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/ACESSION 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>Subject Index</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td></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 HEADING</th>
<th>TITLE</th>
<th>REPORT NUMBER</th>
<th>PAGE NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ABSORBERS (EQUIPMENT)</strong></td>
<td>Raven aircraft filter-absorber --- agricultural aircraft</td>
<td>[AD-A099862]</td>
<td>p0099 A82-13139</td>
</tr>
</tbody>
</table>

The title is used to provide a description of the subject matter. When the title is insufficiently descriptive of the document content, a title extension is added, separated from the title by three hyphens. The NASA or AIAA accession number is included in each entry to assist the user in locating the abstract in the abstract section of the supplement. If applicable, a report number is also included as an aid in identifying the document.

### A

**A-6 AIRCRAFT**

- Harpoon missile captive-carry dynamic environments on the A-6A aircraft  
  p0503 A82-47072

**A-7 AIRCRAFT**

- Direct digital design method for reconfigurable multivariable control laws for the A-7D Digitac II aircraft  
  p0074 A82-16828
- Navy ship evaluation of the A-7 airplane configured with automatic maneuvering flaps  
  p0076 A82-16933
- A-7 transonic wing designs  
  p0431 A82-35562
  A comparison of theoretical and experimental pressure distributions for two advanced fighter wings  
  [NASA-TM-8173]  
  p0035 A82-11059
- System safety program plan --- electromagnetic pulse testing of the A-7B aircraft  
  [AD-A104557]  
  p0001 A82-11354
- Function specifications for the A-7D function driver module  
  [AD-A107912]  
  p0203 A82-17173
- A-7B software module guide  
  [AD-A106049]  
  p0260 A82-18920

**A-10 AIRCRAFT**

- Performance assessment of the ACES-II ejection seat-A-10 configuration  
  p0800 A82-14980
- Production weldbonding on the A-10 aircraft  
  p0327 A82-28995
- Manual conversion flight control system for A-10 aircraft: Pilot performance and simulator cue effects  
  [AD-A115346]  
  p0526 A82-28302

**A-300 AIRCRAFT**

- Gust load alleviation on Airbus A-300  
  p0504 A82-80881
- The effect of intake flow disturbances on ADP compressor blade high cycle fatigue in the Airbus A300  
  p0513 A82-80983
- Active control elements on the transonic wing of the Airbus A-300 (ACCTA B). Airbus A-300 with reduced longitudinal stability (ACTTA-C) --- advanced control transonic transport aircraft (ACTTA); design considerations  
  p0028 A82-10044

**ACTTA: Investigation of new piloting and flight control technologies. Volume 1: Review; active wing**  
  [AIAA-82-05-01-VOL-1]  
  p0369 A82-23252

**ABILITIES**

- Human capabilities and limitations in systems  
  p0534 A82-29297

**ABLATION**

- Development and laboratory testing of a thermal emission velocimeter for application to an acoustic nose tip test facility  
  [AD-A07713]  
  p0213 A82-17482

**ABLATIVE MATERIALS**

- Fireworthiness of transport aircraft interior systems  
  p0533 A82-29204

**ABSORBERS (EQUIPMENT)**

- Raven aircraft filter-absorber --- agricultural aircraft  
  [AD-A099862]  
  p0099 A82-13139
- Variable response load limiting device --- for aircraft seats  
  [NASA-CASS-LAB-12001-1]  
  p0308 A82-20544

**ABSORBERS (MATERIALS)**

- Aircraft absorbers -- Promise and practice --- sound attenuation  
  p0062 A82-14042
- Quad-static and dynamic crushing of energy absorbing materials and structural components with the aim of improving helicopter crashworthiness  
  p0440 A82-37769
- Evaluation of the acoustic measurement capability of the NASA Langley F/STOL wind tunnel open test section with acoustically absorbent ceiling and floor treatments  
  [NASA-CR-165796]  
  p0030 A82-10059

**ABSORPTION BANDS**

- U ABSORPTION SPECTRA  
  [NASA-F/STOL]  
  p0073 A82-10059

**AC (CURRENT)**

- U ALTERNATING CURRENT  
  [NASA-F/STOL]  
  p0073 A82-10059

**AC GENERATORS**

- 60 KVA AEP permanent magnet VCPF starter generator system -- Generator system performance characteristics  
  [NASA-F/STOL]  
  p0016 A82-11721
- Digital simulation of aircraft electrical generating systems by means of Scrape program  
  p0073 A82-14820
- High speed VSCP generator design consideration --- computer aided design for Variable Speed
ACCELERATED LIFE TESTS

Constant Frequency generator p0230 A82-24379
Advanced generating system technology p0230 A82-24380
Models for the motor state of FSCF aircraft p0230 A82-24390
electrical power system — Variable Speed
Constant Frequency p0513 A82-40982

ACCELERATED LIFE TESTS

Aircraft electric system development and test p0231 A82-24384
facilities
Advanced attack helicopter fatigue testing — p0240 A82-24720
Overview
Evaluation of graphite/epoxy skins in a high p0269 A82-27155
capacity laminate helicopter bearing
Effects of defects on tension coupons undergoing p0290 A82-27168
an accelerated environmental spectrum
Moisture gradient considerations in environmental p0576 A82-45479
fatigue of CF/PE

ACCELERATION (PHYSICS)

MT ANGULAR ACCELERATION

MT DECELERATION

MT HIGH GRAVITY ENVIRONMENTS

MT IMPACT ACCELERATION

MT SPIN REDUCTION

Take-off ground roll of propeller driven aircraft p0114 A82-17607
Acceleration response of fuselage sidewall panels p0129 A82-18729
on a twin-engine, light aircraft
Analysis of changes in the gas-dynamic parameters p0334 A82-29872
of a gas-turbine helicopter engine during acceleration
Aircrew restraint and mobility test fixture p0525 A82-18193
[AD-A100274]
A pilot in the loop analysis of helicopter p0367 A82-23229
acceleration/deceleration maneuvers
Statistical review of counting accelerometer data p0407 A82-25243
for Navy and Marine fleet aircraft from January 1962 to 30 June 1981
[AD-A110660]

ACCELERATION PROTECTION

Advanced crash survivable flight data recorder p0132 A82-14072
and Accident Information Retrieval System (AIBS)
[AD-A105510]
ACCELERATION STRESSES (PHYSIOLOGY)

Study and design of high G augmentation devices p0306 A82-20195
for flight simulators
[AD-A109927]
ACCELEROMETERS

A concept for a high-accuracy, low-cost p0065 A82-16685
accelerometer
Advanced recorder design and development p0193 A82-16385
[PB81-244053]
Low cost development of IRS sensors for expendable p0525 A82-28291
EPF control and navigation
[AD-A112691]

ACCEPTABILITY

Physiological acceptability tests of the SJO-5/S p0253 A82-18194
ejection seat: Second physiological acceptance
demonstration
[AD-A108680]
ACCEPTANCE

U ACCEPTABILITY

ACCESSORIES

The testing and approval of aircraft engine p0318 A82-21206
mounted accessories — subject to vibration
[PAW-90051]

ACCIDENT INVESTIGATION

MT AIRCRAFT ACCIDENT INVESTIGATION

Accidents of surface effect ships and hydrofoil p0149 A82-18099
craft — Russian book
Transport aircraft accident dynamics p0350 A82-22227
[BAA-CR-165850]
Special investigation report: Evacuation of United p0351 A82-22236
Airlines DC-8-61, Sky Harbor
International Airport, Phoenix, Arizona,
December 29, 1980
[PB82-115619]

SUBJECT INDEX

Summary of Federal Aviation Administration p0568 A82-31313
response to National Transportation Board
safety recommendations
[AD-A115845]
Summary of Federal Aviation Administration p0568 A82-31314
response to National Transportation Safety Board
safety recommendations
[AD-A115846]

ACCIDENT PREVENTION

A matter of seconds — A critical account of three p0081 A82-15597
notable air disasters /5th Major Miller Memorial
Lecture/
Why safety — fuel conservation through aircraft p0110 A82-17277
safety
Accident prevention — A regulators view p0110 A82-17278
Accidents of surface effect ships and hydrofoil p0149 A82-16689
craft — Russian book
Scanning strategies for air traffic control radar p0235 A82-24666
The toll of ILS-preventable aviation accidents p0242 A82-25325
The performance of warning systems in avoiding p0562 A82-46255
Controlled-Flight-Into-Terrain /CFIT/ accidents

A proposed flight safety program for the Korean p0496 A82-26213
Air Force
[AD-A102973]
Lightweighting on aircraft and composites.
Literature study on lightning strikes and p0025 A82-10023
protection — advanced composite materials
[POA-C-20368-P9]
An analysis of civil aviation propeller-to-person p0026 A82-10024
accidents: 1965-1979
[AD-A105365]
Study of air compressor hazards in underground and p0086 A82-12053
surface mines
[PB80-105164]
Detection and tracking algorithms refinement p0214 A82-17597
[AD-A105517]
Flying qualities criteria for GA single pilot IFB
operations
[AD-A108573]
Proposed research tasks for the reduction of human p0046 A82-26213
error in naval aviation mishaps
[AD-A112339]
A study of wind shear effects on aircraft p0046 A82-27281
operations and safety in Australia
[AVL-SIS-REP-24]
Aircraft alerting systems standardization study. p0522 A82-28265
Phase 4: Accident implications on systems design
[AD-A117876]
Safety in aviation operations — Part 4: p0609 A82-33380
Accidents

MT BOMB-AIRCRAFT COLLISIONS
Fuel system protection methods p0533 A82-29283

ACCRETION

DEPOSITION

ACCUUMULATORS

Low maintenance hydraulic accumulator p0027 A82-10034
[AD-A103947]

ACCRUENCY

Requirements on modern mathematical models of gas p0282 A82-26486
turbine engines. I

ACCE Program

Benefit cost analysis of the aircraft energy p0468 A82-27280
efficiency program
[BAA-CR-165116]
NASA aeronautics
[BAA-EP-85]
p0557 A82-30283

ACIDS

MT FATTY ACIDS

MT PHOSPHONIC ACID

ACOUSTIC ATTENUATION

Welded flange for aircraft engine applications p0602 A82-14062
[AD-A115831]
Ultrasonic evaluation of acoustic absorbing materials p0602 A82-14063
[AD-A115836]
Holmes-Con 81: Proceedings of the National p0602 A82-14064
Conference on Noise Control Engineering, North
Carolina State University, Raleigh, NC, June 8-10, 1981
[AD-A115848]

A2-
The effect of barriers on wave propagation phenomena: With application for aircraft noise shielding
NASA-CR-169128 p0530 NASA-29111

ACOUSTIC CORROSION
STABILITY

ACOUSTIC DUCTS
Impedance modeling of acoustic absorbing materials for aircraft engine applications
p0067 NASA-14043
Influence of exit impedance on finite difference solutions of transient acoustic mode propagation in ducts
The effect of induced sound on the flow around a rectangular body in a wind tunnel
p0276 NASA-26194
Node scatterer design for fan noise suppression in two-dimensional ducts
p0551 NASA-3602
The Rolls Royce role in aircraft noise reduction
--- jet engines, acoustic lining
NASA-90069
Development of an analytical technique for the optimization of jet engine and duct acoustic liners
NASA-CR-169022 p0409 NASA-25256
Circumferentially segmented duct lines optimized for axisymmetric and standing wave sources — reducing noise from turbofan engine galaxies in method acoustic attenuation
[NASA-TD-2075] p0618 NASA-34190

ACOUSTIC EMISSION
Acoustic emission: An emerging technology for assessing fatigue damage in aircraft structure
p0013 NASA-11149
NDE of composite rotor blades during fatigue testing
[NASA-TT-71] p0235 NASA-24712
Acoustic emission in jet engine fan blades
p0419 NASA-35257
'Listening' systems to increase aircraft structural safety and reduce costs
p0492 NASA-39539
Acoustic emission inspection of aircraft engine turbine blades for intergranular corrosion
p0544 NASA-41914
In-flight acoustic emission monitoring
p0548 NASA-42665
Acoustic emission from free jets --- supersonic jets
p0359 NASA-22962

ACOUSTIC EXCITATION
Development and validation of preliminary analytical models for aircraft interior noise prediction
p0464 NASA-36077
Vibration of structures excited acoustically
p0307 NASA-20343
Acoustic noise test as part of the dynamic qualification program in aeronautics
p0344 NASA-22162
STOL aircraft structural vibration prediction from acoustic excitation
p0345 NASA-22169

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

ACOUSTIC GENERATORS
U SOUND GENERATORS

ACOUSTIC IMPELLER
Airframe absorbers - Praxim and practice --- sound attenuation
p0062 NASA-14042
Impedance modeling of acoustic absorbing materials for aircraft engine applications
p0067 NASA-14043
Influence of exit impedance on finite difference solutions of transient acoustic mode propagation in ducts

ACOUSTIC MEASUREMENT
ST NOISE MEASUREMENT
Effects of vanes/blade ratio and spacing on fan noise
[ASME PAPER 81-PV-2033] p0080 NASA-10057
Large scale model measurements of airflow noise using cross-correlation techniques

A-3
ACOUSTIC SIMULATION

Scattering of sound by a vortex ring  p0104 A02-16148
Role of sounder design for fan noise suppression in two-dimensional ducts  p0051 A02-43402

ACOUSTIC SIMULATION
QSBE over-the-wing engine acoustic data  [NASA-TH-82708] p0536 A02-29329
ACOUSTIC STABILITY
U FREQUENCY STABILITY

ACOUSTIC VELOCITY
Taking into account nighttime annoyance in the calculation of the psophic index  [NASA-TE-76580] p0137 A02-14674

ACOUSTIC VIBRATIONS
U SOUND WAVES

ACOUSTICS
AT AESOACUSTICS
AT BIOACOUSTICS
AT PSYCHOACOUSTICS
Activities of the Institute of Sound and Vibration Research  p0577 A02-31569

ACQUISITION
AT DATA ACQUISITION
AT TARGET ACQUISITION

ACOUSTICS
Sport aircraft --- Russian book  p0040 A02-40483

ACRYLIC RESINS
Acrylic - A timely review  p0227 A02-24317
Lucas stretched acrylic  p0227 A02-24318
Problems associated with the quality assurance of stretched acrylic sheet  p0226 A02-24319
The effects of absorbed moisture upon the physical properties of stretched acrylic materials  p0220 A02-24320

ACRYLONITRILES
Effects of elastomeric additives on the mechanical properties of epoxy resins and composite systems  p0113 A02-17538

ACTING SERIES
AT TORCH
AT DRAGON

ACTIMETERS
AT DICKER RADIONETERS
AT INFRARED DETECTORS
AT INFRARED SPECTROMETERS
AT MICROWAVE RADIONETERS

ACTIVE CONTROL
Fault isolation methodology for the L-1011 digital avionic flight control system  [AIAA 82-2223] p0047 A02-13658
On-board communication for active-control transport aircraft  [AIAA 82-2321] p0052 A02-13520
Digital active control system for load alleviation for the Lockheed L-1011  p0104 A02-16147
Fighters - Tomorrow’s terminology  p0221 A02-22360
Active control of aeroelastic divergence  [AIAA 82-0698] p0338 A02-30151

ACTIVE CONTROL: Development of a control law for the alleviation of maneuver loads on an elastic aircraft  p0300 A02-31644
A simple system for helicopter Individual-Blade-Control and its application to stall flutter suppression  p0039 A02-37765
Design and evaluation of a state-feedback vibration controller  [AHS PREPRINT 81-10] p0042 A02-37783
Self-active fluid inertia - A new concept in vibration isolation  [AHS PREPRINT 81-17] p0042 A02-37789
Estimation of the peak count of actively controlled aircraft  p0042 A02-38047
Active control elements on the transonic wing of the Airbus A-300 (ACTIA A). Airbus A-300 with reduced longitudinal stability (ACTIA-C) --- advanced control transonic transport aircraft

SUBJECT INDEX

(ACTIA); design considerations  p0028 A02-10046
A method for determination of the aeroelastic behavior of aircraft with active control systems  [DPFLA-PB-81-05] p0029 A02-10047
Maneuver load control for the reduction of design loads and improvement of the maneuverability of modern fighter aircraft  [DRUG-PRENT-81-2] p0059 A02-13138
Design for active and passive flutter suppression and gust alleviation  [NASA-CR-3402] p0100 A02-13147
Interactive aircraft flight control and aeroelastic stabilization --- forward swept wing flight vehicles  [NASA-CR-165036] p0100 A02-13150
Accelerated development and flight evaluation of active controls concepts for subsonic transport aircraft. Volume 1: Load alleviation extended span development and flight tests  [NBN-PB-172/S/DB/39-FP-1] p0267 A02-19220
The application of subsonic theoretical aeroelasticity to active controls --- aircraft controls  [NAR-PB-81060] p0320 A02-21217
An electronic control for an electrohydraulic active control loading gear for the F-4 aircraft  [NASA-CR-3552] p0353 A02-22252
Control law design to meet constraints using STANAPAC-synthesis package for active controls  [NASA-TH-82366] p0356 A02-22280
A method for determining the aeroelastic behavior of aircraft with active control systems  [ESA-TE-719] p0397 A02-24211
Guidance and control/ACEE  p0409 A02-25261
Comparison of analytical and wind-tunnel results for flutter and gust response of a transport wing with active controls  [NAR-PB-8110] p0460 A02-26703
CF6 jet engine performance improvement: High pressure turbine active clearance control  [NASA-CR-165556] p0526 A02-28297
The Shock and Vibration Digest, volume 14, no. 7  [AD-A137323] p0585 A02-32301
Active control technology in aircraft  p0585 A02-32303
Selected advanced aerodynamics and active controls technology concepts development on a derivative B-747  [NASA-CR-3164] p0587 A02-32346
Integrated application of active controls (IAAC) technology to an advanced subsonic transport project. Initial ACT configuration design study  [NASA-CR-3304] p0589 A02-32349
Active flutter suppression using optical output feedback digital controllers  [NASA-CR-16592] p0592 A02-32375
Integrated application of active controls (IAAC) technology to an advanced subsonic transport project. Initial ACT configuration design study  [NASA-CR-15529] p0593 A02-32380
Integrated application of active controls (IAAC) technology to an advanced subsonic transport project. Conventional baseline configuration study  [NASA-CR-155248] p0593 A02-32381

ACCOMOST REDS
Rotating stall in blade rows operating in shear flow  p0106 A02-22209

A-8
ADAPTIVE CONTROL

Control of electromechanical actuator elements for flight vehicles --- Russian book

A dual input actuator for fluidic backup flight control

Direct digital drive actuation

Electromechanical actuation development program

New all-electric-system technology --- electromechanical actuators for aircraft

Active flutter suppression on an F-4F aircraft

Aircraft digital input controlled hydraulic actuation and control system

The influence of sensor and actuator characteristics on overall helicopter APCS design

Slotted variable camber flap

Overview of Honeywell electromechanical actuation programs

Electric flight systems

Electromechanical actuators

Electric flight systems integration

Tubing and cable cutting tool

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

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

Experiments techniques for active flutter suppression

Kevlar/Pan-15 reduced drag DC-9 reverser stang fairing

Electromechanical Actuation Development Program

Power control development

ADHESIVE BONDBING

Wing/store flutter - an active adaptive control application

The use of adaptive control for helicopter trajectories in search operations

Passive-adaptive wing flight demonstration program

Applications of adaptive control systems --- to aircraft design, industrial processes and electrical drives

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

Outline of a multiple-access communication network based on adaptive arrays

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

Adaptive fuel control feasibility investigation

The use of adaptive walls in plane flow

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

Practical design and realization of a digital adaptive flight control system

Role of optical computers in aeronautical control applications

Apparatus for damping operator induced oscillations of a controlled system --- flight control

Effect on fuel efficiency of parameter variations in the cost function for multivariable control of a turbofan engine

ADAPTIVE CONTROL SYSTEMS

ADAPTIVE FILTERS

Adaptive filtering for an aircraft flying in turbulent atmosphere

Research on an adaptive Kalman filter for solving the radar tracking problem --- German thesis

Fixed gain controller design for aircraft

Apparatus for damping operator induced oscillations of a controlled system --- flight control

ADDITIONAL RESOURCES

ADHESIVES

ADHESIVE BONDBING

Light weight adhesive joining of composite structures

Compatibility of 350 deg curing honeycomb adhesives with phosphoric acid anodizing

Characterization of composition variations in a structural adhesive

Transition of aerospace adhesive bonding technology from R&D to operational use

Correlation of surface characterization of phosphoric acid anodize oxide with physical properties of bonded specimens

Automated ultrasonic inspection of adhesive bonded structure

Applications of structural adhesives in production

Production welding on the A-10 aircraft

SUBJECT INDEX

Damage tolerant design for cold-section turbine engine discs

ADAPTORS

Control of electromechanical actuator elements for flight vehicles --- Russian book

A dual input actuator for fluidic backup flight control

Direct digital drive actuation

Electromechanical actuation development program

New all-electric-system technology --- electromechanical actuators for aircraft

Active flutter suppression on an F-4F aircraft

Aircraft digital input controlled hydraulic actuation and control system

The influence of sensor and actuator characteristics on overall helicopter APCS design

Slotted variable camber flap

Overview of Honeywell electromechanical actuation programs

Electric flight systems

Electromechanical actuators

Electric flight systems integration

Tubing and cable cutting tool

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

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

Experiments techniques for active flutter suppression

Kevlar/Pan-15 reduced drag DC-9 reverser stang fairing

Electromechanical Actuation Development Program

Power control development

ADHESIVE BONDBING

Wing/store flutter - an active adaptive control application

The use of adaptive control for helicopter trajectories in search operations

Passive-adaptive wing flight demonstration program

Applications of adaptive control systems --- to aircraft design, industrial processes and electrical drives

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

Outline of a multiple-access communication network based on adaptive arrays

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

Adaptive fuel control feasibility investigation

The use of adaptive walls in plane flow

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

Practical design and realization of a digital adaptive flight control system

Role of optical computers in aeronautical control applications

Apparatus for damping operator induced oscillations of a controlled system --- flight control

Effect on fuel efficiency of parameter variations in the cost function for multivariable control of a turbofan engine

ADAPTIVE CONTROL SYSTEMS

ADAPTIVE FILTERS

Adaptive filtering for an aircraft flying in turbulent atmosphere

Research on an adaptive Kalman filter for solving the radar tracking problem --- German thesis

Fixed gain controller design for aircraft

Apparatus for damping operator induced oscillations of a controlled system --- flight control

ADDITIONAL RESOURCES

ADHESIVES

ADHESIVE BONDBING

Light weight adhesive joining of composite structures

Compatibility of 350 deg curing honeycomb adhesives with phosphoric acid anodizing

Characterization of composition variations in a structural adhesive

Transition of aerospace adhesive bonding technology from R&D to operational use

Correlation of surface characterization of phosphoric acid anodize oxide with physical properties of bonded specimens

Automated ultrasonic inspection of adhesive bonded structure

Applications of structural adhesives in production

Production welding on the A-10 aircraft
ADHESIVES

Fatigue behavior of adhesively bonded joints
Bonded aluminum honeycomb - Aircraft flight surface primary structure application
Aeronaurotics applications of bonding
Laminar flow control SF/08 feasibility demonstration
Develop, demonstrate, and verify large area composite structural bonding with polyamide adhesives - adhesively bonding graphite-polyamide structures
Titanium surface treatments for adhesive bonding

ADHESIVES

Addition polyamide adhesives containing various monomers

ADVANCED TECHNOLOGY LABORATORY

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AERIAL PHOTOGRAPHY

Three navigation systems and their costs of acquiring remote sensing data
Weather impact on low-altitude imaging infrared sensors in Europe - An availability model
Current aerial cameras
A VHFC imaging system with VHFC radiotelephony for area-representative strip-survey flights conducted, as part of combined forest inventories, with light aircraft carrying 70 m and 35 m cameras
A field guide for scanner and photographic missions
Loran-C navigation as an aid to aerial photographic operations
Photointerpretation key for plane regeneration analysis using high-altitude color infrared, panoramic photography

AERIAL RECONNAISSANCE

Offshore uses of the airship
Studies of modern technology airships for maritime patrol applications
The airship - Its application and promotional utility
The uses of airships in the Royal Navy
A surveillance airship for the New Zealand environment
Analysis of side-looking airborne radar /SLAR/ performance in the detection of search and rescue targets
The utilization of aircraft in fighting forest fires - French experience
Cloud top remote sensing by airborne lidar
Opto-electronic push-broom scanners for navigation, reconnaissance and generation of digital data bases
The optical recognition of sea targets as a function of surrounding and observation parameters in air to water observations
Airborne gamma-ray spectrometer and magnetometer survey. Itipikpak river quadrangle, Alaska, volume 2
Airborne gamma-ray spectrometer and magnetometer survey. Jamestown quadrangle, North Dakota, volume 1

AERIAL PHOTOGRAPHY

Current investigations regarding noise research in the Braunschweig Center of the German Institute for Research and Experimentation in Aeronautics and Astronautics
High frequency sound emission from moving point sources embedded in arbitrary transversely sheared mean flows
On the generation of side-edge flap noise
Consents on 'Nature of inlet turbulence and strut flow disturbances and their effect on turbocompressor noise'
Helicopter model scale results of blade-vortex interaction impulsive noise as affected by blade plan form
Helicopter model scale results of blade-vortex interaction impulsive noise as affected by blade plan form
Aerocoustic theory for nonideal wing-gust interaction
Aeroacoustic performance of an externally blown flap configuration with several flap noise suppression devices
The effect of barriers on wave propagation phenomena: with application for aircraft noise shielding
Some comments on the prediction of forward flight effects on jet noise
Noise measurement in wind tunnels, workshop summary

AERIAL ROLLERS

Design, fabrication and qualification of the Z-2 composite rudder
Dynamic response of a hot gas, control-surface actuator -- for an aircraft rudder

AEROCOUSTICS

Helicopter rotor trailing edge noise
Design predictions for noise control in the cryogenic National Transonic Facility
Workshop report for the AIAA 6th Aerocoustic Conference
Aerospace highlights 1981
Scattering of sound by a vortex ring
The German-Dutch wind tunnel as aerocoustic experimental installation
Current investigations regarding noise research in the Braunschweig Center of the German Institute for Research and Experimentation in Aeronautics and Astronautics
High frequency sound emission from moving point sources embedded in arbitrary transversely sheared mean flows
On the generation of side-edge flap noise
Consents on 'Nature of inlet turbulence and strut flow disturbances and their effect on turbocompressor noise'
Helicopter model scale results of blade-vortex interaction impulsive noise as affected by blade plan form
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Aeroacoustic performance of an externally blown flap configuration with several flap noise suppression devices
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AERODYNAMIC DESIGN

AERODYNAMIC BALANCE

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Three navigation systems and their costs of acquiring remote sensing data
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Current aerial cameras
A VHFC imaging system with VHFC radiotelephony for area-representative strip-survey flights conducted, as part of combined forest inventories, with light aircraft carrying 70 m and 35 m cameras
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AERIAL RECONNAISSANCE

Offshore uses of the airship
Studies of modern technology airships for maritime patrol applications
The airship - Its application and promotional utility
The uses of airships in the Royal Navy
A surveillance airship for the New Zealand environment
Analysis of side-looking airborne radar /SLAR/ performance in the detection of search and rescue targets
The utilization of aircraft in fighting forest fires - French experience
Cloud top remote sensing by airborne lidar
Opto-electronic push-broom scanners for navigation, reconnaissance and generation of digital data bases
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AERIAL PHOTOGRAPHY

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High frequency sound emission from moving point sources embedded in arbitrary transversely sheared mean flows
On the generation of side-edge flap noise
Consents on 'Nature of inlet turbulence and strut flow disturbances and their effect on turbocompressor noise'
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Aeroacoustic performance of an externally blown flap configuration with several flap noise suppression devices
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Some comments on the prediction of forward flight effects on jet noise
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AERODYNAMIC DESIGN

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Fatigue behavior of adhesively bonded joints
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Three navigation systems and their costs of acquiring remote sensing data
Weather impact on low-altitude imaging infrared sensors in Europe - An availability model
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Photointerpretation key for plane regeneration analysis using high-altitude color infrared, panoramic photography

AERIAL RECONNAISSANCE

Offshore uses of the airship
Studies of modern technology airships for maritime patrol applications
The airship - Its application and promotional utility
The uses of airships in the Royal Navy
A surveillance airship for the New Zealand environment
Analysis of side-looking airborne radar /SLAR/ performance in the detection of search and rescue targets
The utilization of aircraft in fighting forest fires - French experience
Cloud top remote sensing by airborne lidar
Opto-electronic push-broom scanners for navigation, reconnaissance and generation of digital data bases
The optical recognition of sea targets as a function of surrounding and observation parameters in air to water observations
Airborne gamma-ray spectrometer and magnetometer survey. Itipikpak river quadrangle, Alaska, volume 2
Airborne gamma-ray spectrometer and magnetometer survey. Jamestown quadrangle, North Dakota, volume 1
AERODYNAMIC BALANCE

Development of new lifting parachute designs with increased trim angle
[AIAA PAPER 81-2626] p0006 AB2-10400

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 AB2-13466

Determination of the trimmed drag of an aircraft
[AIAA 81-2127] AB2-16563

Evaluation and wind tunnel tests of the 9,000 lb (normal-force) pitch/pitch and roll dynamic stability balance system for measuring direct, cross, and cross-coupling derivatives
[AD-A105122] p0085 AB2-12047

Evaluation of an experimental technique to investigate the effects of the engine position on engine/pylon/wing interference
[AIAA 81-13090] p0096 AB2-13090

Experimental trim drag values for conventional and supercritical wings
[BASA-CR-168500] [AIAA 82-17126] p0198 AB2-17126

A general purpose program for rotor blade dynamics
[AIAA 81-18151] p0248 AB2-18151

The use of a multi-degree-of-freedom dual balance system to measure cross and cross-coupling derivatives
[AD-A116811J] p0538 AB2-29333

AERODYNAMIC DRAG

WT LEADING EDGE FLAPS

WT SPLIT FLAPS

WT TRAILING-EDGE FLAPS

WT WING FLAPS

Aerodynamic characteristics of nonsymmetry parachute decelerators limited to a length of three feet
[AIAA 81-1950] p0007 AB2-10425

Analysis and flight evaluation of a tail-fixed-wing aircraft equipped with hinged plate spoilers
[AIAA 81-166247] p0352 AB2-22243

AERODYNAMIC DESIGN

WT AERODYNAMIC CENTER

WT AERODYNAMIC BALANCE

WT AERODYNAMIC CHARACTERISTICS

WT AERODYNAMIC DESIGN

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
[p0005 AB2-10363]

Aerodynamics and performance of cruciform parachute canopies
[AIAA PAPER 81-1919] p0006 AB2-10400

Development of new lifting parachute designs with increased trim angle
[AIAA PAPER 81-2121] p0006 AB2-10407

Propfan installation aerodynamics of a supercritical swept wing transport configuration
[AIAA PAPER 81-1563] p0029 AB2-19466

Calculation of aerodynamic characteristics of a jet-finned airplane
[0140 AB2-11459

Divergence of a sweptforward wing
[p0053 AB2-13560

BIMAT aerodynamic design and flight test experience
[AIAA PAPER 81-2423] p0055 AB2-13871

The development of cryogenic wind tunnels and their application to maneuvering aircraft technology
[AIAA PAPER 81-13871] p0061 AB2-13971

AD-1 oblique wing aircraft program
[AIAA PAPER 81-13560] p0059 AB2-13890

Symmetric flow characteristics of thin rectangular wings
[AD-A116903] p0103 AB2-16901

Experience with high performance V/STOL fighter projects at NASA
[AIAA PAPER 81-2614] p0107 AB2-16901

A summary of V/STOL inlet analysis methods
[AIAA PAPER 81-2626] p0107 AB2-16902

Advanced technology airfoil development for the XV-15 tilt-rotor vehicle
[AIAA PAPER 81-2623] p0108 AB2-16906

Trailing edge flap influence on leading edge vortex flap aerodynamics
[AIAA PAPER 81-0015] p0115 AB2-17799

Recent improvements in prediction techniques for supersonic Weapons separation
[AIAA PAPER 81-0170] p0116 AB2-17820

An experimental investigation of the influence of vertical wind shear on the aerodynamic characteristics of an airfoil
[AIAA PAPER 82-0241] p0117 AB2-17863

Aerodynamics of tactical weapons to Mach number 8 and angle-of-attack of 180 deg
[AIAA PAPER 82-0250] p0118 AB2-17864

Viscous flow - Reynolds of the theorician in pursuit of higher order accuracy
[AIAA PAPER 82-0349] p0120 AB2-17920

Evaluation of supersonic missile aerodynamic prediction techniques
[AIAA PAPER 82-0394] p0120 AB2-17920

Concerning the calculation of the aerodynamic characteristics of mechanized wings
[AIAA PAPER 82-1859] p0127 AB2-1859

A simplified wing procedure in connection with the lifting line theory and the double-lattice method
[AIAA 81-19195] p0154 AB2-19195

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 AB2-19197

Ground effect hover characteristics of a large-scale tilt-rotor V/STOL model
[AIAA PAPER 81-2609] p0155 AB2-19201

Thrust-induced effects on low-speed aerodynamics of fighter aircraft
[AIAA PAPER 81-2612] p0155 AB2-19203

Low-speed testing of the inlets designed for a tandem-fan V/STOL nacelle
[AIAA PAPER 81-2627] p0156 AB2-19210

Concept definition and aerodynamic technology studies for single-engine V/STOL fighter/attack aircraft
[AIAA PAPER 81-2647] p0157 AB2-19216

Aerodynamics of a transport aircraft-type wing-fuselage assembly
[AIAA 81-19738] p0164 AB2-19738

Aerodynamic characteristics of waveriders at subsonic flight speeds
[AIAA 81-19810] p0165 AB2-19810

A perspective of computational aerodynamics from the viewpoint of airplane design applications
[AIAA PAPER 82-0018] p0183 AB2-22028

Transonic turbulent flow analysis of wing-fuselage-pylon configurations with powered jet exhausts
[AIAA PAPER 82-0255] p0184 AB2-22077

Aerodynamic characteristics of airfoils with ice accretions
[AIAA PAPER 82-0262] p0184 AB2-22081

Aerodynamic characteristics of maneuvering flaps
[AIAA PAPER 82-22110] p0185 AB2-22110

Aerodynamic evaluation of winglets for transport aircraft
[AIAA PAPER 81-1215] p0186 AB2-22245

[0236 AB2-24651

Numerical design of the contoured wind-tunnel liner for the NASA swept-wing LFC test setup
[AIAA PAPER 82-0548] p0236 AB2-24656

The use of a multi-degree-of-freedom dual balance system to measure cross and cross-coupling derivatives
[AIAA 82-0595] p0237 AB2-24669

Status and capabilities of the National Full Scale Facility 90- by 80-foot wind tunnel modification
[AIAA PAPER 82-0607] p0238 AB2-24676

Angle of downwash behind a wing in unsteady flow
[AIAA PAPER 82-02970] p0241 AB2-24970

Wing/control surface flutter analysis using experimentally corrected aerodynamics
[0283 AB2-26569

A-7

SUBJECT INDEX
AERODYNAMIC CHARACTERISTICS CONT.

Heavy rain penalties for a flight simulator
[ AIAA PAPER 82-0213 ] p0286 A82-27093
A computer-controlled oscillation mechanism for
unsteady aerodynamics experiments
p0320 A82-29018
Development of a homebuilt powered sailplane
p0330 A82-29416
Computational aerodynamics - Its coming of age and
its future
p0332 A82-29773
A wind-tunnel study of the aerodynamic
characteristic of a flapped versus smooth-skin
supercritical wing
[ AIAA 82-0642 ] p0337 A82-30139
Subsonic aerodynamic and flutter characteristics of
several wings calculated by the SOUSA PL1 panel method
[ AIAA PAPER 82-0727 ] p0341 A82-30193
The equivalent simple body /ESB/ method for
transonic wing analysis
p0374 A82-31923
Finite volume calculation of three-dimensional
potential flow around a propeller
[ AIAA PAPER 82-0957 ] p0374 A82-31933
Calculation of the flow-field velocities of a
wing-body-vehicle combination in transonic flow
[ AIAA PAPER 82-0958 ] p0374 A82-31934
Incompressible symmetric flow characteristics of
sharp-edged rectangular wings
p0379 A82-32850
Aerodynamics. Part 2 - Methods of aerodynamic
design /3rd revised and enlarged edition/ ---
Russian book
p0382 A82-33387
The ubiquitous helicopter
p0385 A82-33913
Low-speed aerodynamic characteristics of wings
with sweep discontinuities
p0385 A82-33997
Periodic boundary value problem for the equations of
the ha-sonic oscillation of a rotor blade
about the axis of a flapping hinge
p0387 A82-34127
Detached flow past V-shaped low-aspect-ratio wings
p0387 A82-34136
Transonic flow past bodies of the type
wing-fuselage with allowance for boundary effects
p0388 A82-34166
Comparison of aerodynamic characteristics of
aircraft models with forward and aft swept wings
at Mach number 0.5
[ OBERL. TP 80. 1962-9 ] p0389 A82-34497
Ultra light airplanes
p0419 A82-35233
The effect of rotor blade thickness and surface
finish on the performance of a small axial flow
turbine
[ AAEV PAPER 82-GT-222 ] p0428 A82-35409
Heat transfer measurements of a transonic nozzle
guide vane
[ AAEV PAPER 82-GT-297 ] p0428 A82-35426
Heat transfer optimised turbine rotor blades - An
experimental study using transient techniques
[ AAEV PAPER 82-GT-304 ] p0430 A82-35469
Transonic wind tunnel test of a supersonic nozzle
installation
[ AAEV PAPER 82-1045 ] p0437 A82-37677
Current techniques for jet engine test cell modeling
p0439 A82-37712
General purpose research rotor
[ AHS PREPRINT 81-9 ] p0441 A82-37777
Aerodynamic characteristics of a large-scale, twin
tail-nacelle VSSTOL model
[ AAEV PAPER 81-0150 ] p0482 A82-38443
Supersonics on Flows with Separation, Stuttgart,
West Germany, November 23-25, 1981, Reports
p0483 A82-38781
Supersonic missile aerodynamic and performance
relationships for low observables mission profiles
[ AAEV PAPER 82-1298 ] p0487 A82-39085
An estimation of aerodynamic forces and moments on
an airplane model under steady state spin
conditions
[ AAEV PAPER 82-1311 ] p0487 A82-39092
High angle-of-attack characteristics of a
forward-swept wing fighter configuration
[ AAEV PAPER 82-1322 ] p0487 A82-39099
Optimal three-dimensional turning performance of
supersonic aircraft

SUBJECT INDEX
[ AIAA PAPER 82-1236 ] p0488 A82-39103
Unique flight characteristics of the AD-1
subsonic-wing research airplane
[ AIAA PAPER 82-1239 ] p0488 A82-39106
Use of rotary balance and forced oscillation test
data in six degrees of freedom simulation
[ AIAA PAPER 82-1364 ] p0489 A82-39129
NASA Dryden's experience in parameter estimation
and its use in flight test
[ AIAA PAPER 82-1373 ] p0489 A82-39135
Effects of vortex breakdown on longitudinal and
lateral-directional aerodynamics of slender
wings by the suction analogy
[ AIAA PAPER 82-1385 ] p0489 A82-39141
The unsteady motion of a wing traveling at
subsonic speed above a plane
p0491 A82-39358
The rectangular wing with semispan in
nonlinear theory
p0491 A82-39359
Optimal control application in supersonic aircraft
performance
p0491 A82-39374
Aerodynamic aspects of aircraft dynamics at high
angles of attack /AIAA Lecture/
[ AIAA PAPER 82-1363 ] p0495 A82-39836
Advanced aerodynamic design for future combat
aircraft
p0504 A82-40079
Some aerodynamic/flightmechanic aspects for the
design of future combat aircraft
p0504 A82-40080
Recent advances in the performance of high bypass
ratio fans
p0505 A82-40091
Aerodynamic development of laminar flow control on
swept wings using distributed suction through porous surfaces
p0505 A82-40094
Viscous transonic airflow flow simulation
p0506 A82-40079
Determination of airplane aerodynamic parameters
from flight data at high angles of attack
p0508 A82-40028
Aerodynamic concepts for fuel-efficient transport
aircraft
p0511 A82-40097
Variable geometry aerofoils as applied to the
Beatty B-5 and B-6 sailplanes
p0512 A82-40068
Aircraft design for fuel efficiency
p0512 A82-40073
Advanced aerodynamic wing design for commercial
transports - Review of a technology program in
the Netherlands
p0514 A82-40085
Recent airfoil developments at DFVLR
p0514 A82-40086
Wing-tip jets aerodynamic performance
p0518 A82-40078
An experimental investigation of leading-edge
spanwise blowing
p0518 A82-40088
Vortex formation over double-delta wings
p0518 A82-40089
Wind tunnel test and aerodynamic analysis of three
aerodynamically tailored wings
p0519 A82-41001
Upper Vortex Flap - A versatile surface for highly
swept wings
p0519 A82-41002
An initial look at the supersonic aerodynamics of
twin-tailfinage aircraft concepts
p0516 A82-41008
Low-speed characteristics of a fighter-type
configuration at high angles-of-attack and
sidelip
p0517 A82-41020
Wind-tunnel investigation of a full-scale
canard-configured general aviation aircraft
p0517 A82-41024
Analysis of flight data in the frequency domain
p0583 A82-41796
Processes and procedural approaches in the
aerodynamic design of the Alpha Jet aircraft
p0550 A82-43320
Aerodynamic computational procedures for subsonic
and transonic aircraft
p0550 A82-43330
AERODYNAMIC CHORDS

Steady, Oscillatory, and Unsteady Subsonic and Supersonic Aerodynamics, introduction version 1.1
(SOUSA-P1.1), Volume 2: User/programmer manual...analytical treatment of wake influence
(NASA-TM-85484)
p0048 882-26236
Proceedings of the 12th Naval Symposium on Aerodynamics, volume 1
[AD-A111763]
p0063 882-27225
IA-59A ABC technology demonstrator altitude expansion and operational tests
[AD-A111114]
p0069 882-27282
Proceedings of the 12th Naval Symposium on Aerodynamics, volume 2
[AD-A111783]
p0072 882-27312
A summary of V/STOL inlet analysis methods
[HASA-TM-82645]
p0052 882-28249
Nearfield aerodynamics and optical propagation characteristics of a large-scale turret model
[AD-A113910]
p0059 882-28624
Aerodynamics of an airfoil with a jet issuing from its surface
[HASA-TM-84625]
p0051 882-29267
User's manual for the Automated Paneling Technique (APT) and the Wing Body Aerodynamic Technique (WABAT) programs
[HASA-CR-166935]
p0056 882-31297
Materials and design criteria for Kevlar-29 ribbon parachutes
[AD-A116357]
p0057 882-31308
Dynamical System Coupling (DYSCO) program, Volume I: User's manual
[AD-A115003]
p0073 882-31974
Long duct nacelle aerodynamic development for DC-10 derivatives
[HASA-CR-159211]
p0086 882-32315
Energy efficient engines: High pressure turbine uncooled r&t technology report
[HASA-CR-161849]
p0093 882-32383
Propeller flow visualization techniques
[AD-A116458]
p0097 882-32672
User's manual for interfacing a leading edge, vortex roller program with two linear panel methods
[HASA-TM-76584]
p0064 882-33340
The aerodynamic influences of rotor blade taper, twist, airfoils and solidity on hover and forward flight performance
[AD-A117397]
p0065 882-33357
A simulation language approach to structural interaction problems
[AD-A118374]
p0074 882-33758

AERODYNAMIC CHORDS
U AIRFOIL PROFILES
AERODYNAMIC COEFFICIENTS
The effects of flexibility on the steady-state performance of small ribbon parachute models
[AIAA PAPER 81-1923]
p0006 882-10408
Analysis of escape systems at 687 KIAS
[PB82-132267]
p0079 882-16978
Vortex lift augmentation by suction on a 60 deg swept Gothic wing
[AIAA PAPER 82-0231]
p0117 882-17856
Effect of the blading type on the aerodynamic damping of blade vibrations with allowance for the profile curvature
[AD-A111112]
p0127 882-18664
Sensitivity of helicopter aeromechanical stability to dynamic inflow
[PB82-132267]
p0273 882-25773
Prediction of aerodynamically induced vibrations in turbomachinery blading
[PB82-132267]
p0327 882-25956
Aerodynamic coefficient identification of time-varying aircraft system and its application
[PB82-132267]
p0390 882-36645
Analytical study of vortex flaps on highly swept delta wings
[p0515 882-41003
Fuselage effects in leading edge vortex flap aerodynamics
[p0516 882-41006
Aerelastic equilibrium of a helicopter rotor in the presence of nonlinear aerodynamic forces
[OMERA, TP No. 982-31]
p0547 882-42809
Transonic flutter and response analyses of two 3-degree-of-freedom airfoils
[p0555 882-44245

Finite element approach to the calculation of unsteady aerodynamic influence coefficients in dynamic aeroelastic analysis
[p0581 882-45849
Determination of airplane model structure from flight data by using modified stepwise regression
[NASA-TF-1916]
p0208 882-10044
Wind-tunnel results for a modified 17-percent-thick low-speed airfoil section
[NASA-TF-1919]
p0208 882-11033
ACTA Mechanics Sinica (selected articles)
[AD-A170322]
p0311 882-14060
Lifting surface theory for wings at low frequency small amplitude mowing and side slipping oscillating motions at low speeds
[p0311 882-14061
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-TF-1550]
p0393 882-15015
High lift selected concepts
[NASA-CR-155093]
p0393 882-15017
Aerodynamic considerations in the prediction of uninstalled supersonic flutter in transonic fans
[p0413 882-15058
A new method of estimating the lateral wall effect on the airfoil incidence due to the suction at side walls
[HASA-TH-600]
p0490 882-17123
Experimental verification of an aerodynamic parameter optimization program for wind tunnel testing
[AD-A107727]
p0199 882-17134
Theoretical investigations on the influence of different strake, tail unit, and conventional NLF arrangement as well as of CCV on the aerodynamic characteristics of fighter aircraft configurations
[NASA-FF-122/2/PUB/36]
p0255 882-18211
A criterion for the prediction of the recovery characteristics of transonic aircraft
[SAE-TR-21521]
p0267 882-19223
Influence of strakes on coefficients of longitudinal stability
[NASA-FF-122/2/PUB/22]
p0319 882-21215
Real time digital filtering test in the 51 continuous wind tunnel at Memi
[p0343 882-22152
Effect of nacelles on aerodynamic characteristics of an executive-jet model with simulated, partial-chord, laminar-flow-control wing glove
[HASA-TM-82271]
p0349 882-22217
Approximate method for predicting supersonic normal force coefficient very-low-aspect-ratio lifting surfaces
[AD-A111770]
p0360 882-23199
The effect of very heavy rain upon aircraft and its role in wind shear attributed accidents
[p0401 882-25179
Experimental analysis of the effects of sweep and aspect ratio on incompressible flow about forward swept wings
[p0405 882-25223
Leading edge flap system for aircraft control augmentation
[HASA-CASL-LAB-12707-1]
p0407 882-25240
Hurricane-induced wind loads
[PB82-132267]
p0476 882-27548
Prelaunch estimates of near Earth satellite lifetimes using quasi-dynamic atmosphere models - application to a proposed Brazilian satellite
[PB82-22521]
p0538 882-29347
AERODYNAMIC CONFIGURATIONS
ST WING NACELLES CONFIGURATIONS
Analysis of escape systems at 687 KIAS
[PB82-132267]
p0079 882-14978
Direct approach to aerodynamic design problems
[p0105 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 turbofan jet airplane
[AIAA PAPER 82-0365]
p0119 882-17905
Analysis of an ideal-fluid flow past a finite-thickness wing
[p0165 882-19813

A-10

SUBJECT INDEX
Finite element calculation of the aerodynamic effects of shape, camber, pitch, and ground proximity on idealized ground-vehicle fuselages and nacelles

Hysteresis 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

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

Reduced nonlinear flight dynamic model of elastic structure aircraft

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

An investigation of F-16 nozzle-afterbody forces on transonic Mach numbers with emphasis on model scale effects

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

Calculation of nonstationary 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

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

Experimental verification of force determination and ground flying on a full-scale helicopter

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

Aerodynamic heating

In-situ calibration of flight heat transfer instrumentation

Dissipation of radome aerodynamic heating on 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

AERODYNAMIC LOADS

Investigation of the interference effects of mixed flow long duct nacelles on a DC-10 wing [NASA-TM-76078] p0557 A82-30287
Investigation of the interference effects of mixed flow long duct nacelles on a DC-10 wing [NASA-CR-159202] p0506 A82-32319

AERODYNAMIC EFFECTS

Closed-form solutions of supersonic wing-body effects of vane/blade ratio and spacing on fan noise [AIAA PAPER 81-2033] p0600 A82-10457
Airframe effects on top-mounted inlet systems for VTOL fighter aircraft [AIAA PAPER 81-2631] p0156 A82-19212
Numerical comparison of unsteady subsonic aerodynamic forces on wing-body-tail exposed to travelling gust [AIAA 82-20663] p0185 A82-22112
Transonic wind tunnel wall interference corrections for three-dimensional models [AIAA 82-0586] p0237 A82-24663
Closed-form solutions of supersonic wing-body interference [AIAA 82-33120] p0380 A82-43308

Aerodynamics

Darrieus rotor aerodynamics [AIAA 82-33708] p0384 A82-37081
Thrust reverser induced flow interference on aircraft [AIAA PAPER 82-1123] p0928 A82-37692
The use of small strakes to reduce interference drag of a low wing, twin engine airplane [AIAA PAPER 82-1223] p0887 A82-39100
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
External aerodynamic design for a laminar flow control glove on a Lockheed JetStar wing [AIAA 82-40895] p0505 A82-40895

Computational and experimental studies of light twindisc aerodynamics [AIAA 82-40930] p0508 A82-40930
The use of adaptive walls in plane flows [AIAA 82-42813] p0548 A82-42813
Higher-order flow angle corrections for three-dimensional wind tunnel wall interference [AIAA 82-42246] p0555 A82-42246
Airframe-propulsion system aerodynamic interference predictions at high transonic Mach numbers including off-design engine airflow effects [AIAA 82-13098] p0929 A82-13098
Optima performance and wake geometry of co-axial rotor in hover [AIAA 82-18156] p0249 A82-18156
A numerical approach to co-axial rotor aerodynamics [AIAA 82-18157] p0249 A82-18157
Helicopter rotor downwash: Results of experimental research at the DFVLR-rotor test stand and their comparison with theoretical results [AIAA 82-18158] p0249 A82-18158

Investigations of the separation behavior on airfoils at high angles of attack, using linear lift theory [ABB-FB-122/Z/S/POW/37] p0252 A82-18189
The effect of a well on the aerodynamics of a spoiler --- wind tunnel flow visualization and pressure measurement [ABB-1269] p0263 A82-19194
Theoretical and experimental investigations of wind tunnel interference due to angle of attack [ABB-FB-122/6/POW/34] p0260 A82-21226
A numerical investigation of two-dimensional, subsonic, linear, wind tunnel interference theory [AIAA/AEROTECH-403] p0364 A82-23197
Experimental determination of flow-interference effects of wing-mounted, two-dimensional, full-capture propulsion nacelles in close proximity to a vehicle body at a Mach number of 6 [NASA-PB-82226] p0805 A82-25217
Evaluation of an experimental technique to investigate the effects of the engine position on engine/pylon/wing interference --- wind tunnel tests [ML-SP-81020-U] p0521 A82-28262
Aerodynamics on a transport aircraft type wing-body model [NASA-TR-76078] p0557 A82-30287

AERODYNAMIC INTERFERENCE

Effects of vane/blade ratio and spacing on fan noise [AIAA PAPER 81-2033] p0600 A82-10457
Airframe effects on top-mounted inlet systems for VTOL fighter aircraft [AIAA PAPER 81-2631] p0156 A82-19212
Numerical comparison of unsteady subsonic aerodynamic forces on wing-body-tail exposed to travelling gust [AIAA 82-20663] p0185 A82-22112
Transonic wind tunnel wall interference corrections for three-dimensional models [AIAA 82-0586] p0237 A82-24663
Closed-form solutions of supersonic wing-body interference [AIAA 82-33120] p0380 A82-43308

Blast Loads

Nonlinear prediction of subsonic aerodynamic loads on wings and bodies at high angles of attack [AIAA PAPER 81-2952] p0508 A82-13924
Improved techniques for the calibration and measurement of in-flight loads [AIAA PAPER 81-2952] p0506 A82-13924
Development of a comprehensive analysis for rotorcraft. II - aircraft model, solution procedure and applications [AIAA PAPER 81-2952] p0506 A82-14007
Calculation of the unsteady loads on the surface of a moving wedge with an incident shock wave [AIAA PAPER 81-2952] p0506 A82-18590
On the track of practical forward-swept wings [AIAA PAPER 81-2952] p0506 A82-19071
BB 211 powerplant deterioration - review of current situation and lessons learned [AIAA PAPER 81-2952] p0506 A82-24393
Operating flight loads and their effect on engine performance [AIAA PAPER 81-2952] p0506 A82-29405
Hypothetical fatigue life problem - Application of Aerospacelike method [AIAA PAPER 81-2952] p0506 A82-29716
Helicopter rotor load prediction [AIAA PAPER 81-2952] p0506 A82-29716
The Model 412 multi-bladed rotor system [AIAA PAPER 81-2952] p0506 A82-26376
Helicopter vibration suppression using simple pendulum absorbers on the rotor blade [AIAA PAPER 81-2952] p0506 A82-26620
A simple crack closure model for prediction of fatigue crack growth rates under variable-amplitude loading [AIAA PAPER 81-2952] p0506 A82-26630
The stressed state of a parachute canopy during opening [AIAA PAPER 81-2952] p0506 A82-29820
Application of a transonic potential flow code to the static aeroelastic analysis of three-dimensional wings [AIAA PAPER 81-2952] p0506 A82-30156
Application of optimal control techniques to aircraft flutter suppression and load alleviation [AIAA PAPER 81-2952] p0506 A82-30173
Joint Anglo-American experience of the analysis of helicopter rotor blade pressure distribution [AIAA PAPER 81-2952] p0506 A82-37770
Determination of rotor wave induced parasitic airloads [AIAA PAPER 81-2952] p0506 A82-37770
Supersonic missile aerodynamics and performance relationships for low observables mission profiles [AIAA PAPER 82-1226] p0487 A82-39008
Dynamic load measurements with delta wings undergoing self-induced roll-oscillations [AIAA PAPER 82-1320] p0487 A82-39090
Manoeuvre stability of a vehicle with a towed body [AIAA PAPER 82-1347] p0488 A82-39119
The use of linearized-aerodynamics and vortex-flow methods in aircraft design [AIAA PAPER 82-1364] p0497 A82-40294
Theory and application of optimum airloads to rotors in hover and forward flight [AIAA PAPER 82-1364] p0498 A82-40506
Performance of the Botor Systems Research Aircraft calibrated rotor loads measurement system [AIAA PAPER 82-1364] p0498 A82-40506
Results of the AH-64 Structural Demonstration [AIAA PAPER 82-1364] p0498 A82-40551
Gust load alleviation on Airbus A 300 [AIAA PAPER 82-1364] p0498 A82-40881
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 [AIAA PAPER 82-1364] p0498 A82-40909

References

[HASA-CB-809202] p0185 A82-14007
[HASA-TH-83287] p0405 A82-25217
[HASA-PY-83287] p0487 A82-39098
[HASA-PY-83287] p0506 A82-40881
[HASA-PY-83287] p0506 A82-40909
Application of the ONERA dynamic stall model to a helicopter blade in forward flight (ONERA, TP-No. 1983)-93, p0062 A82-13992
An experimental study of separated flow on a finite wing ([AIAA PAPER 81-1682] p0167 A82-20923
Aerelasticity of compressor blades - Subsonic stall flutter p0285 A82-26933
A computer-controlled oscillation mechanism for unsteady aerodynamics experiments p0320 A82-29019
Effects of dynamic stall on SWCS --- Small Wind Energy Conversion System p0384 A82-13707
Will ABC technology produce the next-generation helicopter p0385 A82-39161
The performance of centrifugal compressor channel differencers (AIAA PAPER 82-CT-10) p0420 A82-35279
Effect of the rear stage casing treatment on the overall performance of a multistage axial-flow compressor (AIAA PAPER 82-CT-110) p0429 A82-35344
A simple system for helicopter Individual-Blade-Control and its application to stall flutter suppression p0439 A82-37765
A simple system for helicopter Individual-blade-control and its application to stall-induced vibration alleviation ([AIAA PREPRINT 81-12) p0442 A82-37705
Analytic extrapolation to full scale aircraft dynamics (AIAA PAPER 82-1387) p0490 A82-39143
Dynamic surface measurements on a model helicopter rotor during blade slap at high angles of attack p0503 A8-40555
Prediction of high alpha flight characteristics utilizing rotary balance data p0510 A82-40953
Aerelastic equilibria of a helicopter rotor in the presence of nonlinear aerodynamic forces ([ONERA, TP-No. 1983-339), p0547 A82-42809
Transient phenomena of shock-induced turbulent separation for a spikebody and stalling airfoil at transonic and supersonic speeds ([AIAA PAPER 82-1362) p0549 A82-42550
Spin recovery training --- licensing requirement (GPO-66-020) p0525 A82-10022
An experimental investigation of the rotating stall, surge and wake behind the rotor for a single stage axial compressor p0533 A82-11088
Compressor stall inducing installation effects of an engine control parameter for the CF-5 aircraft p0595 A82-11085
On the numerical analysis of stall flutter in turbine cascades p0143 A82-15054
Summary of theoretical considerations and wind tunnel tests of an aerodynamic spoiler for stall proofing a general aviation airplane ([NASA-TR-165100) p0187 A82-15046
Spin tests of a single-engine, high-wing light airplane ([NASA-TP-1927) p0189 A82-16068
Application of the ONERA dynamic stall model to a helicopter blade in forward flight p0250 A82-18161
Some unsteady aerodynamic effects on helicopter rotors p0250 A82-18162
State of the art and recent perspectives on the study of the loss of control and spin p0347 A82-22197
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 A82-22669
Unsteady pressure measurements at stall and buffeting ([AIAA PREPRINT 79-09) p0364 A82-23198
Aerelasticity of compressor blades: Subsonic stall flutter p0414 A82-26189
AERODYNAMIC VEHICLES

Effects of wing-leading-edge modifications on a high-lift, low-aspect-ratio model wing used in a low-speed wind tunnel: Investigation of high-lift potential flows at high angle of attack [AIAA-TP-2001] p0446 A82-26217


AERODYNAMICS

WT AEROTHERMODYNAMICS

WT TURBOMACHINE APPLICATIONS

WT ROTOR AERODYNAMICS

Control laws for adaptive wind tunnels p0012 A82-10985

The CIVIC - A concept in vortex induced combustion II [ASME PAPER 81-GT-12] p0107 A82-11977

Rapid elliptic solvers p0082 A82-15827

Remarks on the calculation of transonic potential flow by a finite volume method p0082 A82-15835

Some aerodynamic aspects of hang gliding p0109 A82-17124

Technical evaluation report of the AGARD Fluid Dynamics Panel Symposium on computation of viscous-inviscid interactions [AGARD-AG-1601] p0163 A82-19737


Aerodynamics - Retrospect and prospect [AMS-21904] p0275 A82-26898

Computational fluid dynamics - The coming revolution p0277 A82-26366

The effect of swirl burner aerodynamics on boxer formation p0326 A82-26658

Measurement of aerodynamic work during fan flutter p0327 A82-26987

Vertical takeoff technology - Flight mechanics, aerodynamics, and propulsion systems - German book p0381 A82-33348


Aerodynamics: The science of air in motion /2nd edition/ --- Book p0383 A82-33671

Flow visualization techniques for the study of high incidence aerodynamics [AGARD-AG-1601] p0389 A82-34943

CFD technology for propulsion installation design: Forecast for the 80's --- computational fluid dynamics in aerospace applications [ASME PAPER 82-GT-21] p0420 A82-35289

Practical aerodynamic problems - Military aircraft p0431 A82-35556


Aerodynamic research applications at Boeing p0515 A82-41000

Modern compressible flow with historical perspective --- Book p0546 A82-42552

Computational aerodynamics p0581 A82-45581

Investigation of the aerodynamics of an asymetric body in an asymmetric flow in the presence of localized injection p0583 A82-46692

Nonlinear transonic flutter analysis [AIAA PAPER 81-6088] p0583 A82-46687

Development of high loading, high efficiency axial flow turbine p0583 A82-47069

Analysis of tapered-laid hybrid aerostatic journal bearings p0584 A82-47944

Aerodynamic calculations and design of subcritical airfoils p0032 A82-10983

Effect of a part span variable inlet guide vane on TF34 fan performance [NASA-CR-165458] p0088 A82-12075


Research and Technology p0091 A82-13043

Prediction of subsonic aircraft flows with jet exhaust interactions p0097 A82-13096

Predisign study for a moders u-bladed rotor for the NASA rotor systems research aircraft [NASA-CP-166153] p0167 A82-16042

Flight dynamics technology development: Structures and dynamics, vehicle equipment/subsystems, flight control and aeromechanics [AD-A056636] p0195 A82-17082

Scientific report of the Fluid Mechanics Research Department p0213 A82-17469

XFV-12A diagnostic and development program [AD-A100354] p0254 A82-18206

Tendencies in the development of subsonic transport aircraft with special consideration of aerodynamics [ASA-TR-705] p0255 A82-18214

Air Force Academy aeronautics digest Fall/Sumer 1980 [AD-A100338] p0301 A82-20139

Design criteria for flightpath and airspeed control for the approach and landing of STOL aircraft [NASA-TP-1911] p0305 A82-20187

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 p0316 A82-21193


An accurate method for evaluating the kernel of the integral equation relating lift to downwash in an steady potential flow [NASA-TR-83281] p0363 A82-23194

Combining analysis with optimization at Langley Research Center. An evolutionary process [NASA-TR-84472] p0400 A82-24866

Air Force Academy aeronautics digest Spring/Summer 1981 [AD-A112421] p0462 A82-27216

General aviation activity and avionics survey [AD-A112924] p0521 A82-28244

Aerodynamics of advanced axial-flow turbomachinery [AD-A114911] p0537 A82-29328


Computational aerodynamics and design [NASA-TR-84527] p0605 A82-33348

AEROLENSITY

WT AEROTHERMOLUMINESCENCE

Aeroleminiscence matters - Some reflections on two decades of testing in the NASA Langley Transonic Dynamics Tunnel p0661 A82-13969

Application of the ONERA dynamic stall model to a helicopter blade in forward flight [ONERA, TP NO. 1981-09] p0662 A82-13992

In-flight deflection measurement of the RATS aerodynamically tailored wing [AIAA PAPER 81-2650] p0663 A82-14281

Comparison of wind tunnel and theoretical aerodynamic predictions with flight measured airloads for the R-1 aircraft [AIAA PAPER 81-2307] p0665 A82-14393

Effect on surface pressures of trapezoidal holes in a T-38 stabilator p0113 A82-17602

SUBJECT INDEX

A-16
Effect of the blading type on the aerodynamic damping of blade vibrations with allowance for the profile curvature

Torsional vibrations of a wing carrying a concentrated load (asymptotic behavior)

On the track of practical forward-swept wings

Aerelastic characteristics of a cascade of mistuned blades in subsonic and supersonic flows

Flutter - Tomorrow's terminology

A generalized Mull's method for the stability analysis of parametrically excited dynamic systems

Results of recent measurements on an oscillating aerofoil

Performance and aerelastic tradeoffs on recent rotor blade designs

Aeroelasticity of compressor blades - Subsonic stall flutter

Flutter of forward swept wings, analyses and tests

Design considerations and experiences in the use of composite material for an aerelastic research wing

Active control of aerelastic divergence

Transonic time response analysis of three D.O.F. conventional and supersonic aircraft

Application of a transonic potential flow code to the static aerelastic analysis of three-dimensional wings

Comparisons between computations and experimental data in unsteady three-dimensional transonic aerodynamics, including aerelastic applications

Aerelastic flutter and divergence of stiffness coupled, graphite/epoxy, cantilevered plates

Flutter analysis using nonlinear aerodynamic forces

Feedback control of a cantilever wing in steady airflow

Identification of the form of motion of an aircraft

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

Development of a control law for the alleviation of maneuver loads on an elastic aircraft

An algorithm for calculating the compliance matrices of aircraft structures by the substructure method as applied to aerelasticity problems

A method of accounting for the effect of aircraft deformations on its loading

Aerodynamic lag functions, divergence, and the British flutter method

Substructure program for analysis of helicopter vibrations

Static and aerelastic optimization of aircraft

Survey of active and passive means to reduce rotorcraft vibrations

P-16 active flutter suppression program

Robust Kalman filter design for active flutter suppression systems

Dynamic stability of flexible forward swept wing aircraft

Summary and recent results from the NASA advanced high-speed propuer research program

An experimental investigation of a bearingless model rotor in hover

Helicopter vibration reduction by rotor blade modal shaping

Finite element analysis for bearingless rotor blade aerelasticity

Calculations of transonic steady state aerelastic effects for a canard airplane

Computer-aided derivation of equations of motion for rotary-wing aerelastic problems

Design of compensated flutter suppression systems

Wind tunnel test and aerelastic analysis of three aerastically tailored wings

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

Sensitivity analysis and optimization of aerelastic stability

Fundamentals of strength and aerelasticity in flight vehicles - Russian book

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

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

Nonlinear transonic flutter analysis

A method for determination of the aerelastic behavior of aircraft with active control systems

Aeroelasticity matters: Some reflections on two decades of testing in the NASA Langley transonic dynamics tunnel

Design for active and passive flutter suppression and gust alleviation

Interactive flight control and aerelastic stabilization --- forward swept wing flight vehicles

Estimation methods for the determination of dynamic responses of elastic aircraft --- to random loads

Interactive investigation of transonic compressor aerodynamics and aerelasticity

Control of vibration in aerelastic cascade experiments

Technical evaluation report on the aerelasticity in Turbomachines Symposium

Integration of a code for aerelastic design of conventional and composite wings into ACSIBT, an aircraft synthesis program --- wing aerelastic design (WADS)

Correlating measured and predicted dynamic stability characteristics for an advanced bearingless rotor

Application of the OHEB dynamic stall model to a helicopter blade in forward flight

Flutter and time response analyses of three degree of freedom airfoils in transonic flow
AEROSPACE SCIENCES

Orbital and aircraft operations
[ASA Paper 82-12-77] p0423 A82-35322
Moderate compressible flow with historical perspective
--- Book

AEROSPACE SCIENCES
Research and Technology annual report FY-1981
[NASA-TP-84199] p0371 A82-24137

AEROSPACE SYSTEMS
p0065 A82-14676

Aerospace highlights 1981
p0103 A82-16135

Determination of the flammability characteristics of aerospace hydraulic fluids
p0104 A82-16187

Analytical prediction of aerospace vehicle vibration environments
[ASA Paper 81-DE-29] p0160 A82-19305

Lighting simulation and testing
[ASA Paper 82-15711] p0432 A82-25733

CSS-the designer's media, the analyst's model --- Configuration Development System for aircraft
p0518 A82-40991

Optimizing aerospace structures for manufacturing cost
p0516 A82-41014

Theory and applications of optimal control in aerospace systems
[AGARD-AD-251] p0306 A82-11073

An overview of optimal control in aerospace systems
[AGARD-AD-308] A82-11074

Flight dynamics technology development: Structures and dynamics, vehicle equipment/subsystems, flight control and aerospace
[AD-406666] p0195 A82-17002

AEROSPACE TECHNOLOGY TRANSFER
Considerations and applications for the use of fluidics in aerospace controls
p0019 A82-12087

AEROSPACE VEHICLES
NT FLEXIBLE SPACECRAFT
Development of Integrated Programs for Aerospace-Vehicle Design (IPAD) - IPAD user requirements
[NASA-CR-29065] p0141 A82-15034

AEROSPACEPLANES
A concept for light-powered flight
[ASA Paper 82-1216] p0418 A82-35067

Inflated wings
p0512 A82-40966

Structures testing analysis real-time network
[SABRANT] p0413 A82-25827

AEROSTATICS
Analysis of tapered-land hybrid aerostatic journal bearings
[ASA Paper 82-47944]

AEROSTARFS
U AIRSHIPS
AEROTHERMODYNAMICS
Design analysis of high temperature transparent windshields for high performance aircraft
[ASA Paper 81-ENAS-5] p0111 A82-10893

Qualification of the thermal environment for externally carried aircraft stores and ordnance
p0019 A82-12100

Technical innovations in testing and analysis of heat and pressure models in hypersonic wind tunnels
[A82-0578] p0236 A82-24660

Reverse heat-transfer problems - Domains of application in the design and testing of technical systems
p0274 A82-25971

Radiation enhancement by nonequilibrium during flight through the Titan atmosphere
[ASA Paper 82-0876] p0373 A82-31883
Gas turbine aero-thermodynamics with special reference to aircraft propulsion --- Book
p0303 A82-33650

An experimental study at free-stream Mach 5 of the aerodynamic heating of the upper surface of piano wings of various platforms
p0388 A82-34149

Small turbine engine augmentor design methodology
[ASA Paper 82-1179] p0417 A82-35044

Test facility and data handling system for the development of axial compressors

A-20

SUBJECT INDEX

[ASA Paper 82-GF-73] A82-35322
Moderate compressible flow with historical perspective
--- Book

A real time Pegasus propulsion system model for VTOL piloted simulation evaluation
[NASA-TP-62770] p0100 A82-13144
Calibration and performance of the AEDC/VEP tunnel C, Mach number 4, aerothermal wind tunnel
[AD-A166279] p0571 A82-31338

AEROTHERMODYNAMICS
Calculation of sensitivity derivatives in thermal problems by finite differences
p0181 A82-21391

AEROSPACE LIQUID FUELS
APCS (CONTROL SYSTEM)
U AUTOMATIC FLIGHT CONTROL

AFTERBURNERS

Relaxation solution for viscous transonic flow about fighter-type forebodies and afterbodies
[ASA Paper 82-0152] p0118 A82-17865

Aerodynamic interactions with turbulent jet exhaust plumes
p0381 A82-33125

An investigation of F-16 nozzle-afterbody forces at transonic Mach numbers with emphasis on model scale effects
[AD-A104905] p0091 A82-12392

Aerodynamics of Power Plant Installation
[AGARD-CP-391] p0093 A82-13065

Aerodynamic aspects of a high bypass ratio engine installation on a fuselage afterbody
p0096 A82-13093

An afterbody drag balance --- transonic wind tunnel
goal study
[ASA Paper 82-1197] p0135 A82-14103

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
p0260 A82-23158

AFTERBURNERS
U AFTERBURNING

AFTERBURNING
Small turbine engine augmentor design methodology
[ASA Paper 82-1179] p0417 A82-35044

AUC (CONTROL)
U AUTOMATIC Gain CONTROL

AGE HARDENING
U PRECIPITATION HARDENING

AGING (MATERIALS)
Effects of 50,000 hours of thermal aging on graphite/epoxy and graphite/polyimide composites
[ASA Paper 82-0657] p0335 A82-30087

Aging of composite rotor blades
p0440 A82-37771

AGRICULTURAL AIRCRAFT
The utilization of agricultural aircraft in economical operations for fighting forest fires in Israel
p0331 A82-29580

Rationalization of the maintenance process for helicopter Ka-26
p0590 A82-39246

The design integration of wingtip devices for light general aviation aircraft
[AD-A95962] p0508 A82-40933

Haven aircraft filter-absorber --- agricultural aircraft
[AD-A95962] p0509 A82-13139

Briefs of accidents involving aerial application operations, U.S. general aviation, 1979
p0546 A82-27256

Agricultural airplane mission time structure
[ASA Paper 82-04470] p0537 A82-29329

AR-16 HELICOPTER
Main rotor hub electromagnetic signature reduction
p0279 A82-25393

Joint Anglo-American experience of the analysis of helicopter rotor blade pressure distribution
p0440 A82-37770

Improved methods in ground vibration testing
[ASA Paper 82-3778] p0441 A82-37781

Error minimization in ground vibration testing --- of helicopter structures
p0502 A82-40550

A-20
The effect of ejector augmentation on test-section flow quality in the Calpan 8-ft transonic wind tunnel. [AIAA 82-0571] p0236 882-24658
Pressure measurements on twin vertical tails in buffetting flow. [AIAA 82-0661] p0337 882-30138
Feedback control of a cantilever wing in steady airflow. [AIAA 82-0729] p0340 882-30177
Aerodynamics: The science of air in motion. 2nd edition. ---- Book. p0383 882-33671
Experimental study on discharge and loss coefficients of combustor nozzles. p0390 882-34644
Semiaempirical analysis of liquid fuel distribution downstream of a plane orifice injector under cross-stream airflow. [ASME PAPER 82-02-16] p0402 882-35285
Gas turbine airflow control for optimum heat recovery. [ASME PAPER 82-02-02] p0423 882-35329
Fluctuating forces and rotor noise due to distorted inflow. p0510 882-40945
Wind-tunnel testing of V/STOL configurations at high lift. p0510 882-40949
Laser Doppler anemometry applied to the study of the airflow in the wake of an helicopter rotor. [OMBA, TP 80, 1982-61] p0552 882-43755
A vapour cycle cabin cooling system for the Sea King HX.50 helicopter. [AD-A10521] p0600 882-12069
System for acquisition and analysis of dynamic tests on air intakes. [NASA-TN-76646] p0131 882-14056
Combustion behavior of solid fuel ramjets. Volume 1: Correlation of reacting and non-reacting flow characteristics. [AD-A1060691] p0136 882-14136
ALQ-164 POD/AV-6C environmental evaluation flight tests. [AD-A110198] p0310 882-21170
Active clearance control system for a turbomach. [NASA-CASE-LEW-12938-1] p0591 882-32366
AIR FREIGHT
G AIR CARGO
AIR INLETS
E AIR INTAKES
AIR ENGINES
ST ENGINE INLETS
ST INLET AIRCRAFT CONFIGURATIONS
ST SUPERSONIC INLETS
The three-dimensional calculation of the flow in helicopter air intakes. [OMBA, TP 80, 1981-124] p0164 882-19740
Low speed testing of the intakes designed for a tandem-fan V/STOL nacelle --- conducted in the Lewis 10 by 10 foot wind tunnel. [NASA-TN-07276] p0034 882-11042
Transonic flows in an air inlet with large incidence and the effect of a blowing flap. p0094 882-13071
An acquisition and analysis system for dynamic tests of air intakes. p0095 882-13082
Studies of air inlets at Reynolds numbers comparable to flight in OMBAA's F1 and S1A wind tunnels. p0096 882-13091
Airframe-propulsion system aerodynamic interference predictions at high transonic Mach numbers including off-design engine airflow effects. p0097 882-13098
Helicopter inlets. p0208 882-17217
AIR JETS
Plain-jet airblunt atomization of alternative liquid petroleum fuels under high ambient air pressure conditions. [ASME PAPER 82-02-12] p0420 882-35293
Local heat transfer to staggered arrays of impinging circular air jets. [ASME PAPER 82-02-211] p0427 882-35401
Digital spectral analysis of the noise from short duration impulsively started jets. p0434 882-36191
AIR LAUNCHING
Wind tunnel studies of store separation with load factor - Freedom and capture trajectories. p0363 882-33626
AIR LAW
Consequences of American airline deregulation. Legislative theory in a concrete example. p0165 882-19947
Air transportation of handicapped persons. p0220 882-24338
Predicting the application of vicarious liability to fixed base operators - Still guesswork after all these years. p0377 882-32056
Aviation accident investigation - Functional and legal perspectives. p0377 882-32059
Factors influencing settlement of personal injury and death claims in aircraft accident litigation. p0377 882-32062
Aviation negotiations and the U.S. model agreement. p0377 882-32063
The DC-10 Chicago crash and the legality of SPAB 40. p0463 882-37382
The recognition of air worthiness of aircraft - Comments to a remarkable judicial decision. p0444 882-38025
Noise pollution and airport regulation. p0496 882-40051
O'Hare International Airport - Impervious to proposed state efforts to limit airport noise. p0496 882-40052
Extracts from Problems of Air Law, a collection of works of the Section of air law of the Aviakhim society of the USSR and Aviakhim RSFSR. [NASA-TN-76913] p0565 882-31153
AIR NAVIGATION
MT ALL-WEATHER NAVIGATION
MT AREA NAVIGATION
MT BAR-OF-THE-EARTH NAVIGATION
Three navigation systems and their costs of acquiring remote sensing data. p0001 882-10049
Navigation task partitioning in distributed-processing avionics systems. p0009 882-10046
Discrete address beacon, navigation and landing system. p0110 882-10560
Fast and accurate gyrocompass using strapdown tuned rotor gyros as a solution to combat helicopters navigation problems. p016 882-11927
National Aerospace Meeting, Trevose, PA, April 8-10, 1981, Proceedings. p0221 882-12626
Satellite geometry considerations for low cost GPS user equipment. p01 882-12630
A solution to the static geometry problem for JITS relative navigation. p0222 882-12634
Memory requirements for future navigation systems. p0222 882-12637
A navigation systems planning model. p0222 882-12640
The integrated inertial sensor assembly "JITSA" - A redundant strapdown system for advanced aircraft.

A-22
navigation and flight control functions

Integrated satellite navigation and strapdown
temperature, humidity, and heading reference systems for civil
air carriers

Ring Laser Gyro Navigator / AGL
test results

Fuel efficient flight profiles in an ATC flow
management environment

An update of an integrated CMU system -- TIEs ---
Communication, Navigation, and Identification
provided by Tactical Information Exchange System

Time referencing of data in an asynchronous
environment --- for fighter aircraft avionics

A Locate prototype navigation receiver for
general aviation

Estimation of the efficiency of radioelectronic
flight navigation systems

Instrumentation to determine the suitability of
NAV systems for helicopter navigation in the
national airspace system /NAS/

Navstar Global Positioning System flight test
program overview

Evaluating sources of error in EAM/GAMS
navigation using a Kalman postprocessor ---
Electronically Agile Radar/Gimballed Electrally
suspended gyro airborne Navigation System

The agile transformnal filter -- a flexible building
block for ICIRA --- integrated Communications,
Navigation, and Identification Avionics

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

Technical/operational ATC scenarios for future TNA
navigation

The LANTIERE wide field of view Easter Head-Up
Display --- Low Altitude Navigation and
Targeting IF for Flight

SELECTING THE 1990 CIVIL AVIATION
RADIONAVIGATION SYSTEM

Solid-state VOR/NAV with remote maintenance and
monitoring

Position extrapolation quality calculation for
inertial and Doppler-AHS navigation systems

JTIDS distributed TDA/DODMA terrestrial
development results with emphasis on relative
navigation performance

JTIDS BELHAV network off-line simulations

Post-flight assessment of the JTIDS BelHAV

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

A stable decentralized filtering implementation
for JTIDS BelNav --- stable community relative
navigation

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

Tornado-avionic development testing

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U.S. Naval Postgraduate School, Monterey, CA,
June 23-26, 1980, Proceedings

The emerging need for improved helicopter navigation

Helicopters and Navstar/GPS

A simulator assessment of a wide field of view
head-up display for presentation of a visual
image during low level navigation and ground
attack missions

Navigational aids on board the Concorde

Institute of Navigation, Annual Meeting, 37th
U.S. Naval Academy, Annapolis, MD, June 9-11,
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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 FLEX-NAV
system

Analysis of loran-C system reliability for civil
aviation

Integration of multi-sensor navigation data using
optimal estimation techniques

Radio-navigational equipment of aircraft -- Devices
and operation ----house book

RAMP -- A fault tolerant distributed microcomputer
structure for air lift navigational control

Corona and antenna effects on the RH-53D
mine-sweeping helicopter and Navstar navigation set

Aviation electronics /4th edition/ --- Book

Operational testing of the L3-33 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 Harvat-A future worldwide civil
navigation/multipurpose system

Prospects for Harvat - A future worldwide civil
navigation/multipurpose system

FAA tests on the Navstar GPS Z-set

Opto-electronical push-broom scanners for
navigation, reconnaissance and generation of
digital data bases

Characteristics of a Paris-New York flight on
board the Concorde

Automation of flight operational control in the
German Democratic Republic

Loran-C navigation as an aid to aerial
photographic operations

Aviation meteorology in the 1980's -- A trend
forecast

The Center Weather Service Unit program /CWUS/ ---
for civil aviation

Weather support for helicopter operations in the
Gulf of Mexico

The Aviation Route Forecast /ABF/ program -- An
interactive system for Pilot Self-Briefing ---
Terminal area automatic navigation, guidance, and control research using the Microwave Landing System (MLS). Part 2: HNAV/MLS transition problem for aircraft

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

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Loran-C prototype navigation receiver for general aviation

The P-POD Project -- error detection codes

Investigation of air transportation technology at Ohio University, 1981 -- lorac

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

A Loran-C prototype navigation receiver for general aviation

Investigation of air transportation technology at Princeton University, 1981

Modification of OB-258/OBN Tactical Air Navigation System in a lessex helicopter

Air Pollution

Smoke reduction in FJ-710 turbofan engines by an ambient combustor [NASA PAPER 82-05-24]

Fuel microemulsions for jet engine smoke reduction [ASABE PAPER 82-CP-33]

On the Corrosion problems of the TAP F-5 aircraft [ASAE-TH-BAD-NAV-147]

Calculation of the contributions of air-traffic and road traffic to air pollution in the region of Schiphol airport in 1974 [AV-TO-7-77]

Control of air pollutants from aviation: The emission standard setting process [AD-A107435]

Smoke abatement system for crash rescue/fire training facilities [AD-A110250]

Smoke abatement system for crash rescue/fire training facilities [AD-A113637]

Control of air pollution from aviation: The emission standard setting process [AD-A107435]
AIRCRAFT CONTROL COSTS

The choice of technology for ATC radars. I - Transmitters
[AD-A107956] p0501 B82-45891

Maxwell-entropy spectral analysis of radar clutter
[AD-A107956] p0504 B82-45897

Airport and Airway Improvement Act of 1980, part 1
[SBOA-T-2191] p0310 B82-20462

FAC to maxime opportunities to discontinue or reduce
operating hours of some airport traffic control
towers
[AFB-22241C] p035 B82-11049

Orienting description of air traffic control in
the Netherlands
[YS-LA-285] p0087 B82-12063

Moving target Detector/Airport Surveillance radar
(MSR-7) field evaluation
[AD-A105621] p0132 B82-16071

The use of flight management computers in air
Carrier operations in the 1980s
[AD-A105621] p0132 B82-16071

Analysis of two air traffic samples in the
terminal area of Frankfurt/Main, August 4th 1978
[AFID-B-80-12] p0132 B82-16073

Design and implementation of a telecommunications
interface for the TACT/TVC real-time experiment
[AFSA-81-8212] p0132 B82-16075

Requirements for instrument approaches to triple
parallel runways
[AD-A106522] p0132 B82-16079

Real time simulation of computer-assisted
sequencing of terminal area operations
[HASS-81-16695] p0137 B82-16817

Automated Pilot Advisory System
[AFSA-27106] p0140 B82-15027

Analysis of two air traffic samples in the
terminal area of Frankfurt/Main, 3 August 1979
[AFSA-B-81-17] p0140 B82-15028

ATC/ATS Bullpen environment measurement near
Jacksonville, Florida
[AD-A108053] p0188 B82-16066

Aircraft position measurement using laser beacon
Optics
[AD-A107973] p0189 B82-16067

Investigation of Alcoa model 5851 very high
frequency omnidirectional radio range (VOR)
Systems, part 3
[AFSA-81-8585] p0200 B82-17149

Aeronautical Information Data Subsystem (AIDS): A
ground-based component of air navigation
services systems
[AD-A106611] p0201 B82-17150

Distributed intelligence for air fleet control
[AD-A106611] p0253 B82-18195

Analytical study of cockpit information requirements
[AD-A106524] p0256 B82-18181

National Airspace Data Interchange Network (NADIN)
support of Remote Monitoring System (RMS)
[AD-A105128] p0262 B82-19160

FAC statistical handbook of aviation
[AD-A109289] p0263 B82-19198

Air traffic control en route computer systems
[AFSA-89-9068] p0264 B82-19202

FAC air traffic control computer modernization
[AFSA-82-773] p0303 B82-20167

Air traffic control en route computer modernization
[AFSA-82-773] p0303 B82-20167

Air traffic control en route computer modernization
[AFSA-88-505] p0303 B82-20168

Aircraft collision avoidance and air traffic safety
[AFSA-88-505] p0303 B82-20168

Operational delay day forecasts for the 20 air
route traffic control centers for the year 1982
through 1992
[AD-A108684] p0304 B82-20173

Test plan for SSB -- surveillance radar for air
traffic control
[AD-A108503] p0307 B82-20392

Proceedings: Fifth Annual Workshop on
Meteorological and Environmental Inputs to
Aviation Systems
[AFSA-12-192] p0310 B82-21139

Operational procedures relative to severe weather
[AFSA-82-21142]

Meteorology impact on ATC system design
[AFSA-82-21144]

Preliminary functional description of integrated
flow management -- for air traffic control
Systems
[AD-A109909] p0313 B82-21171

Joint US/ USSR mode S compatibility test program,
volume 1
[FA2B-126616] p0319 B82-21173

Joint US/ USSR mode S compatibility test program,
volume 2
[FA2B-126624] p0314 B82-21174

Overview of the O'Hare Runway management
configuration study
[AD-A110137] p0320 B82-21224

Measures to increase airfield capacity by changing
aircraft runway occupancy characteristics
[AFSA-82-68841] p0351 B82-22240

Analysis of Monte Carlo simulation of
near-term aircraft flight paths
[AD-A10-2P-1997] p0367 B82-22333

Extravehicular Activity/Air Traffic Control
(ETA/ATC) test report: communication links to the
astronaut
[HASS-81-16690] p0370 B82-23381

Marine Air Traffic Control and Landing System
(MATCALS) Investigation, volume 1
[AD-A106662] p0394 B82-24160

Marine Air Traffic Control and Landing System
(MATCALS) Investigation, volume 2
[AD-A106663] p0394 B82-24169

Round table discussion on the transfer of results
from the project "Aids to navigation and control
of air traffic"
[FO8-20-ATC-1981] p0395 B82-24192

On-line experiments in acquiring and exploiting
AIDS data for ATC purposes
[AD-A103017] p0401 B82-25175

A pilot's view on possible uses of AIDS ---
airborne collision avoidance systems
[AD-A103017] p0401 B82-25176

Aeronautical information data subsystems -- air
navigation
[AD-A110777] p0401 B82-25176

Evaluation of a voice recognition system for the
NOTAS pseudo pilot station function
[HASS-81-84487] p0406 B82-25235

Dynamic scheduling of runway operations
[AD-A107195] p0450 B82-26200

Comparison between the surveillance performances
of the Air Traffic Control Radar Beacon System
mode of the Mode S and the Automated Radar
Terminal System
[AD-A111753] p0450 B82-26273

Standard engineering installation package, Air
traffic radio channel control equipment: Change 1
[AD-A107150] p0458 B82-26326

Airfield and airspace capacity/delay policy analysis
[AD-A110777] p0458 B82-26326

Marine Air Traffic Control and Landing System
(MATCALS) Investigation
[AD-A107384] p0466 B82-27260

High-speed rotary printing device for air traffic
control applications: A preliminary evaluation
[AD-A107325] p0466 B82-27264

Design and implementation of efficient algorithms
for automatic determination of correct slant
range
[AD-A112294] p0467 B82-27267

Terminal air traffic control with surveillance
services from the mode S system: Results of system
demonstrations to field controllers
[AD-A112632] p0467 B82-27268

AIRFLO: A distributed planner for air fleet
control
[AD-A107139] p0467 B82-27269

Marine Air Traffic Control and Landing System
(MATCALS) Investigation
[AD-A113047] p0468 B82-27276

An analysis of selected enhancements to the en
route central computing complex
[AD-A113575] p0479 B82-28044

Electronic/electric technology benefits study ---
avionics
[HASS-81-165800] p0521 B82-28243

Computer output at air terminal facilities and
their correlation to near miss mid-air
collisions (AFBD-82-43)
[AD-A107325] p0522 B82-28243

A study of wind shear effects on aircraft
operations and safety in Australia
[AFSA-65-8-979] p0522 B82-28243

Special investigation report: Air traffic control
systems
[PSB-82-16276] p0523 B82-28277

A-26
AIR WATER INTERACTIONS

NASA research activities in aeropropulsion
[NASA-TP-87876]
p0190 H82-16084

Air service, airport access and future technology
[TP82-105958]
p0192 H82-16100

p0263 H82-19195

Developmental possibilities and restrictions in air transport
[DPFME-RIT-01-9]
p0250 H82-22229

Investigation of air transportation technology at Princeton University, 1981
p0246 H82-26212

Final regulatory evaluation: Metropolitan Washington Airports Policy
[AD-H101583]
p0057 H82-26324

Cold regions testing of an air transportable shelter
[AD-H107131]
p0875 H82-27325

Identification of terms to define un constrained air transportation demands
p0568 H82-31311

AIR WATER INTERACTIONS
Structure and variability of the Alboran Sea frontal system
p0168 H82-20447

AIRBORNE EQUIPMENT
MT AIRBORNE/SPACEBORNE COMPUTERS
MT LIGHT AIRBORNE Multipurpose System
Instrumented aircraft verification of clear-air radar detection of low-level wind shear
p0034 H82-10221

A mathematical model of an over-sea airborne UHF radio link
p0016 H82-11006

High voltage surge and partial discharge test to evaluate aerospace equipment parts
p0016 H82-11740

On-board communication for active-control transport aircraft
[NAAS-81-2321]
p0052 H82-13520

Detection range analysis of an airborne medium PBR radar
p0068 H82-14723

Airborne Electronic Terrain Map System
p0071 H82-14771

Airborne Electronic Terrain Map System, II - Applications
p0071 H82-14773

Commercial airborne weather radar technology
p0075 H82-14868

High voltage/high power for airborne applications
p0083 H82-15918

Design and performance of airborne radomes - A Review
p0106 H82-16564

A GPS receiver design for general aviation navigation
p0122 H82-18132

Flight measurements of Area Navigation System performance using various combinations of ground aids and airborne sensors
p0123 H82-18147

Airborne measurements with a sensitive high resolution 90 GHz radiometer
p0151 H82-18940

Mapping in tropical forests - a new approach using the laser APF --- Airborne Profile Recorder
p0168 H82-20407

Laser communications via an atmospheric link
p0175 H82-20615

Airborne lidar measurements of smoke plume distribution, vertical transmission, and particle size
p0181 H82-21306

LAPS III recovery assist, securing and traversing /FAST system --- Light Airborne Multi-Purpose System
[SAE PAPER 811080]
p0224 H82-24012

Small ERP/SHP airborne MATCOM terminal
p0229 H82-27209

Selection of optimum antennas for tracking telemetry instrumented airborne vehicles
p0229 H82-27220

Fighting fire and other disasters from the air:
International Scientific-Technical Symposium, Hanover, West Germany, June 11, 12, 1982; Reports
p0230 H82-29576

Fighting forest fires with the aid of aircraft in the United States of America

A-28

SUBJECT INDEX

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
p0239 H82-29579

The utilization of agricultural aircraft in economical operations for fighting forest fires in Israel
p0231 A82-29590

The utilization of aircraft in fighting forest fires - French experience
p0231 A82-29581

The use of 'water bombers' and chemical agents against forest fires, taking into account the employment of a first-attack system
p0231 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
p0231 A82-29583

The employment of helicopters in Austria in connection with large-scale fires in buildings
p0231 A82-29585

Performance characteristics and employment profiles of the new helicopter BFI17
p0231 A82-29586

A system design for a multispectral sensor using two-dimensional solid-state imaging arrays
p0177 A82-31991

An optical data link for airborne scanning system
p0391 A82-34737

Airborne warning systems for natural and aircraft-initiated lightning
p0342 A82-35729

Certification of an airborne Loran-C navigation system
p0343 A82-35876

A single-frequency multitransmitter telemetry technique
p0384 A82-36281

An accurate Doppler navigator with microwave simplicity
p0385 A82-37037

Medium PBR performance analysis --- Pulse-Repetition Frequency
p0386 A82-37378

Application of an optical data link in the airborne scanning system
p0391 A82-39275

Nover jas - US Army studies EW helicopter
p0230 H82-41088

Use of aircraft-derived data to assist in MTC tracking systems. I - Accuracy and theoretical considerations
p0546 H82-42504

Proposed multipurpose flying radio-physical laboratory using an I-16 aircraft
p0550 A82-43278

Passive direction finding and signal location
p0578 A82-45346

Measuring flexural loads by means of strain transducers
p0582 A82-46619

A random vibration test for the evaluation of stiff sensitive component parts
p0583 A82-47073

Aquila - Robot eye in the sky
p0584 A82-48025

Integration of complex systems in current and future aircraft projects for the example of airavance
[AB-AB-18-00-0]
p0256 H82-1821

FM broadcast interferences related to airborne ILS, VOR and VHF communications
[ETCA-00-176]
p0268 H82-19149

RADAR simulator for aircraft instruments
[701-C-0136-A]
p0256 H82-22288

The 1981 direct strike lightning data
[AB-AB-18-00-0]
p0358 H82-22288

Testing of the Kuiper Airborne Observatory 9Irca
[AB-AB-18-00-0]
p0358 H82-22288

Astronomical research activities in aeropropulsion
[AB-AB-18-00-0]
p0358 H82-25040

Airborne gamma-ray spectrometer and magnetometer survey, Barrow quadrangle, Alaska, volume 2
[AB-AB-18-00-0]
p0363 H82-25623
Head-up displays - The integrity of flight information
EC-135 avionics modernization - hot bench - An evaluation of requirements and design for the future
Radar environment simulation for software testing
The significance of electronics for air traffic control at the present time and in the future
The impact of increasing energy costs upon the design philosophy of avionic fuel management systems
Thrust management - Current achievements and future developments
MLS fare low elevation angle guidance considerations
Tornado avionics development testing
The use of dynamic mock-ups in the design of advanced systems: DoD's Digital Avionic Information System and NAVY's Advanced Integrated Display System
High temperature engine control electronics
Local for precise position location - The TLM-SAT system
Analysis of Loran-C system reliability for civil aviation
Flight condition recognition /FCS/ technique - microprocessor-based recording for helicopter structural component fatigue damage
On-board computers save fuel and help RAC
An approach to software for high integrity applications - in aircraft gas turbine engine control
Estimation of the peak count of actively controlled aircraft
FBCS - A commercial flight management computer system
A preliminary laboratory evaluation of a reconfigurable flight control concept
An MLS with computer aided landing approach
Flight management computers
The fourth dimension - flight management systems for airline operations
The control and guidance unit for BACNAR
Boeing's new 767 crew work load
Aircraft design for fuel efficiency
Investigations concerned with shifting pilot activities to a higher hierarchical stage of flight control - German thesis
A floating-point/multiplicity-precision processor for airborne applications
Integrated sensor system for flight test instrumentation
New trends and concerns in the airliner radio equipment market
High Order Languages /HOL/ for flight control applications
The use of flight management computers in air carrier operations in the 1980s

[p0106 882-16562]
[p0157 882-19249]
[p0158 882-19245]
[p0163 882-19649]
[p0169 882-20517]
[p0170 882-20520]
[p0175 882-20586]
[p0177 882-20760]
[p0223 882-24007]
[p0235 882-20649]
[p0236 882-24650]
[p0239 882-24712]
[p0275 882-26046]
[p0329 882-29259]
[p0429 882-35430]
[p0462 882-36487]
[p0484 882-38938]
[p0485 882-39892]
[p0489 882-39122]
[p0491 882-39221]
[p0492 882-39540]
[p0493 882-39738]
[p0497 882-40388]
[p0512 882-40973]
[p0519 882-41453]
[p0544 882-41668]
[p0544 882-41869]
[p0555 882-44238]
[p0570 882-45608]
Flight characteristics design and development of the BBA/E37 EBI17 helicopter

The effect of fuel composition on groundfall from aircraft fuel jettisoning

Fuel system protection methods

High-altitude imagery user guide

A survey of gliding layer research

Replacement of aboard naval aircraft

AIRCRAFT ACCIDENT INVESTIGATION

Downdrafts and microbursts - An aviation hazard

Airborne weather radar and severe weather penetration

A note on fatal aircraft accidents involving metal fatigue

Extended time radar raw video recording

A matter of seconds - A critical account of three notable air disasters /5th Major Miller Memorial Lecture/

Modern aircraft accident investigation equipment and techniques

Improving the crashworthiness of general aviation aircraft by crash injury investigations

The investigation of aircraft accidents and incidents - Some recent national and international developments

Aviation accident investigation - Functional and legal perspectives

Post analysis of aircraft accident environments

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

Summary of Federal Aviation Administration Board safety recommendations


Solid state crash survivable flight data recorders for mishap investigations

Briefs of accidents involving gliders, U.S.

general aviation, 1979

AIRCRAFT ACCIDENTS

ACCRIDBIT IITBSIJ61IIOI

BASEP - survival from crashed heavy helicopters

Post ejection survival

A matter of seconds - A critical account of three notable air disasters /5th Major Miller Memorial Lecture/

Why safety --- fuel conservation through aircraft safety

AIRCRAFT ACCIDENTS

Accident prevention - A regulators view

Estimate of human control over mid-air collisions

Airworthiness of helicopter transmissions

Operational air traffic in the Federal Republic of Germany

The toll of ILS-preventable aviation accidents

A survey of U.S. Army helicopter main and tail rotor blade obstacle strikes

Analysis of aircraft dynamic behavior in a crash environment

Predicting the application of vicarious liability to fixed base operators - Still guesswork after all these years

Factors influencing settlement of personal injury and death claims in aircraft accident litigation

The DC-10 Chicago crash and the legality of FAA 49

The recognition of air worthiness of aircraft - Comments to a remarkable judicial decision

Analysis of general-aviation accidents using ATC radar records

[ATIA PAPER 82-1310]

Satellite localization of aircraft accidents - The Secret program

[SEE PAPER 811765]

Improving air carrier water survival

Heavy rain/wind shear accidents

Resonant convective complexes and general aviation

The performance of warning systems in avoiding Controlled-Flight-Into-Terrain /CFIT/ accidents

Advanced crash survivable flight data recorder and Accident Information Retrieval System (AIRS)

[AD-105510]

The prevalence of visual deficiencies among 1979 general aviation accident airmen

[AD-106400]

Test and evaluation of improved aircraft resistance systems

[AD-107576]

Special investigation report. Search and rescue procedures and arming of emergency locator transmitter: Aircraft accident near Michigan City, Indiana, 7 December, 1980

[PB1-249427]


[RTSA-ARH-81-177]

Solid state crash survivable flight data recorders for mishap investigations

[PB1-249427]

Briefs of accidents involving gliders, U.S.

general aviation, 1979

[PB1-129015]

[PB1-27258]

[AD-165526]

Aircraft collision avoidance systems

[SGO-79-031]

Transport aircraft accident dynamics

[NASA-CR-165560]

Review of rotocraft accidents 1977-1979

[PB1-115601]

Technical approaches for measurement of human errors

[NASA-CR-166314]

A theory of human error

[NASA-CR-166314]

Commercial jet transport crashworthiness

[NASA-CR-165899]

Transport aircraft crash dynamics

[NASA-CR-165851]

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

Update of the summary report of 1977-1978 task force on aircrew workload
SUBJECT INDEX

Requirements for independent and dependent parallel instrument approaches at reduced runway spacing (AD-A105673)  p0112 N82-14080
Dynamic scheduling of runway operations  p0495 N82-26200
Airfield and airspace capacity/delay policy analysis  p0458 N82-26326

AIRCRAFT BASICS
U AVIATION AIR FACILITIES
U AIRCRAFT MAINTENANCE
U LEADING EDGE FLAPS
U TRAILING-EDGE FLAPS
U WING FLAPS

Correlation of wear with oxidation of carbon-carbon composites  p0285 A82-27068
Dynamics of aircraft antiskid braking systems conducted at the Langley aircraft landing loads and traction facility (NASA TP-1984)  p0250 N82-18204
Tire tread temperatures during antiskid braking and cornering on a dry runway (NASA TP-20003)  p0395 N82-24193
Alert aircraft roll over chocks (AD-A107456)  p0527 N82-28307

AIRCRAFT CABINS
U AIRCRAFT COMPARTMENTS
U AIRCRAFT CABINERS

Commentary on facilities used in the development of a Sea Harrier all weather operations capability (AIAA PAPER 81-2407)  p0056 A82-13892
The Navy F/A-18 Hornet electromagnetic compatibility program  p0070 A82-14760
Initial F-18 carrier suitability testing  p0176 A82-20752
Navel Air Systems Command (NAVAIR) ATE program - Standardized ATE for the carrier environment  p0294 A82-27892
Aircraft carrier - Surface effect ship (AIAA PAPER 82-0808)  p0376 A82-31981
Review of defense-related vertical and short takeoff and landing (V/STOL) aircraft programs (GSO-50-278)  p0254 A82-18205
Investigation of cruise deck pendant catapult slot interaction; proposed corrective measure (AD-A108149)  p0258 A82-18232
Descent-rate curving for carrier landings: Effects of display gain, display noise and aircraft type (AD-A108801)  p0264 A82-19206
Reports by Systems Technology, Inc., in support of carrier-landing research in the visual technology research simulator (AD-A112466)  p0474 A82-27324

AIRCRAFT COMMUNICATIONS
A mathematical model of an over-sea airborne UHF radio link  p0014 A82-11406
AHRC 429 digital data communications on the Boeing 757 and 767 commercial airliners  p0049 A82-13405
An update of an integrated CNS system - TINS - Communication, navigation, and identification (AIAA 81-2292)  p0099 A82-13500
On-board communication for active-control transport aircraft (AIAA 81-2321)  p0052 A82-13520
Future directions in CNS integrated avionics  p0067 A82-14720
The agile transversal filter - A flexible building block for IGCS --- Integrated Communications, Navigation and Identification Avionics  p0070 A82-14765
An analysis of anti-jam communication requirements in fading media  p0176 A82-20695
Voice communications - The vital link  p0220 A82-21324
Beyond the horizon coverage for air navigation/traffic control  p0235 A82-26477
Loran-C NAV in mountainous areas  p0236 A82-26649
Radiating elements for hemispherically scanned arrays - onboard aircraft for data links to satellites  p0379 A82-29292
Implementation of aircraft identification schemes by public key cryptosystems  p0383 A82-33646
Digital computer simulation of modern aeronautical digital communication systems  p0436 A82-37318
New trends and concerns in the airliner radio equipment market (SEE PAPER 811766)  p0555 A82-40230
Automation in the skies - Automatic air traffic control  p0584 A82-47224
Investigation of the effects of airborne installation factors on receiver interference  p0268 N82-19422
FAR/PCC coordination procedures for PB broadcast stations  p0268 N82-19423
A comparative study of narrowband vocoder algorithms in Air Force operational environments using the Diagnostic Rhyme Test (AD-A110253)  p0660 N82-26956
Attack and on route avionics for in-weather operations  p0760 A82-27300
Propagation problems associated with aircraft communication systems  p0539 A82-29225
Airborne Flight Test System (AFTS)  p0589 A82-32354
Transverse electric waves for VLF/FM communication between aircraft (AD-A115834)  p0596 A82-32582

AIRCRAFT COMPARTMENTS
Aircraft cabin air ozone contamination and compliance with regulations  p0342 A82-31057
Flight demonstration of an integrated floor/fuel isolation system (AIAA PREPRINT 81-6)  p0442 A82-37788
Experimental model analysis of the fuselage panels of an Aero Commander aircraft (NASA-CR-165750)  p0626 N82-10028
A vapour cycle cabin cooling system for the Sea King H.S.50 helicopter (AD-A105211)  p0088 A82-12069
Preliminary thoughts on helicopter cabin noise prediction methods  p0249 A82-18148
The measurement of the mobility of structures at acoustic frequencies  p0248 A82-18149
Study of cabin noise control for twin engine general aviation aircraft (NASA-CR-165633)  p0260 A82-18995
Reduction of structural vibration by a dynamic absorber - helicopter cabins (NASA TN-500-181)  p0316 A82-21190
Acoustic analysis 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-CR-165869)  p0358 A82-22952
A research program to reduce interior noise on a general aviation airplane. Influence of - depressurization and damping material on the noise reductions characteristics of flat and curved stiffened panels (NASA-CR-165035)  p0462 N82-27088
Cabin safety in large transport aircraft (P882-129297)  p0664 A82-27244
Cranworthiness studies: Cabin, seat, restraint, and injury findings in selected general aviation accidents (AD-A114876)  p0531 A82-29275
Fireworthiness of transport aircraft interior systems (SEE PAPEB 81-768)  p0605 N82-33360

UNCLASSIFIED AIAA PUBLICATIONS  "AIRCRAFT COMPARTMENTS"

Aviation electronics /4th edition/ - Book  p0379 A82-29292
Implementing aircraft identification schemes by public key cryptosystems  p0383 A82-33646
Digital computer simulation of modern aeronautical digital communication systems  p0436 A82-37318
New trends and concerns in the airliner radio equipment market (SEE PAPER 811766)  p0555 A82-40230
Automation in the skies - Automatic air traffic control  p0584 A82-47224
Investigation of the effects of airborne installation factors on receiver interference  p0268 N82-19422
FAR/PCC coordination procedures for PB broadcast stations  p0268 N82-19423
A comparative study of narrowband vocoder algorithms in Air Force operational environments using the Diagnostic Rhyme Test (AD-A110253)  p0660 N82-26956
Attack and on route avionics for in-weather operations  p0760 A82-27300
Propagation problems associated with aircraft communication systems  p0539 A82-29225
Airborne Flight Test System (AFTS)  p0589 A82-32354
Transverse electric waves for VLF/FM communication between aircraft (AD-A115834)  p0596 A82-32582

AIRCRAFT CABINS

Aircraft cabin air ozone contamination and compliance with regulations  p0342 A82-31057
Flight demonstration of an integrated floor/fuel isolation system (AIAA PREPRINT 81-6)  p0442 A82-37788
Experimental model analysis of the fuselage panels of an Aero Commander aircraft (NASA-CR-165750)  p0626 N82-10028
A vapour cycle cabin cooling system for the Sea King H.S.50 helicopter (AD-A105211)  p0088 A82-12069
Preliminary thoughts on helicopter cabin noise prediction methods  p0249 A82-18148
The measurement of the mobility of structures at acoustic frequencies  p0248 A82-18149
Study of cabin noise control for twin engine general aviation aircraft (NASA-CR-165633)  p0260 A82-18995
Reduction of structural vibration by a dynamic absorber - helicopter cabins (NASA TN-500-181)  p0316 A82-21190
Acoustic analysis 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-CR-165869)  p0358 A82-22952
A research program to reduce interior noise on a general aviation airplane. Influence of - depressurization and damping material on the noise reductions characteristics of flat and curved stiffened panels (NASA-CR-165035)  p0462 N82-27088
Cabin safety in large transport aircraft (P882-129297)  p0664 A82-27244
Cranworthiness studies: Cabin, seat, restraint, and injury findings in selected general aviation accidents (AD-A114876)  p0531 A82-29275
Fireworthiness of transport aircraft interior systems (SEE PAPEB 81-768)  p0605 N82-33360
AIRCRAFT CONTROL CONT

A design criterion for highly augmented fly-by-wire aircraft
[AIAA 82-1570] p0465 882-39096
The use of differential pressure feedback in an automatic flight control system
[AIAA 82-1596] p0465 882-38981
The ideal controlled element for real airplanes is not a R/L
[AIAA 82-1606] p0465 882-38986
An alternate method of specifying bandwidth for flying qualities
[AIAA 82-1609] p0465 882-38988
Investigation of low order lateral directional transfer function models for augmented aircraft
[AIAA 82-1610] p0465 882-38989
An analysis of a nonlinear instability in the implementation of a YDOL control system during hover
[AIAA 82-1611] p0465 882-38990
X-29A flight control system design experiences
[AIAA 82-1538] p0466 882-39003
The effects of atmospheric turbulence on a quadrupolar heavy lift aircraft
[AIAA 82-1542] p0466 882-39009
Flight control synthesis using robust output observers
[AIAA 82-1575] p0466 882-39016
Handling qualities criteria for flight path control of V/STOL aircraft
[AIAA PAPER 82-1292] p0466 882-39081
Piloted simulator evaluation of a relaxed static stability fighter at high angle-of-attack
[AIAA PAPER 82-1295] p0466 882-39082
In-flight investigation of large airplane flying qualities for approach and landing
[AIAA PAPER 82-1296] p0466 882-39083
Parameter estimation applied to general aviation aircraft - A case study
[AIAA PAPER 82-1313] p0467 882-39094
Flight dynamics of rotorcraft in steep high-g turns
[AIAA PAPER 82-1345] p0468 882-39117
Guidance for the use of equivalent systems with MIL-7-0705C -- drugs for aircraft flight controls systems
[AIAA PAPER 82-1355] p0489 882-39124
A modern approach to pilot/vehicle analysis and the Neale-Smith criteria
[AIAA PAPER 82-1357] p0489 882-39125
Electronic stabilization of an aircraft
[AIAA PAPER 82-1359] p0491 882-39322
Optimal control application in supersonic aircraft performance
[AIAA PAPER 82-1359] p0491 882-39322
Flying qualities requirements for roll CAS systems
[AIAA PAPER 82-1356] p0496 882-40207
Terrain following/terrain avoidance system concept development
[AIAA PAPER 82-1518] p0497 882-40428
Flight experience with a backup flight-control systems for the EXR research vehicle
[AIAA PAPER 82-1541] p0497 882-40429
Optimal open-loop aircraft control for go-around maneuvers under wind shear influence
[CSBB-FE-301/S/POB/43) p0320 882-21220
Wind tunnel measurements of longitudinal stability and control characteristics of primary and secondary wing configurations
[CSBB-FE-301/S/POB/43) p0320 882-21220
Laser pointing in a turbulent atmosphere
[CSBB-FE-301/S/POB/43) p0320 882-21220
The testing of new technologies with the aid of the Alpha Jet aircraft
[CSBB-FE-301/S/POB/43) p0320 882-21220
Theoretical and experimental investigation of some nonlinear characteristics of electrohydraulic servovalves --- German thesis
[CSBB-FE-301/S/POB/43) p0320 882-21220
Use of DYGRA in-flight simulator HP 320 Hanns for handling qualities investigations
[CSBB-FE-301/S/POB/43) p0320 882-21220
Self-tuning regulator design for adaptive control of aircraft wing/store flutter
[CSBB-FE-301/S/POB/43) p0320 882-21220
Theoretical investigation of the influence of spoiler dynamics on the handling qualities of an aircraft with direct lift control
[CSBB-FE-301/S/POB/43) p0320 882-21220
Estimation of airplane stability and control derivatives from large amplitude longitudinal maneuvers
[ESA-TP-8185] p0027 882-10036
Control law design for transport aircraft flight tasks
[ESA-TP-8185] p0028 882-10042
Reliability analysis of the F-8 digital fly-by-wire system
[NASA-CR-16131] p0089 882-12079
Fixed gain controller design for aircraft [AI-A100677] p0089 882-12081
A standard control display unit for multi-aircraft application
[AI-A100677] p0089 882-12081
NASA aviation safety reporting system
[NASA-TP-81274] p0140 882-15025
An observer approach to the identification and isolation of sensor failures in flight control systems
[AI-A100677] p0089 882-12081
Role of optical computers in aerornautical control applications
[AI-A100677] p0089 882-12081
Multivariate control system by maneuver command: An application to air to surface gunnery
[AI-A100677] p0262 882-19154
Transport aircraft cockpit standardization (Federal Aviation Regulations part 25)
[Al-A100677] p0264 882-19207
A method for applying linear optimal control theory to the design of a regulator for a flexible aircraft -- improving riding quality in fighter aircraft
[AI-A100677] p0265 882-19212
Optimization of thrust algorithm calibration for Computing System (TC) for Thrust the NASA Highly Maneuverable Aircraft Technology (HAMAT) vehicle's propulsion system
[AI-A100677] p0317 882-21198
Theoretical linear approach to the combined man-machine system in manual control of an aircraft
[AI-A100677] p0320 882-21220
Development of a tentative flying qualities criterion for aircraft with independent control of six degrees of freedom: Analysis and flight test
[SP7-2-4095024] p0347 882-21919
Multivariable closed loop control analysis and synthesis for complex flight systems
[SP7-2-4095024] p0347 882-21919
Integration of avionics and advanced control technology
[SP7-2-4095024] p0347 882-21919
Enhanced piloting control through cockpit facilities and A.C.T.
[SP7-2-4095024] p0347 882-21919
State of the art and recent perspectives on the study of the loss of control and spin
[SP7-2-4095024] p0347 882-21919
Aerelastic tailoring for control and performance: Are requirements compatible?
[SP7-2-4095024] p0348 882-22200
Tail configurations for highly maneuverable combat aircraft
[SP7-2-4095024] p0348 882-22201
Analysis of rotary balance data for the F-15 airplane including the effect of conformal fuel tanks
[SP7-2-4095024] p0349 882-22213
Effects of cable geometry and aircraft attitude on the accuracy of a magnetic leader cable system for aircraft guidance during rollout and turnoff
[SP7-2-4095024] p0351 882-22239
An electronic control for an electrohydraulic active control landing gear for the F-A aircraft
[SP7-2-4095024] p0353 882-22252
Control law design to meet constraints using SIMFACT-synthesis package for active controls
[SP7-2-4095024] p0356 882-22280
An analysis of a nonlinear instability in the implementation of a YDOL control system
[SP7-2-4095024] p0356 882-22280
Production Verification Testing (FTT) of guidance and control systems for high reliability
[SP7-2-4095024] p0356 882-22300
State-of-the-art cockpit design for the BB-6SA helicopters
[SP7-2-4095024] p0366 882-22320
AIRCRAFT DESIGN CONT.

628 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

The use of frequency methods in rotorcraft system identification
(AIAA PAPER 81-2386)
p0064 A82-14392

Development of a comprehensive analysis for rotocraft. II - Aircraft model, solution procedure and applications
p0065 A82-14407

Wing design for light transport aircraft with improved fuel economy
p0065 A82-14416

New all-electric system technology --- electrochemical actuators for aircraft
p0067 A82-14710

The influence of smart computers on the cockpit of the future
p0069 A82-14743

The all composite Lear Fan 2100
p0077 A82-14936

Emergency in-flight egress for general aviation aircraft
p0077 A82-14953

A new safety harness for mobile aircrew
p0078 A82-14963

Crashworthy military passenger seat development
p0079 A82-14987

Aerospace highlights 1981
p0103 A82-16135

Direct approach to aerodynamic design problems
p0105 A82-16404

Special problems associated with aircraft radomes
p0106 A82-16558

Advanced cockpit for tactical aircraft
p0106 A82-16599

Grumman T-2C-2C - In a class of its own
p0107 A82-16600

V/STOL status from the engine technology viewpoint
(AIAA PAPER 81-2648)
p0108 A82-16613

Maintenance problems associated with the operation of the F-106A/F-105A engine in the AT-3B/A4
/Airway/ aircraft
(AIAA PAPER 81-2656)
p0109 A82-16915

Type 'A' V/STOL - One aircraft for all support missions
(AIAA PAPER 81-2661)
p0109 A82-16917

Airbus - Perspectives for the future
p0109 A82-16972

Turbofan resurgence - The next step
p0110 A82-17149

Fuel conservation now ---- improvements for existing production ram transport aircraft
p0111 A82-17281

Productivity and safety --- reducing transport aircraft operating costs and increasing safety
p0111 A82-17284

development of the Lockheed SR-71 Blackbird
p0112 A82-17417

The all-electric airplane - A new trend
p0113 A82-17420

Optima configuration for a 10 passenger business turbofan jet airplane
(AIAA PAPER 82-0365)
p0119 A82-17905

Highlights of a design concept for a close ground support fighter
(AIAA PAPER 82-0411)
p0121 A82-17932

Flight mechanics - Modern aircraft design and control concepts --- German book
p0121 A82-17951

Introduction to V/STOL airplanes --- Book
p0122 A82-18117

Design evolution of the Boeing 757
p0126 A82-18322

Lear Fan - The plastic aeroplane arrives
p0126 A82-18348

Boeing 757 - Introducing the big-fan narrowbody
p0126 A82-18349

Aircraft electrical equipment - Design and operation --- Russian book
p0151 A82-18998

On the track of practical forward-swept wings
p0154 A82-19071

Ground effect hover characteristics of a large-scale twin tilt-rotor V/STOL model
(AIAA PAPER 81-2609)
p0155 A82-19201

A-40

SUBJECT INDEX

Thrust-induced effects on low-speed aerodynamics of fighter aircraft
(AIAA PAPER 81-2612)
p0155 A82-19203

Tactical STOL moment balance through innovative configuration technology
(AIAA PAPER 81-2615)
p0155 A82-19204

STOL capability impact on advanced tactical aircraft design
(AIAA PAPER 81-2617)
p0155 A82-19206

Quiet Short-Haul research Aircraft - The first 3 years of flight research
(AIAA PAPER 81-2625)
p0156 A82-19209

Application of thrusting jets to tactical aircraft having vertical lift and short-field capability
(AIAA PAPER 81-2629)
p0156 A82-19211

Concept definition and aerodynamic technology studies for single-engine V/STOL fighter/attack aircraft
(AIAA PAPER 81-2647)
p0157 A82-19216

Sea based support aircraft alternatives
(AIAA PAPER 81-2649)
p0157 A82-19217

Design features of a sea-based multipurpose V/STOL, STOL, and STOL aircraft in a support role for the U.S. Navy
(AIAA PAPER 81-2650)
p0157 A82-19218

Flexibility is offered by XV-15 tilt-rotor concept
(AIAA PAPER 81-2660)
p0160 A82-19300

Design of the composite spar-vangus joint development
p0166 A82-20128

The prospects for liquid hydrogen fueled aircraft
p0166 A82-20137

Graphics in numerical control - The user's challenge
p0167 A82-20277

The future of integrated CAD/CAM systems - The Boeing perspective
p0167 A82-20278

p0169 A82-20513

Design possibilities for improved fuel efficiency of civil transport aircraft
p0169 A82-20514

The F52/RAF Bedford civil flight research programme --- on components and system integration for optimum ATC
p0170 A82-20519

p0173 A82-20551

An introduction to the airship
p0173 A82-20552

Offshore uses of the airship
p0173 A82-20553

Studies of modern technology airships for maritime patrol applications
p0173 A82-20554

The airship - Its application and promotional activity
p0173 A82-20555

The uses of airships in the Royal Navy
p0173 A82-20556

Airworthiness of airships
p0173 A82-20557

A surveillance airship for the New Zealand environment
p0173 A82-20557

Skyship 500 - The development of a modern production airship
p0173 A82-20558

p0174 A82-20559

Design for operability of military aircraft IAE engineering experience and requirements - Thoughts of a squadron engineer
p0174 A82-20560

Aircraft design for operability
p0174 A82-20563

Operability of military aircraft - Avionic design aspects
p0174 A82-20564

Operability of military aircraft - Some design and cost trends
p0174 A82-20565
AIRCRAFT DESIGN COST

Materials aspects of aircraft ERC design...
CAD/CAM in British Aerospace - Aircraft Group
Application of damage tolerance technology to type certification
Airworthiness considerations in the design of commercial transport aircraft
Designing for continued airworthiness - General aviation
Quality, quantity, and technology - A perspective on fighter development
Future strike fighter options - Concepts and technologies
Technology for quality and quantity in a new fighter
Fighter issues - 2000
Development of a self-optimizing flexible technology /SOFI/ transonic wing tunnel model
Spoilers or auxiliary flaps
Aircraft/airport compatibility - A constant challenge for aircraft designers
The design of a wing tunnel VTOL fighter model incorporating turbine powered engine simulators
Advanced electronic displays and their potential in future transport aircraft
The bomber that radar cannot see
Inverse heat-transfer problems - Domains of application in the design and testing of technical systems
Yak-36 Forger - The brand IVIOL fighter
Aerodynamics - Retrospect and prospect /The 21st Lanchester Memorial Lecture/
Design optimization of rotor systems for tilt-rotor aircraft that fold for shipboard compatibility
Method for engine-airframe integration using a high-level computer-aided engine design system of the Apparat series
A310 - Europe builds on Airbus successes
Structural design and construction of the New Technology Wing
Experimental program for general aviation - wing design, construction and flight testing
Composite aircraft structures
Preliminary design development AV-88 advanced aircraft 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 Group
Continuous filament advanced composite isogrid - A promising structural concept
A crashworthiness test for composite fuselage structure
SUBJECT INDEX

Canadair rotary wing technology development [p0093 A82-39729]
Stableeye - R. Stephenson --- RPY performance, design and materials characteristics [p0093 A82-39731]
BAeAAM - A manned aircraft flight research facility [p0093 A82-39733]
Electric propulsion for a max RPY system [p0096 A82-39744]
Development of the advanced composite ground spoiler for C-1 medium transport aircraft [p0095 A82-39895]
The use of linearized aerodynamics and vortex-flow methods in aircraft design /limited paper/ [AIAA PAPER 82-1304]
Analytical design and validation of digital flight control system structure [AIAA PAPER 82-1626]
Predesign study for an advanced flight research rotor [p0097 A82-00430]
A summary of weight savings data for composite VSTOL structure [p0502 A82-00546]
Some aerodynamic/flightmechanic aspects for the design of future combat aircraft [p0504 A82-00489]
Application of advanced exhaust nozzles for tactical aircraft [p0504 A82-00880]
Observations and implications of natural laminar flow on practical airplane surfaces [p0503 A82-00893]
External aerodynamic design for a laminar flow control glove on a Lockheed JetStar wing [p0505 A82-00895]
Material and process developments on the Boeing 767 [p0506 A82-00902]
The promise of laminated metals in aircraft design [p0506 A82-00903]
Design of compensated flap suppression systems [p0506 A82-00904]
Dual wing, swept forward swept rearward wing, and single wing design optimization for high performance business airplanes [p0506 A82-00931]
The design integration of wingtip devices for light general aviation aircraft [p0506 A82-00933]
Operation V10F - Development of a composite material wing [p0509 A82-00934]
Non-honeycomb F-16 horizontal stabilizer structural design [p0509 A82-00936]
Progress at Douglas on laminar flow control applied to commercial transport aircraft [p0511 A82-00950]
Design and tests of airfoils for sailplanes with an application to the ASH-19B [p0512 A82-00957]
Ejection powered propulsion and high lift subsonic wing [p0512 A82-00970]
Design Integration of CCR/USB for a sea-based aircraft [p0512 A82-00972]
Aircraft design for fuel efficiency [p0512 A82-00973]
Advanced aerodynamic wing design for commercial transports - Review of a technology program in the Netherlands [p0514 A82-00985]
Recent airfoil developments at DVL Ba [p0514 A82-00986]
CATIA - A computer aided design and manufacturing tridimensional system [p0514 A82-00990]
CDS—the designer's media, the analyst's model ---- Configuration Development System for aircraft [p0514 A82-00991]

AIRCRAFT DESIGN CONTENT

Aircraft geometry verification with enhanced computer-generated displays [p0510 A82-00992]
Application of composite materials and new design concepts for future transport aircraft [p0515 A82-00999]
Wind tunnel test and aerodynamic analysis of three aerodynamically tailored wings [p0515 A82-10001]
Optimizing aerospace structures for manufacturing cost [p0516 A82-10106]
Wing design for supersonic cruise/transonic maneuver aircraft [p0517 A82-10102]
Analysis of jet transport wings with deflected control surfaces by using a combination of 2- and 3-D methods [p0517 A82-10122]
Optimization of canard configurations - An integrated approach and practical drag estimation method [p0517 A82-10123]
Requirements and possible design choices for improving the operation of aircraft in the terminal control area [p0584 A82-41881]
A supersonic V/STO. fighter design project [p0546 A82-42545]
The application of geometric programming to the structural design of aircraft wings [p0546 A82-42546]
Design and analysis of advanced composite structures [p0547 A82-42670]
Europe's best seller - Second-generation aircraft emerges [p0547 A82-42750]
Taking the drag out of bombs [p0548 A82-42849]
The testing of new technologies with the aid of the Alpha Jet aircraft [p0550 A82-43326]
Applied flight mechanics in the design and in flight tests [p0550 A82-43327]
Processes and procedural approaches in the aerodynamic design of the Alpha Jet aircraft [p0550 A82-43328]
Aerodynamic computational procedures for subsonic and transonic aircraft [p0550 A82-43330]
Processes and procedural approaches used in the dimensioning of the supporting structure and the demonstration of the airworthiness [p0550 A82-43331]
Simulation in connection with the development of the Alpha Jet aircraft [p0550 A82-43333]
Methodology in flight tests [p0551 A82-43400]
Implicit model-following technique - Application to the design of longitudinal stability augmentation systems [p0551 A82-43571]
Technology for tomorrow’s business aircraft [p0551 A82-43577]
New approaches to fighter design [p0554 A82-44218]
New technologies for future fighters [p0554 A82-44219]
Interactive graphics design with CODEC [p0554 A82-44223]
XV-15 program update [p0556 A82-44468]
Integral characteristics in the computer aided design of geometrical objects of complex configuration [p0562 A82-46603]
Parameterization in the design of surfaces by means of Coons' method --- for computer aided aircraft design [p0562 A82-46620]
Aquila - Robot eye in the sky [p0584 A82-40025]
<table>
<thead>
<tr>
<th>SUBJECT INDEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>V/STOL aircraft and fluid dynamics</td>
</tr>
<tr>
<td>[NASA-TM-81268] p0216 N82-17640</td>
</tr>
<tr>
<td>Quiet short-term research aircraft familiarization document, revision 1</td>
</tr>
<tr>
<td>[NASA-TM-81286] p0206 N82-10029</td>
</tr>
<tr>
<td>Active control elements on the transonic wing of the Airbus A-300 (ACTA-2); Airbus A-300 with reduced longitudinal stability (ACTA-CH) --- advanced control transonic transport aircraft (ACTA); design considerations</td>
</tr>
<tr>
<td>[NASA-TM-81286] p0206 N82-10031</td>
</tr>
<tr>
<td>Acta mechanics section</td>
</tr>
<tr>
<td>[AD-105084] p0203 N82-11010</td>
</tr>
<tr>
<td>The principles and methods for shaping the wing root regions of a wing-body combination at transonic and lower supersonic speeds</td>
</tr>
<tr>
<td>[NASA-TM-81286] p0203 N82-11016</td>
</tr>
<tr>
<td>New estimation method for flutter or divergence boundary from random responses at subcritical speeds</td>
</tr>
<tr>
<td>[NAS-TN-6677] p0204 N82-11034</td>
</tr>
<tr>
<td>Design techniques for multivariable flight control systems</td>
</tr>
<tr>
<td>[NASA-CR-164980] p0205 N82-12080</td>
</tr>
<tr>
<td>Index of National Aviation Facilities Experimental Center technical reports 1972 - 1977</td>
</tr>
<tr>
<td>[AD-A104759] p0206 N82-12056</td>
</tr>
<tr>
<td>Computational methods of robust controller design for aerodynamic flutter suppression</td>
</tr>
<tr>
<td>[NASA-CR-164980] p0205 N82-12080</td>
</tr>
<tr>
<td>Research and Technology</td>
</tr>
<tr>
<td>[NASA-TM-83221] p0209 N82-13043</td>
</tr>
<tr>
<td>The impact of new guidance and control systems on military aircraft cockpit design</td>
</tr>
<tr>
<td>[AGARD-CP-312] p0209 N82-13046</td>
</tr>
<tr>
<td>Aerodynamics of Power Plant Installation</td>
</tr>
<tr>
<td>[AGARD-CP-301] p0209 N82-13065</td>
</tr>
<tr>
<td>The design and development of the Tornado engine air intake</td>
</tr>
<tr>
<td>[NASA-TN-83221] p0209 N82-13074</td>
</tr>
<tr>
<td>Evaluation of an experimental technique to investigate the effects of the engine position on engine/pylon/wing interference</td>
</tr>
<tr>
<td>[NASA-CR-159093] p0206 N82-13050</td>
</tr>
<tr>
<td>High lift selected concepts</td>
</tr>
<tr>
<td>[NASA-CR-159093] p0213 N82-15017</td>
</tr>
<tr>
<td>Configuration Development System/NASAEP Report</td>
</tr>
<tr>
<td>[AD-A106727] p0209 N82-16072</td>
</tr>
<tr>
<td>The effect of increasingly severe complex aircraft and avionics on the method of system design</td>
</tr>
<tr>
<td>[NASA-CR-166420] p0216 N82-17080</td>
</tr>
<tr>
<td>A tutorial on distributed processing in aircraft/avionics applications</td>
</tr>
<tr>
<td>[NASA-CR-166420] p0216 N82-17085</td>
</tr>
<tr>
<td>Use of optimization to predict the effect of selected parameters on conventor aircraft performance characteristics</td>
</tr>
<tr>
<td>[NASA-CR-166439] p0201 N82-17151</td>
</tr>
<tr>
<td>Preliminary design study of a hybrid airship for flight research</td>
</tr>
<tr>
<td>[NASA-CR-166466] p0201 N82-17152</td>
</tr>
<tr>
<td>Systems study of transport aircraft incorporating advanced aluminum alloys</td>
</tr>
<tr>
<td>[NASA-CR-166520] p0201 N82-17153</td>
</tr>
<tr>
<td>Aircraft corrosion</td>
</tr>
<tr>
<td>[AGARD-CP-315] p0211 N82-17349</td>
</tr>
<tr>
<td>Scientific report of the Fluid Mechanics Research Department</td>
</tr>
<tr>
<td>[AGARD-CP-315] p0211 N82-17349</td>
</tr>
<tr>
<td>Tendencies in the development of subsonic transport aircraft with special consideration of aerodynamics</td>
</tr>
<tr>
<td>[JSA-TM-705] p0255 N82-18214</td>
</tr>
<tr>
<td>Electric flight systems</td>
</tr>
<tr>
<td>[NASA-CR-2209] p0260 N82-19134</td>
</tr>
<tr>
<td>Electric flight systems, overview</td>
</tr>
<tr>
<td>[NASA-CR-2209] p0260 N82-19135</td>
</tr>
<tr>
<td>The 400-Hertz constant-speed electrical generation system</td>
</tr>
<tr>
<td>[NASA-CR-2209] p0260 N82-19135</td>
</tr>
<tr>
<td>Engine technology</td>
</tr>
<tr>
<td>[NASA-CR-2209] p0261 N82-19145</td>
</tr>
<tr>
<td>Power systems</td>
</tr>
<tr>
<td>[NASA-CR-2209] p0261 N82-19146</td>
</tr>
<tr>
<td>Electromechanical actuators</td>
</tr>
<tr>
<td>[NASA-CR-2209] p0261 N82-19146</td>
</tr>
<tr>
<td>Aeronautical Research Laboratory Structures Division</td>
</tr>
<tr>
<td>[AD-109049] p0262 N82-19161</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AIRCRAFT DESIGN CONDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>V/STOL aircraft and fluid dynamics</td>
</tr>
<tr>
<td>[NASA-TM-81268] p0216 N82-17640</td>
</tr>
<tr>
<td>Quiet short-term research aircraft familiarization document, revision 1</td>
</tr>
<tr>
<td>[NASA-TM-81286] p0206 N82-10029</td>
</tr>
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</tr>
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<tr>
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<tr>
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<tr>
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<td>Aeronautical Research Laboratory Structures Division</td>
</tr>
<tr>
<td>[AD-109049] p0262 N82-19161</td>
</tr>
</tbody>
</table>
Investigation on rotating ailerons

Supersonic cruise/transonic maneuver wing section development study

Tanker Aviation/Aircrew Complement Evaluation (TAACE). Volume 1: Crew system design

Investigations of future aircraft impacting aircraft and airport compatibility

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

Aircraft geometry verification with enhanced computer generated displays

Deterministic and probabilistic approaches

NACA aeronautics

Structures and Dynamics Davison research and technology plan, 1982

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

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

Multi-body aircraft study, volume 1

Multi-body aircraft study, volume 2

Application of an optimized winglet configuration to a advanced commercial transport

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

Langley test highlights, 1981

Integrated application of active controls (IAAC) technology to an advanced subsonic transport project. Configuration modeling of acoustic absorbing materials

Computational aerodynamics and design

AIRCRAFT DETECTION

Inverse SAR and its application to aircraft classification

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

The boomer that radar cannot see

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

Multiple aircraft tracking system for coordinated research missions

Implementing aircraft identification schemes by public key cryptosystems

AIRCRAFT ENGINES

Passive aircraft location

AIRCRAFT ENERGY EFFICIENCY PROGRAM

AIRCRAFT ENGINES

ST HELICOPTER ENGINES

GE 7-J58 ENGINE

TF-34 ENGINES

VARIABLE CYCLE ENGINES

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

Airfield cooling returns to runways

Basic problem of aircraft gas turbine engine analytic design. II

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

History of flight testing the L-1011 Tristar jet transport. II - Testing highlights since initial certification of the L-1011-1

Considerations and applications for the use of fluidics in aerospace controls

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

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

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

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

Supercooled superalloy powders by the rotating electrode process

Superalloy turbine components - which is the superior manufacturing process, as-HIP, HIP plus Isoforge, or 'gatoning' of extrusions consolidated billet

Lineup of the J-series aircraft-derivative gas turbines

Creep and aero gas turbine design

Direct digital drive actuation

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

Flight test method for the determination of reciprocating engine cooling requirements

Aircraft absorbers - Promise and practice --- sound attenuation

Impedance modeling of acoustic absorbing materials for aircraft engine applications

Conceptual design of an integrated power and propulsion system automated engine monitoring systems

Permanent Magnet Generator for Variable Speed Constant Frequency applications

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

The well tempered transport aircraft engine /The Sir Henry Royce Memorial Lecture/
An acquisition and analysis system for dynamic tests of air inlets

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

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

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

Thrust modulation methods for a subsonic V/STOL aircraft

A real time Pegasus propulsion system model for VSTOL piloted simulation evaluation

Sensor failure detection system for the F100 turbofan engine

Foreign object damage in naval aircraft engines

Electric flight systems, overview

Maintenance posture for quick start

Damage from engine debris projectiles

A look into the future: The potential of the all-electric secondary power system for the electric ECS for energy efficient transport

The 400-Hertz constant-speed electrical generation system

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 flow fan --- in an aircraft engine

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

Analytical investigation of nonrecoverable stall

Maintenance in Service of High Temperature Parts

Engine depot maintenance repair technology

Maintenance problems in gas turbine components at the Royal Aircraft Yard, Fleetlands --- helicopter and marine gas turbines

Maintenance experience with civil aero engines

Engine component retirement for cause

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

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

Electric Flight Systems

Electric flight systems, overview

A propulsion view of the all-electric airplane

Potential propulsion considerations and study areas for all-electric aircraft

A look into the future: The potential of the all-electric secondary power system for the energy efficient transport

The 400-Hertz constant-speed electrical generation system

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

Program/ACEE

Cost/benefit studies of advanced materials technologies for future aircraft engines

Foundation for aero gas turbine engine/airframe integration study

Advanced engine/airframe integration study

BB211 powerplant deterioration: Review of current situation and lessons learned

Development of a correlated finite element dynamic model of a complete aero engine

Encounters with surge: Some experiences of development of axial compressors for aero gas turbines

Reliable power --- BB211 aircraft engines

Collaborative development of aero-engines

Power metallurgical innovations for improved hot section alloys in aero-engine applications

Evaluation of inelastic constitutive models for nonlinear structural analysis of aircraft turbine engines

Gas path analysis of commercial aircraft engines

Analysis of transient data from aircraft gas turbine engines using AIDS

Propulsion/ACEE

Cost/benefit studies of advanced materials technologies for future aircraft engines

An acquisition and analysis system for dynamic tests of air inlets

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

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

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Thrust modulation methods for a subsonic V/STOL aircraft

A real time Pegasus propulsion system model for VSTOL piloted simulation evaluation

Sensor failure detection system for the F100 turbofan engine

Foreign object damage in naval aircraft engines

Electric flight systems, overview

Maintenance posture for quick start

Damage from engine debris projectiles

A look into the future: The potential of the all-electric secondary power system for the electric ECS for energy efficient transport

The 400-Hertz constant-speed electrical generation system

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 flow fan --- in an aircraft engine

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

Analytical investigation of nonrecoverable stall

Maintenance in Service of High Temperature Parts

Engine depot maintenance repair technology

Maintenance problems in gas turbine components at the Royal Aircraft Yard, Fleetlands --- helicopter and marine gas turbines

Maintenance experience with civil aero engines

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

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

Electric Flight Systems

Electric flight systems, overview

A propulsion view of the all-electric airplane

Potential propulsion considerations and study areas for all-electric aircraft

A look into the future: The potential of the all-electric secondary power system for the energy efficient transport

The 400-Hertz constant-speed electrical generation system

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

Program/ACEE

Cost/benefit studies of advanced materials technologies for future aircraft engines

Foundation for aero gas turbine engine/airframe integration study

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BB211 powerplant deterioration: Review of current situation and lessons learned

Development of a correlated finite element dynamic model of a complete aero engine

Encounters with surge: Some experiences of development of axial compressors for aero gas turbines

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Power metallurgical innovations for improved hot section alloys in aero-engine applications

Evaluation of inelastic constitutive models for nonlinear structural analysis of aircraft turbine engines

Gas path analysis of commercial aircraft engines

Analysis of transient data from aircraft gas turbine engines using AIDS

Propulsion/ACEE

Cost/benefit studies of advanced materials technologies for future aircraft engines
AIRCRAFT GUIDANCE

Characterization of an Experimental Reheater Broadened Specification (ERBS) Aviation turbine fuel and SBO fuel blends
H (NASA-TR-82-52083) p0355 882-32504
Impact of advanced propeller technology on aircraft/mission characteristics of several general aviation aircraft
H (NASA-CC-1679G04) p0604 882-33347

AIRCRAFT GUIDANCE
Fuel efficient flight profiles in an ATC flow management environment
p0403 882-13078
Digital detection and processing of laser beacon signals for aircraft collision hazard warning
H (AIAA-81-2326) p0552 882-13525
Commentary on facilities used in the development of a Sea Harrier all weather operations capability
H (AIAA PAPER 81-2407) p0556 882-13892
Development of an MLS lateral autoland system with automatic path definition
H (AIAA PAPER 81-1751) p0662 882-13993
Helical helicopter approaches with microwave landing system guidance
H (AIAA PAPER 81-2654) p0109 882-16914
Flight measurements of Area Navigation System performance using various combinations of ground aids and airborne sensors
p0123 882-18147
MLS flare low elevation angle guidance considerations
p0175 882-20566
A automatic map reader suitable for use in helicopters
p0345 882-37035
PACS - A commercial flight management computer system
H (AIAA 82-1515) p0404 882-38938
The control and guidance unit for MACRAM
p0493 882-39737
A terrain following system, an algorithm and a sensor
p0494 882-39760
Flight simulation studies of the feasibility of terrain segmented approaches in an MLS environment
p0509 882-39961
A concept for 4D-guidance of transport aircraft in the IMA --- Terminal Maneuvering Area
p0509 882-40942
Investigations concerned with shifting pilot activities to a higher hierarchical stage of flight control --- German thesis
p0519 882-41453
Image processing in tactical flight guidance
p0559 882-44221
Requirements for independent and dependent parallel instrument approaches at reduced runway spacings
[AD-A1056173] p0132 882-14080
MLS vertical guidance and navigation for a STOL airplane landing on an elevated STOLport
H (NASA-TR-81338) p0135 882-14101
Automation of on-board flightpath management
H (NASA-TR-84212) p0191 882-16088
Terminal area automatic navigation, guidance, and control research using the Microwave Landing System (MLS) Part 2: NOV/MLS transition problems for aircraft
H (NASA-CW-1519) p0200 882-17192
Effects of cable geometry and aircraft attitude on the accuracy of a magnetic leader cable system for aircraft guidance during rollout and arrestoff
H (NASA-TP-1978) p0351 882-22239
Integrated navigation-TP/TA-system based on stored terrain data processing
p0362 882-23183
Optimal inertial navigation using terrain correlation: An attractive solution to the ground attack aircraft navigation problem
p0362 882-23184
The integration of multiple avionic sensors and technologies for future military helicopters
H (NASA-TR-81593) p0363 882-23166
Production Verification Testing (PVT) of guidance and control systems for high reliability
p0363 882-23187

SUBJECT INDEX
Sun sensng guidance system for high altitude aircraft
H (NASA-CB-88-11522-1) p0367 882-23231
Guidance and control/ACE
H (NASA-PACS-95-0-81) p0409 882-25261
Terrain following/terrain avoidance system concept development
p0606 882-33363
AIRCRAFT HAZARDS
Detection and display of wind shear and turbulence
p0008 882-10222
Wire strike protection
p0046 882-13246
Assessment methodology of the lightning threat to advanced aircraft
p0669 882-14759
Operational evaluation of thunderstorm penetration tent flights during project Storm Hazards '80
p0768 882-14954
A criterion for determining the causes of wind shear at Punta Balla airport, on the basis of statistical data from barograph records
p0800 882-15468
Simulation of phugoid excitation due to hazardous wind shear
H (AIAA PAPER 82-0215) p0117 882-17894
The influence of turbulence models on computer-simulated aircraft landing
H (AIAA PAPER 82-0342) p0119 882-17896
An analytical methodology to predict potential aircraft losses due to canopy birdstrikes
p0227 882-24112
The effects of hard orientation on load profile and damage level
p0227 882-24316
Lighting detection and ranging
p0277 882-26367
Sudden changes in wind velocity - Their effect on aircraft and means of reducing hazard. I
p0339 882-29071
Aircraft lightning protection
H (URSA, TP No. 1952-51) p0362 882-33594
Triggered lightning --- resulting from aircraft atmospheric electricity interactions
p0342 882-35727
Airborne warning systems for natural and aircraft-initiated lightning
p0422 882-35729
The direct effects of lightning on aircraft
p0432 882-35730
The operation of aircraft and helicopters in difficult meteorological and environmental conditions --- Russian book
p0491 882-39295
Selected bibliography of NASA-MASA aircraft icing publications
H (NASA-TR-81651) p0305 882-11053
System safety program plan --- electromagnetic pulse testing of the A-7E aircraft
[AD-A1045577] p0401 882-11356
Investigation of severe lightning strike incidents to two USAR F-106A aircraft
H (NASA-CW-16579A) p0806 882-12052
Test and evaluation of U1 fiber optics for application for aircraft fire detector systems
[AD-A106129] p0195 882-16850
Aircraft icing avoidance and protection
H (NASA-CW-165526) p0200 882-17193
An assessment of the crash fire hazard of liquid hydrogen fueled aircraft
H (NASA-CW-165526) p0263 882-19196
Simulation study of vortex encounters by a twin-engine, commercial, jet transport airplane
H (NASA-IP-1966) p0267 882-19225
Workshop on Mathematical Fire Modeling
H (NASA-100876) p0268 882-19343
Safety (aviation material)
H (AD-A110361) p0303 882-20165
Full-scale flammability test data for validation of aircraft fire mathematical models
H (NASA-TR-58244) p0313 882-21146
Airframe accretion and its effect on airfoil performance
H (NASA-CW-165599) p0393 882-24166
Primary sewage treatment plant as a source of bird hazards at airport
p0413 882-26184
Proceedings of the 1st Annual Workshop on Aviation Related Electricity Hazards Associated with
AIRCRAFT LANDING

[ADIAA PAPBB 81-12367] p0060 A82-13969
A Microwave Ice accretion Measurement Instrument –
AIAMX
[ADIAA PAPBB 82-02856] p0118 A82-17875
Radio-navigation equipment of aircraft – Berics
and operation --- Russian book
p0262 A82-26550
Simple vs. sophisticated TacAir avionics. II –
Soviet TacAir avionics technology
p0297 A82-28397
Checking and calibrating varicensors in place in
the mainplane instrument panel
p0330 A82-29415
F-15 fighter abilities evaluated
p0332 A82-29592
Assembly of aircraft instruments --- Russian book
p0434 A82-36950
Instrument failure detection in partially
observable systems
p0436 A82-37380
Evaluation of an automatic subsystem parameter
monitor --- for aircraft
p0502 A82-40552
A miniature electro-optical air flow sensor
p0543 A82-41854
Integrated sensor system for flight test
instrumentation
p0544 A82-41869
Maximum likelihood failure detection of aircraft
flight control sensors
p0556 A82-44481
Index of National Aviation Facilities Experimental
Center technical reports 1972 – 1977
p0086 A82-12056
Electronic Master Monitor and Advisory Display
System (EMMADS)
[p8AD-A105062] p0088 A82-12067
Advanced recorder design and development
[p8PF-124105] p0193 A82-16385
Economic considerations for real-time naval
aircraft/avionics distributed computer control
systems
p0196 A82-17097
The multi mode matrix flat panel display:
Technology and applications
p0251 A82-18169
Analytical study of cockpit information requirements
[AD-A106524] p0256 A82-18218
Integration of complex systems in current and
future aircraft projects for the example of avionics
[AD-A82-11855] p0256 A82-18221
Transport aircraft cockpit standardization
(Federal Aviation regulations part 25)
[AD-A108624] p0264 A82-19207
RADIAK simulator for aircraft instruments
[PDEA-C-60136-K] p0356 A82-22286
V/STOL tilt rotor research aircraft. Volume 1:
General information, revision C
[AD-A103504] p0395 A82-24194
V/STOL tilt rotor research aircraft. Volume 2:
Ship 1 instrumentation
[AD-A103504] p0395 A82-24195
V/STOL tilt rotor research aircraft. Volume 3:
Ship 2 instrumentation
[AD-A103504] p0395 A82-24196
V/STOL tilt rotor research aircraft. Volume 4:
CFD technical data
[AD-A103504] p0395 A82-24197
Improvement program for the C-141 Navigation
Selector Panel
[AD-A111469] p0408 A82-25248
PADD Programmable pilot-oriented display --- air
navigation
p0445 A82-26201
Cockpit display of traffic information and the
measurement of pilot workload: An associated
bibliography
[AD-A11337] p0470 A82-27291
Air craft icing research at NASA
[AD-A108929] p0558 A82-30297
Separation monitoring with four types of
predictors on a cockpit display of traffic
information
p0564 A82-30860
AIRCRAFT LANDING

NT CRASH LANDING

NT DITCHING (LANDING)
Aircraft Noise

- Reduced nonlinear flight dynamic model of elastic structure aircraft
- An improved propulsion system simulation technique for scaled wind tunnel model testing of advanced fighters
- Wind-tunnel investigation of a full-scale canard-configured general aviation aircraft
- A restrained model helicopter, which is able to fly, for investigations regarding human multi-parameter control behavior --- German thesis
- Implicit model-following technique - Application to the design of longitudinal stability augmentation systems
- Determination of airplane model structure from flight data by using modified stepwise regression
- 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 a turbojet powered engine simulator
- Development of an efficient procedure for calculating the aerodynamic effects of planform variation
- Analytical study of twin-jet shielding
- Prediction of off-design performance of turbo-shaft engines - a simplified method
- Parametric criteria and impact on design trends
- Interpretation and construction of a dynamic similarity model of the A 310 wings
- Design study into a high endurance can-rotorcraft
- Structural system identification technology verification
- Design of dynamically-scaled, asymmetrical wind tunnel models
- Alternatives for jet engine control
- System identification of nonlinear aerodynamic models

Aircraft Noise

- Quiet please --- aircraft hydraulic systems noise reduction
- Model helicopter rotor impulsive noise
- The FAA's proposed helicopter certification rules
- Costs of noise abatement from aircraft
- Aircraft absorbers - Promise and practice --- sound attenuation

Subject Index

- An advanced facility for processing aircraft dynamic test data
- Workhop report for the AIAA 6th Aeroacoustics Conference
- Noise control measures in the new Singapore International Airport
- Current investigations regarding noise research in the Braunschweig Center of the German Institute for Research and Experimentation in Aeronautics and Astronautics
- Propeller tip vortex - A possible contributor to aircraft cabin noise
- Reduction of the acoustic environment in an F100-PW-100 engine test cell
- Acceleration response of fuselage sidewall panels on a twin-engine, light aircraft
- Noise monitoring in airport communities
- Quantification of airport community noise impact in terms of noise levels, population density, and human subjective response
- The city and aviation --- Russian book
- A comparative study on mechanical vibration and noise during patient transportation
- Ground reflection effects in aircraft noise measurements
- Comparison of aircraft and ground vehicle noise levels in front and backyards of residences
- Helicopter transmission philosophy - The way ahead
- We have just begun to create efficient transport aircraft
- Direct comparison of community response to road traffic noise and to aircraft noise
- Methodology for multisurface minimum noise impact landing trajectories
- Model helicopter rotor low frequency broadband noise
- On the generation of side-edge flap noise
- Large scale model measurements of airframe noise using cross-correlation techniques
- The status of airport noise prediction, with special reference to the United Kingdom and Europe
- Comparing the relationships between noise level and annoyance in different surveys - A railway noise vs. aircraft and road traffic comparison
- Fuel efficient and Bach 0.8, too
- No-tail-rotor helicopter tests continue
- Development and validation of preliminary analytical models for aircraft interior noise prediction
- Noise pollution and airport regulation
- O'Hare International Airport - Impervious to aircraft noise German thesis
Information technology and its impact on test and

The Cessna 1303 Crusader

A technique to determine lift and drag polars in

Power-lift takeoff performance characteristics

On the question of trailing airplane motion

Ideal and simulated performance of an aircraft in

Improved penetrant process evaluation criteria

Fatigue life prediction of helicopter pitch link

Davy performance modeling techniques

Beal-time flight management avionics software system

An operational model of specific range for

Air-to-air combat analysis - Overview of

Fuel conservation - DC-9 series 20/30/40

Design challenges of high-performance aircraft POD

An airport wind shear detection and naming system

Grob aircraft construction: The G 110 flies

Corrosion prevention methods developed from direct

Horses for courses in BPV operations system

The technological aspects of titanium application

Geometrical aspects of the tribological properties

Electro-hydraulic nose wheel steering of the

Engine/drive/airframe compatibility: A new way of life

An analogy method for crack initiation life prediction

Engine/drive/airframe compatibility: A way of life

Corrosion prevention methods developed from direct experience with aerospace structures

Groeb aircraft construction: The G 110 flies

Improved penetrant process evaluation criteria

AIRCRAFT PERFORMANCE

ST HELICOPTER PERFORMANCE

An airship wind tunnel detection and warning system using Doppler radar

Design challenges of high-performance aircraft POD

EOC cooling systems - Electro-Optical/Countermeasure

General aviation airplanes

Ideal and simulated performance of an aircraft using the terrain following mission

On the question of trailing airplane motion

Fuel conservation - DC-9 series 20/30/40

Air-to-air combat analysis - Overview of differential-gaming approaches

On matching the systems identification technique to the particular application — in evaluating flight test data

An operational model of specific range for microprocessor applications in piston-prop general aviation airplanes

Real-time flight management avionics software systems

Powered-lift takeoff performance characteristics determined from flight test of the Quiet Short- haul Research Aircraft (QDRA)

A review of flight-to-wind tunnel drag correlation

620 manned aircraft demonstrator — Next generation trainer — cost-effective pilot trainer

AB-1 oblique wing aircraft program

Development of a comprehensive analysis for rotorcraft II - Aircraft model, solution procedure and applications

Design of direct digital flight-mode control systems for high-performance aircraft

The X-14 — 20 years of V/STOL flight testing

Ball-Bartoletti jetting flight tests

F/A-16A high angle of attack/spin testing

KC-10 flight test program

The all composite Lear Fan 2100

F/A-18 roll rate improvement program

AT-GS technical update — Leading edge root extension development

Operational evaluation of thunderstorm penetration test flights during project Storm Hazards ’80

Airplane performance sensitivities to lateral and vertical profiles

The well-tempered transport aircraft engine (The

Sir Henry Boyce Memorial Lecture)

Gruum Towcat — In a class of its own

Experience with high performance V/STOL fighter projects at ABH

Turboprop resurgence — The next step

Energy savings with today’s technology — Aircraft fuel management through inflight monitoring

Flight crew management and cockpit performance systems

Coopter flight planning for fuel efficiency

Liquid hydrogen — An outstanding alternate fuel for transport aircraft

Take-off ground roll of propeller driven aircraft

Determination of Learjet Longhaul airplane horizontal tail load and hinge moment characteristics from flight data

Simulation of phugoid excitation due to hazardous wind shear

Digital test pilot concept

Minimum cost atmospheric cruise control — Most efficient airspeed for a given wind component

Optimum configuration for a 10 passenger business turbofan jet airplane

Design evolution of the Boeing 757

FI01DFE in Tomcat — Preliminary test results

Boeing 757 — Introducing the big-fan narrowbody

Operational and performance aspects of fuel management in civil aircraft

Studies of modern technology airships for maritime patrol applications

The airship — Its application and promotional activity

A-60
The prevalence of visual deficiencies among 1979
large numbers of airline pilots was a concern.

A study of wind shear effects on aircraft
operations and safety in Australia was conducted,
assessing the effectiveness of various countermeasures.

Investigations into the aerodynamics of the
F/A-18 'Hornet' combat aircraft were carried out,
with a focus on maneuverability and operational
characteristics.

British aerospace began an update effort focusing
on design and fabrication of a composite rear
cockpit structure for the 03-60/Black Hawk.

Experiments in flight test programs for improving
combat aircraft maneuverability by maneuver
flaps and pylon split flaps were conducted.

A simulation and analysis system for complex flight systems was developed, providing
insight into load factors and maneuverability.

Aerodynamic tailoring for control and performance was explored,
with consideration for dynamic response and stability.

Experience with high performance V/STOL fighter
projects at NASA was shared, highlighting
a flight investigation of blade-section aerodynamics for a helicopter main rotor having
DC-9 flaps and pylon split flaps.

A comparison of properties of single overlap
tension joints prepared by ultrasonic welding
and other means was analyzed.

A review of design and fabrication of a composite rear
cockpit structure for the 03-60/Black Hawk
was provided, including material selection and process
optimization.

The technology of sheet-metal stamping for aircraft
radomes and other components was discussed,
highlighting the importance of precision
manufacturing techniques.

Noise control plan for a new airplane was presented,
considering noise reduction strategies and
technologies for improved cockpit environment.

From the A 300 to the A 310, the evolution of
aircraft technology was examined, focusing
on advancements in composite materials
and manufacturing processes.

Fatigue behavior of weldbonded joints was analyzed,
considering the effects of ultrasonic welding
and other bonding techniques.

The DBAPO system - Materials means and logic
discipline at III, Bombay was introduced,
providing insight into discipline-level
management techniques.

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discipline at III, Bombay was introduced,
providing insight into discipline-level
management techniques.
Aircraft Safety Contd

A system safety program for aircraft production
and deployment

Effect of fleet size on estimates of safety

Determination of the flammability characteristics
of aerospace hydraulic fluids

Techniques for overhead-wire detection to
prevent helicopter entanglement

Why safety --- fuel conservation through aircraft
safety

Accident prevention - A regulators 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

Effect of fleet size on estimates of safety

Bo-Tail-Botor helicopter

Flight test data acquisition and interpretation

Standardization of helicopter fatigue methodology

Airworthiness of airliners

The case for helicopter hoisting

Flight test data acquisition and interpretation

The reliability and safety of small passenger
aircraft

Design for the operating environment - Rang-fin
tail rotor program

Automating 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 antistatic
fuels - Status report

Wall 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-protection 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

Summary of Federal Aviation Administration
responses to National Transportation Safety
Board safety recommendations

NASA Aviation safety reporting system

Test and evaluation of improved aircrew restraint
systems

Point of view of a helicopter manufacturer on
airworthiness regulations

Electrical ground testing of aircraft antistatic
protection

Disengagement of safety harness buckles - C74

Active Beacon Collision Avoidance System (RCAS)
logic performance during operational flight tests

Workshop on Mathematical Fire Modeling

Doppler radar-research and application to aviation
flight safety, 1977 - 1979

Detection and tracking algorithms refinement

Safety (aviation material)

Aircraft collision avoidance and air traffic safety

Variable response load limiting device --- for
aircraft seats

A NASA/FAA Advanced Rotorcraft Technology and
Tilt Rotor Workshop. Volume 6: Vehicle
Configuration Session

Opportunities exist to achieve greater
standardization of aircraft and helicopter seats

Wind tunnel measurements of three-dimensional
wakes of buildings --- for aircraft safety
applications

Aircraft alerting systems standardization study.
Volume 1: Candidate system validation and
time-critical display evaluation
AIRCRAFT STABILITY

Not Vehicular Stability

On computing Floguet transition matrices of rotocraft

A note on fatal aircraft accidents involving metal fatigue

Numerical treatment of helicopter rotor stability problem

Navigation for helicopters by multiple use of inertial sensors

The use of observers on relaxed static stability aircraft

F/A-18A high angle of attack/spin testing

Acceptance testing of the Calspan variable stability Learjet

AR-86 technical update - Leading edge ramp extension development

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

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

Thrust reversing effects on twin-engine aircraft having nonaxisymmetric nozzles

Bifurcation analysis of nonlinear stability of aircraft at high angles of attack

Aircraft flutter suppression and load alleviation for shear strain

A unified and generalized definition of static longitudinal stability in aircraft

Calculation of the lift distribution and aerodynamic derivatives of quasi-static elastic aircraft

AIRCRAFT SPECIES

Applications of parameter estimation in the study of spinning airplanes

Current perspectives on emergency spin-recovery systems

Spin recovery training --- licensing requirements

A simple system for helicopter individual-blade-control and its application to stall-induced vibration alleviation

Considerations of open-loop, closed-loop, and adaptive multicyclic control systems
Acoustic emission - An emerging technology for assessing fatigue damage in aircraft structure

[0011 A82-11149]

Fatigue substantiation of non-linear structures

[0013 A82-11224]

Dynamic response of aircraft structure to gun shot loads

[0013 A82-11314]

Emerging technologies in aerospace structures, design, structural dynamics and aerothermodynamics


[0010 A82-12026]

Impact-initiated damage thresholds in composites

[0018 A82-12028]

Response of nonlinear aircraft structural panels to high intensity noise

[0018 A82-12041]

Quantification of the thermal environment for externally carried aircraft stores and ordnance

[0019 A82-12100]

Practical determination of fatigue crack growth rates in aircraft components

[0023 A82-12697]

Fatigue methodology - A technical management system for helicopter safety and durability

[0022 A82-13240]

Flight testing the nonmetallic spline coupling technology at the Naval Air Test Center

[0022 A81-2405]

[0022 A81-13891]

Flight vibration optimization via confocal mapping

[0062 A82-13975]

Techniques for modifying airfoils and fairings of an aircraft using foam and fiberglass

[0064 A82-14383]

The load-carrying behavior of a trapezoidal aluminimum-alloy supporting element, subjected to a compressive stress, in the postbuckling region

[0065 A82-14418]

Aircraft composite materials and structures

[0073 A82-16143]

Crack edge instability - A criterion for safe crack propagation limit in this sheet

[0074 A82-17243]

Subsonic flow over airborne optical turrets

[0074 A82-17605]

Icing analysis of an unprotected aircraft radome

[0074 A82-0281]

Application of the finite element method to the calculation of the modes and frequencies of natural vibrations of aircraft structures

[0075 A82-17847]

Calculation of the stability of crosswind-reinforced cylindrical shells

[0075 A82-18621]

Development of a transmission loss test facility for light aircraft structures

[0076 A82-18720]

Crack-closure model for predicting fatigue crack growth under aircraft spectra loading

[0076 A82-20509]

Performance flight test evaluation of the Ball-Barto JF-1 Jetwing STOL research aircraft

[0079 A82-20762]

AN-80 Harrier II

[0080 A82-21260]

Calculation of sensitivity derivatives in thermal problems by finite differences

[0081 A82-21391]

Low-frequency eddy current inspection of aircraft structure

[0083 A82-21900]

On the sonic fatigue life estimation of skin structures at room and elevated temperatures

[0084 A82-23678]

Novel approaches to electron beam welding machine utilization

[0084 A82-23773]

Diffusion bonding in superplastic forming/diffusion bonding

[0082 A82-23754]

Aluminum and its alloys - Weldability

[0082 A82-23755]

Material/structure degradation due to fretting and fretting-initiated fatigue

[0082 A82-23771]

A new approach to the problem of stress corrosion cracking in 7075-T6 aluminum

[0082 A82-23772]
SUBJECT INDEX

Aircraft structures - inspection program for aircraft maintenance
Aircraft in the 1980's
Portable transparency optical test system - P-TOTS/
Windshield system structural enhancement
D.C.9 windshield - Effect of attachment retorques
Application of damage tolerance technology to type certification
(SAE PAPER 81062)
Certification of civil composite aircraft structure
(SAE PAPER 81061)
Standardization of helicopter fatigue methodology - A manufacturer's view
Introduction to the principles of fracture mechanics
Evaluation of crack growth rates for service life tracking
Composite aircraft structures
Continuous filament advanced composite isogrid - A promising structural concept
Impact resistance of graphite and hybrid configurations
Mechanically-fastened joints for advanced composites - Phenomenological considerations and simple analyses
Sensitivity of bonded and bolted joints in composites to load/environmental spectrum variations - in fighter aircraft structures
Service sensitivity of polysulfide sealants
Characterization of composite variations in a structural adhesive
Occurrence of fretting fatigue failures in practice
Finite element thermal analysis of conductively-cooled aircraft structures
Tool use in cutting operations involving integral structural components in aircraft construction
Production welding on the A-10 aircraft
Structural integrity of an adhesively bonded aircraft fuselage
SFP of high strength aluminum structures - superplastic forming for complex aircraft structures
Development of low-cost titanium structures using blended elemental powder metallurgy
Fatigue behavior of adhesively bonded joints
Development of a homebuilt powered sailplane
Analysis of a multihinged aerocontrol with allowance for shear strain
Bone loading of flight-vehicle structures
Integrity analyses of surface-flawed aircraft attachment legs - A new, inexpensive, 3-D alternating method

373 graphite-epoxy horizontal stabilizer certification
Flight qualification of composite structures at A-6B
Finite element analysis of nose aerospace shell structures
Understanding aircraft structures -- Book review
An algorithm for calculating the compliance matrices of aircraft structures by the substructure method as applied to aeroelasticity problems
Solution of creep problems by a finite element method
A method of accounting for the effect of aircraft deformations on its loading
Composite aircraft - A new concept for light weight, integrally stiffened skin structure
Calculation of the lift distribution and aerodynamic derivatives of quasi-static elastic aircraft
Aerodynamic coefficient identification of time-varying aircraft system and its application
A review and assessment of fatigue crack growth rate relationships for metallic airplane aircrafts
Quasi-static and dynamic crushing of energy absorbing materials and structural components with the aim of improving helicopter crashworthiness
Static and aeroelastic optimization of aircraft
Composite use on helicopters
'Listening' systems to increase aircraft structural safety and reduce costs
On the state of technology and trends in composite materials in the United States
Tents of CFRP spar/chord models with corrugated webs
Evaluation of CFRP prototype structures for aircraft
Developments on graphite/epoxy T-2 nose landing gear door
Fabrication of CFRP prototype structure for aircraft horizontal tail leading edge slat rail
On the bearing strengths of CFBP laminates
N-tension radiography of titanium spar tube welds
Results of the AB-64 Structural Demonstration
HJIF-II - A program system for the dynamic analysis of aeronautical structures
Design of compensated flutter suppression systems
The behavior of composite thin-walled structures in dynamic buckling under impact
Nondestructive testing in aircraft construction using holographic methods
Determination of load spectra and their application for keeping the operational life proof of sporting airplanes
Theoretical and experimental investigation of joint-structural damping interaction for airplane construction
Principles of achieving damage tolerance with flexible maintenance programs for new and aging aircraft

A-67
<table>
<thead>
<tr>
<th>SUBJECT INDEX</th>
<th>AILINE Profiles</th>
</tr>
</thead>
<tbody>
<tr>
<td>User's manual for the automated Paneling Technique (APT) and the Wing body Aerodynamic Technique (WABAT) program</td>
<td>A-69</td>
</tr>
<tr>
<td>(NASA-CR-165895)</td>
<td></td>
</tr>
<tr>
<td>p0566 N82-312097</td>
<td></td>
</tr>
<tr>
<td>Aerostructure nondestructive evaluation by thermal field detection: phase 1: Fundamentals of information and basic technique development</td>
<td>A-69</td>
</tr>
<tr>
<td>[AD-A115724]</td>
<td></td>
</tr>
<tr>
<td>p0595 N82-32425</td>
<td></td>
</tr>
<tr>
<td>AIRCRAFT SURVIVABILITY</td>
<td>A-69</td>
</tr>
<tr>
<td>Fighters - Improving the breed</td>
<td>A-69</td>
</tr>
<tr>
<td>p0062 A82-14354</td>
<td></td>
</tr>
<tr>
<td>[SAE PAPER 810896]</td>
<td>A-69</td>
</tr>
<tr>
<td>p0234 A82-24415</td>
<td></td>
</tr>
<tr>
<td>Evolution of the aerocoust</td>
<td>A-69</td>
</tr>
<tr>
<td>p0239 A82-24706</td>
<td></td>
</tr>
<tr>
<td>Operational experience with the fiberglass rotor blade</td>
<td>A-69</td>
</tr>
<tr>
<td>p0279 A82-26388</td>
<td></td>
</tr>
<tr>
<td>Fracture control in ballistic-damaged graphite/epoxy wing structure</td>
<td>A-69</td>
</tr>
<tr>
<td>p0280 A82-26639</td>
<td></td>
</tr>
<tr>
<td>Analysis of aircraft dynamic behavior in a crash environment</td>
<td>A-69</td>
</tr>
<tr>
<td>[AIAA PAPER 82-305]</td>
<td>A-69</td>
</tr>
<tr>
<td>p0339 A82-3004</td>
<td></td>
</tr>
<tr>
<td>Combat survivability in the Advanced Technology Engine Study</td>
<td>A-69</td>
</tr>
<tr>
<td>[AIAA PAPER 82-1207]</td>
<td>A-69</td>
</tr>
<tr>
<td>p0419 A82-35101</td>
<td></td>
</tr>
<tr>
<td>The correlation of flight test and analytic N=08-8 airfoil interaction results — Navy-on-Navy</td>
<td>A-69</td>
</tr>
<tr>
<td>[AIAA PAPER 82-1320]</td>
<td>A-69</td>
</tr>
<tr>
<td>p0488 A82-39105</td>
<td></td>
</tr>
<tr>
<td>Lightning effects on aircraft and components</td>
<td>A-69</td>
</tr>
<tr>
<td>Literature study on lightning strikes and protection --- advanced composite materials</td>
<td>A-69</td>
</tr>
<tr>
<td>[ADA-C-20389-P]</td>
<td>A-69</td>
</tr>
<tr>
<td>p0026 A82-10024</td>
<td></td>
</tr>
<tr>
<td>Army Link: Product line match to military combat development</td>
<td>A-69</td>
</tr>
<tr>
<td>p0247 N82-18143</td>
<td></td>
</tr>
<tr>
<td>A light helicopter for night firing</td>
<td>A-69</td>
</tr>
<tr>
<td>p0248 N82-18144</td>
<td></td>
</tr>
<tr>
<td>The assessment of aircraft combat effectiveness using a new computational method</td>
<td>A-69</td>
</tr>
<tr>
<td>p0348 N82-22203</td>
<td></td>
</tr>
<tr>
<td>Commercial jet transport crashworthiness</td>
<td>A-69</td>
</tr>
<tr>
<td>[NASA-CS-165849]</td>
<td>A-69</td>
</tr>
<tr>
<td>p0364 N82-23207</td>
<td></td>
</tr>
<tr>
<td>AIRCRAFT TOWLS</td>
<td>A-69</td>
</tr>
<tr>
<td>Experimental stress analysis of a thin-walled pressurized torus loaded by contact with a plane --- dynamic response of aircraft turrets</td>
<td>A-69</td>
</tr>
<tr>
<td>[AIAA PAPER 82-0726]</td>
<td>A-69</td>
</tr>
<tr>
<td>p0336 N82-30114</td>
<td></td>
</tr>
<tr>
<td>Touchdown stability --- large aircraft landing gear stress</td>
<td>A-69</td>
</tr>
<tr>
<td>p0496 A82-60057</td>
<td></td>
</tr>
<tr>
<td>Pneumatic tire model for aircraft simulation</td>
<td>A-69</td>
</tr>
<tr>
<td>p0555 A82-62444</td>
<td></td>
</tr>
<tr>
<td>Measured pavement response to transient loadings</td>
<td>A-69</td>
</tr>
<tr>
<td>[NASA-TP-13642]</td>
<td>A-69</td>
</tr>
<tr>
<td>p0101 N82-13642</td>
<td></td>
</tr>
<tr>
<td>Dynamics of aircraft antiskid braking systems --- conducted at the Langley aircraft landing loads and traction facility</td>
<td>A-69</td>
</tr>
<tr>
<td>[NASA-TP-1559]</td>
<td>A-69</td>
</tr>
<tr>
<td>p0250 N82-16204</td>
<td></td>
</tr>
<tr>
<td>Tire tread temperatures during antiskid braking</td>
<td>A-69</td>
</tr>
<tr>
<td>and cornering on a dry runway</td>
<td>A-69</td>
</tr>
<tr>
<td>p0195 N82-24193</td>
<td></td>
</tr>
<tr>
<td>Alert aircraft roll over checks</td>
<td>A-69</td>
</tr>
<tr>
<td>[AD-A107456]</td>
<td>A-69</td>
</tr>
<tr>
<td>p0257 N82-28307</td>
<td></td>
</tr>
<tr>
<td>AIRCRAFT WAKES</td>
<td>A-69</td>
</tr>
<tr>
<td>NT HELICOPTER WAKES</td>
<td>A-69</td>
</tr>
<tr>
<td>NT PROPELLER SLIPSTREAMS</td>
<td>A-69</td>
</tr>
<tr>
<td>Strong matching method for computing transonic viscous flows including wakes and separations - lifting airfoils</td>
<td>A-69</td>
</tr>
<tr>
<td>p0010 A82-10821</td>
<td></td>
</tr>
<tr>
<td>Flow visualization using a computerized data acquisition system</td>
<td>A-69</td>
</tr>
<tr>
<td>p0179 A82-20792</td>
<td></td>
</tr>
<tr>
<td>Flow field around an oscillating airfoil</td>
<td>A-69</td>
</tr>
<tr>
<td>p0179 A82-20813</td>
<td></td>
</tr>
<tr>
<td>The requirements for reduced Z8 field separations on final approach</td>
<td>A-69</td>
</tr>
<tr>
<td>p0219 A82-23311</td>
<td></td>
</tr>
<tr>
<td>Approximate boundary condition procedure for the two-dimensional numerical solution of vortex wakes</td>
<td>A-69</td>
</tr>
<tr>
<td>[AIAA PAPER 82-0951]</td>
<td>A-69</td>
</tr>
<tr>
<td>p0437 A82-37467</td>
<td></td>
</tr>
<tr>
<td>Turbulent wake development behind streamlined bodies</td>
<td>A-69</td>
</tr>
<tr>
<td>p0097 N82-13104</td>
<td></td>
</tr>
<tr>
<td>Simulator study of vortex encounters by a twin-engine, commercial, jet transport airplane</td>
<td>A-69</td>
</tr>
<tr>
<td>[AIAA PAPER 82-15866]</td>
<td>A-69</td>
</tr>
<tr>
<td>p0267 N82-19225</td>
<td></td>
</tr>
<tr>
<td>A theoretical study of the impact of aircraft wake vortices on roofs in the final approach area of Dusseldorf Airport</td>
<td>A-69</td>
</tr>
<tr>
<td>[DFVLR-MTH-82-01]</td>
<td>A-69</td>
</tr>
<tr>
<td>p0371 N82-23560</td>
<td></td>
</tr>
<tr>
<td>p0448 N82-26236</td>
<td></td>
</tr>
<tr>
<td>Wand tunnel measurements of three-dimensional wakes of buildings --- for aircraft safety applications</td>
<td>A-69</td>
</tr>
<tr>
<td>p0461 N82-26921</td>
<td></td>
</tr>
<tr>
<td>B-747 vortex alleviation flight tests: Ground-based sensor measurements</td>
<td>A-69</td>
</tr>
<tr>
<td>[AD-A13625]</td>
<td>A-69</td>
</tr>
<tr>
<td>p0469 N82-27287</td>
<td></td>
</tr>
<tr>
<td>Reduction in parachute drag due to forebody wake effects</td>
<td>A-69</td>
</tr>
<tr>
<td>[S081-030124]</td>
<td>A-69</td>
</tr>
<tr>
<td>p0567 N82-31309</td>
<td></td>
</tr>
<tr>
<td>Transonic applications of the Wake Imaging System</td>
<td>A-69</td>
</tr>
<tr>
<td>p0597 N82-32676</td>
<td></td>
</tr>
<tr>
<td>AIRCRAFT SURFACE MOVEMENTS</td>
<td>A-69</td>
</tr>
<tr>
<td>Movement in Category III conditions --- all weather air traffic operations</td>
<td>A-69</td>
</tr>
<tr>
<td>The effects of weather on runway operations</td>
<td>A-69</td>
</tr>
<tr>
<td>p0166 A82-20221</td>
<td></td>
</tr>
<tr>
<td>Runway and intersection design</td>
<td>A-69</td>
</tr>
<tr>
<td>p0285 A82-27050</td>
<td></td>
</tr>
<tr>
<td>Measured to determine runway capacity</td>
<td>A-69</td>
</tr>
<tr>
<td>p0304 A82-33904</td>
<td></td>
</tr>
<tr>
<td>Measures to increase airport capacity by changing aircraft runway occupancy characteristics</td>
<td>A-69</td>
</tr>
<tr>
<td>p0351 N82-22240</td>
<td></td>
</tr>
<tr>
<td>Transonic Turbines</td>
<td>A-69</td>
</tr>
<tr>
<td>Commercial jet transport crashworthiness</td>
<td>A-69</td>
</tr>
<tr>
<td>p0348 N82-22203</td>
<td></td>
</tr>
<tr>
<td>Aircraft runway occupancy characteristics</td>
<td>A-69</td>
</tr>
<tr>
<td>[AIAA PAPER 81-2623]</td>
<td>A-69</td>
</tr>
<tr>
<td>p0108 A82-16906</td>
<td></td>
</tr>
<tr>
<td>Design procedures for compressor blades</td>
<td>A-69</td>
</tr>
<tr>
<td>[NASA PAPER 82-0127]</td>
<td>A-69</td>
</tr>
<tr>
<td>p0115 A82-17598</td>
<td></td>
</tr>
<tr>
<td>Unsteady flow patterns associated with spoiler control devices</td>
<td>A-69</td>
</tr>
<tr>
<td>[AIAA PAPER 82-0250]</td>
<td>A-69</td>
</tr>
<tr>
<td>p0119 A82-17900</td>
<td></td>
</tr>
<tr>
<td>The structure of a separating turbulent boundary layer. I. - Mean flow and Reynolds stresses. II - Higher-order turbulence results</td>
<td>A-69</td>
</tr>
<tr>
<td>[AIAA PAPER 82-0127]</td>
<td>A-69</td>
</tr>
<tr>
<td>p0121 A82-18022</td>
<td></td>
</tr>
<tr>
<td>Implausible cooling of concave surfaces of turbine airfoils</td>
<td>A-69</td>
</tr>
<tr>
<td>p019 A82-18894</td>
<td></td>
</tr>
</tbody>
</table>
AIBFOIL SECTIONS

Experimental studies of the Eppler 61 airfoil at low Reynolds numbers [NASA TP 82-0345] p0164 882-19796
Flow field around an oscillating airfoil [NASA TP 82-0345] p0182 882-20813
A new facility and technique for two-dimensional aerodynamic testing [NASA TP-82-0640] p0238 882-26677
Supercritical flow past symmetrical airfoils [NASA TP 82-0640] p0275 882-26130
An experimental study of steady and quasi-steady jet flap [NASA TP 82-0640] p0276 882-26222
Experimental study of the flowfield of an airfoil with deflected spoiler [NASA TP 82-0640] p0286 882-27086
A computer-controlled oscillation mechanism for unsteady aerodynamics experiments [NASA TP 82-0640] p0328 882-29018
Transonic time-response analysis of three D.O.F. conventional and supercritical airfoils [NASA TP 82-0640] p0319 882-30155
Material flow and defect formation as forming an airfoil shape from metal-matrix composites [NASA TP 82-0640] p0365 882-33995
Structural optimization of a swept wing on the basis of the aileron efficiency condition [NASA TP 82-0640] p0388 882-34145
The initial lift and drag of an impulsively started airfoil of finite thickness [NASA TP 82-0640] p0390 882-34538
Optimization of propeller blade shape by an analytical method [NASA TP 82-1125] p0417 882-35021
A two-dimensional boundary-layer program for turbine airfoil heat transfer calculation [NASA TP 82-1125] p0424 882-35336
The effect of rotor blade thickness and surface finish on the performance of a small axial flow turbine [NASA TP-82-02-222] p0428 882-35409
Heat transfer optimized turbine rotor blades - An experimental study using transient techniques [NASA TP-82-02-304] p0430 882-35469
A series of airfoils designed by transonic drag minimization for Gates Learjet aircraft [NASA TP 82-35565] p0432 882-35565
A new transonic Airfoil Design Method and its application to helicopter rotor airfoil design [NASA TP 82-40507] p0436 882-40507
Viscous transonic airfoil flow simulation [NASA TP 82-40997] p0506 882-40997
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 [NASA TP 82-40997] p0507 882-40909
Design and tests of airfoils for sailplanes with an application to the ASN-198 [NASA TP 82-40909] p0512 882-40967
Variable geometry airfoils as applied to the Beatty B-5 and B-6 sailplanes [NASA TP 82-40909] p0512 882-40968
Advanced aerodynamic wing design for commercial transports - Review of a technology program in the Netherlands [NASA TP 82-40909] p0514 882-40985
Recent airfoil developments at DPLR [NASA TP 82-40986] p0514 882-40986
The design of airfoil profiles with trailing edge loading [ONERA, TP NO. 1982-35] p0554 882-44224
Transonic flutter and response analyses of two 3-degree-of-freedom airfoils [NASA TP 82-44245] p0555 882-44245
Wind-tunnel results for a modified 17-percent-thick low-speed airfoil section [NASA TP 82-11033] p0534 882-11033
Aeroelastic theory for noncompact wing-root interaction [FDAO Bl-17] p0538 882-11071
Subcritical and supercritical airfoils for given pressure distribution [NASA TP 82-12031] p0005 882-12031

SUBJECT INDEX

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 a articulated helicopter rotor p0097 882-13107
Optimization and performance calculation of dual-rotation propellers [NASA TP-19498] p0131 882-14049
A flight investigation of blade-section aerodynamics for a helicopter main rotor having 10-64C airfoil sections [NASA TP-83226] p0131 882-14058
Low Reynolds number airfoil survey, volume 1 [NASA CR-165803-197] p0131 882-14059
High lift selected concepts [NASA CR-159220] p0139 882-15017
Computer program for aerodynamic and blading design of multistage axial-flow compressors [NASA TP-19464] p0141 882-15039
Investigations of the separation behavior on airfoils at high angles of attack, using linear lift theory [NASA TP-121-5247] p0252 882-18109
Leakage airfoils for transport aircraft [NASA TP 82-640] p0252 882-18190
On the design of some airfoils for sailplane application - additions to existing wings for inflight testing [NASA TP 82-1296] p0252 882-19213
Core compressor exit stage study, volume 6 [NASA CR-165555] p0472 882-27310
Family of airfoil shapes for rotating blades - for increased power efficiency and blade stability [NASA CR-165941-1] p0607 882-33372

AIBFOIL SECTIONS
U AIBFOIL PROFILES
U AIBFOIL THICKNESS
U AIBFOIL PROFILES
AIRFOILS
T AERIAL FUSSELAGE
T AILEBOARDS
T AIRFOIL PENCES
T ARROW WINGS
T BEARINGLESS BROTHERS
T BOXER WINGS
T CARROLL WINGS
T CARAVEL WINGS
T CIRCULATION CONTROL AIRFOILS
T DELTA WINGS
T ELEVATORS (CONTROL SURFACES)
T ELEVONS
T EXTERNALLY BLOWN FLAPS
T FIXED WINGS
T FLAPS (CONTROL SURFACES)
T FLEXIBLE WINGS
T HORIZONTAL TAIL SURFACES
T INFINTE SPAWNG WINGS
T JET FLAPS
T LAMINAR FLOW AIRFOILS
T LEADING EDGE SLATS
T LIFTING BROTHERS
T LOW ASPECT RATIO WINGS
T OBIQUE WINGS
T PARAIRINGS
T PROPELLER BLADES
T RECTANGULAR WINGS
T RIGID WINGS
T RIGID BROTHERS
T SPLIT FLAPS
T SPOILER SLOT ALLERBONS
T SPOILERS
T SUPERCRITICAL WINGS
T SUPERSONIC AIRFOILS
T SWEEP FORWARD WINGS
T SWEEP WINGS
T SWEEPBACK WINGS
T TABS (CONTROL SURFACES)
T THIN AIRFOILS
T THIN WINGS
T TILTING BROTHERS
T TRAILING-EDGE FLAPS
T TRAPEZOIDAL WINGS
T TWISTED WINGS
T SWEEP WINGS
T EXTERNALLY BLOWN FLAPS
T UPPER SURFACE BLOWN FLAPS

A-70
AIRFRAMES

[NW-85-81006-0] p0343 882-22153
Materials and structures/ACE
[NASA-PACS-117-B-81] p0407 882-23252
Panel Optimization with Integrated Software (POIS), Volume 2. User instructions: FEMO and BRIS
[AD-A112224-0] p0475 882-27411
Replacement of aboard naval aircraft
[AD-A115782-0] p0590 882-32356

AIRFRAMES

Development of aircraft production engineering discipline at IIT, Bombay
[AB-A1131-3] p0113 882-13117
The Navy F/A-16A Hornet electromagnetic compatibility program
[AB-A1131-2] p0070 882-14760
Effect of fleet size on estimates of safety against airframe fatigue
[AB-A1131-1] p0048 882-16153
Design requirements for modern rescue helicopters
[AB-A1131-0] p0152 882-19202
Airframe effects on top-mounted inlet systems for TSTOL fighter aircraft
[AB-A1131-0] p0156 882-19212
Modal analysis using helicopter dynamic test data
[AB-A1131-0] p0160 882-19306
A comprehensive flight test flyover noise program
[AB-A1131-0] p0178 882-20765
Welding for low-cost advanced titanium airframe structures
[AB-A1131-0] p0222 882-23757
Material/structure degradation due to fretting and fretting-initiated fatigue
[AB-A1131-0] p0222 882-23771
Minimum mass sizing of a large low-aspect ratio airframe for flutter-free performance
[AB-A1131-0] p0225 882-24022
Large scale model measurements of airframe noise using cuna-correlation techniques
[AB-A1131-0] p0268 882-26966
A review of U.S. Air Force research related to airframe and engine materials
[AB-A1131-0] p0329 882-29266
Component coupling with time-invariant mass matrix for nonisotropic rotating and nonrotating systems
[AB-A1131-0] p0340 882-30179
A method for observing the deterioration of airframe life in operational conditions
[AB-A1131-0] p0346 882-37123
Improved methods in ground vibration testing
[AB-A1131-0] p0441 882-37781
Determination of in-flight helicopter loads and vibration
[AB-A1131-0] p0441 882-37782
A summary of weight savings data for composite TSTOL structure
[AB-A1131-0] p0502 882-40546
Inlet and airframe compatibility for a T-TSTOL fighter/attack aircraft with top-mounted inlets
[AB-A1131-0] p0507 882-40548
Processes and procedural approaches used in the dimensionalizing of the supporting structure and the demonstration of the airworthiness
[AB-A1131-0] p0570 882-43331
Calculation of the stability and post-buckling behavior of thin shell underframes using the finite element method — German thesis
[AB-A1131-0] p0577 882-45219
Design techniques for multivariable flight control systems
[AB-A1131-0] p0689 882-81078
The role and implementation of different nacelle/engine simulation concepts for wind-tunnel testing in research and development work on transport aircraft
[AB-A1131-0] p0695 882-13086
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
[AB-A1131-0] p0696 882-13089
Airframe-propulsion system aerodynamic interference predictions at high transonic Mach numbers including off-design engine airflow effects
[AB-A1131-0] p0697 882-13098

ENGINE/DRIVE/AIRFRAME COMPATIBILITY: A WAY OF LIFE

Evaluation of superelastic forming and co-diffusion bonding of Ti-6Al-4V titanium alloy expanded mesh aircraft structures
[AB-A1131-0] p0260 882-19358
Study of noise reduction characteristics of composite fiber-reinforced panels, structural panel configurations, and the application of the tuned dumper concept
[AB-A1131-0] p0269 882-19999
Some applications of Hartmann-type sources in aircraft noise research — airframe shielding
[SAA-1060-1] p0232 882-22007
Development of experimentally compatible subsystem methods for the analysis of aircraft structures
[AD-A112242-0] p0235 882-24196
Structures testing analysis real-time network (STABNET)
[AD-A111636-0] p0413 882-25327
Specification and estimation of dynamic cost functions for aircraft production airframes
[AD-A111637-0] p0428 882-27221
Commercial aircraft airframe fuel systems surveys
[AD-A112241-0] p0076 882-27524
Learning and costs in aircraft production, part 1
[AD-A112948-0] p0079 882-28210
User's manual for the coupled rotor/airframe vibration analysis package
[AB-A1131-0] p0566 882-31299
Coupled rotor,airframe vibration analysis program manual volume 1: User's and programmer's instructions
[AB-A1131-0] p0573 882-31965
Coupled rotor,airframe vibration analysis program manual volume 2: Sample input and output listings
[AB-A1131-0] p0573 882-31966
Integrated airframe propulsion control
[AB-A1131-0] p0592 882-32328
Crashworthy airframe design concepts: Fabrication and testing
[AB-A1131-0] p0613 882-37335

AIRLINE OPERATIONS

Now large should a commuter transport be
[AB-A1131-0] p0800 882-10543
Civil aviation in China
[AB-A1131-0] p0853 882-13600
The payoff from U.S. investment in aeronautical research and development
[AB-A1131-0] p0972 882-14793
Effect of fleet size on estimates of safety against airframe fatigue
[AB-A1131-0] p1046 882-16153
Greenlandar TSTOL transportation study
[AB-A1131-0] p1078 882-16912
The procurement of flight simulators at the German Luftfahrt
[AB-A1131-0] p1595 882-19268
Consequences of American airfare deregulation — Legislative theory in a concrete example
[AB-A1131-0] p1985 882-19947
Movement in Category III conditions — all weather air traffic operations
[AB-A1131-0] p1666 882-22221
Ground movement control and guidance - Cat. J
[AB-A1131-0] p1677 882-22222
A European airline's future simulator requirements
[AB-A1131-0] p1971 882-25036
Improvement of fuel economy by flying with maximum rearward center-of-gravity positioning
[AB-A1131-0] p2221 882-23470
What the operator wants — airline cooperation in aircraft maintenance
[AB-A1131-0] p2224 882-24000
B30-3 overview — aircraft maintenance program development
[AB-A1131-0] p2224 882-24000
Wind and temperature database for flight planning
[AB-A1131-0] p2289 882-24014
Airline flight planning — the weather connection
[AB-A1131-0] p2321 882-24365
Integration of energy management concepts into the flight deck
[AB-A1131-0] p2321 882-24365
On-board computers save fuel and help ATC
[AB-A1131-0] p2375 882-26046

SUBJECT INDEX
The load-carrying behavior of a trapezoidal aluminum-alloy supporting element, subjected to a compressive stress, in the postbuckling region.

A crack-closure model for predicting fatigue crack growth under aircraft spectrum loading.

Multi-parameter yield zone model for predicting spectrum crack growth.

Crack growth behavior of center-cracked panels under random spectrum loading.

Random spectrum fatigue crack life predictions with or without considering load interactions.

Low-frequency eddy current inspection of aircraft structure.

Aluminum and its alloys - Weldability.

A new approach to the problem of stress corrosion cracking in 7075-T6 aluminum.

Materials and aeronautics.

A simple crack closure model for prediction of fatigue crack growth rates under variable-amplitude loading.

Effect of mechanical surface and heat treatments on erosion resistance.

Correlation of surface characterization of phosphoric acid anodize oxide with physical properties of bonded specimens.


SPP of high strength aluminum structures - superplastic forming for complex aircraft structures.

Bonded aluminum honeycomb - Aircraft flight surface primary structure application.

Forbility of INCOCOT alloy 8A 956 - An oxide dispersion strengthened sheet alloy.

Material and process developments on the Boeing 767.

Application of a new hybrid material/ABALOG in an aircraft structure.

Evaluation of heat damage to aluminum aircraft structures.

Systems study of transport aircraft incorporating advanced aluminum alloys.

Superplastic aluminum evaluation (AB-4107650).

Mechanisms of corrosion fatigue of high strength aluminum alloys.

Corrosion fatigue behavior of some aluminum alloys.

Flight-by-flight corrosion fatigue tests.

Corrosion prevention measures used in the construction of an aircraft airframe: The case of 2014 and 2214 alloys.

Recent developments in materials and processes for aircraft corrosion control.

Corrosion protection schemes for aircraft structures; Some examples for the corrosion behavior of Al alloys.


Engineering property comparisons of 7050-T7351, 7010-T7651 and 7010-T73651 aluminum alloy plate for aircraft construction.
Current pressure measuring system in the transonic wind tunnel
(AD-1006712) p0192 882-16096
Heads up display
NASA CASE-LAF-12630-1) p0536 882-29319

ANALOGIES
Calculation of wing-body-nacelle interference in subsonic and transonic potential flow
p0097 882-13095

ANALYSIS (MATHEMATICS)
- AUTOPROGRAMMING
- CALCULATIONS OF VARIATIONS
- COMPUTATIONAL FLUID DYNAMICS
- CONFORMAL MAPPING
- CONTINUITY (MATHEMATICS)
- DIFFERENTIAL EQUATIONS
- ELLIPTIC DIFFERENTIAL EQUATIONS
- ERROR ANALYSIS
- EXTREMA VALUES
- FALEKES-CHAP EQUATION
- FINITE INTEGRAL EQUATIONS
- INTERPOLATION
- ITERATION
- KERNEL FUNCTIONS
- LEAST SQUARES METHOD
- LINEAR EQUATIONS
- MATRICES FUNCTION
- MINIMUM AND INTEGRATION
- MONTE CARLO METHOD
- NATURES
- NONLINEAR EQUATIONS
- NUMERICAL ANALYSIS
- NUMERICAL INTEGRATION
- PARIS APPROXIMATION
- PARTIAL DIFFERENTIAL EQUATIONS
- QUADRATIC EQUATIONS
- RATIONAL EQUATIONS
- REAL VARIABLES
- RELATIONSHIP METHOD (MATHEMATICS)
- RIGID-DYNA METHOD
- SCHWARZ-CHRISTOFFEL TRANSFORMATION
- SINGULARITY (MATHEMATICS)
- STOCH-LOYAVE THEORY
- TANGENTS
- TAYLOR SERIES
- VECTOR ANALYSIS
- VOLTILITY
- WIGHTING FUNCTIONS

Multi-variable analysis and design techniques
(AGARD-LS-117) p0029 882-10048
Prediction of aerodynamic loads on aircrafts with external stores at transonic speeds
p011 882-13813

ANALYSIS OF VARIANCE
A descriptive study of the application of analyses of variance and regression techniques in an error analysis program for test data obtained in a 16 foot transonic tunnel
p0309 882-20977

ANALYTIC GEOMETRY
- TANGENTS
- TANGENTES

ANALYSES
- ANALYSIS
- SIGNAL ANALYZERS

ANATOMY
- LINES (ANATOMY)

AERODYNAMIC CHAMBERS
Calibration of the Ames Anechoic Facility. Phase 1. Short range plan
(AGARD-DM-S006) p0191 882-16091

AERODYNAMICS
- TWO-FLYING AIRPLANES
- LASER AERODYNAMICS

The dynamic behaviour of propeller aerofoils
p0276 882-26184

AERODYNAMIC U VELOCITY MEASUREMENT

ANGLE OF ATTACK
Non-linear prediction of subsonic aerodynamic loads on wings and bodies at high angles of attack
p014 882-11359

A large-scale investigation of engine influence on inline performance at angle-of-attack

SUBJECT INDEX

[AIANTA PAPER 81-2481] p0059 882-13399
The USAP Test Pilot School high angle of attack and spin training program
[p0076 882-14932
F/A-18A high angle of attack/spin tests
p0076 882-14934
Direct free-flight analysis of aircraft dynamics at high angles of attack
p0081 882-15596
Wind tunnel investigations for the flat spin of tandem bodies at high angles of attack
[AIANTA PAPER 82-0054] p0115 882-17755
Bifurcation analysis of nonlinear stability of aircraft at high angles of attack
[AIANTA PAPER 82-0244] p0117 882-17862
Aerodynamics of tactical weapons to Mach number 8 and angle-of-attack of 160 deg
[AIANTA PAPER 82-0250] p0118 882-17864
Large-scale wind tunnel tests of a sting-supported V/SSTOL fighter model at high angles of attack
[AIANTA PAPER 82-2621] p0156 882-19208
Thrust modulation methods for a subsonic V/SSTOL aircraft
[AIANTA PAPER 82-2633] p0156 882-19213
High angle-of-attack characteristics of three-surface fighter aircraft — canard-wing-horizontal tail configuration for greater stability and control
[AIANTA PAPER 82-0245] p0184 882-22047
Measurements of a three-dimensional boundary layer on a sharp cone at Mach 3
[AIANTA PAPER 82-0269] p0185 882-22063
Steady and unsteady nonlinear hybrid vortex method for lifting surfaces at large angles of attack
[AIANTA PAPER 82-0351] p0185 882-22094
Oscillating supersonic/hypersonic wings at high incidence
p0223 882-23820
Review of support interference in dynamic tests
[AIANTA PAPER 82-0594] p0237 882-24668
Measured and calculated effects of angle of attack on the transonic flutter of a supercritical wing
[AIANTA PAPER 82-0595] p0330 882-29183
Wind-tunnel wall interference corrections for three-dimensional flows
p0379 882-32847
Piloted simulator evaluation of a relaxed static stability fighter at high angle-of-attack
[AIANTA PAPER 82-1352] p0465 882-13602
An estimation of aerodynamic forces and moments on an airplane model under steady state spun conditions
[AIANTA PAPER 82-1311] p0487 882-39092
Analysis and wind tunnel tests of a probe used to sense altitude through measurement of static pressure
[AIANTA PAPER 82-1361] p0489 882-39128
Effects of vortex breakdown on longitudinal and lateral-directional aerodynamics of slender wings by the suction analogy
[AIANTA PAPER 82-1385] p0489 882-39411
Lateral aerodynamics of delta wings with leading edge separation
[AIANTA PAPER 82-1386] p0490 882-39412
Aerodynamic aspects of aircraft dynamics at high angles of attack /AGARD Lecture/
[AIANTA PAPER 82-1363] p0495 882-39836
Flight-determined correction terms for angle of attack and sideslip
[AIANTA PAPER 82-1374] p0497 882-40290
Dynamic surface measurements on a model helicopter rudder during blade slap at high angles of attack
p0503 882-40555
Determination of airplane aerodynamic parameters from flight data at high angles of attack
p0508 882-40928
Prediction of high alpha flight characteristics utilizing rotary balance data
p0510 882-40953
Low-speed characteristics of a fighter model — configuration at high angles-of-attack and sideslip
p0510 882-41020
Higher-order flow angle corrections for three-dimensional wind tunnel wall interference
p0555 882-44246
Estimation of airplane stability and control derivatives from large amplitude longitudinal maneuvers
A16GB0 LAB VQB0CII

A16GDB0 B0TIOI

UGDUB »CCBLBATIOB

AI6LBS (GEOBBIBI)

8T AHGLE OF ATTACK

F/A-18 roll rate improvement program

the ideal controlled element for real airplanes is

3 OOF gyro analysis from measured and derived rates

Some STF laser velocimeter installation and

measured and calculated effects of angle of attack

Effects of Ming-leading-edge modifications on a

Air data measurement using distributed processing

Tunnel-to-tunnel correlation

Water tunnel flow visualization and wind tunnel

data analysis of the F/A-18 --- leading edge

extension vortex effects

[NASA-CE-15850] p0364 882-25215

Air data measurement using distributed processing

and fiber optics data transmission

p0446 882-26214

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

[NASA-TP-2011] p0464 882-26217

Rough analysis of installation effects on

turboprop noise

[NASA-TP-82826] p0574 882-32082

Measured and calculated effects of angle of attack

on the transonic flutter of a supercritical wing

[NASA-TP-83276] p0613 882-33736

ANGLES (HORIZONTAL)

ANGULAR ACCELERATION

The ideal controlled element for real airplanes is not E/σ

[AIAA 82-1606] p0484 882-38986

ANGULAR ACCELERATION

ANGULAR VELOCITY

p077 882-14939

J DOF gyro analysis from measured and derived rates

--- hypersonic reentry simulation test

[AIAA PAPER 82-0189] p0116 882-17831

ANIMALS

MT BIRDS

MT PIGEONS

ANTENNA COUPLERS

Component coupling with time-invariant mass matrix

for nonrotating and nonrotating systems

[AIAA 82-0731] p0340 A82-30179

ANTIGRAVITY

Hybrid state vector methods for structural dynamic

and aerelastic boundary value problems

[NASA-CE-3591] p0567 882-31304

ANTENNA ARRAYS

Effects of mechanical surface and heat treatments

on erosion resistance

p0265 882-27071

ANTENNA ARRAYS

MT POSITON ANNULLATION

Angular flow

A comprehensive method for preliminary design

optimization of axial gas turbine stages

[AIAA PAPER 82-1264] p0419 882-35091

Local heat transfer to staggered arrays of

impinging circular air jets

[ASBE PAPER 82-07-211] p0427 882-35401

Experimental investigation of turbine endwall heat

transfer. Volume 2: Linear and annular cascade

summary data sets

[AD-A101333] p0317 882-21200

Laser anemometer measurements in an annular

cascade of core turbine vanes and comparison

with theory

[NASA-TP-2018] p0497 882-26234

Correlation of three dimensional unsteady

nonswirl flows in the blade-free annular

channel of a turboshaft --- military aircraft,

turboengines

[ONERA-TR-1902-2] p0592 882-32372

ANTENNAS

Three dimensional near velocity and turbulence

characteristics in the annular wall region of an

axial flow compressor rotor passage

[NASA-CE-169003] p0406 882-25252

ANTENNAS

Correlation of surface characterization of phosphoric acid anodize oxide with physical

properties of bonded specimens

p0293 882-27437

Corrosion fatigue behaviour of some aluminium alloys

p0210 882-17365

AUTOMATION

MT GRAVITY ANOMALIES

MT MAGNETIC ANOMALIES

Elastic suspension of a wind tunnel test section

p0370 882-23163

ATMOSPHERIC ENVIRONMENT

MT ANTENNAS

MT EMPIRE AIRWAYS

MT LINEAR ANTENNAS

MT STEerable ANTENNAS

Study of the effects of manoeuvre compensation on beam pointing accuracy

p0702 882-14780

Broader bandwidth for thin conformal antennas

p0154 882-19069

Analysis and tolerance study of an array antenna

for a new generation of secondary radars

p0163 882-19521

Distributed airborne array concepts

p0424 882-31669

Outline of a multiple-access communication network

based on adaptive arrays

p0390 882-34607

Antenna (selected articles)

[AD-A108174] p0269 882-19480

Conformal antenna array design handbook

[AD-A110091] p0322 882-21483

Modification of 08-258/VRN Tactical Air Navigation

[MTAC] antenna group

[AD-A111660] p0499 882-26266

Spiral phased antenna array

p0476 882-27558

ANTENNA COUPLERS

Airborne measurements with a sensitive high

resolution 90 GHz radiometer

p0151 882-18940

ANTENNA COUPLERS

MT COUPLING CIRCUITS

A-79
ANTENNA DESIGN

ANTENNA DESIGN
Antenna theory and design — Book p0020 A82-12323
Octave bandwidth dual polarized antenna
p0150 A82-18934
Broader bandwidth for than conformal antennas
p0154 A82-19069
Selection of optimum antennas for tracking
teleometry instrumented airborne vehicles
p0290 A82-27228
Recent results in main beam nulling — aircraft
antenna design
p0553 A82-43792
General aviation aircraft antennas for the global
positioning system
[ NASA-TR-6212 ] p0041 A82-11339
Antenna (selected articles)
 [ AD-A108174 ] p0269 A82-19408
Conformal antenna array design handbook
[ AD-A110091 ] p0322 A82-21603
Spiral slotted phased antenna array
p0876 A82-27558
Advanced microstrip antenna developments. Volume
2: Microstrip GPS antennas for general aviation
aircraft
[ AD-A113620 ] p0477 A82-27588
Improved 243 MHz homing antenna system for use on
helicopters
[ MIL-SP-01022-0 ] p0523 A82-20276

ANTENNA FIELD

ANTENNA RADIATION PATTERNS

ANTENNA RADIATION PATTERNS
Antenna theory and design — Book p0020 A82-12323
Leaky wave antenna using an inverted strip
dielectric waveguide — for aircraft application
p063 A82-19552
Selection of optimum antennas for tracking
teleometry instrumented airborne vehicles
p0290 A82-27228
Measuring LF and HF antenna radiation patterns by
means of a helicopter
p0391 A82-24772
Monopole antenna patterns on finite size composite
ground planes — in aircraft
p0518 A82-61055
Recent results in main beam nulling — aircraft
antenna design
p0553 A82-43792
Airborne antenna pattern calculations
[ NASA-CE-168776 ] p0146 A82-15277
TM/TE polarization ratios in a sample of 30 Hz
sferics received at altitudes from 0 to 70 km
[ AD-A108182 ] p0258 A82-18466
Volumetric pattern prediction of antennas on
aircraft using the geometrical theory of
diffraction
[ ESA-TR-677 ] p0259 A82-18403
Antenna (selected articles)
 [ AD-A108174 ] p0269 A82-19448
GTD analysis of airborne antennas radiating in the
presence of lossy dielectric layers
[ NASA-CE-168776 ] p0357 A82-22398
Radar frequency radiation
[ AD-A111852 ] p0411 A82-25420
Elevation plane analysis of on-aircraft antennas
[ AD-A112373 ] p0460 A82-26550
Near field analysis of airborne antennas
[ AD-A115074 ] p0561 A82-30462
The effect of refloe scattering on EBG antenna
patterns
[ AD-A115517 ] p0561 A82-30463
L-band DME multipath environment in the Microwave
Landair System (MLS) approach and landing region
[ FAA-RD-02-19 ] p0586 A82-32330

ANTENNAS

AT SPACECRAFT ANTENNAS
AT CYLINDRICAL ANTENNAS
AT DIPOLAR ANTENNAS
AT DIRECTIONAL ANTENNAS
AT HORN ANTENNAS
AT LOOP ANTENNAS
AT MONOPOLE ANTENNAS
AT PARABOLIC ANTENNAS
AT RADIATION ANTENNAS
AT RADIO ANTENNAS
AT SLOT ANTENNAS
AT SPACECRAFT ANTENNAS
AT SPIRAL ANTENNAS

ANTENNA DESIGN

AT SYMMETRICAL ANTENNAS
AT WAVEGUIDE ANTENNAS
Assessment of aircraft capacitive circuit sedus
wave antennas according to their efficiency
p0249 A82-19453
ARTICULATING
Life enhancement of Naval systems through advanced
material means
[ AD-A14772 ] p0560 A82-30404
ARTIFICIAL BEAKING
AT BALL BEAKING
AT ROLL BEAKING
Optimization of requirements on the
pitting-prevention properties of turbojet-engine
oils
Consideration of mechanical, phanasical, and
chemical properties in bearing selection for
landing gear of large transport aircraft
[ ASLE PAPER 81-1235 ] p0126 A82-18442
Four pad tilting pad bearing design and
application for multistage axial compressors
[ ASLE PAPER 81-LD-12 ] p0126 A82-18429
ARTICULATING ADDITIVES
Icing tunnel tests of a composite porous leading
edge for use with a liquid anti-ice system
Low icing research tunnel
[ NASA-CA-169966 ] p035 A82-11052
ARTISAN DEFENSE
A low cost maritime control aircraft-sharp-weapon
system — antiship missile defense
[ AIAA PAPER 81-2660 ] p0109 A82-16916
Perspectives for Controlled Weapons Technology:
Report of the 90th Helicopter Forum
[ AIAA PAPER 81-2660 ] p0265 A82-21211
ARMING FUELS
Aircraft fire safety research with antistatic
fuels — Status report
[ AIAA PAPER 81-2635 ] p0410 A82-35076
Investigation of the application of a cryogenic
blending process to produce antistatic diesel
fuels
[ AD-A110517 ] p0411 A82-25339
Aviation fuels—future outlook and impact on
aircraft fire threat
p032 A82-29292
Commercial aircraft airframe fuel systems survey
and analysis
[ DO/DAA/CT-82/80 ] p0589 A82-32351
ANTIOXIDANTS
Determination of antioxidant content in aviation
oils using thin-layer chromatography
p0548 A82-42894
Antioxidants for synthetic oils
p0548 A82-42895
ANTIFRAG COATINGS
The bomber that radar cannot see
p0274 A82-25874
ANTISCRIPT COATINGS
Reducing reflections on the front surface of air
traffic control displays
p0219 A82-23314
ANTISHIP MISSILES
Air-fan cooling returns to ramjets
[ ASHE PAPER 81-10838-6 ] p0111 A82-10996
A low cost maritime control aircraft-sharp-weapon
system — antiship missile defense
[ AIAA PAPER 81-2660 ] p0109 A82-16916
Harpoon missile captive-carry dynamic environments
on the a-6E aircraft
p0583 A82-47072
ANTISKID DEVICES
Dynamics of aircraft antiskid braking systems
— conducted at the Langley aircraft landing loads
and traction facility
[ NASA-TP-1959 ] p0254 A82-18204
ANTISKID DEVICES
Light Airborne Multi-Purpose System
p0046 A82-13244
ANTISKID DEVICES
A-3 AIRCRAFT
A-5 AIRCRAFT
A-6E HELICOPTER
Sea based support aircraft alternatives
[ AIAA PAPER 81-2640 ] p0157 A82-19217
Training in the flight and tactics simulator of
the Navy Flight Squadron 3 'Srao Seppella'
[ DGLR PAPER 81-109 ] p0160 A82-19273

SUBJECT INDEX
The use of approach frequency for the synthesis of navigation systems /DAS/

Game-theoretical method for the synthesis of navigation systems /DAS/ at airports of the German Democratic Republic

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

Requirements for Instrument Approaches to Triple Parallel Runways

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

Requirements for Instrument Approaches to Triple Parallel Runways

Design criteria for flightpath and airspeed control for the approach and landing of STOL aircraft

Terminal area automatic navigation, guidance, and control research using the Microwave Landing System (ALS) Part 9: Transition path reconstruction along a straight line path containing a glide-slope change waypoint

Effects of approach lighting and variation in visible runway length on perception of approach angle in simulated night landings

Automatic path definition

Instrument landing systems /ILS/ at airports in the State of Vermont

In-flight investigation of the effects of pilot location and control system design on airplane flying qualities for approach and landing

-analysis of longitudinal pilot-induced oscillation experienced on the approach and landing test of the space shuttle

Flight-test verification of a pictorial display

Instrument approach lighting and variations in visible runway length on perception of approach angle in simulated night landings

APPROACH CONTROLS

APPROACH CONTROL

Comparison of low-speed flight control and approach landing test of the space shuttle

APPROACH SERVICES

APPROACHES

APPROACH INDICATORS

APPROXIMATION

APPROXIMATION METHODS

APPROXIMATE SOLUTIONS

ARC HEATING

SUBJECT INDEX
SUBJECT INDEX

ARC WELDING

[AIAA PAPER 82-1240] p0418 A82-35060

ARC WELDING

MT GAS TUBES/ARC WELDING

MT PLASMA ARC WELDING

ARCHACROLOGY

Radar mapping, archaeology, and ancient land use in the Maya lowlands
[HASA-CR-160531] p0401 NS2-11514

ARCHITECTURE

Airport related residential acoustical insulation demonstration project: Report 1720
[P862-100777] p0268 NS2-19356

ARCHITECTURE [COMPUTERS]

HiMAT onboard flight computer system architecture and qualification
[AIAA 81-2107] p0001 NS2-10082

Airborne associative processor /ASPRG/ --- for early warning radar surveillance, command, and control applications
[AIAA 01-2145] p0002 NS2-10104

An advanced programmable/reconfigurable color graphics display system for crew station technology research
[AIAA 81-2314] p0051 NS2-13516

Advanced weapon systems - Integration technology
--- Digital Avionic Information System
[AIAA 81-2153] p0053 NS2-13533

Advanced integrated CHI architectures --- Communications, Navigation and Identification avionics for tactical aircraft and attack helicopter
[AIAA 81-2145] p0070 NS2-14763

APC automation - A look forward: Technology/architecture
p0220 A82-23320

Discrete Address Beacon System (DABS)/
A tutorial on distributed processing in aircraft/avionic applications
p0196 NS2-17069

Economic considerations for real-time naval aircraft/avionic distributed computer control systems
p0196 NS2-17097

Stage-state reliability analysis technique
p0196 NS2-17104

Analysis of computing system configurations for highly integrated guidance and control systems
p0363 NS2-23169

Electronic Warfare Avionics Integration Support Facility support processor
p0600 NS2-25249

At assessment of the real-time application capabilities of the SIFT computer system
[NASA-TM-84062] p0613 NS2-25611

Computer architecture study for VISI simulators
[AD-A115641] p0613 NS2-30953

Design of a microprocessor-controlled linkage for simulator applications
[AD-A115641] p0564 NS2-30954

ARCTIC ENVIRONMENT

U ICE ENVIRONMENTS

ARCTIC REGIONS

VTOL as it applies to resource development in the Canadian north
[AIAA PAPER 81-2640] p0156 A82-19215

AREA NAVIGATION

Use of Space Shuttle technology in conventional aircraft
[AIAA 81-2176] p0002 A82-10125

Discrete address beacon, navigation and landing system
p0100 A82-10650

Flight measurements of Area Navigation System performance using various combinations of ground aids and airborne sensors
p0123 A82-18147

Evaluation of Loran-C enroute navigation and non-procurement approaches within the State of Vermont
p0124 A82-18160

Flight evaluation of Loran-C for general aviation area navigation
p0380 A82-33049

Applications of a multiplexed GRS use test set
p0380 A82-33050

Navstar - Global Positioning System: A revolutionary capability
p0435 A82-37040

NASA/FAA helicopter arc simulation investigation of RNAV/ILS instrument approaches
p0501 A82-40535

Northeast corridor helicopter area navigation accuracy evaluation
[AD-A117845] p0606 NS2-33367

ARGENTINA

German-Argentine experiment: Vertical-rotor wind engine
p0091 NS2-12648

AIRC (IMPACT PREDICTION)

O COMPUTERIZED SIMULATION
O IMPACT PREDICTION

ARITHMETIC

NT FLOATING POINT ARITHMETIC

ARMED FORCES

NT ARMED FORCES (FOREIGN)

NT ARMED FORCES (UNITED STATES)

NT RVAT

ARMED FORCES (FOREIGN)

A proposed flight safety program for the Korean Air Force
[AD-A102373] p0025 NS2-10023

ARMED FORCES (UNITED STATES)

U.S. Marine Corps AT-8A maintenance experience
[AIAA PAPER 81-2657] p0482 NS2-38446

ARBOR

Transparent polyethylene film armor
p0213 NS2-17377

ARTIFICIAL COMBUSTION

The sooting tendency of fuels containing polycyclic aromatics in a research combustor
[AIAA PAPER 82-0299] p0164 A82-19791

ARHATS

NT ANTENNA ARHATS

NT EMPLOYEE ARHATS

NT LIBRARY ARHATS

NT PHASED ARRAYS

NT SOLAR ARRAYS

NT STERILE ANTENNAS

Local heat transfer to staggered arrays of impinging rectangular air jets
[ASSE PAPER 82-GT-211] p0427 A82-35401

ARRESTING GEAR

Test and evaluation of improved aircrew restraint systems
[AD-A107576] p0199 NS2-16056

Investigation of crossdeck pendant catapult slot interaction; proposed corrective measures
[AD-A106149] p0258 NS2-18232

ARROW WING

Effects of vortex flaps on the low-speed aerodynamic characteristics of an arrow wing
[NASA-TN-1918] p0033 NS2-11013

ARTIFICIAL CLOUDS

Helicopter Icing Spray System (HISS) nozzle improvement evaluation
[AD-A109405] p0264 NS2-19208

ARTIFICIAL SATELLITES

NT COMMUNICATION SATELLITES

NT GEOGRAPHIC SATELLITES

NT NAVIGATION SATELLITES

NT NAVSTAR SATELLITES

NT SCA SATELLITES

NT SRI SATELLITES

NT SEASAT SATELLITES

ARTS

NT ABILITIES

ARTL COMPOUNDS

O AROMATIC COMPOUNDS

ASBESTOS

Replacement of aboard naval aircraft engine
[p0590 NS2-32356

ASCEM

NT CLIMBING FLIGHT

ASPECT RATIO

NT HIGH ASPECT RATIO

NT LOW ASPECT RATIO

Infrared emission from turbofans with h. gh aspect ratio nozzles
[p0103 A82-16092

Secondary flow effects and mixing of the wake behind a turbine stator
[ASME PAPER 82-GT-46] p0422 A82-35304

Development and application of a performance prediction method for straight rectangular diffusers
[ASME PAPER 82-GT-122] p0425 A82-35352
Low-speed aerodynamic performance of a high-aspect-ratio supersonic wing transport model equipped with full-span split and part-span double-slotted flaps

High lift selected concepts

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

Performance of single-stage annular-flow transonic compressor with rotor and stator aspect ratios of 1.63 and 1.78, respectively, and with design pressure ratio of 1.82

A survey of experimental data on wing characteristics at transonic speeds

Low-speed measurements of the static pressure distribution and overall forces on a cascade and a symmetric mild gothic wing of aspect ratio 1.4 --- in a wind tunnel

ASSEMBLES

ST TAIL ASSEMBLY

Advanced concepts for composite structure joints and attachment fittings. Volume 2: Design guide

ASSASSEMBLY

Assembly of aircraft instruments --- Russian book

The technology of the assembly of engines for flight vehicles --- Russian book

ASSESSMENTS

ST DAMAGE ASSESSMENT

ST TECHNOLOGY ASSESSMENT

Reduced performance and increased cost warrant reassessment of the multiple stores ejector rack

ASTRONOMY

MEMORY REQUIREMENTS FOR FUTURE NAVIGATION SYSTEMS

ASTRONAUTICS

Studies in the history and theory of development of aviation and rocketry and space science and technology --- Russian book

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

ASTRONOMICAL SPECTROSCOPY

The stations to forty micro spectroscopy from the NASA Lear Jet

AEROBATIC

ST X-1 EAGLE ASSTATION

Journal of Aeronautics and astronauty

ASYMPTOTIC METHODS

A stable decentralized filtering implementation for UJUS bellows --- stable community relative navigation

Torsional vibrations of a wing carrying a concentrated load /asymptotic behavior/

The stability of maneuverable flight vehicles

Evaluation of an asymptotic method for helicopter rotor airflow

Asymptotic theory of separated flow past low-aspect-ratio wings

Helicopter rotor loads using a matched asymptotic expansion technique

ASTEROIDS

Cascades converter of dc voltage to ac voltage of higher frequency with voltage and frequency stabilization devices --- aircraft electric equipment

ATMOSPHERIC ELECTRICITY

tracks - Some interim results of the study

ATMOSPHERIC ABNORMALITIES

U ATMOSPHERIC ATOMIZATION

I-band vs C-band aircraft radar — the relative effects of beamwidth and attenuation in severe store situations

ATMOSPHERIC CHEMISTRY

Radiation enhancement by nonequilibrium during flight through the Titan atmosphere

Atmospheric chemistry of hydrocarbon fuels.

Volume 2: Outdoor chamber data tabulations, Part 1

ATMOSPHERIC CIRCULATION

Multiple Doppler radar observations of PBL structure

Aircraft measurements and analysis of severe storms: 1976 field experiment

ATMOSPHERIC COMPOSITION

ST ATMOSPHERIC POLLUTANTS

Two-dimensional model studies of the impact of aircraft exhaust emissions on tropospheric ozone

In situ ozone data for comparison with laser absorption remote sensor: 1980 PEPE/WEROS program

Beta experiment flight report

ATMOSPHERIC CONDITIONS

ST METEOROLOGY

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

AEROBATIC EFFECTS

Updated station deselection procedures to support automatic Omega receiver operation

Constant L/D glide trajectories

Aviation meteorology --- Russian book

On the corrosion problems of the TAF-5 aircraft

New concepts in multifunctional corrosion for aircraft and other systems

Corrosion in naval aircraft electronic systems

Proceedings: Fifth Annual Workshop on Meteorological and Environmental Inputs to Aviation Systems

Volume 2: Outdoor chamber data tabulations.

Effect of heavy rain on aircraft

Prototype Regional Observation and Forecast System , (PROFS)

ATMOSPHERIC ELECTRICITY

Electrical ground testing of aircraft antistatic protection

Direct strike lightning measurement system --- for aircraft

Calculations of lightning return stroke electric and magnetic fields above ground

Instrumentation for testing aircraft antistatic protection

Triggered lightning --- resulting from aircraft atmospheric electricity interactions

NASA research programs responding to workshop recommendations

Influence of meteorological processes on the verticality of electric fields

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

The effects of atmospheric turbulence on a quadruprotor heavy lift airship

The role of the scale parameter in service load assessment and simulation — 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

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

Analysis of variation induced error in turbulence velocity measurements from an aircraft wing tip boom

Evaluation of a meteorological airborne pulse doppler radar

The influence of turbulence models on computer-simulated aircraft landing

The effects of atmospheric turbulence on a quadruprotor heavy lift airship

The role of the scale parameter in service load assessment and simulation — 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

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

Analysis of variation induced error in turbulence velocity measurements from an aircraft wing tip boom

Evaluation of a meteorological airborne pulse doppler radar
AUTOMATIC PILOTS

The design of exact nonlinear model followers --- with application to trajectory autopilot for helicopter
p0044 A82-13125

A gust dumper --- for light passenger aircraft
p0436 A82-37127

Electronic stabilization of an aircraft
p0491 A82-39322

The control and guidance unit for NASA
p0504 A82-39738

Designs and flight testing of a digital optimal control general aviation autopilot
p0507 A82-40906

Simulated ILS using a laser tracker
p0543 A82-41795

Electronic stabilization

[AIAA PAPEB 81-1763] p0555 A82-44234
Optimization of autopilot equations for rapid estimation of helicopter control settings
[AD-110739] p0409 A82-25263

Gust response of commercial jet aircraft including effects of autopilot operation
[NASA-CS-165919] p0522 A82-28266
Analysis of several glidepath and speed control autopilot concepts for a powered lift STOL aircraft
[BASA-TB-84282] p0611 A82-33400

AUTOMATIC ROCKET IMPACT PREDICTIONS

U COMPUTERIZED SIMULATION
U IMPACT PREDICTION

AUTOMATIC TEST EQUIPMENT

Air supply system kits for Boeing 767 airplane --- Built-In-Test-Equipment
[ASBE PAPER 81-ENAS-7] p0011 A82-10895

Commercial EMS considerations for small gas turbine engines --- automated engine monitoring systems
p0020 A82-12449

Information technology and its impact on test and evaluation at the Naval Air Test Center
[AlIA PAPER 81-2396] p0056 A82-13894

Automated radome performance evaluation in the Radio Frequency Simulation System /RFSS/ at NAWC
p0281 A82-26471

AUTOFECSTC '80; International Automatic Testing Conference, Washington, DC, November 2-5, 1980, Proceedings
p0294 A82-27876

Airline maintenance strategy
p0294 A82-27883

Airline ATE requirements
p0294 A82-27884

The role of software in commercial ATE
p0294 A82-27885

The modular ATE --- for cost effective maintenance of new generation aircraft
p0294 A82-27886

AWTS - Realistic not futuristic --- Advanced Electronic Warfare Test Set
p0294 A82-27887

ATE logistics in the United States Air Force
p0294 A82-27890

ATLAS/test data provision for the Tornado ATS - A challenging task
p0294 A82-27891

Naval Air Systems Command /NAFAIR/ ATE program - Standardized ATE for the carrier environment
p0294 A82-27892

Configuration management techniques for automatic testing
p0294 A82-27893

Falcon Comet II jet engine test system
p0295 A82-27896

Automated ultrasonic inspection of adhesive bonded structure
p0299 A82-28534

A laboratory mock-up ultrasonic inspection system for composites
p0419 A82-35526

A simple, low cost application of a flight test parameter identification system
[AlIA PAPER 82-1312] p0487 A82-39093

Analysis of built-in-test accuracy
p0545 A82-42211

Computer Monitored Inspection Program /CMIP/, a key to increased aircraft and personnel productivity

Vibration test procedures for accessory angle drive gearboxes on Atar 09C engines --- turbojet engines
[AD-A105269] p0088 A82-12076

BoiL computers in the flight testing of the Fokker P29 aircraft
p0138 A82-14839

Aircraft interrogation and display system: A ground support equipment for digital flight systems
[BASA-TB-81370] p0318 A82-21175

AUTOMATIC TRAFFIC ADVISORY AND RESOLUTION

Conflicts between random flights in a given area
p0242 A82-25213

Estimation of the number of in-flight aircraft on instrument flight rules
p0518 A82-41117

AUTOMATIC WEATHER STATIONS

A modular automated approach to airfield weather system
The Modular Automated Weather System (MAWS) concept --- airfield weather support
p0137 A82-14763

AUTOMATION

Automated Paint and Process Line /APPL/ --- for aircraft production
[AlIA 81-2166] p0002 A82-10120

Automation in flight simulation of data handling and validation testing
p0171 A82-20532

Automation air-traffic control
p0282 A82-26511

Problems in the automation of the thermal-stress analysis of flight vehicles
p0293 A82-27509

Automation of flight operational control in the German Democratic Republic
p0547 A82-42574

AUTOMOBILE ENGINES

Future auto engines - Competition heats up
p0333 A82-29793

Ceramic components for automotive and heavy duty turbine engines - CATS and ACT 100
[ASBE PAPER 82-G0-253] p0429 A82-35432

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
[BASA-TR-82644] p0316 A82-21193

Preliminary results on performance testing of a turbocharged rotary combustion engine
p0316 A82-21194

AUTOMOBILE FUELS

HY LIQUID FUELS
Technological innovation for success - Liquid hydrogen propulsion
p0107 A82-16734

AUTOMOBILES

AUTOMATIC PILOTS

AUTOMATION

Evaluation of helicopter autorotation assist concepts

AUXILIARY EQUIPMENT (COMPUTERS)

AUXILIARY POWER SOURCES

A new AFP for medium size aircraft environmental control systems
[ASBE PAPER 81-ENAS-1] p0110 A82-10869

An evaluation of helicopter autorotation assist concepts

Electric Flight Systems
[HASA-CF-2209] p0260 A82-19135

Electric Flight systems, overview
p0260 A82-19135
The testing of aircraft under near field conditions
Advanced electronic displays and their potential
EHC clearance of modern military aircraft
The use of dynamic mock-ups in the design of
Size reduction flight test airborne data systems
The influence of technology advances on integrated
Operability of military aircraft - Avionic design
The effects on simulators of advances in aircraft
technology
Operability of military aircraft - Avionic design
aspects
The influence of technology advances on integrated
CMI avionics --- Integrated Communication,
Navigation, and Identification Avionics for
military aircraft
Tornado-avionic development testing
Size reduction flight test airborne data systems
Systems approach to the design of wind shear
avionics
Very high speed integrated circuits: Into the
second generation. II - Satisfying Phase 1
The use of dynamic mock-ups in the design of
advanced systems --- ONR's Digital Avionics
Information System and NAVY's Advanced
Integrated Display System
The coupling of electromagnetic interference into
aircraft systems
The variation of induced currents in aircraft wiring
EMC clearance of modern military aircraft
The testing of aircraft under near field conditions
Advanced electronic displays and their potential
in future transport aircraft
Electronic flight instrument systems /EFIS/; the
instrumentation of the 1980s

AVIONICS CONTENT

AVIONICS FOR TACTICAL AIRCRAFT AND ATTACK
HELICOPTER

p0070 A82-14763
The agile transverse filter - A flexible building
block for ICHIA — Integrated Communications,
Navigation and Identification Avionics

p0070 A82-14765
Applications of covariance analysis simulation to
avionics flight testing

Conceptual design of an integrated power and
avionics information system

Implementing the DAIS executive --- Digital
Avionics Information System software feasibility
for aircraft systems

A storage device for subsystem maintenance
information

Air-to-ground RTI radar using a displaced phase
center, phased array

A E W Mured - The Emissions System Avionics

Management of a large avionics project

Advanced cockpit for tactical aircraft

Trends in maintainability and reliability of
avionics systems with particular reference to
DCAF Technical Publication 1/77

JTIDS distributed TMRA /DIMA/ terminal
development results with emphasis on relative
navigation performance

Octave bandwidth dual polarized antenna

KC-135 avionics modernization hot bench - An
evaluation of requirements and design for the
future

Digital avionics - Advances in maintenance designs

The aircraft manufacturer's needs as a simulator
user

The effects on simulators of advances in aircraft
technology

Operability of military aircraft - Avionic design
aspects

The influence of technology advances on integrated
CMI avionics --- Integrated Communication,
Navigation, and Identification Avionics for
military aircraft

Tornado-avionic development testing

Size reduction flight test airborne data systems

Systems approach to the design of wind shear
avionics

Very high speed integrated circuits: Into the
second generation. II - Satisfying Phase 1

The use of dynamic mock-ups in the design of
advanced systems --- ONR's Digital Avionics
Information System and NAVY's Advanced
Integrated Display System

The coupling of electromagnetic interference into
aircraft systems

The variation of induced currents in aircraft wiring

EMC clearance of modern military aircraft

The testing of aircraft under near field conditions

Advanced electronic displays and their potential
in future transport aircraft

Electronic flight instrument systems /EFIS/; the
instrumentation of the 1980s

AV-8B/Harrier GB.5 - Range, payload and
YSTOL

Manufacturing cost trade-studies in avionics

Airline maintenance strategy

Airline ATF requirements

The role of software in commercial ATF

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

ATLAS/test data provision for the Tornado AES - A
challenging task

Naval Air System Command /NANAS/ /ATF program -
Standardized ATF for the carrier environment

Simple vs. sophisticated TacAir avionics. II -
Soviet Tactical Avionics technology

Aviation electronics /4th edition/ Book

Operational testing of the LW-33 inertial
navigation system

Integrated aircraft avionics and powerplant
control and management systems

AIREP PAPER 82-14756
Static charging and its effects on avionic systems

The computerized cockpit for the one-man crew

A preliminary laboratory evaluation of a
reconfigurable integrated flight control concept

MACH3 - A unmanned aircraft flight research
facility

Future helicopter cockpit design

Micro-heads-up display

Avionics systems for helicopter integration

Support of the HH-65A - The impact of advanced
technology of VTOL systems upon existing product
support

A practical approach to the incorporation of
technical advances in avionics

Preliminary design of an advanced integrated power
and avionics information system

Models for the motor state of VSCF aircraft

Trendsetting and concerns in the airliner radio
communications equipment: Design
and use --- Russian book

Fault isolation BIT for increased productivity

757 systems key to route flexibility

NASA studies business aircraft avionics

Electronic aircraft stabilization

New image generators for the next generation
of civil aircraft

Electronic aircraft stabilization

Electronic master monitor and advisory display
system, data transmission study

Portable air driven variable speed fiber optic
cable termination polishing
The role of simulation in the design process
The impact of new guidance and control systems on military aircraft cockpit design
Impact of technology on avionics cost trends
Integration of inertial sensors in helicopters
Impact of technology on avionics cost trends
Trends in airborne avionics
Integration of complex systems in current and future aircraft projects for the example of avionics
A planning system for F-16 air-to-surface missions
How the helicopter cockpit designer uses digital avionics
The integration of multiple avionics sensors and technologies for highly integrated guidance and control systems
A planning system for F-16 air-to-surface missions
Impact of advanced avionics and munitions
The role of simulation in the design process
Impact of new guidance and control systems on military aircraft cockpit design
How the helicopter cockpit designer uses digital avionics
Impact of technology on avionics cost trends
Integration of inertial sensors in helicopters
Impact of technology on avionics cost trends
Trends in airborne avionics
Integration of complex systems in current and future aircraft projects for the example of avionics
Technology overview for advanced aircraft armament systems
Planning system for F-16 air-to-surface missions
Pave low radar integrated strike avionics system
Adapted multifunction sensor concept for air-ground missions
Integration of complex systems in current and future aircraft projects for the example of avionics
Planning system for F-16 air-to-surface missions
Pave low radar integrated strike avionics system
Adapted multifunction sensor concept for air-ground missions
Integration of complex systems in current and future aircraft projects for the example of avionics
Planning system for F-16 air-to-surface missions
Pave low radar integrated strike avionics system
Adapted multifunction sensor concept for air-ground missions
Integration of complex systems in current and future aircraft projects for the example of avionics
Planning system for F-16 air-to-surface missions
Pave low radar integrated strike avionics system
Adapted multifunction sensor concept for air-ground missions
Integration of complex systems in current and future aircraft projects for the example of avionics
Planning system for F-16 air-to-surface missions
Pave low radar integrated strike avionics system
Adapted multifunction sensor concept for air-ground missions
AVOIDANCE

Protection of electrical systems from EM hazards:
Design guide
[AD-A111877] p0477 882-27659

Assessment of lightning simulation test techniques, part 1
[AD-A1112620] p0477 882-27663

Electronic/electric technology benefits study ---- avionics

General aviation activity and avionics survey
[AD-A112924] p0521 882-28244

Advanced aircraft electrical system control technology demonstrator. Phase 1: Analysis and preliminary design
[AD-A110313] p0524 882-28284

Problems related to the integration of fault tolerant aircraft electronic systems

System data communication structures for active-control transport aircraft, volume 2

Design and implementation of USAP avionics integration support facilities
[AD-A115537] p0558 882-30307

Climatic laboratory evaluation YC-U7D helicopter
[AD-A115561] p0590 882-32355

Avionic system development for the Tornado F 882
[ADPT-96] p0590 882-32361

A-7 flight software analysis
[AD-1116177] p0594 882-32386

The AIDS/P-18 differential HUD
[AD-A116026] p0608 882-33382

Voice Interactive Systems Technology Avionics (VISTA) Program
[AD-A117268] p0608 882-33383

Development of avionics installation interface standards
[AD-A116853] p0608 882-33384

Enhancements and algorithms for avionic information processing system design methodology
[AD-A117946] p0609 882-33385

A-83

AXIAL FLOW TURBINE S

Dynamic response of blades and vanes to wakes in axial turboachinery
[ASBE PAPEB 82-GT-33] p0160 882-19307

Endwall boundary layer flows and losses in an axial turbine stage
[ASBE PAPEB 82-GT-03] p0160 882-20298

A comprehensive method for preliminary design optimization of axial gas turbine stages
[ALAA PAPEB 82-1264] p0479 882-35091

Secondary flows and losses in axial flow turbines
[ASBE PAPEB 82-GT-19] p0420 882-35288

On the influence of the number of stages on the efficiency of axial-flow turbines
[ASBE PAPEB 82-GT-04] p0421 882-35301

The use of optimization techniques to design controlled diffusion compressor blading
[ASBE PAPEB 82-GT-149] p0426 882-35373

Numerical calculation of the flow in compressor and turbine cascades ---- German thesis
[AD-A112707] p0578 882-45222

Development of high loading, high efficiency axial flow turbine
[AD-A117288] p0583 882-47069

An aerodynamic design and the overall stage performance of an air-cooled axial-flow turbine
[NAL-TB-3212] p0597 882-13109

The use of optimization techniques to design controlled diffusion compressor blading
[NASA-TP-62763] p0134 882-14094

Through flow calculations in axial turbomachines
[AGARD-AB-175] p0204 882-17178

Influence of correlations and computational methods on the prediction of overall efficiency
[AD-A116026] p0204 882-17180

The two stage aero engine turbine
[AD-A116878] p0610 882-33396

Part span damper loss prediction for transonic axial fan rotors
[AD-A116888] p0205 882-17192

Axial compressor stall and surge
[AD-A116899] p0205 882-17194

Summary of answers to the questionnaire
[AD-A117268] p0205 882-17195

Single stage transonic compressor and equivalent plane cascade
[AD-A116869] p0206 882-17196

Blade-to-blade computations and boundary layer corrections in axial compressors and turbines
[AD-A110341] p0206 882-17202

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
[ST-812] p0206 882-19956

Research on turbine rotor-stator aerodynamic interaction and rotor negative incidence stall
[AD-A116899] p0318 882-21203

Aerodynamics of advanced axial-flow turbomachinery
[AD-A114911] p0537 882-29328

Rotor tip clearance effects on overall and blade-element performance of axial-flow transonic fan stage
[NASA-TP-2049] p0609 882-33389

AXIAL LOADS

Fracture and fatigue characterization of aircraft structural materials under biaxial loading
[AD-A109054] p0269 882-19587

AXIAL STRAIN

Improving composite bolted joint efficiency by laminate tailoring
[AD-A116009] p0180 882-20982

Investigation of compaction criteria for airport pavement subgrade soils
[AD-A104516] p0258 882-18230

AXIAL STRESS

Crack growth evaluation of a method to convert real-time loads history to a simplified engineering spectra --- for aircraft structural analysis
[AD-A114911] p0188 882-12043

AXILASTRISIC MOTIONS

The analysis of the thermal-mechanical stress conditions in axisymmetric rotating hot components of /aircraft/ gas turbines ---- German thesis
[AD-A116869] p0110 882-12043
NUMERICAL INVESTIGATION OF SUPersonic BASE FLOW WITH PARALLEL INJECTION

A-93

B

BACKWASH
Surveys of flow-field around mesopause of the MSLG research-aircraft model

[NAS-TP-6777] p0327 A82-28907

BALLEYS
Analysis of the temperature field of a baffle-cooled gas-turbine-engine blade under conjugated boundary conditions

[AD-A102937] p0198 A82-17124

BAGS
BY AIR BAG RESTRAINT DEVICES

[AD-A110496] P0474 H82-27320

[HASA-CB-170622] P0613 H82-33698

[AD-A102937] P0474 H82-27320

BATTERY
Optimal target designation techniques

[HASA-TP-2044] p0557 B82-30291

[AD-A110496] p0474 H82-27320

[AD-A102937] p0474 H82-27320

B-52 AIRCRAFT
On the prediction of swirling flowfields

[DAST-CB-166147] p0566 B82-31302

[DAST-CB-166365] p0566 B82-31302

AXISYMMETRIC ENHANCED Axial Strain

[AD-A116458] P0602 H82-30356

[AD-A110977] P0583 A82-34192

[AD-A106083] P0614 H82-27320

[AD-A110496] p0474 H82-27320

BASE FLOW

[AD-A110496] p0474 H82-27320

[AD-A110496] p0474 H82-27320

[AD-A110496] p0474 H82-27320

BACI
Numerical investigation of supersonic base flow with parallel injection --- in scramjet combustors
BASE PRESSURE

A method of predicting fuselage loads in hover

BASES (FOOTPRINTS)

U FOOTPRINTS

The Hydrographic Airborne Laser Sounder (HALS)

BASE ANCHORS

U ANCHORS

Mast supports for twin lift helicopters

BEACON COLLISION AVOIDANCE SYSTEM

Air-air collision avoidance system

Analysis of a nonlinear altitude tracking method

Active Beacon Collision Avoidance System (ABCS)

Logic performance during operational flight tests

Active analysis of ABCS alert rates and protection based on actual aircraft tracks

BEACONS

MT DISCRETE ADDRESS BEACON SYSTEM

MT RADAR BEACONS

MT RADIO BEACONS

MT RADIO DIRECTOR FINDERS

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

MT-81-2328

MT-142-1052

MT-116402

BEAM WAVETUNES

Leaky wave antenna using an inverted strip dielectric waveguide --- for aircraft applications

BEAMS (RADIATION)

MT LIGHT BEAMS

MT RADAR BEAMS

Recent results in main beam nulling --- aircraft antenna design

BEAMS (SUPPORTS)

MT BOO BEAMS

MT CANTILEVER BEAMS

MT RECTANGULAR BEAMS

Linear decentralized systems with special structure --- for twin lift helicopters

Matrix analysis of wings

BEARDING

U COLLIMATION

BEARING (DIRECTION)

System for providing an integrated display of instantaneous information relative to aircraft attitude, heading, altitude, and horizontal situation

BEARINGLESS ROTORS

Dynamic stability of low effective flap hinge BMR concepts

The YH-64A composite flexbeam tail rotor

Evaluation of the effect of elastomer damping material on the stability of a bearingless main rotor system

An experimental investigation of a bearingless model rotor in hover

Finite element analysis for bearingless rotor blade aeroelasticity

Correlating measured and predicted improved stability characteristics for an advanced bearingless rotor

BEARINGS

MT ANTI-FRICTION 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 plate, unencapsulated screw damper bearing

Engine dynamic analysis with general nonlinear finite element codes. II - Bearing element implementation, overall numerical characteristics and benchmarking

Comparison of HP turbine "deep blade design" effects in turbofan engine gas generators with different bearing structure configurations

Aeroelastic analysis of the elastic global rotor

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

Subsynchronous vibrations of rotor systems

Labyrinth seal effects on rotor bearing system

stability

BEHAVIOR

MT ABRAD BEHAVIOR

BALL AIRCRAFT

MT OH-13 HELICOPTER

MT OH-1 HELICOPTER

MT X-14 AIRCRAFT

MT XV-15 AIRCRAFT

BEARINGS

Low maintenance hydraulic accumulator

BEAM VESSELS

U SEALS

BENDING

MT ELASTIC BENDING

BENDING FATIGUE

Matrix analysis of wings

BENDING MOMENTS

Measuring flexural loads by means of strain transducers

A method for applying linear optimal control theory to the design of a regulator for a flexible aircraft -- improving riding quality in fighter aircraft

The lateral response of an airscrew to turbulence

The stability of monocoque panels under bending

BEWAS

MT RESPONSE BEAS

BIBLIOGRAPHY

Selected bibliography of NASA-AIAA aircraft icing publications

Index of National Aviation Facilities Experimental Center technical reports 1972 - 1977

Compilation of abstracts of dissertations, theses, and research papers submitted by candidates for degrees, 1 October 1979 - 30 September 1980

Financial year 1981 scientific and technical reports, articles, papers, and presentations

A-98
Subject Index


BOEING 757 AIRCRAFT
ARINC 429 digital data communications on the Boeing 757 and 767 commercial airliners [AIAA 81-2267] p0049 A82-13485
Design evolution of the Boeing 757 p0126 A82-18322
2037 - Pratt & Whitney tests new turbofan 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 tube for Boeing 767 airplane --- Built-in-Test-Equipment [ASME PAPER 81-EBAC-7-1] p0011 A82-10895
ARINC 429 digital data communications on the Boeing 757 and 767 commercial airliners [AIAA 81-2267] p0049 A82-13485
Boeing's bigger narrowbody p0180 A82-21190
Boeing's new transports in a flight-test marathon p0437 A82-37493
Committing composites to the Boeing 767 p0461 A82-38224
Boeing's new 767 cabin 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

BOLDEN AIRCRAFT
FT BO-105 HELICOPTER
BOLTS
Bolted field repair of graphite/epoxy wing skin laminates p0180 A82-20954
Improving composite bolted joint efficiency by laminate tailoring p0180 A82-20952
D.C.9 windshield - effect of attachement retorque p0228 A82-24324
Mechanically-fastened joints for advanced composites - Phenomenological considerations and simple analyses p0290 A82-27156
Some observations on the corrosion of aircraft at the air force base in Bandirma, Turkey p0211 N82-17353

BOMBER AIRCRAFT
FT A-6 AIRCRAFT
FT B-1 AIRCRAFT
FT B-52 AIRCRAFT
FT B-70 AIRCRAFT
FT F-100 AIRCRAFT
Simulation of modern radar installations in full-mission flight and tactics simulators [DGIM PAPER 81-103] p0160 A82-19272
A new look at the Tupolev Tu-26 'backfire' p0180 A82-21191
The bomber that radar cannot see p0274 A82-25874
Investigations regarding vortex formation at wings with bent leading edges p0463 A82-38783
The testing of new materials 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

Corrosion prevention methods developed from direct experience with aerospace structures p0212 N82-17358
Multi-mission V/STOL with vectored thrust engines --- bombing, air superiority [PHR-9006] p0356 N82-22278

BOREING EQUIPMENT
Technology overview for advanced aircraft armament system program [AD-A107662] p0201 N82-17155
Standardization study for advanced aircraft armament system program [AD-A107661] p0201 N82-17156
Reduced performance and increased cost warrant reevaluation of the multiple stores ejector rack [AD-A112726] p0469 N82-27285

BONDS (ORDNANCE)
Bomb crater repair techniques for permanent airfields. Report 1: Series I tests [AD-A106716] p0257 N82-18229

BONING
NT ADHESIVE BONING
NT METAL BONING
NT METAL-RETAIL BONING
NT Epoxy BONING

Composite bonds improve thermal integrity p0335 A82-30004
Evaluation of sensitivity of ultrasonic detection of disbonds in graphite/epoxy to metal joints p0436 A82-37008
Boeing procedure for Teflon seals p0547 A82-42792
Fabrication of baocon/Aluminum fan blades for SCH engines [NASA CR-165294] p0192 N82-16176
Chem-House amiable seal attachment to aircraft gas turbine compressor components [AD-A111692] p0412 N82-25521

BONDS (DEVICE)
Composite flight test boom for Nomad #22 aircraft [REL-0096-28] p0470 N82-27289
Analysis of vibration induced error in turbulence velocity measurements from an aircraft wind-tunnel boom [NASA CR-3571] p0530 N82-20681

BOOST
U ACCELERATION (PHYSICS)
U CAVITIES

BOREIGHT ERROR
Radar aerodynamic heating effects on boreight 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

BOMB COPPOUNDS
FT BOMB-EPOXY COPPOUNDS
FT BOMB REINFORCED COPPOUNDS
FT BOMB-EPOXY COPPOUNDS

Flight service evaluation of advanced structures p0291 A82-27402

BOMBERS
FT ALPHA PARTICLES
FT LIGHT BEAMS
FT PHOTONS

BOUNDARIES
FT GAS-SOLID INTERFACES
FT JET BOUNDARIES
FT LIQUID-SOLID INTERFACES

BOUNDARY LAYER METHOD
Generation of boundary-conforming grids around wing-body configurations using transfinite interpolation p0553 A82-44091

BOUNDARY LAYER CONTROL
FT BONALY BOUNDARY LAYER CONTROL
Developments in boundary layer thrust vector control p0010 A82-10055
A summary of V/STOL inlet analysis methods [AIAA PAPER 81-2628] p0107 A82-16902

A-98
The stability of portable bridges carried on tire tread temperatures during antiskid braking dynamics of aircraft antiskid braking systems.

Selected furnace brazed components for the chem-Braze abradable seal practical.

The application of bifurcation theory to the study of aeroballistic characteristics of sonobuoy.

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Hybrid state vector methods for structural dynamic and aeroelastic boundary value problems.


Bow shock waves

U.S. stock waves

Box bracing

Durability evaluation of highly stressed wing box structure.

Brakes (FOR ASSISTING MOTION)

U.S. aircraft brakes U.S. aircraft brakes.


Boom flaps aeroballistic characteristics of nosebooby parachute decelerators limited to a length of three feet.

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Branching (MATHEMATICS)

The application of bifurcation theory to the study of loss of control over combat aircraft [OKERA, TP. NO. 1981-100].

Branching Chez-Braze abradable seal practical.

Selected ferrous brazed components for the aerospace industry.

Breakaway U.Boundary layer separation.

Breakers (STRUCTURES) The stability of portable bridges carried on slings beneath helicopters [AIR/SEA-DEEP-156].

Breakaway U Boundary Layer Separation

Breakers (Structures) The stability of portable bridges carried on slings beneath helicopters [AIR/SEA-DEEP-156].

Breakaway U Boundary Layer Separation

Breakers (Structures) The stability of portable bridges carried on slings beneath helicopters [AIR/SEA-DEEP-156].

Bristol-Siddeley BS 55 engine

Maintenance problem associated with the operation of the F402 /Pegasus/ engine in the AV-8A /Harrier/ aircraft.

A real time Pegasus propulsion system model for VSTOL piloted simulation evaluation.

Brittle materials brittle materials design, high temperature gas turbine.

Broadband Broadband bandwidth for thin conformal antennas.

Broadcasting FM broadcast interference related to airborne HLS, VOR and VHF communications.

Investigation of technical requirements.

Bubble technique Visualization of flow separation and separated flows with the aid of hydrogen bubbles.

Buckeye aircraft U T-Z aircraft.

Buckling

U Aircraft

Building materials

U Constructional materials.

Building structures U buildings.

Buildings

The employment of helicopters in Austria in connection with large-scale fires in buildings.

STOL aircraft response to turbulence generated by a tall upward building.

Repair and maintenance of buildings in civil aviation --- Russian book.

Buildings A global atlas of GEO-3 significant waveheight data and comparison of the data with national buoy data.

Hamburgs The effect of swirl burner aerodynamics on nozzle formation.

Burning

U combustion.

Burning processes U combustion.

Burner design effects of elastomeric additives on the mechanical properties of epoxy resin and composite systems.

The preparation and characterization of mixtures of polycyclopentadienes as solid ramjet fuels.

Brochureess of thin conformal antennas.

Butterfly valves

U dampers (valves)

By-pass ratio Analysis of the characteristics of a bypass engine, with allowance for variable pressure losses in the channels.

Individual bypass throttling in fighter engines.

Experimental performance evaluation of a new mixer concept for high bypass turbofan engines.

A-100
The ultrasonic inspection of CFBP carbon materials and manufacturing technology over the next 20 years: Composite materials

FCBP-06-341-02-0)

CARBON FIBERS

Lear Fan - The plastic aeroplane arrives

Fibre Baltex - A fiber composite material for highly stressed light-structure components

Technical and economic comparison of carbon fiber tape and woven fabric applications

Carbon fiber reinforced composite structures protected with metal surfaces against lightning strike damage

[BB-06-340-02-06]

CARBON ROBES

BC and CO emission abatement via selective fuel injection

[ACEP Paper 82-GT-170]

Exhaust emissions reduction for intermittent combustion aircraft engines

[FAA-CR-167914]

CARBON STEELS

Carbonized high temperature steels

[FAA-CR-116559]

CARBON TETRAFLUORIDE

Relations for the thermodynamic and transport properties in the testing environment of the Langley hypersonic CF4 tunnel

[NSA-TR-03200]

CARBON-CARBON COMPOSITES

Correlation of wear with oxidation of carbon-carbon composites

[BB-06-2706]

CARMABOUGI ROCKS

Composites

CFRP construction

CFRP-06-28517-025

CFRP-06-28517-018

CFRP-06-28517-017

CFRP-06-28517-015

CFRP-06-28517-014

CFRP-06-28517-013

CFRP-06-28517-012

CFRP-06-28517-011

CFRP-06-28517-010

CFRP-06-28517-009

CFRP-06-28517-008

CFRP-06-28517-007

CFRP-06-28517-006

CFRP-06-28517-005

CFRP-06-28517-004

CFRP-06-28517-003

CFRP-06-28517-002

CFRP-06-28517-001

CFRP-06-28517-000

CFRP-06-28517-001

CFRP-06-28517-000

CFRP-06-28517-001

CFRP-06-28517-000

CFRP-06-28517-001

CFRP-06-28517-000

CFRP-06-28517-001

CFRP-06-28517-000

CFRP-06-28517-001

CFRP-06-28517-000

CFRP-06-28517-001

CFRP-06-28517-000

CFRP-06-28517-001

CFRP-06-28517-000

CFRP-06-28517-001

CFRP-06-28517-000

CFRP-06-28517-001

CFRP-06-28517-000

CFRP-06-28517-001

CFRP-06-28517-000

CFRP-06-28517-001

CFRP-06-28517-000

CFRP-06-28517-001

CFRP-06-28517-000

CFRP-06-28517-001

CFRP-06-28517-000

CFRP-06-28517-001

CFRP-06-28517-000

CFRP-06-28517-001

CFRP-06-28517-000

CFRP-06-28517-001

CFRP-06-28517-000

CFRP-06-28517-001

CFRP-06-28517-000

CFRP-06-28517-001

CFRP-06-28517-000

CFRP-06-28517-001

CFRP-06-28517-000

CFRP-06-28517-001

CFRP-06-28517-000

CFRP-06-28517-001

CFRP-06-28517-000

CFRP-06-28517-001

CFRP-06-28517-000

CFRP-06-28517-001

CFRP-06-28517-000

CFRP-06-28517-001

CFRP-06-28517-000
CARTRIDGE ACTUATED DEVICES

U ACCTUATORS
U EXPLOSIVE DEVICES

CARTRIDGES
Analytical and experimental characterization of the JANU/4A cartridge actuated initiator for use in crew escape systems performance evaluation

CASCADE CONTROL
Digital redesign of existing multiloop continuous control systems — with application to TIP-16 aircraft flight controller

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/

Aerodynamic characteristics of a cascade of mistuned blades in subsonic and supersonic flows

Prediction of aerodynamically induced vibrations in turbomachinery 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 method for 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 compressors with leading edge normal shock waves

The calculation of the deviation angle in axial-flow cascade compressors

Heat transfer optimized 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 subsonic 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

Calculation of quasi-stationary aerodynamic force acting on cascade of oscillating airfoil in subsonic flow

Numerical experiments on unsteady flows through vibrating cascades

On the numerical analysis of stall flutter in turbine cascades

SUBJECT INDEX

Control of vibration in aeroelastic cascade experiments

A method of characteristic solutions 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 unsteady aerodynamic forces induced by vibration of a cascade blade

Study of acoustic resonance of cascades — sound generated by guide vanes; wind tunnel investigation

Correlation for secondary flows and clearance effects

Effects of Reynolds number and turbulence level on axial cascade performance

Experimental investigation of turbine underflow heat transfer. Volume 1: Description of experimental hardware and test conditions

Experimental investigation of turbine underflow heat transfer. Volume 2: Linear and annular cascade summary data sets

Experimental investigation of turbine underflow heat transfer. Volume 3: Data base supplement

Thrust reverser for a low duct fan engine — for turbofan engines

Blade tip gap effects in turbomachines: A review

CASCADE NOZZLES

Heat transfer measurements of a transonic nozzle guide vane

Aerodynamic performance of high turning core turbine vanes in a two-dimensional cascade

CASCADES (FLUID DYNAMICS)

CASCADING

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)

Casting equipment and hardware and test conditions

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 synfuels from coal and oil shale by advanced catalytic processes

Advanced Low-Radiant Catalytic-Combustor Program, phase 1 — aircraft gas turbine engines

Radiation/catalytic augmented combustion

CATAPULTS

Investigation of crossdeck pendant catapult slot interaction; proposed corrective measures
CHEMICAL REACTIONS

- Hydrolysis
- Oxidation
- Photocatalytic Reactions
- Pyrolysis
- Thermal Decomposition

CHEMICAL RELATION

- Chemical Analysis
- Gas Analysis
- Spectroscopic Analysis

CHEMICAL TESTS

- Molecular Relations
- Nuclear Propulsion

CHEMICAL REACTIONS

- Hydrolysis
- Oxidation
- Photocatalytic Reactions
- Pyrolysis
- Thermal Decomposition

CHEMICAL RELATION

- Chemical Analysis
- Gas Analysis
- Spectroscopic Analysis

CHEMICAL TESTS

- Molecular Relations
- Nuclear Propulsion

CHEMICAL REACTIONS

- Hydrolysis
- Oxidation
- Photocatalytic Reactions
- Pyrolysis
- Thermal Decomposition

CHEMICAL RELATION

- Chemical Analysis
- Gas Analysis
- Spectroscopic Analysis

CHEMICAL TESTS

- Molecular Relations
- Nuclear Propulsion

CHEMICAL REACTIONS

- Hydrolysis
- Oxidation
- Photocatalytic Reactions
- Pyrolysis
- Thermal Decomposition

CHEMICAL RELATION

- Chemical Analysis
- Gas Analysis
- Spectroscopic Analysis

CHEMICAL TESTS

- Molecular Relations
- Nuclear Propulsion

CHEMICAL REACTIONS

- Hydrolysis
- Oxidation
- Photocatalytic Reactions
- Pyrolysis
- Thermal Decomposition

CHEMICAL RELATION

- Chemical Analysis
- Gas Analysis
- Spectroscopic Analysis

CHEMICAL TESTS

- Molecular Relations
- Nuclear Propulsion

CHEMICAL REACTIONS

- Hydrolysis
- Oxidation
- Photocatalytic Reactions
- Pyrolysis
- Thermal Decomposition

CHEMICAL RELATION

- Chemical Analysis
- Gas Analysis
- Spectroscopic Analysis

CHEMICAL TESTS

- Molecular Relations
- Nuclear Propulsion

CHEMICAL REACTIONS

- Hydrolysis
- Oxidation
- Photocatalytic Reactions
- Pyrolysis
- Thermal Decomposition

CHEMICAL RELATION

- Chemical Analysis
- Gas Analysis
- Spectroscopic Analysis

CHEMICAL TESTS

- Molecular Relations
- Nuclear Propulsion

CHEMICAL REACTIONS

- Hydrolysis
- Oxidation
- Photocatalytic Reactions
- Pyrolysis
- Thermal Decomposition

CHEMICAL RELATION

- Chemical Analysis
- Gas Analysis
- Spectroscopic Analysis

CHEMICAL TESTS

- Molecular Relations
- Nuclear Propulsion

CHEMICAL REACTIONS

- Hydrolysis
- Oxidation
- Photocatalytic Reactions
- Pyrolysis
- Thermal Decomposition

CHEMICAL RELATION

- Chemical Analysis
- Gas Analysis
- Spectroscopic Analysis

CHEMICAL TESTS

- Molecular Relations
- Nuclear Propulsion

CHEMICAL REACTIONS

- Hydrolysis
- Oxidation
- Photocatalytic Reactions
- Pyrolysis
- Thermal Decomposition

CHEMICAL RELATION

- Chemical Analysis
- Gas Analysis
- Spectroscopic Analysis

CHEMICAL TESTS

- Molecular Relations
- Nuclear Propulsion

CHEMICAL REACTIONS

- Hydrolysis
- Oxidation
- Photocatalytic Reactions
- Pyrolysis
- Thermal Decomposition

CHEMICAL RELATION

- Chemical Analysis
- Gas Analysis
- Spectroscopic Analysis

CHEMICAL TESTS

- Molecular Relations
- Nuclear Propulsion

CHEMICAL REACTIONS

- Hydrolysis
- Oxidation
- Photocatalytic Reactions
- Pyrolysis
- Thermal Decomposition

CHEMICAL RELATION

- Chemical Analysis
- Gas Analysis
- Spectroscopic Analysis

CHEMICAL TESTS

- Molecular Relations
- Nuclear Propulsion
An Operational evaluation of head up displays for civil transport operations. NASA/TAA phase 3 report
[AD-A117447] p0648 882-33554

 iClouding
Hurricane-induced wind loads
[PB02-132267] p0476 882-27546

 iClouding
Hurricane-induced wind loads
[PB02-132267] p0476 882-27546

 iClouding
Block I airfoil
G AIRFOIL PROFILES

 iCLOUDS (CLASSIFICATIONS)
Inverse SAS and its application to aircraft classification
p0775 882-14671

 iClouding
Kovats indices as a tool in characterizing condensable liquid samples for bio-technological applications
p0579 882-45823

 iClouding
Development of a clear-air radar to detect unusual atmospheric hazards at airports
[AD-A108726] p0260 882-18815

 iClouding
Optical tip clearance sensor for aircraft engine controls
[AD-A112317] p0469 882-27284

 iClouding
An evaluation of the Beechmount ice detector for cloud water content measurements
[PB02-158333] p0536 882-29321

 iClouding
Doppler processing, waveform design and performance measures for some pulsed Doppler and STD-radar. II
p0390 882-30537

 iClouding
The PATHFINDER Airborne Weather Radar
p0395 882-47007

 iClouding
Cosmated automatic gain control system
p0446 882-26209

 iClouding
Jet fuel from carbon
p0438 882-37651

 iClouding
Correlation for secondary flows and clearance effects
p0205 882-17169

 iClouding
CF6 Engine Designation Program: High pressure compressor clearance investigation
[HASA-CH-165590] p0317 882-21197

 iClouding
Investigation of the tip clearance flow inside and at the exit of a compressor rotor passage
[HASA-CH-169004] p0408 882-25253

 iClouding
Blade tip gap effects in turbomachines: A review
[AD-A111889] p0458 882-26400

 iClouding
CF6 jet engine performance improvement: High pressure turbine active clearance control
[HASA-CH-165556] p0526 882-26308

 iClouding
Multistage axial compressor program on tip clearance effects
[AD-A1097445] p0536 882-29235

 iClouding
Active clearance control system for a turbomachine
[HASA-CASE-LER-12578-1] p0591 882-32366

 iClouding
Rotor tip clearance effects on overall and blade-element performance of axial-flow transonic fan stage
[HASA-CH-165667] p0609 882-33389

 iClouding
Climatic laboratory evaluation TCP-47D helicopter
[AD-A115061] p0590 882-32355

 iClouding
Energy savings with today's technology --- aircraft fuel management through in-flight monitoring
p0111 882-17282

 iClouding
Determination of an optimal control program for an aircraft power plant during climb
p0334 882-29895

 iClouding
A surface singularity method for rotors in hover or climb
[AD-A1095687] p0304 882-20178

 iClouding
Electronic master monitor and advisory display system test and demonstration report
[AD-A105317] p0099 882-13141

 iClouding
Global positioning system timing receivers in the DSS
p0271 882-20126

 iClouding
CLOSED LOOP SYSTEMS
U feedback control
CLOTH
U FABRICS
COASTS

COATING
MT ANODIZING
MT METALLIZING

COATINGS
MT ALUMINUM COATINGS
MT ANODIZING COATINGS
MT ANTIREFLECTION COATINGS
MT CERAMIC COATINGS
MT GLASS
MT METAL COATINGS
MT METALLIZING
MT PLASTIC COATINGS
MT PROTECTIVE COATINGS
MT SPACER COATINGS
MT THERMAL CONTROL COATINGS

COAXIAL FLOW
Widely-spaced co-axial jet, diffusion-filse combustion — Isothermal flow calculations using the two-equation turbulence model [AIAA PAPERS 82-0113] p0115 AB2-17791

COAXIAL TRANSMISSION
U TRANSMISSION

COBALT
Where is cobalt irreplaceable
A status review of NASA's COAS (Conservation of Strategic Aerospace Materials) program [NASA-TP-82052] p0397 862-24326

COBALT ALLOYS
MT BENSE 95
Torsional stiffiness element based on cobalt-titanium magnets — for a turn and bank indicator [DOD-TR-NS-AT-044] p0470 B62-27292

COCKPIT SIMULATORS
Simulation of advanced cockpits [AIAA PAPERS 82-19259]

Data base generation for digital external view [AIAA PAPERS 82-19270]

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 PAPERS 82-0261] p0104 AB2-22079

Applying advanced technology to flight station design [AIAA PAPERS 82-40867]

A general aviation simulator evaluation of a rate-enhanced instrument landing system display [NASA-TP-1960] p0133 B62-18405

The role of simulation in the design process [AIAA PAPERS 82-18154]

Simulator study of a pictorial display for general aviation instrument flight [NASA-TP-1963] p0304 B62-20160

COCKPITS
Have we overlooked the pilot's role in an automated flight deck [AIAA PAPERS 81-2262] p0048 AB2-13461

The application of large screen CRT's, touch panels, and voice to the flight stations of the 1980's [AIAA PAPERS 81-2264] p0048 AB2-13482

F/A-18 'Hornet' - One man operability [AIAA PAPERS 81-2265] p0048 AB2-13483

Application of a microprocessor controlled cockpit display for enhanced pilot control of flight test maneuvers [AIAA PAPERS 81-2510] p0057 AB2-13908

The influence of smart computers on the cockpit of the future [AIAA PAPERS 81-2511] p0057 AB2-13908

Airborne color CRT displays [AIAA PAPERS 81-2512] p0069 AB2-14743

Flight crew management and cockpit performance systems [AIAA PAPERS 81-2513] p0111 AB2-17285

F/A-18 weapon system development [AIAA PAPERS 81-2514] p0223 AB2-23774

Deficiencies and constraints that affect the design of cockpit enclosures and transparencies [AIAA PAPERS 81-2515] p0226 AB2-24303

B.A.C. One-Eleven flight deck glazing product improvement [AIAA PAPERS 81-2516] p0228 AB2-24325

Integration of energy management concepts into the flight deck [SAA PAPERS 81-1013] p0231 AB2-23487

The future of helicopter flight control technology [AIAA PAPERS 81-1520] p0240 AB2-26821

Flight simulators [AIAA PAPERS 81-1521] p0330 AB2-29924

The computerized cockpit for the one-man crew [AIAA PAPERS 81-1522] p0348 AB2-36937

Analysis of in-trail following dynamic of CAPT-equipped aircraft --- Cockpit Displays of Traffic Information [AIAA PAPERS 81-1523] p0488 AB2-39107

Boeing's new 767 ease crew workload [AIAA PAPERS 81-1524] p0497 AB2-40348

Conceptual design of the LHX integrated cockpit [AIAA PAPERS 81-1525] p0500 AB2-40527

Future helicopter cockpit design [AIAA PAPERS 81-1526] p0503 AB2-40529

Concept demonstration of automatic subsystem parameter monitoring — military helicopter cockpit instrumentation [AIAA PAPERS 81-1527] p0500 AB2-40530

The evolution of display formats for advanced fighters using multiside color CRT displays [AIAA PAPERS 81-1528] p0505 AB2-40688

NASA studies business aircraft avionics [AIAA PAPERS 81-1529] p0552 AB2-43659

The impact of new guidance and control systems on military aircraft cockpit design [AD-A71-201] p0901 AB2-13048

How the helicopter cockpit designer uses digital avionics [AIAA PAPERS 81-1530] p0901 AB2-13049

Electronic flight deck displays for military transport aircraft [AIAA PAPERS 81-1531] p0902 AB2-13050

Color CRT displays for the cockpit [AIAA PAPERS 81-1532] p0902 AB2-13051

Integration of controls and displays in 05 Army helicopter cockpits [AIAA PAPERS 81-1533] p0909 AB2-13053

F/A 18 Hornet crew station [AIAA PAPERS 81-1534] p0909 AB2-13054

Threat perception while viewing single intruder conflicts on a cockpit display of traffic information [NASA-TR-8141] p190 AB2-16076

The multi mode matrix flat panel display: Technology and applications [AIAA PAPERS 81-1535] p0251 AB2-18169

New developments in cockpit-human interfaces [AIAA PAPERS 81-1536] p0255 AB2-18125

Analytical study of cockpit information requirements [DOD-TR-10524] p0256 AB2-18120

Transport aircraft cockpit standardization (Federal Aviation regulations part 25) [NASA-TR-8141] p0256 AB2-18120

Integration of controls and displays in U.S. Army helicopter cockpits [AD-A109594] p0306 AB2-20191

Enhanced piloting control through cockpit facilities and A.C.T. [AIAA PAPERS 81-1537] p0347 AB2-22195

Helicopter Handling Qualities [NASA-CP-2219] p0364 AB2-23200

State-of-the-art cockpit design for the HH-65A helicopters [AIAA PAPERS 81-1538] p0366 AB2-23220

Synthesis of an integrated cockpit management system [AIAA PAPERS 81-1539] p0366 AB2-23222

The role of voice technology in advanced helicopter cockpits [AIAA PAPERS 81-1540] p0366 AB2-23223

Cockpit integration from a pilot's point of view [AIAA PAPERS 81-1541] p0366 AB2-23224

Helicopter simulation technology: An Ames Research Center perspective [AIAA PAPERS 81-1542] p0366 AB2-23225

Advanced technology and fighter cockpit design: Which drives which? [AIAA PAPERS 81-1543] p0471 AB2-27302

Electronic/electric technology benefits study -- avionics
COBBII ELECTROBIOE A6#DATION
CODIIG
COCKS
COIB AIBCBAFT
COBEBENT BADIATION
CHEBENf LIGHT
COEFFICIENTS
COLLISION A7OIDAICE
COLLECTOBS
COLD BE*THEE
COLOB Iolests
COLLISION AVOIDANCE
COLLISION AVOIDANCE DEVICES
NT HEAT TBANSFE COEFFICIENTS
NT DISCHABGE COEFFICIENT
NT STBDCTOBAL INFLUENCE COEFFICIENTS
NT BEGBESSION COEFFICIENTS
NT NOZZLE THBUST COEFFICIENTS
NT FLOB COEFFICIENTS
NT AEBODZNAHIC COEFFICIENTS
HI SIGNAL ENCODING
HI BEDUNDANC! ENCODING
NT OV-10 AIBCBAFT
ST F-5 AIBCBAF1
NT COHBBENT LIGHT
NT INFLUENCE COEFFICIENT
NT COUPLING COEFFICIENTS
NT BEACON COLLISION AVOIDANCE SISTEfl
U ACCOaULATOBS
Climatic laboratory evaluation ICH-47D helicopter

SUBJECT INDEX

p0005 882-10396
p0947 882-13967
p0952 882-13525
p0116 882-17828
p0220 882-23322
p0282 882-25611
p0341 882-30311
p0341 882-30313
p0382 882-35523
p0491 882-39323
p0555 882-44235
p050A 882-87224
p0335 882-11047
p0190 882-16076
p0200 882-17148
p0253 882-18200
p0264 882-19201
p0303 882-20169
p0401 882-25716
p0587 882-32336
p0569 882-31126
p0587 882-32336
p0000 882-25716
p0320 882-29008
### SUBJECT INDEX

**Application of image processing techniques to fluid flow data analysis**  
[RSA-TR-62760] p0187 882-16049

New techniques in data retrieval and display —**  
A color video display technique for flow field surveys  
[p0015 882-25174]

**COLOR INFRARED PHOTOGRAPHY**  
Photointerpretation key for pine regeneration analysis using high-altitude color infrared panoramic photography  
[p0562 882-30606]

**COLOR PRESCRIPTION**  
U COLOR VISION  
Airborne color CRT displays  
[p0073 882-14823]

**COLOURATION**  
U COLOR  
U EMISSION

**COLORS (SUPPORTS)**  
On the dynamic collapse of a column impacting a rigid surface  
[AD-A115716] p0340 882-30126

The behavior of composite thin-walled structures in dynamic buckling under impact  
[p0513 882-04976]

**COMBAT**  
Air-to-air combat analysis — Review of differential-gaming approaches  
[p0084 882-13115]

The application of bifurcation theory to the study of loss of control over combat aircraft  
[p0129 882-10837]

Evolution of the aerocost  
[p0239 882-24706]

The cargo helicopter — A logistical vehicle  
[p0240 882-24717]

Aerial combat simulation in the G.S. Air Force  
[p0295 882-27920]

Combat training imagery  
[p0342 882-31179]

Military aircraft  
[p0387 882-34121]

Combat survivability in the Advanced Technology Engine Study (ATIES)  
[AIAA PAPER 82-1267] p0419 882-35101

Navstar - Global Positioning System: A revolutionary capability  
[p0435 882-37040]

The correlation of flight test and analytic N to M air combat exchange ratios — day-on-day  
[AIAA PAPER 82-13258] p0488 882-30105

Energy methods used in air combat performance comparisons  
[p0501 882-45805]

Use of a helmet-mounted matrix display for presenting energy-manueverability information during simulated close combat  
[p0092 882-13061]

Combat Aircraft maneuverability  
[AGED-CP-319] p0346 882-22187

Review of practical experience on combat aircraft maneuverability  
[p0346 882-22189]

The assessment of combat aircraft effectiveness using a new computational method  
[p0388 882-22203]

Evaluation of direct force node fighters by combat simulation  
[p0388 882-22204]

The study of combat aircraft maneuverability by air to air combat simulation  
[p0388 882-22205]

Influence of maneuverability on helicopter combat effectiveness  
[p0365 882-23212]

Validation of zero-order feedback strategies for medium range air-to-air interception in a horizontal plane  
[p0368 882-23237]

Simulator for air-to-air combat versus real world: Visual computer analysis for simulated air-to-air combat training  
[AD-A110576] p0410 882-25270

**COMBUSTION**  
Aviation Natural Combat Ready In-Country (ANCRC)  
[AD-A107451] p0469 882-27283

Para Mover added enhanced strike avionics system  
[p0471 882-27298]

Adaptive multifunction sensor concept for air-ground missions  
[p0471 882-27298]

Tactical systems approach to interaction of 2nd echelon moving target using real time sensors  
[p0472 882-27306]

Attribute requirements for a simulated flight scenario microcomputer test  
[p0594 882-32389]

Survey and update of F-14A mission profiles for TF30 engine usage  
[AD-A116831] p0603 882-33337

**COMBUSTION CHAMBERS**  
A crack growth model under spectrum loading  
[p0511 882-40961]

**COMBUSTIBILITY**  
U FLAMMABILITY

**COLOURATION**  
U COLOR  
U EMISSION

**COLORS (SUPPORTS)**  
On the dynamic collapse of a column impacting a rigid surface  
[AD-A115716] p0340 882-30126

The behavior of composite thin-walled structures in dynamic buckling under impact  
[p0513 882-04976]

**COMBAT**  
Air-to-air combat analysis — Review of differential-gaming approaches  
[p0084 882-13115]

The application of bifurcation theory to the study of loss of control over combat aircraft  
[p0129 882-10837]

Evolution of the aerocost  
[p0239 882-24706]

The cargo helicopter — A logistical vehicle  
[p0240 882-24717]

Aerial combat simulation in the G.S. Air Force  
[p0295 882-27920]

Combat training imagery  
[p0342 882-31179]

Military aircraft  
[p0387 882-34121]

Combat survivability in the Advanced Technology Engine Study (ATIES)  
[AIAA PAPER 82-1267] p0419 882-35101

Navstar - Global Positioning System: A revolutionary capability  
[p0435 882-37040]

The correlation of flight test and analytic N to M air combat exchange ratios — day-on-day  
[AIAA PAPER 82-13258] p0488 882-30105

Energy methods used in air combat performance comparisons  
[p0501 882-45805]

Use of a helmet-mounted matrix display for presenting energy-manueverability information during simulated close combat  
[p0092 882-13061]

Combat Aircraft maneuverability  
[AGED-CP-319] p0346 882-22187

Review of practical experience on combat aircraft maneuverability  
[p0346 882-22189]

The assessment of combat aircraft effectiveness using a new computational method  
[p0388 882-22203]

Evaluation of direct force node fighters by combat simulation  
[p0388 882-22204]

The study of combat aircraft maneuverability by air to air combat simulation  
[p0388 882-22205]

Influence of maneuverability on helicopter combat effectiveness  
[p0365 882-23212]

Validation of zero-order feedback strategies for medium range air-to-air interception in a horizontal plane  
[p0368 882-23237]

Simulator for air-to-air combat versus real world: Visual computer analysis for simulated air-to-air combat training  
[AD-A110576] p0410 882-25270

**COMBUSTION**  
Aviation Natural Combat Ready In-Country (ANCRC)  
[AD-A107451] p0469 882-27283

Para Mover added enhanced strike avionics system  
[p0471 882-27298]

Adaptive multifunction sensor concept for air-ground missions  
[p0471 882-27298]

Tactical systems approach to interaction of 2nd echelon moving target using real time sensors  
[p0472 882-27306]

Attribute requirements for a simulated flight scenario microcomputer test  
[p0594 882-32389]

Survey and update of F-14A mission profiles for TF30 engine usage  
[AD-A116831] p0603 882-33337

**COMBUSTION CHAMBERS**  
A crack growth model under spectrum loading  
[p0511 882-40961]
COHBOSEXION STABILITY

[AIAR PAPEB 82-1075] p0047 A82-35041
Characteristics of a wide dump gas combustion generator ramjet
[AIAR PAPEB 82-1258] p0019 A82-35089
Acoustic control of dilution-air mixing in a gas turbine combustor
[AIAS PAPEB 82-GT-35] p0021 A82-35296
The potential impact of future fuels on small gas turbine engines
[AIAS PAPEB 82-GT-133] p0025 A82-35362
A procedure for evaluating fuel composition effects on combustor life
[AIAS PAPEB 82-GT-296] p0030 A82-35465
A spark ignition model for liquid fuel sprays applied to gas turbine engines
[AIAS PAPEB 82-1261] p0036 A82-35720
Models for a turbulent premixed combustor
[AIAS PAPEB 82-1262] p0039 A82-37709
Turbulence measurements in a confined jet using a six-orientation hot-wire probe technique
[AIAS PAPEB 82-1262] p0043 A82-37710
Effect of fuel injector type on performance and emissions of reverse-flow combustor

COHBOSEXION HEAT

[AIAR PAPEB 82-1088] p0046 A82-34999
Preliminary results on performance testing of a turbocharged rotary combustion engine
[AIAS-TR-82772] p0036 A82-21194
Effect on fuel efficiency of parameter variations in the cost function for multivariable control of a turbofan engine
[AIAS-110614] p0044 A82-26301
[AIAS-110796] p0054 A82-26303
The Schlaakst fuel injector: An initial performance evaluation without burning

COHBOSEXION INSTABILITY

[AIAS PAPEB 82-113612] p0073 A82-27315
Radiation/catalytic augmented combustion
[AIAS 82-27434
Combustion Physics
The combustion of a fuel jet in a stream of lean gaseous fuel-air mixtures

COHBOSEXION PHYSICS

[AIAR PAPEB 82-10692] p0326 A82-28692
An investigation of the combustion process in solid fuel ramjets
[AIAS-TR-82569] p0040 A82-11232
Thermodynamics of organic compounds
[AIAS-11030] p0318 A82-21202
Thermodynamic and transport combustion properties of hydrocarbons with air. Part 1: Properties in SI units
[AIAS-TP-82006] p0574 A82-32166
Thermodynamic and transport combustion properties of hydrocarbons with air. Part 2: Compositions corresponding to Kelvin temperature schedules in part 1
[AIAS-TR-82010] p0575 A82-32187
Thermodynamic and transport combustion properties of hydrocarbons with air. Part 3: Properties in US customary units
[AIAS-11028] p0575 A82-32188
Thermodynamic and transport combustion properties of hydrocarbons with air. Part 4: Compositions corresponding to Rankine temperature schedules in part 3
[AIAS-TP-82009] p0575 A82-32189
Combustion Products
Damage of turbine blades due to interaction with fuel recombination products

[AIAR PAPEB 82-10847] p0127 A82-18479
The burning tendency of fuels containing polyacrylic aromatic in a research combustor
[AIAS PAPEB 82-2299] p0164 A82-19791
Fuel property effects on radiation intensities in a gas turbine combustor
[AIAS-TR-82196] p0166 A82-19966
The formation of benzpyrene during the combustion of aviation fuels

[AIAS-TR-82498] p0282 A82-26494
Methodology for determining fuel-combustion efficiency and the toxicity of exhaust gases
[AIAR PAPEB 82-22945
NOx formation in flat, laminar, opposed jet methane diffusion flames

[AIAR PAPEB 82-28660] p0326 A82-28660
Chemistry of combustion of fuel-water mixtures
[AIAS-105501] p0090 A82-12178
Investigation of soot and carbon formation in small gas turbine combustors
[AIAS-165763] p0354 A82-22265
Investigation of soot and carbon formation in small gas turbine combustors
[AIAS-167853] p0534 A82-32267
Nonlinear structural and life analyses of a combustor liner
[AIAS-82-21846] p0398 A82-24501
Fracture mechanics criteria for turbine engine hot section components
[AIAS-167869] p0409 A82-25257
Coastal dump Ramjet combustor combustion instabilities. Part 1: Parametric test data
[AIAS-111355] p0409 A82-25259
Low NOx heavy fuel combustor concept program
[AIAS-165367] p0413 A82-25635
Procedures of the 12th Navy Symposium on Aeroballistics, volume 2
[AIAS-111763] p0472 A82-27312
Nonlinear constitutive theory for turbine engine structural analysis
[AIAS-82-33744] p0613 A82-33744
Combustor Control
Acoustic control of dilution-air mixing in a gas turbine combustor

[AIAS PAPEB 82-GT-35] p0021 A82-35296
Combustion Efficiency
Development and operating characteristics of an advanced two-stage combustor
[AIAS PAPEB 82-17833] p0016 A82-35089
The effect of the shape of a body on the efficiency of its utilization as a flame stabilizer
[AIAS 82-26483
Methodology for determining fuel-combustion efficiency and the toxicity of exhaust gases
[AIAS-82-26495
Energy efficient engine /J5/ technology status
[AIAS PAPEB 82-10552] p0495 A82-34860
Numerical and experimental examination of a prevaporized/pressurized combustor
[AIAS PAPEB 82-914] p0416 A82-34994
NASA Standard Specification Fuel Combustion Technology program - Pratt and Whitney Aircraft
Phase I results and status

[AIAS 82-1258] p0416 A82-34999
Combustor Stability
[AIAS PAPEB 82-10058] p0495 A82-34860
One reason for the onset of high-frequency self-excited oscillations in combustion chambers of aircraft engines
| SUBJECT INDEX |
|---------------|-----------------|
| **COMMERCIAL AIRCRAFT** |
| Accident prevention - A regulators view | p0110 A82-17278 |
| Estimate of human control over mid-air collisions | p0114 A82-17604 |
| Development of a digital integrated automatic landing system /DIALS/ for steep approach and landing | p0168 A82-20297 |
| Operational and performance aspects of fuel management in civil aircraft | p0169 A82-20518 |
| The application of condition monitoring to commercial helicopter in-service maintenance | p0172 A82-20542 |
| Airworthiness considerations in the design of commercial transport aircraft | p0232 A82-24396 |
| Electronic flight instrument systems /EFIS/, the instrumentation of the 1980s | p0242 A82-25324 |
| Damage tolerance and durability design of composite structures for commercial aircraft | p0251 A82-27403 |
| The role of software in commercial ATM | p0294 A82-27885 |
| Test methodology for evaluation of fireworthy aircraft seat cushions | p0332 A82-29596 |
| Commercial transport developments for the 1980's | p0366 A82-34109 |
| Technology advancements for energy efficient aircraft engines | p0430 A82-35479 |
| Progress at Douglas on laminar flow control applied to commercial transport aircraft | p0511 A82-60958 |
| New technology for the next generation of commercial transports - Real or imaginary | p0536 A82-61000 |
| Fault isolation IFIT for increased productivity | p0545 A82-62210 |
| The sporty game - On wide body commercial airliner business history | p0547 A82-62572 |
| It's too logical - It'll never work!/Commercial applications of the JY/ | p0556 A82-64469 |
| Helicopter composites - An optimistic outlook | p0556 A82-64470 |
| Exterior noise on the fuselage of light propeller driven aircraft in flight | p0581 A82-66114 |
| Lightweight diesel engine designs for commuter type aircraft | p0637 A82-11068 |
| Application of singular perturbation theory | p0805 A82-12050 |
| In-service inspection methods for graphite-epoxy structures on commercial transport aircraft | p0809 A82-12162 |
| Shipgdized microcomputer hardware and software topics, 1981: Proceedings of the 8th IORI MIL-SPEC Computer User's Group Conference | p0818 A82-14829 |
| Natural laminar flow airfoil analysis and trade studies | p0818 A82-15018 |
| Symposium on Commercial-aviation energy-conservation strategies | p0818 A82-16057 |
| Use of optimization to predict the effect of selected parameters on computer aircraft performance | p0819 A82-16049 |
| Aircraft Corrosion | p0820 A82-17151 |
| Naval versions of the Dauphin and the AS 15 TT weapon system | p0821 A82-17349 |
| Impact of technology on avionics cost trends | p0824 A82-18142 |
| Bibliography of NASA published reports on general aviation, 1975 to 1981 | p0826 A82-18132 |
| FAA statistical handbook of aviation | p0827 A82-19132 |
| Small business aviation strategies | A-115 |
Research and development program for non-linear structural modeling with advanced time-temperature dependent constitutive relationships

Component research for future propulsion system

Fatigue analysis of composite materials using the fail-safe concept

Commercial aircraft airframe fuel systems survey and analysis

Efficient part removal processes -- from molds

Composite materials

Aluminium boron composites

Boron reinforced materials

Boron-epoxy composites

Carbon fiber Reinforced plastics

Carbon-carbon composites

Ceramics

Epoxy matrix composites

Eutectic composites

Fiber composites

Fiber reinforced composites

Glass fiber reinforced composites

Graphite-epoxy composites

Graphite-polymide composites

Intermetallics

Metal Matrix composites

Polyester matrix composites

Reinforced plastics

Resin matrix composites

Resin composites

Some possibilities for composite light aircraft construction

Light aircraft structural design in non-metals -- Use of composite honeycomb for light aircraft


Impact-initiated damage thresholds in composites

Aircraft composite materials and structures


C9-46 and C8-47 composite rotor blade lightning protection testing

Preliminary design development AV-88 forward fuselage composite structure

Application of advanced composite materials to helicopter airframe structures

Statistical analysis methods for characterizing composite materials

Effects of defects on tension composites undergoing an accelerated environmental spectrum


Characterization of composition variations in a structural adhesive

Utility of a probability-density-function curve and F-maps in composite-material inspection
COHMTATIONAL FLO'ZM OIIAICS

BY TURBOCOMPRESSIONS
Large scale aeropropulsion compressor test facility
A stage-by-stage dual-speed compressor system
modeling technique
Study of air compressor hazards at underground and
surface mines
Open-cycle water compressor heat pump
Foundations for computer simulation of a low
pressure oil flooded single screw air compressor
Evaluation of cast titanium alloy compressor
components
Investigation of the tip clearance flow inside and
at the exit of a compressor rotor passage
Blade tip gap effects in turbomachines: a review
High pressure bleed for STOL and STO-Vl
Performance: A conceptual examination
USAF Bioenvironmental Noise Data Handbook. Volume
163: GPC-28 compressor
Numerical stability analysis of a compressor model
Computational fluid dynamics - The coming revolution
The use of the Weber method for
minicomputer-assisted numerical analysis of
airfoils
Theoretical analysis of parachute inflation
including fluid kinematics
Strong matching method for computing transonic
viscous flows including wakes and separations -
Lifting airfoils
Multiple-scale turbulence modeling of free
turbulent flows
Control laws for adaptive wind tunnels
Calculation of aerodynamic characteristics of jet
flapped airplane
Validation studies of turbulence and combustion
models for aircraft gas turbine combustors
Overview of flight and ground testing with
emphasis on the wind tunnel
The operational characteristics of turbomachinery,
giving particular attention to the cooled
high-pressure turbine
Rapid elliptic solvers
Remarks on the calculation of transonic potential
flow by a finite volume method
Supersonic nozzles without shocks
Direct approach to aerodynamic design problems
A summary of jet-impingement studies at McDonnell
Douglas Research Laboratories
Computation of the steady viscous flow over a
tri-element 'errantor wing' airfoil
A simple finite difference procedure for the
vortex controlled diffuser
Computational treatment of transonic canard-wing
interactions
A more accurate transonic computational method for
wing-body configurations
Transonic three-dimensional viscous-inviscid
interaction for wing-body configuration analysis
Computer simulation of transonic flow over an
calibrated airfoil with shock-induced separation
Viscous flow - Resemblances of the theoretician in
pursuit of higher order accuracy
Responses of oscillating wings in weak shear flow
A contribution to the hodograph method for
shock-free transonic airflow sections
Technical evaluation report of the AGARD Fluid
Dynamics Panel Symposium on computation of
viscous-inviscid interactions
Supercritical flow past symmetrical airfoils
Design of supercritical swept wings
Steady and unsteady nonlinear hybrid vortex method
Isolated nacelle performance - Measurement and
estimation of vortex flow aerodynamics
Isolated nacelle performance - Measurement and
simulation
A split coefficient/locally monotonic scheme for
multishocked supersonic flow
Steady and unsteady nonlinear hybrid vortex method
for lifting surfaces at large angles of attack
Design of supercritical swept wings
Annual review of fluid mechanics. Volume 15 --- Book
International Conference on Numerical Methods in
Fluid Dynamics, 7th, Stanford University, Stanford and
Hoffett Field, CA, June 23-27, 1980, Proceedings
Problems of numerical simulation of unsteady	hree-dimensional viscous-gas flows in nozzles
Transonic flow past thin wings
Aerodynamics - Retrospect and prospect /The 21st
Lancaster Memorial Lecture/
Supercritical flow past Dynamical airflow
Effect of wakes of upstream stator blades on the
rotor of an axial flow compressor
Unsteady response of rectangular wings in expansion
uniform shear flow
Computational fluid dynamics - The coming revolution
Numerical solution of Space Shuttle Orbiter flow
field
A perspective of computational aerodynamics from
the viewpoint of airplane design applications
Recent advances in refining Free Vortex Sheet
theory to the estimation of vortex flow
aerodynamics
Isolated nacelle performance - Measurement and
simulation
A split coefficient/locally monotonic scheme for
multishocked supersonic flow
Steady and unsteady nonlinear 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
Transonic flow past thin wings
Aerodynamics - Retrospect and prospect /The 21st
Lancaster Memorial Lecture/
Supercritical flow past Dynamical airflow
Effect of wakes of upstream stator blades on the
rotor of an axial flow compressor
Unsteady response of rectangular wings in expansion
uniform shear flow
Computational fluid dynamics - The coming revolution
Numerical solution of Space Shuttle Orbiter flow
field
A perspective of computational aerodynamics from
the viewpoint of airplane design applications
Recent advances in refining Free Vortex Sheet
theory to the estimation of vortex flow
aerodynamics
Isolated nacelle performance - Measurement and
simulation
A split coefficient/locally monotonic scheme for
multishocked supersonic flow
Steady and unsteady nonlinear 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
Transonic flow past thin wings
Aerodynamics - Retrospect and prospect /The 21st
Lancaster Memorial Lecture/
Three-dimensional separation and reattachment in axial turbomachines: A finite difference method for the calculation of quasi-stationary aerodynamic force acting on a cascade of oscillating airfoils in unsteady flow. Comparison of boundary layer calculations for the root section of a wing. The September 1979 Amsterdam Workshop test case.


MOBILE HELP

Integration of computer graphics design with analytical models for aircraft design. Digital redesign of existing multiloop continuous control systems — with application to F-16 aircraft flight controller. High voltage/high power for airborne applications. Application of structural optimization technique to reduce the external vibrations of a gas-turbine engine.

Graphics in numerical control — The user's challenge.
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

Life and Utilization Criteria Identification in Design (LUCID), volume 1

Automated optimal design of wing structures

Aircraft geometry verification with enhanced computer-generated displays

A computer aided design and manufacturing system

Configuration Development System/HATAIB Report

A computer program for aeroelastic design of critical and supercritical airfoils for given computer program for aerodynamic and bidding high lift selected concepts

Configuration and principal gains and phases and LQG multivariable design tools

Parameterization in the design of surfaces by means of Coons' method -- for computer aided aircraft design

Computational aerodynamics and design

Configuration Dynamics System -- Russian book

The application of small propellers to EPV

The use of linearized aerodynamics and vortex-floir techniques

Incorporating fault tolerant flight control systems

An effective algorithm for shock-free wing design

Surface generation for aerodynamic applications

An effective algorithm for shock-free wing design

A method for designing inlet distortion screens for aircraft gas turbine engine tests using an interactive computer program

Design of advanced digital flight control systems via Command Generator Tracker (CGT) synthesis methods, volume 1

Computational aerodynamics and design

A new Transonic Airfoil Design Method and its application to helicopter rotor airfoil design

A prototype interface unit for microprocessor based Ioran-C receiver

Computer aided design of complex aircraft components

Computer graphics for aircraft control applications

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 1981 Image 2 Conference Proceedings

Simulator study of a pictorial display for general Integrated control design techniques

Configuration Development System/HA7AIB Beport'

Interactive-graphic flowpath plotting for turbine Terrain model animation

Development of a computer based presentation of A prototype interface unit for microprocessor based Loran-C receiver

Aircraft geometry verification with enhanced computer-generated displays

Color graphics based real-time telemetry processing system

Flow visualization using a computerized data acquisition system

Computer-generated images for simulatosis - The cost of technology


Application of computer generated color graphic techniques to the processing and display of three dimensional fluid dynamic data --- for turbon fan mixer nozzle mixing process analysis

Combat training imagery

Simulation reaches towards reality

Justification for, and design of, an economical programmable multiple flight simulator

Design and construction of a flexible automatic electronic display device --- for flight control applications

CATIA - A computer aided design and manufacturing tridimensional system

Aircraft geometry verification with enhanced computer-generated displays

Interactive graphics design with CODEM

A prototype interface unit for microprocessor based Loran-C receiver

Interactive-graphic flowpath plotting for turbine engines

Configuration Development System/NASA Report

Development of a computer based presentation of non-steady helicopter rotor flows

Integrated control design techniques

Simulator study of a pictorial display for general aviation instrument flight

The 1981 Image 2 Conference Proceedings

New techniques in data retrieval and display --- color graphics

Flight-test verification of a pictorial display for general aviation instrument approach

Advanced training techniques using computer generated imagery

Computer image generation: Advanced visual/sensor simulation

Aircraft geometry verification with enhanced computer generated displays

Pilot/vehicle model analysis of visual and motion cue requirements in flight simulation

User's manual for the Automated Paneling Technique (APT) and the Wind Body Aerodynamic Technique

Low cost programmable multisimulator facility

Real-Time Simulation Computation System --- for digital flight simulation of research aircraft

Telemetry Computer System at Wallops Flight Center

A new class of routing protocols for a proposed computer network linking tactical radar sites

Reconfiguration: A method to improve systems realiability

A reconfigurable change network for distributed process control

SIFT: An ultra-reliable avionic computing system

F/A-18A tactical airborne computational subsystem

Structures testing analysis real-time network

AUTOPilot: A distributed planner for air fleet control programs

Design of a microprocessor-controlled linkage for simulator applications

Computer Programming in Engineering Design Problems

High Order Languages /BOL/ for flight control applications

Programs for the transonic wind tunnel data processing installation. Part 9: Pressure measurements updated

A program testing assistant

Transect measurements under electric pulse excitation in 37 Vagar aircraft

Combining analysis with optimization at Langley Research Center. An evolutionary process

Computer-Controlled Gage control systems

A prototype interface unit for microprocessor-based Loran-C receiver

The Sortie-Generation Model system. Volume 4:

Design and implementation of OSAF avionics

The Sortie-Generation Model system. Volume 3:

Design and implementation of OSAF avionics

Design and implementation of OSAF avionics

Design and implementation of OSAF avionics

Design and implementation of OSAF avionics
Analysis of computing system configurations for highly integrated guidance and control systems

A numerical investigation of two-dimensional, subsonic, linear, wind tunnel interference theory


STGTSK: A computer code for predicting multistage axial flow compressor performance by a meanline stage stacking method (NASA-TN-2020)

Panel Optimization with Integrated Software (POIS). Volume 1: Panel: Interactive program for preliminary minimum weight design (NASA-TP-25404)

The Sortie-Generation Model system. Volume I: Programs for the transonic tunnel data

Bird impact analysis package for turbine engine fan blades (NASA-TP-26701)

Design of a data acquisition and reduction system for fatigue testing (NASA-AI-11012)

Scenario for evolution of air traffic control (NASA-AI-12026)

Digital command augmentation for lateral directional aircraft dynamics (NASA-AI-12021)


Hurricane-induced wind loads (NASA-AI-12023)

Cooperator program for analysis of spherical screen distortion (NASA-AI-12024)

Programs for the transonic wind tunnel data processing installation. Part 6: Programs for processing data on the central site computer (NASA-AI-15006)

Field studies of the air force procedures (NASA/AEDC) for measuring community noise exposure from aircraft operations (NASA-AI-13076)

Geophysical flight laser flying and flight path recovery utilizing the Litton LTV-76 inertial navigation system (DE-00553)

Effect of water on axial flow compressors. Part 2. Computational program (NASA-AI-13081)

User's manual for the ANSER flight path-trajectory simulation code (NASA-AI-13082)

Design of advanced digital flight control systems

Design and implementation of a cascaded scenario function for the F-16 dynamic system simulator (NASA-AI-13083)

Air Traffic Control computer replacement - Specification issues and problems (NASA-AI-13084)

NAS system load - Utilization of the DABC system (NASA-AI-13085)

ATC automation - a look forward: Technology/architecture (NASA-AI-13086)

Lightweight ATC systems (NASA-AI-13087)

CAD/CAM in British aerospace - Aircraft structural design (NASA-AI-13088)

Integrated structural analysis and design support for advanced launch vehicles (NASA-AI-13089)

The computerized cockpit for the one-man crew (NASA-AI-13090)

The DABBO system - materials means and logic functions (NASA-AI-13091)

Future terminal area systems (NASA-AI-13092)

Digital Avionics Information System (DAIS) - Development and demonstration (NASA-AI-13093)

Distributed data processing: What is it? (NASA-AI-13094)

The effect of increasingly more complex aircraft and avionics on the method of system design (NASA-AI-13095)

Stage-state reliability analysis technique (NASA-AI-13096)

Digital Avionics Information System (DAIS) documentation (NASA-AI-13097)

A prototype interface unit for microprocessor-based Loran-C receiver (NASA-AI-13098)
<table>
<thead>
<tr>
<th>Page</th>
<th>Heading</th>
<th>Volume</th>
<th>Journal/Conference ID</th>
<th>Publication Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-128</td>
<td>COMPUTER SYSTEMS PERFORMANCE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Life and Utilization Criteria Identification in Design (LOCID), volume 2</td>
<td>p0466</td>
<td>NASA-CR-165015</td>
<td>1982-02-1563</td>
</tr>
<tr>
<td></td>
<td>Control optimization, stabilization and computer algorithms for aircraft applications</td>
<td>p0455</td>
<td>NASA-CR-165015</td>
<td>1982-02-1563</td>
</tr>
<tr>
<td></td>
<td>Problems related to the integration of fault tolerant flight display systems</td>
<td>p0475</td>
<td>NASA-CR-165015</td>
<td>1982-02-1563</td>
</tr>
<tr>
<td></td>
<td>Examination of the Federal Aviation Administration’s plan for the National Airspace System (APN-82-66)</td>
<td>p0530</td>
<td>NASA-CR-165015</td>
<td>1982-02-1563</td>
</tr>
<tr>
<td></td>
<td>COMPUTER SYSTEMS PERFORMANCE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>WAS system load - Utilization of the DAC system</td>
<td>p0611</td>
<td>NASA-CR-165015</td>
<td>1982-02-1563</td>
</tr>
<tr>
<td></td>
<td>Distributed data processing modeling for future ATC systems</td>
<td>p0678</td>
<td>NASA-CR-165015</td>
<td>1982-02-1563</td>
</tr>
<tr>
<td></td>
<td>An advanced reliability modeling of fault-tolerant computer-based systems</td>
<td>p0797</td>
<td>NASA-CR-165015</td>
<td>1982-02-1563</td>
</tr>
<tr>
<td></td>
<td>COMPUTER SYSTEMS PROGRAMS ET OPERATING SYSTEMS (COMPUTERS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>An advanced programable/configurable color graphic display systems for crew station technology research</td>
<td>p0051</td>
<td>NASA-CR-165015</td>
<td>1982-02-1563</td>
</tr>
<tr>
<td></td>
<td>Real-time flight management avionics software system</td>
<td>p0052</td>
<td>NASA-CR-165015</td>
<td>1982-02-1563</td>
</tr>
<tr>
<td></td>
<td>Software considerations in the design of computer generated flight displays</td>
<td>p0069</td>
<td>NASA-CR-165015</td>
<td>1982-02-1563</td>
</tr>
<tr>
<td></td>
<td>Implementing the DATS executive --- Digital Avionics Information System software feasibility for aircraft systems</td>
<td>p0073</td>
<td>NASA-CR-165015</td>
<td>1982-02-1563</td>
</tr>
<tr>
<td></td>
<td>General purpose real-time interaction panel for digital simulation --- of control systems</td>
<td>p0074</td>
<td>NASA-CR-165015</td>
<td>1982-02-1563</td>
</tr>
<tr>
<td></td>
<td>Real time simulation of computer-animated sequencing of terminal area operations</td>
<td>p0078</td>
<td>NASA-CR-165015</td>
<td>1982-02-1563</td>
</tr>
<tr>
<td></td>
<td>Development of Integrated Programs for Aerospace-Vehicle Design (IPAD) - IPAD user requirements</td>
<td>p0114</td>
<td>NASA-CR-165015</td>
<td>1982-02-1563</td>
</tr>
<tr>
<td></td>
<td>Methodology for measurement of fault latency in a digital avionics minicomputer</td>
<td>p0196</td>
<td>NASA-CR-165015</td>
<td>1982-02-1563</td>
</tr>
<tr>
<td></td>
<td>Hierarchical specification of the SIFT fault tolerant flight control system</td>
<td>p0197</td>
<td>NASA-CR-165015</td>
<td>1982-02-1563</td>
</tr>
<tr>
<td></td>
<td>COMPUTER SYSTEMS SIMULATION ET DIGITAL SIMULATION</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Performance analysis of enroute air traffic control computers in the National Airspace System</td>
<td>p0003</td>
<td>NASA-CR-165015</td>
<td>1982-02-1563</td>
</tr>
<tr>
<td></td>
<td>Methodology for measurement of fault latency in a digital avionics minicomputer</td>
<td>p0196</td>
<td>NASA-CR-165015</td>
<td>1982-02-1563</td>
</tr>
<tr>
<td></td>
<td>COMPUTER TECHNOQUES ET IPAD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The Maneuvering Flight Path Display - A flight trajectory solution display concept</td>
<td>p0069</td>
<td>NASA-CR-165015</td>
<td>1982-02-1563</td>
</tr>
</tbody>
</table>
SUBJECT INDEX

Computer modeling of an aircraft HVDC electrical system p0073 AB2-16819
Computer simulation of an advanced aircraft electrical system p0073 AB2-16821
A synthesis technique for highly uncertain and interacting multivariable flight control systems p0074 AB2-16827 Performance assessment of the JCHS-XI ejection seat-10 configuration p0080 AB2-16980
Computation of the steady viscous flow over a tri-element canard-wing aircraft p0114 AB2-17335
A simple finite difference procedure for the vortex controlled diffuser p0115 AB2-17788
Computational treatment of transonic canard-wing interactions p0115 AB2-17814
Simulation of F/A-18 excitation due to hazardous wind shear p0117 AB2-17844

Digital test pilot concept p0116 AB2-17867
The influence of turbulence models on computer-simulated aircraft landing p0119 AB2-17896
JPIDS HELNAY network off-line simulation p0123 AB2-18153
The electromagnetic theta gun and tubular projectiles p0125 AB2-18182

 Integral Noise': An automatic calculation model for the prediction and control of fixed-wing aircraft noise. I - General considerations, theoretical bases and model analysis p0125 AB2-10274
A real time Pegasus propulsion system model for TSTOL piloted simulation evaluation p0157 AB2-19221
Utilization of hybrid computational equipment for the simulation of parasitic system flight p0157 AB2-19234
KC-135 avionics modernization hot bench - An evaluation of requirements and design for the future p0157 AB2-19244
Radar environment simulation for software test p0158 AB2-19269
SIMAR - An air battle simulation of the USAF Tactical Air Control System /TADS/ with Advanced Tactical Radars p0158 AB2-19256

Simulation of advanced cockpits p0158 AB2-19259
Development of a digital integrated automatic landing system /DIALS/ for steep approach and landing p0168 AB2-20297
A perspective of computational aerodynamics from the viewpoint of airplane design applications p0168 AB2-20228 Isolated nacelle performance - measurement and simulation p0168 AB2-20258

GTD terrain reflection model applied to ILS glide scope - Geometrical Theory of Diffraction p0210 AB2-20527

Aircraft parameter identification in the presence of atmospheric turbulence p0218 AB2-23227
A microwave landing system simulation p0220 AB2-23233
Calculation and measurement of electric field strength for airborne antennas in the LF/RF range p0220 AB2-23501
Radar rain damage - An environmental analysis technique p0261 AB2-26468
Mathematical modeling of ice accretion on airfoils p0266 AB2-27098
Effect of contrast on space perception in TV displays of the external scene observed by the pilot - - - German book p0297 AB2-28395
A Schwarz-Christoffel method for generating internal flow grids p0328 AB2-29005
A computer-controlled oscillation mechanism for unsteady aerodynamics experiments p0328 AB2-29018
Low cost aircrew training devices p0329 AB2-29258
Computational aerodynamics - Its coming of age and its future p0332 AB2-29773
Flight simulators p0334 AB2-29924
Combat training imagery p0342 AB2-31179
Evaluation of two analytical methods for the prediction of inlet flow fields in the vicinity of generalized forebodies p0342 AB2-31953 Finite element modeling of a fighter aircraft canopy acrylic panel p0374 AB2-32808
Simulation reaches towards reality p0382 AB2-33547
Application of high bypass turbofan computer simulation to flight and test data processing p0426 AB2-35366
Justification for, and design of, an economical programmable multiple flight simulator p0426 AB2-36969
A cost modeling approach to engine optimization p0439 AB2-37690
Design and evaluation of a state-feedback vibration controller p0442 AB2-37783
Problems in the simulation of correlation-external navigation systems p0492 AB2-39403
Terrain following/terrain avoidance system concept development p0497 AB2-40428
Dynamic energy transfer between wind and aircraft p0509 AB2-40939
Optimal open-loop aircraft control for go-around maneuvers under wind shear influence p0510 AB2-40943
Turbulence modelling - Impact of a Working Party p0546 AB2-41547
A method to determine runway capacity p0553 AB2-44100
Pneumatic tire model for aircraft simulation p0555 AB2-44244
Self-tuning regulator design for adaptive control of aircraft wing/store flutter p0578 AB2-45538
Heavy rain/wind shear accidents p0580 AB2-45825
An investigation of ring laser gyroscope random walk experiments p0584 AB2-47157
Subsonic military aircraft engine intake: An integrated theoretical experiment design p0094 AB2-13073
Real time simulation of computer-assisted sequencing of terminal area operations (NASA-CH-161915) p0137 AB2-14617
On-board computer programs in development of a 310 flight testing program p0138 AB2-14833
A generalized escape system simulation computer program: A user's manual - (AD-A106152) p0187 AB2-16055
Research through simulation - - - simulators and research applications at Langley (NASA-FAC7S-125) p0192 AB2-16092
Implementation of the recommendations made on the technical report titled analysis of advanced simulator for pilot training (AD-A106779) p0192 AB2-16094
Analytical study of twin-jet shielding (NASA-CH-165105) p0194 AB2-16804
A simple hybrid visual simulation for research flight simulators (AS-97-690) p0210 AB2-17232
The model simulation (AD-A107911) p0215 AB2-17887
Developments in rotary wing aircraft aerodynamics p0246 AB2-18180
A study of the techniques of dynamic analysis of helicopter type structures p0246 AB2-18129
### SUBJECT INDEX

#### CONNECTORS (ELECTRIC)
- U ELECTRIC CONNECTORS

#### CONSETS
- U CONICAL BODIES

#### CONSERVATION
- U ENERGY CONSERVATION

#### CONSOLES
- U REMOTE CONSOLES

Flight simulation consoles, and or obstruction - Objective evaluation of control consoles of modern flight and tactical simulators  
[UQLN PAPER 81-097] p0159 A82-19269

Task analytic techniques: Application to the design of a flight simulator instructor/operator console  
[AD-1108724] p0257 A82-18227

Controls  
[AD-1108724] p0534 A82-29301

#### CONSTANT SPEED PROPELLERS
- U VARIOUS FITCH PROPELLERS

#### CONSTITUTIVE EQUATIONS

Nonlinear structural and life analyses of a combustor liner  
[NASA-TM-82846] p038 B82-24501

Nonlinear constitutive theory for turbine engine structural analysis  
[AD-1112645] p064 A82-27238

#### CONSTRAINTS

Aircrew restraint and nobility test fixture  
[AD-1106724] p0025 A82-10193

Current AIM restraint system status, trade-off constraints and long range objectives for the Maximum Performance Ejection System (MPES)  
[AD-1112645] p064 A82-27238

#### CONSTRUCTION

Airfield construction - A reference book --- in Russian  
[AD-1101264] p0584 A82-40264

Development and construction of pilot ejection seats in Germany from 1938-1945  
[DFVLR-TR-81-04] p0026 A82-10026

A CEPF taileron for the F-111: Construction and introduction -- horizontal stabilizer  
[PSU-TR-212/RKP/PH/2] p0027 A82-10035

#### CONSUMABLES (SPACESHIP)

Experimental investigation of aerelastic instability of open field thin profiles --- metallic structures  
[AD-1112645] p0572 A82-31705

#### CONSUMERS (SPACECRAFT)

#### CONSUMPTION
- U ENERGY CONSUMPTION

#### CONTAINERS

Toward VLA air-cargo service  
[AD-1106724] p0296 A82-28277

#### CONTAINMENT

Composite containment systems for jet engines  
[AD-1106724] p00435 A82-37062

#### CONTAMINANTS

Aircraft cabin air ozone contamination and compliance with regulations  
[AD-1106724] p0342 A82-31507

#### CONTAMINATION

#### CONTINUITY (MATHEMATICS)

Skin friction lines  
[AD-1106724] p0303 A82-33629

#### CONTINUOUS WAVE RADAR

C band spectral tracking for PR/CW altimetry  
[AD-1106724] p0435 A82-37035

#### CONTROLS

Comparison of experimental and analytic performance for contoured endwall stators  
[AD-1106724] p0957 A82-20422

Comparison of experimental and analytic performance for contoured endwall stators  
[NASA-TR-82877] p0454 A82-26299

#### CONTRACT MANAGEMENT

Trends in maintainability and reliability of avionics systems with particular reference to DCAD Technical Publication 1/77  
[AD-1106724] p1006 A82-16561

#### CONTROL CONFIGURED VEHICLES

Durability and damage tolerance control plans for UAV aircraft  
[AD-1106724] p0338 A82-30147

#### COSTABILITY

Forecasting aircraft condensation trails  
[AD-111176] p0941 A82-26939

#### CONTROL

Control of vibration in aerelastic cascade experiments  
[AD-1106724] p0143 A82-15056

Reliability and maintainability analysis of fluidic back-up flight control system and components  
[AD-110495] p074 A82-27230

Dynamic System Coupling (DYSCO) program. Volume 2: Theoretical manual  
[AD-1115004] p0573 A82-31975

#### CONTROL BOARDS

Flat panel developments for future military aircraft  
[AD-1106724] p0050 A82-13507

An integrated control panel utilizing a programmable variator-multiplexed dichroic liquid crystal display  
[AD-1112645] p0550 A82-13508

Advanced technology FPCS control panel for the L-1011-500  
[AD-1109240] p0328 A82-29000

Electronic master monitor and advisory display system, human engineering summary report  
[AD-110495] p0037 A82-11065

Tanker avionics and aircrew complement evaluation  
[AD-1106724] p0033 A82-13063

P/A 18 Hornet crew station  
[AD-1106724] p0039 A82-13066

Controls and displays for all-weather operation of helicopters  
[AD-1109240] p0035 A82-22260

Development of avionics installation interface standards  
[AD-111653] p0608 A82-33384

#### CONTROLLED Configured VEHICLES

Direct digital design method for reconfigurable multivariable control laws for the a-70 Digitac II aircraft  
[AD-1106724] p0074 A82-14828

Flight mechanics - Modern aircraft design and control concepts --- German book  
[AD-1106724] p0612 A82-17951

Missile-adaptive wing flight demonstration program  
[AD-1106724] p0032 A82-24399

Active flutter suppression on an F-15 aircraft  
[AD-1106724] p0299 A82-28513

Investigation of the aerodynamic-contour method with control functions in the form of smooth constant-sign contours  
[AD-1106724] p0333 A82-29831

### A-133
Control law design to meet constraints using STRIPAC-synthesis package for active controls [NASA-TR-83264] p0356 A82-22280
An analytical study of turbulence response mechanisms, 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 A82-30859
Integrative application of active controls (IAAC) technology to an advanced subsonic transport project. Initial act configuration design study [NASA-CE-159269] p0593 A82-32380

CONTROL DEVICES
C CONTROL EQUIPMENT
W CONTROL STICKS
W PRESSURE REGULATORS
W SPEED REGULATORS
Considerations and applications for the use of fluidics in aerospace controls p0019 A82-12087
The interface of multifunction controls and displays to tomorrow's avionics [AIAA 81-2290] p0049 A82-13499
The use of separated multifunction inertial sensors for flight control [AIAA 81-2295] p0050 A82-13502
The integration of control and display concepts for improved pilot situational awareness p0061 A82-13972
Fixed gain controller design for aircraft p0221 A82-22341
P/A-18 weapon system development p0223 A82-22774
Fatigue test of the typical main rotor control component p0260 A82-24715
AFFAL turbine engine controls research and development - Present and future [AIAA PAPER 82-0321] p0262 A82-25050
TURBOTRANS - a programming language for the performance simulation of arbitrary gas turbine engines with arbitrary control systems [SAMLE PAPER 82-02-200] p0247 A82-35396
Simplified digital design tools p0335 A82-37034
Generic faults and design solutions for flight-critical systems [AIAA 82-1595] p0385 A82-39800

CONTROL PAREMM
C CONTROL BOARDS
C CONTROL RECEPIENTS
Current perspectives on emergency spin-recovery systems p0549 A82-43264

CONTROL SIMULATION
C CONTROL SIMULATION
An approach to robust nonlinear control design --- with illustration of J-85 turbojet engine simulation p0045 A82-13128
Aircraft systems simulation for the Northrop P/A-18L aircraft [AIAA 81-2274] p0049 A82-13488
Modelling procedures for handling qualities evaluation of flexible aircraft p0061 A82-13968
Real-time simulation of helicopter ZPF approaches into major terminal areas using BHA, HILS, and CDIT [AIAA PAPER 82-0260] p0118 A82-17068
The use of adaptive control for helicopter trajectories in search operations p0158 A82-18065
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
Evaluations of a multivariable control design on a variable cycle engine simulation p0358 A82-37682
Piloted simulator evaluation of a relaxed static stability fighter at high angle-of-attack [AIAA PAPER 82-1295] p0466 A82-39062
Sensor stabilization requirements of FHP's - a simulation study p0484 A82-39741
The design of a RPH ground station simulator p0495 A82-39750
Statistical analysis of piloted simulation of real-time trajectory optimization algorithms p0549 A82-32621
Use of DVFLR in-flight simulator HPS 320 digital avionics for handling qualities investigations p0577 A82-45146
A general aviation simulator evaluation of a rate-enhanced instrument landing system display [NASA-TP-1660] p0333 A82-14085
High-g performance for active flutter suppression [NASA-CE-16931] p0396 A82-24206

CONTROL STABILITY
C CONTROL STABILITY
The use of observers on relaxed static stability aircraft p0668 A82-44740
Flutter noise suppression using hyperstable feedback [AIAA PAPER 82-0368] p0120 A82-17906
Modal control of relaxed static stability aircraft [AIAA 82-1524] p0564 A82-39944
Characteristic and principal gains and phases and their use as multivariable control design tools --- generalizing Nyquist and root-locus diagrams techniques p0289 A82-10050
Design of high integrity multivariable control systems p0303 A82-10055
In-flight investigation of the effects of pilot location and control system design on airplane flying qualities for approach and landing [NASA-CE-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-CSE-F1C-11041-1] p0259 A82-18493
Effect of source 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] p0566 A82-32320

CONTROL STICKS
C CONTROL STICKS
Simulator investigations of various side-stick controller/stability and control augmentation
<table>
<thead>
<tr>
<th>SUBJECT INDEX</th>
<th>CONTROLLABILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>systems for helicopter terrain flight</td>
<td>p0074 A82-14482</td>
</tr>
<tr>
<td>[AIAA 82-1522]</td>
<td></td>
</tr>
<tr>
<td>Ground calibration of a strain-gauged CT-4A aircraft</td>
<td>p0109 B82-16073</td>
</tr>
<tr>
<td>aircraft (1979) [AD-A107847]</td>
<td></td>
</tr>
<tr>
<td>CONTROL SURFACES</td>
<td></td>
</tr>
<tr>
<td>NT SPECIAL BUMPERS</td>
<td></td>
</tr>
<tr>
<td>NT AILERONS</td>
<td></td>
</tr>
<tr>
<td>NT ELEVATORS (CONTROL SURFACES)</td>
<td></td>
</tr>
<tr>
<td>NT ELEVONS</td>
<td></td>
</tr>
<tr>
<td>NT EXTERNALLY BLOWN FLAPS</td>
<td></td>
</tr>
<tr>
<td>NT FLAPS (CONTROL SURFACES)</td>
<td></td>
</tr>
<tr>
<td>NT GUIDE VANS</td>
<td></td>
</tr>
<tr>
<td>NT HORIZONTAL TAIL SURFACES</td>
<td></td>
</tr>
<tr>
<td>NT JET FLAPS</td>
<td></td>
</tr>
<tr>
<td>NT JET LIGHTS</td>
<td></td>
</tr>
<tr>
<td>NT LEADING EDGE FLAPS</td>
<td></td>
</tr>
<tr>
<td>NT LEADING EDGE GLITS</td>
<td></td>
</tr>
<tr>
<td>NT RUDDERS</td>
<td></td>
</tr>
<tr>
<td>NT SPLIT FLAPS</td>
<td></td>
</tr>
<tr>
<td>NT SPOILER SLOT AILERONS</td>
<td></td>
</tr>
<tr>
<td>NT SPOILERS</td>
<td></td>
</tr>
<tr>
<td>NT TABS (CONTROL SURFACES)</td>
<td></td>
</tr>
<tr>
<td>NT TRAILING-EDGE FLAPS</td>
<td></td>
</tr>
<tr>
<td>NT UPPER SURFACE BLOWN FLAPS</td>
<td></td>
</tr>
<tr>
<td>NT WING FLAPS</td>
<td></td>
</tr>
<tr>
<td>Direct digital design method for reconfigurable multivariable control laws for the A-7D Digitac II aircraft</td>
<td>p0074 A82-14482</td>
</tr>
<tr>
<td>Stress intensity factor measurements in composite sandwich structures</td>
<td>p0113 A82-17535</td>
</tr>
<tr>
<td>Concerning the calculation of the aerodynamic characteristics of mechnized wings</td>
<td>p0127 A82-18589</td>
</tr>
<tr>
<td>Wing/control surface flutter analysis using experimnentally corrected aerodynamics</td>
<td>p0203 A82-26569</td>
</tr>
<tr>
<td>Analysis of a multihinged aeroelastic flap with allowance for shear strain</td>
<td>p0333 A82-29834</td>
</tr>
<tr>
<td>Method for the measurement of elastic deformations of aircraft models in a wind tunnel</td>
<td>p0386 A82-34162</td>
</tr>
<tr>
<td>The use of differential pressure feedback in an automatic flight control system [AIAA 82-1596]</td>
<td>p0405 A82-18981</td>
</tr>
<tr>
<td>Analysis of jet transport wings with deflected control surfaces by using a combination of 2- and 3-D methods</td>
<td>p0423 A82-26569</td>
</tr>
<tr>
<td>On the kernel function collocation method in steady subsonic flow for wing with control surfaces</td>
<td>p0517 A82-41022</td>
</tr>
<tr>
<td>Force and moment, flow-visualization, and boundary-layer tests on a shuttle orbiter model at Mach 6 [NASA TP-1952]</td>
<td>p0097 A82-13106</td>
</tr>
<tr>
<td>Pressure distributions on three different cruciform aft-tail control surfaces of a wingless missile at Mach 1.60, 2.36, and 3.70</td>
<td>p0130 A82-13110</td>
</tr>
<tr>
<td>A program to evaluate a control system based on feedback of aerodynamic pressure differentials [NASA CR-163466]</td>
<td>p0191 A82-16089</td>
</tr>
<tr>
<td>Influence of strakes on coefficients of longitudinal stability [RB-PS-122/5/PUB/22]</td>
<td>p0319 A82-21215</td>
</tr>
<tr>
<td>Eigenvalue techniques for active flutter suppression [NASA CR-168231]</td>
<td>p0396 A82-29206</td>
</tr>
<tr>
<td>Use of the pseudo-inverse for design of a reconfigurable flight control system [AD-A111721]</td>
<td>p0409 A82-25264</td>
</tr>
<tr>
<td>Electromechanical Actuation Development Program (EADP). Power control development [AD-A111721]</td>
<td>p0572 A82-31694</td>
</tr>
<tr>
<td>CONTROL SYSTEMS</td>
<td></td>
</tr>
<tr>
<td>O CONTROL</td>
<td></td>
</tr>
<tr>
<td>CONTROL THEORY</td>
<td></td>
</tr>
<tr>
<td>Design considerations for the direct digital control of opt-tuned gyroscope</td>
<td>p0017 A82-11933</td>
</tr>
<tr>
<td>Control of electromechanical actuator elements for flight vehicles --- Russian book</td>
<td>p0020 A82-12170</td>
</tr>
<tr>
<td>Robust flight control - A design example</td>
<td>p0082 A82-15845</td>
</tr>
<tr>
<td>An application of total synthesis to robust coupled design. --- turbine engine control</td>
<td>p0154 A82-19061</td>
</tr>
<tr>
<td>Analysis and optimization of control systems in piloted flight vehicles --- Russian book</td>
<td>p0001 A82-22938</td>
</tr>
<tr>
<td>The role of modern control theory in the design of controls for aircraft turbine engines [AIAA PAPER 82-0320]</td>
<td>p0282 A82-26526</td>
</tr>
<tr>
<td>Development of a control law for the alleviation of maneuver loads on an elastic aircraft</td>
<td>p0388 A82-38144</td>
</tr>
<tr>
<td>A practical approach to the design of multivariable control strategies for gas turbines [ASME PAPER 82-01-150]</td>
<td>p0426 A82-35374</td>
</tr>
<tr>
<td>Application of multivariable model following method to flight controller [AIAA PAPER 82-1349]</td>
<td>p0488 A82-39120</td>
</tr>
<tr>
<td>A modern approach to pilot/vehicle analysis and the real-Smith criteria [AIAA PAPER 82-1357]</td>
<td>p0489 A82-39125</td>
</tr>
<tr>
<td>Control of the operations of a 'flight complex' --- Russian on ground installations to aid air and space navigation</td>
<td>p0577 A82-45213</td>
</tr>
<tr>
<td>Theory and applications of optimal control in aerospace systems [NASA CR-55251]</td>
<td>p0338 A82-11073</td>
</tr>
<tr>
<td>An introduction to stochastic optimal control theory</td>
<td>p0338 A82-11076</td>
</tr>
<tr>
<td>Computational methods of robust controller design for aerodynamic flutter suppression [NASA CR-164983]</td>
<td>p0089 A82-12080</td>
</tr>
<tr>
<td>Fastest gain controller design for aircraft [AD-A104877]</td>
<td>p0089 A82-12081</td>
</tr>
<tr>
<td>Parallel computation for developing nonlinear control procedures [AIAA PAPER 82-1571]</td>
<td>p0209 A82-17227</td>
</tr>
<tr>
<td>The influence of sensor and actuator characteristics on overall helicopter AFCS design</td>
<td>p0251 A82-18171</td>
</tr>
<tr>
<td>Digital command augmentation for lateral-directional aircraft dynamics [AD-A110274]</td>
<td>p0319 A82-21214</td>
</tr>
<tr>
<td>The role of modern control theory in the design of controls for aircraft turbine engines [NASA TR-821051]</td>
<td>p0354 A82-22262</td>
</tr>
<tr>
<td>Application of model control to wing-flutter suppression [NASA TR-1983]</td>
<td>p0396 A82-24209</td>
</tr>
<tr>
<td>Tactical systems approach to interdiction of 2nd echelon moving targets using real-time sensors</td>
<td>p0472 A82-27306</td>
</tr>
<tr>
<td>Digital command augmentation for lateral-directional aircraft dynamics [AD-A107264]</td>
<td>p0474 A82-27321</td>
</tr>
<tr>
<td>Applications to aeronautics of the theory of transformations of nonlinear systems via Command Generator Tracker (CGT) synthesis methods, volume 1 [AD-A115510]</td>
<td>p0570 A82-31331</td>
</tr>
<tr>
<td>Design of analytical failure detection using secondary observers [NASA TR-82284]</td>
<td>p0590 A82-32362</td>
</tr>
<tr>
<td>System optimization by periodic control [AIAA PAPER 82-1357]</td>
<td>p0611 A82-33402</td>
</tr>
<tr>
<td>CONTROL VALVES</td>
<td></td>
</tr>
<tr>
<td>Cavitation inception in spool valves</td>
<td>p0105 A82-16428</td>
</tr>
<tr>
<td>An ejector suggested choking valve for the metering and control of inlet and bleed duct flows</td>
<td>p0336 A82-24659</td>
</tr>
<tr>
<td>Flight tests of a GE and DCI direct drive fly by wire flight control system [AD-A117244]</td>
<td>p0611 A82-33401</td>
</tr>
<tr>
<td>CONTROLLABILITY</td>
<td></td>
</tr>
<tr>
<td>Flight test experience with high-alpha control system techniques on the F-14 airplane [AIAA PAPER 81-2505]</td>
<td>p0057 A82-13906</td>
</tr>
<tr>
<td>Comparison of low-speed handling qualities in ground-based and in-flight simulator tests [AIAA PAPER 81-2478]</td>
<td>p0059 A82-13936</td>
</tr>
<tr>
<td>Modeling procedures for handling qualities evaluation of flexible aircraft</td>
<td>p0061 A82-13968</td>
</tr>
</tbody>
</table>
In-flight deflection measurement of the H-168 aeroservoelastically tailored wing
[AIAA PAPER 82-2450] p0063 A82-14031
Enhanced aircraft handling qualities by longitudinal dynamics model decoupling
[AIAA PAPER 82-14826] p0074 A82-14826
Analytical control law for desirable aircraft lateral handling qualities
p0183 A82-21941
Pilot models for discrete maneuvers
[AIAA 82-1519] p0048 A82-39840
Simulator investigation of various side-stick controller/stability and control augmentation
systems for helicopter terrain flight
[AIAA 82-1522] p0048 A82-39842
Handling qualities criteria for flight path control of V STOL aircraft
[AIAA PAPER 82-1292] p0048 A82-39801
In-flight investigation of large airplane flying qualities for approach and landing
[AIAA PAPER 82-1296] p0048 A82-39803
Guidance for the use of equivalent systems with MIF-705C --- for airplane flight control systems
[AIAA PAPER 82-1355] p0049 A82-39124
Flying qualities requirements for roll CAS systems
[AIAA 82-1356] p0049 A82-40287
Requirements and possible design choices for improving the operation of aircraft in the terminal control environment
p0044 A82-41881
Theoretical investigation of the influence of spoiler dynamics on the handling qualities of an aircraft with direct lift control
[KY-TT-601] p0027 H82-10026
Limited evaluation of an F-144 airplane utilizing an aileron-reducer interconnect control system in the landing configuration
[HJSA-TM-6172] p0100 H82-11148
In-flight investigation of the effects of pilot location and control system design on airplane flying qualities for approach and landing
[HJSA-CR-163115] p0145 H82-15074
Stiffness degradation of impact damaged structure
p0203 H82-17168
A translational velocity command system for VSTOL low-speed flight
[HJSA-TM-84215] p0305 H82-20106
A review of recent AGARD Symposium on the angle of attack capability of Combat aircraft
p0346 H82-22108
Helicopter Handling Qualities
[HJSA-CR-2219] p0346 H82-23208
VSTOL and VSTOL handling qualities specifications, as an overview of the current status
p0364 H82-23209
A helicopter handling-qualities study of the effects of engine response characteristics, height-control dynamics, and excess power on nap-of-the-Earth operations
p0365 H82-23214
Unified results of several analytical and experimental studies of helicopter handling qualities in visual terrain flight
p0365 H82-23215
An assessment of various side-stick controller/stability and control augmentation systems for night nap-of-Earth flight using piloted simulation
p0365 H82-23216
Prediction of aircraft handling qualities using analytical models of the human pilot
[HJSA-TM-84213] p0396 H82-24208
Notes on lateral-directional pilot induced oscillations
[AD-A139969] p0074 H82-27322
Evaluations of helicopter instrument-flight handling qualities
[AD-A114006] p0054 H82-28285
Analytical and simulator study of advanced transport
[HJSA-CR-1573] p0056 H82-28298
A discussion of the flying qualities requirements of a basic training aircraft
[AD-A114603] p0036 H82-29318
Effects of higher order control systems on aircraft approach and landing longitudinal handling qualities
p0563 H82-30848

CONTROVERSY:

FATIGUE SHOCK TRANSFER

Finite element thermal analysis of convectively-cooled aircraft structures
p0255 A82-25656
Measurements of heat transfer coefficients on gas turbine components. I - Description, analysis and experimental verification of a technique for use in hostile environments
[AD-A124817] p0256 A82-35387
Measurements of heat transfer coefficients on gas turbine components. II - Application of the technique described in part I and comparisons with results from a conventional measuring technique and predictions
[AD-A124823] p0256 A82-35388
The use of analog computers in solutions of inverse problems of heat conduction for the identification of boundary conditions on the basis of gas-turbine engine parts on the basis of temperature-measurement results

A-136
Application of Computational Fluid Dynamics (CFD) in transonic wind-tunnel/flight-test correlation p004 A-82-25211

Hardware and software integration for concurrent data acquisition and reduction of photon correlated laser Doppler velocimetry [AD-4111146] p008 A-82-25506

CORRELATION COEFFICIENTS
An automated technique for improving modal test/analysis correlation [AIAA 82-0640] p037 A-82-30137

CORRELATION DETECTION
Target tracking using area correlation p040 A-82-39194

Simulation of correlation-extreme receivers of signals from sampling-phase radio-navigation systems p049 A-82-39404

CORRELATION FUNCTIONS
0 CORRELATION

POTENTIAL CORROSION

FUEL CORROSION

HOT CORROSION

INTERMETALLIC CORROSION

Airflow corrosion

US Naval fleet aircraft corrosion p0211 A-82-17349

An airline view of the corrosion problem p0211 A-82-17350

Some observations on the corrosion of aircraft at the air force base in Bandir, Turkey p0211 A-82-17352

On the Corrosion problems of the TAI-5-9 aircraft p0211 A-82-17353

The experience of corrosion on French military aerodynamic p0211 A-82-17354

Design and maintenance against corrosion of aircraft structures p0211 A-82-17356

CORROSION PREVENTION

A protective additive for jet fuels p0048 A-82-12022

The protection of gas turbine blades - a platinum aluminide diffusion coating p0063 A-82-14364

Attach on superalloys by chemical and electrolytic processes p0063 A-82-14365

Recent developments in materials and aircraft corrosion control p0241 A-82-24825

Recent developments in materials and aircraft corrosion control p0241 A-82-24825

Corrosion inhibiting engine oils (AD-106127) p0135 A-82-14099

Corrosion Fatigue - conferences [AEGARD-CR-316] p0210 A-82-17342

Mechanisms of corrosion fatigue - of high strength aluminium alloys p0210 A-82-17343

Fracture mechanics based modelling of the corrosion fatigue process p0210 A-82-17344

Corrosion fatigue behaviour of some aluminium alloys p0210 A-82-17345

Flight-by-flight corrosion fatigue test p0210 A-82-17347

Detection and prevention of corrosion on Royal Air Force aircraft p0211 A-82-17348

Corrosion control measures for large aircraft p0212 A-82-17351

Corrosion prevention measures used in the construction of an aircraft framework: The case of 2014 and 2214 alloys p0212 A-82-17352

Recent developments in materials and processes for aircraft corrosion control p0212 A-82-17353

New concepts in multifunctional corrosion for aircraft and other systems p0212 A-82-17361

Corrosion in naval aircraft electronic systems p0212 A-82-17362

Corrosion protection schemes for aircraft structures: Some examples for the corrosion behaviour of Al alloys p0212 A-82-17363


Life enhancement of Naval systems through advanced materials [AD-411472] p0550 A-82-30404

CORROSION RESISTANCE

ST OXIDATION RESISTANCE

A new approach to the problem of stress corrosion cracking in 7075-76 aluminium p022 A-82-23772

Materials aspects of aircraft design p022 A-82-24358

Airframe surface coatings for drag reduction/erosion protection [SAE PAPER 811070] p032 A-82-24401

Effect of mechanical surface and heat treatments on erosion resistance p0243 A-82-25538

An evaluation of several polymers for high density humidity PC coatings p0205 A-82-27071

Strength of the turbine components of a one-pass turbine engine under complex loading and associated problems p0292 A-82-27432

Wear by generation of electrokinetic streaming currents [ASLE PREPRINT 82-AW-6A-3] p0043 A-82-37857


Corrosion control test method for avionic components [AD-1008951] p0203 A-82-17171

CORROSION TESTS

Engine experience of turbine rotor blade materials and coatings [ASR PAPER 82-GT-244] p0428 A-82-35425

Corrosion inhibiting engine oils [AD-106127] p0135 A-82-14099

CORRODED PLATES

Non-honeycomb F-16 horizontal stabilizer structural design p0509 A-82-40936

CORSAIR AIRCRAFT

0 A-7 AIRCRAFT

COST ANALYSIS

Costs of noise nuisance from aircraft p0046 A-82-13318

The Federal Environmental Plan p0104 A-82-16178

Quality, quantity, and technology - a perspective on fighter development [SAE PAPER 811097] p0232 A-82-24400

Technology for quality and quantity in a new fighter [SAE PAPER 811100] p0233 A-82-24400

The toll of ILS-preventable aviation accidents p0242 A-82-25252

Selection of telecommunication equipment - a new approach to the equivalent cost concept p0243 A-82-25510

Solutions to the aviation fuel problem p0386 A-82-34113

Minimization of the total costs incurred in the employment of passenger jet aircraft p0386 A-82-34113

Impact of technology on avionics cost trends [AD-4108949] p0256 A-82-18199

Assessment of Avionic Equipment Field Reliability and Maintainability as Functions of Unit Cost [AD-4103373] p0266 A-82-19218


Specification and estimation of dynamic cost functions for airframe production airframes
SUBJECT INDEX

[ASA-SP-80047-0] p0157 882-227260
OT-10A nose gear fork damage analysis
[AD-111492] p0047 882-252944
Fracture mechanics criteria for turbine engine hot section components
[ASA-CR-167896] p0409 882-25257
Mechanical property characterization and modeling of structural materials — for airframes and aircraft gas turbine engines
[AD-111348] p0078 882-27704
Prediction of fatigue crack growth rates under variable loading using a simple crack closure model
[ANS-SP-81020-0] p0529 882-28685
Titanium surface treatments for adhesive bonding
[AD-1114710] p0550 882-30378
Improved penetrant process evaluation criteria
[AD-1115157] p0560 882-30366
Stress intensity factors for radial cracks at outer surface of a partially autofrettaged cylinder subjected to internal pressure
[AD-1116536] p0573 882-31714
CRACKING (CHEMICAL ENGINEERING)
NT HYDROCRACKING
NT PYROLYSIS
CRACKING (FRACTURING)
NT STRESS CORROSION CRACKING
A compilation of stress intensity factor solutions for flawed fastener holes
[AD-1010753] p0259 882-18623
CRACKS
NT MICROCRACKS
A method for locating aircraft wing damage by nonlinear vibration analysis
[AD-1010753] p0109 882-17116
Unconventional internal cracks. II - Method of generating simple cracks
[AD-1010753] p0391 882-28461
CRASH INJURIES
Improving the crashworthiness of general aviation aircraft by crash injury investigations
[AD-111478] p0528 882-28476
Briefs of fatal accidents involving fixed-wing multi-engine aircraft, U.S. General Aviation, 1979
[PB-150307] p0065 882-27254
Crashworthiness studies: Cabin, seat, restraint, and injury findings in selected general aviation accidents
[AD-1114878] p0531 882-29275
CRASH LANDING
NT DITCHING (LANDING)
Will hydrogen-fueled aircraft be safe
[AIAA-PAPER 82-1236] p0418 882-35077
Dismantage of safety harness buckles - CT6
[AD-1019048] p0263 882-19199
Transport aircraft crash dynamics
[ASA-CR-165591] p0394 882-28416
CRASHES
NT CRASH LANDING
NT DITCHING (LANDING)
Design of a crashworthy crew seat for the Boeing Vertol Chinook helicopter
[PB-150167] p0079 882-14975
Crashworthy military passenger seat development
[AD-1116536] p0079 882-14976
BASEP - Survival from crashed Navy helicopters
[PB-81-24105] p0079 882-14977
Advanced recorder design and development
[PB-81-24105] p0193 882-16385
[STAN-AB-8-17] p0199 882-17138
Test site instrumentation study. Volume 2: Crash 1 and crash 2 raw data
[PB-81-11632] p0258 882-18233
An assessment of the crash fire hazard of liquid hydrogen fueled aircraft
[ASA-CR-165526] p0263 882-19196
Transport aircraft accident dynamics
[ASA-CR-165850] p0350 882-22227
Commercial jet transport crashworthiness
[ASA-CR-165941] p0354 882-23207
Crashworthiness studies: Cabin, seat, restraint, and injury findings in selected general aviation accidents
[AD-1114878] p0531 882-29275
AirCraft fire safety
[ASA-SP-123] p0532 882-29279
AirCraft fire mishap experience/crash fire scenario quantitation
[PB-150167] p0532 882-29280
Human response to fire
[AD-1114710] p0532 882-29281
Fuel system protection methods
[AD-1114710] p0533 882-29283
Examination of aircraft interior emergency lighting in a postcrash fire environment
[AD-1117629] p0605 882-33360
CRASHWORTHINESS
A crashworthiness test for composite fuselage structure
[PB-150167] p0288 882-27139
Improving the crashworthiness of general aviation aircraft by crash injury investigations
[AD-1114710] p0339 882-30161
Quasi-static and dynamic crushing of energy absorbing materials and structural components with the aim of improving helicopter crashworthiness
[AD-1114710] p0400 882-37769
Structural design of a crashworthy landing gear for the AH-64 Attack Helicopter
[PB-150167] p0502 882-40547
Commercial jet transport crashworthiness
[ASA-CR-165849] p0364 882-23207
Solid-state flight accident recorder
[AD-1114710] p0401 882-25172
Solid state crash survivable flight data recorders for mishap investigation
[AD-1114710] p0401 882-25173
Value of survivability and recoverability of flight data recorders — benefit cost methodology
[AD-1114710] p0402 882-25168
Cabin safety in large transport aircraft
[PB-150167] p0404 882-27244
Crashworthiness studies: Cabin, seat, restraint, and injury findings in selected general aviation accidents
[AD-1114878] p0531 882-29275
Aircraft post crash fire reduction/survivability enhancement from a manufacturer's viewpoint
[AD-1114878] p0533 882-29286
Structures and Dynamics Division research and technology plans, FY 1982
[ASA-TH-84509] p0561 882-30566
Results from tests of three prototype general aviation seats
[ASA-TH-84532] p0613 882-33733
Crashworthiness airframe design concepts: Fabrication and testing
[ASA-CR-3603] p0613 882-33735
CHATTERING
NT PROJECTILE CATERING
CHARVES
Bomb crater repair techniques for permanent airfields. Report 1: Series 1 tests
[AD-1109716] p0257 882-16229
CHARBING ANALYZES
Solution of creep problems by a finite element method
[AD-1114710] p0380 882-36172
CHARBING PROPERTIES
NT SHEAR CREEP
Process development and evaluation of gas turbine engine components in IMI 629 --- titanium alloy
[PB-90050] p0310 882-21205
CHARBING RESISTANCE
U CREEP STRENGTH
Crep and aero gas turbine design
[PB-81-1297] p0033 882-12976
Dispersion and temperature-force dependence of the high-temperature strength characteristics of a gas-turbine-engine disk alloy
[PB-81-1297] p0182 882-21636
Mechanical and metallurgical considerations in extending the life of turbine blades
[PB-81-1297] p0304 882-33855
CREEP STRENGTH
Precision casting for gas turbine engine
[PB-81-1297] p0297 882-28313
CHUBBIES
U CRACKS
New estimation method for flutter or divergence boundary from random responses at subcritical speeds

Experimental and analytical studies of advanced air cushion landing systems

Development and trial of a rotary balance for the 3 a low speed wind tunnels in the Federal Republic of Germany

Conditions of generation and methods of damping the aerofoil vortex of a turbojet engine

Comparison of analytical and wind-tunnel results for flutter and gust responses of a transport with active controls

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

Rotorcraft blade node damping identification from random components using a recursive maximum likelihood algorithm

Damping Factor

Damping in Pitch

Damping in Roll

Damping in Yaw

Damping Tests

Dry friction damping mechanisms in engine blades

Study of noise reduction characteristics of composite fiber-reinforced panels, interior panel configurations, and the application of the tuned damper concept

Development of experimentally compatible subsystem methods for the analysis of aircraft structures

The vibratory behavior of a rotating propeller shaft. Part 4: Vibration tests of a rotating propeller shaft in a rubber stern tube bearing

Dampers

Oil Content

Damage

Hazards

DTR Turboprop Engines

IDT Turboprop Engines

Dassault Aircraft

Data Acquisition

A microprocessor-based data acquisition system for stalls/spin research

FAA developing new collision avoidance, data acquisition and transmission systems

The development and use of a computer-interactive data acquisition and display system in a flight environment

Development of a simple, self-contained flight test data acquisition system

Data systems organization - a change for the better

Flight test data acquisition

Color graphics based real-time telemetry processing system

Flow visualization using a computerized data acquisition system

Flight test data acquisition and interpretation

Advanced medium scale real-time system --- for Army helicopter tests

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

Test facility and data handling system for the development of axial compressors

Acquisition of F-100/JV high pressure compressor entrance profiles

A single-frequency multitransmitter telemetry technique

The detection of low level wind shear. II

Economic analysis for data base management

APFSC standard airspeed calibration procedures

Digital data acquisition and analysis system for dynamic tests of airfoils

NASA Dryden Flight Loads Research Facility

Programs for the transonic wind tunnel data processing installation. Part 9: Pressure measurements updated

A versatile data acquisition system for a low speed wind tunnel

Development of a simple, self-contained flight test data acquisition system

Test site instrumentation study. Volume 2: Crash 1 and crash 2 raw data

Review of rotorcraft accidents 1977-1979

Revised test data acquisition system

V/STOL tilt rotor research aircraft. Volume 1: General information, revision C

V/STOL tilt rotor research aircraft. Volume 2: Ship 1 instrumentation

V/STOL tilt rotor research aircraft. Volume 3: Ship 2 instrumentation

V/STOL tilt rotor research aircraft. Volume 4: CFU technical data

On-line experiments in acquiring and exploiting ADS data for ATC purposes

Hardware and software integration for concurrent data acquisition and reduction of photon correlated laser Doppler velocimetry

Design of a data acquisition and reduction system for fatigue testing

Advanced trending analysis/EDS data program

Reduction and analysis of mode C altitude data collected at high altitudes over the continental United States

Data acquisition system for NASA LaRC impact dynamics research facility

Thermal, availability, maintainability data tracking plan improved GROUNDAILS

Data adaptive evaluators/monitor

Data processing

Data reduction

Data transmission

Data analysis

Data processing

Data reduction

Data base management systems

Opto-electronical push-broom scanners for...
DATA BASES

- Navigation, reconnaissance and generation of digital data bases
- Economic analysis for data base management
- Electronic Warfare Avionics Integration Support
  Facility support processor
  [AD-111664]
  Source assessment system
  [AD-111723]

DATA BASES

- Aircraft alerting systems standardization study
  [AD-A 81-2242]
- Data base generation for digital external view
  systems
  [DG 140 PAPER 81-101]

DATA BASES

- Correlation of Preston-tube data with laminar skin friction (Log No. J12984)
  [NASA-TM-84027]

DATA HANDLING SYSTEMS

- Distributed Time Division Multiple Access (D/TDMA)
- - A distributed signaling technique for advanced tactical communications
  [AD-A116979]

DATABASES

- Enhanced noise immunity and error control in a fully integrated JPL/S/GPS receiver --- Joint Tactical Information Distribution System
  [AD-A125-82-04]

DATA LINKS

- Modernizing the Egyptian A.T.C. system
  [AD-A125-82-72]

DATA LINKS

- Microwave communications to remotely piloted vehicles
  [AD-A125-82-72]

DATA LINKS

- Laser communications via an atmospheric link
  [AD-A125-82-06]

DATA MANAGEMENT SYSTEMS

- Delay-saturated data links in an interference environment
  [AD-A176-82-04]

DATA PROCEEDINGS

- Discrete Address Beacon System (DABS)
  [AD-A125-82-32]

DATA TRANSMISSION

- MIL-STD 1553B - Aircraft Environmental Susceptibility Effects
  [AD-A125-82-35]

DATA TRANSMISSION

- Radiating elements for hemispherically scanned arrays --- onboard aircraft for data links to satellites
  [AD-A125-82-35]

DATA TRANSMISSION

- An optical data link for airborne scanning system
  [AD-A125-82-35]

DATA TRANSMISSION

- Application of an optical data link to the airborne scanning system
  [AD-A125-82-35]

DATA TRANSMISSION

- U.S. Army remotely piloted vehicle supporting technology program
  [AD-A125-82-35]

DATA TRANSMISSION

- A pilot's view of possible uses of AIDS --- airborne collision avoidance systems
  [AD-A125-82-35]

DATA TRANSMISSION

- Design of a microprocessor-controlled linkage for simulator applications
  [AD-A125-82-35]

DATA TRANSMISSION

- Two at a time - Flight test plans for the new Boeing airliners
  [AD-A125-82-35]

DATA TRANSMISSION

- Algorithms for an adaptive dynamic window in electronic map systems
  [AD-A125-82-35]

DATA TRANSMISSION

- The Boeing Flight Test Data System 1980
  [AD-A125-82-35]

DATA TRANSMISSION

- Instrumentation remote 'aim' ground station
  [AD-A125-82-35]

DATA TRANSMISSION

  [AD-A125-82-35]

DATA TRANSMISSION

- D NCS - A commercial flight management computer system
  [AD-A125-82-35]
SUBJECT INDEX

[ALAA PAPER 81-2392] p0056 A82-13888
Fleet Flight Loads Survey monitoring and analysis techniques

[ALAA PAPER 81-2461] p0057 A82-13903
The advanced range instrumentation aircraft improvement and modernization program

[ALAA PAPER 81-2368] p0060 A82-13908
Status and tracking system for flight test data production

[ALAA PAPER 81-2395] p0063 A82-14376
Integrated flight testing based on nonlinear system identification data processing techniques

[ALAA PAPER 81-2649] p0064 A82-13839
A multi-channel processor system for JFWSR monopulse data processing

Instrumentation remote ‘mini’ ground station

Color graphics based real-time telemetry processing system

Distributed data processing modeling for future AIC systems

Modernizing air traffic control in France

Problems in the automation of the thermal-stress program for the transonic wind tunnel data processing

Data processing at the Global Positioning System

Flying qualities criteria for 6A single pilot IFB

Supplementary studies on the sensitivity of Sas path analysis of commercial aircraft engines

The DFVLB Digital Flight Data Beadout and Distributed data processing: what is it?

Tactical airborne distributed computing and networks

Primary-data devices --- Russian book

Analysis of flight data in the frequency domain

A versatile data acquisition system for a low speed wind tunnel

[D-AD-410628] p0192 M82-16097
Tactical airborne distributed computing and Networks

[AGARD-CP-303] p0195 M82-17086
Distributed data processing: What is it?

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

[D-AD 82-2092] p0199 M82-32509
Report of the JANAF Workshop on High Frequency Instrumentation and Data Analysis Techniques

Application of Kalman filtering to the kinematic reconstruction of free flight of catapulted aircraft models in the laboratory

[D-AD-810994] p0353 M82-22259
Aeronautical information data subsystems --- air navigation

[D-DFRL 82-25178] p0401 M82-25184
The DFRL Digital Flight Data Readout and Processing Station and its Utility

[D-AD-82-25180] p0402 M82-25184
Gas path analysis of commercial aircraft engines

[D-AD-82-25184] p0402 M82-25184
Analysis of transient data from aircraft gas turbine engines using AIDS

[D-AD-82-25189] p0403 M82-25189
Supplementary studies on the sensitivity of optimized structures

[AD-8111616] p0412 M82-25505
Structures testing analysis real-time network (STANNET)

[D-AD-82-25505] p0413 M82-25505
Flying qualities criteria for GA single pilot IFR operations

[D-AD-82-25613] p0496 M82-26213
Data processing at the Global Positioning System master control station

[D-AD-82-26270] p0450 M82-26270
An analysis of selected enhancements to the en route central computing complex

[D-AD-82-28044] p0479 M82-28044
Hydraulic Universal Display Processor System (HUDPSS)

[D-AD-82-28064] p0525 M82-28064
Programs for the transonic wind tunnel data processing installation. Part 8: Programs for processing data on the central site computer

DATA PROCESSING EQUIPMENT

NT AIRBORNE/SATELLITE COMPUTERS
NT ANALOG COMPUTERS
NT CCĐT CIBER 175 COMPUTER
NT COMPUTERS

DATA STORAGE

NT DATA PROCESSING TERMINALS
NT DIGITAL COMPUTERS
NT HYBRID COMPUTERS
NT IBM COMPUTERS
NT MICROCOMPUTERS
NT MICROPROCESSORS
NT MINICOMPUTERS
NT PRINTERS (DATA PROCESSING)

Data processing on route computer systems

DATA PROCESSING TERMINALS

Terminal information display system benefits and costs

DATA PROCESSES

O DATA PROCESSING EQUIPMENT

DATA REDUCTION

O DATA SYSTEMS

O DISPLAY DEVICES

DATA RECORDERS

Extended time radar raw video recording

DATA RECORDING

A design for a 32-channel multiplexer --- for unmanned aircraft navigation sensors

Simulator data test instrumentation - Flight test challenge of the eighties

Rapid extraction of layer relative humidity, geopotential thickness, and atmospheric stability from satellite sounding radiometer data

Problems with the use of percentages in the analysis of AAS data --- Aircrew Automated Escape Systems

ADAMS Executive and operating system

Improvements and extensions of the Geometrical Dilution of Precision (GDOP) concept for selecting navigation measurements

Applying Kalman filtering to the kinetic reconstruction of free flight of catapulted aircraft models in the laboratory

[D-IMFL-80-28] p0353 M82-22259
Application of Kalman filtering to the kinematic reconstruction of free flight of catapulted aircraft models in the laboratory

[D-IMFL-80-28] p0353 M82-22259
Design of a data acquisition and reduction system for fatigue testing

[D-AD-110612] p0461 M82-26720
Reduction and analysis of node C altitude data collected at high altitudes over the continental United States

[D-AD-111655] p0532 M82-29276
Data reduction procedures for Sea King helicopter flight trials

[D-AD-117040] p0590 M82-32359
Data retrieval

New techniques in data retrieval and display --- color graphics

[D-AD-82-25174] p0401 M82-25174
Flight data recovery under adverse conditions

[D-AD-82-25183] p0563 M82-30849
Value of survivability and recoverability of flight data recorders --- benefit cost methodology

Data smoothing

Pilot opinions of smoothing effects in lateral directional control

[D-AD-82-30589] p0273 M82-25577
Integration of multi-sensor navigation data using optimal estimation techniques

Data storage

A storage device for subsystem maintenance information

[D-AD-82-14819] p0259 M82-14503
Data processing -- Aircraft automation systems

[D-AD-82-13119] p0044 M82-13119
Simulation data test instrumentation - Flight test challenge of the eighties

[D-AD-82-20768] p0178 M82-20768
Rapid extraction of layer relative humidity, geopotential thickness, and atmospheric stability from satellite sounding radiometer data

[D-AD-82-25183] p0563 M82-30849
Value of survivability and recoverability of flight data recorders --- benefit cost methodology

[D-AD-82-25174] p0401 M82-25174
Flight data recovery under adverse conditions

[D-AD-82-25183] p0563 M82-30849
Value of survivability and recoverability of flight data recorders --- benefit cost methodology

DATA SAMPLING

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

A-147
OEICXHG DEICIBS DELTA BIHGS DEICIHG SYSIEHS 0 F-106 AIBCBAFT hi BEAPONS DELIVBBI 0 DEICEBS

Increasing the lift-drag ratio of a flat delta wing
Formation of triangular-element stiffness matrix
Study of the de-icing properties of the ASDE-3 rodotose
[AD-8115645] p0570 Nb2-31335

DEICING SYSTEMS
U DEICERS
DELIVERY
WEAPONS DELIVERY
DELTA DAST AIRCRAFT
S 7-106 AIRCRAFT
DELTA WINGS
Formation of triangular-element stiffness matrix using sliding interpolation
Increasing the lift-drag ratio of a flat delta wing
Use of high concanal 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 wave riders at supersonic flight speeds
Alleviation of the subsonic pitch-up of delta wings
Crossflow shock on the nose plane 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
(AIAA PAPER 82-0686) p0330 Nb2-30153
On the vortex flow over delta and double-delta wings
(AIAA PAPER 82-0949) p0437 Nb2-37466
Chordwise and compressibility corrections for arbitrary planform slender wings
Leading edge separation at delta wings with curved leading edges in supersonic flow
Measurements and visualization of skin friction on the leeside of delta wings in supersonic flow
Measurements of velocity distributions in the leading edge vortex of a delta wing by the laser-Doppler procedure
Dynamic load measurements with delta wings undergoing self-induced roll-oscillations
Lateral aerodynamics of delta wings with leading edge separation
Four vortex formation over double-delta wings
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 supersonic flow
Fusionage effects in leading edge vortex flap aerodynamics
Subsonic balance and pressure investigation of a 60-deg delta wing with leading-edge devices (data report)
[NASA-CR-165066] p0319 Nb2-30505
Experimental study of delta wing leading-edge devices for drag reduction at high lift --- conducted in Langley T-7- by 10-foot high speed tunnel
Finite difference computation of the field over a delta wing
[FL-79-140] Pressure distributions on some delta wings at M = 4 --- wind tunnel tests
[AD-82-30060] p0319 Nb2-21164

Static and unsteady pressure measurements on a 50 degree clipped delta wing at M = 0.9 --- conducted in the Langley Transonic Dynamics Tunnel
[NASA-TN-83367] p0336 Nb2-23195

DYNANS (ECONOMICS)
Selection of telecommunication equipment - a new approach to the equivalent cost concept
Energy environment study
[NASA-CR-167421] p0090 Nb2-12230

DENSITY (MAS/SOULINE)
MT ATMOSPHERIC DENSITY
DEPOSITION
Flow field studies using holographic interferometry at Langley
DENSITY MEASUREMENT
Formation and characterization of polystyrene resilient foams of various densities for aircraft seating applications
[NASA-CR-167421] p0090 Nb2-12230

DEPRENCES
MT TEMPERATURE DEPENCE
MT WIND DEPENCE
DEPOSITION
MT ABLATING
MT ELECTRODEPOSITION
Deposit formation in liquid fuels. II - The effect of selected compounds on the storage stability of Jet & turbine fuel

DEPOSITS
Thermal decomposition of aviation fuels
[ASME PAPER 82-GT-27] p0437 Nb2-25292
Deposit formation in hydrocarbon fuels
[ASME PAPER 82-GT-49] p0437 Nb2-35307
Determination and analysis of jet and gas turbine fuel deposits
[AD-8105450] p0090 Nb2-12240

DEPRESURIZATION
U PRESSURE REDUCTION
DEPERSION
U SPACE PERCEPTION
DESCRIPT
MT PARACHUTE DESCENT
Descent-rate cuing for carrier landings: Effects of display gain, display noise and aircraft type
[VT-81-18265] p0266 Nb2-19206

DESCRIPT TRAJECTORIES
MT AERIAL TRAJECTORIES
Flight investigations of integrated descent rate control systems
[AD-8105450] p0090 Nb2-12240

DESCRIPTIONS
Orbiting description of air traffic control in the Netherlands
[VT-81-18265] p0087 Nb2-12063

DESIGN ANALYSIS
Development of new lifting parachute designs with increased triax angle
[AD-8105450] p0006 Nb2-10407
Optimization of the principal design parameters of a parasailing aircraft
[AD-8105450] p0015 Nb2-10816
Design analysis of high temperature transparent windowseals for high perforance aircraft
[AD-8106156] p0011 Nb2-10893
Parachute technology under pressure
[AD-8105450] p0024 Nb2-12204
Air-to-ground RTI radar using a displaced phase center, phased array
[AD-8105450] p0075 Nb2-14881

The history of the development of the Sm aerosenical parachute - 1971-1980
[AD-8105450] p0078 Nb2-12063

A look at the Hoffman Triangular parachute - The first successful glidable parachute
[AD-8105450] p0079 Nb2-14966
Mathematicaldas in engineering design problems
[AD-8105450] p0087 Nb2-15884
Direct approach to aerodynamic design problems
[AD-8105450] p0015 Nb2-16040
Design and performance of airborne radomes - A review
[AD-8105450] p0106 Nb2-17564

Flight mechanics - Modern aircraft design and control concepts --- German book
[AD-8105450] p0121 Nb2-17951

A-150
DESIGN OF EXPERIMENTS

Design of advanced digital flight control systems via Command Generator Tracker (CGT) synthesis method, Volume 1
[AD-A115510] p0570 882-31331

DESIGN OF EXPERIMENTS
V EXPERIMENTAL DESIGN

DESIGN TO COST
Productivity and safety -- reducing transport aircraft operating costs and increasing safety
[AD-A1117784] p0111 882-17284

Advanced composite integral structures meet the challenge of future aircraft systems
[AD-A107425] p0288 882-27133

Combat survivability in the Advanced Technology Engine Study Report
[AD-A1024519] p0419 882-35101

The promise of laminated metals in aircraft design
[AD-A106724] p0257 882-18227

DESIGNING U SPIN REDUCTION

DESTRUCTIVE TESTS
Experimental structural testing on a composite aircraft canard and its applications
[AD-A106129] p0112 882-17930

DETECTION
BT AIRCRAFT DETECTION
BT CORRELATION DETECTION
BT RADAR DETECTION
BT REMOTE SENSING
BT SIGNAL DETECTION
BT TARGET RECOGNITION
BT ULTRASONIC FLAT DETECTION

Sensor failure detection system -- for the F100 turbofan engine
[AD-A115515] p0100 882-13145

Test and evaluation of UV fiber optics for application for aircraft fire detector systems
[AD-A1006129] p0195 882-16850

NASA research programs responding to workshop recommendations
[AD-A107425] p0650 882-26274

The effect of isosceles variability on the accuracy of high frequency position location
[AD-A112491] p0666 882-27262

A result in the theory of spiral search
[AD-A112317] p0669 882-27284

Response of cloud microphysical instruments to aircraft icing conditions
[AD-A111484] p0561 882-30437

Utilization of AESA/PS-94 side-looking airborne radar systems in search and rescue
[AD-A111484] p0228 882-24011

DETERMINATION

HSG-3 structures -- inspection program for aircraft maintenance
[AD-A100523] p0221 882-24393

EE 211 powerplant deterioration -- Review of current situation and lessons learned
[AD-A100523] p0231 882-24393

DETERMINATION
U MEASUREMENT
DEHAB SYSTEMS
U CYLINDRICAL EQUIPMENT
DIAGRAMS
BT BISTATIC DIAGRAMS
BT ST-BISTATIC DIAGRAMS
DIAMOND WINGS
U LOW ASPECT RATIO WINGS
U SWEEP WINGS
DICKE RADIATORS

A study of potentially low cost millimetre-wave radiometric sensors
[AD-A115510] p0151 882-18942

Radioactive measurements at 80 GHz
[AD-A115510] p0151 882-18943

DIELECTRIC TYPES

DIELECTRIC RADARHAGERS
U DIELECTRIC RADARHAGERS
DIELECTRIC MATERIALS
U DIELECTRIC MATERIALS
DIELECTRICS

HT RADIO-active MATERIALS
Leaky wave antenna using an inverted strip
dielectric waveguide -- for aircraft application
[AD-A112373] p0460 882-26554

The AESA/F-16 DRAFICATURE HUD
[AD-A110626] p0608 882-33382

DIEFRACTION PATHS
Geodesic paths of an ellipsoid-mounted antenna
[AD-A110453] p0596 882-32573

DIEFRACTION PATTERNS
Diffraction by a finite strip
[AD-A112373] p0382 882-36065

GTO terrain reflection model with application to its glide slope
[AD-A112373] p0303 882-20166

DIFFUSERS

Optimal subsonic diffuser wall design for arbitrary entry conditions
[AD-A1024519] p0115 882-17800

A-152
Determination of losses in a channel with a sudden expansion behind a diffuser

Experimenal investigation of turbulent wall-jets in the presence of adverse pressure gradients in a rectangular diffuser

Analysis of two-dimensional internal flows using a primitive-variable relaxation Navier-Stokes procedure

Improved vane-island diffusers at high swirl

Design and investigations of a three dimensionally twisted diffuser for centrifugal compressors

Development and application of a performance prediction method for straight rectangular diffuser

Study of controlled diffusion stator blading. I. Aerodynamic and mechanical design report

Survey on diffusion factors and profile losses

Evaluation of profile loss predictions based on diffusion factors

DIFFUSION...

DIGITAL RADAR SYSTEMS

Determination of losses in a channel with a sudden expansion behind a diffuser

Experimenal investigation of turbulent wall-jets in the presence of adverse pressure gradients in a rectangular diffuser

Analysis of two-dimensional internal flows using a primitive-variable relaxation Navier-Stokes procedure

Improved vane-island diffusers at high swirl

Design and investigations of a three dimensionally twisted diffuser for centrifugal compressors

Development and application of a performance prediction method for straight rectangular diffuser

Study of controlled diffusion stator blading. I. Aerodynamic and mechanical design report

Survey on diffusion factors and profile losses

Evaluation of profile loss predictions based on diffusion factors

DIFFUSION BONDING

DIGITAL RADAR SYSTEMS

Determination of losses in a channel with a sudden expansion behind a diffuser

Experimenal investigation of turbulent wall-jets in the presence of adverse pressure gradients in a rectangular diffuser

Analysis of two-dimensional internal flows using a primitive-variable relaxation Navier-Stokes procedure

Improved vane-island diffusers at high swirl

Design and investigations of a three dimensionally twisted diffuser for centrifugal compressors

Development and application of a performance prediction method for straight rectangular diffuser

Study of controlled diffusion stator blading. I. Aerodynamic and mechanical design report

Survey on diffusion factors and profile losses

Evaluation of profile loss predictions based on diffusion factors

DIFFUSION BONDING

DIFFUSION WELDING

DIFFUSION EFFECT

DIFFUSION ELECTRODES

Unsolved problems of nickel cadmium batteries

DIFFUSION FLAMES

Widely-spaced co-axial jet, diffusion-flame combustor - Isothermal flow calculations using the two-equation turbulence model

NOx formation in flat, laminar, opposed jet methane diffusion flames

Chemistry of combustion of fuel-water mixtures

DIFFUSION WELDING

Diffusion bonding in superplastic forming/diffusion bonding

Metal honeycomb to porous wireframe substrate diffusion bond evaluation

Evaluation of superplastic forming and co-diffusion bonding of Ti-6Al-4V titanium alloy expanded sandwich structures

Space/DB titanium concepts for structural efficiency for SC

SP/DB titanium LPC porous panel concept

Laminate flow control SP/DB feasibility demonstration

DIFFUSION COMPOUNDS

DIFFUSION EFFECT

DIFFUSION ELECTRODES

DIFFUSION FLAMES

Widely-spaced co-axial jet, diffusion-flame combustor - Isothermal flow calculations using the two-equation turbulence model

NOx formation in flat, laminar, opposed jet methane diffusion flames

Chemistry of combustion of fuel-water mixtures

DIFFUSION WELDING

Diffusion bonding in superplastic forming/diffusion bonding

Metal honeycomb to porous wireframe substrate diffusion bond evaluation

Evaluation of superplastic forming and co-diffusion bonding of Ti-6Al-4V titanium alloy expanded sandwich structures

Space/DB titanium concepts for structural efficiency for SC

SP/DB titanium LPC porous panel concept

Laminate flow control SP/DB feasibility demonstration

DIFFUSION COMPOUNDS

DIFFUSION EFFECT

DIFFUSION ELECTRODES

DIFFUSION FLAMES

Widely-spaced co-axial jet, diffusion-flame combustor - Isothermal flow calculations using the two-equation turbulence model

NOx formation in flat, laminar, opposed jet methane diffusion flames

Chemistry of combustion of fuel-water mixtures

DIFFUSION WELDING

Diffusion bonding in superplastic forming/diffusion bonding

Metal honeycomb to porous wireframe substrate diffusion bond evaluation

Evaluation of superplastic forming and co-diffusion bonding of Ti-6Al-4V titanium alloy expanded sandwich structures

Space/DB titanium concepts for structural efficiency for SC

SP/DB titanium LPC porous panel concept

Laminate flow control SP/DB feasibility demonstration
DIGITAL SIMULATION

A new approach to radar plot extraction for ATC applications
Tactical Radar Threat Generator system
Sanctuary radar -- with digital processor for Doppler filtering and pulse compression
Simulation of modern radar installations in full-motion flight and tactics simulators
RADAR DESIGN 81-1103
Radar for UMA
A new class of routing protocols for a proposed computer network linking tactical radar sites

DIGITAL SIMULATION

Real-time, on-line digital simulation of optimum maneuvers of supersonic aircraft
A failure detection and isolation system for tactical aircraft with separated I/Os
Digital simulation of aircraft electrical generating system by means of Sceptre program
General purpose real-time interaction panel for digital simulation of flight control systems
Widely-spaced co-axial jet, diffusion-flame combustor isothermal flow calculations using the two-equation turbulence model
Real-Time Simulation Computation System --- for digital flight simulation of research aircraft
Requirements regarding digital external view systems for full motion flight and tactics simulators
The effects on simulators of advances in aircraft technology
Advancements in real-time engine simulation technology --- of digital electronic aircraft engine controls
Digital computer simulation of modern aeronautical digital communication systems
Simulation in connection with the development of the Alpha Jet aircraft
A real time Pegasus propulsion system model for VSTOL piloted simulation evaluation
Application of integration algorithms in a parallel processing environment for the simulation of jet engines
The assessment of aircraft combat effectiveness using a new computational method
Evaluation of direct force node fighters by combat simulation
Design of advanced digital flight control systems via Command Generator Tracker (CGT) synthesis

DIGITAL NAVIGATION

HT DIGITAL RADAR SYSTEMS
The all digital military aircraft
The digital civil aircraft
The certification of digital systems
Digital avionics systems -- The BAP experience

A-154
Computer graphics for aircraft control
(AIAA 81-2313) p0051 A82-13515
An advanced programmable/reconfigurable color
graphic display system for crew station
technology research
(AIAA 81-2316) p0051 A82-13516
Application of a microprocessor controlled cockpit
display for enhanced pilot control of flight
test scenarios
(AIAA PAPER 81-2510) p0057 A82-13908
A unique integrated flight testing facility for
advanced control/display research
(AIAA PAPER 81-2490) p0058 A82-13919
The development and use of a computer-interactive
data acquisition and display system in a flight
environment
(AIAA PAPER 81-2371) p0060 A82-13946
The integration of control and display concepts
for improved pilot situational awareness
A standard control display unit for multi-aircraft
helicopter cockpits
(AIAA 81-2305) p0069 A82-13972
Software considerations in the design of computer
generated flight displays
A methodology for missile launch envelope display
evaluation
Airborne color CRT displays
The Maneuvering Flight Path Display - A flight
trajectory solution display concept
Computer image generation for flight simulation
Computer-animated predictive displays for
microwave landing approaches
Experimental evaluation of a perspective tunnel
display for three-dimensional helicopter
approaches
Data base generation for digital external view
systems
The use of dynamic mock-ups in the design of
advanced systems - USN's Digital Avionic
Information System and NAYT's Advanced
Integrated Display System
Combined multisensor displays - Image
preprocessing for shape coding to reduce pilot
workload
Loran for precise position location - The VIOM-AV
system
Advanced electronic displays and their potential
in future transport aircraft
Electronic flight instrument system /EFIS/, the
instrumentation of the 1980s
Advanced display-control concepts for power plant
operation
Effect of contrast on space perception in TV
displays of the external scene observed by the
pilot - German book
The detection of low level wind shear - 12
Analysis of in-trail following dynamics of
CH2-equipped aircraft - Cockpit Displays of
Traffic Information
(AIAA PAPER 82-1330) p0088 A82-39107
Conceptual design of the LNX integrated cockpit
(AIAA PAPER 82-1330) p0088 A82-39107
Future helicopter cockpit design
Evaluation of an automatic subsystem parameter
monitor --- for aircraft
Design and construction of a flexible avionic
electronic display device --- for flight control
The evolution of display formats for advanced
fighters using multiscope color CRT displays
Visual scene simulation concerning the landing of
sporting aircraft in connection with
investigations regarding the control and
learning behavior of the pilot - German thesis
New image generators for the next generation of
civil aircraft
Electronic master monitor and advisory display
system, data transmission study
Electronic master monitor and advisory display
system, human engineering summary report
Electronic Master Monitor and Advisory Display
System (EMADS)
The impact of new guidance and control systems on
military aircraft cockpit design
Electronic flight deck displays for military
transport aircraft
Color CRT displays for the cockpit
Integration of controls and displays in US Army
helicopter cockpits
A standard control display unit for multi-aircraft
application
Tanker avionics and aircrew complement evaluation
P/A 18 Hornet crew station
Electronic master monitor and advisory display
system test and demonstration report
A prototype interface unit for microprocessor
based Loran-C receiver
A general aviation simulator evaluation of a
carrier-enhanced instrument landing system display
Buoyedged microcomputer hardware and software
topics, 1981: Proceedings of the 4th NOLM
HIL-SPEC Computer User Group Conference
System for providing an integrated display of
instantaneous information relative to aircraft
attitude, heading, altitude, and horizontal
direction
Aircraft alerting system standards study. Volume 2:
Aircraft alerting system design
guidelines
The multi mode matrix flat panel display:
Technology and applications
Analytical study of cockpit information requirements
Descent-rate cuing for carrier landings: Effects
of display gain, display noise and aircraft type
Transport aircraft cockpit standardization
(Federal Aviation regulations part 25)
Simulator study of a pictorial display for general
aviation instrument flight
Satellite display for enhanced pilot control of flight
test maneuvers
Integration of controls and displays in U.S. Army
helicopter cockpits
Aircraft interrogation and display system: A
standard control display unit for multi-aircraft
application
The multi mode matrix flat panel display:
Technology and applications
stand and their comparison with theoretical results

An accurate method for evaluating the kernel of the integral equation relating lift to downwash
in unsteady potential flow [NASA-TR-81272]
p0363 882-23194

DRAG

MT AERODYNAMIC DRAG
MT FRICTION DRAG
MT INTERFERENCE DRAG
MT MINIMUM DRAG
MT PRESSURE DRAG
MT SUPERSTRUCT DRAG
MT VISCOUS DRAG

Preliminary investigation of effects of heavy rain on the performance of aircraft
[AD-A115046]
p0557 882-30293

Kevlar/Fiber-15 reduced drag DC-9 reverse airframe
facing
[NASA-CE-165448]
p0571 882-31448

DRAG BALANCE
U AEROBALANCE
U LIFT DRAG RATIO

DRAG DEVICES

MT AERODYNAMIC BRACKETS
MT LEADING EDGE SLATS
MT SPLITS FLAPS
MT SPOILERS
MT TRAILING-EDGE FLAPS
MT WING FLAPS

DRAG EFFECT
U DRAG

DRAG MEASUREMENT

Determination of the trimmed drag of an aircraft
[IAIA PAPER 81-1939]
p0007 882-10417

Model testing techniques for measuring inlet drag
[AD-A119583]
p0095 882-13084

Wind tunnel investigations of sailplane fuselage configurations with different leading and trailing edge settings
[AD-A115046]
p0364 882-22300

EASA vertical drag test report - rotor systems
 research aircraft [NASA-CE-66350]
p0587 882-32341

DRAG REDUCTION

Reductions in parachute drag due to forebody wake effects
[IAIA PAPER 81-1939]
p0070 882-19478

Three-dimensional calculation of the flow in Helicopter air intakes
[ONYERA, TP NO. 1981-124]
p0164 882-19740

Wing-canard aerodynamics at transonic speeds - fundamental considerations on minimum drag
[NASA PAPER 82-0097]
p0183 882-22046

Aerodynamic characteristics of maneuvering flaps
[NASA PAPER 82-0097]
p0185 882-22110

Fuel-efficient windshields for transport, commuter and business aircraft
[IAIA PAPER 81-1939]
p0226 882-24304

Airfoil surface coatings for drag reduction/erosion protection
[SAB PAPER 111070]
p0232 882-24401

Selected results of the F-15 propulsion interactions program
[IAIA PAPER 82-1041]
p0415 882-34976

A series of airfoils designed by transonic drag minimization for General Learjet aircraft
[IAIA PAPER 82-1041]
p0432 882-35565

Kevlar/Fiber-15 polyethylene matrix composite for a complex shaped DC-9 drag reduction fairing
[IAIA PAPER 82-1041]
p0437 882-37670

Development and flight test evaluation of a pitch stability augmentation system for a relaxed stability L-1011
[IAIA PAPER 82-1297]
p0487 882-39004

The use of small strakes to reduce interference drag of a low wing, twin engine airplane
[IAIA PAPER 82-1297]
p0487 882-39100

NASA research on viscous drag reduction
p0505 882-40896

Optimization of canard configurations - an integrated approach and practical drag estimation method
p0517 882-41023

Minimum induced drag of canard configurations
p0518 882-41116

Taking the drag out of booms
p0548 882-42849

The principles and methods for shaping the wing root regions of a wing-body combination at transonic and lower supersonic speeds
p0603 882-11016

Comparison of experimental and theoretical turbulence reduction characteristics for screens, honeycomb, and honeycomb-screen combinations
[AD-A115046]
p0131 882-14055

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]
p0145 882-15076

Experimental study of delta wing leading-edge devices for drag reduction at high lift - conducted in Langley 7- by 10-foot high speed tunnel
p0198 882-17125

Developments in rotary wing aircraft aerodynamics
p0245 882-18120

Laminar airfoils for transport aircraft
[ESA-TP-680]
p0252 882-18190

On the design of some airfoils for sailplane applications - additions to existing wings for inflight testing
[VT-LE-326]
p0265 882-19213

Investigation of passive shock wave-boundary layer control for transonic airfoil drag reduction
[NASA-CE-166044]
p0399 882-22209

Drag reduction using pneumatic turbulators -
laminar airfoils
[DPLTR-FS-81-33]
p0350 882-22223

Automated design of minimum drag light aircraft fuselages and nacelles
[AD-A119583]
p0168 882-23238

Aerodynamics of aircraft: Aircraft energy efficiency
[NASA-FACTS-94/8-81]
p0407 882-25241

Reduction in parasite drag due to foreshock wave effects
[DBB-030124]
p0567 882-31309

Investigation of the interference effects of mixed flow long duct nacelles on a DC-10 wing
[NASA-CE-159202]
p0586 882-32319

NASA research on viscous drag reductions
[NASA-CE-84518]
p0604 882-33344

DRAG DEVICES

U SHARKS (FOR ARRESTING MOTION)

DRAWINGS

MT ENGINEERING DRAWINGS

Y/STOL tilt rotor research aircraft. Volume 4: CPF technical data
[NASA-CE-166350]
p0395 882-24197

NADBUBES

U TONED BOOMS

DRONE AIRCRAFT

Development of a nylon-Kevlar recovery system for the CL-289 /AW/USD 502/ surveillance drone
[IAIA PAPER 81-1952]
p0008 882-10427

Aquila - Robot eye in the sky
p0584 882-48025

A design for a 32-channel multiplexer - - - - for unmanned aircraft navigation sensors
[BAA-TR-HAD-NAV-145]
p0259 882-18503

DRONE HELICOPTERS

U DRONE AIRCRAFT

U HELICOPTERS

U DRONE HELICOPTER AIRCRAFT

U DRONE HELICOPTERS

U DRONE AIRCRAFT

U DRONE HELICOPTERS

PDF FILE
### SUBJECT INDEX

**Plan-Jet Airblast Atomization of Alternative Liquid Petroleum Fuels Under High Ambient Air Pressure Conditions**

[AIAA Paper 82-02-272] p0420 882-35293

**DROP TESTS**

The constricted rigging line trials technique for assessing the dynamic characteristics of parachutes


Structural design of a swanbent landing gear for the AH-64 Attack Helicopter

[8052 882-60547] p0420 882-35293

**DROP WEIGHT TESTS**

**DROPS (LIQUIDS)**

Aircraft measurements of icing in supercooled and water droplet ice crystal clouds

[8433 882-36054] p0433 882-36054

The Farman Space Flight Center KC-135 zero gravity test program for FY 1981

[NASA-TP-82578] p0058 882-26350

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

[NASA-C-169246] p0560 882-30432

**DFT FRICTION**

Mechanism for the elimination of instability in a slurry problem

[8105 882-16289] p0420 882-35293

Dry friction damping mechanisms in engine blades

[AIAA Paper 82-07-162] p0926 882-35383

**DTFB-111 GROUND EFFECT MACHINE**

U GROUND EFFECT MACHINE

**DTFB-430 GROUND EFFECT MACHINE**

U GROUND EFFECT MACHINE

**DUAL WING CONFIGURATIONS**

Dual wing, swept forward swept rearward wing, and single wing design optimization for high performance business airplanes

[8058 882-60931] p0420 882-60931

Optimization and performance calculation of dual-rotation propellers

[NASA-TP-1948] p0131 882-11049

**DUOT GEOMETRY**

Influence of exit impedance on finite difference solutions of transient acoustic mode propagation in ducts


Effects of intake geometry on circular pitot intake performance at zero and low forward speeds

[8009 882-13070] p0093 882-13070

Effect of vacuum exhaust pressure on the performance of N5 ducts at high O-field

[NASA-Tn-02750] p0101 882-13908

Energy efficient engine: Turbine transition duct model technology report

[NASA-C-167996] p0610 882-33394

**DOUCED BOOKS**

Aerodynamic properties of turbofan inlets

[NASA-C-169016] p0462 882-27090

Long duct nacelle aerodynamic development for DC-10 derivatives

[NASA-C-159271] p0586 882-32315

**DOUCED PAPERS**

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

[77-8011] p0270 882-19956

Acoustic similarity laws for centrifugal fans

[75-PP-712] p0203 882-33172

Noise reduction in centrifugal fans by the use of blades/4 resonators

[75-PP-723] p0603 882-33173

**DOUCED FLOW**

An ejector augmented choking valve for the directing and control of inlet and bleed duct flows

[AIAA 82-0575] p0236 882-24659

An investigation of the swirl in an S-duct

[AIAA 82-13125] p0297 882-28318

**DTX ACUSTIC DUCTS**

**DTX AIR DUCTS**

Turboprop and turbojet ejector optimization

[8095 882-22174] p0362 882-23174

Sound transmission through ducts and aircraft noise prediction, volume 1

[8057 882-115783] p0062 882-33164

**DEHAY LOADS**

U OUTPUT

**DUGS AND WIND SHEAR MECHANISM**

**DUPLIX OPERATIONS**

An on board supervisory system for applications on space missions


**DURABILITY**

Durability and damage tolerance control plans for USAP aircraft

[AIAA 82-0679] p0380 882-30432

**DYNAMICS**

Turbine surface treatments for adhesive bonding

[NASA-C-114710] p0560 882-30378

**DYNA TOLOATION**

U TOPIC

**DYNAMIC CHARACTERISTICS**

B AERODYNAMIC DRAG

B AERODYNAMIC STABILITY

B AIRCRAFT STABILITY

B ATTITUDE STABILITY

B BOUNDARY LAYER STABILITY

B COMBUSTION STABILITY

B CONTROL STABILITY

B DIRECTIONAL STABILITY

B DRY

B DYNAMIC PRESSURE

B DYNAMIC STABILITY

B FLAME STABILITY

B FLOW CHARACTERISTICS

B FLOW DISTRIBUTION

B FLOW VOLUMETRIC

B FLOW VELOCITY

B FREQUENCY STABILITY

B FREQUENCY DRAG

B GYROSCOPIC STABILITY

B GYROSCOPIC DRAG

B HANDLING QUALITY

B HANDLING QUALITY DRAG

B INTERFERENCE DRAG

B INTEREIIENCE LIFT

B JET LIFT

B LATERAL STABILITY

B LIFT

B LONGITUDINAL STABILITY

B LOW SPEED STABILITY

B MAXIMUM DRAG

B MOTION STABILITY

B PRESSURE DRAG

B ROTARY STABILITY

B ROCKER LIFT

B SUPERSONIC DRAG

B TRANSIENT RESPONSE

A study of the techniques of dynamic analysis of helicopter type structures

[8046 882-10189] p0246 882-10189

Tail rotor studies for satisfactory performance: Strength and dynamic behavior

[8018-210-168] p0353 882-22258

Plow-lag-torsional dynamics of extensional and inextensional rotor blades in hover and forward flight


Design of helicopter rotor blades for optimum dynamic characteristics


**DYNAMIC CONTROL**

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

[8044 882-13125] p0420 882-35293

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

[AIAA 81-2238] p0045 882-13666

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

[8033 882-29382] p0333 882-29382

The need for multivariable design and analysis techniques

[8029 882-10049] p0297 882-10049
An introduction to stochastic optimal control theory

DYNAMIC LOADS

DYNAMIC MODELS

Performance estimation from non-steady manoeuvres

Development of a correlated finite element dynamic model of a complete aero engine

Application of structural optimisation technique to reduce the external vibrations of a gas-turbine engine

Analysis of aircraft dynamic behaviour in a crash environment

The maximum flying range problem for an aircraft

Determination of in-flight helicopter loads and vibration

Evaluation and wind tunnel tests of the 4,000 Ib loadings

Pneumatic tire model for aircraft simulation

New holding method of three-dimensional hollow photoelastic model and centrifugal stress analysis of an cooled turbine blade-typed (NAL-TB-4277)

Analysis of aircraft dynamic behavior as a crash

The maximum flying range problem for an aircraft

DYNAMIC PRESSURE

Wind tunnel tests of ejection seat for high dynamic pressure escape

Gunfire blast pressure predictions

Static and unsteady pressure measurements on a 50 degree clipped delta wing at M = 0.9 --- conducted in the Langley Transonic Dynamics Tunnel (NAL-TB-62997)

DYNAMIC PROPERTIES

U DYNAMIC CHARACTERISTICS

Dynamic response of aircraft structure to gun shock loads

DYNAMIC RESPONSE

Dynamic response of aircraft structure to gun shock loads

Analysis of aircraft dynamic behavior as a crash

Performance estimation from non-steady manoeuvres

Development of a correlated finite element dynamic model of a complete aero engine

Application of structural optimisation technique to reduce the external vibrations of a gas-turbine engine

Analysis of aircraft dynamic behaviour in a crash environment

The maximum flying range problem for an aircraft

DYNAMIC PRESSURE

Wind tunnel tests of ejection seat for high dynamic pressure escape

Gunfire blast pressure predictions

Static and unsteady pressure measurements on a 50 degree clipped delta wing at M = 0.9 --- conducted in the Langley Transonic Dynamics Tunnel (NAL-TB-62997)

DYNAMIC PROPERTIES

U DYNAMIC CHARACTERISTICS

Dynamic response of aircraft structure to gun shock loads

DYNAMIC RESPONSE

Dynamic response of aircraft structure to gun shock loads

DYNAMIC RESPONSE

Dynamic response of aircraft structure to gun shock loads

Optimum journal bearing parameters for maximum rotor unbalance response in synchronous whirl

An investigation of dual mode phenomena in a sustained bladed-disk

A parametric study of dynamic response of a discrete model of turbocharger bladed disk

SUBJECT INDEX

[ASME PAPER 81-DET-137] p0162 A82-19349

The dynamic behaviour of propeller accelerometers

Applications of adaptive control systems --- to aircraft design, industrial processes and electrical drives

Experimental stress analysis of a thin walled pressurized torus loaded by contact with a plate --- dynamic response of aircraft tires

Evaluation of four subcritical response methods for on-line prediction of flutter onset in wind-tunnel tests

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

A nonlinear response analysis for coupled rotor-fuselage systems

Dynamic energy transfer between wind and aircraft

A method for determination of the aeroelastic behavior of aircraft with active control systems

A preliminary experimental investigation of the response of a turbojet engine to inlet pressure distortion

Evaluation and wind tunnel tests of the 4,000 Ib (noseal-force) pitch/yaw and roll dynamic stability balance systems for measuring direct, cross, and cross-coupling derivatives (AD-A105122)

Estimation methods for the determination of dynamic responses of aircraft --- to random loads

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

Numerical and flight simulator test of the flight deterioration concept

Analysis methods for predicting structural response to projectile impact

CF6 jet engine performance improvement: High pressure turbine roundness

Problems of engine response during transient maneuvers

Rotor model for the verification of computational methods

Dynamics of aircraft aitkaskid braking systems --- conducted at the Langley aircraft landing loads and traction facility

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

Acoustic fatigue endurance test of 0SB flat structure models at elevated temperature

Vibration of structures excited acoustically

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

Dynamic Environmental Qualification Techniques --- conference

Development and use of dynamic qualification standards for Air Force stores

Qualification of equipment for gunfire induced vibration

Development of vibration qualification test spectra for the F-15 aircraft

Application of modal synthesis techniques for the dynamic qualification of wings with stores

A-162
DINABOBETBBS

DIIABIC TESTS

DZBABXC TESTS

The use of dynamometer readings for damping of the natural vibrations of twin-rotor gyrocompasses

DYNAMICS

D  ROTATING GENERATORS

E

EARLY WARNING SYSTEMS
Airborne associative processor /ASPRO/ --- for early warning radar surveillance, control, and applications

AERIAL SURVEY - The Mission System Avionics

Management of a large avionics project

Sea-based remotely piloted vehicles. I - Issuing and concepts

EARTH ATMOSPHERE

EARTH RESOURCES

EARTH OBSERVATIONS (FROM SPACE)

EARTH STRUCTURES

EARTH THREATS

ECONOMIC ANALYSIS

Greenlandair VTOL transportation study

ECONOMIC FACTORS

Adaptation and equipment of aircraft for the fighting of forest fires

AERIAL SURVEY - The Mission System Avionics

AERIAL SURVEY - The Mission System Avionics
<table>
<thead>
<tr>
<th>SUBJECT INDEX</th>
<th>EJECTION SEATS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aeronautical research and development in Europe - Perspectives</td>
<td>NT NOISE EFFICIENCY</td>
</tr>
<tr>
<td>Economic considerations for real-time naval aircraft/atomic distribution</td>
<td>NT POWER EFFICIENCY</td>
</tr>
<tr>
<td>Computer control systems</td>
<td>NT PROPULSIVE EFFICIENCY</td>
</tr>
<tr>
<td>Energy environment study</td>
<td>NT THERMODYNAMIC EFFICIENCY</td>
</tr>
<tr>
<td>[NASA-CE-168548]</td>
<td>NT TRANSMISSION EFFICIENCY</td>
</tr>
<tr>
<td>Value of survivability and recoverability of flight data recorders -</td>
<td></td>
</tr>
<tr>
<td>benefit cost methodology</td>
<td></td>
</tr>
<tr>
<td>Noise and economic characteristics of an advanced</td>
<td></td>
</tr>
<tr>
<td>blended supersonic transport concept</td>
<td></td>
</tr>
<tr>
<td>[NASA-TP-2073]</td>
<td></td>
</tr>
<tr>
<td>Economic Impact</td>
<td></td>
</tr>
<tr>
<td>The FAA's proposed helicopter certification rules</td>
<td></td>
</tr>
<tr>
<td>Kovlas/En-15 reduced drag DC-9 reverser stang</td>
<td></td>
</tr>
<tr>
<td>Emission metric study</td>
<td></td>
</tr>
<tr>
<td>Emission metric study</td>
<td></td>
</tr>
<tr>
<td>BT DYNAMICS (ECONOMICS)</td>
<td></td>
</tr>
<tr>
<td>The influence of aeronautical B6 expenditures upon the productivity of air</td>
<td></td>
</tr>
<tr>
<td>transportation</td>
<td></td>
</tr>
<tr>
<td>[PB81-247140]</td>
<td></td>
</tr>
<tr>
<td>EDDIES</td>
<td></td>
</tr>
<tr>
<td>Low-frequency eddy current inspection of aircraft structure</td>
<td></td>
</tr>
<tr>
<td>p0163 AB2-21900</td>
<td></td>
</tr>
<tr>
<td>EDGE DISLOCATIONS</td>
<td></td>
</tr>
<tr>
<td>Crack edge instability - A criterion for safe crack propagation limit in thin</td>
<td></td>
</tr>
<tr>
<td>sheets</td>
<td></td>
</tr>
<tr>
<td>p0110 AB2-17243</td>
<td></td>
</tr>
<tr>
<td>EDGE LOADING</td>
<td></td>
</tr>
<tr>
<td>Aeroacoustic theory for noncompact wing-gust interaction</td>
<td></td>
</tr>
<tr>
<td>[PB82-81-7]</td>
<td></td>
</tr>
<tr>
<td>Prediction of wing side-edge suction forces and maximum inviscid lift</td>
<td></td>
</tr>
<tr>
<td>p0038 AB2-11071</td>
<td></td>
</tr>
<tr>
<td>p0403 AB2-25192</td>
<td></td>
</tr>
<tr>
<td>EDGES</td>
<td></td>
</tr>
<tr>
<td>NT BLUNT LEADING EDGES</td>
<td></td>
</tr>
<tr>
<td>NT LEADING EDGES</td>
<td></td>
</tr>
<tr>
<td>NT SHARP LEADING EDGES</td>
<td></td>
</tr>
<tr>
<td>NT TRAILING EDGES</td>
<td></td>
</tr>
<tr>
<td>EDUCATION</td>
<td></td>
</tr>
<tr>
<td>NT FLIGHT TRAINING</td>
<td></td>
</tr>
<tr>
<td>NT PILOT TRAINING</td>
<td></td>
</tr>
<tr>
<td>NT SPACE FLIGHT TRAINING</td>
<td></td>
</tr>
<tr>
<td>Development of aircraft production engineering discipline at lift, Bombay</td>
<td></td>
</tr>
<tr>
<td>p0013 AB2-11317</td>
<td></td>
</tr>
<tr>
<td>Aerospace engineers: We're tomorrow-minded people</td>
<td></td>
</tr>
<tr>
<td>High-altitude imagery user guide</td>
<td></td>
</tr>
<tr>
<td>[PB82-158353]</td>
<td></td>
</tr>
<tr>
<td>System efficiency</td>
<td></td>
</tr>
<tr>
<td>AB2-5058 W02-05845</td>
<td></td>
</tr>
<tr>
<td>AB2-5062 W02-30608</td>
<td></td>
</tr>
<tr>
<td>EFFECTIVE PERCEIVED NOISE LEVELS</td>
<td></td>
</tr>
<tr>
<td>Comparing the relationships between noise level and annoyance in different</td>
<td></td>
</tr>
<tr>
<td>surveys - A railway noise vs. aircraft and road traffic comparisons</td>
<td></td>
</tr>
<tr>
<td>p0329 AB2-29165</td>
<td></td>
</tr>
<tr>
<td>Airscrew industry and community noise</td>
<td></td>
</tr>
<tr>
<td>High-altitude imagery user guide</td>
<td></td>
</tr>
<tr>
<td>[PB82-158353]</td>
<td></td>
</tr>
<tr>
<td>SEL and EPF1 noise duration coefficients for the 767 and T-38 aircraft</td>
<td></td>
</tr>
<tr>
<td>[NASA-TE-83214]</td>
<td></td>
</tr>
<tr>
<td>Airscrew industry and community noise</td>
<td></td>
</tr>
<tr>
<td>[PB82-158353]</td>
<td></td>
</tr>
<tr>
<td>The annoyance of impulsive helicopter noise</td>
<td></td>
</tr>
<tr>
<td>[NASA-CE-169122]</td>
<td></td>
</tr>
<tr>
<td>System efficiency</td>
<td></td>
</tr>
<tr>
<td>NT COST EFFECTIVENESS</td>
<td></td>
</tr>
<tr>
<td>NT SYSTEM EFFECTIVENESS</td>
<td></td>
</tr>
<tr>
<td>The annoyance of aircraft combat effectiveness using a new computational</td>
<td></td>
</tr>
<tr>
<td>method</td>
<td></td>
</tr>
<tr>
<td>Influence of maneuverability on helicopter combat</td>
<td></td>
</tr>
<tr>
<td>effectiveness</td>
<td></td>
</tr>
<tr>
<td>p0348 AB2-22203</td>
<td></td>
</tr>
<tr>
<td>EFFECTORS</td>
<td></td>
</tr>
<tr>
<td>NT CONTROL EQUIPMENT EFFICIENCY</td>
<td></td>
</tr>
<tr>
<td>NT COMBUSTION EFFICIENCY</td>
<td></td>
</tr>
<tr>
<td>NT COMPRESSOR EFFICIENCY</td>
<td></td>
</tr>
<tr>
<td>NT ENERG CONVERSION EFFICIENCY</td>
<td></td>
</tr>
<tr>
<td>NT MJZ frontal efficiency</td>
<td></td>
</tr>
<tr>
<td>NT POWER EFFICIENCY</td>
<td></td>
</tr>
<tr>
<td>NT PROPULSIVE EFFICIENCY</td>
<td></td>
</tr>
<tr>
<td>NT THERMODYNAMIC EFFICIENCY</td>
<td></td>
</tr>
<tr>
<td>NT TRANSMISSION EFFICIENCY</td>
<td></td>
</tr>
<tr>
<td>EMISSIONS</td>
<td></td>
</tr>
<tr>
<td>Emergency in-flight egress for general aviation aircraft</td>
<td></td>
</tr>
<tr>
<td>Lear Fan 2100 egress system</td>
<td>p0077 AB2-14953</td>
</tr>
<tr>
<td>EMISSIONS FUNCTION</td>
<td></td>
</tr>
<tr>
<td>O EIGENVECTORS</td>
<td></td>
</tr>
<tr>
<td>O EIGENVALUES</td>
<td></td>
</tr>
<tr>
<td>O EIGENVALUES</td>
<td></td>
</tr>
<tr>
<td>O EIGENVALUES</td>
<td></td>
</tr>
<tr>
<td>EMISSIONS FUNCTION</td>
<td></td>
</tr>
<tr>
<td>Use of entire exoskeleton assignment with high-gain error-actuated flight</td>
<td></td>
</tr>
<tr>
<td>control systems</td>
<td></td>
</tr>
<tr>
<td>[AB-1110998]</td>
<td>p0456 AB2-26318</td>
</tr>
<tr>
<td>EMISSIONS FUNCTION</td>
<td></td>
</tr>
<tr>
<td>Use of entire exoskeleton assignment with high-gain error-actuated flight</td>
<td></td>
</tr>
<tr>
<td>control systems</td>
<td></td>
</tr>
<tr>
<td>[AB-1110998]</td>
<td>p0456 AB2-26318</td>
</tr>
<tr>
<td>EJECTION INJURIES</td>
<td></td>
</tr>
<tr>
<td>Wind tunnel tests of ejection seat for high</td>
<td></td>
</tr>
<tr>
<td>dynamic pressure escape</td>
<td></td>
</tr>
<tr>
<td>p0079 AB2-14979</td>
<td></td>
</tr>
<tr>
<td>EJECTION SEATS</td>
<td></td>
</tr>
<tr>
<td>Post ejection survival</td>
<td></td>
</tr>
<tr>
<td>USAF ACES II progress report --- Advanced Concept</td>
<td></td>
</tr>
<tr>
<td>Ejection Seat performance</td>
<td></td>
</tr>
<tr>
<td>p0444 AB2-37969</td>
<td></td>
</tr>
<tr>
<td>Problems with the use of percentages in the</td>
<td></td>
</tr>
<tr>
<td>analysis of AEES data - Aircrew Automated Ejection Systems</td>
<td></td>
</tr>
<tr>
<td>Development and construction of pilot ejection</td>
<td></td>
</tr>
<tr>
<td>seats in Germany from 1930-1945</td>
<td></td>
</tr>
<tr>
<td>[DFVLR-PR-81-04]</td>
<td>p0026 AB2-10206</td>
</tr>
<tr>
<td>Physiological acceptability tests of an</td>
<td></td>
</tr>
<tr>
<td>ejection seat: Second physiological acceptability demonstration</td>
<td></td>
</tr>
<tr>
<td>[AD-1108686]</td>
<td>p0253 AB2-18194</td>
</tr>
<tr>
<td>On the aerodynamics of windblast</td>
<td>[AD-1110495]</td>
</tr>
<tr>
<td>p0405 AB2-25221</td>
<td></td>
</tr>
<tr>
<td>EJECTION SEATS</td>
<td></td>
</tr>
<tr>
<td>NT FLYING EJECTION SEATS</td>
<td></td>
</tr>
<tr>
<td>Escape systems decelerator technology</td>
<td></td>
</tr>
<tr>
<td>[AIAA PAPER 81-191]</td>
<td></td>
</tr>
<tr>
<td>Testing of the SJL-5A ejection seat for the F/A-18</td>
<td></td>
</tr>
<tr>
<td>[NCIAB] AB2-13966</td>
<td></td>
</tr>
<tr>
<td>Testing of the SJL-5A ejection seat for the F/A-18</td>
<td></td>
</tr>
<tr>
<td>[NCIAB] AB2-13966</td>
<td></td>
</tr>
<tr>
<td>Analysis of escape systems at 607 KIAS</td>
<td></td>
</tr>
<tr>
<td>[DFVLR-PR-81-04]</td>
<td>p0078 AB2-14955</td>
</tr>
<tr>
<td>Wind tunnel tests of ejection seat for high</td>
<td></td>
</tr>
<tr>
<td>dynamic pressure escape</td>
<td></td>
</tr>
<tr>
<td>p0079 AB2-14970</td>
<td></td>
</tr>
<tr>
<td>Wind tunnel tests of ejection seat for high</td>
<td></td>
</tr>
<tr>
<td>dynamic pressure escape</td>
<td></td>
</tr>
<tr>
<td>p0078 AB2-14955</td>
<td></td>
</tr>
<tr>
<td>Post ejection survival</td>
<td></td>
</tr>
<tr>
<td>p0080 AB2-14980</td>
<td></td>
</tr>
<tr>
<td>Terrain actuated deployment system --- radar altimeter for non-ejector seat</td>
<td></td>
</tr>
<tr>
<td>separation</td>
<td></td>
</tr>
<tr>
<td>[AIAA PAPER 81-191]</td>
<td>p0080 AB2-14982</td>
</tr>
<tr>
<td>USAF ACES II progress report ----- Advanced Concept</td>
<td></td>
</tr>
<tr>
<td>Ejection Seat performance</td>
<td></td>
</tr>
<tr>
<td>Development and construction of pilot ejection</td>
<td></td>
</tr>
<tr>
<td>seats in Germany from 1930-1945</td>
<td></td>
</tr>
<tr>
<td>[DFVLR-PR-81-04]</td>
<td>p0026 AB2-10206</td>
</tr>
<tr>
<td>A generalized escape system simulation computer program: A user's manual</td>
<td></td>
</tr>
<tr>
<td>[AD-1106512]</td>
<td>p0167 AB2-16055</td>
</tr>
<tr>
<td>Multiple ejection effects analysis</td>
<td></td>
</tr>
<tr>
<td>p0252 AB2-18192</td>
<td></td>
</tr>
</tbody>
</table>
### EJECTORS

Phyiscal acceptability tests of the 53J-5/4 ejection seat: Second physiological acceptance demonstration (AD-A108668) p0253 882-18194 Development of an ejection seat ballast block for the S-3A aircraft (AD-A109806) p0303 882-20161 Development of a supported airbag ejection restraint (SABER) for windshield爆陷 (AD-A109907) p0303 882-20162 Development of a backpack survival kit for ejection seats (AD-A111363) p0464 882-27242 Comparative vertical impact testing of the F/F-111 crew restraint system and a proposed modification (AD-A113257) p0522 882-28267 Investigation of aircrew protection during emergency escape at dynamic pressures up to 1600 psi (AD-A111752) p0605 882-33599

### ELASTIC DAMPING

**VISCROELASTIC DAMPING**
- Effect of the blading type on the aerodynamic damping of blade vibrations with allowance for the profile curvature p0127 882-18484 Evaluation of the effect of elastomeric damping material on the stability of a bearingless main rotor system p0280 882-26394 Choice of weight coefficients in the problem of the optimal damping of the elastic oscillations of a wing p0582 882-46608 Design for active and passive flutter suppression and gust alleviation p0100 882-13147

### ELASTIC DEFORMATION

**ELASTIC BENDING**
- On low-speed wind tunnels with deformable boundaries p0018 882-11462 In-flight deflection measurement of the Hi-HAT aeroelastically-tailored wing (AIAA PAPER 81-2629) p0156 882-19211 Method for the measurement of elastic deformations of aircraft models in a wind tunnel p0380 882-34162 Elastic deformation effects on aerodynamic characteristics for a high-aspect-ratio supercritical-wing model (NASA-TM-83266) p0408 882-25210

### ELASTIC RINGS

- Elastic suspension of a wind tunnel test section p0370 882-23363

### ELASTIC MODULUS

- **MOODLES OF ELASTICITY**
  - Elastic properties p0165 882-19928
  - Elastic waves p0334 882-29836
  - Aerodynamic noise p0308 882-34161
  - Aircraft noise p0390 882-34639
  - Vibration waves p0516 882-41009
  - Shock waves p0577 882-45219

### ELASTIC BODIES

- Stability of aeroelastic plates under bending p0334 882-29836
- Thermoelastodynamics p0308 882-34161
- Stability of elastic structures p0390 882-34639
- Calculations of the lift distribution and aerodynamic derivatives of quasi-static elastic aircraft p0516 882-41009
- Reduced nonlinear flight dynamic model of elastic structure aircraft p0577 882-45219

### ELASTIC CONSTRAINTS

- Stability of hypersonic vehicles p0077 882-45219
- Electric equipment p0560 882-30400
- Electric automobiles p0264 882-19205
- Electric batteries p0264 882-19205
- Lead acid batteries p0264 882-19205

### ELASTICITY

- Structure of the stability of aeroelastic plates under bending p0334 882-29836
- Thermoelastodynamics p0308 882-34161
- Stability of elastic structures p0390 882-34639
- Reduced nonlinear flight dynamic model of elastic structure aircraft p0516 882-41009
- Electric equipment p0560 882-30400
- Electric automobiles p0264 882-19205
- Electric batteries p0264 882-19205
- Lead acid batteries p0264 882-19205

---

**SUBJECT INDEX**

ELASTIC DAMPING  
- VISCROELASTIC DAMPING  
  - Effect of the blading type on the aerodynamic damping of blade vibrations with allowance for the profile curvature p0127 882-18484  
  - Evaluation of the effect of elastomeric damping material on the stability of a bearingless main rotor system p0280 882-26394  
  - Choice of weight coefficients in the problem of the optimal damping of the elastic oscillations of a wing p0582 882-46608  
  - Design for active and passive flutter suppression and gust alleviation p0100 882-13147  

ELASTIC DEFORMATION  
- ELASTIC BENDING  
  - On low-speed wind tunnels with deformable boundaries p0018 882-11462  
  - In-flight deflection measurement of the Hi-HAT aeroelastically-tailored wing (AIAA PAPER 81-2629) p0156 882-19211  
  - Method for the measurement of elastic deformations of aircraft models in a wind tunnel p0380 882-34162  
  - Elastic deformation effects on aerodynamic characteristics for a high-aspect-ratio supercritical-wing model (NASA-TM-83266) p0408 882-25210  

ELASTIC RINGS  
- Elastic suspension of a wind tunnel test section p0370 882-23363  

ELASTIC MODULUS  
- MOODLES OF ELASTICITY  
  - Elastic properties p0165 882-19928  
  - Elastic waves p0334 882-29836  
  - Aerodynamic noise p0308 882-34161  
  - Aircraft noise p0390 882-34639  
  - Vibration waves p0516 882-41009  
  - Shock waves p0577 882-45219  

ELASTIC BODIES  
- Stability of aeroelastic plates under bending p0334 882-29836  
- Thermoelastodynamics p0308 882-34161  
- Stability of elastic structures p0390 882-34639  
- Reduced nonlinear flight dynamic model of elastic structure aircraft p0516 882-41009  

ELASTIC CONSTRAINTS  
- Stability of hypersonic vehicles p0077 882-45219  
- Electric equipment p0560 882-30400  
- Electric automobiles p0264 882-19205  
- Electric batteries p0264 882-19205  
- Lead acid batteries p0264 882-19205

---

**A-166**
High speed PUG containment study for VSCF system

Electric flight systems integration

Digital flight controls

Digital flight controls

Electric ECS

Electric flight systems integration

Electric flight systems

Engine technology

Power systems

Electrochemical actuators

Digital flight controls

Electric flight systems integration


Motor technology for electric Remotely Piloted Vehicle (RPV) [AD-A1117732]

ELECTRIC POTENTIAL

A study of the effect of the flight vehicle body potential on the characteristics of ion attitude transmitters


ELECTRIC POWER

Will power-by-wire replace power-by-hydraulics? p.0067 A82-14707

The all electric airplane - its development and logistic support p.0067 A82-14709

ELECTRIC POWER CONVERSION

D ELECTRIC GENERATORS

ELECTRIC POWER PLANTS

MT 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 cuts cost 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 PUG 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 [SAB 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 electrical power systems --- Variable Speed Constant Frequency

Development of accelerated fuel-engines qualification procedures methodology, Volume 1 [AD-A1113461] p.0473 A82-27317

Development of accelerated fuel-engines qualification procedures methodology, Volume 1: Appendices [AD-A1113532]

Delta electrical load analysis C-141B JACC/CF aircraft

ELECTRIC POWER TRANSMISSION

Feasibility study of a 270V dc flat cable aircraft electrical power distributed system [AD-A1110256] p.0528 A82-28552

System data communication structures for active-control transport aircraft, Volume 1 [NASA-Cr-165773-VOL-1] p.0538 A82-29510

ELECTRIC PROPULSION

HT LASER PROPULSION

HT SOLAR ELECTRIC PROPULSION

Electric propulsion for a mav B/F system

ELECTRIC KINES

Transmit measurements under electric pulse excitation in 37 Viggen aircraft [J/AC-C-30243-AJ] p.0370 A82-23409

ELECTRIC KINES

Improvement program for the C-141 Navigation Selector Panel [AD-A1116699] p.0408 A82-25248

ELECTRIC WELDING

HT ELECTRON BEAR WELDING

HT GAS TURBINE ARC WELDING

HT PLASMA ARC WELDING

ELECTRIC WIRE

The use of 'Kapton' polyamide film in aerospace applications [SAB PAPEB 81109] p.0234 A82-29443

ELECTRIC WIRE

U ELECTRIC WIRE

U WIRING

U ELECTRICAL CONDUCTIVITY

U ELECTRICAL RESISTIVITY

ELECTRICAL ENERGY

U ELECTRIC POWER

ELECTRICAL ENGINEERING

Compilation of abstracts of dissertation theses, and research papers submitted by candidates for degrees, 1 October 1979 - 30 September 1980 [AD-A104124] p.0160 B82-13974


ELECTRICAL INSULATION

The use of 'Kapton' polyamide film in aerospace applications [SAB PAPEB 81109] p.0234 A82-29443

ELECTRICAL MEASUREMENT

Electric field detection and ranging of aircraft p.0436 A82-37377

SUBJECT INDEX
ELECTRONIC CONTROL

The effect of critical design parameters on the
Electronic control for small engines
Advanced display-control concepts for power plant
The significance of electronics for air traffic
FILE-IB aircraft flight test program feature
Airborne Electronic Bap Systems. I - Design
Hew ail-electric-system technology
Advanced generating system technology
Thrust management - Current achievements and
Energy management in military combat aircraft
The control of aircraft gas turbines for fuel
economy
The impact of increasing energy costs upon the
design philosophy of avionic fuel management systems
Thrust management - Current achievements and
future developments
Advanced generating system technology
The effect of critical design parameters on the
selection of a VSCF system
Packaging the VSCF system for an aircraft engine
High temperature engine control electronics
Advanced display-control concepts for power plant
operation
Transport engine control design
An advanced helicopter engine control system
Flight evaluation of a digital engine control system in an F-15 airplane
Electronic control for small engines
Reliability design study for a fault-tolerant
electronic engine control
Electronic stabilization of an aircraft
Adaptive fuel control feasibility investigation
Digital full authority controls for helicopter
gas turbines
Engine controls for the 1980s and 1990s
Electrocar electronics stabilization
Advanced aircraft electrical system control
technology demonstrator. Phase I: Requirements
analysis and conceptual design
Electromechanical Actuation Development Program
[AD-A116126]

ELECTRONIC COUNTERMEASURES

AT BROADBAND COUPLING
Design challenges of high performance aircraft POD
EOCS cooling systems -- Electro-
Optical/Countermeasure
[ASEE PAPER 81-8245-6]
Octave bandwith dual polarized antennas
An analysis of antenna communication requirements in fading media
Northrop ECM - From B-18 to P-5E
A/AV/LQ-135 tail warning system follow-on
operational test and evaluation
Acta Aeronautica et Astronautica Simplices
Tag LASERS
The effect of radar scattering on ECM antennas

ELECTRONIC EQUIPMENT TESTS

MT CHARGE COUPLED DEVICES
MT CROSS
MT ELECTRONIC MODULES
MT ELECTRONIC RECORDING SYSTEMS
MT ELECTRONIC TRANSDUCERS
MT LIGHT EMITTING DIODES
MT MINIATURE ELECTRONIC EQUIPMENT
MT PHOTOVOLTAIC CELLS
MT SEMICONDUCTOR DEVICES
MT SOLID STATE DEVICES
MT SPACECRAFT ELECTRONIC EQUIPMENT
MT THERMISTORS
MT TAG LASERS
MT CHARGE COUPLING DEVICES
MT CROSS
MT ELECTRONIC MODULES
MT ELECTRONIC RECORDING SYSTEMS
MT ELECTRONIC TRANSDUCERS
MT LIGHT EMITTING DIODES
MT MINIATURE ELECTRONIC EQUIPMENT
MT PHOTOVOLTAIC CELLS
MT SEMICONDUCTOR DEVICES
MT SOLID STATE DEVICES
MT SPACECRAFT ELECTRONIC EQUIPMENT
MT THERMISTORS
MT TAG LASERS
External vibration test for the Tornado ATS - A
A challenging task

A random vibration test for the evaluation of
stiff sensitive component parts

New all-electric-system technology ---
electroamechanical actuators for aircraft
Airborne Electronic Map System. I - Design
Airborne Electronic Terrain Map System
Very high speed integrated circuits: into the
second generation. II - Enteraging Phase I
Minutes of physical configuration addit for the
F-16 Electronic Warfare Training Device
Reliability, Availability, Maintainability Data
Tracking Plan improved GUARDRAIL 5
Algorithms for an adaptive dynamic window in
electronic map systems
Failure analysis of variable reluctance stepper
motor --- in electronic fuel control system on
jet engine
PLL-I8 aircraft flight test program - Feature
Identification and Location Experiment
NAGA V/STOL Propulsion control analysis - Phase I and
II program status
The significance of electronics for air traffic
control at the present time and in the future
Energy management in military combat aircraft
The control of aircraft gas turbines for fuel
economy
The impact of increasing energy costs upon the
design philosophy of avionic fuel management systems
Thrust management - Current achievements and
future developments
Advanced generating system technology
The effect of critical design parameters on the
selection of a VSCF system
Packaging the VSCF system for an aircraft engine
High temperature engine control electronics
Advanced display-control concepts for power plant
operation
Transport engine control design
An advanced helicopter engine control system
Flight evaluation of a digital engine control system in an F-15 airplane
Electronic control for small engines
Reliability design study for a fault-tolerant
electronic engine control
Electronic stabilization of an aircraft
Adaptive fuel control feasibility investigation
Digital full authority controls for helicopter
gas turbines
Engine controls for the 1980s and 1990s
Electrocar electronics stabilization
Advanced aircraft electrical system control
technology demonstrator. Phase I: Requirements
analysis and conceptual design
Electromechanical Actuation Development Program
[AD-A116126] 

Subject Index

New all-electric-system technology ---
electroamechanical actuators for aircraft
Airborne Electronic Map System. I - Design
Airborne Electronic Terrain Map System
Very high speed integrated circuits: into the
second generation. II - Enteraging Phase I
Minutes of physical configuration addit for the
F-16 Electronic Warfare Training Device
Reliability, Availability, Maintainability Data
Tracking Plan improved GUARDRAIL 5
Algorithms for an adaptive dynamic window in
electronic map systems
Failure analysis of variable reluctance stepper
motor --- in electronic fuel control system on
jet engine
PLL-I8 aircraft flight test program - Feature
Identification and Location Experiment
NAGA V/STOL Propulsion control analysis - Phase I and
II program status
The significance of electronics for air traffic
control at the present time and in the future
Energy management in military combat aircraft
The control of aircraft gas turbines for fuel
economy
The impact of increasing energy costs upon the
design philosophy of avionic fuel management systems
Thrust management - Current achievements and
future developments
Advanced generating system technology
The effect of critical design parameters on the
selection of a VSCF system
Packaging the VSCF system for an aircraft engine
High temperature engine control electronics
Advanced display-control concepts for power plant
operation
Transport engine control design
An advanced helicopter engine control system
Flight evaluation of a digital engine control system in an F-15 airplane
Electronic control for small engines
Reliability design study for a fault-tolerant
electronic engine control
Electronic stabilization of an aircraft
Adaptive fuel control feasibility investigation
Digital full authority controls for helicopter
gas turbines
Engine controls for the 1980s and 1990s
Electrocar electronics stabilization
Advanced aircraft electrical system control
technology demonstrator. Phase I: Requirements
analysis and conceptual design
Electromechanical Actuation Development Program
[AD-A116126] 

A-171
Application of the ABC helicopter to the emergency medical service role
(AIAA Paper 81-2653)
Improvement of a tactical aircraft in emergency relief
(p0157 AB2-19219
An evaluation of helicopter autorotation assist concepts
(p0243 AB2-25499
Reflections on an F-43 in flight emergency
(AD-116073)
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 ACOUSTIC EMISSION
MT LASER EMISSION
MT FLUORESCENCE
MT THERMAL EMISSION
PRODUCTIVE model for jet engine test cell opacity
(AD-117505)
Emission spectra
Evaluation of plasma source spectrometers for the Air Force Oxidation Program
(AD-113809)
Emissometers
U RECORDING INSTRUMENTS
HINTERS
Antenna (selected articles)
(AD-108174)
EROTIONAL FACTORS
Aircraft fire safety
(GA/R-123)
Emissions
Fuel requirements for jet engine smoke reduction
(Agase Paper 82-GT-33)
ENCODING
U CODING
EPISODE ARRAYS
A new end-final ILS glide slope
(p0122 AB2-16143
ENERGY ABSORPTION
Results from tests of three prototype general aviation seats
(Asa-20-04533)
Crashworthy airframe design concepts: Fabrication and testing
(Asa-CR-36000)
ENERGY CONSERVATION
Fuel conservation - DC-9 series 20/30/40
(p0211 AB2-12563
Airplane performance sensitivities to lateral and vertical profiles
(p0033 AB2-15846
Safe and efficient management of energy:
Proceedings of the Thirty-third Annual International Air Safety Seminar, Christchurch, New Zealand, September 15-18, 1980
(p0110 AB2-17276
Why safety - fuel conservation through aircraft safety
(p0110 AB2-17277
Fuel conservation now --- improvements for existing production run transport aircraft
(p0111 AB2-17281
Energy savings with today's technology --- aircraft-fuel management through in-flight monitoring
(p0111 AB2-17282
Energy conservation through airport design and management
(p0112 AB2-17287
Energy management and its impact on avionics:
(p0169 AB2-20513
General aviation fuel conservation in the 1980's
(p0177 AB2-20757
Improvement of fuel economy by flying with maximum rearward-curen-gravity positions
(p0221 AB2-23470
Wind and temperature database for flight planning
(Asa Papers 811066)
Integration of energy management concepts into the flight deck
(Asa Papers 811066)
Management of powerplant maintenance and restoration programs for fuel conservation
(Asa Papers 811052)
Airline fuel saving through J790 engine refurbishment
(Asa Papers 811051)
Principles of efficient energy use at Interflag
(p0380 AB2-33250
A significant role for composite in energy-efficient aircraft
(p0435 AB2-37065
Fuel conservation: The airline - ATC
(p0483 AB2-38044
Third generation turbo fans
(p0511 AB2-40964
Minimum fuel horizontal flight paths in the terminal area
(p0556 AB2-44840
Cost reduction in air transportation --- energy conservation
(SWIS-811-150-1)
Analysis of integrated fuel-efficient, low-noise procedures in terminal-area operations
(AD-0192933)
The use of flight management computers in air carrier operations in the 1980s
(AD-105623)
Selected advanced aerodynamic and active control concepts development
(Asa-CR-3220)
Symposium on commercial-aircraft energy-conservation strategies
(p0141 AB2-15033
Design and testing
(AD-105623)
Aircraft energy conservation during airport ground operations
(p0122 AB2-14071
Development of a low risk augmentation system for an energy efficient transport having relaxed static stability
(Asa-CR-159166)
Integrated energy management study. Energy efficient transport program
(Asa-CR-159890)
The CF6 jet engine performance improvement: Low pressure turbine active clearance control
(p0160 AB2-33933
Aircraft thrust/power management can save defense fuel, reduce engine maintenance costs and improve readiness
(AD-117865)
ENERGY CONVERSION EFFICIENCY
Characteristics and trends of energy consumption in transport missions with aircraft and surface vehicles
(p0009 AB2-10965
Towards maximum power for environmental control in transport aircraft
(Agase Paper 81-28441)
Air transport in the 21st century
(p0111 AB2-10892
ENERGY CONVERSION
(p0383 AB2-33701
Effects of dynamic stall on small wind Energy Conversion System
(p0384 AB2-33707
Open-cycle vapor compression heat pump
(p0249 AB2-11050)
ENERGY CONVERSION EFFICIENCY
A hidden advantage of permanent magnet electrical...
A fuel control system design engineers approach to gas turbine engine computer model validation

Development of a correlated finite element dynamic model of a complete aero engine

A CAE/CAS graphic system with relative data and tolerances

The impact of increasing engine costs upon the design philosophy of avionic fuel management systems

Advanced subsonic transport propulsion

Advanced engine cooling

Reliable power --- Rolls-Boyaice engine design
designs

BB 211 powerplant deterioration - Review of current situations and lessons learned

Management of powerplant maintenance and reconditioning programs for fuel conservatio

Airframe fuel saving through JT9D engine refurbishment

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

Advanced engine technology and its influence on aircraft performance

Sheet materials - Fabrication and joining --- for gas turbine engine components

Future auto engines - Competition heats up

Gas turbine engines used in aviation: Design and construction of components - 5th revised and enlarged edition/ Russian book

Gas turbine aero-thermodynamics with special reference to aircraft propulsion Book

The TH 331, a trump card for Turbosaez

Development of an aircraft engine

Air cooling of gas turbine blades

Selection of a starting system for a low cost single engine fighter aircraft

Ceramic component development for limited-life propulsion engines

Ramco efficient engine/ET technology status

Transport engine control design

Analysis of two-dimensional internal flows using a primitive-variable relaxation Navier-Stokes procedure

NASA Broad Specification Fuels Combustion Technology program - Pratt and Whitney Aircraft Phase I results and status

An experimental investigation of 5-dact diffusers for high-speed propfans
E1GIIE DESIGI COH1D

An experimental investigation of 5-duct diffusers for high-speed propfans

[AIAA PAPEB 82-1123] p0417 A02-35019

Predicting missile peak instantaneous distortion patterns from steady state and turbulence data using a statistical technique

[AIAA PAPEB 82-1065] p0438 A02-37605

A summary of V/STOL inlet analysis methods

[AIAA PAPEB 82-0725] p0034 A02-11043

Effect of a part span variable inlet guide vane on TPU fan performance

[AIAA PAPEB 82-165456] p0088 A02-12075

Aerodynamics of Power Plant Installation

[AGARD-CP-301] p0093 A02-13065

Performance of highly integrated inlets for supersonic aircraft

[AIAA PAPEB 82-13066]

Soane RAM research on shielded and unshielded fanmounted air intakes at subsonic and supersonic speeds

[AIAA PAPEB 82-13068]

Prediction and measurement of time-variant, three-dimensional flows in military aircraft intakes

[AIAA PAPEB 82-13069]

Effect of intake geometry on circular pitot intake performance at zero and low forward speeds

[AIAA PAPEB 82-13070]

Subsonic military aircraft engine intake: An integrated theoretical experiment design

[AIAA PAPEB 82-13073]

The design and development of the F-14 engine air intake

[AIAA PAPEB 82-13074]

Wind tunnel tests of powered models: A comparison of two methods of simulating the jets of jet engines

[AIAA PAPEB 82-13067]

Numerical analysis of the scramjet-inlet flow field by using two-dimensional Navier-Stokes equations

[AIAA PAPEB 82-13142]

System for acquisition and analysis of dynamic tests on air intakes

[AIAA PAPEB 82-14056]

Prediction of sound radiation from different practical jet engine inlets

[AIAA PAPEB 82-16512] p0093 A02-16810

Effects of fan inlet temperature disturbances on the stability of a turbofan engine

[AIAA PAPEB 82-06299] p0256 A02-18222

V/STOL Tandem Fan transition section model test

--- in the Lewis Research Center 10-by-10 foot wind tunnel

[AIAA PAPEB 82-165587] p0312 A02-21158

Development of a convoluted intake seal for model B66 --- V/STOL wind tunnel

[BAA-AUG-162] p0370 A02-23255

Forward velocity effects on fan noise and the suppression characteristics of advanced intakes as measured in the NASA-40 by 80-foot wind tunnel

[AIAA PAPEB 82-152328] p0540 A02-30030

Energy efficient engine: Turbine transition duct technology report

[AIAA PAPEB 82-167996] p0610 A02-33394

ENGINE MONITORING INSTRUMENTS

An experimental investigation of 5-duct diffusers for high-speed propfans

[AIAA PAPEB 82-1123] p0417 A02-35019

P-4 inlet development experience

[AIAA PAPEB 82-47-5] p0419 A02-35728

Small engine inlet air particle separator technology

[AIAA PAPEB 82-44-4] p0524 A02-35299

Prediction of cruise missile inlet peak instantaneous distortion patterns from steady state and turbulence data using a statistical technique

[AIAA PAPEB 82-1065] p0438 A02-37605

A summary of V/STOL inlet analysis methods

[AIAA PAPEB 82-0725] p0034 A02-11043

Effect of a part span variable inlet guide vane on TF34 fan performance

[AIAA PAPEB 82-165456] p0088 A02-12075

Aerodynamics of Power Plant Installation

[AGARD-CP-301] p0093 A02-13065

Performance of highly integrated inlets for supersonic aircraft

[AIAA PAPEB 82-13066]

Soane RAM research on shielded and unshielded fanmounted air intakes at subsonic and supersonic speeds

[AIAA PAPEB 82-13068]

Prediction and measurement of time-variant, three-dimensional flows in military aircraft intakes

[AIAA PAPEB 82-13069]

Effect of intake geometry on circular pitot intake performance at zero and low forward speeds

[AIAA PAPEB 82-13070]

Subsonic military aircraft engine intake: An integrated theoretical experiment design

[AIAA PAPEB 82-13073]

The design and development of the F-14 engine air intake

[AIAA PAPEB 82-13074]

Wind tunnel tests of powered models: A comparison of two methods of simulating the jets of jet engines

[AIAA PAPEB 82-13067]

Numerical analysis of the scramjet-inlet flow field by using two-dimensional Navier-Stokes equations

[AIAA PAPEB 82-13142]

System for acquisition and analysis of dynamic tests on air intakes

[AIAA PAPEB 82-14056]

Prediction of sound radiation from different practical jet engine inlets

[AIAA PAPEB 82-16512] p0093 A02-16810

Effects of fan inlet temperature disturbances on the stability of a turbofan engine

[AIAA PAPEB 82-06299] p0256 A02-18222

V/STOL Tandem Fan transition section model test

--- in the Lewis Research Center 10-by-10 foot wind tunnel

[AIAA PAPEB 82-165587] p0312 A02-21158

Development of a convoluted intake seal for model B66 --- V/STOL wind tunnel

[BAA-AUG-162] p0370 A02-23255

Forward velocity effects on fan noise and the suppression characteristics of advanced intakes as measured in the NASA-40 by 80-foot wind tunnel

[AIAA PAPEB 82-152328] p0540 A02-30030

Energy efficient engine: Turbine transition duct technology report

[AIAA PAPEB 82-167996] p0610 A02-33394

ENGINE MONITORING INSTRUMENTS

An experimental investigation of 5-duct diffusers for high-speed propfans

[AIAA PAPEB 82-1123] p0417 A02-35019

P-4 inlet development experience

[AIAA PAPEB 82-47-5] p0419 A02-35728

Small engine inlet air particle separator technology

[AIAA PAPEB 82-44-4] p0524 A02-35299

Prediction of cruise missile inlet peak instantaneous distortion patterns from steady state and turbulence data using a statistical technique

[AIAA PAPEB 82-1065] p0438 A02-37605

A summary of V/STOL inlet analysis methods

[AIAA PAPEB 82-0725] p0034 A02-11043

Effect of a part span variable inlet guide vane on TF34 fan performance

[AIAA PAPEB 82-165456] p0088 A02-12075

Aerodynamics of Power Plant Installation

[AGARD-CP-301] p0093 A02-13065

Performance of highly integrated inlets for supersonic aircraft

[AIAA PAPEB 82-13066]

Soane RAM research on shielded and unshielded fanmounted air intakes at subsonic and supersonic speeds

[AIAA PAPEB 82-13068]

Prediction and measurement of time-variant, three-dimensional flows in military aircraft intakes

[AIAA PAPEB 82-13069]

Effect of intake geometry on circular pitot intake performance at zero and low forward speeds

[AIAA PAPEB 82-13070]

Subsonic military aircraft engine intake: An integrated theoretical experiment design

[AIAA PAPEB 82-13073]

The design and development of the F-14 engine air intake

[AIAA PAPEB 82-13074]

Wind tunnel tests of powered models: A comparison of two methods of simulating the jets of jet engines

[AIAA PAPEB 82-13067]

Numerical analysis of the scramjet-inlet flow field by using two-dimensional Navier-Stokes equations

[AIAA PAPEB 82-13142]

System for acquisition and analysis of dynamic tests on air intakes

[AIAA PAPEB 82-14056]

Prediction of sound radiation from different practical jet engine inlets

[AIAA PAPEB 82-16512] p0093 A02-16810

Effects of fan inlet temperature disturbances on the stability of a turbofan engine

[AIAA PAPEB 82-06299] p0256 A02-18222

V/STOL Tandem Fan transition section model test

--- in the Lewis Research Center 10-by-10 foot wind tunnel

[AIAA PAPEB 82-165587] p0312 A02-21158

Development of a convoluted intake seal for model B66 --- V/STOL wind tunnel

[BAA-AUG-162] p0370 A02-23255

Forward velocity effects on fan noise and the suppression characteristics of advanced intakes as measured in the NASA-40 by 80-foot wind tunnel

[AIAA PAPEB 82-152328] p0540 A02-30030

Energy efficient engine: Turbine transition duct technology report

[AIAA PAPEB 82-167996] p0610 A02-33394

ENGINE MONITORING INSTRUMENTS

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

[AIAA PAPEB 82-12449]

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

[AIAA PAPEB 82-12450]

Gas path analysis -- a tool for engine condition monitoring

[AIAA PAPEB 82-12786]

Process monitor helps make jet engines reliable

[AIAA PAPEB 82-21697]
ENGINE NOISE

Monitoring engine wear by oil analysis

Propulsion multiplexer /FMN/ system - The missing link

[ASME PAPEB 82-10456] p0297 A82-30743
[ASME PAPEB 82-10457] p0297 A82-30744

FMN - The interface for engine data to IDS propulsion multiplexer in Aircraft Integrated Data System

[ASIA PAPER 92-1127] p0417 A82-35022

Acquisition of F-100/J. high pressure compressor entrance profile

[ASME PAPEB 82-GT-215] p0427 A82-35402

Design concepts of an advanced propulsion monitoring system

[ASIA PAPER 82-1130] p0348 A82-37690

Caval helicopter propulsion system reliability and engine monitoring technology assessments

[ASIA PAPER 82-10518] p0499 A82-00518

Research on the behavior of a turbojet engine during transient and external disturbances with respect to early recognition of damage - German thesis

[ASIA PAPER 82-10519] p0503 A82-00521

High temperature electronic requirements in supersonic propulsion systems (F-700)

[ASIA PAPER 82-0124] p0115 A82-17796

An alternative approach to engineering structures using monitoring systems

[ASIA PAPER 82-17223] p0209 A82-17223

Gas path analysis of commercial aircraft engines

[ASIA PAPER 82-25184] p0462 A82-25184

ENGINE NOISE

Rotor wake characteristics relevant to rotor-static interaction noise generation

[ASIA PAPER 81-2031] p0008 A82-10456

Workshop report for the AIAA 6th Aeroacoustics Conference

[p103 A82-16091

An iterative finite element-integral technique for predicting sound radiation from turbulent jet flows in steady flight

[ASIA PAPER 82-0124] p0115 A82-17796

Shock associated noise of supersonic jets from convergent-divergent nozzles

[ASIA PAPER 82-32202] p0270 A82-32202

Interior noise considerations for advanced high-speed turboprop aircraft

[ASIA PAPER 82-1121] p0416 A82-35018

Multiple pure tone elimination strut assembly - air breathing engines

[ASIA CASE-1302-11062-1] p0193 A82-16000

Analytical study of twin-jet shielding

[ASIA-CA-165102] p0193 A82-16001

[ASIA-CA-165103] p0194 A82-16002

Analytical study of twin-jet shielding

[ASIA-CA-165104] p0194 A82-16003

Analytical study of twin-jet shielding

[ASIA-CA-165105] p0194 A82-16004

Analytical study of twin-jet shielding development of a 3-dimensional model

[ASIA-CA-165106] p0194 A82-16005

Analytical study of twin-jet shielding development of a two-dimensional model

[ASIA-CA-165107] p0194 A82-16006

Preliminary thoughts on helicopter cabin noise prediction methods

[ASIA PAPER 82-18148] p0268 A82-18148

Aerodynamic noise generated by jet wing/ flap interactions of the external USB configuration of STOL aircraft. Part 2: Full scale model experiment using F9710 turbofan engine

[ASIA-TR-6872-FT-2] p0270 A82-19945

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

[ASIA-TR-16652-80-1] p0309 A82-21031

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

[ASIA-TR-16652-80-2] p0309 A82-21032

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

[ASIA-TR-16652-80-3] p0309 A82-21033

Fluctuating pressures on fan blades of a turbofan engine: Static and wind tunnel investigations

[ASIA-TR-1976] p0309 A82-21037

[ASIA PAPER 82-02691] p0309 A82-21037

Static noise tests on modified augmentor wing jet STOL research aircraft

[ASIA PAPER 82-27311] p0309 A82-27311

ENGINE PARTS

Ceramic powder engine components: controls employed to ensure high quality hardware

[ASIA PAPER 82-12499] p0021 A82-12499

Strength of the turbine components of a gas-turbine engine under complex loading and associated problems

[ASIA PAPER 82-27526] p0027 A82-27526

Precision casting for gas turbine engines

[ASIA PAPER 82-28313] p0027 A82-28313

The gas turbine engine

[ASIA PAPER 82-28587] p0027 A82-28587

Gas turbine engines used in aviation: Design and construction of components /5th revised and enlarged edition/ - Russian book

[ASIA PAPER 82-30697] p0031 A82-30697

Chemically abradable noise practical

[ASIA PAPER 82-31048] p0031 A82-31048

Effect of operating life on the mechanical properties of the materials and load-bearing capacity of the rotor elements of gas-turbine engines

[ASIA PAPER 82-31643] p0032 A82-31643

The superalloys - Materials for gas turbine hot section components

[ASIA PAPER 82-33653] p0034 A82-33653

Large scale aerodynamic compressor test facility

[ASIA PAPER 82-34953] p0034 A82-34953

Ceramic component development for limited-life propulsion engines

[ASIA PAPER 82-10509] p0415 A82-34979

Development and application of Dabber gas tungsten arc welding for repair of aircraft engine seal tees

[ASIA PAPER 82-34979] p0041 A82-34979

Net shape components for small gas turbine engines

[ASIA PAPER 82-35320] p0042 A82-35320

Demonstration of ceramic hot-section static components in a radial flow turbine

[ASIA PAPER 82-35392] p0042 A82-35392

Next generation turboprop gearboxes

[ASIA PAPER 82-35418] p0042 A82-35418

Ceramic components for automotive and heavy duty turbine engines - CASE and HT 100

[ASIA PAPER 82-35432] p0042 A82-35432

Internal review of the Energy Efficient Engine /EE3/ Program

[ASIA PAPER 82-35447] p0042 A82-35447

[ASIA PAPER 82-35450] p0042 A82-35450

[ASIA PAPER 82-35452] p0042 A82-35452

[ASIA PAPER 82-35462] p0042 A82-35462

Ceramic turbine housings

[ASIA PAPER 82-35463] p0042 A82-35463

Development of counter-rotating intershaft support bearing technology for aircraft gas turbine engines

[ASIA PAPER 82-35464] p0042 A82-35464

[ASIA PAPER 82-35465] p0042 A82-35465

A-178
<table>
<thead>
<tr>
<th>SUBJECT INDEX</th>
<th>EQUIPMENT SPECIFICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air-freon integrated environmental conditioning</td>
<td>Light weight adhesive joining of composite structures</td>
</tr>
<tr>
<td>system for trainer subsonic aircraft</td>
<td>p0291 A82-27804</td>
</tr>
<tr>
<td>[ADMD PAPER 81-BHMS-513]</td>
<td>Effects of moisture on the mechanical properties of glass/epoxy</td>
</tr>
<tr>
<td>Electric Flight Systems</td>
<td>composites</td>
</tr>
<tr>
<td>[NASA-C/P-2209]</td>
<td>p0292 A82-39036</td>
</tr>
<tr>
<td>Electric ECS</td>
<td>A significant role for composites in</td>
</tr>
<tr>
<td>Environmental Control Systems</td>
<td>energy-efficient aircraft</td>
</tr>
<tr>
<td>Electric flight systems integration</td>
<td>p0345 A82-37065</td>
</tr>
<tr>
<td></td>
<td>A one-shot autoclave manufacturing process for</td>
</tr>
<tr>
<td></td>
<td>carbon epoxy components</td>
</tr>
<tr>
<td>ENVIRONMENTAL MONITORING</td>
<td>Development of manufacturing technology for</td>
</tr>
<tr>
<td>Aeronautics and Space report of the President:</td>
<td>fabrication of a composite helicopter main rotor</td>
</tr>
<tr>
<td>1981 activities</td>
<td>spar by tubular braiding</td>
</tr>
<tr>
<td>[NASA-TM-86715]</td>
<td>p0265 A82-19209</td>
</tr>
<tr>
<td>ENVIRONMENTAL QUALITY</td>
<td>Materials and structures/ACEH</td>
</tr>
<tr>
<td>AIR QUALITY</td>
<td>[NASA-FACTS-119/0-81]</td>
</tr>
<tr>
<td>ENVIRONMENTAL TESTS</td>
<td>p0407 A82-25242</td>
</tr>
<tr>
<td>ST COLD WEATHER TESTS</td>
<td>EPOXY RESINS</td>
</tr>
<tr>
<td>ST CORROSION TESTS</td>
<td>Effects of elastomeric additives on the mechanical</td>
</tr>
<tr>
<td>ST HIGH TEMPERATURE TESTS</td>
<td>properties of epoxy resin and composite systems</td>
</tr>
<tr>
<td>ST LOW TEMPERATURE TESTS</td>
<td>p0113 A82-17538</td>
</tr>
<tr>
<td>ST NEW REFINERY TESTS</td>
<td>A new resin for field repair</td>
</tr>
<tr>
<td>ST NEW TESTS</td>
<td>p0291 A82-27412</td>
</tr>
<tr>
<td>ST OTHER EQUATIONS OF MOTION</td>
<td>EQUATIONS OF MOTION</td>
</tr>
<tr>
<td>ST NAVIER-STOKES EQUATION</td>
<td>Optimal flight paths for winged, supersonic flight</td>
</tr>
<tr>
<td></td>
<td>vehicles - Extension to the case where thrust may be</td>
</tr>
<tr>
<td></td>
<td>vectorized</td>
</tr>
<tr>
<td>The Global Positioning System Evaluators ---</td>
<td>On the question of trailing airplane motion</td>
</tr>
<tr>
<td>facility for testing in simulated wide range</td>
<td>p0005 A82-10310</td>
</tr>
<tr>
<td>environments</td>
<td>Numerical computation of optimal atmospheric</td>
</tr>
<tr>
<td>The coupling of electromagnetic interference</td>
<td>trajectories involving stepped vehicles</td>
</tr>
<tr>
<td>into aircraft systems</td>
<td>p0015 A82-11470</td>
</tr>
<tr>
<td>The variation of induced currents in aircraft</td>
<td>Analytical technique for the analysis of</td>
</tr>
<tr>
<td>wiring</td>
<td>airplance spin entry and recovery</td>
</tr>
<tr>
<td>EEC clearance of modern military aircraft</td>
<td>p0119 A82-17902</td>
</tr>
<tr>
<td>Sensitivity of bonded and bolted joints in</td>
<td>The dynamic behaviour of propeller anemometers</td>
</tr>
<tr>
<td>composites to load/environmental spectrum</td>
<td>p0276 A82-26104</td>
</tr>
<tr>
<td>variations --- in fighter aircraft structures</td>
<td>Computational aerodynamics - Its coming of age and its</td>
</tr>
<tr>
<td></td>
<td>p0132 A82-29773</td>
</tr>
<tr>
<td>Effects of defects on tension coupons</td>
<td>Transformation relations for singularity avoidance</td>
</tr>
<tr>
<td>on an accelerated environmental spectrum</td>
<td>in three-dimensional trajectory optimization</td>
</tr>
<tr>
<td>Analyzing stable disturbances and design of a</td>
<td>p0178 A82-32137</td>
</tr>
<tr>
<td>sensor vault to monitor pad stability</td>
<td>Computer-aided derivation of equations of motion</td>
</tr>
<tr>
<td>p0290 A82-27804</td>
<td>for rotary-wing aeroelastic problems</td>
</tr>
<tr>
<td>Moisture gradient considerations in environmental</td>
<td>p0504 A82-40883</td>
</tr>
<tr>
<td>fatigue of CFRP</td>
<td>The nonsynchronous whirls of the turbine rotor in</td>
</tr>
<tr>
<td>p0579 A82-55479</td>
<td>jet engine</td>
</tr>
<tr>
<td>The Shock and Vibration Digest, volume 13, no. 9</td>
<td>Reduced nonlinear flight dynamic model of elastic</td>
</tr>
<tr>
<td>[AD-Al05062]</td>
<td>structure aircraft</td>
</tr>
<tr>
<td>Environmental exposure effects on composite</td>
<td>p0516 A82-41009</td>
</tr>
<tr>
<td>materials for commercial aircraft</td>
<td>ACT Mechanics Sinica (selected articles)</td>
</tr>
<tr>
<td>p0031 A82-10421</td>
<td>[AD-A107321]</td>
</tr>
<tr>
<td>Forecasting corrosion damage and maintenance</td>
<td>p0131 A82-10460</td>
</tr>
<tr>
<td>costs for large aircraft</td>
<td>Flag-lag torsional dynamics or extensional and</td>
</tr>
<tr>
<td>p0289 A82-27158</td>
<td>inertesional rotor blades in hover and in forward flight</td>
</tr>
<tr>
<td>ALQ-164 POD/NAV-BC environmental evaluation flight</td>
<td>p0139 A82-15013</td>
</tr>
<tr>
<td>test</td>
<td>An aircraft sensor fault tolerant system</td>
</tr>
<tr>
<td>[AD-A110198]</td>
<td>p0407 A82-25236</td>
</tr>
<tr>
<td>p0314 A82-221178</td>
<td>User's manual for the AREER flight path-trajectory</td>
</tr>
<tr>
<td>Analysis and environmental fate of Air Force</td>
<td>p0538 A82-29343</td>
</tr>
<tr>
<td>distillate and high density fuels</td>
<td>simulation code</td>
</tr>
<tr>
<td>[AD-A115995]</td>
<td>[G028-007004]</td>
</tr>
<tr>
<td>ENVIRONMENTS</td>
<td>EQUATIONS OF STATE</td>
</tr>
<tr>
<td>NT AEROSPACE ENVIRONMENTS</td>
<td>On computing Floquet transition matrices of</td>
</tr>
<tr>
<td>NT HIGH ALTITUDE ENVIRONMENTS</td>
<td>rotocraft</td>
</tr>
<tr>
<td>NT HIGH GRAVITY ENVIRONMENTS</td>
<td>p0013 A82-11225</td>
</tr>
<tr>
<td>NT HIGH TEMPERATURE ENVIRONMENTS</td>
<td>EQUIPMENT</td>
</tr>
<tr>
<td>NT ICE ENVIRONMENTS</td>
<td>The impact of new guidance and control systems on</td>
</tr>
<tr>
<td>NT IONOSPHERE</td>
<td>military aircraft cockpit design</td>
</tr>
<tr>
<td>NT LOW GRAVITY ENVIRONMENTS</td>
<td>[AGARD-C/P-312]</td>
</tr>
<tr>
<td>NT LOW TEMPERATURE ENVIRONMENTS</td>
<td>EQUIPMENT SPECIFICATIONS</td>
</tr>
<tr>
<td>NT MARINE ENVIRONMENTS</td>
<td>A natural parameter-controller specification procedure for</td>
</tr>
<tr>
<td>NT SATELLITE ATMOSPHERES</td>
<td>an integrated radio/dead reckoner navigation system</td>
</tr>
<tr>
<td>NT THERMAL ENVIRONMENTS</td>
<td>p0126 A82-18155</td>
</tr>
<tr>
<td>The work environment</td>
<td>Practical aspects of instrumentation system</td>
</tr>
<tr>
<td>p0534 A82-29299</td>
<td>installation, volume 13</td>
</tr>
<tr>
<td>EPWU</td>
<td>[NASA-TM-86067]</td>
</tr>
<tr>
<td>D EFFECTIVE PERCEIVED NOISE LEVELS</td>
<td>Advanced recorder design and development</td>
</tr>
<tr>
<td>EPOXY RESINS</td>
<td>[PB81-244105]</td>
</tr>
<tr>
<td>NT NON-EPOXY RESINS</td>
<td>p0099 A82-13140</td>
</tr>
<tr>
<td>NT BAKELITE COMPOSITES</td>
<td>p0193 A82-16385</td>
</tr>
<tr>
<td>EPOXY BAKELITE COMPOSITES</td>
<td>Light weight adhesive joining of composite structures</td>
</tr>
<tr>
<td>Kevlar composites: Proceedings of the Symposium,</td>
<td>p0291 A82-27004</td>
</tr>
<tr>
<td>El Segundo, CA, December 2, 1980</td>
<td>Effects of moisture on the mechanical properties of glass/epoxy</td>
</tr>
<tr>
<td>p0223 A82-12666</td>
<td>composites</td>
</tr>
<tr>
<td>The TAH-644 composite flexbeam tail rotor</td>
<td>p0345 A82-37065</td>
</tr>
<tr>
<td>Design of a composite main rotor blade spar for</td>
<td>A one-shot autoclave manufacturing process for carbon epoxy</td>
</tr>
<tr>
<td>fabrication by tubular braiding</td>
<td>p0265 A82-19209</td>
</tr>
<tr>
<td>p0279 A82-26386</td>
<td>Development of manufacturing technology for fabrication of a</td>
</tr>
<tr>
<td></td>
<td>composite helicopter main rotor by tubular braiding</td>
</tr>
<tr>
<td></td>
<td>[AD-A109377]</td>
</tr>
<tr>
<td></td>
<td>p0265 A82-19209</td>
</tr>
<tr>
<td></td>
<td>Materials and structures/ACEH</td>
</tr>
<tr>
<td></td>
<td>[NASA-FACTS-119/0-81]</td>
</tr>
<tr>
<td></td>
<td>p0407 A82-25242</td>
</tr>
</tbody>
</table>
ERECTON


ERECION

U CONSTRUCTION

REGONICS

U HUMAN FACTORS ENGINEERING

ERGYON

U MAIN EJECTION

U WATER EJECTION

ERROR ANALYSIS


Analysis of system problems using aviation safety reporting system data [NASA-CR-166381] p0219 882-23312


Compressor stall inducing installation effects of an engine control parameter for the CF-5 aircraft p0095 882-13085


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-166385] p0309 882-20997


Reduction and analysis of node C altitude data collected at high altitudes over the continental United States [NASA-CR-166388] p0532 882-29276

Establishment of a rotor model basis [NASA-TP-2026] p0535 882-29311

ERROR BAND

U ACCURACY

ERROR CONNECTING DEVICES

Observability of the parameters of an inertial navigation system for a 360-deg coordinated turn [NASA-CR-166389] p0563 882-67093

Flight data recovery under adverse conditions [NASA-CR-166390] p0402 882-25183

ERROR DETECTION CODES


The P-POD Project --- error detection codes [NASA-CR-166392] p0445 882-26202

Coast operation stabilization and computer algorithms for aircraft applications [NASA-CR-166393] p0661 882-27009

Design of analytical failure detection using secondary observers [NASA-TP-64284] p0590 882-32362

ERRORS

U BORESIGHT ERROR

U INSTRUMENT ERRORS

U PHASE ERROR

U PILOT ERRORS

U POSITION ERRORS

U RANGE ERRORS

U VELOCITY ERRORS

ESCAPE CAPSULES

Current ADM restraint system status, trade-off constraints and long range objectives for the Mariner Performance Ejection System (MPES) [NASA-CR-166394] p0464 882-27238

ESCAPE SYSTEMS


SUBJECT INDEX

Easeancy in-flight egress for general aviation aircraft p0077 882-14953

Wind tunnel tests of ejection seat for high dynamic pressure escape p0079 882-14979

A ballistic design model for initiators for aircraft personnel escape systems p0080 882-14984

Analytical and experimental characterization of the JAA/IAA cartridge actuated initiator for use in an aircrew escape system performance evaluation p0080 882-14985

Finite element analysis of through the canopy emergency crew escape from the T-38 aircraft [NASA-CR-166396] p0335 882-30096

Leaf fan 2100 egress system p0449 882-37970

Problems with the use of percentages in the analysis of AABS data --- Aircrew Automated Escape Systems p0556 882-44293

Investigation of aircrew protection during emergency escape at dynamic pressures up to 1600 Q [NASA-CR-166397] p0605 882-33359

ESTERS

U POLICARBONATES

U SUBSTANCES

ESTIMATES

U COST ESTIMATE

Real time estimation and prediction of ship motions using Kalman filtering techniques [NASA-CR-166398] p0572 882-31637


ESTIMATING

U PARAMETER IDENTIFICATION

U SYSTEM IDENTIFICATION

Comparison of various elevation angle estimation techniques p0175 882-20589


Statistical analysis and time series modeling of air traffic operations data from flight service stations and terminal radar approach control facilities: Two case studies [NASA-CR-166401] p0304 882-20172


ESTERS


ETHYL ALCOHOL

Ethanol production by vapor compression distillation [NASA-CR-166404] p0308 882-29393

EUCLIDEAN GEOMETRY

U ANGLE OF ATTACK

U ANGLES (GEOMETBY)

U CARTESIAN COORDINATES

U ELEVATION ANGLE

U GEOMETRIC LINES

U RECTANGLES

U SPHEREPACK

U TANGENTS

U TAPERES

EUCLIDEAN EQUATIONS OF MOTION


Damped Euler-equation method to compute transonic flow around wing-body combinations [NASA-CR-166406] p0513 882-84092

Simulation of the fluctuating field of a forced jet [NASA-CR-166407] p0615 882-34191

EUREPE

The status of airport noise prediction, with special reference to the United Kingdom and Europe p0296 882-28149

EUROPEAN AVIATION

U A-300 AIRCRAFT

A-182
An experimental and analytical study of mixing flow of turbofan engine exhaust through circular and 2-dimensional mixer/nozzle

Methodology for determining fuel-combustion efficiency and the toxicity of exhaust gases

Smoke reduction in F-710 turbofan engines by an airblast combustor

Gas turbine airflow control for optimum heat recovery

RESEARCH JETS

EXHAUST NOZZLES

EXHAUST GASES

An experimental study of flow rate and thrust characteristics of a four-nozzle ejector with flow twist

Study of reignition of exhaust gases with different initial temperature in a reversed turbine engine

Fuel-rich plume combustion

Calculation of the contributions of air traffic and road traffic to air pollution in the region of Schiphol airport in 1974

Flight control systems for aerial targets

Performance of multiple, angled nozzles with short mixing stack eductor systems

EXHAUST VELOCITY

Evaluation of the effects of model scale and test technique on jet-induced effects

EXHAUST GASES

Steady and periodic jet exhaust exhaust gases with thrust reverser concepts for axisymmetric nozzles

EXHAUST SYSTEMS

Maintenance problems associated with the operation of the F402 /Pegasus/ engine in the AV-8A /Harrier/ Aircraft

Test model and full scale checkout of dry-cooled airblast combustor

Investigation of acoustic interactions in jet thrust augmenting ejection

Engine superficial temperature and infrared

Energy efficient engine exhaust mixer model technology

EXHAUST NOZZLES

STUDENT DIVERGENIT DIVERGENIT NOZZLES

MT TURBINE EXHAUST NOZZLES

ADEN plane flow properties for infrared analysis

Advanced nozzle integration for air combat fighter application

Performance of a 2-D CO nonaxisymmetric exhaust nozzle on a turbomachinery engine at altitude

Application of advanced exhaust nozzles for tactical aircraft

An experimental study of flow rate and thrust characteristics of a four-nozzle ejector with flow twist

An investigation of F-16 nozzle-afterbody forces at transonic Mach numbers with emphasis on model scale effects

Aerodynamics of Power Plant Installation

Integration of advanced exhaust nozzles

Advanced exhaust nozzle technology

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

EXHAUST SYSTEMS

Computer modeling of fan-exit-splitter spacing

Efficiency improvements in jet engines with thrust reverser concepts for axisymmetric nozzles

Part 2: Analysis of results

Part 3: Experimental technique

EXHAUST VELOCITY

Evaluation of the effects of model scale and test technique on jet-induced effects

EIXTS (DOORS)

FOLDING DOORS

DOOR SYSTEMS

MT BALLOONS

MT BELLONS

MT HIGH ALTITUDE BALLOONS

MT INFLATABLE STRUCTURES

Flight control systems for aerial targets

EXPANSION

MT SERIES EXPANSION

MT THERMAL EXPANSION

Design of airport pavements for expansive soils

EXPERIENCE

Relationships between naval aviation safety and pilot flight experience

EXPERIMENTAL DESIGN

Applying advanced technology to flight station design

The influence of closed-coupled, rear fuselage mounted nacelles on the design of an advanced high speed van

Control of vibration in aerodynamic cascade experiments

La recherche Aerospatiale, Bi-monthly bulletin, number 1981-6, November-December 1981 - aerodynamic research
SUBJECT INDEX

**P-4 AIRCRAFT**

- Development and use of dynamic qualification standards for Air Force stores.
- Qualification of equipment for gunshot induced vibration.
- Aircraft fuel tank slosh and vibration test.
- Approach in dynamic qualification of light helicopter stores and equipment.
- The dynamic qualification of equipment and external stores for use with rotary winged aircraft.
- Application of modal synthesis techniques for the dynamic qualification of warning with stores.
- Decomposer pylon: wing/store flutter suppressor.
- Aerodynamic efficiency of an externally blown flap configuration with several flap noise suppression devices.
- Qualification of equipment for gunfire induced vibration.
- Development and use of dynamic qualification techniques for Air Force stores.

**P-5 AIRCRAFT**

- Elastic Environmental Qualification Techniques.
- Calculation of the flow-field velocities of a wing-body configuration in transonic flow.
- Aerodynamic characteristics and store loads of a 1/2 scale F-111 aircraft model with three external stores configurations.
- Prediction of aerodynamic loads on aircraft with external stores at transonic speeds.
- Technology overview for advanced aircraft armament system program.
- Standardization study for advanced aircraft armament system program.
- Aerodynamic characteristics and store loads of a 1/4 scale F-111 aircraft model with three external stores configurations.
- External Store Separation.
- Aeroelastic Activity/Air Traffic Control (RTA/AIRC) test report communication links to the astronaut.
- U RANGE (RANGES).
- Hypervelocity airborne target identification.
- Ideal range - Optimum subsonic flight limit and material limit.
- Extending.

**F-6 AIRCRAFT**

- Dynamic Environmental Qualification Techniques.
- Qualification of equipment for gunshot induced vibration.
- Aircraft fuel tank slosh and vibration test.
- Approach in dynamic qualification of light helicopter stores and equipment.
- The dynamic qualification of equipment and external stores for use with rotary winged aircraft.
- Application of modal synthesis techniques for the dynamic qualification of warning with stores.
- Decomposer pylon: wing/store flutter suppressor.
- Aerodynamic efficiency of an externally blown flap configuration with several flap noise suppression devices.
- Qualification of equipment for gunfire induced vibration.
- Development and use of dynamic qualification techniques for Air Force stores.

**F-8 AIRCRAFT**

- External Store Separation.
- Aeroelastic Activity/Air Traffic Control (RTA/AIRC) test report communication links to the astronaut.
- U RANGE (RANGES).
- Hypervelocity airborne target identification.
- Ideal range - Optimum subsonic flight limit and material limit.
- Extending.

**F-10 AIRCRAFT**

- External Store Separation.
- Aeroelastic Activity/Air Traffic Control (RTA/AIRC) test report communication links to the astronaut.
- U RANGE (RANGES).
- Hypervelocity airborne target identification.
- Ideal range - Optimum subsonic flight limit and material limit.
- Extending.

**F-16 AIRCRAFT**

- Dynamic Environmental Qualification Techniques.
- Qualification of equipment for gunshot induced vibration.
- Aircraft fuel tank slosh and vibration test.
- Approach in dynamic qualification of light helicopter stores and equipment.
- The dynamic qualification of equipment and external stores for use with rotary winged aircraft.
- Application of modal synthesis techniques for the dynamic qualification of warning with stores.
- Decomposer pylon: wing/store flutter suppressor.
- Aerodynamic efficiency of an externally blown flap configuration with several flap noise suppression devices.
- Qualification of equipment for gunfire induced vibration.
- Development and use of dynamic qualification techniques for Air Force stores.

**F-18 AIRCRAFT**

- External Store Separation.
- Aeroelastic Activity/Air Traffic Control (RTA/AIRC) test report communication links to the astronaut.
- U RANGE (RANGES).
- Hypervelocity airborne target identification.
- Ideal range - Optimum subsonic flight limit and material limit.
- Extending.

**F-20 AIRCRAFT**

- External Store Separation.
- Aeroelastic Activity/Air Traffic Control (RTA/AIRC) test report communication links to the astronaut.
- U RANGE (RANGES).
- Hypervelocity airborne target identification.
- Ideal range - Optimum subsonic flight limit and material limit.
- Extending.
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 [AD-A113371] p0048 A82-25207
A PLANNING SYSTEM FOR F-16 AIR-TO-SURFACE MISSILES p0071 A82-27297
F-18 AIRCRAFT
VARIABLE SPEED CONSTANT FREQUENCY/TPSR ELECTRICAL SYSTEM CUTS COST OF OWNERSHIP p0016 A82-11719
F/A-18 "HORNET" - ONE MAN OPERABILITY [AIAA 81-2266] p0048 A82-13484
AVIONICS SYSTEM SIMULATION FOR THE HORNET [AIAA 81-2276] p0049 A82-13488
F/A-18 AIRCRAFT [AIAA 81-2351] p0060 A82-13955
THE NAVY F/A-18A HORNET ELECTROMAGNETIC COMPATIBILITY [AIAA 81-2465] p0058 A82-13930
F/A-18 AIRCRAFT flight program overview - 1 September 1981 [AIAA PAPER 81-2251] p0060 A82-13955
THE NAVY F/A-18A HORNET ELECTROMAGNETIC COMPATIBILITY [AIAA 81-2465] p0058 A82-13930
F/A-18 WEAPON SYSTEM DEVELOPMENT p0223 A82-20752
F/A-18 HORNET RELIABILITY CHALLENGE - STATUS REPORT p0545 A82-22229
F/A-18 HORNET CROW STATION p0093 A82-13064
F/A-18 WEAPON SYSTEM SUPPORT FACILITIES p0198 A82-17120
AEROPROPULSIVE CHARACTERISTICS OF BACH NUMBERS UP TO 2.2 OF AXISYMMETRIC AND NONAXISYMMETRIC NOZZLES INSTALLED ON AN F-106 MODEL [NASA-TP-20464] p0057 A82-30291
SOLING FLOW WIND TUNNEL TESTS OF F-18 AIRCRAFT [NASA-CE-165304] p0064 A82-33338
CURVED FLOW WIND TUNNEL TEST OF F-18 AIRCRAFT [NASA-CE-165304] p0064 A82-33338
F-27 AIRCRAFT
AIRCRAFT FOR SECONDARY LONG RANGE EMERGENCY AMBULANCE FLIGHT p0154 A82-19021
F-20 TRANSPORT AIRCRAFT
F-100 AIRCRAFT
ACOUSTIC MEASUREMENTS OF F100-PW-100 ENGINES OPERATING IN HATCH HOUSE NO 4920-02-070-2721 [AD-A106614] p0270 A82-19952
F-106 AIRCRAFT
THUNDERSTORMS AND AIRCRAFT FLIGHT [AIAA PAPER 81-2412] p0053 A82-13853
OPERATIONAL EVALUATION OF THUNDERSTORM PREDICTION TECHNIQUES FOR DURING PROJECT STORM HAZARDS '80 [NASA-TP-89054] p0078 A82-14954
INVESTIGATION OF SEVERE LIGHTNING STRIKE INCIDENTS TO TWO USAF F-106A AIRCRAFT [NASA-CE-165794] p0066 A82-12052
F-111 AIRCRAFT
PAIR FLOOR FLIGHT TEST PROGRAM [NASA PAPER 81-2022] p0063 A82-12480
RAM-ADEPTIVE WIND FLOW DEMONSTRATION PROGRAM [SACE PAPER 81-11053] p0232 A82-26399
AERODYNAMIC CHARACTERISTICS AND STORE LOADS OF A 1/20 SCALE F-111 AIRCRAFT MODEL WITH THREE EXTERNAL STORE LOADS [AD-A109349] p0302 A82-21585
EVALUATION OF A PROPOSED MODIFIED F-111 CREW SEAT AND RESTRAINT SYSTEM [AD-A110188] p0313 A82-21167
COMPARATIVE VERTICAL IMPACT TESTING OF THE FL/111 CREW RESTRAINT SYSTEM AND A PROPOSED MODIFICATION [AD-A113507] p0522 A82-28267
FAB (PROGRAMMING LANGUAGE) - V FORTRAN
FABRICATION
A CASE/AR GRAPHICS SYSTEM WITH RELATIVE DATUMS AND TOLERANCES [ASAE PAPER 81-DIST-106] p0161 A82-19333
SIBERIAN TAIL ROTOR - 1980: ADVANCED MANUFACTURING AND QUALITY CONTROL TECHNIQUES [AD-A109777] p0265 A82-19209
ENERGY EFFICIENT ENGINE SHROUDS, HOLLOW FAN BLADE TECHNOLOGY REPORT [NASA-CE-165586] p0317 A82-21936
DEVELOPMENT AND DEMONSTRATION OF MANUFACTURING PROCESSES FOR FABRICATING GRAPHITE/IMOC 160 POLYDIAMETRIC STRUCTURAL ELEMENTS [NASA-CE-165586] p0357 A82-22315
WIND TUNNELS AT THE INSTITUTE OF MECHANICS OF MOSCOW STATE UNIVERSITY [NASA-TP-76909] p0297 A82-24215
MATERIALS AND DESIGN CRITERIA FOR KEVLAR-29 PARACHUTES [AD-A116375] p0567 A82-31300
FABRICS
HIT PARACHUTE FABRICS
TECHNICAL AND ECONOMIC COMPARISON OF CARBON FIBER TAPE AND WOVEN FABRIC APPLICATIONS p0514 A82-40978
PABY-FEROT LASERS
U LASERS
FACTORIES
U INDUSTRIAL PLANTS
PABY-FEROT LASERS
R LC LASERS
FACTORIES
U INDUSTRIAL PLANTS
PABZ-FEROT LASERS
U LASERS
FACTORIES
U INDUSTRIAL PLANTS
PABZ-FEROT LASERS
U LASERS
FACTORIES
U INDUSTRIAL PLANTS
PABY-FEROT LASERS
U LASERS
FACTORIES
U INDUSTRIAL PLANTS
PABZ-FEROT LASERS
U LASERS
FACTORIES
U INDUSTRIAL PLANTS
PABZ-FEROT LASERS
U LASERS
FACTORIES
U INDUSTRIAL PLANTS
PABZ-FEROT LASERS
U LASERS
FACTORIES
U INDUSTRIAL PLANTS
PABY-FEROT LASERS
U LASERS
FACTORIES
U INDUSTRIAL PLANTS
PABY-FEROT LASERS
U LASERS
FACTORIES
U INDUSTRIAL PLANTS
PABY-FEROT LASERS
U LASERS
FACTORIES
U INDUSTRIAL PLANTS
PABZ-FEROT LASERS
U LASERS
FACTORIES
U INDUSTRIAL PLANTS
PABZ-FEROT LASERS
U LASERS
FACTORIES
U INDUSTRIAL PLANTS

A preliminary laboratory evaluation of a reconfigurable integrated flight control concept
[IAIA 82-1590]
p0485 A82-39582
Analysis of built-in-test accuracy
[p0545 A82-42211
Fatigue analysis of composite materials using the
fail-safe concept

FAILURE

MT ENGINE FAILURE

MT STRUCTURAL FAILURE

MT SYSTEM FAILURES

FAILURE ANALYSIS

Synchronous fault-tolerant flight control systems
[IAIA 81-2469] p0001 A82-10083
Unsolved problems of nickel cadmium batteries
[p0016 A82-11725
Extending the limits of reliability theory --- Book
[p0020 A82-12318
Practographic determination of fatigue crack
growth rates in aircraft components
[p0023 A82-12697
Fault detection for two physically separated,
communicating inertial measurement units
[p0045 A82-13142
Theoretical analysis of wake-induced parachute
collapse
[IAIA PAPER 81-1922] p0061 A82-13963
A failure detection and isolation system for
tactical aircraft with separated I/Os
[p0066 A82-14684
Failure analysis of variable reluctance stepper
motor --- an electronic fuel control system on
jet engine
[p0072 A82-14792
Fatigue test of the typical main rotor control
component
[p0240 A82-24715
Failure analysis of silicon phenolic nozzle liners
[p0391 A82-34882
Evaluation criteria for aero engine materials
[p0434 A82-36065
Instrument failure detection as partially
observable systems
[p0436 A82-37780
Maxwell likelihood failure detection of aircraft
flight control sensors
[p0556 A82-44481
Investigation of crossdeck pendant catapult
interaction; proposed corrective measures
[AD-108149] p0259 A82-18232
Disengagement of safety harness buckles - C depletion
[AD-102048] p0259 A82-19199
Fatigue analysis of composite materials using the
fail-safe concept
Production Verification Testing (PVT) of guidance
and control systems for high reliability
[p0663 A82-23187
Prediction of fatigue crack growth rates under
variable loading using a simple crack closure
model
[MSL-BP-01023-U] p0529 A82-28685

FAILURE NODES

Mechanically-fastened joints for advanced
composites --- Phenomenological considerations and
simple analyses
[p0289 A82-27156
Material identification for the design of
composite rotary wings
[p0509 A82-40937
The effect of intake flow disturbances on AP0
cogensor fan blade high cycle fatigue in the
Airbus A300
[p0513 A82-40938
An observer approach to the identification and
isolation of sensor failures in flight control systems
[DPT14-PD-81-26] p0185 A82-15078
Lubrication breakdown between gear teeth
[p0208 A82-17213
Corrosion in naval aircraft electronic systems
[p0212 A82-17363
Defects and their effect on the behavior of gas
turbine discs
[p0346 A82-22178

FAIRCCHILD MILITARY AIRCRAFT

U MILITARY AIRCRAFT

FAILURES

Techniques for modifying airfoils and fairings on
aircraft using foams and fiberglass
[IAIA PAPER 82-2465] p0064 A82-14383
Development of a preloaded hybrid advanced
composite wing pivot fairing
[p0287 A82-27154
Kevlar/PB-15 polysulfide matrix composite for a
complex shaped DC-9 drag reduction fairing
[IAIA PAPER 82-1047] p0287 A82-27678
Flight service evaluation of Kevlar-49 epoxy
composite panels in wide-bodied commercial
transport aircraft
[NASA-CA-165861] p0357 A82-22216
Flow control for a high energy laser turret using
trapped vortices
[AD-115263] p0561 A82-30547

FAILURE-SEAN EQUATION

An observer approach to the identification and
correction of sensor failures in flight control
systems
[AD-A107363] p0612 A82-33570
Effects of nose-to-blade ratio and spacing on fan noise
[IAIA PAPER 81-2033] p0008 A82-10475
Mechanical properties of a fabergers propeller
system at cryogenic and other temperatures
[IAIA 82-0706] p0335 A82-30099
Bird impact analysis package for turbine engine
fan blades
[IAIA 82-0966] p0339 A82-30962
Three dimensional turbulent boundary layer
development on a fan rotor blade
[IAIA PAPER 82-1057] p0375 A82-31565
Blade loss transient dynamic analysis of
turboshaft engine
[IAIA PAPER 82-1057] p0375 A82-34992
Acoustic emission in jet engine fan blades
[p0419 A82-35257
Structural dynamics of shroudless, hollow, fan
blades with composite inlays
[ASME PAPER 82-GT-284] p0430 A82-35456
Composite containment systems for jet engines
[p0435 A82-37062
Thrust modulation methods for a subsonic V/STOL
aircraft
[IAIA-TM-82747] p0098 A82-11311
Fabrication of boron/aluminum fan blades for SCR
engines
[IAIA-C-165294] p0192 A82-16176
Bird impact analysis package for turbine engine
fan blades
[IAIA-TM-82631] p0460 A82-26701
National Transonic Facility (NTF) prototype fan
blade fatigue test
[AD-1149405] p0521 A82-28261
Structural tailoring of engine blades (STAEBL)
[NASA-CA-167949] p0610 A82-33991
Lift system and fan performance of air cushion
supported vehicles
[AD-117173] p0612 A82-35700

FAIRY DEVICES

U LIFT FANS

FABRICATIONS

ON AIRCRAFT

FIELD TESTS

ON AIRCRAFT

FIELD OF VIEW

ON AIRCRAFT

FABRIC AND GLASS REINFORCED PLASTIC

ON AIRCRAFT

FABRICATION AND APPLICATIONS

ON AIRCRAFT
<table>
<thead>
<tr>
<th>SUBJECT INDEX</th>
<th>FATIGUE LIFE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flight-by-flight corrosion fatigue tests</td>
<td>Fatigue life of lugs under service loading - Test results and predictions p0013 A82-11169</td>
</tr>
<tr>
<td>A compilation of stress intensity factor solutions for flawed fastener holes (AD-A1098753)</td>
<td>Creep and aero gas turbine design p0015 A82-11685</td>
</tr>
<tr>
<td>Disengagement of safety harness buckles - CTN (AD-A109908)</td>
<td>In-flight computation of helicopter transmission fatigue life expenditure p0043 A82-12907</td>
</tr>
<tr>
<td></td>
<td>Effect of fleet size on estimates of safety against airframe fatigue p0055 A82-13072</td>
</tr>
<tr>
<td></td>
<td>A method for predicting the lifetime of gas turbine blades p0104 A82-16153</td>
</tr>
<tr>
<td></td>
<td>Inclusions and service induced cracks in a mature population of gas turbine engine bearings p0105 A82-16692</td>
</tr>
<tr>
<td></td>
<td>Random spectra fatigue crack life predictions with or without considering load interactions p0109 A82-20512</td>
</tr>
<tr>
<td></td>
<td>Bolted field repair of graphite/epoxy wing skin laminates p0100 A82-20591</td>
</tr>
<tr>
<td>Corrosion Fatigue conferences</td>
<td>On the sonic fatigue life estimation of skin structures at room and elevated temperatures p0222 A82-23678</td>
</tr>
<tr>
<td>Fatigue methodology - A technical management system for helicopter safety and durability</td>
<td>Application of damage tolerance technology to type certification [SAE PAPER 81-1538-48] p0223 A82-24388</td>
</tr>
<tr>
<td>Material/structure degradation due to fretting and fretting-initiated fatigue</td>
<td>The Agusta’s solution of ABS’s hypothetical fatigue life problem p0238 A82-24701</td>
</tr>
<tr>
<td>Standardization of helicopter fatigue methodology - A manufacturer’s view</td>
<td>The challenge of standardizing fatigue methodology p0239 A82-24710</td>
</tr>
<tr>
<td>Fatigue test of the typical main rotor controls component</td>
<td>Hypothetical fatigue life problem - Application of Aerospatiale method p0240 A82-24716</td>
</tr>
<tr>
<td>Helicopter rotor load prediction</td>
<td>Boeing Vertol fatigue life methodology p0240 A82-24718</td>
</tr>
<tr>
<td>‘Listening’ systems to increase aircraft structural safety and reduce costs</td>
<td>A simple crack closure model for prediction of fatigue crack growth rates under variable-amplitude loading p0248 A82-26630</td>
</tr>
<tr>
<td>The effect of intake flow disturbances on APU compressor blade high cycle fatigue in the Airbus A300</td>
<td>Fracture mechanics technology applied to individual aircraft tracking --- durability and structural life estimates p0248 A82-26637</td>
</tr>
<tr>
<td>Principles of achieving damage tolerance with flexible maintenance programs for new and aging aircraft</td>
<td>Evaluation of crack growth gages for service life tracking p0248 A82-26652</td>
</tr>
<tr>
<td>Prediction of fatigue crack propagation in plane specimens and thin-walled structural elements of aircraft wing skin under programed loading</td>
<td>Prediction of cyclic growth of cracks and debonds in aluminum sheets reinforced with boron/epoxy p0268 A82-27151</td>
</tr>
<tr>
<td>Flight trail of the Aircraft Fatigue Data Analysis System (APDAS) Mk 2 prototype</td>
<td>Growth of four flaw types in graphite/epoxy composites due to fully reversed fatigue p0290 A82-27167</td>
</tr>
<tr>
<td>Effects of cyclic loading on projectile impact damage</td>
<td>On the characterization of damages in graphite-epoxy composites p0336 A82-30117</td>
</tr>
<tr>
<td>Corrosion Fatigue --- conferences</td>
<td>Mechanical and metallurgical considerations in extending the life of turbine blades p0340 A82-33055</td>
</tr>
<tr>
<td>[AGARD-CP-316]</td>
<td>Fatigue life prediction of helicopter pitch link using Kasan life calculation methods p0367 A82-34125</td>
</tr>
<tr>
<td></td>
<td>A review and assessment of fatigue crack growth rate relationships for metallic airframe materials p0387 A82-34125</td>
</tr>
<tr>
<td></td>
<td>Turbine blade nonlinear structural and life analysis [AIAA PAPER 82-1056] p0415 A82-34091</td>
</tr>
<tr>
<td></td>
<td>Control of gas turbine power transients for improved turbine airflow durability [AIAA PAPER 82-1182] p0418 A82-35067</td>
</tr>
<tr>
<td></td>
<td>A method for observing the deterioration of airframe life in operational conditions p0436 A82-37123</td>
</tr>
</tbody>
</table>

**Acoustic emission - An emerging technology for assessing fatigue damage in aircraft structure**
A roadmap toward a fatigue qualification process for modern technology helicopters

Design and experimental verification of the USFL-flap structure for NAL 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 CFRP

Effect of fighter attack spectrum on composite fatigue life

Acoustic fatigue endurance test of USFL flag structure models at elevated temperature

Fatigue analysis of composite materials using the fail-safe concept

Engine component retirement for cause

Fatigue behavior of selected non-woven fiber reinforced composites

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 methodologies

NDE of composite rotor blades during fatigue testing

Fundamentals of helicopter fatigue life determination

Fatigue test of the typical main rotor components

Advanced attack helicopter fatigue testing - Overview

Sonic fatigue testing of an advanced composite airframe

Sensitivity of bonded and bolted joints in composites 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

Subject Index

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/AA6111 in aircraft structures

Structural strength of materials and parts of gas turbine engines - Russian book

Modeling of thermal effects when simulating 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

A protective additive for jet fuels

Antwear properties of additives based on higher fatty acids for jet fuels

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 IUs

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 Sharpy serial frequency ratio test for redundancy management

Analytical design and validation of digital flight control system structure

Hierarchical specification of the SIFT fault tolerant flight control system

SIFT: An ultra-reliable avionic computing system

Analysis of computing system configurations for highly integrated guidance and control systems

Production of Reliable Flight Crucial 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

Fasteners for composite structures

A roadmap toward a fatigue qualification process for modern technology helicopters

Application of a new hybrid material/AA6111 in aircraft structures

Structural strength of materials and parts of gas turbine engines - Russian book

Modeling of thermal effects when simulating 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

A protective additive for jet fuels

Antwear properties of additives based on higher fatty acids for jet fuels

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 IUs

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 Sharpy serial frequency ratio test for redundancy management

Analytical design and validation of digital flight control system structure

Hierarchical specification of the SIFT fault tolerant flight control system

SIFT: An ultra-reliable avionic computing system

Analysis of computing system configurations for highly integrated guidance and control systems

Production of Reliable Flight Crucial 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
Cost and benefits design optimization model for fault tolerant flight control systems

Fault trees Fault isolation BITE for increased productivity

Feasibility Analysis Implementing the BITE executive --- Digital Avionics Information System software feasibility for aircraft systems

Advanced realistic not futuristic Electronic Warfare Test Set

Adaptive fuel control feasibility investigation

Transportation systems evaluation methodology development and applications, phase 3

Feature Extraction U pattern recognition

Federal Budgets Naval and Airway Improvement Act of 1981, part 1

NASA Authorization, 1982: Index

Federal Republic of Germany U West Germany

Feed Systems Helicopter air inlets

Feedback Control NT Cascade Control

Closed loop environmental control systems for fighter aircraft

A dual input actuator for fluidic backup flight control

Digital redesign of existing multiloop continuous control system --- with application to YF-16 aircraft flight controller

Comparison between the exact and an approximate feedback solution for moderate range interception problems

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

The use of observers on relaxed static stability aircraft

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

Acceptance testing of the Calspan variable stability LearJet

Flutter mode suppression using hyperstable feedback

An application of total synthesis to robust coupled design --- turbojet engine control

The use of adaptive control for helicopter trajectories in search operations

Sensitivity reduction by double perfect model following --- with application to aircraft control

Active control of aerelastic divergence

Feedback control of a cantilever wing in steady airflow

GIGA - A gust alleviation for general aviation aircraft

Automatic synthesis of control in a stationary linear system --- for aircraft flight control

Simplified digital design tools

A simple system for helicopter Individual-blade-Control and its application to stall flutter suppression

Design and evaluation of a state-feedback vibration controller

Bator state estimation for rotocraft

A simple system for helicopter Individual-blade-control and its application to stall-induced vibration alleviation

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

Modal control of relaxed static stability aircraft

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

Flight control systems using robust output observers

Application of multivariable model following method to flight controller

Design and analysis of a multivariable control system for a CCV-type fighter aircraft

Design of a longitudinal ride-control system by Zakian's method of inequalities

Optimization in multivariable design

Comparative study of flare control laws

Multi-variable analysis and design techniques

The need for multivariable design and analysis techniques

Characteristic and principal gains and phases and their use as multivariable control design tools

Generalizing Nyquist and root-locus diagram techniques

Multivariable design techniques based on singular value generalizations of classical control techniques

Limitations on achievable performance of multivariable feedback systems

LQG-based multivariable design: Frequency domain interpretation

LQG multivariable design tools

Design of high integrity multivariable control systems

A geometric approach to multivariable control system synthesis

Multivariable design: The optimization of approximate inverses

Feedback and unam quant sensitivity

Design techniques for multivariable flight control systems

Practical design and realization of a digital adaptive flight control system

Experimental and analytical studies of advanced air cushion landing systems

Computational methods of robust controller design

A program to evaluate a control system based on aerodynamic flutter suppression

A program to evaluate a control system based on feedback of aerodynamic pressure differentials

Identification of multivariable high performance turbofan engine dynamics from closed loop data

Optimal terrain-following feedback control for advanced cruise missiles

Dynamic response of a hot gas, control-surface actuator --- for an aircraft rudder
Fiber optics remoting of terrestrial radar and beacon signals (AD-A116403) p0574 H82-32140

FIBER OPTIC INTERCONNECT
Fatigue behavior of selected non-woven fiber composites for helicopter rotor blades p0170 H82-20524

Damping and stiffness of aligned discontinuous fiber reinforced polymer composites (AIAA 82-0712) p0335 H82-30102

Shape optimization of fiber reinforced composites (AIAA 82-0719) p0339 H82-30169

FIBER REINFORCED COMPOSITES
Effects of elastomeric additives on the mechanical properties of epoxy resin and composite systems p0113 H82-17538

Multilevel optimum design of structures with fiber-composite stiffened-panel components (AIAA PAPER 80-0723) p0113 H82-17594

Certification of civil composite aircraft structure (SAE PAPER 810061) p0231 A82-24389

NDE of composite rotor blades during fatigue testing p0239 A82-24713

Materials and aerostructures p0274 A82-26025

Fibrous composites in structural design -- Book p0287 A82-27127

A crashworthiness test for composite fuselage structure p0288 A82-27139

Mechanically-fastened joints for advanced composites -- Phenomenological considerations and simple analyses p0289 A82-27156

Damping and stiffness of aligned discontinuous fiber reinforced polymer composites (AIAA 82-0712) p0335 H82-30102

Shape optimization of fiber reinforced composites (AIAA 82-0719) p0339 H82-30169

Failure analysis of silica phenolic nozzle liners (AD-A106178) p0391 A82-24882

Geometrical aspects of the tribological properties of graphite fiber reinforced polyamide composites (AD-A10948) p0431 A82-37855

The effect of hybrid composite materials on the dynamic characteristics of helicopter rotor blades p0491 A82-29263

A summary of weight savings data for composite VSSL structure p0502 A82-60546

Material and process developments on the Boeing 767 (AIAA 82-0712) p0339 A82-60902

Material identification for the design of composite rotary wings p0509 A82-60937

Application of a new hybrid material /ABALL/ in aircraft structures (AIAA 82-0712) p0350 A82-60992

Sliced disc design - a composite concept for a turbo engine axial compressor p0515 A82-60975

Advanced compressor components. Phase I: 1978 to 1979 --- for aircraft engines (BAFPT-FB-8-01-025) p0144 H82-15073

Composite structural materials --- fiber reinforced composites for aircraft structures (NASA-CA-165121) p0193 H82-16182

Use of composite materials for helicopter rotor blades (PB82-124041) p0316 H82-21911

Advanced concepts for composite structure joints and attachment fittings. Volume 1: Design and evaluation (AD-A110212) p0321 H82-21261

Study of noise reduction characteristics of composite fiber-reinforced panels, interior panel configurations, and the application of the tuned damped concept (NASA-CA-168745) p0322 H82-21999

Advanced concepts for composite structure joints and attachment fittings. Volume 2: Design guidelines (AD-A1111061) p0451 H82-26280

Fuselage structure using advanced technology fiber reinforced composites (NASA-CASE-LAR-11680-1) p0450 H82-26284

Carbon fiber reinforced composite structures protected with metal surfaces against lightning p0466 H82-26214

...
SUBJECT INDEX

* Strike damage [AIAA 81-2345] p0492 A82-13400
  High temperature composites. Status and future
  directions [NASA-TR-82079] p0559 A82-30336
  Aircraft structure evaluation by thermal field detection, phase 1: Fundamental
  information and basic technique development [AIAA 81-11574] p0593 A82-32425

* FIBER STRENGTH
  Report from the Working Party on New Fiber Materials
  --- standardization and strength p0398 A82-24512

* FIBERGLASS
  U GLASS FIBERS
  NT CARBON FIBERS
  NT GLASS FIBERS
  NT REINFORCING FIBERS
  Report from the Working Party on New Fiber Materials
  --- standardization and strength p0398 A82-24512

* FIBER MATERIALS
  S FIBERS

* FIBER-FILLER MATERIALS
  NT CARBON FIBERS

* FIBER FILLER MATERIALS
  NT GLASS FIBERS
  NT REINFORCING FIBERS
  Report from the Working Party on New Fiber Materials
  --- standardization and strength p0398 A82-24512

* FIELD STRENGTH
  NT ELECTRIC FIELD STRENGTH

* FIELD THEOREM (ALGEBRA)
  NT QUADRATIC EQUATIONS

* FIELD THEORY (PHYSICS)
  Antenna theory and design --- Book p0020 A82-12323
  Simulation of the fluctuating field of a forced jet [NASA-TR-84056] p0615 A82-34019

* FIGHTER AIRCRAFT
  NT ALPHA JET AIRCRAFT
  NT F-4 AIRCRAFT
  NT F-5 AIRCRAFT
  NT F-8 AIRCRAFT
  NT F-14 AIRCRAFT
  NT F-15 AIRCRAFT
  NT F-16 AIRCRAFT
  NT F-18 AIRCRAFT
  NT F-22 AIRCRAFT
  NT F-27 AIRCRAFT
  NT F-100 AIRCRAFT
  NT F-106 AIRCRAFT
  NT F-111 AIRCRAFT
  NT FALCON AIRCRAFT
  NT JAGUAR AIRCRAFT
  NT MIRAGE AIRCRAFT
  NT SAAB 37 AIRCRAFT
  Analysis of augmented aircraft flying qualities
  through application of the Neale-Smith criterion
  [AIAA PAPER 81-1776] p0008 A82-10462
  Closed loop environmental control system for
  fighter aircraft [NASA PAPER 81-R552-2] p0011 A82-10890
  Dynamic response of aircraft structure to gun
  shock loads p0013 A82-11314
  The case for a defensive air-to-air fighter
  [NASA PAPER 81-TR5-1] p024 A82-12801
  Air-to-air combat analysis - Review of
  wing/store data analysis - An active adaptive control
  application p0044 A82-13115
  Fault detection for two physically separated,
  communicating inertial measurement units
  [NASA PAPER 81-11574] p045 A82-13142
  Airframes and computer control of fighter jet
  operational utility studies on manned air combat
  simulators [AIAA 81-2230] p0067 A82-13463
  Application of the concept of dynamic trim control
  and nonlinear system inversion to automatic
  control of a vertical attitude takeoff and
  landing aircraft [AIAA 81-2238] p0067 A82-13451
  Joint Tactical Offensive Landing System /JTO/LS/
  airborne signal processing [AIAA 81-2247] p0000 A82-13471
  An update of an integrated CFI system -- YESS ---
  Communication, Navigation, and Identification
  provided by Tactical Information Exchange System
  [AIAA 81-2292] p0059 A82-13500
  Time-referencing of data in an asynchronous
  environment --- for fighter aircraft avionics
  [AIAA 81-2341] p0052 A82-13531
  The development of cryogenic wind tunnels and
  their application to maneuvering aircraft
  technology p0061 A82-13971
  Techniques for modifying airfoils and fairings on
  aircraft using foam and fiberglass
  [AIAA PAPER 81-2405] p0064 A82-14383
  A conclusion of a flutter installation system
  for tactical aircraft with separated wings
  [AIAA PAPER 81-2418] p0066 A82-14875
  Integrated flight/weapon control design and
  evaluation p0066 A82-14741
  The influence of smart computers on the cockpit of
  future aircraft p0069 A82-14743
  Evaluation of advanced air-to-air gunnery fire
  control systems p0069 A82-14750
  Airborne color CRT displays
  [AIAA PAPER 81-2423] p0073 A82-14823
  A synthesis technique for highly uncertain and
  interacting multivariable flight control systems
  [AIAA PAPER 81-2427] p0076 A82-14824
  Robust flight control - A design example
  [AIAA PAPER 81-2428] p0082 A82-15845
  Advanced cockpit for tactical aircraft
  p0106 A82-16559
  Experience with high performance V/STOL fighter
  projects at NASA
  [AIAA PAPER 81-2414] p0107 A82-16901
  Pilot simulation of hover and transition of a
  vertical attitude takeoff and landing aircraft
  [AIAA PAPER 81-2630] p0108 A82-16910
  Thrust reversing effects on twin-engine aircraft
  having nonaxisymmetric nozzles
  [AIAA PAPER 81-2639] p0109 A82-16911
  Digital test pilot concept
  [AIAA PAPER 82-0259] p0118 A82-17867
  Highlights of a design concept for a close ground
  support fighter
  [AIAA PAPER 82-0411] p014 A82-17932
  Autonomous controlled terrain following flights
  [AIAA PAPER 82-0415] p0150 A82-18920
  Thrust-induced effects on low-speed aerodynamics
  of fighter aircraft
  [AIAA PAPER 81-2612] p0155 A82-19203
  Tactical STOL moment balance through innovative
  configuration technology
  [AIAA PAPER 81-2615] p0155 A82-19204
  Analysis of data from a wind tunnel investigation
  of a large-scale model of a highly maneuverable
  supercritical V/STOL fighter - STOL configuration
  [AIAA PAPER 81-2620] p0155 A82-19207
  Large-scale wind tunnel tests of a sting-supported
  V/STOL fighter model at high angles of attack
  [AIAA PAPER 81-2621] p0156 A82-19208
  Airframe effects on top-mounted inlet systems
  for VSSTOL fighter aircraft
  [AIAA PAPER 81-2631] p0156 A82-19212
  Concept definition and aerodynamic technology
  studies for single-engine V/STOL fighter/attack
  aircraft [AIAA PAPER 81-2647] p0157 A82-19216
  SIMAR - An air battle simulation of the USAF
  Tactical Air Control System /TACS/ with advanced
  Tactical Radars
  [AIAA PAPER 81-2651] p0158 A82-19217
  Control law development for a close-coupled
  canard, relaxed static stability fighter
  [AIAA PAPER 82-0180] p016 A82-19784
  Energy management in military combat aircraft
  p0169 A82-20515

A-193
Structural analysis of fuselages with cutouts by finite element method

Research and development program for non-linear structural analysis computer programs for rigid bodies

Concept studies of an advanced composite wing temperature-dependent constitutive relationships

Finite volume calculation of three-dimensional turbulent flow around a propeller

Aeroelastic stability of rotor blades using finite element method

Large displacements and stability analysis of nonlinear structural and life analyses of a combustor liner

Application of the finite element method to rotary wing aerelasticity

Elastic-plastic finite-element analyses of thermally cycled double-edge wedge specimens

Nonlinear structural and life analyses of a combustor liner

Vibration of structures excited acoustically

Application of the finite element method to rotary wing aerelasticity

Finite volume method

Remarks on the calculation of transonic potential flow by a finite volume method

Finite volume calculation of three-dimensional potential flow around a body

A numerical study of the turbulent flow past an isolated airfoil with trailing edge separation

An implicit finite-volume method for solving the Euler equations

Damped Euler-equation method to compute transonic flow around wing-body combinations

FINITE VOLUME METHOD

Remarks on the calculation of transonic potential flow by a finite volume method

The anatomy of a technology test bed - Integrated Flight/Fire Control I/IFFC I/FFC I

U.S. Army remotely piloted vehicle program

Technology overview for advanced aircraft armament system program

Standardization study for advanced aircraft armament system program

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

Integrated flight and fire control demonstration on an F-15E aircraft: System development and ground test results

A case study of reliability and maintainability of the F-16 APG-66 fire control radar

Impact of Advanced Avionics Technology and Ground Attack Weapon Systems

A new trajectory for F-16 air-to-surface missions

FIRE DASH:

Evaluation of heat damage to aluminum aircraft structures

Workshop on Mathematical Fire Modelling

Aircraft fire safety

Aircraft fire mishap experience/crash fire scenario quantitation

Aviation fuel's future outlook and impact on aircraft fire threat

Fireworthiness of transport aircraft interior systems

The development and applications of a full-scale wide body test article to study the behavior of interior materials during a postcrash fuel fire

Aircraft post crash fire reduction/surivivability enhancement from a manufacturer's viewpoint

FIRE EXTINGUISHERS

Fighting fire and other disasters from the air: International Scientific-Technical Symposium, Hanover, West Germany, June 11, 12, 1980, Reports

Fighting fire with the aid of aircraft in the United States of America

Fighting forest fires - a task for the Swiss air force

The current state of technology concerning the fighting of forest fires from the air in Austria

The utilization of agricultural aircraft in economical operations for fighting forest fires in Israel

The utilization of aircraft in fighting forest fires - French experience

The use of 'water bombers' and chemical agents against forest fires, taking into account the employment of a first-attack system

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

Adaptation and equipment of aircraft for the fighting of forest fires

Fire extinguishing materials

 finite element approach and measurement by ground vibration test

A study of the techniques of dynamic analysis of helicopter type structures

Interpretation and construction of a dynamic similarity model of the A 310 wings

Characterization of the Airbus horizontal stabilizers of CFPB construction and structural analysis with the finite element method

Vibration of structures excited acoustically

Application of the finite element method to rotary wing aerelasticity

Elastic-plastic finite-element analyses of thermally cycled double-edge wedge specimens

Nonlinear structural and life analyses of a combustor liner

Large displacements and stability analysis of nonlinear structural and life analyses of a combustor liner

Stress intensity factors for radial cracks at outer surface of a partially autofrettaged cylinder subjected to internal pressure

Aerelastic stability of rotor blades using finite element analysis

Finite element method

Remarks on the calculation of transonic potential flow by a finite volume method

Finite volume calculation of three-dimensional potential flow around a body

A numerical study of the turbulent flow past an isolated airfoil with trailing edge separation

An implicit finite-volume method for solving the Euler equations

Damped Euler-equation method to compute transonic flow around wing-body combinations

FEDERATED BODIES

Subsonic and transonic roll damping measurements on Basic Finner --- finned missile calibration model

FINS

Ground calibration of a strain-gauged C2-4A aircraft (1979)

Concept studies of an advanced composite helicopter fan

FIRE CONTROL

Design and analysis of a digitally controlled integrated flight/fire control system

Evaluation of advanced air-to-air gunnery fire control systems

Radar environment simulation for software test

The use of 'water bombers' and chemical agents against forest fires, taking into account the employment of a first-attack system

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

Adaptation and equipment of aircraft for the fighting of forest fires

Fire extinguishing materials

Development and testing of dry chemicals in advanced extinguishing systems for jet engine nacelle fires
FIBB PBBVBHIIOB
FIBE FIGHTING
FIBE PISHTIHG
- The utilization of aircraft in fighting forest fires
Evaluation of the North Island A/C crash/rescue fireworthiness of transport aircraft interior
Biomechanical behavior of progressively
Smoke abatement system for crash rescue/fire extinguishing agents in connection with the fighting of forest fires
The employment of helicopters in Austria in 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
Adaptation and equipment of aircraft for the fighting of forest fires - A task for the Swedish armed forces
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
Performance characteristics and employment profiles of the new helicopter BK117
Evaluation of the North Island A/C crash/rescue training facility
Briefs of accidents involving aerial application operations, U.S. general aviation, 1979
Smoke abatement system for crash rescue/fire training facilities
Aircraft fire safety [AGARD-LS-123]
Aircraft fire mishap experience/crash fire scenario quantification
Aircraft post crash fire reduction/survivability enhancement from a manufacturer's viewpoint
Aircraft post crash fire fighting/rescue
FIRE PREVENTION
Biomechanical behavior of progressively shear-thickening solutions - Aircraft fuel polymer additives for fire protection in survivable crashes
Aircraft fire safety research with antisticking fuels - Status report
An assessment of the crash fire hazard of liquid hydrogen fueled aircraft
Workshop on Mathematical Fire Modeling
Fuel system protection methods
Fireworthiness of transport aircraft interior systems
The development and applications of a full-scale wide body test article to study the behavior of interior materials during a postcrash fuel fire
FIRE RETARDANTS
- PLANE FIRE RETARDANTS
FIREPROOFING
Test methodology for evaluation of fireworthy aircraft seat cushions
Fireproof brake hydraulic system
The development and applications of a full-scale wide body test article to study the behavior of interior materials during a postcrash fuel fire
FIREWORX
- HYDROCHEMICALS
FIRST AID
Importance of a tactical cargo aircraft in an emergency relief
FISHING
- YAIN
FITNESS
- NT PHYSICAL FITNESS
FITTINGS
Advanced concepts for composite structure joints and attachment fittings. Volume 1: Design and evaluation
FIXED WINGS
Wing design for light transport aircraft with improved fuel economy
Craneworthy military passenger seat development
Analysis and flight evaluation of a small, fixed-wing aircraft equipped with hinged plate spoilers
V/STOL aircraft and fluid dynamic
New development in flying qualities with application to rotary wing aircraft
FIXED-ENG AIRCRAFT
- AIRCRAFT CONFIGURATIONS
- FIXED WINGS
FLAME CALORIMETERS
Best release rate calorimetry of engineering plastics
FLARE PROJECT
- PLANE PROPAGATION
FLARE HOLDERS
Experimental study of the effects of secondary air on the emissions and stability of a lean premixed combustor
FLAME INHIBITION
- PLANE PROPAGATION
FLAME PROPAGATION
Determination of the flammability characteristics of aerospace hydraulic fluids
The relaxation oscillation in premixed combustion
Models for a turbulent premixed dual combustor
FLAME RETARDANTS
Formulation and characterization of polynolamide resilient foams of various densities for aircraft seating applications
SUBJECT INDEX
FLIGHT CHABACIBBISTICS

A method for applying linear optimal control theory to the design of a regulator for a flexible aircraft --- improving riding quality in fighter aircraft

The dynamic flexural response of propeller blades

Optimal dolphin hang glider flight

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 position

Optimization of thrust algorithms for Computing System (TCS) for Thrust the NASA Highly Maneuverable Aircraft Technology (HMAT) vehicle's propulsion system

FLIGHT CHARACTERISTICS

Analysis of augmented aircraft flying qualities through application of the Heal-Smith criterion

Wings in the sun - The evolution of Solar Challenger

A decoupled control system for improved flight performance in wind shear

Governor testing

Selected stability and control derivatives from the first Space Shuttle entry

Powered-lift STOL aircraft shipboard operations - A comparison of simulation, land-based and sea trial results for the QSH --- Quiet Short-Haul Research Aircraft

AD-1 oblique wing aircraft program

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

Determination of Learjet Longhorn airplane horizontal tail load and hinge moment characteristics from flight data

Digital test pilot concept

Quiet Short-Haul Research Aircraft - The first 3 years of flight research

AV-8B Harrier II

Airframe parameter identification in the presence of atmospheric turbulence

Performance improvements with the free-turb rotor

Flying qualities - A costly lapse in flight-control design

Advancing blade flight data gathered

The characteristics and detection of low level wind shear in the critical phases of flight

Performance characteristics and employment profiles of the new helicopter BK117

Forward-swept-wing technology

OLGA - A gust alleviation for general aviation aircraft

An alternate method of specifying bandwidth for flying qualities

SUBJECT INDEX

Optimal dolphin hang glider flight p0582 AB-2-46608


On-line optimization of aircraft altitude and flight path angle dynamics

Checking and calibrating variometers in place in the sailplane instrument panel p0230 AB-2-29415

System for providing an integrated display of instantaneous information relative to aircraft attitude, heading, altitude, and horizontal position [NASA-CASE-PESC-11005-1] p0189 AB-2-16075

Optimization of thrust algorithms for Computing System (TCS) for Thrust the NASA Highly Maneuverable Aircraft Technology (HMAT) vehicle's propulsion system [NASA-CR-163121] p0317 AB-2-21198

FLIGHT CHARACTERISTICS

Analysis of augmented aircraft flying qualities through application of the Heal-Smith criterion [AIAA PAPER 81-2451] p0056 A82-13880

Wings in the sun - The evolution of Solar Challenger [AIAA PAPER 81-2451] p0116 A82-19209

A decoupled control system for improved flight performance in wind shear p0043 AB-2-13079

Governor testing [AIAA PAPER 81-2451] p0055 AB-2-13877

Selected stability and control derivatives from the first Space Shuttle entry [AIAA PAPER 81-2451] p0056 AB-2-13880


AD-1 oblique wing aircraft program [AIAA PAPER 81-2354] p0064 AB-2-14390


Determination of Learjet Longhorn airplane horizontal tail load and hinge moment characteristics from flight data [AIAA PAPER 82-0183] p0116 AB-2-17827

Digital test pilot concept [AIAA PAPER 82-0259] p0118 AB-2-17667

Quiet Short-Haul Research Aircraft - The first 3 years of flight research [AIAA PAPER 82-2625] p0156 AB-2-19209

AV-8B Harrier II [AIAA PAPER 82-21260] p0180 AB-2-21260

Airframe parameter identification in the presence of atmospheric turbulence p0210 AB-2-23227

Performance improvements with the free-turb rotor p0279 AB-2-26387

Flying qualities - A costly lapse in flight-control design p0296 AB-2-28280

Advancing blade flight data gathered p0297 AB-2-28312

The characteristics and detection of low level wind shear in the critical phases of flight p0297 AB-2-28349

Performance characteristics and employment profiles of the new helicopter BK117 p0331 AB-2-29586

Forward-swept-wing technology p0381 AB-2-33309

OLGA - A gust alleviation for general aviation aircraft p0389 AB-2-34374

An alternate method of specifying bandwidth for flying qualities [AIAA 82-1609] p0485 AB-2-38988

Investigation of low order lateral directional transfer function models for augmented aircraft [AIAA 82-1610] p0495 AB-2-39899

Handling qualities criteria for flight path control of V/STOL aircraft [AIAA PAPER 82-1292] p0496 AB-2-39081

In-flight investigation of large airplane flying qualities for approach and landing [AIAA PAPER 82-1296] p0496 AB-2-39083

Unique flight characteristics of the AD-1 oblique-wing research airplane [AIAA PAPER 82-1329] p0498 AB-2-39106

A ground-simulation investigation of helicopter decelerating instrument approaches [AIAA PAPER 82-1346] p0498 AB-2-39118

Perspectives of the flying qualities specification [AIAA PAPER 82-1354] p0499 AB-2-39123

Ringfin augmentation effects p0502 AB-2-40548

Prediction of high alpha flight characteristics utilizing rotary balance data p0510 AB-2-40953

Characteristics of a Paris-New York flight on the Concorde p053 AB-2-41700

A complete method for computatie of blade mode characteristics and responses in forward flight p057 AB-2-18126

Flight characteristics design and development of the BBN/EMH BK117 helicopter p0248 AB-2-18150

An analytical investigation of the free-turb rotor for helicopters [NASA-TP-14675] p0502 AB-2-18127

Helicopter rotor performance improvement by utilization of swept-back parabolic blade tip --- wind tunnel tests p0343 AB-2-22151

Combat aircraft manoeuvrability [AGARD-CP-319] p0346 AB-2-22187

The military flying qualities specification, a help or a hindrance to good fighter design --- flight control system design [AIAA PAPER 82-1346] p0488 AB-2-39118

Development of a tentative flying qualities criterion for aircraft with independent control of six degrees of freedom: analysis and flight test p0347 AB-2-22191

Experimental flight test programs for improving combat aircraft maneuverability by maneuver flaps and pylon split flaps p0348 AB-2-22192

Multivariable closed loop control analyses and synthesis for complex flight systems p0347 AB-2-22193

The development of cryogenic wind tunnel facilities with their application to maneuvering aircraft technology p0347 AB-2-22196

Socata: TB 20 Trinidad given German debut [NASA-TR-17066] p0352 AB-2-22247

Applications of system identification methods to the prediction of helicopter stability, control and handling characteristics p0367 AB-2-23230

Airworthiness and flight characteristics test of an OM-50C configured to a Light Combat Helicopter (LCH) [AD-A112581] p0452 AB-2-26286

A ground-simulator investigation of helicopter longitudinal flying qualities for approach and landing [NASA-TR-04225] p0511 AB-2-33398

FLIGHT CLOTHING

Evaluation of a selected group of anti-exposure garment configurations for their effects on the operational performance and survival of Naval aircrew p0079 AB-2-19472

FLIGHT COMPUTERS

0 AIRSHOW/SPACECRAFT COMPUTERS

FLIGHT CONDITIONS

Helicopters - Night operations p0153 AB-2-19017

Properties of the new flight and tactics simulators [DGLA PAPER 81-106] p0158 AB-2-19265

Flight condition recognition /FCE/ technique --- microprocessor-based recording for helicopter
FLIGHT CONTROL

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 tripler 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

Evaluation of advanced air-to-air Quincy 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

USSTPS 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 RAB

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

[AlAA 82-2112] p0239 A82-29712

[AlAA 82-2006] p0265 A82-27082

[AlAA 82-36972]

[AlAA 82-36216]

[AlAA 82-32274]

[AlAA 82-32363]

[AlAA 81-2105] p0001 A82-10081

[AlAA 81-2105] p0001 A82-10083

[AlAA 81-2105] p0001 A82-10100

[AlAA 81-2105] p010 A82-10853

[AlAA 82-12170]

[AlAA 82-12170]

[AlAA 82-13079]

[AlAA 82-13088]

[AlAA 82-13142]

[AlAA 82-13452]

[AlAA 82-13455]

[AlAA 81-2217] p007 A82-13455

[AlAA 81-2217] p006 A82-13452

[AlAA 81-2217] p006 A82-13452

[AlAA 82-13502]

[AlAA 82-13503]

[AlAA 81-2297] p0054 A82-13504

[AlAA 81-2295] p0054 A82-13502

[AlAA 81-2296] p0054 A82-13503

[AlAA 81-2298] p0059 A82-13536

[AlAA 81-2109] p0054 A82-10083

[AlAA 81-2141] p0054 A82-10081

[AlAA 81-2145] p0054 A82-10100

[AlAA 81-2146] p0054 A82-10081

[AlAA 81-2147] p0054 A82-10083

[AlAA 81-2148] p0054 A82-10082

[AlAA 81-2149] p0054 A82-10084

[AlAA 81-2150] p0054 A82-10085

[AlAA 81-2151] p0054 A82-10086

[AlAA 81-2152] p0054 A82-10087

[AlAA 81-2153] p0054 A82-10088

[AlAA 81-2154] p0054 A82-10089

[AlAA 81-2155] p0054 A82-10090

[AlAA 81-2156] p0054 A82-10091

[AlAA 81-2157] p0054 A82-10092

[AlAA 81-2158] p0054 A82-10093

[AlAA 81-2159] p0054 A82-10094

[AlAA 81-2160] p0054 A82-10095

[AlAA 81-2161] p0054 A82-10096

[AlAA 81-2162] p0054 A82-10097

[AlAA 81-2163] p0054 A82-10098

[AlAA 81-2164] p0054 A82-10099

[AlAA 81-2165] p0054 A82-10100

[AlAA 81-2166] p0054 A82-10101

[AlAA 81-2167] p0054 A82-10102

[AlAA 81-2168] p0054 A82-10103

[AlAA 81-2169] p0054 A82-10104

[AlAA 81-2170] p0054 A82-10105

[AlAA 81-2171] p0054 A82-10106

[AlAA 81-2172] p0054 A82-10107

[AlAA 81-2173] p0054 A82-10108

[AlAA 81-2174] p0054 A82-10109

[AlAA 81-2175] p0054 A82-10110

[AlAA 81-2176] p0054 A82-10111
A design criterion for highly augmented fly-by-wire aircraft
[AIAA 82-1570] P0045 882-38669

Generic faults and design solutions for flight-critical systems
[AIAA 82-1559] P0045 882-39800

Preliminary laboratory evaluation of a reconfigurable integrated flight control concept
[AIAA 82-1597] P0045 882-39892

As an alternate method of specifying bandwidth for flying qualities
[AIAA 82-1609] P0045 882-39898

The Sharryev sequential probability ratio test for redundancy management
[AIAA 82-1623] P0045 882-39998

X-29A flight control system design experiences
[AIAA 82-1538] P0046 882-39003

Flight control synthesis using robust output observers
[AIAA 82-1575] P0046 882-39166

Handling qualities criteria for flight path control of V/STOL aircraft
[AIAA PAPER 82-1292] P0046 882-39081

Application of multivariable model following method to flight controller
[AIAA PAPER 82-1349] P0046 882-39120

Design and analysis of a multivariable control system for a CCY-type fighter aircraft
[AIAA PAPER 82-1350] P0046 882-39121

Perspectives of the flying qualities specification
[AIAA PAPER 82-1354] P0049 882-39123

Guidance for the use of equivalent systems with MIL-P-8765C --- for aircraft flight control systems
[AIAA PAPER 82-1355] P0049 882-39124

NASA Dryden's experience in parameter estimation and its uses in flight test
[AIAA PAPER 82-1370] P0049 882-39315

The system of 'objective control' and flying quality requirements for V/STOL transition
[AIAA PAPER 82-1293] P0049 882-39245

Flight-determined correction terms for angle of attack and sideslip
[AIAA PAPER 82-1374] P0049 882-40290

Analytical design and validation of digital flight control system structure
[AIAA PAPER 82-1626] P0047 882-40439

Design and construction of a flexible automatic electronic display device --- for flight control systems
P0503 882-40569

Advanced fighter technology integration program AFPI/F-16
P0506 882-40670

Optimal open-loop aircraft control for go-around maneuvers under wind shear influence
P0510 882-40675

Design integration of CCM/DSB for a sea-based aircraft
P0512 882-40677

Statistical analysis of piloted simulation of real-time trajectory optimization algorithms
P0519 882-42625

Current perspective on emergency spin-recovery systems
P0554 882-43275

757 system key to route flexibility
P0558 882-43274

Image processing in tactical flight guidance
P0559 882-43275

Maximum likelihood failure detection of aircraft flight control systems
P0566 882-44481

High Order Languages /HGL/ for flight control applications
[AAS 82-020] P0578 882-45608

Development and evaluation of automatic landing control laws for light wagon landing STOL aircraft
[AIAA-CGE-16403] P0598 882-10043

Flight trajectory control investigation
[AD-104452] P0035 882-11048

Electronic master monitor and advisory display system, human engineering summary report
[AD-104464] P0037 882-11065

Design considerations for optimal flight control systems
P0045 882-10077

Design techniques for multivariable flight control systems

A-202

SUBJECT INDEX

Practical design and realization of a digital adaptive flight control system
P0039 882-10178

Control law design for transport aircraft flight tasks
P0039 882-11079

Management of redundancy in flight control systems using optimal decision theory
P0039 882-11080

Fixed gain controller design for aircraft
[AD-8106877] P0669 882-12061

Limited evaluation of an F-14A'airplane utilizing an allcrew-rudder interconnect control system in the landing configuration
[NASA-FR-61972] P0100 882-13148

Interactive aircraft flight control and aerodynamic stabilization --- forward swept wing flight vehicles
[NASA-CR-165036] P0100 882-13150

Selected advanced aerodynamic and active control concepts development
[NASA-CR-3220] P0141 882-15029

In-flight investigation of the effects of pilot location and control system design on airplane flying qualities for approach and landing

Flight dynamics technology development: Structures and dynamics, vehicle equipment/ subsystems, flight control and aerosurfaces
[AD-8096636] P0195 882-17024

Stage-state reliability analysis techniques
P0196 882-17025

Hierarchical specification of the SIFT fault tolerant flight control system
P0197 882-17126

Reconfiguration: A method to improve systems reliability
P0197 882-17117

An investigation of multi-axis isometric side-air controllers in a variable stability system
[AD-8106759] P0209 882-17226

Parallel computation for developing nonlinear control procedures
[AD-8107914] P0209 882-17272

A redundancy concept for a digital CAS
P0209 882-18170

The x-continuum of sensor and actuator characteristics on overall helicopter AFCS design
P0209 882-18173

Integration of inertial sensors in helicopters
P0209 882-18174

Integrated control design techniques
[AD-108223] P0257 882-18212

Apparatus for damping operator induced oscillations of a controlled system --- flight control
[NASA-CR-447-1] P0259 882-18498

Electric Flight Systems
[NASA-CP-2209] P0260 882-19145

Overview of honeywell electrosensory actuation programs
P0261 882-19402

Digital flight controls
P0261 882-19413

Digital flight controls
P0261 882-19419

Electric flight system integration
P0261 882-19500

Multivariable aircraft control by maneuver commands: An application to air to surface gunnery
P0262 882-19549

A study of flight control requirements for advanced, winged, earth-to-orbit vehicles with far-alt center-of-gravity locations
P0267 882-19926

Development of longitudinal equivalent system models for selected US Navy tactical aircraft
[AD-8104988] P0306 882-20196

Categorization of atmospheric turbulence in terms of aircraft response for use in turbulence reports and forecasts
[AD-8105011] P0306 882-20190

Integration of controls and displays in U. S. Army helicopter cockpits
[AD-8105013] P0306 882-20156
Optimization of auto-pilot equations for rapid
An assessment of the real-time application
BarneFs~Trad—dispersal surfaces in minimum-time
Integration of avionics and advanced control
The military flying qualities specification, a
Combat Aircraft Nanoeuvrability
Operational procedures relative to severe weather
Use of the Pseudo-inverse for design of a
Comparison of analytical predictions of
Strapdown inertial navigation systems: An
The development of cryogenic wind tunnels and
ACTTA: Investigation of new piloting and flight
The role of voice technology in advanced
Analysis of computing system configurations for
Production Verification Testing (PVT) of guidance
Scenarios for evolution of air traffic control
Design of advanced digital flight control systems
Evaluation of a trajectory command concept for
Lov cost development of I8S sensors for expendable
Lov cost development of individual airframe
High-accuracy ranging over voice radios for downed
Cost and benefits design optimization model for
Engineering/electric technology benefits study ---
Design of advanced digital flight control systems via Command Generator Tracker (CGT) synthesis methods, volume 1
Design of advanced digital flight control systems via Command Generator Tracker (CGT) synthesis methods, volume 2
Evaluation of a selected group of anti-exposure garments configurations for their effects on the
Operational reversion flight control system for A-10
manual control of carrier approaches and landings
Evaluation of a trajectory command concept for
Design of advanced digital flight control systems via Command Generator Tracker (CGT) synthesis
Singularity perturbation techniques for real time aircraft trajectory optimization and control
Evaluation of a trajectory command concept for
Cost and benefits design optimization model for
Voice Interactive Systems Technology Avionics (VISTA) Program
The all digital military aircraft
High-accuracy ranging over voice radios for downed
Rescue at sea
'Little people' problem /BA-2 torso harness/
A new safety harness for mobile aircrews
Evaluation of a selected group of anti-exposure garments configurations for their effects on the
Operational performance and survival of naval aircrews
Test and evaluation of improved aircrew restraint systems
HASEP - Survival from crashed Navy-helicopters
Analytical and experimental characterization of the JAD-14/4 cartridge actuated initiator for

A-201
A mathematical model of a subsonic transport aircraft

General aviation fuel conservation in the 1980s...

Improvement of fuel economy by flying with maximum rearward center-of-gravity position

Efficient combinations of numerical techniques applied to aircraft turning performance optimization

Fuel optimal trajectory computation

Comparison of light aircraft with strutted and cantilever wings

Application of a dimensionless criterion of transport efficiency in evaluating aircraft modifications

The maximum flying range problem for an aircraft

Determination of the glide path of an aircraft with power off

Flight management computers

Optimal control application in supersonic aircraft performance

The fourth dimension --- flight management system for airline operations

Optimization of flight with tilt wings

The flight management computer

Optimum climb and descent trajectories for airline missions

Flight management computer

Cost and fuel consumption per nautical mile for two engine jet transports using OPTIH and TRAGEN

FLIGHT PATHS

Optimal flight paths for winged, supersonic flight vehicles - Extension to the case where thrust can be vectored

Darbour points in minimum-fuel aircraft landing problems

On-line optimization of aircraft altitude and flight path angle dynamics

Computer graphics for aircraft control

Development of an MLS lateral autolaud system with automatic path definition

The maneuvering flight path display - A flight trajectory solution display concept

Fuel optimal trajectory computation

Transformation relations for singularity avoidance in three-dimensional trajectory optimization

Flight evaluation of Loran-C for general aviation area navigation

Electric field detection and ranging of aircraft

Handling qualities criteria for flight path control of Y/STOL aircraft

Analysis of in-trail following dynamics of CDTI-equipped aircraft - Cockpit Displays of Traffic Information

An MLS with computer aided landing approach

The fourth dimension --- flight management system for airline operations
FLIGHT PERFORMANCE

A concept for 3D-guidance of transport aircraft in the FAA — Terminal 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

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

Autonomy of on-board flightpath management

Radar and near radar collisions on two- and three-dimensional curvilinear flight paths

Optimal aircraft landing patterns for minimal 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 a single pilot instrument flight operations

User's manual for the AHEE flight path-trajectory simulation code

An analytical study of landing flare

A study of the traffic control area

FLIGHT PERFORMANCE

FLIGHT CHARACTERISTICS

FLIGHT FLIXES

Computer flight planning for fuel efficiency

The NASA HEET 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

PFS — 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 RECORDERS

Modern aircraft accident investigation equipment and techniques

Analysis of general-aviation accidents using ATC radar records

Advanced crash survivable flight data recorder and Accident Information Retrieval System (AIRS)

Solid-state flight incident recorder

A portable, low-cost flight-data measurement and recording system

An integrated digital air data computer into the test aircraft EBR-320

Advanced recorder design and development

A portable, low-cost flight-data measurement and recording system

Proceedings of the 11th symposium on aircraft integrated data systems — conferences

Solid-state flight incident recorder

Solid state crash survivable flight data recorders for mishap investigation

New techniques in data retrieval and display

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 (AIRS)

Flight data recovery under adverse conditions

Value of survivability and recoverability of flight data recorders — benefit cost methodology
### SUBJECT INDEX

<table>
<thead>
<tr>
<th>Topic</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural airplane mission time structure characteristics</td>
<td>[NASA-TE-04970] p0537 N82-29329</td>
</tr>
<tr>
<td>Chief of Naval Air Training automated management information system (CARIS) users guide</td>
<td>[AD-A115058] p0603 N82-32280</td>
</tr>
</tbody>
</table>

### FIGHT SIMULATION

<table>
<thead>
<tr>
<th>Topic</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Beacon Collision Avoidance System (BCAS) logic performance during operational flight tests</td>
<td>[AD-A1088993] p0024 N82-19203</td>
</tr>
<tr>
<td>Detection and tracking algorithms refinement</td>
<td>[AD-A109517] p0030 N82-20164</td>
</tr>
<tr>
<td>Operational procedures relative to severe weather</td>
<td>[AD-A112339] p0064 N82-27241</td>
</tr>
<tr>
<td>Prototype Regional Observation and Forecast System (PROFS)</td>
<td>[AD-A112339] p0310 N82-21162</td>
</tr>
<tr>
<td>Proposed research tasks for the reduction of human error in naval aviation mishaps</td>
<td>[AD-A112339] p0064 N82-27241</td>
</tr>
<tr>
<td>Examination of the Federal Aviation Administration's plan for the National Airspace System</td>
<td>[AD-A102-66] p0611 N82-33403</td>
</tr>
</tbody>
</table>

### FLIGHT RULES

<table>
<thead>
<tr>
<th>Topic</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>NT INSTRUMENT FLIGHT RULES</td>
<td>[AD-A107805] p0200 N82-17148</td>
</tr>
</tbody>
</table>

### FLIGHT SAFETY

<table>
<thead>
<tr>
<th>Topic</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applications of conventional and Doppler radars for aviation safety</td>
<td>[AD-A107805] p0200 N82-17148</td>
</tr>
<tr>
<td>Detection and display of wind shear and turbulence</td>
<td>[AD-A107805] p0200 N82-17148</td>
</tr>
<tr>
<td>Relationships between aviation accidents and pilot flight experience</td>
<td>[AD-A105060] p0012 A82-11031</td>
</tr>
<tr>
<td>Safety of helicopters in flight -- Bussman book</td>
<td>[AD-A105060] p0077 A82-14946</td>
</tr>
<tr>
<td>A new safety harness for mobile aircraft</td>
<td>[AD-A105060] p0078 A82-14963</td>
</tr>
<tr>
<td>Official recognition and the significance of simulation for flight operations</td>
<td>[DGLE PAPER 81-094] p0159 A82-19271</td>
</tr>
<tr>
<td>The significance of electronic hardware to air traffic control at the present time and in the future</td>
<td>[AD-A105060] p0163 A82-195649</td>
</tr>
<tr>
<td>The use of flight simulators in l'arme de l'Air</td>
<td>[AD-A105060] p0171 A82-20528</td>
</tr>
<tr>
<td>System approach to the design of wind shear avionics</td>
<td>[AD-A105060] p0182 A82-21593</td>
</tr>
<tr>
<td>Analysis of system problems using aviation safety reporting system data</td>
<td>[AD-A105060] p0219 A82-23312</td>
</tr>
<tr>
<td>Operational air traffic in the Federal Republic of Germany</td>
<td>[AD-A105060] p0220 A82-23318</td>
</tr>
<tr>
<td>Voice communications -- The vital link</td>
<td>[AD-A105060] p0220 A82-23324</td>
</tr>
<tr>
<td>The investigation of aircraft accidents and incidents -- Some recent national and international developments</td>
<td>[AD-A105060] p0229 A82-29275</td>
</tr>
<tr>
<td>The direct effects of lightning on aircraft</td>
<td>[AD-A105060] p0432 A82-35730</td>
</tr>
<tr>
<td>A gust dancer --- for light passenger aircraft</td>
<td>[AD-A105060] p0436 A82-37127</td>
</tr>
<tr>
<td>The system of 'objective control' for manned aircraft</td>
<td>[AD-A105060] p0490 A82-39245</td>
</tr>
<tr>
<td>Instrument landing systems /ILS/ at airports of the German Democratic Republic</td>
<td>[AD-A105060] p0490 A82-39248</td>
</tr>
<tr>
<td>Wind determination and wind shear detection from flight test and airborne flight data</td>
<td>[AD-A105060] p0579 A82-45818</td>
</tr>
<tr>
<td>Low level wind shear detection system for airport landing approach areas using the Bertan Doppler acoustic sounder /Sadar/</td>
<td>[AD-A105060] p0579 A82-45818</td>
</tr>
<tr>
<td>The airplane 'manufacturer and meteorology' -- in prediction of weather effects on aircraft performance</td>
<td>[AD-A105060] p0579 A82-45821</td>
</tr>
<tr>
<td>Mesoscale convective complexes and general aviation</td>
<td>[AD-A105060] p0580 A82-45832</td>
</tr>
<tr>
<td>A proposed flight safety program for the Korean Air Force</td>
<td>[AD-A105060] p0025 A82-10023</td>
</tr>
<tr>
<td>Computer Air Carrier Symposium</td>
<td>[AD-A1049894] p0086 A82-12059</td>
</tr>
<tr>
<td>Summary of Federal Aviation Administration responses to National Transportation Safety Board safety recommendations</td>
<td>[AD-A104922] p0086 A82-12055</td>
</tr>
<tr>
<td>Orienting description of air traffic control in the Netherlands</td>
<td>[VTH-LR-285] p0087 A82-12063</td>
</tr>
<tr>
<td>Active beacon collision avoidance logic evaluation. Volume 2: Collision avoidance (BCAS) threat phase</td>
<td>[AD-A107805] p0200 A82-17148</td>
</tr>
</tbody>
</table>
FLIGHT SIMULATION

Real-Time Simulation Computation System --- for digital flight simulation of research aircraft

Cost efficiency versus objective fidelity in flight simulation

Flight simulation consoles, aid or obstruction - Objective evaluation of control consoles of modern flight and tactics simulators

Piloted simulation of an on-board trajectory optimization algorithm

Advanced simulation --- in commercial aviation

Analytical control law for desirable aircraft lateral handling qualities

Mission-adaptive wing flight demonstration program

Aerial combat simulation in the U.S. Air Force

Flying qualities - A costly lapse in flight-control design

Effect of contrast on space perception in TV displays of the external scene observed by the pilot --- German book

Simulation reaches towards reality

Evaluation of a simplified gross thrust calculation method for a J-52-21 afterburning turbojet engine in an altitude facility

Application of high bypass turbofan computer simulation to flight and test data processing

Complete flexibility and realism in radar simulation

Pilot models for discrete maneuvers

Development and flight test evaluation of a pitch stability augmentation system for a relaxed stability L-1011

A ground-simulation investigation of helicopter decelerating instrument approaches

Use of rotary balance and forced oscillation test data in mix degrees of freedom simulation

Flight simulation studies on the feasibility of laterally segmented approaches in an MLS environment

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

Visual scene simulations concerning the landing of sporting aircraft in connection with investigations regarding the control and learning behavior of the pilot --- German thesis

The effect of visual information on manual approach and landing

Use of a helmet-mounted matrix display for presenting energy-manoeuvrability information during simulated close combat

Longitudinal and lateral stability and control characteristics of a 1/6-scale model of a remotely piloted research vehicle with a supercritical wing

Accelerated development and flight evaluation of active control concepts for subsonic transport aircraft. Volume 2: AFT C.G. simulation and analysis

A simple hybrid visual simulation for research flight simulators

The role of simulation in the design process

Motorcraft simulation computer program CBI with DATAHAP interface. Volume 2: Programmer's manual

A design for a 32-channel multiplexer --- for unmanned aircraft navigation sensors

Simulation study of vortex encounters by a twin-engine, commercial, jet transport airplane

Simulation of the IV-15 tilt rotor research aircraft

Simulation study of a pictorial display for general aviation instrument flight

Design of a cathodoluminescent VCASS helmet-mounted display

Aircraft combat simulation in the U.S. Air Force

Use of a helmet-mounted matrix display for flight simulation

Pilot in the loop analysis of helicopter

Evaluation of aircraft in simulated combat:

Comparison of different fighter aircraft load spectra

Computer program for analysis of spherical screen distortion

Design, 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

Math modeling for helicopter simulation of low speed, low altitude and steeply descending flight

Attribute requirements for a simulated flight scenario microcomputer test

Development of methods for assessment of gliding parachute applications
FLIGHT STABILITY TESTS

Wide-angle, multiviewer, infinity display system
[AD-A16308] p0571 A82-31336
User’s guide for the rotorcraft flight simulation computer program CH1, ASAPO version, CDC conversion
[AD-A11508] p0594 A82-32388
A ground-simulator investigation of helicopter longitudinal flying qualities for the current approach
[NASA-DR-4225] p0611 A82-33398
Math model description for the Visual Technology Research Simulator (VTBS) conventional takeoff and landing (CTOL) weapon delivery visual system
[AD-A11716] p0611 A82-33007

FLIGHT STABILITY TESTS

The stability of maneuverable flight vehicles
[AD-A09-20827] p0333 A82-30827
Piloted simulator evaluation of a relaxed static stability fighter at high angle-of-attack
[AD-A11-1295] p0486 A82-30902
NASA Dryden’s experience in parameter estimation and its uses in flight test
[AD-A82-1373] p0849 A82-39135

FLIGHT TECHNICAL ERROR

V FLIGHT ERROR

FLIGHT TEST INSTRUMENTS

A unique flight test facility - Description and results
[p0508 A82-40925
Integrated sensor system for flight test instrumentation
[p0504 A82-41869
Outside’s look at flight instrumentation
[DE81-025409] p0307 A82-11066
Practical aspects of instrumentation system installation, volume 13
[NASA-DR-40607] p0099 A82-13140
Development of a sample, self-contained flight test data acquisition system
[NASA-CS-168438] p0213 A82-17478

FLIGHT TEST VEHICLES

A unique flight test facility - Description and results
[p0508 A82-40925
Generic Test Bed (GTB) aircraft
[AD-A11035] p0314 A82-21176

FLIGHT TESTING

AT FLIGHT STABILITY TESTS

AT SPACE TRANSPORTATION SYSTEM FLIGHTS

HMIT onboard flight computer system architecture and qualification
[AD-A18-2107] p0001 A82-10082
A microprocessor-based data acquisition system for stall/recovery research
[AD-A18-2177] p0002 A82-10126
The constructed rugged line trials technique for assessing the opening characteristics of parachutes
[AD-A18-2152] p0007 A82-10413
Inflatable system for fast deployment of parachutes at low altitudes from slow moving aircraft or stationary supports
[AD-A18-2153] p0008 A82-10426
Dynamic response of aircraft structure to gust shock loads
[AD-A18-21134] p0113 A82-11314
History of flight testing the L-1011 Frisbee jet transport. II - Testing highlights since initial certification of the L-1011-1
[AD-A18-21249] p0119 A82-12049
FAA acceptance tests on the NAVSTAR GPS S-Set receiver
[AD-A18-21249] p0119 A82-12049
RIO Laser Gyro Navigator AS/GY Flight test results
[AD-A18-21249] p0222 A82-12639
On matching the systems identification technique to the particular application -- an evaluating of flight test data
[AD-A18-21249] p0223 A82-12644
Determining hinge moments and empennage airloads
[AD-A18-21249] p0206 A82-13119
Aircraft separation assurance avionics
[AD-A18-21239] p0207 A82-13467
The use of separated multifunction inertial sensors for flight control
[AD-A18-2295] p0205 A82-13502
Design and flight test of a lateral-directional command augmentation system

SUBJECT INDEX

[AD-A18-2331] p0052 A82-13527
Power-lift takeoff performance characteristics determined from flight test of the Quiet Short-Haul Research Aircraft (QSHRA)
[AD-A18-2190] p0533 A82-13052
Enhanced F-15 air-to-ground flight demonstrations
[AD-A18-2190] p0534 A82-13054
The F-15/79 test program
[AD-A18-2190] p0546 A82-13055
Organizing and training for innovative flight test management
[AD-A18-2190] p0546 A82-13056
Flight experience with a remotely augmented vehicle flight test technique
[AD-A18-2190] p0546 A82-13057
A technique for detecting lift and drag polar in flight and their application
[AD-A18-2190] p0546 A82-13059
Navy performance modeling techniques
[AD-A18-2190] p0546 A82-13069
NASA Ames flight test experience
[AD-A18-2190] p0555 A82-13077
Advancing blade concept /ABC/ development test program
[AD-A18-2190] p0555 A82-13078
Recent propulsion system flight tests at the NASA Dryden Flight Research Center
[AD-A18-2190] p0555 A82-13084
The Cessna T303 Crusader
[AD-A18-2190] p0555 A82-13076
Government testing
[AD-A18-2190] p0555 A82-13097
Flight test methods for the determination of recuperating engine cooling requirements
[AD-A18-2190] p0555 A82-13086
Planning a helicopter flight test program
[AD-A18-2190] p0556 A82-13081
Recent improvements at the Naval Air Test Center for increased test system flexibility
[AD-A18-2190] p0556 A82-13088
Flight testing the nonmetallic spline coupling technology at the Naval Air Test Center
[AD-A18-2190] p0556 A82-13086
Information technology and its impact on test and evaluation at the Naval Air Test Center
[AD-A18-2190] p0556 A82-13089
Georgia Tech coherent jammer flight test
[AD-A18-2190] p0556 A82-13089
Fleet Flight Loads Survey monitoring and analysis techniques
[AD-A18-2190] p0557 A82-13061
Flight test experience with high-alpha control system techniques on the F-14 airplane
[AD-A18-2190] p0557 A82-13064
Flight testing DASH-8 utilizing onboard data analysis by microprocessor
[AD-A18-2190] p0557 A82-13062
Application of a microprocessor controlled cockpit display for enhanced pilot control of flight test maneuvers
[AD-A18-2190] p0557 A82-13067
Instrumentation to determine the suitability of RIM systems for helicopter navigation in the national airspace system /NAS/
[AD-A18-2190] p0557 A82-13014
The Air Force Flight Test Center - Utah Test and Training Range in the 1980’s
[AD-A18-2190] p0557 A82-13016
The need for, and development of, a simulation facility at the Naval Air Test Center
[AD-A18-2190] p0558 A82-13017
A unique integrated flight testing facility for advanced control/display research
[AD-A18-2190] p0558 A82-13019
Flight testing the suspended maneuvering system -- helicopter fire fighting and rescue techniques
[AD-A18-2190] p0558 A82-13023
Improved techniques for the calibration and test maneuvers
[AD-A18-2190] p0558 A82-13032
F/A-18 high authority/high qsn dial flight control system development and flight testing
[AD-A18-2190] p0558 A82-13030
The development and flight test evaluation of an integrated propulsion control system for the HIRAT research airplane [AIAA PAPER 81-2667]

Comparison of low-speed handling qualities in ground-based and in-flight simulator tests [AIAA PAPER 81-2676]

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]

Two at a time flight test plans for the new Boeing airliners [AIAA PAPER 81-2376]

Flight test concept evolution [AIAA PAPER 81-2375]

The development and use of a computer-interactive data acquisition and display system in a flight environment [AIAA PAPER 81-2371]

F/A-18 Flight Test program overview - 1 September 1981 [AIAA PAPER 81-2351]

Kavnet Global Positioning System flight test program overview [AIAA PAPER 81-2350]

Development of a lifting parachute to provide self-dispersion capability for an Arco-designed tactical unmanned aircraft [AIAA PAPER 81-1928]

Status and tracking system for flight test data production [AIAA PAPER 81-2395]

An advanced facility for processing aircraft dynamic test data [AIAA PAPER 81-2398]

Experience with flight test trajectory guidance [AIAA PAPER 81-2504]

Hover Test Flight Program [AIAA PAPER 81-2492]

TC-130, Flight Test Program Management - The Contractor's viewpoint [AIAA PAPER 81-2350]

62% manned aircraft demonstrator - Next generation trainer -- cost effective pilot trainer [AIAA PAPER 81-2519]

Hover Tests of the XV-15 Tilt Rotor Research Aircraft [AIAA PAPER 81-2501]

Testing capabilities of the 3246th Test Wing [AIAA PAPER 81-2494]

Integrated Flight testing based on nonlinear system identification data processing techniques [AIAA PAPER 81-2497]

Applications of covariance analysis simulation to avionics flight testing [AIAA PAPER 81-2519]

Flight management systems for modern jet aircraft [AIAA PAPER 81-2492]

The X-14 - 24 years of V/STOL flight testing [AIAA PAPER 81-2504]

Ball-Baroe Jetwing flight tests [AIAA PAPER 81-2492]

Flight investigations of integrated descent rate control systems [AIAA PAPER 81-2504]

Progress report - CH-47 modernization program [AIAA PAPER 81-2504]

USAFFS spin program [AIAA PAPER 81-2504]

USAF Test Pilot School high angle of attack and spin training program [AIAA PAPER 81-2504]

Navy spin evaluation of the A-7 airplane - configured with automatic maneuvering flaps [AIAA PAPER 81-2504]

F/A-18A high angle of attack/spin testing [AIAA PAPER 81-2504]

KC-10 flight test program [AIAA PAPER 81-2504]

The all composite Lear Fan 2100 [AIAA PAPER 81-2504]

Acceptance testing of the Calpan variable stability Learjet [AIAA PAPER 81-2504]

F/A-18 roll rate improvement program [AIAA PAPER 81-2504]

AT-88 technical update - Leading edge root extension development [AIAA PAPER 81-2504]

Operational evaluation of thunderstorm penetration test flights during Project Storm Hazards '80 [AIAA PAPER 81-2504]

Direct free-flight analysis of aircraft dynamics at high angles of attack [AIAA PAPER 81-2504]

FLIGHT TESTS COSTS

FLIGHT TESTS 1981-1982

Aerospace vehicle development, flight testing and test equipment evolution [AIAA PAPER 81-2504]

Operational evaluation of thunderstorm penetration test flights during Project Storm Hazards '80 [AIAA PAPER 81-2504]

Direct free-flight analysis of aircraft dynamics at high angles of attack [AIAA PAPER 81-2504]

FLIGHT TESTS 1981-1982

Aerospace vehicle development, flight testing and test equipment evolution [AIAA PAPER 81-2504]
FLIGHT TESTS CONTD

The Boeing Flight Test Data System 1980
Instrumentation remote 'mini' ground stations p0179 A82-20769
Color graphics based real-time telemetry processing system p0179 A82-20770
Aerodynamic evaluation of winglets for transport aircraft [AIAA PAPER 81-1215] p0186 A82-27245
FLITE-18 weapon system development p0223 A82-23774
LAMPS III recovery assist, securing and traversing /ASay system -- Light Airborne Multi-Purpose System [SAGE PAPER 81-1080] p0234 A82-24642
Experimental program for general aviation -- wing design, construction and flight testing p0239 A82-24707
One year flight testing of the Transonic Wing p0263 A82-26542
No-Tail-Torotor helicopter p0286 A82-26622
Advanced medium scale real-time systems -- for army helicopter tests p0290 A82-27187
Flight service evaluation of advanced structures p0291 A82-27402
F-15 fighter abilities evaluated p0297 A82-28312
Fuel efficient and Mach 0.8, too p0332 A82-29592
Flight qualification of composite structures at AMD-DA [AIAA 82-0755] p0336 A82-30116
The helicopter Havstar GPS test program p0342 A82-31290
Flight evaluation of Loran-C for general aviation area navigation p0380 A82-33049
No-tail-torotor helicopter tests continue p0380 A82-33095
AX-15 -- Foretelling things to come p0385 A82-33994
Aerodynamic coefficient identification of time-varying aircraft system and its application p0390 A82-34645
Short-term behavior of a Doppler navigation system and comparison with position indication by means of scanning radar p0390 A82-34672
Selected results of the F-15 propulsion automation program [AIAA PAPER 82-1041] p0415 A82-34976
Evaluation of a simplified gross thrust calculation method for a J85-21 afterburning turbojet engine in a altitude facility [AIAA PAPER 82-1044] p0415 A82-34978
In-flight acoustic results from an advanced-design propeller at Mach numbers to 0.8 [AIAA PAPER 82-1120] p0416 A82-35017
7700 -- Modern development test techniques, lessons learned and results [AIAA PAPER 82-1183] p0418 A82-35048
Certification of an airborne Loran-C navigation system p0433 A82-35876
The PATRIOT Radar in tactical air defense p0433 A82-37031
Boeing's new transports in a flight-test marathon p0437 A82-37943
Practical application of a computerized flight by flight fatigue test system p0440 A82-37760
Flight demonstration of an integrated floor/fuel isolation system [AMS PREPRINT 81-16] p0442 A82-37788
Design and flight testing of digital direct side-force control laws [AIAA 82-1521] p0484 A82-38941

The ideal controlled element for real airflows is not K/s [AIAA 82-1606] p0485 A82-38981
Avoiding the pitfalls in automatic landing control systems design [AIAA 82-1599] p0486 A82-39013
Development and flight test evaluation of a pitch stability augmentation system for a relaxed stability L-1011 [AIAA PAPER 82-1297] p0487 A82-39094
A simple, low cost application of a flight test parameter identification system [AIAA 82-1312] p0487 A82-39093
The correlation of flight test and analytic N-on-N air combat exchange ratios -- Many-on-Many [AIAA PAPER 82-1326] p0488 A82-39105
Unique flight characteristics of the AH-1 Cobra -- weapon research airplane [AIAA PAPER 82-1372] p0489 A82-39106
Analysis of an airborne windshield anti-icing system [AIAA PAPER 82-1372] p0489 A82-39104
Evaluations of CFPD prototype structures for aircraft p0495 A82-39692
An evaluation of vertical load and ground effect using the B25 rotor balance system -- Rotor Systems Research Aircraft p0499 A82-40510
Flight test evaluation of a video tracker for enhanced offshore airborne radar approach capability p0500 A82-40531
Results of the MD-64 Structural Demonstration Flight and design and flight testing of a digital control system general aviation autopilot p0507 A82-40590
A concept for 4D-guidance of transport aircraft in the TMA -- Terminal Maneuvering Area [AIAA PAPER 82-1909] p0509 A82-40942
Analysis of flight data in the frequency domain p0509 A82-41796
Europe's best seller -- Second-generation Airbus emerges p0507 A82-42750
The testing of new technologies with the aid of the Alpha Jet aircraft p0550 A82-43051
Applied flight mechanics in the design and in flight tests p0550 A82-43326
Methodology in flight tests p0551 A82-43400
New technologies for future fighters p055a A82-44219
IV-15 program update p0556 A82-44668
Flight test results of the model simulation controller for the HFR 320 for in-flight simulation of the A310 Airbus [EA-ST-660] p0630 A82-10107
Flight trail of the aircraft Fatigue Data Analysis System (AFDAS) N 2 prototype [AD-A105270] p0637 A82-12066
A flight investigation of blade-section aerodynamics for a helicopter main rotor having 10-64C airfoil sections [NASA-TP-83226] p0631 A82-14058
Airborne data analysis/monitor system p0631 A82-14030
ADAMS executive and operating system p0631 A82-14030
On-board computer program in development of a 310 flight testing program p0630 A82-14034
ROG Computers in the flight testing of the Focker 29 aircraft p0630 A82-14383
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-150097] p0145 A82-15076
Differential Omega system development and evaluation [AD-A107057] p0200 A82-17146

SUBJECT INDEX

[4144 CB-1521] p0484 482-38941
[4144 P4PEH 82-1041] p0415 482-34976
[4144 82-1152] p0484 A82-38941

A-212
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
SH-60B test program
Evaluation of the helicopter low airspeed system LASHB
A design for a 32-channel multiplexer - for unmanned aircraft navigation sensors
Active Beacon Collision Avoidance System (BCAS) logic performance during operational flight tests
Preliminary airworthiness evaluation of the SH-60B with hot metal plus plane infrared suppressor and infrared jammer
A preliminary comparison between the SH-3 propeller noise in flight and in a wind tunnel
Development of a tentative flying qualification criteria for aircraft with independent control of six degrees of freedom: Analysis and flight test
Experimental flight test programs for improving combat aircraft maneuverability by maneuver flaps and pylon split flaps
Civil (French/US) certification of the Coast Guard's HH-65A Dauphin
Flight tests for the assessment of task performance and control activity
Wind-tunnel/flight-drag correlation
Wind-tunnel/flight-correlation program on XB-70-1
Problems in correlation caused by propulsion systems
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 correlation
Flying qualities criteria for GA single pilot IFR operations
Flight-test verification of a pictorial display for general aviation instrument approach flight
B-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 elevons deflections to trim and maneuver the DAST vehicle with negative static margin
Geophysical flight lane flying and flight path recovery utilizing the Litos LCM-76 inertial navigation system
Grob aircraft construction: The G 103 hangar
Data reduction procedures for Sea King helicopter flight trials

FLIGHT TIME

Optimum three-dimensional flight of a supersonic aircraft
Solar-powered airplane design for long-endurance, high-altitude flight
Meteorological aspects of North Atlantic flight tracks - The development of programs for minimum-time tracks
Electronic master monitor and advisory display system test and demonstration report
Investigation and evaluation 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 1961

FLIGHT TRAINING

Military Flight Training
- Space Flight Training
Problems pertaining to aeronautical technology in the case of rescue operations with helicopters in mountainous areas
Properties of the new flight and tactics simulators - Experience, problems, meaning
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 'Graf Zeppelin'
Report covering experience obtained at the German Luftwaffe with respect to training involving the use of flight simulators
The use of flight simulators in the Army
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
Space recovery training - Licensing requirements
Group 1: Scenario design and development issues
Task analytic techniques: Application to the design of a flight simulator instructor/operator console
A pilot in the loop analysis of helicopter acceleration/deceleration maneuver
Operational test and evaluation handbook for aircrew training devices. Volume 3: Operational suitability evaluation
Operational test and evaluation handbook for aircrew training devices. Volume 1: Operational suitability evaluation
Flight IFR procedures simulator
Operational test and evaluation handbook for aircrew training devices. Volume 2: Operational suitability evaluation
Chief of Naval Air Training automated management information system (CAMIS) users guide

FLIGHT VEHICLES

Analysis and optimization of control systems in piloted flight vehicles - Russian book
FLIB DECTORS

The influence of closed-coupled, rear funnel mounted nacelles on the design of an advanced high speed wing

FLIB DECTORS

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FLIB
FLOW EQUATIONS

The pressure signature method for blockage corrections, and its applications to the industrial wind tunnel [BU-263] p0267 882-19231
Experimental methods for the prediction of the effect of viscosity on propeller performance [AD-A108946] p0398 882-20472
The modeling and prediction of multiple jet V/STOL aircraft flow fields in ground effect [NASA-CH-166187] p0367 882-23166
Automated design of minimum drag lift aircraft fuselages and nacelles [NASA-CH-168913] p0368 882-23238
An experimental investigation of the flow field of an ejector wing design employing a photos correlation laser velocimeter [AD-111134] p0394 882-24182
Study of VTOL in ground-effect flow field including temperature effect [NASA-CH-166258] p0400 882-25170
Investigation of the tip clearance flow inside and at the exit of a compressor rotor passage [NASA-CH-169006] p0408 882-25253
Aerodynamically induced vibration [AD-111049] p0455 882-26306
Comparison of numerical results and measured data for smooth and indented nacelles [AD-111754] p0460 882-26619
Proceedings of the 12th NAVY Symposium on Aerodynamics, volume 2 [AD-111754] p0472 882-27312
A prescribed wake rotor inflow and flow field prediction analysis, user's manual and technical approach [NASA-CH-165896] p0566 882-31296
Surface generation for aerodynamic applications [AD-1116263] p0567 882-31305
Computer prediction of three-dimensional potential flow fields in which aircraft propellers operate [NASA-CH-169317] p0585 882-32312
An in-flight video display technique for flow field surveys [NASA-CH-165896] p0596 882-32669
Propeller flow visualization techniques [AD-111754] p0597 882-32672
In-flight propeller flow visualization using fluorescent tracers [NASA-TM-82886] p0597 882-32672
Flow field studies using holographic interferometry at Langley [NASA-CH-165306] p0598 882-32689
LV measurements with an advanced turboprop [NASA-CH-165306] p0598 882-32690
Sasulation of the fluctuating field of a forced jet [NASA-CH-84056] p0615 882-34191
FLOW GEOMETRY

Thermal and flow analysis of a convection, air-cooled ceramic coated porous metal concept for turbine engines [ASME PAPER 81-HT-48] p0012 882-10952
Determination of the trimmed drag of an aircraft [AD-A127 882-10853]
Real gas flows over complex geometries at moderate angles of attack [AIAS PAPER 82-0392] p0165 882-19801
Self streaming wind tunnels without computers [NASA PAPER 82-26181]
Determination of losses in a channel with a sudden expansion behind a diffuser [NASA PAPER 82-26492]
A Schr"{o}dinger-Christoffel method for generating internal flow grids [NASA PAPER 82-29005]

Subsonic 3-D surface panel methods for rapid analysis of multiple geometry perturbations [NASA PAPER 82-0955] p0174 882-19554
Similarity parameters for the geometric structure of a supercritical jet propagating in a channel and in a submerged space [AIAA PAPER 82-31432]
A comprehensive method for preliminary design optimization of axial gas turbine stages [NASA PAPER 82-1264] p0194 882-35051
The use of optimization techniques to design controlled diffuser compressor blading [ASME PAPER 82-GT-149] p0246 882-35373
The calculation of deviation angle in axial-flow compressor cascades [NASA PAPER 82-GT-210] p0248 882-35412
Optical stream surfaces in supersonic three-dimensional flows [NASA PAPER 82-GT-231] p0547 882-42722
Higher-order angle corrections for three-dimensional wind tunnel wall interference [NASA PAPER 82-42853]
An experimental study of flow rate and thrust characteristics of a four-nozzle ejector with flow twist [NASA PAPER 82-46140]
The use of optimization techniques to design controlled diffusion compressor blading [NASA PAPER 82-14994]
A computer program for variable-geometric single-stage axial compressor test data analysis [NASA PAPER 82-16066]
Fluid dynamic of jets with applications to V/STOL [NASA PAPER 82-23150]
Flowfield and noise sources of jet impingement on flaps and ground surface [NASA PAPER 82-23163]
The modeling and prediction of multiple jet VTOL aircraft flow fields in ground effect [NASA PAPER 82-21731]
Jet effects on forces and moments of a V/STOL fighter type aircraft [NASA PAPER 82-21768]
Curved flow wind tunnel test of F-18 aircraft [NASA-CH-169385] p0604 882-33339
FLOW MEASUREMENT

Calibration of seven-hole probes suitable for high angles in subsonic compressible flows [AIAA PAPER 82-0410] p0121 882-17931
Ultrasonic method for flow field measurement in wind tunnel tests [NASA PAPER 82-20054]
Measurements of a three-dimensional boundary layer on a sharp cone at Mach 3 [AIAA PAPER 82-0289] p0185 882-22083
Three dimensional turbulent boundary layer development on a fan rotor blade [NASA-CP-306] p0360 882-23150
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 [NASA-CP-306] p0360 882-23158
The aerodynamic resolution of the Navier-Stokes equations for incompressible turbulent flow over airfoils [AD-111127] p0460 882-26612
FLOW FIELDS

U FLOW DISTRIBUTION
FLOW VISUALIZATION

Numerical Flow Visualization
Experimental study of subsonic and transonic flows past a wing p0005 A-62-10363
Endwall boundary layer flows and losses in an axial turbine stage p0168 A-62-20298
Boundary layer transition and separation on a compressor rotor airfoil p0168 A-62-20299
Flow visualization using a computerized data acquisition system p0179 A-62-20792
Visualization of flow separation and separated flows with the aid of hydrogen bubbles p0179 A-62-20803
Visualization of laminar separation by oil film method p0179 A-62-20811
Quantitative interpretation of recirculated flow visualization by the analysis of video pictures p0286 A-62-27109
More than meets the eye - The oil dot technique p0286 A-62-27114
Flow visualization techniques for the study of high incidence aerodynamics [OWRA, TP No. 152-5] p0307 A-62-34493
An experimental investigation of leading-edge spanwise blowing p0514 N-62-40988
Effects of vortex flaps on the low-speed aerodynamic characteristics of an arrow wing p0533 N-62-11103
Vortex flow correlation - Water tunnel tests on thin-slicker wings (AD-A108725) p0107 N-62-20466
Surface flow visualization requirements for testing in HF p0596 N-62-32667
Operational flow visualization techniques in the Langley Unitary Plan Wind Tunnel p0597 N-62-32671
Propeller flow visualization techniques p0597 N-62-32672
In-flight propeller flow visualization using fluorescent tracers p0597 N-62-32673
Shadowgraph techniques in transonic tests with powered nacelles p0597 N-62-32674
Transonic applications of the Wake Imaging System p0597 N-62-32676
Flow visualization in the Langley 0.3-meter Transonic Cryogenic Tunnel and preliminary plans for the National Transonic Facility p0597 N-62-32677
Holographic interferometry and tomography at Ames Research Center p0597 N-62-32681
Flow field studies using holographic interferometry at Langley p0598 N-62-32682

FLOWMETERS
Hot-wire flowmeters A miniature electro-optical air flow sensor (AD-A104364) p0593 A-62-41854
Advanced fuel flowmeter for future naval aircraft (AD-A110464) p0037 N-62-11063

FLOW BOUNDARIES
Gas-solid boundaries p0005 A-62-10363
Liquid-solid boundaries p0164 A-62-19796
Fluid dynamics p0168 A-62-20298
Aerodynamics p0168 A-62-20299
Aerothermodynamics p0179 A-62-20792
Computational fluid dynamics p0179 A-62-20803
Gas dynamics p0179 A-62-20811
Hydrodynamics p0286 A-62-27109
Magnetohydrodynamics p0286 A-62-27114
Motor aerodynamics p0307 A-62-34493
Vortex shedding p0514 N-62-40988

FLUID FILMS
Squeeze films Four pad tilting pad bearing design and application for multistage axial compressors [ASME Paper 81-LUB-12] p0126 A-62-18429
Visualization of laminar separation by oil film method p0179 A-62-20811
Evaluation of three percent aqueous film forming foam (AFFF) concentrates as fire fighting agents - vp-4 jet fuel fires (AD-A108281) p0411 N-62-25402

FLUID FLOW
Air flow p0543 A-62-41854
Air jets p0597 N-62-32671
Axial flow p0597 N-62-32672
Axisymmetric flow p0597 N-62-32673
Base flow p0597 N-62-32674
Boundary layer flow p0597 N-62-32676
Boundary layer separation p0597 N-62-32677
Cascade flow p0597 N-62-32678
Cavitation flow p0597 N-62-32679
Channel flow p0597 N-62-32680
Coaxial flow p0597 N-62-32681
Compressible flow p0597 N-62-32682
Convective flow p0597 N-62-32683
Critical flow p0597 N-62-32684
Cross flow p0597 N-62-32685
Ducted flow p0597 N-62-32686
Free flow p0597 N-62-32687
Fuel flow p0597 N-62-32688
Gas flow p0597 N-62-32689
Hypersonic flow p0597 N-62-32690
Incompressible flow p0597 N-62-32691
Inlet flow p0597 N-62-32692
Isothermal flow p0597 N-62-32693
Jet flow p0597 N-62-32694
Jet mixing flow p0597 N-62-32695
Laminar flow p0597 N-62-32696
Liquid flow p0597 N-62-32697
Magnetic flow p0597 N-62-32698
Multiphase flow p0597 N-62-32699
Waveform flow p0597 N-62-32700
Nose flow p0597 N-62-32701
Orifice flow p0597 N-62-32702
Oscillating flow p0597 N-62-32703
Parallel flow p0597 N-62-32704
Plastic flow p0597 N-62-32705
Potential flow p0597 N-62-32706
Radial flow p0597 N-62-32707
Turbulent flow p0597 N-62-32708
Turbulent flow p0597 N-62-32709
Vortex flow p0597 N-62-32710
Vortex shedding p0597 N-62-32711
Vortex flow p0597 N-62-32712
Three-dimensional flow p0597 N-62-32713
Transition flow p0597 N-62-32714
FLUTTER ANALYSIS

Fluent analysis of aircraft wing/store flutter

Supersonic aerodynamic and flutter characteristics of a 1/6-scale model of a supercritical wing

Aeroelastic stability of rotor blades using finite element analysis

Aerodynamic lag functions, divergence, and the flutter of forward swept wings

Aerodynamic stability of rotor blades using finite element analysis

Three-dimensional analysis of cascade flutter in parallel shear flow

Application of model control to wing-flutter suppression

The determination of critical flutter conditions of nonlinear systems

A harmonic analysis method for unsteady transonic flow and its application to the flutter of airfoils

Subsonic aerodynamic and flutter characteristics of several wings calculated by the S0033A F1.1 panel method

Investigation of an improved structural model for damaged T-38 horizontal stabilizer flutter analysis using WASTAN

Aerodynamic stability of rotor blades using finite element analysis

MEASURING INSTRUMENTS

MULTI-AXIAL PROBES

COUNTER-ROTATING BLADES

MATHEMATICAL ANALYSIS

Partial Difference Equations

Linear Stability Analysis

Nonlinear Stability Analysis

Aeroelastic Flutter Analysis

Flutter of Forward Swept Wings

Flutter Analysis of Flexure-Induced Stability

FLIGHT TESTS

Aeroelastic Stability of Rotor Blades

AERODYNAMIC CHARACTERISTICS

Supersonic Aerodynamic Characteristics

Subsonic Aerodynamic Characteristics

Flutter Characteristics of Several Wings

Flutter Characteristics of Forward Swept Wings

Flutter Characteristics of Supercritical Wings

Flutter Characteristics of Several Wings

Flutter Characteristics of Forward Swept Wings

Flutter Characteristics of Supercritical Wings

Flutter Characteristics of Several Wings

Flutter Characteristics of Forward Swept Wings

Flutter Characteristics of Supercritical Wings

Flutter Characteristics of Several Wings

Flutter Characteristics of Forward Swept Wings

Flutter Characteristics of Supercritical Wings

Flutter Characteristics of Several Wings

Flutter Characteristics of Forward Swept Wings

Flutter Characteristics of Supercritical Wings

Flutter Characteristics of Several Wings

Flutter Characteristics of Forward Swept Wings

Flutter Characteristics of Supercritical Wings

Flutter Characteristics of Several Wings

Flutter Characteristics of Forward Swept Wings
Improvement of the first-ply-failure strength in laminates by using softening strips.  
Effects of elastomer emissions on the mechanical properties of epoxy resins and composite systems.  
The effects of absorbed moisture on the physical properties of stretched acrylic materials.  
Application of damage tolerance technology to type certification.  
[SAE PAPER 811062] p0231 A82-24388  
Fracture control in ballistic-damaged graphite/epoxy wing structure.  
[WB-RP-00047-0] p0357 A82-22360  
Carburized high temperature steels.  
[AD-A116559] p0595 A82-32467

Fracture toughness  
Fracture (materials)  
A computerized system for the application of fracture tracking data to aircraft management for the C-5A military airlift transport.  
[AIAA-82-0760] p0336 A82-30119

Fracture propagation  
Damage from engine debris projectiles.  
[EB-82-17165] p0202 A82-17165  
[NASA-CR-165380] p0473 A82-27316

Phanes  
NT AIRFRAMES  
NT UNDERCARRIAGES  
Thermal expansion accommodations in a jet engine frame.  
[p0017 A82-11999]

Phare  
Helicopter development in France.  
[p0208 A82-17216]

Pharaon region  
U F PAR FIELDS  
Free flight test apparatus  
Direct free-flight analysis of aircraft dynamics at high angles of attack.  
[p0081 A82-15596]  
A laser-interferometer method for determining the forces on a freely-flying model in a shock-tunnel.  
[p0550 A82-43311]  
Design of dynamically-scaled, asymmetrical wind tunnel models.  
[AIAS-T-78-18] p0356 A82-22285

Free Flow  
Multiple-scale turbulence modeling of free turbulent flows.  
[ASME PAPER 81-PF-20] p0012 A82-10934  
Static pressure in the slipstream of a propeller.  
[p0225 A82-24023]  
Transonic flow past thin wings.  
[p0274 A82-25995]  
An experimental study at free-stream Mach 5 of the aerodynamic heating of the upper surface of plane wings of various planforms.  
[p0388 A82-34149]  
Aerodynamic behavior of a slender slot in a wind tunnel wall.  
[p0481 A82-38281]

Free Jets  
The German-Dutch wind tunnel as an aerocoustic experimental installation.  
[p0110 A82-17136]  
Sedan-based study of various configurations of jet crossing a cavity — Application to the CEP4A wind tunnel of CEP.  
[p0383 A82-33627]  
Acoustic emission from free jets — Supersonic jets.  
[p0359 A82-22962]  
Fluid dynamics of jets with applications to V/STOL.  
[AGARD-CP-220] p0360 A82-23150  
Flowfield and noise sources of jet impingement of flags and ground surface.  
[p0361 A82-23163]

Free Oszillations  
U Free Vibration  
Free Stochastic Effects  
U Free Flow  
Free Strobos  
U Free Flow  
Free Vibration  
Aerocoustic characteristics of a mistuned bladed-disc assembly.  
[p0301 A82-20182]  
FREEDOM FIGHTER AIRCRAFT  
U F-5 AIRCRAFT  
Freezing  
The low temperature properties of aviation fuels.  
[ASME PAPER 82-GT-48] p0422 A82-35306

Freeze  
Air-freeze integrated environmental conditioning system for trainer subsonic aircraft.  
[ASME PAPER 81-EMAS-33] p0012 A82-10920

Frequencies  
NT BROADBAND  
NT C BAND  
NT CARRIER FREQUENCIES  
NT EXTREME HIGH FREQUENCIES  
NT HIGH FREQUENCIES  
NT LOW FREQUENCY BANDS  
NT RESONANT FREQUENCIES  
NT SUPERHIGH FREQUENCIES  
NT ULTRASONIC FREQUENCIES  
NT VERY HIGH FREQUENCIES  
NT VERY LOW FREQUENCIES  
Effects of filter response on analyses of aircraft noise data.  
[p0602 A82-33167]

Frequency Bands  
U FREQUENCIES  
Frequency converters  
Frequency synthesizers  
Frequency modulation  
Frequency sweep testing.  
B.F. calibrators for Doppler radars.  
[p0434 A82-36281]

Frequency ranges  
NT RADIO RANGE  
Frequency response  
The use of frequency methods in rotorcraft system identification.  
[AIAA PAPER 81-2386] p0064 A82-14392  
Optimization in multivariable design.  
[p0546 A82-42565]  
Frequency sweep testing.  
A single-frequency multitransmitter telemetry technique.  
[p0434 A82-36281]

Frequency stability  
60 KVA ADP permanent magnet VSFC starter generator system — Generator system performance characteristics.  
[p0316 A82-11721]  
Advanced generating system technology.  
[p0230 A82-24380]  
The effect of critical design parameters on the selection of a VSFC system.  
[p0230 A82-24381]  
Packaging the VSFC system for an aircraft engine environment.  
[p0230 A82-24383]  
Cascade converter of dc voltage to ac voltage of higher frequency with voltage and frequency stabilization devices — aircraft electric equipment.  
[p0326 A82-22875]

Frequency standards  
Global positioning system timing receivers in the DOD.  
[p0827 A82-20126]  
Frequency synthesizers  
High speed microwave phase-locked loops.  
[p066 A82-14696]  
Fresnel lenses  
Phoenix airport solar photovoltaic concentrator project.  
[p0577 A82-49890]  
Descent-rate cues for carrier landings: Effects of display gain, display noise and aircraft type.  
[p0264 A82-19206]  
Fretting  
Occurrence of fretting fatigue failures in practice.  
[p0325 A82-28543]
Computer flight planning for fuel efficiency
The all-electric airplane - a new trend
Minimum cost atmospheric cruise control - Most efficient airspeed for a given wind component
Comparison of two parallel/series flow turbomachinery concepts for supersonic V/STOL
Design possibilities for improved fuel efficiency of civil transport aircraft
Energy management in military combat aircraft
The control of aircraft gas turbines for fuel economy
The impact of increasing energy costs upon the design philosophy of avionic fuel management systems
Operational and performance aspects of fuel management in civil aircraft
Thrust management - Current achievements and future developments
Studies of modern technology airships for maritime patrol applications
General aviation fuel conservation in the 1980's
A study of the suitability of the all fiberglass XV-11A aircraft for fuel efficient general aviation flight research
Advanced subsonic transport propulsion
Boeing's bigger narrowbody
We have just begun to create efficient transport aircraft
Improvement of fuel economy by flying with maximum rearward center-of-gravity positioning
Fuel-efficient windshields for transport, consumer and business aircraft
Integration of energy management concepts into the flight deck
Management of powerplant maintenance and restoration programs for fuel conservation
Airline fuel saving through JT9D engine refurbishment
Restoration of performance, Models 727, 737, and 747
On-board computers save fuel and help ATC
Fuel optimal trajectory computation
Fuel efficient and smooth, too
Application of a dimensionless criterion of transport efficiency in evaluating aircraft modifications
Determination of an optimal control program for an aircraft power plant during climb
System study of application of composite materials for future transport aircraft
Principles of efficient energy use at Interflug
A study of the suitability of the all fiberglass XV-11A aircraft for fuel efficient general aviation flight research
Boost in the development of energy efficient engine components
GAS ANALYSIS
VY GEORESTY
Gast path analysis - a tool for engine condition monitoring
p0111 A82-17286

GAS BEARING ANALYSES
An analysis of selected distillate blending solvents in simple and complex aircraft fuel matrices via glass capillary gas chromatography
[AIAA PAPEB 82-1489]
p0855 A82-14832

Turbine engine lubricant reclamation
p0455 A82-26312

Kovats indices as a tool in characterizing hydrocarbon fuels at temperature programmed glass capillary gas chromatography. Part I: Qualitative identification
[AD-A111389]
p0456 A82-26400

Analyzing the environmental fate of air force distillate and high density fuels
[AD-A115949]
p0595 A82-32512

GAS COOLING
Model test and full scale checkout of dry-cooled jet engine sound suppressors
[AIAA PAPEB 82-1229]
p0410 A82-35079

A new method of cooling turbine vane
p0034 A82-11027

GAS DYNAMICS
AV AERODYNAMICS
AV AEROTHERMODYNAMICS
AV HYPERSONICS
AV ROTOR AERODYNAMICS
Supersonic nozzle without shocks
p0104 A82-16172

Analysis of changes in the gas-dynamic parameters of a gas-turbine helicopter engine during acceleration
p0334 A82-29872

GAS FLOW
AV AIR FLOW
AV TRANSITION FLOW
AV VERTICAL AIR CURRENTS
Divergence of a sweptforward wing
p0053 A82-13560

A progress report on the European Transonic Wind Tunnel Project
[OREHA, TP No. 198-1-121]
p0163 A82-19737

Real gas flows over complex geometries at moderate angles of attack
[AIAA PAPEB 82-0392]
p0165 A82-19801

A split coefficient/local conicotic scheme for multihocked supersonic flow
[AIAA PAPEB 82-0267]
p0164 A82-22062

The relative motion of a particle in the case of exponential changes of the velocity of the medium
p0281 A82-26479

A critical appraisal of some current incendence
p0229 A82-12172

Loss models for the stator and rotor of a mixed flow gas turbine
[ASME PAPEB 82-GT-120]
p0425 A82-35350

Theoretical investigations and experimental researches for higher subsonic two-dimensional compressor cascade
p0033 A82-11024

Simulation of turbofan engine models in the Norden low speed wind tunnel -- gas supply control
[MINSTITUTE-NOHE-46]
p0319 A82-21212

Gas path analysis of commercial aircraft engines
p0402 A82-25184

GAS GENERATOR ENGINES
U GAS GENERATORS
GAS GENERATORS
Comparison of HP turbine 'deep blade design' effects in turbofan engine gas generators with different bearing structure configurations
[AIAA PAPEB 82-1560]
p0410 A82-35089

GAS INJECTION
Hypersonic interactions with surface mass transfer. I - Steady flow over a slender wedge wing
[AIAA PAPEB 82-0979]
p0374 A82-31594

Numerical investigation of supersonic base flow with parallel injection --- in scramjet combustors
[AIAA PAPEB 82-1001]
p0375 A82-31560

Investigation of the aerodynamics of axisymmetric bodies in supersonic flow in the presence of localized injection
p0583 A82-46692

GAS LASERS
AV CARBON DIOXIDE LASERS
AV EXCIMER LASERS
AV HELIUM-NEON LASERS
Starting transients in supersonic nozzles and nozzle-diffuser assemblies
[AD-A111134]
p0406 A82-25226

GAS LIQUIDIFICATION
U COMpressOn
GAS LUBRICATED BEARINGS
U GAS BEARING ENGINES
GAS MIXTURES
AV COMPRESSED AIR
Noch reflection of a shock wave from an inclined wall
p0391 A82-34748

GAS PRESSURE
Determination of losses in a channel with a sudden expansion behind a diffuser
p0282 A82-26492

GAS RECOVERY
Gas turbine airflow control for optimum heat recovery
p0423 A82-35329

GAS STRESSES
The combustion of a fuel jet in a stream of lean gaseous fuel-air mixtures
p0326 A82-26892

Dilution jet behavior in the turn section of a reverse flow combustor
[AIAA PAPEB 82-GT-83]
p0422 A82-35310

GAS TEMPERATURE
Study of reheat of exhaust gases with different initial temperature in a reversed supersonic engine
p0014 A82-11444

Control of gas turbine power transients for improved turbine airfoil durability
[AIAA PAPEB 82-1162]
p0418 A82-35047

GAS TURBINE ENGINE AIDS
Development and application of Dabber gas tungsten arc welding for repair of aircraft engines, seal teeth
[AIAA PAPEB 82-GT-55]
p0422 A82-35310

GAS TURBINE ENGINES
AV BRISTOL-BYDDELEY B5 53 ENGINE
AV J-79 ENGINE
AV J-85 ENGINE
AV FUTURA BOJET ENGINES
AV FUTURA JET ENGINES
AV SUPERSONIC COMBUSTION JET ENGINES
AV T-56 ENGINE
AV TURBOPROP ENGINES
AV TURBOPROP ENGINES
AV TURBOJET ENGINES
AV TREPROP ENGINES
Design considerations for duty cycle, life and reliability of small limited life engines
[AIAA PAPEB 82-1402]
p0080 A82-10465

A new APU for medium place aircraft environmental control systems
[ASME PAPEB 82-GT-1101]
p0010 A82-10689

End losses in turbine cascades with porous cooling
p0014 A82-11434

Basic problem of aircraft gas turbine engine analytic design. II
p0014 A82-11455

The CIVIC - A concept in vortex induced combustion. II
[ASME PAPEB 81-GT-12]
p0017 A82-11997

Thermal expansion accommodation in a jet engine frame
p0017 A82-11999

The dispersion of droplets in gas turbine fuel nozzle sprays
p0019 A82-12107
application of numerical modeling to gas turbine combustor development problems

Valuation studies of turbulence and combustion modeling for gas turbine combustors

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

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

Superclean superalloy powders by the rotating electrode process

Lineup of the E-series aircraft-derivative gas turbines

Creep and aero gas turbine design

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

Experimental investigation of total pressure loss and airflow distribution for gas turbines

"In situ" composites for jet propulsion and stationary gas turbine applications

A method for predicting the lifetime of gas turbine blades

Isoclines and service induced cracks in a mature population of gas turbine engine bearings

Damage of turbine blades due to interaction with fuel renification products

Fluidics in aircraft engine controls

A fuel control system designers approach to gas turbine engine computer model validation

A CAD/CAM graphic system with relative datums and tolerances

Application of structural optimization technique to reduce the external vibrations of a gas-turbine engine

The history of aviation lubricant gas-turbine engine lubricants

The control of aircraft gas turbines for fuel economy

Dispersion and temperature-force dependence of the high-temperature strength characteristics of a gas-turbine-engine disk alloy

Lineup of the E-series aircraft-derivative gas turbines

Reliable power --- Rolls-Royce aircraft engine designs

APU engine development and research and development — present and future

Requirements on modern engineering models of gas turbine engines

Application of combined balancing methods to flexible rotors of aviation gas-turbine engines

Sub energies of compressor blade tip seals

Strength of the turbine components of a gas-turbine engine under complex loading and associated problems

Analysis of the temperature field of a baffle-cooled gas-turbine-engine blade under conjugated boundary conditions

The effect of temperature-time factors on the metal damage and endurance characteristics of gas-turbine-engine rotor blades

Precision casting for gas turbine engines

The gas turbine engine

Composite materials --- with emphasis for aircraft gas turbine parts

Sheet metals - fabrication and joining --- for gas turbine engine components

Analysis of changes in the gas-dynamic parameters of a gas-turbine helicopter engine during acceleration

Gas turbine engines used in aviation: Design and construction of components /5th revised and enlarged edition/ --- Russian book

Effect of operating life on the mechanical properties of the materials and load-bearing capacity of the rotor elements of gas turbine engines

Gas turbine aero-thermodynamics with special reference to aircraft propulsion --- book

The TM 333, a trap card for Turboscram

The superalloys — materials for gas turbine hot section components

A study of the vibration loading of the turbine blades of an aircraft gas-turbine engine with dry-fraction dampers

Ceramic component development for limited-life propulsion engines

Blade loss transient dynamic analysis of turbomachinery

Experimental study of the effects of secondary air on the emissions and stability of a lean premixed combustor

Advancements in real-time engine simulation technology --- of digital electronic aircraft engine controls

NASA/General Electric broad-specification fuels combustion technology program — Phase I results and status

Evaluation of fuel injection configurations to control carbon and soot formation in small GT combustors

The P624 development program — a new approach

Icing conditions on sea level gas turbine engine test stands

Thermal decomposition of aviation fuels

Acoustic control of dilution-air mixing in a gas turbine combustor

Blanket jet airblast atomization of alternative liquid petroleum fuels under high ambient air pressure conditions

Whole engine inlet air particle separator technology

The effect of coolant flow on the efficiency of a transonic HP turbine profile suitable for a small engine

Carbon formation by the pyrolysis of gas turbine fuels in premix regions of gas turbine combustors

Two-phase transpiration cooling

A two-dimensional boundary-layer program for turbine airfoil heat transfer calculation
GAS TURBINES

Coatings in the aero gas turbine --- sprayed coatings [PFR-90049] p0318 H82-21204
Processes development and evaluation of gas turbine engine components in Ti-6242 --- titanium alloy [PFR-90050] p0318 H82-21205
The mechanical testing of compressors and turbines for aircraft gas turbine engines --- Rolls Royce engines [PFR-90070] p0319 H82-21211
Telemetry in aero engine development --- from operating engines [PFR-90055] p0321 H82-21217
Maintenance in Service of High Temperature Parts [ADAB-CP-317] p0345 H82-22172
Military maintenance policies and procedures for high-temperature parts. Will they be adequate? p0345 H82-22173
Engine depot maintenance repair technology p0345 H82-22174
Maintenance problems in gas turbine components at the Royal Naval Aircraft Yard, Fleetlands --- helicopter and marine gas turbines p0345 H82-22175
Maintenance experience with civil aero engines p0345 H82-22176
Engine component retirement for cause p0345 H82-22177
Defects and their effect on the behavior of gas turbine discs p0346 H82-22178
The influence of protective treatment on the mechanical properties of superalloy parts p0346 H82-22180
Repair and regeneration of turbine blades, vanes and discs p0346 H82-22185
BB211 powerplant deterioration: review of current situation and lessons learned [PFR-90073] p0355 H82-22270
The contribution of thermal barrier coatings to the life and performance of gas turbine components [PFR-90076] p0355 H82-22271
Turbine power --- BB211 aircraft engines [PFR-90078] p0355 H82-22275
Directional solidification: Project 82 --- of gas turbine rotor blade alloys [PFR-90088] p0356 H82-22279
A helicopter handling-qualities study of the effects of engine response characteristics, height-control dynamics, and excess power on map-of-the-earth operations p0365 H82-23214
Analysis of high load dampers [NASA-CR-165503] p0369 H82-23248
Impact study of syntactic and alternative fuel usage in Army aircraft propulsion systems [AD-A111046] p0398 H82-24355
Evaluation of inelastic constitutive models for nonlinear structural analysis --- for aircraft turbine engines [NASA-TP-82845] p0398 H82-24502
Analysis of transient data from aircraft gas turbine engines using AIDS p0403 H82-25189
Low NOx heavy fuel combustor concept program [NASA-CR-165367] p0413 H82-25365
Transient simulation of gas turbines including the effects of heat capacity of the solid parts [ISBN-951-752-456-1] p0453 H82-26296
Life and Utilization Criteria Identification in Design (LUCID), Volume 1 [AD-A111393] p0455 H82-26309
Life and Utilization Criteria Identification in Design (LUCID), Volume 2 [AD-A111940] p0455 H82-26310
Depot support of gas turbine engines [AD-A077161] p0462 H82-27217
Mechanical property characterization and modeling of structural materials --- for airplanes and aircraft gas turbine engines [AD-1113841] p0478 H82-27794
Ceramic applications in turbine engines [NASA-CASE-198-12938-1] p0565 H82-31158
A method for diagnosing inlet distortion asymmetries for aircraft gas turbine engine tests using an interactive computer program [AD-1116506] p0569 H82-31325
Engine dynamic analysis with general nonlinear finite element codes. Part 2: Bearing element implementation overall numerical characteristics and benchmarking [NASA-CR-167946] p0609 H82-33390

FUEL TURBINES
Fuel property effects on radiation intensities in a gas turbine combustor p0166 A02-15966
Investigation of heat transfer in the vicinity of the leading and trailing edges of a cooled nozzle blade of a low-consuming gas turbine p0295 A02-28018
Air cooling of gas turbine blades p0390 A02-34700
A comprehensive method for preliminary design optimization of axial gas turbine stators [AD-A862-12644] p0419 A02-35901
Atmospheric quality of twin fluid atomizers for gas turbines [AD-SHER PAPER 82-GT-61] p0422 A02-35314
The use of performance-monitoring to prevent compressor and turbine blade failure [AD-SHER PAPER 82-GT-66] p0422 A02-35316
Gas turbine airflow control for optimum heat recovery [AD-SHER PAPER 82-GT-83] p0423 A02-35329
Development of hybrid gas turbine-hybrid technology [AD-SHER PAPER 82-GT-94] p0424 A02-35337
A critical appraisal of some current incidence loss models for the stator and rotor of a mixed flow gas turbine [AD-SHER PAPER 82-GT-120] p0425 A02-35350
Accuracy expectations for gas turbine and centrifugal compressor performance testing [AD-SHER PAPER 82-GT-128] p0425 A02-35358
Oxidation-resistant materials for hot-gas turbines and jet engines. 1 [AD-SHER PAPER 82-GT-83] p0543 A02-4725
Gas turbine ceramic-coated-vane concept with combustion-cooled porous metal core [NASA-TJ-1942] p0343 H82-14090
Linear and nonlinear analysis of vortex whirler: Another blade buster [AD-SHER PAPER 82-GT-83] p0314 H82-15067
Brazile materials design, high temperature gas turbine [AD-1106670] p0191 H82-16005
Dualchannel fuel control program, phase 2 [AD-1109715] p0305 H82-20165
Basic technology of squeeze-film dampers for rotor dynamics control [AD-A110842] p0369 H82-23250
Evaluation of cast titanium alloy compressor components, volume 1 [AD-A1113431] p0396 H82-24204
Performance of multiple, angled nozzles with short mixing stack eductor systems [AD-A110817] p0454 H82-26302
Heat transfer in turbines [AD-A111584] p0455 H82-26307
Survey and update of F-14A mission profiles for TF30 engine usage [AD-A116831] p0603 H82-33337
Nuclear stability analysis of a compressor model [AD-A116878] p0610 H82-33394

GAS BUILDING
BY BLEETING
GAS-LIQUID INTERACTIONS
BY AIR WATER INTERACTIONS

A-232
Structures and Dynamics Division research and technology plans, FY 1982
NASA-Th-84509) p0561 882-30566

Results from tests of three prototype general aviation seats
(NASA-Th-84509) p0561 882-31733

Craneway airframe design concepts: Fabrication and testing
(NASA-CR-3603) p0643 882-33735

GENERAL DYNAMICS AIRCRAFT

NASA Canadian Aircraft
NAS P-106 Aircraft
NASA F-111 Aircraft

GENERAL DYNAMICS MILITARY AIRCRAFT

U S MILITARY AIRCRAFT

GEOASTROPHICS

U GEOPHYSICS

GEODETIC COORDINATES

Transformation relations for singularity avoidance in three-dimensional trajectory optimization
(AD-A110510) p0450 882-26269

An unbiased analysis of the Doppler coordinate system
(AD-A110510) p0450 882-26269

GEODETIC SATELLITES

A global atlas of GOES-3 significant wave height data and comparison of the data with national buoy data
(NASA-Ca-156082) p0394 882-15498

Doppler test results of experimental GPS receiver
(AD-A113587) p0468 882-27274

GEODETIC SURFACES

Applications of a multiplexed GPS user set
p0380 882-33050

GEODYNAMICS

Baseline monitoring using aircraft laser ranging
--- spaceborne laser simulation and aircraft laser tracking
(NASA-Th-73928) p0529 882-28090

GEOLICAL SURVEYS

Airborne gamma-ray spectrometer and magnetometer survey. Ilulissat icefjord quadrangle, Alaska, volume 2
[DE82-000314] p0399 882-24620

Airborne gamma-ray spectrometer and magnetometer survey. Jeaostekat quadrangle, North Dakota, volume 1
[DE82-000150] p0399 882-26629

Airborne gamma-ray spectrometer and magnetometer survey. Jeaostekat quadrangle, North Dakota, volume 2
[DE82-000169] p0399 882-26630

Airborne gamma-ray spectrometer and magnetometer survey. Barnicr quadrangle, Alaska, volume 2
[DE82-000320] p0399 882-25623

Geophysical flight line flying and flight path recovery utilizing the Litton LTB-76 inertial navigation system
[DE82-005555] p0534 882-29292

GEOLOGY

U VOLCANOLOGY

GEOGRAPHIC ANOMALIES

U MAGNETIC ANOMALIES

GEOMETRICAL FIELD

U GEOMAGNETISM

- GEOMAGNETISM

A comparison of pole positions derived from GPS satellite and Navstar navigation satellite observations
(AD-A110765) p0449 882-26268

The Earth's gravity field to degree and order 180 using SASSAT altimeter data, terrestrial gravity data and other data
(AD-A111098) p0478 882-27900

GEOMETRIC DILATION OF PRECISION

Improvements and extensions of the Geometrical Dilation of Precision (GDOP) concept for selecting navigation measurements
(AD-A108607) p0453 882-18197

GEOMETRIC RECTIFICATION (RAFTEED)

Scanner imaging systems, aircraft

GEOMETRICAL HORMATIONAL

U MAGNETHORIZATIONAL

GEOMETRICAL OPTICS

Wide angle raster head up display design and application to future single seat fighters
p0472 882-27304

GEOMETRICAL THEORY OF DIFFRACTION

GTD terrain reflection model applied to ILS glide scope --- Geometrical Theory of Diffraction

Volumetric pattern prediction of antennas on aircraft using the geometrical theory of diffraction
(ESA-77-677) p0259 882-18483

GTD analysis of airborne antenna radiating in the presence of lower dielectric layers
(NASA-Cr-160770) p0357 882-22398

GEOMETRY

U ANGLE OF ATTACK

U CARTESIAN COORDINATES

U CSIFPS (MATHEMATICS)

U DUCT GEOMETRY

U ELEVATION ANGLE

U FLOW GEOMETRY

U GEODETIC LINES

U GEOMAGNETIC FIELD

U RECTANGLES

U TENSOR ANALYSIS

U TORSION

U VECTOR ANALYSIS

U VOLATILITY

A solution to the static geometry problem for JTIDS relative navigation
p0622 882-12634

The statistical theory of radio direction finding
(AD-AI0 1556) p0622 882-10027

A geometric approach to multivariable control system synthesis

p0630 882-10956

Aerodynamic calculations and design of subcritical aerofoils
p0632 882-10985

GEOPHYSICS

Geophysical flight line flying and flight path recovery utilizing the Litton LTB-76 inertial navigation system
p0534 882-29292

GEOPOTENTIAL

U GEOPOTENTIAL HEIGHT

GEOPOTENTIAL HEIGHT

Rapid extraction of layer relative humidity, geopotential thickness, and atmospheric stability from satellite sounding radiometer data
p0242 882-25113

GEOSTRUCTURES

A survey of melting layer research
(AD-A115224) p0562 882-30806

GEBRNH ARC HEATING

U ARC HEATING

U HEATING EQUIPMENT

GERMANY

Developmental possibilities in civil aviation in the Federal Republic of Germany
p0350 882-22230

Traffic infrastructure: Can planning still be carried through
p0350 882-22230

GLOBALS

Composite bonds improve thermal integrity
p0355 882-30004

Aerelastic analysis of the elastic gimbals rotor
(NASA-Cr-166287) p0312 882-21157

GLASS

U GLASS FIBERS

U PYRECEAN (TRADEMARK)

Effect of mechanical surface and heat treatments on erosion resistance
p0285 882-27071

GLASS FIBER REINFORCED PLASTICS

On the use of carbon composites in slat and stabilizer construction
p0615 882-11668

Techniques for modifying airfoils and fairings on aircraft using foam and fiberglass
[AIAA PAPER 83-2445] p0664 882-14383

Tensile fatigue assessment of candidate resins for use in fibre reinforced composite repair schemes
[AD-110741] p0313 882-17531

Conductive prepregs for lightning strike protection on aircraft
GLASS FIBERS

- Fatigue behavior of selected non-woven fiber composites for helicopter rotor blades
- A study of the suitability of the all-fiberglass AH-1A aircraft for fuel-efficient general aviation flight research
- CH-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 CH-47 fiberglass rotor blade repair program

GLASS FIBERS

- A significant role for composites in energy-efficient aircraft
- A & D on composite rotor blades at Augusta
- CPC drive shaft and CPC coupling for the tail rotor of the B-105
- Designing of composite rotor blades
- Adaptation of pultrusion to the manufacture of helicopter components
- Determination of load spectra and their application for keeping the operational life of glass/epoxy composites
- Revolution in airplane construction? Grob G110: The first modern fiber glass composition airplane shortly before its maiden flight
- Development of materials and manufacturing technology over the next 20 years: Composite materials

GLASS FIBERS

- CB-46 fiberglass rotor blade repair program
- Operational experience with the fiberglass rotor blade

GLASS FIBERS

- GLASS FIBERS

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- GLASS FIBERS

- GLASS FIBERS

- GLASS FIBERS

- GLASS FIBERS

- GLASS FIBERS

- GLASS FIBERS

- GLASS FIBERS
Fracture control in ballistic-damaged graphite/epoxy wing structure
- p0284 A82-266339

Composite wing substructure technology on the AV-8B advanced aircraft
- p0287 A82-27128

Design concepts for composite fuselage structure
- p0287 A82-27112

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 pulse on an advanced composites aircraft
- p0288 A82-27141

Evaluation of graphite/epoxy shims in a high capacity laminate helicopter bearing
- p0289 A82-27155

Durability evaluation of highly stressed wing box structure
- p0290 A82-27163

Growth of four flaw types in graphite/epoxy composites due to fully reversed fatigue
- p0290 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 A82-30087

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
- [AIAA 82-03294] p0341 A82-30294

System study of application of composite materials for future transport aircraft
- [AIAA 82-0312] p0376 A82-31985

Fabrication and test of integrally stiffened graphite/epoxy components
- p0435 A82-37071

Application and testing of metallic coatings on graphite/epoxy composites
- p0435 A82-37074

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 medal transport aircraft
- p0495 A82-39895

Development status of a composite vertical stabilizer for a jet trainer
- p0496 A82-39897

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] p0099 A82-12412

A study of the effects of long-term exposure to fuels and fluids on the behavior of advanced composite materials
- [NASA-CR-165763] p0258 A82-18227

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
- [SISAS-82-210-106] p0353 A82-22257

The 737 composite double skin spoiler flight service evaluation
- [NASA-CR-165826] p0356 A82-22314

Standard tests for toughened resin structural panel systems for aircraft structures
- [NASA-RD-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 and graphite/polyimide composites
- [AIAA 82-0657] p0335 A82-30087

High temperature, short term tensile strength of C6000/PHB-15 graphite plymide
- [AIAA 82-0711] p0337 A82-30125

Geometrical aspects of the tribological properties of graphite fiber reinforced polyimide composites
- [AIAA 82-0722] p0340 A82-30172

Development and demonstration of manufacturing processes for fabricating graphite/LAHC 160 polyimide structural elements
- [NASA-CR-165809] p0357 A82-22315

Develop, demonstrate, and verify large area composite structural bonding with polyimide adhesives - adhesively bonding graphite-polyimide structures
- [NASA-CR-165839] p0459 A82-26665

GRAINS (CHARTS)

Airborne gamma-ray spectrometer and magnetometer survey. Skibipik Silver quadrangle, Alaska, volume 2
- [DBDB-000314] p0399 A82-24620

Airborne gamma-ray spectrometer and magnetometer survey. Jamestown quadrangle, North Dakota, volume 1
- [DBDB-004150] p0399 A82-24629

Airborne gamma-ray spectrometer and magnetometer survey. Jamestown quadrangle, North Dakota, volume 2
- [DBDB-004169] p0399 A82-24630

GRAVITATION

MT GRAVITY ANOMALIES

GT REDUCED GRAVITY

GRAVITATIONAL EFFECTS

Stability and response to gravity of the flap lag motion for a rigid rotor blade with flap-pitch coupling
- [ISD-270] p0214 A82-17640

Study and design of high G acceleration devices for flight simulators
- [AD-A1199127] p0306 A82-20195

GRAVITATIONAL PROFILES

Gravity induced position errors in airborne inertial navigation
- [AD-A113823] p0467 A82-37272

The Earth's gravity field to degree and order 180 using SGASAT altimeter data, terrestial gravity data and other data
- [AD-A113098] p0478 A82-27900

GRAVITATIONAL POTENTIAL

Gravity anomalies
- [AD-A113823] p0467 A82-27272

The Earth's gravity field to degree and order 180 using SGASAT altimeter data, terrestial gravity data and other data
- [AD-A113098] p0478 A82-27900

GRIMM AIRCRAFT

UNITED KINGDOM

GILES

A Schwarzschild-Christoffel method for generating
GROUND TESTS

Aircraft stability and control
[1 NASA PAPER 82-10822]
Overview of flight and ground testing
[1 NASA PAPER 82-12746]
Comparison of low-speed handling qualities in ground-based and in-flight simulator tests
[1 NASA PAPER 82-14383]
Ground test of a large scale 'P' vented thrust deflecting nozzle
[1 NASA PAPER 82-26330]
F-16 ground and inflight icing testing
[1 NASA PAPER 82-16907]
T700 - Modern development test techniques, lessons learned and results
[1 NASA PAPER 82-1963]
Improved methods in ground vibration testing
[1 NASA PAPER 82-35048]
Error minimization in ground vibration testing --- of helicopter structures
[1 NASA PAPER 82-40550]
SE-608 test program
[1 NASA PAPER 82-18141]
Electrical ground testing of aircraft static static protection
[1 NASA PAPER 82-19156]
Integrated flight and fire control demonstration on an F-15 aircraft: System development and ground test results
[1 NASA PAPER 82-23185]
Aeroacoustics of aircraft and jet engines
[1 NASA PAPER 82-43249]
Aeroacoustics of aircraft and jet engines
[1 NASA PAPER 82-43250]
GROUND WAVE PROPAGATION
Electromagnetic Propagation Problems in the Tactical Environment
[1 NASA PAPER 82-43261]
GROUND WIND
Active gust and maneuver load control concepts with the example of the Airbus A300. Part I: Explanation of a regular in the time zone of wind gust load decrease and examination of its effectiveness in stochastic gusts
[1 NASA-PAPER-172/3/DGB/39-Pt-1]
B-747 vortex alleviation flight tests:
[1 NASA PAPER 82-19228]
B-747 vortex alleviation flight tests:
[1 NASA PAPER 82-19228]
GROUND-AIR-GROUND COMMUNICATION
The radio link for ground-air-ground communications using an integrated voice-data communication
[1 NASA PAPER 82-38405]
GROUND-TO-AIR MISSELS
U SURFACE TO AIR MISSELS
GROWTH
NT CRYSTAL GROWTH
NT DIRECTIONAL SOLIDIFICATION (CRYSTALS)
GERMAN AIRCRAFT
NT A-4 AIRCRAFT
NT C-1A AIRCRAFT
NT F-4 AIRCRAFT
NT F-111 AIRCRAFT
I-29A forward-swept-wing demonstrator airplane
[1 NASA PAPER 82-25209]
GUATEMALA
Radar mapping, archaeology, and ancient land use in the Maya lowlands

SUBJECT INDEX
[1 NASA PAPER 82-16931]
GUIDANCE (NORTH)
[1 NASA PAPER 82-14379]
Command guidance
[1 NASA PAPER 82-13503]
Inertial guidance
[1 NASA PAPER 82-13504]
Laser guidance
[1 NASA PAPER 82-13504]
Map matching guidance
[1 NASA PAPER 82-14379]
 Strapdown inertial guidance
[1 NASA PAPER 82-14379]
Terminal guidance
[1 NASA PAPER 82-14379]
Experience with flight test trajectory guidance
[1 NASA PAPER 81-2504]
Simplified digital design tools
[1 NASA PAPER 82-37024]
Image processing in tactical flight guidance
[1 NASA PAPER 82-44221]
Proceedings of the 12th Navy Symposium on Aerocballistics, volume 1
[1 NASA PAPER 82-32725]
GUIDANCE SENSORS
The integrated inertial sensor assembly /ISS/ - A redundant strapdown system for advanced aircraft navigation and flight control functions
[1 NASA PAPER 82-2642]
Redundancy management of skewed and dispersed inertial sensors
[1 NASA PAPER 82-13503]
Development and laboratory test of an integrated sensory system /ISS/ for advanced aircraft
[1 NASA PAPER 82-2297]
Navigation for helicopters by multiple use of inertial sensors
[1 NASA PAPER 82-13504]
Analysis of stable pad disturbances and design of a sensor vault to monitor pad stability
[1 NASA PAPER 82-20505]
Fixed pattern noise correction for staring arrays in guidance systems
[1 NASA PAPER 82-39190]
A terrain following system, an algorithm and a sensor
[1 NASA PAPER 82-39740]
Sensor stabilisation requirements of RPV's - a simulation study
[1 NASA PAPER 82-39741]
The integration of multiple avionic sensors and technologies for future military helicopters
[1 NASA PAPER 82-23186]
Sun sensing guidance system for high altitude aircraft
[1 NASA PAPER 82-11552-1]
GUIDE VAMES
#2 JET VAMES
Comprehensive analysis of an axial compressor test with adjustable guide vane
[1 AIAA PAPER 82-GT-74-1]
Heat transfer measurements of a transonic nozzle guide vane
[1 AIAA PAPER 82-60-01]
Effect of a part-span variable inlet guide vane on TF34 fan performance
[1 NASA-CB-165562-VOL-2]
Transonic flows in an air inlet with large incidence and the effect of a blowing ramp
[1 NASA-CB-165562-VOL-3]
Optimization of compressor vane and bleed settings
[1 NASA-CB-165562-VOL-3]
Study of acoustic resonance of cascades --- sound generated by guide vanes; wind tunnel investigations
[1 NASA-CB-165562-VOL-3]
Sea Kang flight tests pitot-static probe and directional vane instrumentation
[1 NASA-CB-165562-VOL-1]
TF 102 in-duct combustor noise measurements with a turbine nozzle, volume 1
[1 NASA-CB-165562-VOL-1]
TF 102 in-duct combustor noise measurements with a turbine nozzle, volume 2
[1 NASA-CB-165562-VOL-2]
TF 102 in-duct combustor noise measurements with a turbine nozzle, volume 3
[1 NASA-CB-165562-VOL-3]
Energy efficient engine: Turbine transition duct model technology report
[1 NASA-CB-165562-VOL-3]
GUIDE THEORIE
#2 HANG (EXTREMES)
GUN LAUNCHERS
The electromagnetic theta gun and tubular
B-13 HELICOPTER
HELICOPTER HALL EFFECT

A-261
HALOGEN COMPOUNDS

HALOGEN COMPOUNDS
- Alkali Halides
- Carbon Tetrafluoride
- Chlorine Compounds
- Polytetrafluoroethylene
- Sodium Chlorides

HANDHELD AIRCRAFT
- C-160 AIRCRAFT
- HBP-320 AIRCRAFT
- U HBP-320 AIRCRAFT

HANDBOOKS
- ST USN MANUS (COMPUTER PROGRAMS)
- Conformation array design handbook
- Maintenance training simulator design and acquisition: Handbook of ISB procedures for design and documentation
- Operational test and evaluation handbook for aircraft training devices. Volume 1: Planning and management
- USAF Bioenvironmental Noise Data Handbook, volume 154
- USAF bioenvironmental noise data handbook. Volume 158: F-106A aircraft, near and far-field noise

HANDLING QUALITIES
- U CONTROLLABILITY

HANG GLIDERS
- Some aerodynamic aspects of hang gliding
- Soaring Society of America, National Convention, Phoenix, AZ, January 15-18, 1981
- Ultralight airplanes
- Optical dolphin hang glider flight

HANDHELD (MATERIALS)
- ST HOT PRESSING
- ST PRECIPITATION HARDENING

HARDWARE
- Controlling the software/hardware interface for the validation of avionics systems --- in flight control systems
- A simplified method for predicting rotor blade airloads
- A harmonic analysis method for unsteady transonic flow and its application to the flutter of airfoils

HARMONIC ANALYSIS
- Development and validation of harmonic analytical models for aircraft interior noise prediction
- Structural dynamics: Modified calculations on natural and harmonically excited vibrations of modified structures, increased computation efficiency
- A simplified method for predicting rotor blade airloads

HARMONIC OSCILLATION
- Design of higher harmonic control for the ABC
- A computer-controlled oscillation mechanism for unsteady aerodynamics experiments
- Periodic boundary value problem for the equation of the harmonic oscillation of a rotor blade about the axis of a flapping hinge

Optimization of blade pitch angle for higher harmonic rotor control

HARMONICS
- AT HARMONIC EXCITATION
- AT HARMONIC OSCILLATION

An investigation of rotor harmonic noise by the use of small scale wind tunnel models

HARNESS
- "Little people" problems / A-2 torso harnesses/
- A new safety harness for mobile aircraft

DISAGGREGATION OF SAFETY HARNESS buckles - CTM
- Evaluation of a proposed modified F/FB-111 crew seat and restraint system

HARMONIC OSCILLATIONS
- Comparative vertical impact testing of the F/FB-111 crew restraint system and a proposed modification

Feasibility study of a 270V dc flat cable aircraft electrical power distribution system

HARPOON MISSILES
- Harpoon missile capture-carry-dynamic environments on the A-6K aircraft

HARRIER AIRCRAFT
- Commentary on facilities used in the development of a Sea Harrier all weather operations capability
- AV-8B technical update - Leading edge root extension development
- Advanced cockpit for tactical aircraft
- Maintenance problems associated with the operation of the F04/ "Pegasus" engine in the AV-8A
- AV-8B Harrier II
- AV-8B/Harrier G.5 - Range, payload and VSTOL

COMPOSITE WING SUBSTRUCTURE TECHNOLOGY ON THE AV-8B ADVANCED AIRCRAFT

Preliminary design development AV-8B forward fuselage composite structure

A real time Pegasus propulsion system model for VSTOL piloted simulation evaluation

Equipment vibration qualification for Harrier and Hawk aircraft

An oxygen enriched air system for the AV-8A Harrier

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

HAWKER SIDDELEY AIRCRAFT
- AT BARRIER AIRCRAFT
- AT HARRIER AIRCRAFT
- U.S. Marine Corps AV-8A maintenance experience

HAZARDS
- AT AIRCRAFT HAZARDS
- AT FLIGHT HAZARDS
- AT IONIZATION HAZARDS

Investigation of the structural degradation and personnel hazards resulting from helicopter composite structures exposed to fires and/or explosions

STUDY OF AIR COMPRESSIONER HAZARDS IN UNDERGROUND AND SURFACE MINEs

HC-1 HELICOPTER
- N CH-47 HELICOPTER

A-262
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.

A review of intermediate temperature, direct reading heat flux transducer for measurements in continuous wind tunnels.

Assessment of burning characteristics of aircraft interior materials.

Heat transfer in turbulent boundary layers on flat plates.

Evaluation of the design, construction and operation of a gas fueled engine driven heat pump.

Analysis of head up displays for reliability and maintainability improvement.

Final engineering report for computer, weapon video angle raster head up display design and development of the signal data converter, CV-3600/AVU-30 (V) . volume 3.

High altitude flight performance of jet engines. I

Directional solidification: Project B2 of gas turbine engine components - controls and application to future single seat fighters.

A simulator assessment of a video field-of-view raster head-up display operation for civil transport operations. NASA/FAA phase 3.
Heat Transfer

A two-dimensional boundary-layer program for two-phase transpiration cooling.

Turbine stage heat flux measurements.

Design, fabrication and testing of an electrical inverse heat-transfer problems - Domains of application in the design and testing of technical systems.

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

Turbine stage heat flux measurements.

A two-dimensional boundary-layer program for turbine blade heat transfer calculation.

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

Gas turbine ceramic-coated-waist concept with convection-cooled porous metal core.

External fuel vaporization study.

Engine superalloy temperature and infrared signature.

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.

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

Historical perspectives on thermosstructural research at the NASA Langley Aeronautical Laboratory from 1948 to 1958.

Transonic simulation of gas turbines including the effects of heat capacity of the solid parts.

Heat transfer in turbines.

Cooled variable nozzle radial turbine for aircraft applications.

Heat Transfer Coefficients

Analysis of the temperature field of a baffled-cooled gas-turbine-engine blade under conjugated boundary conditions.

Investigation of heat transfer in the vicinity of the leading and trailing edges of a cooled nozzle blade of a low-consuming gas turbine.

Measurements of heat transfer coefficients 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 comparisons with results from a conventional measuring technique and predictions.

Local heat transfer to staggered arrays of impinging circular air jets.

The effect of temperature ratios on the film cooling process.

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

Heat Treatment

Aluminum and its alloys - Weldability.

A new approach to the problem of stress corrosion cracking in T675-16 aluminum.

Recent developments in materials and processes for aircraft corrosion control.

Heat Inertia

AECOYDINAMIC HEATING

ARC HEATING

RADIO FREQUENCY HEATING

SUPERHEATING

THERMAL HEATING

Experiments on fuel heating for commercial aircraft.

Heat Exchanger Equipment

Vacuum Furnaces

Vacuum Furnaces

Vacuum Furnaces

Ice protection system technology.
HELECOPTER DESIGN COTED

Fatigue methodology - A technical management system for helicopter safety and durability  p0045 A82-13240
Heavy lift helicopters - A national technology opportunity  p0045 A82-13241
The FAA's proposed helicopter certification rules  p0046 A82-13242
Wire strike protection  p0046 A82-13246
Design of a crashworthy crew seat for the Boeing Vertol Chinook helicopter  p0079 A82-14975
Advanced technology airfoil development for the TV-15 tail-rotor vehicle  p0108 A82-16906
Soviet helicopter construction /2nd revised and enlarged edition/ - Russian book  p0149 A82-18874
Design requirements for modern rescue helicopters  p0153 A82-1919
Application of the ABC helicopter to the emergency medical service role  p0157 A82-19219
Fatigue behavior of selected non-woven fiber composites for helicopter rotor blades  p0170 A82-20524
Helicopter transmission philosophy - The way ahead  p0173 A82-20546
The emerging need for improved helicopter navigation  p0182 A8-21591
LAMPS III recovery assist, securing and traversing /BASH/ system - Light Airborne Multi-Function System  p0234 A82-26412
Standardization of helicopter fatigue methodology - A manufacturer's view  p0238 A82-24704
Evolution of the Aeroscort  p0239 A82-26706
Flight condition recognition /FCR/ technique - microprocessor-based recording for helicopter structural component fatigue damage  p0239 A82-26712
Fatigue test of the typical main rotor control component  p0240 A82-26715
Helicopter rotor load prediction  p0240 A82-26719
Some thoughts on design optimization of transport helicopters  p0273 A82-25771
The model 412 multi-bladed rotor system  p0277 A82-26376
Design for the operating environment - ting-fuzi tail rotor program  p0277 A82-26378
SH-60B Seahawk automatic blade fold system  p0279 A82-26391
The impact of missions on the preliminary design of an ABC rotor  p0279 A82-26392
Rotor preliminary design trade-offs for the Advanced Scout helicopter  p0280 A82-26395
Performance and aerelastic tradeoffs on recent rotor blade designs  p0280 A82-26396
CS-47 fiberglass rotor blade design and fabrication  p0280 A82-26397
Advanced helicopter concepts compete  p0283 A82-26537
Helicopter vibration suppression using simple pendulum absorbers on the rotor blade  p0284 A82-26620
Future helicopter technology  p0284 A82-26620
The future of helicopter flight control technology  p0284 A82-26621
No-Tail-Rotor helicopter  p0284 A82-26822
Application of advanced composite materials to helicopter airframe structures  p0289 A82-27152
Design and production of fiberglass helicopter rotor blades  p0289 A82-27153
Preliminary design of an advanced composite rotor hub for the UH-60A Black Hawk  p0289 A82-27154

SUBJECT INDEX

Composite control tubes  p0289 A82-27154
The design, construction, and performance of composite fuselage components for the Boeing 234 helicopter  p0292 A82-27423
To the root of the problem - Some helicopter research topics  p0292 A82-27424
Advancing blade flight data gathering  p0292 A82-28275
Performance characteristics and employment profiles of the new helicopter AH-1M  p0311 A82-29586
A giant step toward composite helicopters  p0341 A82-30294
Structural modification to achieve antiresonance in helicopters  p0379 A82-32049
The ubiquitous helicopter  p0385 A82-33913
How ABC technology produce the next-generation helicopter  p0385 A82-33916
CPC drive shaft and CPC coupling for the tail rotor of the BO 105  p039 A82-37766
Quasi-static and dynamic crushing of energy absorbing materials and structural components with the aim of improving helicopter crashworthiness  p0400 A82-37769
Helicopter design synthesis  p0400 A82-37772
Factors shaping conceptual design of rotary-wing aircraft  p0400 A82-37773
Low vibration design of AH for mission proficiency requirements - Advanced Attack Helicopter  p0411 A82-37778
The Helicopter Ride Revolution  p0411 A82-37780
Considerations of open-loop, closed-loop, and adaptive multicyclic control systems  p0442 A82-37786
Assessment of the dynamic response of a structure when modified by the addition of mass, stiffness or dynamic absorbers  p0442 A82-37790
A unified approach to helicopter main rotor HASTBAN modeling  p0443 A82-37793
Substructure program for analysis of helicopter vibrations  p0443 A82-37795
Composite use on helicopters  p0461 A82-38222
Toward all-composite helicopter fuselage  p0461 A82-38223
The need for a dedicated public service helicopter design  p0468 A82-38223
The effect of hybrid composite materials on the dynamic characteristics of helicopter rotor blades  p0491 A82-39263
Short range tactical RPH system  p0492 A82-39730
American Helicopter Society, Annual Forum, 38th, Anaheim, Ca, May 4-7, 1982, Proceedings  p0498 A82-40505
A new Transonic Airfoil Design Method and its application to helicopter rotor airfoil design  p0498 A82-40507
Recent advances in rotor technology at Boeing Vertol  p0498 A82-40508
Helicopter vibration reduction by rotor blade modal shaping  p0498 A82-40514
Correlation of predicted vibrations and test data for a wind tunnel helicopter model  p0499 A82-40515
Sikorsky ACHP preliminary design - Advanced Composite Airframe Program  p0500 A82-40526
Conceptual design of the LHX integrated cockpit  p0500 A82-40527
The YH-66 engineweigh and tail rotor - A technical history  p0500 A82-40527

A-246
<table>
<thead>
<tr>
<th>SUBJECT INDEX</th>
<th>HELICOPTER DESIGN COSTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future helicopter cockpit design</td>
<td>p0500 46-2-40530</td>
</tr>
<tr>
<td>Adaptation of pultrusion to the manufacture of helicopter components</td>
<td>p0500 46-2-40529</td>
</tr>
<tr>
<td>Development of the Sea King composite main rotor blade</td>
<td>p0501 46-2-40537</td>
</tr>
<tr>
<td>Computer aided coordinate measuring system in engineering design of helicopter components</td>
<td>p0501 46-2-40539</td>
</tr>
<tr>
<td>A roadmap toward a fatigue qualification process for modern technology helicopters</td>
<td>p0501 46-2-40540</td>
</tr>
<tr>
<td>Optimum structural design for helicopters</td>
<td>p0502 46-2-40542</td>
</tr>
<tr>
<td>Design and fabrication of a composite rear fuselage for the UH-60 Black Hawk</td>
<td>p0502 46-2-40543</td>
</tr>
<tr>
<td>Structural design of a crashworthy landing gear for the AR-64 Attack Helicopter</td>
<td>p0502 46-2-40544</td>
</tr>
<tr>
<td>Ringing augmentation effects</td>
<td>p0502 46-2-40547</td>
</tr>
<tr>
<td>Results of the AR-64 Structural Demonstrator</td>
<td>p0502 46-2-40548</td>
</tr>
<tr>
<td>Material identification for the design of composite rotary wings</td>
<td>p0502 46-2-40551</td>
</tr>
<tr>
<td>An examination of helicopter blade profiles and tips</td>
<td>p0502 46-2-40597</td>
</tr>
<tr>
<td>Apache helicopter blade profiles and tips</td>
<td>p0502 46-2-40598</td>
</tr>
<tr>
<td>An investigation of a stopgap helicopter rotor with circulation control — class 60 by 60 foot wind tunnel</td>
<td>p0502 46-2-40601</td>
</tr>
<tr>
<td>[NASA TM-8182188] p0502 46-10030</td>
<td></td>
</tr>
<tr>
<td>How the helicopter cockpit designer uses digital avionics</td>
<td>p0509 46-2-13049</td>
</tr>
<tr>
<td>Integration of controls and displays in U.S. Army helicopter cockpits</td>
<td>p0509 46-2-13053</td>
</tr>
<tr>
<td>Helicopter landing gear design and test criteria</td>
<td>p0502 46-2-13054</td>
</tr>
<tr>
<td>[AD-110532] p0502 46-15035</td>
<td></td>
</tr>
<tr>
<td>Preliminary study for a modern u-bladed rotor for the NASA rotor system research aircraft</td>
<td>p0504 46-2-15051</td>
</tr>
<tr>
<td>[NASA CR-166153] p0504 46-16042</td>
<td></td>
</tr>
<tr>
<td>The armed helicopter in air to air missions</td>
<td>p0502 46-2-17158</td>
</tr>
<tr>
<td>Design Criteria of the A 129 helicopter drive system</td>
<td>p0502 46-2-17215</td>
</tr>
<tr>
<td>Helicopter development in France</td>
<td>p0502 46-2-17126</td>
</tr>
<tr>
<td>Helicopter propulsion systems. 1: Vibration prevention systems on helicopters — 2: Problem of noise in the cabin</td>
<td>p0502 46-2-17222</td>
</tr>
<tr>
<td>Future requirements for helicopter propulsion systems</td>
<td>p0502 46-2-17223</td>
</tr>
<tr>
<td>A study of the techniques of dynamic analysis of helicopter type structures</td>
<td>p0502 46-2-17224</td>
</tr>
<tr>
<td>The effects of slight non-linearities on modal testing of helicopter-like structures</td>
<td>p0502 46-2-18129</td>
</tr>
<tr>
<td>Point of view of a helicopter manufacturer on airworthiness regulations</td>
<td>p0502 46-2-18130</td>
</tr>
<tr>
<td>Military requirements: Too little or too much</td>
<td>p0502 46-2-18137</td>
</tr>
<tr>
<td>Parametric criteria and impact on design trends</td>
<td>p0502 46-2-18138</td>
</tr>
<tr>
<td>Design philosophy of the Hughes model 500 helicopter</td>
<td>p0502 46-2-18139</td>
</tr>
<tr>
<td>SB-608 test program</td>
<td>p0502 58-2-18140</td>
</tr>
<tr>
<td>Naval versions of the Dauphin and the AS 15 TT weapon system</td>
<td>p0502 58-2-18141</td>
</tr>
<tr>
<td>Army Lynx: Product development matched to military combat development</td>
<td>p0502 58-2-18142</td>
</tr>
<tr>
<td>Flight characteristics design and development of the SH-60K/SH-60N helicopter</td>
<td>p0502 58-2-18143</td>
</tr>
<tr>
<td>The role of simulation in the design process</td>
<td>p0502 58-2-18144</td>
</tr>
<tr>
<td>Impact of systems technology and integration on helicopter design</td>
<td>p0502 58-2-18154</td>
</tr>
<tr>
<td>The multi mode matrix flat panel display: Technology and applications</td>
<td>p0502 58-2-18165</td>
</tr>
<tr>
<td>Integration of inertial sensors in helicopters</td>
<td>p0502 58-2-18173</td>
</tr>
<tr>
<td>NASA/HAA Advanced Rotorkcraft Technology and Tiltrotor Workshops. Volume 1: Executive Summary</td>
<td>p0502 58-2-18170</td>
</tr>
<tr>
<td>Experience during the development of the German-Japanese helicopter BK 117</td>
<td>p0502 58-2-18174</td>
</tr>
<tr>
<td>[BBN-UD-303-810-0] p0502 58-2-18175</td>
<td></td>
</tr>
<tr>
<td>Design study into a high endurance multirotorkcraft</td>
<td>p0502 58-2-18176</td>
</tr>
<tr>
<td>Use of composite materials for helicopter rotor blades</td>
<td>p0502 58-2-18177</td>
</tr>
<tr>
<td>[AA-12041] p0502 58-2-18178</td>
<td></td>
</tr>
<tr>
<td>Advanced concepts for composite structure joints and attachment fittings. Volume 1: Design and evaluation</td>
<td>p0502 58-2-18179</td>
</tr>
<tr>
<td>[AD-A102192] p0502 58-2-18180</td>
<td></td>
</tr>
<tr>
<td>Approach in dynamic qualification of light rotorcraft structures and equipment</td>
<td>p0502 58-2-18181</td>
</tr>
<tr>
<td>The dynamic qualification of equipment and external stores for use with rotary winged aircraft</td>
<td>p0502 58-2-18182</td>
</tr>
<tr>
<td>[BBN-UD-303-810-0] p0502 58-2-18183</td>
<td></td>
</tr>
<tr>
<td>Naval versions of the Dauphin and the AS 15 TT weapon system — helicopters</td>
<td>p0502 58-2-18184</td>
</tr>
<tr>
<td>A light helicopter for night firing</td>
<td>p0503 58-2-18226</td>
</tr>
<tr>
<td>Concept studies of an advanced composite helicopter fuselage</td>
<td>p0503 58-2-18227</td>
</tr>
<tr>
<td>Parametric study of the influence of the engine upon the operating cost of a naval helicopter</td>
<td>p0503 58-2-18228</td>
</tr>
<tr>
<td>Cockpit integration from a pilot's point of view</td>
<td>p0505 58-2-18229</td>
</tr>
<tr>
<td>Integrated cockpit for A-129</td>
<td>p0506 58-2-18230</td>
</tr>
<tr>
<td>Past applications and future potential of variable stability research helicopters</td>
<td>p0506 58-2-18231</td>
</tr>
</tbody>
</table>
HELICOPTER ENGINES

Mechanical properties of hot isostatic pressed Ti-6Al-4V for helicopter components [NB9-UD-328-81-0] - 00410 N82-25383
User’s manual for the coupled rotor/airframe vibration analysis graphic package [NASA-Ca-165897] - 00566 N82-21299
Design of helicopter rotor blades for optimum dynamic characteristics [NASA-Ca-169352] - 00607 N82-33374

HELICOPTER ENGINES

Helicopter engine technology - With particular reference to the Rolls-Royce Gnome engine [AS82-02-10394]
The protection of gas turbine blades - A platinum aluminide diffusion coating [AS92-19-14364]
A fuel control system designer’s approach to gas turbine engine computer model validation [AS82-19-19253]
Three-dimensional calculation of the flow in helicopter air intakes [AERS, TP No. 1501-124] - 0164 A82-19740
Minimum cost performance monitoring of turboshaft engines [Aars 12-20-0594]
Future helicopter technology [A82-26-820]
Analysis of changes in the gas-dynamic parameters of a gas-turbine helicopter engine during acceleration [A82-29-2972]
New processes and methods of technical diagnostics and prognostics in the case of the engine [Aars 12-24-1025]
The TM 333, a trump card for Turbomeca engines[2]
A comparison of current and future helicopter engine technologies - With particular reference to the P-72204 [Aars 12-29-19295]

Development of a helicopter rotor/propulsion system design analysis [AIAA PAPER 82-1076] - 00416 N82-34997
Small engine inlet air particle separator technology [AER8 PAPER 82-GT-40] - 0021 A82-35299
Adaptive fuel control feasibility investigation for helicopter applications [AERS PAPER 82-GT-265] - 0027 A82-35400
An advanced helicopter engine control system [AIAA PAPER 82-GT-250] - 0028 A82-35429
Electronic control for small engines [AIAA PAPER 82-1126] - 0038 A82-37688

Civil helicopter propulsion systems reliability and engine monitoring technology assessments [A82-12-20-40516]
Adaptive fuel control feasibility investigation [A82-12-20-40516]
800shaft Horsepower Advanced Technology Demonstrator Engine [IADCA] status update [A8849 A82-40520]
TF34 Convertible Engine System Technology Program [A82-40521]
Digital full authority controls for helicopter engines [A82-40522]
Support of the H8-65A - The impact of advanced technology of VTOL systems upon existing product support [A82-40522]
The Power Pair Locus - A preliminary design aid to select power ratings for multi-engined helicopters [A82-42474]

Helicopter Propulsion Systems [AAR3-CP-302] - 0026 N82-17203
Helicopter propulsion system: Past, present and future [A82-12-37-17204]

Development test programs adapted to helicopter engines [A82-26-17205]
Aircraft turbine engine development: Current practices and new priorities [A82-26-17206]
Future technology and requirements for helicopter engines [A82-26-17207]
Mechanical advances in the design of small turboshaft engines [A82-26-17208]
HELICOPTER PROPULSION DRIVE

Airworthiness and flight characteristics test of an OH-58C configured to a Light Combat Helicopter (LCH) [AD-1112581] p0452 N82-26286


Math modeling for helicopter simulation of low speed, low altitude and steeply descent flight [NASA-CS-166385] p0592 N82-22374

The aerodynamic influences of rotor blade taper, twist, airfoils and solidity on hover and forward flight performance [AD-117397] p0605 N82-33357

A ground-simulator investigation of helicopter longitudinal flying qualities for instrument approach [NASA-TR-04225] p0611 N82-33398

HELICOPTER PROPULSION DRIVE

In-flight computation of helicopter transmission fatigue life expenditure [AIAA PAPER 81-2434] p0555 A82-13872

Application of the principle of reciprocity to flexible rotor balancing [ASME PAPER 01-DET-09] p0161 A82-19311


Airworthiness of helicopter transmissions [NASA-CS-165892] p0172 A82-20541

Helicopter transmission philosophy - The way ahead [NASA-CS-165892] p0173 A82-20546

Application of fatigue, crack propagation and strain survey testing to the CH-46 aft rotor drive shaft [NASA-TR-04225] p0238 A82-24705

Main rotor hub electromagnetic signature reduction [NASA-TR-04225] p0238 A82-24706

Evaluation of graphite/epoxy shims in a high capacity laminate helicopter bearing [NASA-CS-165892] p0239 A82-27155

Development of a helicopter rotor/propulsion system dynamics analysis manual [AIAA PAPER 82-1078] p0416 A82-39997

Helicopter Propulsion Systems [AGARD-CP-303] p0206 N82-17203

Lubrication breakdown between gear teeth [NASA-CS-165892] p0208 N82-17213

Advanced transmission component development [NASA-CS-165892] p0208 N82-17214

Design Criteria of the A 129 helicopter drive system [NASA-CS-165892] p0208 N82-17215


Future requirements for helicopter propulsion systems [NASA-CS-165892] p0209 N82-17225

HELICOPTER ROTORS

U ROTARY WINGS

HELICOPTER TAIL ROTORS

Design for the operating environment - Ring-fin tail rotor program [NASA-CS-165892] p0277 A82-26378

A survey of U.S. Army helicopter main and tail rotor blade obstacle strikes [NASA-CS-165892] p0278 A82-26385

The YAH-64A composite flexible tail rotor [NASA-CS-165892] p0278 A82-26386


No-Tail-rotor helicopter [NASA-CS-165892] p0284 A82-26822

The YAH-64 esquimaux and tail rotor - A technical history [NASA-CS-165892] p0284 A82-26823

Ringfin augmentation effects [NASA-CS-165892] p0500 A82-60528


Wind tunnel investigation of high speed rotor noise [NASA-CS-165892] p0286 N82-12053

A hingeless tail rotor of fiber composite construction and vibration isolator systems [AIAA PAPER 81-2434] p0555 A82-13872

A complete method for computation of blade node characteristics and responses in forward flight [NASA-CS-165892] p0316 N82-21187

A concept study of an advanced composite helicopter fan [NASA-CS-165892] p0353 N82-22254

Tail rotor studies for satisfactory performance: Strength and dynamic behavior [NASA-CS-165892] p0353 N82-22258

NASA Vertical drag test report --- rotor systems research aircraft [NASA-CS-165892] p0587 N82-32194

HELICOPTER WAVES

The vortex flow field generated by a hovering helicopter [NASA-CS-165892] p0276 A82-26277

Determination of rotor wake induced upwash [NASA-CS-165892] p0276 A82-26277

A simplified approach to the free wake analysis of a hovering rotor [NASA-CS-165892] p0276 A82-26277

An experimental and numerical study of 3-D rotor wakes in hovering flight [NASA-CS-165892] p0276 A82-26277

Laser Doppler anemometry applied to the study of the airflow in the wake of an helicopter rotor [NASA-CS-165892] p0276 A82-26277

Experiential and analytical studies of a model helicopter rotor in hover [NASA-CS-165892] p0276 A82-26277

Development of a computer based presentation of non-steady helicopter rotor flows [NASA-CS-165892] p0276 A82-26277

Non-steady velocity measurement of the wake of a helicopter rotor at low advance ratios [NASA-CS-165892] p0276 A82-26277

Seventh European Robertson and Powered Lift Aircraft Forum [NASA-CS-165892] p0276 A82-26277

A simplified approach to the free wake analysis of a hovering rotor [NASA-CS-165892] p0276 A82-26277

An experimental analysis of the shape of a rotor wake [NASA-CS-165892] p0276 A82-26277

Optimum performance and wake geometry of co-axial rotor in hover [NASA-CS-165892] p0276 A82-26277

A numerical approach to co-axial rotor aerodynamics [NASA-CS-165892] p0276 A82-26277

A prescribed wake rotor inflow and flow field prediction analysis, user's manual and technical approach [NASA-CS-165892] p0276 A82-26277

HELICOPTERS

AH-1G HELICOPTER

AH-64 HELICOPTER

AH-1G HELICOPTER

AH-64 HELICOPTER

AH-1G HELICOPTER

AH-64 HELICOPTER

AH-64 HELICOPTER

AH-64 HELICOPTER
A historical perspective on thermostructural research at the BACA Langley Aeronautical Research Center from 1948 to 1958

A model for sensor-interceptor trade-off analysis

Automated radar performance evaluation in the Radio Frequency Simulation System at NRC

An investigation of dual mode phenomena in a high-performance aerodynamic body

An analysis of heat transfer in a honeycomb-fiber sheet for hypersonic research

An investigation of skin friction on a high-lift configuration

Aerospace research at the BACA Langley Aeronautical Research Center

High-sensitivity holographic interferometry and tomography at Ames Research Center

Flow field studies using holographic interferometry at Langley

A VHF homing system with VHF radiotelephony for area-representative strap-survey flights conducted, as part of combined forest inventories, with light aircraft carrying 70 ma and 35 ma cama

A terminal guidance simulator for evaluation of millimeter wave seekers

Improved 243 MHz homing antenna system for use on helicopters

A short history of aviation gasoline development, 1903-1980

A complete method for computation of blade mode characteristics and responses in forward flight

Improved 243 MHz homing antenna system for use on helicopters

A model for sensor-interceptor trade-off analysis

A model for sensor-interceptor trade-off analysis

A terminal guidance simulator for evaluation of millimeter wave seekers

Some observations on the corrosion of aircraft at the air force base in knocks, Turkey

A compilation of stress intensity factor solutions for flawed fastener holes

Analysis of rotating structures using image interferometry

A contribution to the hodograph method for shock-free transonic airfoil sections

A VHF homing system with VHF radiotelephony for area-representative strap-survey flights conducted, as part of combined forest inventories, with light aircraft carrying 70 ma and 35 ma cama

A compilation of stress intensity factor solutions for flawed fastener holes

A compilation of stress intensity factor solutions for flawed fastener holes

An investigation of skin friction on a high-lift configuration

An investigation of dual mode phenomena in a high-performance aerodynamic body

A compilation of stress intensity factor solutions for flawed fastener holes

An investigation of skin friction on a high-lift configuration

An investigation of dual mode phenomena in a high-performance aerodynamic body
Horizontal planes

[Advanced extant hot systems for jet engine


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

[NASA-CP-1560] p0373 882-29116

Flap-lag-torsional dynamics of transient and
inextensible rotor blades in hover and in
forward flight


The aerodynamic influences of rotor blade tip,
twist, airfoil, and solidity on hover and
forward flight performance

[AD-A177307] p0405 882-33357

HORIZONTAL ORIENTATION

Static investigations of rotating blades under
deadweight and during stationary operation

[13P-269] p0214 882-17639

HORIZONTAL STABILIZERS

0 STABILIZERS (FLOW DYNAMICS)

Effect on surface pressures of transversal holes
in a T-38 stabilator

[p0113 882-17602

Determination of the trimmed drag of an aircraft

[p0127 882-35803

Basic studies of the flow fields of
airfoil-flap-spoiler systems

[AIAA PAPER 82-0173] p0194 882-22060

High angle-of-attack characteristics of
two-surface fighter aircraft -
canard-wing-horizontal tail configuration for
greater stability and control

[AIAA PAPER 82-0245] p0194 882-22074

Fabrication and test of integrally stiffened
graphite/epoxy components

[p0336 882-30105

Tests of CFRP spar/rib models with corrugated web

[p0435 882-37071

Fabrication of CFRP prototype structure for
aircraft horizontal tail leading edge flat rail

[p0495 882-39980

A CFRP tailcon for the Tornado: Construction and
production --- horizontal stabilization

[882-212/KPF/PMB/2] p0027 882-10035

Ground calibration of a strain-gauged CT-A
aircraft (1979)

[AD-A107897] p0189 882-16073

BONE ARTERIES

Research and development at HBB. Technical and
scientific publications, 1981

[p0360 882-23137

HOT CORROSION

BT TEMPERATURE DEPENDENCE

Damage of turbine blades due to interaction with
fuel recombustion products

[p0127 882-18479

Improved plasma sprayed &Czal coatings for
aircraft gas turbine applications

[p0176 882-20742

The effect of NaCl/g in high temperature oxidation

[ASRS PAPER 82-GT-106] p0424 882-35342

HOT EXTENDING

0 EXTENDING

HOT GAS SYSTEMS

0 HIGH TEMPERATURE GASES

HOT GASES

0 HIGH TEMPERATURE GASES

HOT JET EXHAUST

0 HIGH TEMPERATURE GASES

HOT JETS

O JET FLOW

HOT PRESSING

Fabrication of boron/aluminum fan blades for SCB
engines


Repair and regeneration of turbine blades, vanes
and discs

[p0346 882-22165

Mechanical properties of hot isotactic pressed
P/E-titanium for helicopter components

[888-DP-314-81-1] p0010 882-25383

Hot isotactically pressed manufacture of high
strength Reel 76 disk and seal shapes

[NASA-CR-165549] p0518 882-26439

HOT SURFACES

Development and testing of dry chemicals in
advanced extant systems for jet engine
combustion


Powder metallurgical improvements for improved hot
section alloys in eco-engine applications

[PHS-90072] p0357 882-22358

HOT FILM ANEMOMETERS

Rotent (low research in low speed helicopter flight

[AD-A107871] p0199 882-17112

Non-steady velocity measurement of the wake of a
helicopter rotor at low advance ratios

[p0199 882-17113

HOT-WIRE FLOWMETERS

Instantaneous turbulence profiles in the wake of an
oscillating airfoil

[AIAA PAPER 82-0353] p0119 882-17901

Turbulence measurements in a confined jet using a
mixing-orientation hot-wire probe technique

[AIAA 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

HOT-COOLINGS

HOT-DIAGNOSIS

Ceramic turbine hoousing

[ASRS PAPER 82-GT-293] p0430 882-35463

HORNSCRAFT

0 GROUND EFFECT MACHINES

HOVERING

Application of the OHBA dynamic stall model to a
helicopter blade in forward flight


Hover tests of the IV-15 Tilt Rotor Research
Aircraft

[AIAA PAPER 81-2501] p0064 882-14386

Ground effect hover characteristics of a
large-scale twin tilt-saccile VSTOL model

[AD-A100807] 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
flapage vibration

[ANS PREPRINT 81-21] p0442 882-37792

A simplified approach to the free wake analysis of
a hovering rotor

[p0483 882-38474

Flying quality requirements for VSTOL transition

[AIAA PAPER 82-1253] p0496 882-60276

Theory and application of optimum airflow to
rotors in hover and forward flight

[p0498 882-60506

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

[p0498 882-60511

An investigation of scale model testing of VTOI
aircraft in hover

[p0507 882-60911

An experimental and numerical study of 3-D rotor
wake in a hovering flight

[p0510 882-60946

A restrained ideal helicopter, which is able to
fly, for investigations regarding human
multivariable control behavior -- German thesis

[p0543 882-41687

Experimental and analytical studies of a model
helicopter rotor in hover

[NASA-TH-81232] p0065 882-12042

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-A102687] p0304 882-20178

A-255
Hovering Stability

Performance testing of a main rotor system for a utility helicopter at 1/4 scale [NASA-TM-83274] p0352 A82-22251

Some aspects of jet dynamics and their implications for VTO research [NASA-TM-83274] p0360 A82-23151

Jet effects on forces and moments of a VSTOL fighter type aircraft [NASA-TM-83274] p0361 A82-23168

Flag-lag-torsional dynamics of extensional and inextensional rotor blades in hover and an forward flight [NASA-CR-165159] p0535 A82-29312


The aerodynamic influences of rotor blade taper, twist, airfoils and solidity on hover and forward flight performance [AD-A117397] p0605 A82-33357

Hovering Stability

Dynamic stability of a buoyant quad-rotor aircraft --- for airlifting payloads externally on a sling [AIAA PAPER 82-0242] p0117 A82-17861

Performance and aerelastic tradeoffs on recent rotor blade designs [NASA-CR-165078] p0280 A82-26396

Turbulence-excited flapping motion of a rotor blade in hovering flight [NASA-CR-165078] p0299 A82-29042

An analysis of a nonlinear instability in the implementation of a VTO control system during hover [NASA-CR-82-161] p0395 A82-38990

An experimental investigation of a bearingless model rotor in hover [NASA-CR-82-161] p0490 A82-40512

Finite element analysis for bearingless rotor blade aerelasticity [NASA-CR-82-161] p0499 A82-40517

Flag-lag-torsional dynamics of extensional and inextensional rotor blades in hover and an forward flight [NASA-CR-166389] p0399 A82-15013

Hover tests of a model h-force rotor [NASA-CR-166389] p0250 A82-18159

An analysis of a nonlinear instability in the implementation of a VTO control system during hover [NASA-TM-84220] p0356 A82-22281

HBD-1 HELICOPTER

U CH-46 HELICOPTER
HSD-2 HELICOPTER
U SH-3 HELICOPTER
U OH-1 HELICOPTER
HDDs Development of the Traxes rotor head [AIAA 81-2266] p0048 A82-13483

Main rotor hub electromagnetic signature reduction [AIAA 81-2266] p0048 A82-13483

Preliminary design of an advanced composite rotor hub for the UH-60A Black Hawk [AIAA 81-2266] p0048 A82-13483

Rotor noise - a dual frequency rotorhead absorber [AIAA 81-2266] p0048 A82-13483

Aerelastic analysis of the elastic gimbaling rotor [NASA-CR-166287] p0048 A82-13483

Investigation of a rotor system incorporating a constant lift tip [NASA-CR-166287] p0048 A82-13483

HUGHES MILITARY AIRCRAFT

U HUGHES AIRCRAFT
U MILITARY AIRCRAFT

Human Behavior


HUMAN ENGINEERING

U HUMAN FACTORS ENGINEERING

Human factors - what a pilot expects to see [AIAA 81-2217] p0047 A82-13455

Electronic flight deck displays for transport aircraft [AIAA 81-2217] p0047 A82-13455

SUBJECT INDEX

Evaluation of an automatic subsystem parameter monitor --- for aircraft [AIAA 81-2217] p0049 A82-39245

The evolution of display formats for advanced fighters using multilobe color CRT displays [AIAA 81-2217] p0050 A82-48088

Electronic master monitor and advisory display system, human engineering summary report [AD-A104244] p0037 A82-11065

Computer Air Carrier Simulator [AD-A104894] p0086 A82-12054

Color CRT displays for the cockpit [NASA-CASE-ABC-10990-1] p0188 A82-16059

Using voice control onboard combat aircraft [NASA-CASE-ABC-10990-1] p0299 A82-16059

Experimental investigation of a helmet mounted sight/display for helicopter [NASA-CASE-ABC-10990-1] p0350 A82-16059

Tanker avionics and aircrew complement evaluation [NASA-CASE-ABC-10990-1] p0393 A82-13063

F/A-18 Hornet crew station [NASA-CASE-ABC-10990-1] p0393 A82-13064

Raven aircraft filter-absorber --- agricultural aircraft [AD-A109862] p0399 A82-11319

Taking into account nighttime annoyance in the calculation of the prophec index [NASA-TM-76580] p0397 A82-14674

Spectrally balanced chromatic landing approach lighting system [NASA-CAEB-ABC-10990-1] p0188 A82-16059

Aircraft alerting systems standardization study, Volume 2: Aircraft alerting systems design guidelines [NASA-CASE-ABC-10990-1] p0190 A82-16077

Point of view of a helicopter manufacturer on airlowings regulations [NASA-CASE-ABC-10990-1] p0247 A82-18137

Multiple ejection effects analysis [NASA-CASE-ABC-10990-1] p0252 A82-18192

Design of a catadioptric VCASS helmet-mounted display [NASA-CASE-ABC-10990-1] p0250 A82-18192


Controls and displays for all-weather operation of helicopters [NASA-CASE-ABC-10990-1] p0354 A82-22260

Current ADA restraint system status, trade-off constraints and long range objectives for the Minimum Performance Ejection System (MPES) [NASA-CASE-ABC-10990-1] p0464 A82-27238

Proposed research tasks for the reduction of human error in naval aviation mishaps [NASA-CASE-ABC-10990-1] p0464 A82-27238

Development of a backpack survival kit for ejection seats [NASA-CASE-ABC-10990-1] p0464 A82-27238

Advanced technology and fighter cockpit design: Which drives which? [NASA-CASE-ABC-10990-1] p0471 A82-27302

Human factors in air traffic control [NASA-CASE-ABC-10990-1] p0534 A82-29293

The air traffic control system [NASA-CASE-ABC-10990-1] p0534 A82-29293

Human factors contributions to air traffic control systems [NASA-CASE-ABC-10990-1] p0534 A82-29295
<table>
<thead>
<tr>
<th>SUBJECT INDEX</th>
<th>HYDRAULIC STEERING SYSTEMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ran as a system component</td>
<td>p0534 882-29296</td>
</tr>
<tr>
<td>The work environment</td>
<td>p0534 882-29299</td>
</tr>
<tr>
<td>Displays</td>
<td>p0534 882-29300</td>
</tr>
<tr>
<td>Controls</td>
<td>p0534 882-29301</td>
</tr>
<tr>
<td>Additional functions within the air traffic control system</td>
<td>p0534 882-29309</td>
</tr>
<tr>
<td>Future trends and problems</td>
<td>p0535 882-29310</td>
</tr>
<tr>
<td>Human factors evaluation of C-141 fuel savings advisory system</td>
<td>p0550 882-30304</td>
</tr>
<tr>
<td>Climatic laboratory evaluation YCH-470 helicopter</td>
<td>p0590 882-22355</td>
</tr>
<tr>
<td>The LIDS/F-18 directive HUD</td>
<td>p0608 882-33382</td>
</tr>
<tr>
<td>Speech command auditory display system (SCADS)</td>
<td>p0609 882-33383</td>
</tr>
<tr>
<td>Results from tests of three prototype general aviation models</td>
<td>p0613 882-33373</td>
</tr>
<tr>
<td>Human performance</td>
<td>p0021 882-23312</td>
</tr>
<tr>
<td>ST OPERATOR PERFORMANCE</td>
<td>p0219 882-23312</td>
</tr>
<tr>
<td>ST PILOT PERFORMANCE</td>
<td>p0021 882-23322</td>
</tr>
<tr>
<td>Relationships between naval aviation safety and pilot flight experience</td>
<td>p0012 882-11031</td>
</tr>
<tr>
<td>Analysis of system problems using aviation safety reporting system data</td>
<td>p0221 882-23322</td>
</tr>
<tr>
<td>Functional requirements for the man-vehicle systems research facility --- identifying and correcting human errors during flight simulation</td>
<td>p0352 882-22248</td>
</tr>
<tr>
<td>Human capabilities and limitations in systems</td>
<td>p0534 882-29297</td>
</tr>
<tr>
<td>Human reactions</td>
<td>p0129 882-16732</td>
</tr>
<tr>
<td>Direct comparison of community response to traffic noise and to airplane noise</td>
<td>p0218 882-22974</td>
</tr>
<tr>
<td>Effects of aircraft noise on the equilibrium of airport residents: Testing and utilization of a new methodology</td>
<td>p0042 882-11636</td>
</tr>
<tr>
<td>Taking into account nighttime annoyance in the calculation of the psychological index</td>
<td>p0137 882-14674</td>
</tr>
<tr>
<td>Community sensitivity to changes in aircraft noise exposure</td>
<td>p019a 882-16087</td>
</tr>
<tr>
<td>Noise impact on communities from aircraft (GPO-D-6-177)</td>
<td>p0215 882-17655</td>
</tr>
<tr>
<td>Assessment of community response to high-energy impulsive sounds</td>
<td>p0322 882-21777</td>
</tr>
<tr>
<td>Aircraft fire safety</td>
<td>p0332 882-29279</td>
</tr>
<tr>
<td>Human response to fire</td>
<td>p0332 882-29281</td>
</tr>
<tr>
<td>Human tolerances</td>
<td>p0129 882-16732</td>
</tr>
<tr>
<td>Human reaction to noise</td>
<td>p0219 882-23312</td>
</tr>
<tr>
<td>The determination of the duration of an exposure to aircraft noise --- German thesis</td>
<td>p0578 882-23165</td>
</tr>
<tr>
<td>Evaluation of a proposed modified P/F-111 crew seat and restraint system (AD-101088)</td>
<td>p0318 882-21167</td>
</tr>
<tr>
<td>HUMIDITY MEASUREMENT</td>
<td>p0313 882-21167</td>
</tr>
<tr>
<td>Rapid extraction of lower radiation humidity, geopotential thickness, and atmospheric stability from satellite sounding radiometer data</td>
<td>p0242 882-25112</td>
</tr>
<tr>
<td>HYBRID COMPUTERS</td>
<td>p0577 882-19224</td>
</tr>
<tr>
<td>Utilization of hybrid computational equipment for the simulation of parachute system flight</td>
<td>p0017 882-19224</td>
</tr>
<tr>
<td>Role of optical computers in aeronautical control applications</td>
<td>p0017 882-19224</td>
</tr>
<tr>
<td>p0147 882-15897</td>
<td></td>
</tr>
<tr>
<td>Development of a preloaded hybrid advanced composite wing pivot fairing</td>
<td>p0287 882-27131</td>
</tr>
<tr>
<td>Impact resistance of graphite and hybrid configurations</td>
<td>p0287 882-27141</td>
</tr>
<tr>
<td>Use of CERAM in transport --- Carbon and Glass Hybrid Reinforced Plastics</td>
<td>p0435 882-37061</td>
</tr>
<tr>
<td>The effect of hybrid composite materials on the dynamic characteristics of helicopter rotor blades</td>
<td>p0491 882-39263</td>
</tr>
<tr>
<td>HYDRAULIC ACTUATORS</td>
<td>p0010 882-10053</td>
</tr>
<tr>
<td>U ACTUATORS</td>
<td>p0010 882-10053</td>
</tr>
<tr>
<td>U HYDRAULIC EQUIPMENT</td>
<td>p0010 882-10053</td>
</tr>
<tr>
<td>HYDRAULIC CONTROL</td>
<td>p0010 882-10053</td>
</tr>
<tr>
<td>High-efficiency hydraulic power transfer units for multisystem aircraft</td>
<td>p0010 882-10053</td>
</tr>
<tr>
<td>Will power-by-wire replace power-by-hydraulics</td>
<td>p0010 882-10053</td>
</tr>
<tr>
<td>On-aircraft control of the regulation of power source in multiple-axle electro-hydraulic systems</td>
<td>p0010 882-10053</td>
</tr>
<tr>
<td>Description of nonlinear nose gear datasets</td>
<td>p0010 882-10053</td>
</tr>
<tr>
<td>Electric/hydraulic nose wheel steering of the B186</td>
<td>p0390 882-34371</td>
</tr>
<tr>
<td>Wear by generation of electrokinetic streaming currents</td>
<td>p0443 882-37057</td>
</tr>
<tr>
<td>Theoretical and experimental investigation of some nonlinear characteristics of electromechanical actuators --- German thesis</td>
<td>p0552 882-43660</td>
</tr>
<tr>
<td>An electronic control for an electrohydraulic active control landing gear for the F/A-18 aircraft</td>
<td>p0353 882-22252</td>
</tr>
<tr>
<td>Fireproof brake hydraulic system</td>
<td>p0407 882-25245</td>
</tr>
<tr>
<td>Experimental investigation of active loads control</td>
<td>p0568 882-31321</td>
</tr>
<tr>
<td>HYDRAULIC EQUIPMENT</td>
<td>p0010 882-10053</td>
</tr>
<tr>
<td>HYDRAULIC FLUIDS</td>
<td>p0010 882-10053</td>
</tr>
<tr>
<td>Efficient use of working fluids in aviation hydraulic systems</td>
<td>p0010 882-10053</td>
</tr>
<tr>
<td>Determination of the flammability characteristics of aerospace hydraulic fluids</td>
<td>p0108 882-16187</td>
</tr>
<tr>
<td>Design guide for aircraft hydraulic systems and components for use with chlorotrifluorohylene nonflammable hydraulic fluids</td>
<td>p0452 882-26283</td>
</tr>
<tr>
<td>Application of wear debris analysis to aircraft hydraulic systems</td>
<td>p0558 882-30305</td>
</tr>
<tr>
<td>HYDRAULIC HEATING SOURCES</td>
<td>p0010 882-10053</td>
</tr>
<tr>
<td>U HYDRAULIC EQUIPMENT</td>
<td>p0010 882-10053</td>
</tr>
<tr>
<td>U HYDRAULIC PUMPS</td>
<td>p0010 882-10053</td>
</tr>
</tbody>
</table>
ATMOSPHERIC CHEMISTRY OF HYDROCARBON FUELS. Volume 2: Outdoor chamber data tabulations.
Part 1
AD-A113665
p0530 \$2-28842
ADDITIONAL EXPERIMENTS ON FLOWABILITY IMPROVEMENTS
OF AVIATION FUELS AT LOW TEMPERATURES. Volume 2
[NASA-CR-167912]
p0571 \$2-31546
HYDROCARBONS
NT ALKANES
NT BUTADIENE
NT ETHANE
NT NATURAL GAS
NT PROPANE
NT PROPENES

The effect of fuel composition on groundfall from aircraft fuel jettisoning
[AD-A116035]
p0321 \$2-21424
Exhaust emissions reduction for intermittent combustion aircraft engines
[NASA-CR-167914]
p0610 \$2-33392
Hydrocarbon fuel chemistry: Sediment water interaction
[AD-A117920]
p0612 \$2-33522

HYDROCYCLING
Refining and upgrading of synfuels from coal and oil shales by advanced catalytic processes
[AS82-001127]
p0213 \$2-17401
Evaluation of hydrocracking catalysts for conversion of whole shale oil into high yields of jet fuels
[AD-A118260]
p0476 \$2-27523

HYDRODYNAMIC COEFFICIENTS
Experimental methods for the prediction of the effect of viscosity on propeller performance
[AD-A105846]
p0308 \$2-20472

HYDRODYNAMIC DAM AGE
Hydrodynamic ram damage
p029 \$2-1766

HYDRODYNAMIC STABILITY
U FLOW STABILITY
HYDRODYNAMIC TUNNELS
U PLASMA JET WIND TUNNELS
HYDRODYNAMICS
NT MAGNETIC HYDRODYNAMICS
HYDROFOils
Accidents of surface effect ships and hydrofoil craft --- Russian book
p0189 \$2-18899

HYDROGEN
NT LIQUID HYDROGEN
NT TRITIUM
HYDROGEN FUELS
NT LIQUID FUELS
Fuel for future transport aircraft
[ASIA PAPER 81-94-80]
p012 \$2-19665
An experimental study of the combustion of liquid hydrocarbon fuel sprayed into a diffusion hydrogen-air jet
p010 \$2-16267
Technological innovation for success - Liquid hydrogen propulsion
p017 \$2-16734
Liquid hydrogen - an outstanding alternate fuel for transport aircraft
p012 \$2-17920
The prospects for liquid hydrogen fueled aircraft
p016 \$2-20137
The potential for long-range high-payload aircraft with alternate fuels
[ASIA PAPER 82-0814]
p0376 \$2-31987
Will hydrogen-fueled aircraft be safe
[ASIA PAPER 82-1236]
p0418 \$2-35077

HYDROGEN ISOTOPES
NT TRITIUM
HYDROGEN 3
U TRITIUM
HYDROGEN-BASED ENERGY
Hydrogen economy assessment for long-term energy systems in Japan
p038 \$2-32159

HYDROGEOGRAPHY
Hydrographic Airborne Laser Sounder (HALS)
[AD-A111027]
p0460 \$2-26660
SUBJECT INDEX

Weather impact on low-altitude imaging infrared sensors in Europe - An availability model...p0072 A82-14779
Computer-generated images for simulators - The cost of technology...p069 A82-22681
Laser application in weapon guidance and active imaging...p0433 A82-35767
Head up displays...p0092 A82-13052
Application of image processing techniques to fluid flow data analysis...p0187 A82-16049
Advanced training techniques using computer generated imagery...p0479 N82-28007
Computer image generation: Advanced visual/sensor simulation...p0479 N82-28016
Computer program for analysis of spherical screen distortion...p0527 N82-28309
High-altitude imagery user guide...p0562 N82-30608
Transonic applications of the Wake Imaging System...p0597 N82-32676

IMPACT

MT ECONOMIC IMPACT
MT HYPERSONIC IMPACT
IMPACT ACCELERATION
Limiting payload deceleration during ground impact...[AIAA PAPER 81-1918] p0006 A82-10404
IMPACT DAMAGE
MT MAIN IMPACT DAMAGE
Impact-initiated damage thresholds in composites...p0918 A82-12028
Wire strike protection...p0046 A82-13246
The effects of bird orientation on load profile and damage level...p0227 A82-24316
Fracture control in ballistic-damaged graphite/epoxy wing structure...p0284 A82-26639
Impact resistance of graphite and hybrid configurations...p0280 A82-27141
Bird impact analysis package for turbine engine fan blades...[AIAA 82-9696] p0339 A82-30162
Design Manual for impact damage tolerant aircraft structure...[AGARD-AD-238] p0202 N82-17160
Description of projectile threats...p0202 N82-17161
Analysis methods for predicting structural response to projectile impact...p0202 N82-17162
Analysis methods for ballistic damage size and type...p0202 N82-17163
Damage from high explosive (HE) projectiles...p0202 N82-17164
Damage from engine debris projectiles...p0202 N82-17165
Hydrodynamic ram damage...p0202 N82-17166
Effects of cyclic loading on projectile impact damage...p0202 N82-17167
Stiffness degradation of impact damaged structure...p0203 N82-17168
Strength degradation of impact damaged structure...p0203 N82-17169
Analysis of multiple load path panels containing impact damage...p0203 N82-17170
Foreign object impact design criteria, volume 2...p0690 N82-26701
Foreign object impact design criteria, volume 3...p0473 N82-27313
IMPACT DECELERATION
U DECELERATION
U IMPACT ACCELERATION
IMPACT LOADS
Coupled fluid/structure response predictions for soft body impact of airfoil configurations --- ice and bird impact on aircraft engines...p0018 A82-12039
On the dynamic collapse of a column impacting a rigid surface...[AIAA 82-0735] p0340 A82-30182
Transient vibration of high speed lightweight rotor due to sudden imbalance...[ASME PAPER 82-GT-231] p0429 A82-35613
The behavior of composite thin-walled structures in dynamic buckling under impact...p0513 A82-40976

IMPACT PREDICTION
An analytical methodology to predict potential aircraft losses due to canine birdstrokes...p0227 A82-24313

IMPACT PRESSURES
U IMPACT LOADS

IMPACT RESISTANCE
Seven years experience with kevlar-49 in the Lockheed L-1011 Tristar...p0023 A82-12647
The load-carrying behavior of a trapezoidal aluminum-alloy supporting element, subjected to a compressive stress, in the postbuckling region...p0065 A82-14818
The role of finite element analysis in the design of birdstrike resistant transparencies...p0227 A82-24314
Impact resistance of graphite and hybrid configurations...p0289 A82-27141
Commercial jet transport crashworthiness...p0364 N82-23207
Solid-state flight incident recorder...p0501 N82-25172
Environmental and High-Strain Rate effects on composites for engine applications...[NASA-CR-62882] p0571 N82-31409

IMPACT SENSITIVITY
U IMPACT RESISTANCE

IMPACT STRENGTH
Strength degradation of impact damaged structure...p0203 N82-17169
Analysis of multiple load path panels containing impact damage...p0203 N82-17170

IMPACT TESTS
Air bag impact attenuation system for the AFR-34V remote piloted vehicle...[AIAA PAPER 81-1917] p0006 A82-10403
Test and evaluation of improved aircrew restraint systems...p0079 A82-14974
Evaluation of a proposed modified F/FB-111 crew seat and restraint system...[AD-A11080] p0313 N82-21167
Comparative vertical impact testing of the F/FB-111 crew restraint system and a proposed modification...[AD-A111357] p0522 N82-28267

IMPACT TOLEBRANCES
Design manual for impact damage tolerant aircraft structure...[AGARD-AD-238] p0202 N82-17160
Analysis methods for predicting structural response to projectile impact...p0202 N82-17162

IMPEDANCE
U ACOUSTIC IMPEDANCE

IMPEDANCE MEASUREMENT
Antenna (selected articles)...[AD-A108174] p0269 N82-19448

IMPELLERS
U MOTOR BLADES (TORQUEMEMBER)

IMPELLERS
Army's int IFP program begins - Blisk impeller follows --- Integral blade-disk...p0377 A82-31999
Investigation of blade vibration of radial impellers by means of telemetry and holographic interferometry...[ASME PAPER 82-GT-36] p0421 A82-35295
Experimental investigations on the flow in the impeller of a centrifugal fan...[ASME PAPER 82-GT-37] p0421 A82-35298
Secondary flow mixing losses in a centrifugal impeller...[ASME PAPER 82-GT-44] p0421 A82-35302

A-261
The influence of flow rate on the wake in a centrifugal impeller

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

Propulsion multiplexer /PflOX/ system - The missing Electronic master monitor and advisory display

Minimum cost performance monitoring of turboshaft Gas path analysis - A tool for engine condition monitoring

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

Improved techniques for the calibration and measurement of in-flight loads

Energy savings with today's technology -- aircraft fuel management through in-flight monitoring

Gas path analysis - A tool for engine condition monitoring

The application of condition monitoring --- commercial helicopter in-service maintenance

Quick learning diagnostics --- helicopter vibration analysis and component condition monitoring

Minimum cost performance monitoring of turboshaft engines

Propulsion multiplexer /PERS/ system - The missing link

Flight test data acquisition and interpretation

Flight condition recognition /PCR/ technique --- microprocessor-based recording for helicopter structural component fatigue damage

Manual order take sharing filters for IRS in-flight alignment

'Listening' systems to increase aircraft structural safety and reduce costs

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

In-flight acoustic emission monitoring

Use of DILS in-flight simulator NFL 320 Hansen for handling qualities investigations

Electronic master monitor and advisory display system, data transmission study

Electronic master monitor and advisory display system, human engineering summary report

In-flight computation of helicopter transmission system, human engineering summary report

Performance analysis of enroute air traffic control computers in the National Airspace System

Calculation of aerodynamic characteristics of jet aerofoil in compressible potential flow

Subsonic flow over airborne optical turrets

First order approximation theory of an arbitrary aerofoil as compressible potential flow

The numerical solution of incompressible turbulent flow over airfoils

Calculation of nonstationary force ratios on blades of a rotating row in incompressible flow

Effects of Reynolds number and turbulence level on axial cascade performance

The numerical solution of the Navier-Stokes equations for incompressible turbulent flow over airfoils

Aerosound from corner flow and flap flow

Incompressible flow

Theoretical analysis of parachute inflation including fluid kinematics

Subsonic flow over airborne optical turrets

A simple finite difference procedure for the vortex controlled diffuser

Unsteady lifting-line theory with applications

Incompressible symmetrical flow characteristics of sharp-edged rectangular wings

Second order approximation theory of an arbitrary aerofoil as compressible potential flow

The numerical solution of incompressible turbulent flow over airfoils

Calculation of nonstationary force ratios on blades of a rotating row in incompressible flow

Effects of Reynolds number and turbulence level on axial cascade performance

The numerical solution of the Navier-Stokes equations for incompressible turbulent flow over airfoils

Aerosound from corner flow and flap flow

Incompressible flow

Calculation of aerodynamic characteristics of jet flapped airplane

Index to B1S1 Health Bulletins and Speeches, 1980

Index of National Aviation Facilities Experimental Center technical reports 1972 - 1977

Index to NASA News Releases and Speeches, 1980

A-262
The use of separated multifunction inertial navigation systems. | p0067 A82-14713

Electronically Agile Slew/GEANS navigation using a Kalman postprocessor. | p0068 A82-14739

Maneuver dependent component error models and synchronized reset filters for inertial navigation systems. | p0122 A82-18139

Laboratory and flight test of a new HLG strapdown INS. | p0123 A82-18150

Position extrapolation quality calculation for inertial and Doppler-AHRS navigation systems. | p0123 A82-18151

Post-Flight assessment of the JTIDS Bel Nav | p0124 A82-18154


Calibrated and uncalibrated inertial navigation system performance in valid and jammed global positioning system environments. | p0181 A82-21587

Integration of multi-sensor navigation data using optimal estimation techniques. | p0273 A82-25577

Operational testing of the L9-33 inertial navigation system. | p0384 A82-33854

Minimal order time sharing filters for INS in-flight alignment. | p0402 A82-38439

Observability of the parameters of an inertial navigation system for a 360-deg coordinated turn. | p0403 A82-47093

Strapdown inertial navigation systems: An algorithm for attitude and navigation computations. | p0523 A82-22241

Optimal inertial navigation using terrain correlation: An attractive solution to the ground attack aircraft navigation problem. | p0362 A82-23184

Gravity induced position errors in airborne inertial navigation. | p0667 A82-27272

Geophysical flight line flying and flight path recovery utilizing the Lutton LW-76 inertial navigation system. | p0667 A82-27272

Gravity induced position errors in airborne inertial navigation. | p0667 A82-27272

Inflatable Structures

Evaluating sources of error in RBH/GRANS. | p0067 A82-14713

Electronically Agile Slew/GEANS navigation using a Kalman postprocessor. | p0068 A82-14739

Maneuver dependent component error models and synchronized reset filters for inertial navigation systems. | p0122 A82-18139

Laboratory and flight test of a new HLG strapdown INS. | p0123 A82-18150

Position extrapolation quality calculation for inertial and Doppler-AHRS navigation systems. | p0123 A82-18151

Post-Flight assessment of the JTIDS Bel Nav. | p0124 A82-18154


Calibrated and uncalibrated inertial navigation system performance in valid and jammed global positioning system environments. | p0181 A82-21587

Integration of multi-sensor navigation data using optimal estimation techniques. | p0273 A82-25577

Operational testing of the L9-33 inertial navigation system. | p0384 A82-33854

Minimal order time sharing filters for INS in-flight alignment. | p0402 A82-38439

Observability of the parameters of an inertial navigation system for a 360-deg coordinated turn. | p0403 A82-47093

Strapdown inertial navigation systems: An algorithm for attitude and navigation computations. | p0523 A82-22241

Optimal inertial navigation using terrain correlation: An attractive solution to the ground attack aircraft navigation problem. | p0362 A82-23184

Gravity induced position errors in airborne inertial navigation. | p0667 A82-27272

Geophysical flight line flying and flight path recovery utilizing the Lutton LW-76 inertial navigation system. | p0667 A82-27272

Gravity induced position errors in airborne inertial navigation. | p0667 A82-27272

Inflatable Platforms

A failure detection and isolation system for tactical aircraft with separated IMUs. | p0066 A82-14684

Integration of inertial sensors in helicopters. | p0251 A82-18173

Software features applicable to inertial measurement unit self alignment. | p0253 A82-18196

Ground speed measurement from DME/VHF omnirange navigation (DOR) data. | p0402 A82-25185

Inflatable Reference Systems

Integrate satellite navigation and strapdown attitude and heading reference systems for civil air carriers. | p0223 A82-12643

The use of separated multifunction inertial sensors for flight control. | p0505 A82-13502

Strapdown inertial reference systems performance analysis. | p0506 A82-14682

The application of strapdown inertial technology to attitude and heading Reference System requirements -- for YAH-64 advanced attack helicopter. | p0506 A82-14682

Inflatable Span Wings

The velocity potential for the harmonically oscillating, rectangular wing with semisubinfinite span in nonlinear theory. | p0156 A82-19198

Inflatable Devices

The use of separated multifunction inertial sensors for flight control. | p0067 A82-14713

Fault detection for two physically separated, communicating inertial measurement units. | p0067 A82-14713

The use of separated multifunction inertial sensors for flight control. | p0066 A82-14682
INFLATING

HT BALLOONS
HT HIGH ALTITUDE BALLOONS
Inflatable systems for fast deployment of parachutes at low altitudes from slow moving aircraft or stationary supports
[AIAA Paper 81-1953] p0008 A82-10428
Contact problems involving the flow past an inflated aerofoil
p0391 A82-34851
Inflated wings
p0512 A82-40966

INFLATING
Theoretical analysis of parachute inflation including fluid kinetics
[AIAA Paper 81-1925] p0006 A82-10410
The constructed rigging line trails technique for assessing the opening characteristics of parachutes
[AIAA Paper 81-1932] p0007 A82-10413
Stress measurements in a ribbon parachute canopy during inflation and at steady state
[AIAA Paper 81-1944] p0007 A82-10420
Further test results of parachutes with automatic inflation modulation /A.I.R./
A82-14965

INFLUENCE COEFFICIENT
ST STRUCTURAL INFLUENCE COEFFICIENTS
An experimental investigation of the influence of vertical wind shear on the aerodynamic characteristics of an airfoil
[AIAA Paper 82-0244] p0117 A82-17843
Finite element approach to the calculation of unsteady inflow influence coefficients in dynamic aeroelastic analysis
p0581 A82-45489

INFORMATION DISSIPATION
The Aviation Route Forecast /AFR/ program - An interactive system for Pilot Self-Briefing
competerized weather service
p0580 A82-45430
Index to NASA News Releases and Speeches, 1980
p0147 A82-15985
Experience during the development of the German-Japanese helicopter BK 117
[AIAA Paper 82-0255] p0265 A82-19210
Software functional description of max weather dissemination system exploratory engineering model
p0477 A82-27577

INFORMATION FLOW
Higher order Information Transfer Systems are coming
[AIAA Paper 82-13517] p0051 A82-13517
Integration of complex systems in current and future aircraft projects for the example of avionic
[AIAA Paper 82-13517] p0051 A82-13517
The Benefits of data exchange --- between airline and engine manufacturer
[PHR-90046] p0323 A82-22095
Communications
p0534 A82-29302

INFORMATION MANAGEMENT
Integration of complex systems in current and future aircraft projects for the example of avionic
[AIAA Paper 82-13517] p0051 A82-13517
Terminal Information Processing System (TIPS)
Consolidated CAB Display (CCD) comparative analysis
[FAA-CT-81-8] p0587 A82-32331

INFORMATION ENTWINED
The NRI real-time aviation weather information system - an alternative to standard general aviation weather briefing procedures
p0580 A82-45834
Advanced crash survivable flight data recorder and Aircraft Information Retrieval System (AIRS)
[AD-1055259] p0325 A82-14072

INFORMATION SYSTEMS
ST MANAGEMENT INFORMATION SYSTEMS
An update of an integrated CNI system - IXIS --- Communication, Navigation, and Identification provided by Tactical Information Exchange System
[AIAA Paper 82-2792] p0049 A82-13500
Advanced weapon systems - Integration technology --- Digital Avionic Information System
[AIAA Paper 82-2396] p0053 A82-13533
Information technology and its impact on test and evaluation at the Naval Air Test Center
[AIAA Paper 82-2396] p0056 A82-13894

SUBJECT INDEX
Implementing the DAIS executive --- Digital Avionic Information System software feasibility for aircraft systems
p0073 A82-14814
Head-up displays - the integrity of flight information
p0106 A82-15562
Systems approach to the design of wind shear avionics
p0182 A82-21593
The use of dynamic mock-ups in the design of advanced systems --- NASA's Digital Avionic Information System and NAVY's Advanced Integrated Display System
p0695 A82-22292
Preliminary design of an advanced integrated power and avionics information system
p0507 A82-40907
The aviation route forecast /AFR/ program - an interactive system for pilot self-briefing --- of meteorological information
p0553 A82-41821
The NRI real-time aviation weather information system - An alternative to standard general aviation weather briefing procedures
p0580 A82-45834
Digital Avionic Information System (DAIS): Development and demonstration
[AD-A1070906] p0190 A82-16079
Aeronautical Information Data Subsystem (AIDS): A ground-based component of air navigation services systems
p0201 A82-17150
Digital Avionic Information System (DAIS): documentation
[AD-A1080002] p0263 A82-17172
Analytical study of cockpit information requirements
[AD-A108524] p0256 A82-18218
Aeronautical information data subsystems --- air navigation
p0401 A82-25178

INFORMATION TRANSFER
U COMMUNICATION
INFORMATION TRANSMISSION
U DATA TRANSMISSION
INFRARED DETECTORS
HT FLIR DETECTORS
INFRARED PHOTOGRAPHY
INFRARED DETECTORS
HT INFRARED DETECTORS
INFRARED PHOTOGRAPHY
INFRARED DETECTORS
HT COLOR INFRARED PHOTOGRAPHY
INFRARED TELEVISION
Fighting forest fires with the aid of aircraft in the United States of America
p0330 A82-29577
INFRARED RADIATION
Infrared emissions from turbofans with high aspect ratio nozzles
p0103 A82-16092
ADEN plane flow properties for infrared analysis --- Augmented Deflecting Exhaust Nozzle
p0178 A82-17606
Engine superficial temperature and infrared signature
p0247 A82-18136
A light helicopter for night firing
[SIAS-821-210-105] p0353 A82-22256
Aerostructure nondestructive evaluation by thermal field detection, phase 1: Fundamental

IISfBOBBR lAlIDIG SISIBBS
IISfBOBB.ER COHPEISiHOI
IISfBOBEHT PLIGHT BOLES

[46x211] HT ADTOHATIC LANDING CONTEOL - - - -
[50x217] HT ALL-KBATHBB LANDING STSTEflS

Instrument landing systems /ILS/ at airports of

The toll of ILS-preventable aviation accidents

A new end-fire ILS glide slope

Ground movement control and guidance

The toll of ILS-preventable aviation accidents

Instrument landing systems /ILS/ at airports of

The justification of the need for ILS by means of
cost/benefit methods

A general aviation simulator evaluation of a
rate-enhanced instrument landing system display

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

A ground-simulation investigation of helicopter
longitudinal flying qualities for instrument
approach

Instrumentation Compensation

[46x256] IFTC standard airspeed calibration procedures
[AD-1104630]

Instrument Errors

A concept for a high-accuracy, low-cost
accelerometer

The reliability of height and identity data ---
secondary surveillance radar error analyses

Magnetic anomalies as a reference for ground-speed
and map-matching navigation

Instrument Flight Rules

Helicopter IFR - Past, present and future

Real-time simulation of helicopter IFR approaches
into major terminal areas using BNAV, MLS, and
cDPI

Helicopter decelerated steep approach and landing
to confined areas under instrument
meteorological conditions

The requirements for reduced IFR separations on
final approach

Utilizing the helicopter's versatility to improve
the ATC system

A ground-simulation investigation of helicopter
decelerating instrument approaches

Tandem rotor helicopter characteristics in a
continuous icing environment

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

Evaluations of helicopter instrument-flight
hazardous qualities

Development of flying qualities criteria for
eaming pilot instrument flight operations

Inflight IFR procedures simulator

[46x272] VO IFR and VHF communications
[BTCA/DO-176]

Instrument landing systems

AT ALL-WEATHER LANDING SYSTEMS

Bluetooth address beacon, navigation and landing
system

The 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

A method for designing inlet distortion screens
for aircraft gas turbine engine tests using an
interactive computer program

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

Current status of inlet flow prediction methods
[AD-A111708]

A study on numerical method for evaluating
approximate integral in subsonic lifting-surface
theory
SUBJECT INDEX

DEVELOPMENT POTENTIAL OF INTERMITTENT COMBUSTION (I.C.) AIRCRAFT ENGINES FOR COMPUTER TRANSPORT APPLICATIONS  [NASA-TM-82689]  p0453  H82-26297

USAF BIOENVIRONMENTAL NOISE DATA HANDBOOK. VOLUME 163: O-JET  COMPRESSOR  [AD-A116189]  p0601  H82-33156

INTERNATIONAL STRESS

EU ROPEAN STRESS

INTERNATIONAL COOPERATION
AIRWORTHINESS REGULATION: WHAT IS OUR STRATEGY? WHAT ARE THE ISSUES  p0224  H82-24006

WHAT THE OPERATOR WANTS --- AIRLINE COOPERATION IN AIRCRAFT MAINTENANCE  p0224  H82-24008

THE INVESTIGATION OF AIRCRAFT ACCIDENTS AND INCIDENTS - A PROSPECTIVE AND INTERNATIONAL DEVELOPMENT  p0329  H82-29275

CONSIDERATIONS FOR INTERNATIONAL JOINT VENTURE DEVELOPMENT OF VERY LARGE AIRCRAFT  [AIAA PAPER 82-0089]  p0376  H82-31902

ENGINEERING ASPECTS OF INTERNATIONAL COOPERATION ON Tornado  p0504  H82-40687

CONSIDERATION OF AN INTERNATIONAL PRIVATE SECTOR SATELLITE SEARCH AND RESCUE LOCATION SYSTEM  [IAF PAPER 82-236]  p0550  H82-44699

THE WEH REAL-TIME WEATHER INFORMATION SYSTEM - AN ALTERNATIVE TO STANDARD GENERAL AVIATION WEATHER BRIEFING PROCEDURES  p0580  H82-45634

EXPERIENCE DURING THE DEVELOPMENT OF THE GERMAN-JAPANESE HELICOPTER EK 177  [BNL-D-82-130-0-0]  p0265  H82-19210

INDUSTRIAL EXPERIENCE IN THE ANGLE-PRECH HELICOPTER COOPERATION  [SNAF-811-210-101]  p0312  H82-21154

COLLABORATIVE DEVELOPMENT OF AERO-ENGINES  [FPE-90003]  p0355  H82-22277

INTERNATIONAL LAW

N. AIR LAW

OFFSHORE USES OF THE AIRSHIP  p0173  H82-20553

THE INVESTIGATION OF AIRCRAFT ACCIDENTS AND INCIDENTS - SOME RECENT NATIONAL AND INTERNATIONAL DEVELOPMENTS  p0329  J12-29275

AVIATION NEGOTIATIONS AND THE U.S. MODEL AGREEMENT  p0377  H82-32663

THE RECOGNITION OF AIR WORTHINESS OF AIRCRAFT - COMMENTS TO A RELEVANT JUDICIAL DECISION  p0444  H82-38025

INTERNATIONAL RELATIONS

A. INTERNATIONAL COOPERATION

INTERNATIONAL TRADE

MILITARY AIRCRAFT AND INTERNATIONAL POLICY  p0386  H82-34108

WHY GE MADE A MOTEUR D'AVIATION  p0578  H82-45499

ENERGY ENVIRONMENT STUDY  [NASA-CE-160458]  p0215  H82-17654

INTERPLANETARY FLIGHT

RADIATION ENHANCEMENT BY SOMEQUILIBRIUM DURING FLIGHT THROUGH THE TITAN ATMOSPHERE  [AIAA PAPER 82-0870]  p0373  H82-31883

INTERPLANETARY PROPULSION

ROCKET ENGINES

INTERPOLATION

GENERATION OF BOUNDARY-CONFORMING GRIDS AROUND WING-BODY CONFIGURATIONS USING TRANSFINITE INTERPOLATION  p0553  H82-44091

FEEDBACK AND MIN/MAX SENSITIVITY  p0030  H82-10058

INTERPRETATION

FLIGHT TEST DATA ACQUISITION AND INTERPRETATION  p0239  H82-26707

INTERPROCESSOR COMMUNICATION

FUNCTIONAL VERSUS COMMUNICATION STRUCTURES IN MODERN AVIATION SYSTEMS  p0196  H82-17092

A RECONFIGURABLE CHANGE NETWORK FOR DISTRIBUTED PROCESS CONTROL  p0197  H82-17108

NEXT GENERATION MILITARY AIRCRAFT WILL REQUIRE HIERARCHICALLY/MULTILEVEL INFORMATION TRANSFER SYSTEMS --- PACKET SWITCHING  p0453  H82-44092

INVICID FLOW

SIFT: AN ULTRA-RELIABLE AVIONIC COMPUTING SYSTEM  p0197  H82-17110

DISTRIBUTED INTELLIGENCE FOR AIR FLEET CONTROL  [AD-A108611]  p0253  H82-18195

AN ON-BOARD SUPERVISORY SYSTEM FOR APPLICATIONS IN SPACE MISSIONS  [INPE-2097-RP-327]  p0256  H82-18216

JOINT UNIVERSITY PROGRAM AIR FOR TRANSPORTATION RESEARCH, 1981  [NASA-CP-2228]  p0445  H82-26199

THE P-FOG PROJECT --- ERROR DETECTION CODES  p0465  H82-26202

INTERSECTIONS

ROADWAY INTERSECTION DESIGN  p0184  H82-33904

INTOXICATION


INTEGRATED AIRCRAFT

U.S. AIRCRAFT

INVENTORIES

HT TIMBER INVENTORY

INVENTORY CONTROLS

A PRELIMINARY ANALYSIS OF TP43-100/400 JET ENGINE REWORK DATA IN SUPPORT OF THE HBF SYSTEM IMPLEMENTATION AT MR. AIRLINES  [AD-A114452]  p0558  H82-30308

INVENTORY MANAGEMENT

INVENTORY CONTROLS


Palm's Theorems for Nonstationary Processes  [AD-A177089]  p014  H82-34135

INVER SIONS

THE net-skirt to a parachute canopy as a device to prevent inversion  [AIAA PAPER 81-1927]  p0007  H82-10412

INVERTED CONVERTERS (DC TO AC)

CASCADE CONVERTER OF DC VOLTAGE TO AC VOLTAGE OF HIGHER FREQUENCY WITH VOLTAGE AND FREQUENCY STABILIZATION DEVICES --- AIRCRAFT ELECTRICAL EQUIPMENT  p0326  H82-28075

INVESTIGATION

AT ACCIDENT INVESTIGATION

AT AIRCRAFT ACCIDENT INVESTIGATION

ANALYTICAL INVESTIGATION OF NONRECOVERABLE TAIL  [NASA-CP-82792]  p0317  H82-2195

INVESTMENTS

THE PAYOFF FROM U.S. INVESTMENT IN AEROSPACE RESEARCH AND DEVELOPMENT  p0772  H82-14793

A NEW APPROACH TO MODELING THE COST OF OWNERSHIP FOR AIRCRAFT SYSTEMS  [AD-A104436]  p0102  H82-13979

INVESTMENT

IN SATIONARY FLOW

THEORETICAL ANALYSIS OF PARACHUTE INFLATION INCLUDING AUTONOMOUS FLIGHT ANALYSIS  [AIAA PAPER 81-1925]  p0006  H82-10410

SUBSONIC FLOW OVER AIRBORNE OPTICAL TURRETS  p0114  H82-17605

TRANSonic THREE-DIMENSIONAL VISCOSU-LINVISCOUS INTERACTION FOR WING-BODY CONFIGURATION ANALYSIS  [AIAA PAPER 82-0163]  p0116  H82-37816

TECHNICAL EVALUATION REPORT OF THE AGED FLUID DYNAMICS PANEL SYMPOSIUM ON COMPUTATION OF VISCOUS-LINVISCOUS INTERACTIONS  [ONERA TP NO. 1981-116]  p0163  H82-19733

TRANSonic FLOW AROUND THIN WINGS  p0274  H82-25995

AN INVISCID-LINVISCOUS INTERACTION TREATMENT TO PREDICT THE BLADE-TO-BLADE PERFORMANCE OF AXIAL COMPRESSORS WITH LEADING EDGE NORMAL SHOCK WAVES  [ASME PAPER 82-GT-135]  p0425  H82-35363

NUMERICAL SOLUTION OF A PROBLEM CONCERNING TRANSONIC FLOW PASSING A WING-FUSELAGE CONFIGURATION  p0496  H82-39996

Damped Rule-extremum equation to compute transonic flow around wing-body combinations  p0553  H82-44092
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 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 maximum inviscid lift.

Modified version of LyTRAN: A calculation method for inviscid transonic flow about thin airfoils in moderately slow unsteady motion.

Computation of three-dimensional unsteady nonuniform flow in the blade-free annular channel of a turbomachine -- military aircraft, turbocompressors.

The effect of ionospheric variability on the 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.

Invisibility

ION GAGES

A study of the effect of the flight vehicle body potential on the characteristics of ion attitude transmitters.

IONIZING RADIATION

IONOSPHERE

The effect of ionospheric variability on the accuracy of high frequency position location.

IONOSPHERIC ABSORPTION

IONOSPHERIC PROPAGATION

IONOSPHERIC DISTURBANCES

The effect of ionospheric variability on the accuracy of high frequency position location.

IONOSPHERIC F-SCATTER PROPAGATION


IONOSPHERIC NOISE

IONOSPHERIC PROPAGATION

IONOSPHERIC REFLECTION

IONOSPHERIC PROPAGATION

IF (IMPACT PREDICTION)

U COMPUTED SIMULATION

FDAP

Development of Integrated Programs for Aerospace-Vehicle Design (IFP) - IPAD user requirements.

IRON ALLOYS

STEEL

IRON ALLOYS

STEEL

Iron alloys.

STEEL

High strength steel.

STEEL

Stainless steel.

STEEL

Steel.

Formability of M5C05 alloy 945 - An oxide dispersion strengthened sheet alloy.

IRIDOIDS HELICOPTER

UH-1 HELICOPTER

IRROTATIONAL FLOW

U POTENTIAL FLOW

ISSING MODEL

U MATHEMATICAL MODELS

ISOLATORS

U VIBRATION ISOLATORS

ISOPARAMETRIC FINITE ELEMENTS

A set of finite elements developed for the dynamic computation of composite helicopter blades.

ISOTHERMAL FLOW

Widely-spaced co-axial jet, diffusion-flame combustor - Isothermal flow calculations using the two-equation turbulence model.

The relative motion of a particle in the case of exponential changes of the velocity of the medium.

ISOTROPIC

U TRIVITRON

ITERATIVE

U ITERATIVE SOLUTION

Recent applications of the transonic wing analysis computer code, TWING.

ITERATIVE SOLUTION

An iterative finite element-integral technique for predicting sound radiation from turbulent inlets in steady flight.

Computational methods of robust controller design for aerodynamic flutter suppression.

Computer calculations of the effects of additive jamming on the functionality of the GPS positioning system.


**SUBJECT INDEX**

- ALPHA JET AIRCRAFT
- B-52 AIRCRAFT
- B-70 AIRCRAFT
- BOEING 727 AIRCRAFT
- BOEING 737 AIRCRAFT
- BOEING 747 AIRCRAFT
- BOEING 757 AIRCRAFT
- BOEING 767 AIRCRAFT
- C-5 AIRCRAFT
- C-9 AIRCRAFT
- C-135 AIRCRAFT
- C-140 AIRCRAFT
- C-17 AIRCRAFT
- C-180 AIRCRAFT
- CONCORDE AIRCRAFT
- DC 8 AIRCRAFT
- DC 10 AIRCRAFT
- EUROPEAN AIRCRAFT
- F-4 AIRCRAFT
- F-5 AIRCRAFT
- F-6 AIRCRAFT
- F-14 AIRCRAFT
- F-15 AIRCRAFT
- F-16 AIRCRAFT
- F-18 AIRCRAFT
- F-27 AIRCRAFT
- F-28 TRANSPORT AIRCRAFT
- F-100 AIRCRAFT
- F-106 AIRCRAFT
- F-111 AIRCRAFT
- IHBC 320 AIRCRAFT
- L-1011 AIRCRAFT
- L-200 AIRCRAFT
- LEARJET AIRCRAFT
- MBJ 204 AIRCRAFT
- MIRAGE AIRCRAFT
- MYSTIQUE AIRCRAFT
- NF-10 AIRCRAFT
- P-3 AIRCRAFT
- SAAB 37 AIRCRAFT
- SAAB 210 AIRCRAFT
- T-2 AIRCRAFT
- T-33 AIRCRAFT
- T-37 AIRCRAFT
- T-38 AIRCRAFT
- T-40 AIRCRAFT
- T-41 AIRCRAFT
- T-13 AIRCRAFT
- Z-16 AIRCRAFT
- Z-40 AIRCRAFT

**JET AIRCRAFT NOISE**

- Calculation of aerodynamic characteristics of jet flapped airplane
- History of flight testing the L-1011 TriStar jet transport. II - Testing highlights since initial certification of the L-1011-1
- Operational evaluation of the new generation of Jet transport aircraft
- Jet V/STOL wind tunnel simulation and groundplane effects
- Flight management systems for modern jet aircraft
- The influence of wind shear and vertical winds on takeoffs and go-arounds
- Handling problems associated with jet aircraft fuels
- Experience with flight simulators - Training effectiveness future developments
- JP-8 fuel conversion evaluation
- Design, development and flight testing of a jet powered sailplane
- Transparencies - what an aircraft designer should know
- Fuel optimal trajectory computation
- The next generation trainer
- 0.5 Marine Corps AV-8A maintenance experience
- Determination of the total costs incurred in the employment of passenger jet aircraft
- Development status of a composite vertical stabilizer for a jet trainer
- Two-dimensional model studies of the impact of aircraft engines 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 pulse tone elimination strut assembly - Air breathing engines
- Forecasting corrosion damage and maintenance costs for large aircraft
- Corrosion control measures for military aircraft: Present OK requirements and future developments
- Corrosion prevention methods developed from direct experience with aerospace structures
- Further development of the test concept of the ALPHA JET engine LABREC 94
- Categorization of atmospheric turbulence in terms of aircraft response for use in turbulence reports and forecasts
- Acoustic measurements of F-16 aircraft operating in hush house, 869 920-02-070-2712
- Commercial jet transport crashworthiness
- Cost and fuel consumption per nautical mile for two engine jet transports using OPTIM and TRAGEN
- B-747 vortex alleviation flight tests: Ground-based sensor measurements
- Wind response of commercial jet aircraft including effects of autopilot operation
- Computer enhanced analysis of a jet in a cross-stream

**JET AIRCRAFT NOISE**

- Jet airbreathing engines
- Corrosion control measures for military aircraft: Present OK requirements and future developments
Sound transmission through ducts and aircraft

Summary of aircraft technology needs

Community noise

Airport noise

QCSEE under-the-wing engine acoustic data

Program for narrow-band analysis of aircraft

Analytical study of twin-jet shielding development

Analytical study of twin-jet shielding

Analytical study of twin-jet shielding

Two-dimensional model

Effect of facility variation on the acoustic characteristics of three single stream nozzles

Acoustic measurements of F-100-PW-100 engine operating in high house MNS 4920-02-070-2721

Acoustic measurements of F-16 aircraft operating in high house 
MNS 4920-02-070-2721

The role of noise in aircraft noise reduction

Assessment of community response to high-energy impulsive sounds

Some applications of Hartmann-type sensors in aircraft noise research

Airflow noise using ensemble averaging techniques

Acoustic emission from free jets

Prediction of flyover jet noise spectra from static tests

Airframe industry and noise in the community

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

[ASME PAPER 81-HT-80]

Jet fuel from carbon

A protective additive for jet fuels

Handling problems associated with jet aircraft fuels

The sooting tendency of fuels containing polymeric acetals in a research combustor

Deposit formation in liquid fuels. II - The effect of selected compounds on the storage stability of Jet A turbine fuel

Deposit formation in liquid fuels. I - Effect of coal-derived Lewis bases on storage stability of Jet A turbine fuel

Improving the accuracy of the estimates of surfactant content in jet fuels

Low grade fuels for turbo and jet engines

Airliner fuel moving through JT9D engine refurbishment

The formation of benzpyrene during the combustion of aviation fuels

The combustion of a fuel jet in a stream of lean gaseous fuel-air mixtures

NACA/General Electric broad-spectrum fuels combustion technology program - Phase I results and status

[SAE PAPER 81-0151]

Fuel microemulsions for jet engine smoke reduction

[ASME PAPER 82-GT-31]

Evaluating the effectiveness of hydrorefining of the low-stability component of T-1 fuel

Jet fuel from carbon

Antwear properties of additives based on higher fatty acids for jet fuels

Experimental study of fuel boiling at low temperature in a wing tank model, volume 1

Jet fuel locks to shale oil: The 1980 technology review

Determination and analysis of jet and missile fuel deposits

Development of catalytic systems for the conversion of syngas to jet fuel and diesel fuel

Pollution reduction technology program small jet aircraft engines, phase 3

Energy environment study

An assessment of the crash fire hazard of liquid hydrogen fueled aircraft
SUBJECT INDEX

[NASA-CR-165526] p0263 A82-19196
Thermodynamics of organic compounds
(AD-A116709)
[NSRDS-NBS 24] p0318 A82-21202
The effect of fuel composition on groundfall from aircraft fuel jetisoning
(AD-A116351)
Impact study of synthetic and alternative fuel usage in aircraft propulsion systems
(AD-A111046)
Kovats indices as a tool in characterizing hydrocarbon fuels in temperature programmed gas chromatography. Part 1: Qualitative identification
(AD-A111308)
Experiments on fuel heating for commercial aircraft
[NASA-TN-82878] p0458 A82-26400
Jet fuel from shale oil: The 1981 technology review
(AD-A111217)
Sorelity fuels for the Navy
(AD-A112511)
The biological degradation of spilled jet fuels:
A literature review
(AD-A110758)
Effect of some nitrogen compounds thermal stability of jet A
(07682-27519)
Evaluation of hydrocracking catalysts for conversion of whole shale oil into yields of jet fuels
(AD-A112820)
An exploratory research and development program leading to specifications for aviation turbine fuel from whole crude shale oil. Part 1: Preliminary process analyses
(AD-A112622)
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-A112622)
United States Air Force shale oil to fuels, phase 2
(AD-A116453)
An investigation of the effects of smoke suppressant fuel additives on engine and test cell exhaust gas opacity
(AD-A116171)
Characterization of an Experimental Referee Brodened Specification (ERBS) aviation turbine fuel and ERBS fuel blends
[NASA-TM-82883] p0571 A82-31548
Analysis and environmental fate of Air Force distillate and high density fuels
(AD-A115949)
Integrated energy management study. Energy efficient transport program
[NASA-CR-155998] p0595 A82-32504
An exploratory research and development program leading to specifications for aviation turbine fuel from whole crude shale oil. Part 3
(AD-A117428)
Hydrocarbon fuel chemistry: Sediment water interaction
(AD-A117928)
JET ENGINES

[DTNSD-12286] B5 53 ENGINE J-56 ENGINE J-79 ENGINE T-5 ENGINE PULVJET ENGINES BARRET ENGINES SUPERSONIC COMBUSTION BARRET ENGINES T-56 ENGINE TURBOFAN ENGINES TURBOCHARGED ENGINES Thermal expansion accommodation in a jet engine frame
(AD-A131702)
Combined fluid/structure response predictions for soft body/airframe configurations --- ice and bird impact on aircraft engines
(AD-A105599)
Failure analysis of variable reluctance stepper motor --- an electronic fuel control system on jet engine
(AD-A105599)
'In situ' composites for jet propulsion and stationary gas turbine applications
(AD-A105599)
Water injection into jet engine axial compressors
[AI/7 AFF 112-016] p0082 A82-15024
F101DPF in Temoc - Preliminary test results
(AD-A105621)
Process monitor helps keep jet engines reliable
(AD-A105621)
Low grade fuels for turbo and jet engines
(AD-A105621)
Air cooled engine test facilities
(AD-A105621)
Airline fuel missing through JT9D engines
[SECR PAPER 810151] p0232 A82-24935
Jupiter Comet II jet engine test system
(AD-A105621)
The United States Air Force Automated Vibration Diagnostics System /AVID/ for improved jet engine maintenance
(AD-A105621)
Development of an aircraft engine
(AD-A105621)
Propulsion system requirements for advanced fighter aircraft
[AI/7 AFF 82-1143] p0417 A82-35025
Control of gas turbine power transients for improved turbine airfoil durability
[AI/7 AFF 82-1182] p0410 A82-35047
Acoustic emission in jet engine fan blades
(AD-A105621)
Dry friction damping mechanisms in engine blades
[AI/7 AFF 82-1257] p0419 A82-35257
Status report of the USAF's Engine Model Derivative Program
[AI/7 AFF 82-0183] p0427 A82-35391
Cycle considerations for tactical fighters in the early 1990's
[AI/7 AFF 82-259] p0426 A82-35047
Composite containment systems for jet engines
(AD-A105621)
Current techniques for jet engine thermal modeling
[AI/7 AFF 82-1272] p0439 A82-37712
Redundent control unit for an advanced multispool engine
(AD-A105621)
Oxidation-resistant materials for hot-gas turbines and jet engines
(AD-A105621)
Subsonic military aircraft engine intake: an integrated theoretical experiment design
(AD-A105621)
The design and development of the Tornado engine air intake
(AD-A105621)
Integration of advanced exhaust nozzles
(AD-A105621)
Development and testing of dry chemicals in advanced extinguishing systems for jet engine nacelle fires
[NASA-CR-165011] p0101 A82-13186
System for acquisition and analysis of dynamic tests on air intakes
[NASA-TM-76646] p0131 A82-14056
Pollution reduction technology program small jet aircraft engines, phase 3
[NASA-CR-165386] p0134 A82-14095
ERBS fuel addendum: Pollution reduction technology program small jet aircraft engines, phase 3
[NASA-CR-165387] p0134 A82-14096
Application of integration algorithms in a parallel processing environment for the simulation of jet engines
[NASA-TM-82746] p0136 A82-14849
Prediction of sound radiation from different practical jet engine inlets
[NASA-CR-165120] p0195 A82-16810
CFD jet engine performance improvement: High pressure turbine roundness
[NASA-CR-165555] p0203 A82-17714
Acoustic measurements of F100-PW-100 turbofan operating in hush house NS0 5920-02-070-2721
[AD-A106014] p0270 A82-19554
Acoustic measurements of F-15 aircraft operating in hush house, NS0 5920-02-070-2721
[AD-A105028] p0310 A82-21042
Acoustic measurements of F-16 aircraft operating in hush house, NS0 5920-02-070-2721
[AD-A105028] p0310 A82-21043
<table>
<thead>
<tr>
<th>SUBJECT INDEX</th>
<th>p0167 A82-20266</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dilution jet behavior in the turn section of a</td>
<td></td>
</tr>
<tr>
<td>reverse flow combustor</td>
<td></td>
</tr>
<tr>
<td>[AIAA PAPER 82-0192] Complete velocity profile</td>
<td></td>
</tr>
<tr>
<td>and optimum skin friction formulas for the</td>
<td></td>
</tr>
<tr>
<td>plate wall- jet</td>
<td></td>
</tr>
<tr>
<td>[ASM AEROSPACE 81-WA-FR-3]</td>
<td></td>
</tr>
<tr>
<td>Secondary flow mixing losses in a centrifugal</td>
<td></td>
</tr>
<tr>
<td>impeller</td>
<td></td>
</tr>
<tr>
<td>[ASM AEROSPACE 82-GT-44]</td>
<td></td>
</tr>
<tr>
<td>The influence of flow rate on the wake in a</td>
<td></td>
</tr>
<tr>
<td>centrifugal impeller</td>
<td></td>
</tr>
<tr>
<td>[ASM AEROSPACE 82-GT-95]</td>
<td></td>
</tr>
<tr>
<td>Wing-tip jets aerodynamic performance</td>
<td></td>
</tr>
<tr>
<td>p0154 A82-60967</td>
<td></td>
</tr>
<tr>
<td>Periscope jets, I --- surface blowing</td>
<td></td>
</tr>
<tr>
<td>[ADA-452] A82-43589</td>
<td></td>
</tr>
<tr>
<td>Wind tunnel tests of engine-equipped models:</td>
<td></td>
</tr>
<tr>
<td>Comparison of two jet wash simulation methods</td>
<td></td>
</tr>
<tr>
<td>[NASA-TR-76746]</td>
<td></td>
</tr>
<tr>
<td>Analytical study of twin-jet shielding</td>
<td></td>
</tr>
<tr>
<td>[NASA-CR-65102]</td>
<td>p0193 A82-16801</td>
</tr>
<tr>
<td>Analytical study of twin-jet shielding</td>
<td></td>
</tr>
<tr>
<td>[NASA-CR-65103]</td>
<td>p0194 A82-16802</td>
</tr>
<tr>
<td>Analytical study of twin-jet shielding</td>
<td></td>
</tr>
<tr>
<td>[NASA-CR-65104]</td>
<td>p0194 A82-16803</td>
</tr>
<tr>
<td>Analytical study of twin-jet shielding</td>
<td></td>
</tr>
<tr>
<td>[NASA-CR-65105]</td>
<td>p0194 A82-16804</td>
</tr>
<tr>
<td>Analytical study of twin-jet shielding development</td>
<td>p0194 A82-16805</td>
</tr>
<tr>
<td>of a 3-dimensional model</td>
<td></td>
</tr>
<tr>
<td>[NASA-CR-65107]</td>
<td></td>
</tr>
<tr>
<td>Analytical study of twin-jet shielding</td>
<td></td>
</tr>
<tr>
<td>two-dimensional model</td>
<td>p0194 A82-16806</td>
</tr>
<tr>
<td>Dilution jet behavior in the turn section of a</td>
<td></td>
</tr>
<tr>
<td>reverse flow combustor</td>
<td></td>
</tr>
<tr>
<td>[NASA-TR-82776]</td>
<td>p0266 A82-19220</td>
</tr>
<tr>
<td>The role of coherent structures in the generation</td>
<td></td>
</tr>
<tr>
<td>of noise for subsonic jets</td>
<td></td>
</tr>
<tr>
<td>[NASA-CR-68746]</td>
<td>p0358 A82-22947</td>
</tr>
<tr>
<td>Aerodynamic noise generated by jet-wing/ flap</td>
<td></td>
</tr>
<tr>
<td>interactions of the external USB configuration</td>
<td></td>
</tr>
<tr>
<td>of STOL aircraft. Part 2: Eight percent scale</td>
<td></td>
</tr>
<tr>
<td>cold-flow model analysis</td>
<td></td>
</tr>
<tr>
<td>[NAIL-T2-6857]</td>
<td>p0359 A82-22953</td>
</tr>
<tr>
<td>Fluid dynamics of jets with application to V/STOL</td>
<td></td>
</tr>
<tr>
<td>[AGARD-CP-308]</td>
<td>p0360 A82-23150</td>
</tr>
<tr>
<td>Some aspects of jet dynamics and their</td>
<td></td>
</tr>
<tr>
<td>verification of an injector</td>
<td></td>
</tr>
<tr>
<td>[NASA-TR-823151]</td>
<td>p0360 A82-23151</td>
</tr>
<tr>
<td>An experimental and theoretical investigation of</td>
<td></td>
</tr>
<tr>
<td>the interaction between the engine jet and the</td>
<td></td>
</tr>
<tr>
<td>surrounding flow field with regard to the</td>
<td></td>
</tr>
<tr>
<td>pressure drop on afterbodies</td>
<td></td>
</tr>
<tr>
<td>[NASA-TR-823158]</td>
<td>p0360 A82-23158</td>
</tr>
<tr>
<td>Flowfield and noise sources of jet impingement</td>
<td></td>
</tr>
<tr>
<td>of flaps and ground surface</td>
<td></td>
</tr>
<tr>
<td>[NASA-TR-823163]</td>
<td>p0361 A82-23163</td>
</tr>
<tr>
<td>Jet effects on forces and moments of a V/STOL</td>
<td></td>
</tr>
<tr>
<td>fighter type aircraft</td>
<td></td>
</tr>
<tr>
<td>[NASA-82-23168]</td>
<td>p0361 A82-23168</td>
</tr>
<tr>
<td>Theoretical optimization and experimental</td>
<td></td>
</tr>
<tr>
<td>verification of an injector</td>
<td></td>
</tr>
<tr>
<td>[NASA-82-23170]</td>
<td>p0361 A82-23170</td>
</tr>
<tr>
<td>Determination of wind tunnel constraint effects</td>
<td></td>
</tr>
<tr>
<td>by a unified pressure signature method. Part 2:</td>
<td></td>
</tr>
<tr>
<td>Application to jet-in-crossflow</td>
<td></td>
</tr>
<tr>
<td>[NASA-CR-66109]</td>
<td>p0367 A82-23235</td>
</tr>
<tr>
<td>Aerodynamics of an airfoil with a jet impinging</td>
<td></td>
</tr>
<tr>
<td>on its surface</td>
<td></td>
</tr>
<tr>
<td>[NASA-TR-88025]</td>
<td>p0531 A82-29267</td>
</tr>
<tr>
<td>Operational evaluation of a propeller test stand in the quiet flow facility at Langley Research Center</td>
<td>p0600 A82-33149</td>
</tr>
<tr>
<td>[NASA-TR-88523]</td>
<td></td>
</tr>
<tr>
<td>Simulation of the fluctuating field of a forced</td>
<td></td>
</tr>
<tr>
<td>jet [NASA-TR-88506]</td>
<td>p0615 A82-34191</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JET FUELS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>JET ENGINES FUELS</td>
<td></td>
</tr>
<tr>
<td>JET IMPINGEMENT</td>
<td></td>
</tr>
<tr>
<td>Study of reingestion of exhaust gases with</td>
<td></td>
</tr>
<tr>
<td>different initial temperature in a reversed</td>
<td></td>
</tr>
<tr>
<td>turbojet engine</td>
<td></td>
</tr>
<tr>
<td>p0104 A82-11444</td>
<td></td>
</tr>
<tr>
<td>A summary of jet-impingement studies at</td>
<td></td>
</tr>
<tr>
<td>McDonnell Douglas Research Laboratories</td>
<td></td>
</tr>
<tr>
<td>[AIAA PAPER 81-2613]</td>
<td>p0107 A82-16004</td>
</tr>
<tr>
<td>Impingement cooling of concave surfaces of</td>
<td></td>
</tr>
<tr>
<td>turbine airfoils</td>
<td></td>
</tr>
</tbody>
</table>
correlation system
Target acceleration modeling for tactical missile
guidance [AIAA Paper 82-0370]
Maneuver dependent sensor error models and
synchronized reset filters for inertial navigation
systems [AIAA Paper 82-197]9
Post-flight assessment of the JTIDS BelNav
A stable decentralized filtering implementation
for JTIDS BelNav --- stable community relative
navigation [AIAA Paper 82-18139]
Fixed gain controller design for aircraft
Optimal control and estimation for strapdown
seeker guidance of tactical missiles
Rotor state estimation for rotorcraft
[ASS PREPRINT 01-11]
Adaptive filtering for an aircraft flying in
turbulent atmosphere [AIAA Paper 82-38441]
Robust Kalman filter design for active flutter
suppression systems [AIAA Paper 82-38442]
Research on an adaptive Kalman filter 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
optical 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
Digital command augmentation for lateral-directional
aircraft dynamics [AD-A110274]
The use of "kapton" polyimide film in aerospace
applications [JSS Paper 011091]
C-130 AIRCRAFT
U C-130 AIRCRAFT
KC-135 AIRCRAFT
KEVLAR/HELIZOITAL 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
[KAIL-TH-63281]
KEROGEN
NT LIQUID FUELS
KEROSESINE
NT LIQUID FUELS
Airframe fire safety research with antiicing
fuels -- status report [AIAA Paper 82-1235]
Commercial aircraft airframe fuel systems surveys
[AD-A007 82-25076]
Commercial aircraft airframe fuel systems survey
and analysis [AD-A112 82-680]
KEVLAR (TRADEMARK)
Kevlar composites; 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/FPR-15 polyamide matrix composite for a
complex shaped DC-9 drag reduction fairing
[AIAA Paper 82-1047]
Development of manufacturing technology for
fabrication of a composite helicopter main rotor
spar by tubular braiding [AD-A019377]
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 [NASA-CR-165841]
Materials and structures/ACE
[MSS-FTCS-117/8/81]
Materials and design criteria for Kevlar-29 ribbon
parachutes [AD-A116357]
Kevlar/FR-15 reduced drag DC-9 reverser sting
fairings [NASA-CR-165948]
KETING
NT FREQUENCY SHIFT KEYSING
KINETICSTICS
Analytical determination of undercarriage
retraction kinematics
[KPPS 82-10364]
Kinematic investigation Hughes Helicopter 7.62mm
chain gun
[AD-A113114]
Kinematic precision of gear trains
[KAIL-TH-82887]
KINERESIS
U PROPORTIONATION
KINETIC FRICTION
NT SLIDING FRICTION
KINETIC HEATING
NT AERODYNAMIC HEATING
KINETIC TEOR
NT MIXING LENGTH FLOW THEORY
KINETICS
NT ELECTROKINETICS
NT RATION KINETICS
KIRCHROPP-HUBERTS PRINCIPLE
U DIFFRACATION
U WAVE PROPAGATION
KITS
Development of a backpack survival kit for
ejection seats [AD-A113653]
KRONOS PRODUCT
U ORTHOGONALITY
U BAND
U SUPERHIGH FREQUENCIES
KUPPER ABENGREN ORDERABILITY
U C-141 AIRCRAFT
KUPPA-DOWBINSKI CONDITION
A summary of V/STOL inlet analysis methods
[AIAA Paper 01-2628]
A summary of V/STOL inlet analysis methods
[KAIL-TH-82885]
KELLY-JENKINS FREQUENCY L
L BAND
U ULTRAtHIGH 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
[AIAA Paper 82-12049]
Fault isolation methodology for the L-1011 digital avionic flight control system  
(AIAA 81-2223)  
[80047 AES-13458]

Digital active control system for load alleviation for the Lockheed L-1011  
(AIAA 82-1297)  
[p010 AES-16147]

Sonic fatigue testing of an advanced composite aileron  
[AIAA PAPER 81-0636]  
[p029 AES-26567]

Advanced technology DPCS control panels for the L-1011  
[AIAA PAPER 82-1240]  
[p030 AES-29000]

Development and flight test evaluation of a pitch stability augmentation system for a relaxed stability L-1011  
[AIAA PAPER 82-2095]  
[p047 AES-39084]

Accelerated development and flight evaluation of active controls concepts for subsonic transport aircraft. Volume 1: Load alleviation/extended span development and flight tests  
[AIAA-CR-150907]  
[p049 AES-15076]

Flight service evaluation of Kevlar-49 epoxy composite panels in wide-bodied commercial transport aircraft  
[AIAA-CR-165694]  
[p035 AES-22316]

LABORATORIES  
NT ADVANCED TECHNOLOGY LABORATORY  
NT ENGINE TESTING LABORATORIES

LABORATORY EQUIPMENT  
Proposed multipurpose flying radio-physical laboratory using an AI-18 aircraft  
[AIAA-78-84518]  
[p055 AES-43278]

LABRINTH SEALS  
Design and testing of a new double labyrinth seal  
[AIAA PAPER 81-LDP-50]  
[p012 AES-10452]

Sealing effects on leakage losses in labyrinth seals  
[AIAA PAPER 82-GT-157]  
[p047 AES-35380]

Labyrinth seal effects on rotor bearing system stability  
[AIAA-CR-116774]  
[p059 AES-32742]

LAG  
U TIME LAG

LACHARGE COORDINATES  
Modal characteristics of rotor blades: Finite element approach and measurement by ground vibration test  
[p025 AES-18127]

LAGRANGE MULTIPLIERS  
Mathematical programming in engineering design problems  
[p083 AES-15864]

Power system design optimization using Lagrange multiplier techniques  
[p017 AES-20743]

LAMI1A  
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  
[p012 AES-18591]

Visualization of laminar separation by oil film method  
[p019 AES-20811]

Numerical design of the contoured wind-tunnel liner for the NASA swept-wing LFC test  
[AIAA 82-0566]  
[p026 AES-28656]

Aerodynamic development of laminar flow control on swept wings using distributed suction through porous surfaces  
[p050 AES-40894]

External aerodynamic design for a laminar flow control glove on a Lockheed JetStar wing  
[p050 AES-40895]

Heat transfer from nozzles under the conditions of flow laminarization  
[p058 AES-46631]

Amplified crossflow disturbances in the laminar boundary layer on swept wings with suction  
[AIAA-TT-1902]  
[p001 AES-11391]

Probability of laminar flow loss because of ice crystal encounters  
[p030 AES-20153]

LAMINAR BOUNDARY LAYER SEPARATION  
U LAMINAR BOUNDARY LATE

LAMINAR FLAMES  
U LAMINAR FLOW

LAMINAR FLOW  
On low-speed wind tunnels with deformable boundaries  
[80014 AES-11462]

A simple finite difference procedure for the vortex controlled diffuser  
[AIAA PAPER 82-20109]  
[p015 AES-17783]

Box formation in flat, laminar, opposed jet methane diffusion flames  
[p036 AES-28660]

Calculation of level flow using radial grating  
[p064 AES-39922]

Observations and implications of natural laminar flow on practical airplane surfaces  
[p050 AES-40893]

Natural laminar flow airfoil analysis and trade studies  
[AIAA-CR-150929]  
[p040 AES-15018]

Laminar flow control SFP/08 feasibility demonstration  
[AIAA-CR-165818]  
[p032 AES-21532]

Effect of modification of the trailing edge of a separating wall on the downstream mixing of parallel flow mixing streams  
[AD-A111124]  
[p039 AES-24181]

Laminar flow control, 1976 - 1982: A selected annotated bibliography  
[AIAA-78-84496]  
[p057 AES-31645]

Surface flow visualization requirements for testing in wind tunnel  
[p059 AES-32667]

NASA research on viscous drag reduction  
[p060 AES-33344]

LAMINAR FLOW AIRFOILS  
The NASA Langley laminar flow control airfoil experiment  
[AIAA PAPER 82-0567]  
[p038 AES-33327]

Aerodynamic development of laminar flow control on swept wings using distributed suction through porous surfaces  
[p050 AES-40894]

External aerodynamic design for a laminar flow control glove on a Lockheed JetStar wing  
[p050 AES-40895]

Program at Douglas on laminar flow control applied to commercial transport aircraft  
[p051 AES-40958]

Laminar airfoils for transport aircraft  
[AIAA-TT-680]  
[p025 AES-18190]

Laminar Flow Control. The Research and Technology Studies 1981  
[AIAA-CR-22158]  
[p030 AES-20149]

NASA Langley laminar flow control airfoil experiment  
[p030 AES-20150]

Status of NASA advanced LFC airfoil high-lift study  
[p030 AES-20151]

Stability of boundary layers with porous suction strips: Experiment and theory  
[p030 AES-20152]

Probability of laminar flow loss because of ice crystal encounters  
[p030 AES-20153]

SFP/DB titanium concepts for structural efficiency for HC  
[p030 AES-20154]

SFP/DB titanium LFC porous panel concept  
[p030 AES-20155]

Drag reduction using pneumatic turbulators --- laminar airfoils  
[DVP1A-74-31-11]  
[p035 AES-22223]

LAMINAR FLOW CONTROL  
U BOUNDARY LAYER CONTROL

LAMINAR HEAT TRANSFER  
Approximate method of predicting heating on the windward side of Space Shuttle Orbiter and comparisons with flight data  
[AIAA PAPER 82-0823]  
[p037 AES-31653]

LAMINAR JETS  
U JET FLOW

LAMINAR FLOW  
U LAMINAR FLOW

LAMINAR MATERIALS  
U LAMINATES

LAMINATES  
Impact-initiated damage thresholds in composites  
[p001 AES-12028]

Improvement of the first-ply-failure strength in laminates by using softening strips  
[p010 AES-16174]

On the track of practical forward-swept wings  
[p015 AES-19071]
LAMINATIONS

Design of the composite spar-wingskin joint...

Boiled field repair of graphite/epoxy wing skin laminates...

Improving composite bolted joint efficiency by laminate tailoring...

Evaluation of graphite/epoxy shims in a high capacity laminate helicopter bearing...

On the bearing strengths of CFRP laminates...

The promise of laminated metals in aircraft design...

Material identification for the design of composite rotary wings...

Application of a new hybrid material in aircraft structures...

Fabrication of beryllium/aluminum fan blades for X-30 engines...

Transparent polyolefin film armor...

Fabrication of boron/aluminum fan blades for SCS engines...

The promise of laminated metals in aircraft design...

Evaluation of graphite/epoxy shims in a high capacity laminate helicopter bearing...

In-service testing of the Precision Approach Path Indicator (PAPI) at Newark International Airport, New Jersey...

Airfield visual aids research at the Royal Aircraft Establishment...

Marine Air Traffic Control and Landing System (BACATCS) investigation, volume 1...

Marine Air Traffic Control and Landing System (BACATCS) investigation, volume 2...

Marine Air Traffic Control and Landing System (BACATCS) investigation...

Ground movement control and guidance - Cat. 3 operations experience in Air Inter...

The birth of precision DBE...

Comparative study of flare control laws...

Research Simulator (VTBS) conventional takeoff and landing (CTOL) weapon delivery visual system...

Aircraft nondestructive evaluation by thermal transducers...

Landing gear...

The possibility of using deformable rubber components in landing gear...

Mechanisms for the elimination of instability in a slalom problem...

Self-oscillations of the front caster wheel strut for a given track width under the assumption of the wheel drift hypothesis...

Kelvin-Helmholtz stability analysis of air cushion landing gear trunk flutter...

Consideration of mechanical, physical, and chemical properties in bearing selection for landing gear of large transport aircraft...

Describing function analysis of nonlinear nose gear shimmy...

Developments on graphite/epoxy T-2 nose landing gear door...

Touchdown technology --- large aircraft landing gear stress...

Structural design of a crashworthy landing gear for the AH-64 Attack Helicopter...

Landing aids...

Airport lights...

All-weather landing systems...

Approach indicators...

Landing gear...

Automatic landing control...

Desert lights landing system...

Instrument landing systems...

Landing instruments...

Microwave landing systems...

Runway lights...

Digital signal processing on a background of reflections for the international aircraft landing system...

SUBJECT INDEX
FACEPLATE brake hydraulic system
[AD-111319] p0407 N82-25245
Experimental investigation of active 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
[ER-228] p0570 N82-31333
MBSA vertical drag test report --- rotor systems
research aircraft
[NASA-CR-166399] p0587 N82-23241
LANDING SYSTEMS
BT APPROACH INDICATORS
Airfield visual aids research at the Royal
Aircraft Establishment
[BTR-M-PS-431] p0351 N82-22242
LANDING LOADS
An electronic control for an electro-hydraulic
active control landing gear for the F-4 aircraft
[NASA-CR-3552] p0535 N82-22252
Automated optimum design of wing structure.
Deterministic and probabilistic approaches
[NASA-TG-113] p0535 N82-29317
LANDING SIMULATION
Computer-animated predictive displays for
microwave landing approaches
p0082 N82-15616
Visual scene simulation concerning the landing of
sporting aircraft in connection with
investigations regarding the control and
learning behavior of the pilot --- German thesis
p0519 N82-41447
NLS quick cludge and navigation for a STOL
airplane landing on an elevated STOLport
[NASA-TM-81338] p0135 N82-14101
Dynamic scheduling of runway operations
p0445 N82-26700
Marine Air Traffic Control and Landing System
(BATCS) investigation
[AD-310734] p0466 N82-27260
Reports by Systems Technology, Inc., in support of
carrier-landing research in the visual
technology research simulator
[AD-11246] p0474 N82-27324
Design, simulation and evaluation of advanced
display concepts for the F-16 control configured
vehicle
p0563 N82-28589
Real time estimation and prediction of ship
motion using Kalman filtering techniques
[NASA-CR-169284] p0572 N82-31637
LANDING SYSTEMS
U LANDING AIDS
LANDMARKS
United States Coast Pilot 9. Pacific and Arctic
Coasts Alaska: Cape Spencer to Beaufort Sea
[PG2-105562] p0254 N82-18201
LANDSCAPE
U TERRAIN
U TOPOGRAPHY
LANGUAGE
U ISOTOPUS
U ELEMENTARY PROBLEMS
U ELECTROSTATIC PROBLEMS
LANGUAGES
MT POSTER
MT HIGH LEVEL LANGUAGES
MT FASCAL (PROGRAMMING LANGUAGE)
MT PROGRAMMING LANGUAGES
LAP JOISTS
A comparison of properties of simple overlap
tension joints prepared by ultrasonic welding
and other means
[AD-82-0464] p0335 N82-30091
LARGE SPACE STRUCTURES
Aerospace highlights 1981
p0103 N82-16135
Fiscal year 1981 scientific and technical reports,
articles, papers, and presentations
[NASA-TP-82495] p0195 N82-16927
LASER ARRANGEMENTS
Development and laboratory testing of a thermal
emission velocimeter for application to an
economic nose tip test facility
[AD-107713] p0213 N82-17682
Laser anemometer measurements in an annular
cascade of core turbine vanes and comparison
with theory
[NASA-TP-2018] p0847 N82-26234
LASER GEOSCOPES
Status of laser anemometry in turbomachinery
research at the Lewis Research Center
p0598 N82-32686
Velocity and flow angle measurements in the
Langley 0.3-meter transonic cryogenic tunnel
using a laser transit anemometer
p0599 N82-32697
Some NBF laser velocimeter installation and
operation considerations
p0599 N82-32698
LASER APPLICATIONS
BT LASER PROPULSION
Digital detection and processing of laser beacon
signals for aircraft collision hazard warning
[AD-81-2328] p0052 N82-13525
Mapping in tropical forests - A new approach using
the laser APS --- Airborne Profile Recorder
p0160 N82-24047
Laser communications via an atmospheric tank
p0175 N82-20615
Laser application in weapon guidance and active
imaging
p0433 N82-35767
Laser pointing in a turbulent atmosphere
p0434 N82-35766
The Hydrographic Airborne Laser Sounder (HALS)
[AD-111027] p0460 N82-26460
Development and utilization of a laser velocimeter
system for a large transonic wind tunnel
[NASA-TM-82086] p0572 N82-31663
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
p0483 N82-36786
Laser Doppler anemometry applied to the study of
the airflow in the wake of an helicopter rotor
[OBES, TP NO. 1982-61] p0552 N82-63755
Preliminary experiments on a centrifugal research
compressor using a laser -2- focus velocimeter
[OBES, TP NO. 1982-62] p0553 N82-63756
Application of laser velocimetry to large
industrial wind tunnels
[OBES, TP NO. 1982-63] p0553 N82-63757
An experimental investigation of the field of a
laser correlation velocimeter
[AD-111136] p0394 N82-24182
Hardware and software integration for high speed
data acquisition and reduction of photon
channels velocity laser velocimeter
[AD-111146] p0394 N82-25506
A color video display technique for flow field
surveys
p0596 N82-32669
Development of a laser velocimeter for a large
transonic wind tunnel
p0596 N82-32669
Seeding considerations for an IV system in a large
transonic wind tunnel
p0596 N82-32669
LV measurements with an advanced turboprop
p0598 N82-32690
Applications of a laser velocimeter in the Langley
4- by 7-meter tunnel
p0598 N82-32693
Laser Doppler velocimeter application to the
Langley 0.3-meter transonic Cryogenic Tunnel
p0598 N82-32696
Some NBF laser velocimeter installation and
operation considerations
p0599 N82-32698
Beta experiment flight report
[NASA-CE-170622] p0613 N82-32698
LASER GUIDANCE
Laser application in weapon guidance and active
imaging
U S. Army remotely piloted vehicle program
p0433 N82-35767
LASER GEOSCOPES
Kling Laser Gyro Navigator /BLG/ flight test results
p0493 N82-39732
Laboratory and flight test of a new BLG strapdown
INS
p0203 N82-12644
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
p0483 N82-36786
Laser Doppler anemometry applied to the study of
the airflow in the wake of an helicopter rotor
[OBES, TP NO. 1982-61] p0552 N82-63755
Preliminary experiments on a centrifugal research
compressor using a laser -2- focus velocimeter
[OBES, TP NO. 1982-62] p0553 N82-63756
Application of laser velocimetry to large
industrial wind tunnels
[OBES, TP NO. 1982-63] p0553 N82-63757
An experimental investigation of the field of a
laser correlation velocimeter
[AD-111136] p0394 N82-24182
Hardware and software integration for high speed
data acquisition and reduction of photon
channels velocity laser velocimeter
[AD-111146] p0394 N82-25506
A color video display technique for flow field
surveys
p0596 N82-32669
Development of a laser velocimeter for a large
transonic wind tunnel
p0596 N82-32669
Seeding considerations for an IV system in a large
transonic wind tunnel
p0596 N82-32669
LV measurements with an advanced turboprop
p0598 N82-32690
Applications of a laser velocimeter in the Langley
4- by 7-meter tunnel
p0598 N82-32693
Laser Doppler velocimeter application to the
Langley 0.3-meter transonic Cryogenic Tunnel
p0598 N82-32696
Some NBF laser velocimeter installation and
operation considerations
p0599 N82-32698
Beta experiment flight report
[NASA-CE-170622] p0613 N82-32698
LASER GUIDANCE
Laser application in weapon guidance and active
imaging
U S. Army remotely piloted vehicle program
p0433 N82-35767
LASER GEOSCOPES
Kling Laser Gyro Navigator /BLG/ flight test results
p0493 N82-39732
Laboratory and flight test of a new BLG strapdown
INS
p0203 N82-12644

A-279
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- Investigation of heat transfer in the vicinity of the leading edge vortex of a delta wing.
- Research on the use of carbon composites in slat and flap systems.
- Development of leading edge anti-icing systems.
- Analysis of vortex formation at leading edges in supersonic flow.
- Studies on the aerodynamic performance of delta wings with leading edge separation.
- Investigation of heat transfer in the vicinity of the leading edge vortex of a delta wing.
- Development of leading edge anti-icing systems.
- Analysis of vortex formation at leading edges in supersonic flow.
- Studies on the aerodynamic performance of delta wings with leading edge separation.
- Investigation of heat transfer in the vicinity of the leading edge vortex of a delta wing.
- Development of leading edge anti-icing systems.
- Analysis of vortex formation at leading edges in supersonic flow.
- Studies on the aerodynamic performance of delta wings with leading edge separation.
- Investigation of heat transfer in the vicinity of the leading edge vortex of a delta wing.
- Development of leading edge anti-icing systems.
- Analysis of vortex formation at leading edges in supersonic flow.
- Studies on the aerodynamic performance of delta wings with leading edge separation.
- Investigation of heat transfer in the vicinity of the leading edge vortex of a delta wing.
- Development of leading edge anti-icing systems.
- Analysis of vortex formation at leading edges in supersonic flow.
- Studies on the aerodynamic performance of delta wings with leading edge separation.
- Investigation of heat transfer in the vicinity of the leading edge vortex of a delta wing.
- Development of leading edge anti-icing systems.
- Analysis of vortex formation at leading edges in supersonic flow.
- Studies on the aerodynamic performance of delta wings with leading edge separation.
- Investigation of heat transfer in the vicinity of the leading edge vortex of a delta wing.
- Development of leading edge anti-icing systems.
- Analysis of vortex formation at leading edges in supersonic flow.
- Studies on the aerodynamic performance of delta wings with leading edge separation.
- Investigation of heat transfer in the vicinity of the leading edge vortex of a delta wing.
- Development of leading edge anti-icing systems.
- Analysis of vortex formation at leading edges in supersonic flow.
- Studies on the aerodynamic performance of delta wings with leading edge separation.
- Investigation of heat transfer in the vicinity of the leading edge vortex of a delta wing.
- Development of leading edge anti-icing systems.
- Analysis of vortex formation at leading edges in supersonic flow.
- Studies on the aerodynamic performance of delta wings with leading edge separation.
- Investigation of heat transfer in the vicinity of the leading edge vortex of a delta wing.
- Development of leading edge anti-icing systems.
- Analysis of vortex formation at leading edges in supersonic flow.
- Studies on the aerodynamic performance of delta wings with leading edge separation.
- Investigation of heat transfer in the vicinity of the leading edge vortex of a delta wing.
- Development of leading edge anti-icing systems.
- Analysis of vortex formation at leading edges in supersonic flow.
- Studies on the aerodynamic performance of delta wings with leading edge separation.
- Investigation of heat transfer in the vicinity of the leading edge vortex of a delta wing.
- Development of leading edge anti-icing systems.
- Analysis of vortex formation at leading edges in supersonic flow.
- Studies on the aerodynamic performance of delta wings with leading edge separation.
- Investigation of heat transfer in the vicinity of the leading edge vortex of a delta wing.
- Development of leading edge anti-icing systems.
- Analysis of vortex formation at leading edges in supersonic flow.
- Studies on the aerodynamic performance of delta wings with leading edge separation.
- Investigation of heat transfer in the vicinity of the leading edge vortex of a delta wing.
- Development of leading edge anti-icing systems.
- Analysis of vortex formation at leading edges in supersonic flow.
- Studies on the aerodynamic performance of delta wings with leading edge separation.
- Investigation of heat transfer in the vicinity of the leading edge vortex of a delta wing.
- Development of leading edge anti-icing systems.
- Analysis of vortex formation at leading edges in supersonic flow.
- Studies on the aerodynamic performance of delta wings with leading edge separation.
- Investigation of heat transfer in the vicinity of the leading edge vortex of a delta wing.
- Development of leading edge anti-icing systems.
- Analysis of vortex formation at leading edges in supersonic flow.
- Studies on the aerodynamic performance of delta wings with leading edge separation.
- Investigation of heat transfer in the vicinity of the leading edge vortex of a delta wing.
- Development of leading edge anti-icing systems.
- Analysis of vortex formation at leading edges in supersonic flow.
- Studies on the aerodynamic performance of delta wings with leading edge separation.
- Investigation of heat transfer in the vicinity of the leading edge vortex of a delta wing.
- Development of leading edge anti-icing systems.
- Analysis of vortex formation at leading edges in supersonic flow.
- Studies on the aerodynamic performance of delta wings with leading edge separation.
- Investigation of heat transfer in the vicinity of the leading edge vortex of a delta wing.
- Development of leading edge anti-icing systems.
- Analysis of vortex formation at leading edges in supersonic flow.
- Studies on the aerodynamic performance of delta wings with leading edge separation.
- Investigation of heat transfer in the vicinity of the leading edge vortex of a delta wing.
- Development of leading edge anti-icing systems.
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LIGHT ALLOYS

Complete guide to Rutan homebuilt aircraft — Book
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Computational and experimental studies of light twin aerodynamic interference
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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

LIGHT BEAMS
Laser gyro - The guiding light

LIGHT BULBS
U LUMINAIRES

LIGHT COMMUNICATION
U OPTICAL COMMUNICATION

LIGHT EMISSION
LUMINESCENCE
LIGHT BRIGHTING DIODES
The multi mode matrix flat panel display: Technology and applications

LIGHT PROBES
U LIGHT SEAMS
LIGHT TRANSMISSION
Nearfield aerodynamics and optical propagation characteristics of a large-scale turret model

LIGHTING EQUIPMENT
U AIRPORT LIGHTS
FLASH LAMPS
U LANDING LIGHTS

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 of visible runway length on perception of approach angle in simulated night landings
Examination of aircraft interior emergency lighting in a postcrash fire environment

SUBJECT INDEX

LIGHTNING
Thunderstorms hazards flight research - Program overview
Direct strike lightning measurement system -- for aircraft
A recursive state domain analysis of distributed line grid networks with application to the ETA/EPE problem — Lightning Threat Analysis
Calculations of lightning return stroke electric and magnetic fields above ground
Conductive propcets for lightning strike protection on aircraft
Lightning detection and ranging
Effects of lightning and nuclear electromagnetic pulse on an advanced composite aircraft
Triggered lightning — resulting from aircraft atmospheric electricity interactions
Airborne warning 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
Lightning effects on aircraft and composite materials. Literature study on lightning strikes and protection — advanced composite materials
Investigation of severe lightning strike accidents to two USAF F-106A aircraft
Evaluation of noise control technology and alternative noise certification procedures for propeller-driven small airplanes

Simulation of the lightning/aircraft interaction event
Protection of advanced electrical power systems from atmospheric electricity interactions
Protection of advanced electrical power systems from atmospheric electricity interactions
Protection of advanced electrical power systems from atmospheric electricity interactions

Assessment of lightning simulation test techniques, part 1
A compeidium of lightning effects on future aircraft electrical systems
Carbon fiber reinforced composite structures protected with metal surfaces against lightning stroke 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
Computational methods of robust controller design: multivariable design. The optimization of feedback and optimization sensitivity (AIAA Paper 82-1349) p0488 A82-39120

Limitation on achievable performance of multivariable control systems. An integrative analysis of multivariable control systems (AIAA Paper 82-1349) p0083 882-15864

applications of approximate inverses (p0029 882-10054)

Feedback and minimum sensitivity (p0083 882-15864)

Theoretical linear approach to the combined man-robot-manipulator system in manual control of an aircraft (p0083 882-15864)

LIQUID FUELS
LIQUID HYDROGEN

Deposition formation in liquid fuels. I - Effect of coal-derived liquid bases on storage stability of jet turbine fuel

- p0112 A82-17290

LIQUID HYDROGEN

Fuel for future transport aircraft

- p0012 A82-10965

LIQUID FUELS

Technological innovation for success - Liquid hydrogen propulsion

- p0107 A82-16734

Liquid hydrogen - An outstanding alternate fuel for transport aircraft

- p0112 A82-17290

Very large aircraft with alternate fuels - LH2: Most promising

- p0166 A82-20137

Will hydrogen-fueled aircraft be safe?

- p0410 A82-35077

An assessment of the fire hazard of liquid hydrogen fuelled aircraft

- [NASA-CR-165226] p0263 A82-19196

LIQUID INJECTION

Liquid particle dynamics and rate of evaporation in the rotating field of centrifugal compressors

- [NASA-PAPER 82-07-86] p0423 A82-35322

A spark ignition model for liquid fuel sprays applied to gas turbine engines

- p0436 A82-37220

LIQUID ROCKET PROPELLANTS

MT CHROMIEIC ROCKET PROPELLANTS

MT LIQUID FUELS

MT RP-1 ROCKET PROPELLANTS

Deterioration and analysis of jet and missile fuel deposits

- [AIAA-PAPER 82-0813] p0376 A82-31986

LIQUID SLOSHING

Airframe fuel tank slosh and vibration test

- p0344 A82-22164

LIQUID-GAS MIXTURES

MT AEROSOLS

MT FOG

LIQUID-SOLID INTERFACES

Factors influencing velocity distributions at inlet/combustor interfaces

- p0321 A82-21605

LIQUIDS

MT CHROMIC ROCKET PROPELLANTS

MT HYDRAULIC FLUIDS

MT LIQUID FUELS

MT LIQUID HYDROGEN

MT LIQUID ROCKET PROPELLANTS

MT ORGANIC LIQUIDS

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LISTS

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- p0334 A82-29838

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Stiffness degradation of impact damaged structure

- p0203 A82-17168

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- [AIAA-PAPER 82-0409] p0121 A82-17930

The effects of bird orientation on load profile and damage level

- p0227 A82-24316

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- [NASA-PAPER 80-11171] p0233 A82-24405

Fundamentals of helicopter fatigue life determination

- p0339 A82-24714

Sensitivity of bonded and bolted joints in composites to load/environmental spectrum variations ---- in fighter aircraft structures

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On the bearing strengths of CF/Pa laminates

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LOADING OPERATIONS

QOT and Z of the F-16 20mm ammunition loading system's ability to upload/download A-70 aircraft

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Advanced internal cargo system concept development and evaluation

- [AD-A111990] p0451 A82-26212

LOADING RATE

Zone loading of flight-vehicle structures

- p0334 A82-29838

LOADING WAVES

0 LOADS (FORCES)

LOADS (FORCES)

MT AERODYNAMIC LOADS

MT AXIAL LOADS

MT BLAST LOADS

MT CONVECTION LOADS

MT CRITICAL LOADING

MT CYCLIC LOADS

MT DYNAMIC LOADS

MT EGG LOADING

MT GUST LOADS

MT IMPACT LOADS

MT LANDING LOADS

MT BAROM loader

MT SHOCK LOADS

MT STATIC LOADS

MT VIBRATION LOADS

MT WING LOADING

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[ NASA-CR-165100 ]

(a-105260 )

Influence of strakes on coefficients of longitudinal stability

[ NPB-PE-123/5/ PUB-2/2 ]

p0219 N82-21215

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[ NASA-TN-83267 ]

p0368 N82-23226

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[ NASA-TN-84233 ]

p0396 N82-24208

Annular wing

[ NASA-CASE-FEC-11007-2 ]

p0451 N82-26277

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 N82-23220

A ground-simulator investigation of helicopter longitudinal flying qualities for instrument approach

[ NASA-TN-84225 ]

p0611 N82-33398

LOOPS

The need for multivariable design and analysis techniques

p0029 N82-10049

Multivariable design techniques based on nonscalar value generalizations of classical control

p0029 N82-10051

Limitations on achievable performance of multivariable feedback systems

p0029 N82-10052

LQG-based multivariable design: Frequency domain interpretation

p0029 N82-10053

LQG multivariable design tools

p0030 N82-10054

Design of high integrity multivariable control systems

p0030 N82-10055

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AT LORAN C

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p0235 A82-29643

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p0235 A82-29644

FDD Programmable pilot-oriented display --- air navigation

p0445 A82-296201

Loran C

A Loran-C prototype navigation receiver for general aviation

[ AIAA 81-2329 ]

p0096 A82-12059

Evaluation of Loran-C enroute navigation and non-precision approaches within the State of Vermont

p0124 A82-18160

Loran-C BNAV in mountainous areas

p0236 A82-29649

Analysis of Loran-C system reliability for civil aviation

p0236 A82-29650

Flight evaluation of Loran-C for general aviation area navigation

p0380 A82-33049

Certification of an airborne Loran-C navigation system

p0433 A82-35076

Long-range radio NAV/aid signal reliability

p0456 A82-19501

Loran-C navigation as an aid to aerial photographic operations

p0551 A82-63469

Subject Index

Flight evaluation of Loran-C as a helicopter navigation aid in the Baltimore Canyon oil exploration area

p0086 A82-12059

Design study report for General Aviation Loran-C receiver

[ AD-105260 ]

p0087 N82-12062

A prototype interface unit for microprocessor-based Loran-C receiver

[ NASA-CR-168077 ]

p0132 A82-14078

Joint University Program Air for Transportation Research, 1981

[ NASA-CP-7229 ]

p0045 A82-26199

Investigation of air transportation technology at Ohio University, 1981 --- loran

p0045 A82-26204

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p0045 A82-26206

A Loran-C prototype navigation receiver for general aviation

p0045 A82-26207

Commutated automatic gain control system

p0046 A82-26208

A prototype interface unit for microprocessor-based Loran-C receiver

p0046 A82-26210

A Loran-C prototype navigation receiver for general aviation

[ NASA-CR-169118 ]

p0466 A82-27259

Flight evaluation of Loran-C in the State of Vermont

[ NASA-TN-84711 ]

p0523 A82-28287

LOSST MEDIA

GTD analysis of airborne antennas radiating in the presence of lossy dielectric layers

[ NASA-CR-168770 ]

p0337 A82-23298

Low alloy steels

C HIGH STRENGTH STEELS

Low altitude

Inflatable system for fast deployment of parachutes at low altitudes from slow moving aircraft or stationary supports

[ AIAA PAPER 81-4091 ]

p0008 A82-10428

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

p0070 A82-14768

The LASTFM wide field-of-view raster head-up display --- Low Altitude Navigation and Targeting in for Night

p0074 A82-14825

Tracking of low-altitude targets by a combined I/R/radar system

p0175 A82-20590

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 82-9261 ]

p0184 A82-22079

Detection of obstacles by low flying aircraft --- using CO2 laser; mathematical model

[ FOA-C-38227-B1 ]

p0140 A82-15026

Progress on low altitude cloud icing research

[ NASA-CR-166385 ]

p0311 A82-21147

Fare Manual aided integrated strike avionics system

p0471 A82-27298

Adaptive multifunction sensor concept for air-ground missions

p0471 A82-27299

Path modeling for helicopter simulation of low speed, low altitude and steeply descending flight

[ NASA-CR-166385 ]

p0592 A82-32374

Low aspect ratio

Aircraft mass mixing of a large low-aspect ratio airframe for flutter-free performance

[ AIAA PAPER 80-0724 ]

p0225 A82-24022

Low aspect ratio wings

DELTA WINGS

TRIANGULAR WINGS

An experimental study of separated flow on a finite wing

[ AIAA PAPER 81-1882 ]

p0167 A82-30293

Analysis of small-aspect-ratio lifting surfaces in ground effect

p0378 A82-32223
Detached flow past V-shaped low-aspect-ratio wings

An asymptotic theory of separated flow past low-aspect-ratio wings

Aerodynamic performance of slender wings with separated flows

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

Prediction of wing side-edge suction forces and maximum inviscid lift

Recent applications of the transonic wing analysis computer code, THING

LOW COST

Low-cost programmable multiactuator facility

A concept for a high-accuracy, low-cost accelerometer

Baseline cost performance monitoring of turboshaft engines

Welding for low-cost advanced titanium airframe structures

LOW DENSITY MATERIALS

Evaluation of three percent aqueous film forming foam (AFFF) concentrates as fire fighting agents

LOW FREQUENCIES

ST VERY LOW FREQUENCIES

LOW FREQUENCY BANDS

Model helicopter rotor low frequency broadband noise

LOW GRAVITY

U EDUCATED GRAVITY

LOW ALTITUDES

U TROPICAL REGIONS

LOW LEVEL TURBULENCE

ST Detection of low level wind shear. XI

LOW MASS

U MASS

LOW NOISE

On the design and test of a low noise propeller

LOW PASS FILTERS

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

Application of Kalman filtering technique to aerodynamic derivatives for a helicopter

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

LOW PRESSURE

The CF6 jet engine performance improvement: Low pressure turbine active clearance control

Energy efficient engine: Turbine transonic duct model technology report

LOW PRESSURE CHAMBERS

U VACUUM CHAMBERS

LOW SPEED

A cost effective method for the control of roll due to side slip on a low speed aircraft

Can low-speed jet noise be predicted

Low-speed aerodynamic characteristics of wings with sweep discontinuities

Effects of intake geometry on circular pitot intake performance at zero and low forward speeds

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

A versatile data acquisition system for a low speed wind tunnel

A translational velocity command system for VTOL low speed flight

Thrust-induced effects on low-speed aerodynamics of fighter aircraft -- Langley 4-by-7-meter tunnel

Math modeling for helicopter simulation of low speed, low altitude and steeply descending flight

LOW SPEED STABILITY

Low-speed characteristics of a fighter-type configuration at high angles-of-attack and sideslip

Effects of vortex flaps on the low-speed aerodynamic characteristics of an arrow wing

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

Stability and flutter analysis of turbine blades at low speed

LOW SPEED WIND TUNNELS

ST SUBSONIC WIND TUNNELS

On low-speed wind tunnels with deformable boundaries

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

A large-scale investigation of engine influence on inlet performance at angle-of-attack

The German-Dutch wind tunnel as aeroacoustic experimental installation

Wind tunnel investigations for the flat spin of slender bodies at high angles of attack

Experimental studies of the Epler 61 airfoil at low Reynolds numbers

Experimental study of oscillating-wing propulsion

Development and trial of a rotary balance for the 3-m low-speed wind tunnels in the Federal Republic of Germany

Scale-model studies for the improvement of flow patterns of a low-speed tunnel

Low-speed measurements of the static pressure distributions and overall forces on a cambered and a symmetric aird historic wing of aspect ratio 6 --- in a wind tunnel

Simulation of turbomachinery engine models in the interesting low speed wind tunnel --- gas supply control

LOW TEMPERATURE

Additional experiments on flowability improvements of aviation fuels at low temperatures, volume 2

LOW TEMPERATURE ENVIRONMENTS

Experimental study of fuel heating at low temperatures in a wind tank model, volume 1

LOW TEMPERATURE TESTS

The low temperature properties of aviation fuels

LOW THRUST

Comment on 'Optimal control via mathematical programming'

A-289
LOW THRUST PROPULSION

LOW THRUST PROPULSION
MT SOLAR ELECTRIC A-DUPLICATION
MT SOLAR PROPULSION
LOW VELOCITY
U LOW SPEED
LOW VISIBILITY
A tower approach to slant visual range observation and prediction

LOWER ATMOSPHERE
MT TROPOSPHERE
LUBRICANT TESTS
Determination of the flammability characteristics of aerospace hydraulic fluids
Development of the automated AFAPL engine simulator test for lubricant evaluation

LUBRICANTS
MT LUBRICATING OILS
Trends in aviation fuels and lubricants - Proceedings of the West Coast International Meeting, Seattle, WA, August 3-6, 1981
The history of aviation turbine lubricants
Lubricant effects on efficiency of a helicopter transmission
Turboengine lubricant reclamation

LUBRICATING 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

LUBRICATION
The effect of journal misalignment on the oil-film forces generated in a squeeze-film damper
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
Basic technology of squeeze-film dampers for rotor dynamics control
Evaluation of plasma source spectrometers for the Air Force Oil Analysis Program

LUBER BARES
U PLASTIC DEFORMATION
U FIELD POINT
LUGS
Fatigue life of lugs under service loading - Test results and predictions
Integrity analyses of surface-flawed aircraft attachment lugs - a new, inexpensive, 3-D alternating method

LUMINATING AREAS
U FORESTS
LUMINAIRES
MT AIRPORT LIGHTS
MT FLASH LAMPS
MT HIGHWAY LIGHTS

SUBJECT INDEX

Microwave Landing System Flare Subsystem Test
AD-1107327

LUMINESCENCE
Optical properties of airfield lighting fixtures of the Royal Netherlands Airforce. Part 2: Intensity measurements
TIP-1980-12-VOL-2

LUMINOUSNESS
MT FLOURESCENCE
LUMINOUS INTENSITY
MT LUMINANCE

M WINGS
U VARIABLE SWEPT WINGS
MAKES
U CRATES
MACH NUMBER
Symmetric flow characteristics of thin rectangular wings

Measures of a three-dimensional boundary layer on a sharp cone at Mach 3
[AIAA PAPER 82-02299]

History of the sweptback wing
[AD-A112098] p0455 N82-26312

In-flight acoustic results from an advanced-design propeller at Mach numbers to 0.8
[AIAA PAPER 82-1120] p0416 A82-35017

Increased capabilities of the Langley Mach 7 Scramjet Test Facility
[AIAA PAPER 82-1240] p0418 A82-35080

On the performance prediction of a centrifugal compressor scaled up
[ASME PAPER 82-GT-112] p0424 A82-35345

Development and application of a performance prediction method for straight rectangular diffuser
[AIAA PAPER 82-GT-122] p0425 A82-35352

Flight-determined correction terms for angle of attack and sideslip
[AIAA PAPER 82-1276] p0427 A82-40290

The effect of heat transfer on three-dimensional spatial stability and transition of flat plate boundary layer at Mach 3
[AD-A116279] p0571 A82-31338

Studies of air inlets at Reynolds numbers comparable to flight in ONERA's F1 and SINA wind tunnels
[AD-A110495] p0656 A82-13091

Airframe-propulsion system aerodynamic interference predictions at high transonic Mach numbers including off-design engine airflow effects

Experimental determination of flow-interference effects of wing-mounted, two-dimensional, full-capture propulsion nacelles in close proximity to a vehicle body at a Mach number of 6
[NASA-TP-83287] p0645 A82-25217

On the aerodynamics of windblast
[AD-A110495] p0645 A82-25221

Aeropropulsive characteristics of Mach numbers up to 2.2 of axisymmetric and nonaxisymmetric nozzles installed on an F-16 model
[AIAA PAPER 82-1240] p0418 A82-35080

 Calibration and performance of the AEDC/VKF tunnel C, Mach number 4, aerothermal wind tunnel
[AD-A116279] p0571 A82-31338

MACH REFLECTION
Mach reflection of a shock wave from an inclined wall
A-290
and map-matching navigation

MAGNETIC COMPASSES
Low cost development of IRS sensors for expendable BIV control and navigation
[AD-A112691] p0525 H82-28291

MAGNETIC COMPLIABILITY
Effects of cable geometry and aircraft attitude on the accuracy of a magnetic lead cable system for aircraft guidance during rollout and taxiing
[NASA-TP-1978] p0351 H82-22239

MAGNETIC MEASUREMENTS
At Geomagnetic
Calculations of lightning return stroke electric and magnetic fields above ground
p0118 H82-17714

Te/Te polarization ratios in a sample of 30 kHz sferics received at altitudes from 0 to 70 km
[AB-018102] p0258 H82-18464

Transient measurements under electric pole excitation in 37 airplanes
[FOA-C-30243-A1] p0370 H82-23409

Transverse electric waves for VLF/LF communication between aircraft
(AD-A115343) p0596 H82-23582

MAGNETIC MATERIALS
Torsional stiffness element based on cobalt-samarium magnets -- for a turn and bank indicator

MAGNETIC MEASUREMENT
Magnetic heading reference
[NASA-CARS-12-16260-1] p0448 H82-26260

MAGNETIC REFERENCES
U MAGNETIC MATERIALS
U MAGNETICS

MAGNETIC POLES
A comparison of pole positions derived from GPS satellite and radar navigation satellite observations
[AD-A110765] p0449 H82-26268

MAGNETIC PROPERTIES
At Geomagnetic

MAGNETIC SURVEYS
Airborne gamma-ray spectrometer and magnetometer survey, Tikhaya river quadangle, Alaska, volume 2
[DE82-000314] p0399 H82-24620

Airborne gamma-ray spectrometer and magnetometer survey, Janezow quadangle, North Dakota, volume 1
[DE82-004150] p0399 H82-24629

Airborne gamma-ray spectrometer and magnetometer survey, Janezow quadangle, 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

MAGNETOACOUSTIC
MAGNETOACOUSTIC

MAGNETIC PROPERTIES
MAGNETIC SURVEYS

MAGNETIZED GENERATORS
U VARIATIONS

MAGNETIZATION
MAGNETIC MEASUREMENT
MAGNETIC SURVEYS

MAGNETOTELLURIC PROFILING
MAGNETIC SURVEYS

MAGNETOTELLURIC PROFILING
MAGNETIC SURVEYS
Method for refurbishing and processing parachutes
[HAD-AR-82-2930]

Composite repair system with long term latency
[AD-A116472]

Improving the MLS through enhanced cockpit displays
[0009 A82-10649]

Avionics implications from weapon systems
operational utility studies on Manned Air Combat
Simulators
[AIAA 81-2230]

Have we overlooked the pilot’s role in an
automated flight deck
[AIAA 81-2262]

Avionics systems simulation for the F/A-18 aircraft
[AIAA 81-2276]

Advanced display systems for crew stations of
tactical aircraft
[AIAA 81-2312]

The integration of control and display concepts
for improved pilot situational awareness
[0061 A82-13972]

The Maneuvering Flight Path Display: A flight
trajectory solution display concept
[0074 A82-14826]

Advanced cockpit for tactical aircraft
[0105 A82-16559]

Head-up displays - The integrity of flight
information
[0106 A82-16562]

Digital test pilot concept
[AIAA Papers 82-0259]

The NASA PL-78 BSL program – Developing computer
aided system design for accurate flight planning
[AIAA Papers 82-0340]

Flight simulation consoles, aid or obstruction -
Objective evaluation of control consoles of
modern fighter and tactics simulators
[0159 A82-19269]

Analysis and optimization of control systems in
piloted flight vehicles - Russian book
[0001 A82-22398]

Advanced display-control concepts for power plant
operation
[0275 A82-26121]

Flight simulators
[0334 A82-29928]

A modern approach to pilot/vehicle analysis and
the Heald-Smith criteria
[0489 A82-39125]

Evaluation of an automatic subsystem parameter
monitor -- for aircraft
[0502 A82-40552]

Applying advanced technology to flight station
design
[0504 A82-40887]

A restrained model helicopter, which is able to
fly, for investigations regarding human
multicue control behavior -- German thesis
[0503 A82-41687]

The aviation route forecast /ABF/ program - An
interactive system for pilot self-briefing ---
of meteorological information
[0553 A82-43821]

Pilots’ principles still applicable -- Computer
monitoring of fighter aircraft emergencies
[0581 A82-46254]

Using voice control onboard combat aircraft
[0692 A82-13956]

New developments in cockpit-human interfaces
[2255 A82-18215]

Theoretical linear approach to the combined
man-machine control system in manual control of an
aircraft
[RCA-P-3015/S/3044/43]

Functional requirements for the man-vehicle
systems research facility --- identifying and
correcting human errors during flight simulation
[RCA-CR-163345]

Technical approaches for measurement of human
errors
[RCA-CR-163346]

Aerosasional information data subsystems --- air
navigation
[0401 A82-25178]

Integrated flight trajectory control
[AD-A119998]

Advanced technology and fighter cockpit design:
Which drives which?
[0456 A82-26319]
A preliminary analysis of TP-34-10D/400 jet engine
Component data in support of the MAP system
implementation at NASA Ames
[AD-A104247] p0558 W82-30308
Aircraft thrust/power management can enhance
defense, reduce engine maintenance costs and
improve readiness
[AD-A117932] p0615 W82-34926
MANAGEMENT SYSTEMS
NASA MANAGEMENT INFORMATION SYSTEMS
Fuel efficient flight profiles in an ATC flow
management environment
[AD-A104247] p0663 W82-13078
Air Traffic Flow Management and Air Traffic Flow
Control
[AD-A104247] p0334 W82-29923
Future terminal area systems
[AD-A104247] p0483 W82-38462
MANEUVERABILITY
C-5A unsurfaced taxi and off-load demonstrations
[AIAA PAPER 81-2439] p0055 W82-13875
Use of a helmet-mounted matrix display for
presenting environmental maneuverability
information during simulated close combat
[AD-A104247] p0092 W82-13061
Maneuver load control for the reduction of design
loads and improvement of the maneuverability of
modern fighter aircraft
[BVW-PWT-61-2] p0099 W82-13118
The armed helicopter in air to air missions
[AD-80-317-01-001] p0201 W82-17158
A control model for maneuvering flight for
application to a computer-flight testing program
Preliminary investigations into the addition of
auxiliary longitudinal thrust on helicopter
stability
[AD-A104247] p0269 W82-18155
Optimization of thrust algorithm calibration for
Computing System (TCS) for Thrust the NASA
Highly Maneuverable Aircraft Technology (HiMAT)
Vehicle's propulsion system
[NASA-CR-163121] p0317 W82-21198
Combat Aircraft Maneuverability
[AGARD-CP-319] p0364 W82-22187
A review of recent AGARD Symposia on the Angle
of Maneuverability of Combat Aircraft
[AD-A104247] p0364 W82-22188
Review of practical experience on combat aircraft
maneuverability
[AD-A104247] p0346 W82-22189
Experimental flight test programs for improving
combat aircraft maneuverability by maneuver
flaps and pylon split flaps
[AD-A104247] p0347 W82-22192
The development of cryogenic wind tunnels and
their application to maneuvering aircraft
technology
[AD-A104247] p0347 W82-22192
State of the art and recent perspectives on the
study of the loss of control and spin
[AD-A104247] p0367 W82-22196
Aerelastic tailoring for control and performance:
Are requirements compatible?
[AD-A104247] p0348 W82-22200
Tail configurations for highly maneuverable combat
aircraft
[AD-A104247] p0348 W82-22201
The study of combat aircraft maneuverability by
air to air combat simulation
[AD-A104247] p0348 W82-22205
Helicopter Handling Qualities
[NASA-CP-2019] p0364 W82-23208
Influence of maneuverability on helicopter combat
effectiveness
[AD-A104247] p0365 W82-23212
Supercritical maneuvering fighter configuration.
Wind-tunnel investigation at Mach numbers of
0.60 to 0.95
[NASA-TN-46513] p0567 W82-31303
MANEUVERABLE SPACECRAFT
NASA AEROSPACEPLANES
MARKETS
NASA AIRCRAFT MANEUVERS
NASA EVACTIONS ACTIONS
NASA SLIDELIP
MARITFOPS
Active clearance control system for a turboprop
[NASA-CR-12938-1] p0591 W82-32366
RANGING
NASA SPACE SHUTTLES
NASA CONTROL
NASA VISUAL CONTROL
Improving the NIL through enhanced cockpit displays
The effects of the delays on system subject to
manual control
[AD-A104247] p0099 W82-10649
Control law design for transport aircraft flight
tasks
[AD-A104247] p0039 W82-11080
An investigation of multi-axes isometric side-arm
controllers in a variable stability helicopter
[NASA-TR-407593] p0209 W82-17226
Theoretical linear approach to the combined
manipulation system in manual control of an
aircraft
Hydraulic actuator mechanism to control aircraft
pilot movements through dual input commands
[NASA-CASE-LAB-12412] p0396 W82-24205
Flight experiments using the front-side control
technique during piloted approach and landing in
a powered lift STOL aircraft
[NASA-TM-10337] p0456 W82-26318
Manual crossover flight control system for A-10
aircraft: Pilot performance and simulator cue
effects
[AD-A113463] p0526 W82-28302
Training aircraft design considerations based on
the successive organization of perception in
manual control
[AD-A113463] p0563 W82-30840
Effects of higher order control systems on
aircraft approach and landing longitudinal
handling qualities
[AD-A113463] p0563 W82-30848
Evaluation of a trajectory command concept for
manual control of carrier approach and landings
[AD-A113463] p0563 W82-30856
Application of a pilot control strategy
identification technique to a joint FAA/NASA
ground based simulation of head up displays for
COTOL aircraft
[AD-A113463] p0563 W82-30857
Design, simulation and evaluations of advanced
display concepts for the F-16 control configured
vehicle
[AD-A113463] p0563 W82-30859
MANUALS
NASA INSTALLATION MANUALS
NASA OPERATIONS (COMPUTER PROGRAMS)
Development and validation of the V/STOL
aircraft program and stability and control manual
[AIAA PAPER 81-2111] p0107 W82-16903
MANUFACTURING
CAB/CAW in British Aerospace - Aircraft Group
[AD-A104247] p0229 W82-24373
Applications of structural adhesives in production
[AD-A104247] p0326 W82-28088
Point of view of a helicopter manufacturer on
airworthiness regulations
[AD-A104247] p0247 W82-18137
National production methods for the manufacture of
helicopter rotor blades --- 80-105 helicopter
[BBB-OD-312-82-0] p0316 W82-21168
Development and demonstration of manufacturing
processes for fabricating graphite/LARC 160
polyimide structural elements
[NASA-CR-168509] p0357 W82-22315
Development of materials and manufacturing
technology over the next 20 years: Composite
materials
[BBB-OD-312-82-0] p0357 W82-22315
MAP MATCHING GUIDANCE
Airborne Electronic Map Systems. I - Design
[AD-A104247] p0071 W82-16770
Magnetic anomalies as a reference for ground-speed
and map-matching navigation
[AD-A104247] p0381 W82-30314
An automatic map reader suitable for use in
helicopters
[AD-A104247] p0401 W82-37775
RANGING
NASA PHOTOGRAPHY
NASA THERAPEUTIC RANGING
NASA THERMAL RANGING
NASA-APL INDEX
The subject index:

 Modal characteristics of rotor blades: Finite element approach and measurement by ground vibration test p0245 M82-18127

 MASS DISTRIBUTION
 Experimental determination of parachute apparent mass and its significance in predicting dynamic stability
 [AIAA PAPER 81-1920] p0004 M82-10406

 An automated technique for improving modal test/analysis correlation [AIAA PAPER 82-0640] p0337 M82-30137

 Two-dimensional apparent masses for cross-flow sections of wing/store configurations p0583 M82-46601

 MASS FLOW

 Accuracy expectations for gas turbine and centrifugal compressor performance testing [ASME PAPER 82-GT-128] p0425 M82-35358

 MASS FLOW RATE

 Design and testing of a new double labyrinth seal [ASME PAPER 81-LGT-50] p0127 M82-18452

 MASS SPECTROSCOPY

 Control electronics for air-borne quadrupole ion mass spectrometer [AD-4115399] p0560 M82-30356

 Analysis and environmental fate of Air Force distillate and high density fuels [AD-1159599] p0595 M82-32512

 MASS TRANSFER

 Hypersonic interactions with surface mass transfer. 1 - Steady flow over a slender wedge wing [AIAA PAPER 82-0579] p0374 M82-31944

 MATCHING

 Strong matching method for computing transonic viscous flows including wakes and separations - Lifting airfoils p0010 M82-10821

 MATERIAL ABSORPTION

 The effects of absorbed moisture upon the physical properties of stretched acrylic materials p0228 M82-24320

 MATERIAL BALANCE

 Balancing of flexible rotors by the complex modal method [ASME PAPER 81-DET-46] p0161 M82-19310

 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 p0533 M82-29285

 MATERIALS HANDLING

 Handling problems associated with jet aircraft fuels p0112 M82-17288

 British aerospace begins update effort [AWARD 82-30624] p0376 M82-32624

 Generation of electrostatic charge in fuel handling systems: A literature survey [AD-1106056] p0137 M82-14454

 Advanced internal cargo system concept demonstration and evaluation [AD-111990] p0451 M82-26282

 MATERIALS SCIENCE

 Critical metals conservatism, recycling and substitution [AWARD 82-769] p0357 M82-22348

 MATERIALS SCIENCE

 Materials and aeronautics p0274 M82-26025

 Technology transfer; Proceedings of the Thirteenth National Technical Conference, Mount Pocono, PA, October 13-15, 1981 p0291 M82-27401

 New materials fly better and cheaper p0342 M82-31826

 Evaluation criteria for aero engine materials p0344 M82-30605

 MARS

 The possibility of using deformable rubber components in landing gear p0009 M82-10496

 Mach 2.0 rotating arm rain erosion test apparatus p0280 M82-26661

 Effects of filler materials upon rudder rain erosion performance at subsonic conditions
Mechanical Resource

Composite materials --- with emphasis for aircraft gas turbine parts
Processing and use of carbon fibre reinforced plastics --- Book
Effects of moisture on the mechanical properties of glass/epoxy composites
A review of U.S. Air Force research related to airframe and engine materials
Mechanical properties of a fiberglass prepreg system at cryogenic and other temperatures
Environmental and high strain rate effects on composites for engine applications
Effect of operating life on the mechanical properties of the materials and load-bearing capacity of the rotor elements of gas-turbine engines
Technical and economic comparisons of carbon fiber tape and woven fabric applications
Structural strength of materials and parts of gas turbine engines --- Russian book
Mathematical models of rotor strength and optimization in computer-aided design
Advantages and limitations in the use of diverse materials for aircraft construction --- composite versus metallic materials
Composite structural materials --- fiber reinforced composites for aircraft structures
The influence of protective treatment on the mechanical properties of superalloy parts
Mechanical properties of hot isostatic pressed P/m-titanium for helicopter components
Technical property characterization and modeling of structural materials --- for airframes and aircraft gas turbine engines
Determination of material properties by limited scan x-ray tomography

Mechanical Shock

The Shock and Vibration Digest, volume 14, no. 3

Mechanical Resonance

Vibrant Vibration

Medical Personnel

Flying doctor service in East Africa

Aerial Ambulance Service in Australia

Flying Doctor Service in East Africa

Medical Science

Ozone and aircraft operations

Medical Services

Aeromedical evacuation: Results, analysis, developments; International Aeromedical Evacuation Congress, Ist, Munich, West Germany, September 16-19, 1980, Reports
The marketing, organisation and financing of aeromedical evacuation by a notoriety organisation
Survey of aeromedical evacuation in Italy
The network of civilian air rescue in Germany
Ambulance helicopter in the Stockholm archipelago
Military assistance to safety and traffic /MABY/

Aircraft for secondary long range emergency

Application of the ABC helicopter to the emergency medical service role
Importance of a tactical cargo aircraft in emergency relief

Krausenringen Sea

Structure and variability of the Alboran Sea frontal system

Keratin Compounds

U TiOis

A new method for constructing two-dimensional orthogonal and non-orthogonal meshes

Kerosene Coatings

Kerosene/convective weather systems and aviation operations

Kerosene convective complexes and general aviation

Keratin Bonding

Metal-Bearing Bonding

A new resin for field repair

The promise of laminated metals in aircraft design

The experience of corrosion on French military aeroplanes

Metal Coatings

Aluminum Coatings

The protection of gas turbine blades - A platinum aluminide diffusion coating

Improved plasma sprayed McAlY coatings for aircraft gas turbine applications

Application and testing of metallic coatings on graphite/epoxy composites

Subject Index

Aerial ambulance service in Australia p0152 A82-19007
Flying doctor service in East Africa p0152 A82-19008
Air ambulance systems in the Republic of South Africa p0152 A82-19009
The situation of air rescue in Argentina p0152 A82-19010
Aeromedical evacuation in New Zealand p0153 A82-19011
A comparative study on mechanical vibration and noise during patient transportation p0153 A82-19013
Helicopter secondary applications for neurotraumatic emergencies p0153 A82-19015
Problems pertaining to aeronautical technology in the case of rescue operations with helicopters in mountainous areas p0153 A82-1901b
The helicopter in rescue operations in high-mountain areas p0153 A82-19019
Aircraft for secondary long range emergency ambulance flight p0154 A82-19021

Krausenringen Sea

Structure and variability of the Alboran Sea frontal system p0169 A82-20447

Keratin Compounds

U TiOis

A new method for constructing two-dimensional orthogonal and non-orthogonal meshes p0363 A82-33630

Kerosene Coatings

Kerosene/convective weather systems and aviation operations (AIAA Paper 82-0015) p0114 A82-17773
Kerosene convective complexes and general aviation p0580 A82-45832

Keratin Bonding

Metal-Bearing Bonding

A new resin for field repair p0291 A82-27412
The promise of laminated metals in aircraft design p0506 A82-40903
The experience of corrosion on French military aeroplanes p0211 A82-17355

Metal Coatings

Aluminum Coatings

The protection of gas turbine blades - A platinum aluminide diffusion coating p0063 A82-14364

Improved plasma sprayed McAlY coatings for aircraft gas turbine applications p0176 A82-20742

Application and testing of metallic coatings on graphite/epoxy composites p0435 A82-37074
Communicating critical weather information to pilots -- (STEL)  
(AIAA paper 82-0016)  
p0265 822-27082

Aviation meteorology -- Russian book  
p0428 822-36972

The airplane route forecast /ARF/ program -- An interactive system for pilot self-briefing -- of meteorological information  
p0553 822-43821

Development and test of a tactical variability sensor  
p0579 822-45820

The airplane manufacturer and meteorology -- in prediction of weather effects on aircraft performance  
p0579 822-45821

Aircraft meteorological data relay /AMDAR/  
p0579 822-45822

Aviation meteorology in the 1980's -- a trend forecast  
p0580 822-45827

The Center Weather Service Unit program /CWSU/ -- for civil aviation  
p0580 822-45828

Weather support for helicopter operations in the Gulf of Mexico  
p0580 822-45829

The Aviation Route Forecast /ARF/ program -- An interactive system for Pilot Self-Briefing -- of meteorological information  
p0580 822-45830

The NHL real-time aviation weather information system -- An alternative to standard general aviation weather briefing procedures  
p0580 822-45834

Columbus, Ohio, Voice response system demonstration and evaluation  
[ID-4-104750]  
p0091 822-12304

Automated Pilot Advisory System  
[NASA-TN-73296]  
p0140 822-15027

Proceedings: Fifth Annual Workshop on Meteorological and Environmental Inputs to Aviation Systems  
[NASA-CP-2192]  
p0310 822-21139

Efficient transfer of weather information to the pilot in flight  
[NASA-CP-1929]  
p0591 822-32363

METEOROLOGICAL STATIONS U WEATHER STATIONS

METEOROLOGY

H LONG RANGE WEATHER FORECASTING

U MARINE METEOROLOGY

U MICROMETEOROLOGY

U OPTOMETRIC METEOROLOGY

U WEATHER FORECASTING

A summary of the Naval Postgraduate School Research Program  
[NSA-TH-104752]  
p102 822-13975

Proceedings: Sixth Annual Workshop on Meteorological and Environmental Inputs to Aviation Systems  
[NASA-CP-2192]  
p0310 822-21139

METHODS

U MEASURING INSTRUMENTS

U METHACRYLATE RESINS

U THERMOPLASTICS RESINS

METHODS

Nor formation in flat, laminar, opposed jet -- methanol diffusion flames  
  p0326 822-28660

METHOD OF CHARACTERISTICS

Three dimensional flow investigation with a method of characteristics in the inlet region and the blade-to-blade channels of super sonic axial compressors  
[NSA-TH-637]  
p0068 822-12078

A method of characteristics solution for a finite oscillating supersonic cascade with thickness effects  
p0140 822-15560

METEOROLOGY

Combining analysis with optimization at Langley  
Research Center. An evolutionary process  
[NASA-TN-86472]  
p0400 822-24846

METHODS

U METEOROLOGY

U PROCEDURES

Automatic checking of measuring units in the Modane wind tunnels  
p0230 822-24383

MICROPROCESSORS

[OREPA, TP NO. 1982-10]  
p0390 822-34490

HELICOPTERS

B Radar mapping, archaeology, and ancient land use in the Maya lowlands  
[NSA-CS-184931]  
p0041 822-11514

MICROBALANCES

An evaluation of the Rosemount ice detector for closed water content measurements  
[FB82-158833]  
p0536 822-29321

MICROCOMPUTERS U MICROELECTRONICS

U MICROCOMPUTERS

Lockheed airborne Data System -- Distributed microcomputers provide on-board real-time analysis  
[AIAA paper 81-2367]  
p0060 822-13949

ARF -- A fault tolerant distributed microcomputer architecture for aircraft navigation and control  
p0293 822-27714

The detection of low level wind shear. II  
p0483 822-38463

A floating-point/multiple-precision processor for airborne applications  
p0544 822-41860

A Lorentz-C prototype navigation receiver for general aviation  
p0445 822-26208

Combined automatic gain control system  
p0446 822-26209

A floating-point/multiple-precision processor for airborne applications  
[NASA-TM-86252]  
p0452 822-26209

Attribute requirements for a simulated flight scenario microcomputer test  
[AAP-A115676]  
p0594 822-32389

MICROSCOPES

High-frequency monitoring of surface layers of metals  
p2021 822-23603

MICROELECTRONICS

Simulation reaches towards reality  
p308 822-33547

AEROBEOLOGY

Downbursts and microbursts -- An aviation hazard -- downdrafts beneath thunderstorms  
p0003 822-10214

MICROPARTICLES

Small engine inlet air particle separator technology  
[AABE paper 82-07-40]  
p0421 822-35299

MICROPHONES

Adapter for mounting microphone flush with the external surface of the skin of a pressurized aircraft  
[NASA-CAE-PHC-11072-1]  
p0398 822-24474

MICROPROCESSORS

A microprocessor-based data acquisition system for stall/spin research  
[AIAA paper 81-2377]  
p0002 822-10126

Navigation task partitioning in distributed-processing avionics systems  
p0009 822-10646

Digital avionics display processor  
[AIAA paper 81-2311]  
p0031 822-13513

An operational model of specific range for microprocessor applications in piston-prop general aviation airplanes  
[AIAA 81-2330]  
p0552 822-16526

Flight testing De Havilland Aircraft Limited  
DASH-8 utilizing onboard data analysis by microprocessor  
[AIAA paper 81-2507]  
p0057 822-13907

Application of a microprocessor controlled cockpit display for enhanced pilot control of flight test maneuvers  
[AIAA paper 81-2510]  
p0557 822-13908

A multi/microprocessor system for ATCSBS nonaneural data processing  
p0071 822-14777

Microprocessor flight control application study  
p0073 822-14796

Energy management in military combat aircraft  
p1669 822-20515

The control of aircraft gas turbines for fuel economy  
p1669 822-20516

Lightweight ATC systems  
p2020 822-23321

Packaging the VSCF system for an aircraft engine  
p2030 822-24383

A-301
Further application and development of an engine usage/ life monitoring system for military services

Heavy lift helicopters - A national technology opportunity

High performance terminal air traffic control

HILITIBI AIBCB1FT COLLISIONS

Optical properties of airfield lighting fixtures

BICBOBAVE SBITCHIHG

International plans for civil and military co-ordination

BICBOI1TE TB11SHISSIOB

Military aircraft operability - RAP engineering experience and requirements. I - Thoughts of a squadron engineer

HILIT1BI AIB FACILITIES

Military aircraft operability - RAP engineering experience and requirements. II

BICBOBAVE SCATTBBIIG

Operability of military aircraft - Avionic design aspects

HILITIBI AIBCB1FT

Operability of military aircraft - System design and cost trends

BICBOI1TE TB11SHISSIOB

Flight testing in the eighties; Proceedings of the Eleventh Annual Symposium, Atlanta, GA, August 27-29, 1980

MICROWAVE SWITCHING

P0050 882-15607

Fiber-optic immunity to EMI/EMF for military aircraft

BICBOI1TE TB11SHISSIOB

[AlAA 81-2339]

P0052 882-13529

Recent improvements at the Naval Air Test Center for increased test system flexibility

MICROWAVE TRANSMISSION

P0056 882-13888

Collection and simulation of spatial infrared signatures of military jet aircraft

BICBOI1TE TB11SHISSIOB

[AlAA 81-2392]

P0050 882-13921

KC-10, flight test program management - The contractor's viewpoint

BICBOI1TE TB11SHISSIOB

P0064 882-14384

Future directions in CSI integrated avionics

BICBOI1TE TB11SHISSIOB

P0067 882-14720

New advances in signal processing technology for integrated CSI avionics - Communication, Navigation, and Identification

BICBOI1TE TB11SHISSIOB

P0070 882-14762

Applications of covariance analysis simulation to avionic flight testing

BICBOI1TE TB11SHISSIOB

P0070 882-14767

Microprocessor flight control application study

BICBOI1TE TB11SHISSIOB

P0073 882-14796

Testing of the SJX-5A control system for the F/A-18/HORNET/ aircraft

BICBOI1TE TB11SHISSIOB

P0078 882-14955

Crashtrophy military passenger seat development

BICBOI1TE TB11SHISSIOB

P0106 882-15652

Type 111 V/STOL - One aircraft for all support missions

BICBOI1TE TB11SHISSIOB

P0109 882-16917

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

BICBOI1TE TB11SHISSIOB

P0129 882-18837

Application of thrusting ejection to tactical aircraft having vertical lift and short-field operation

BICBOI1TE TB11SHISSIOB

P0156 882-19211

Experience and needs of civil and military flight simulator users; Proceedings of the Flight Simulation Symposium, London, England, April 7, 8, 1981

BICBOI1TE TB11SHISSIOB

P0170 882-20526

The uses of airships in the Royal Navy

BICBOI1TE TB11SHISSIOB

P0173 882-20677


BICBOI1TE TB11SHISSIOB

P0174 882-20560

Design for operability of military aircraft RAP engineering experience and requirements. I - Thoughts of a squadron engineer

BICBOI1TE TB11SHISSIOB

P0174 882-20561

Aircraft operability - RAP engineering experience and requirements. II

BICBOI1TE TB11SHISSIOB

P0174 882-20562

Operability of military aircraft - Avionic design aspects

BICBOI1TE TB11SHISSIOB

P0174 882-20564

Operability of military aircraft - System design and cost trends

BICBOI1TE TB11SHISSIOB

P0174 882-20565

Flight testing in the eighties; Proceedings of the Eleventh Annual Symposium, Atlanta, GA, August 27-29, 1980

BICBOI1TE TB11SHISSIOB

P0176 882-20751

Fired gun controller design for aircraft

BICBOI1TE TB11SHISSIOB

P0221 882-23441

Transparency development needs for military aircraft in the 1980's

BICBOI1TE TB11SHISSIOB

P0225 882-26302

Aircraft transparency bird impact analysis using the RAGA computer program

BICBOI1TE TB11SHISSIOB

P0227 882-26315

BICBOI1TE TB11SHISSIOB

P0229 882-24359

Aircraft transparency bird impact analysis using the RAGA computer program

BICBOI1TE TB11SHISSIOB

P0229 882-24359
**SUBJECT INDEX**

- **MISSILE WAVES**
  - Northrop ECM - 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 rotor platforms and their mission potential
  - V/STOL aircraft and fluid dynamic
  - 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

- **MISSILE WAVES**
  - A study of potentially low cost milliwave wave radiometric sensors
  - Tracking of low-altitude targets by a combined X/Ka-band radar system

- **MINERAL WAVES**
  - A history of aircraft piston engine lubricants
  - Strategic materials - Technological trends

- **MINERS (EXCAVATIONS)**
  - Study of air compressor hazards in underground and surface mines
  - A miniature electro-optical equipment

- **MINICOMPUTERS**
  - The use of the Weber method for microcomputer-assisted numerical analysis of airplanes
  - Low cost programmable multimaster FACILITY
  - Potentiality 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 avionic microprocessor

- **MINIMAL TECHNIQUE**
  - Feedback and minimal sensitivity

- **MINIMIZATION**
  - 0 OPTIMIZATION

- **MINIBAR DRAG**
  - Dual wing, swept forward swept rearward wing, and single wing design optimization for high performance business airplanes

- **MISSILE CASES**
  - 0 MISSILE BODIES

- **MISSILE CONFIGURATIONS**
  - Aerodynamic of tactical weapons to Mach number 8 and angle-of-attack of 100 deg
  - Performance considerations in the design of subsonic cruise missiles
  - Evaluation of supersonic missile aerodynamic prediction techniques
  - Development of advanced supersonic missile concepts
  - Store separation from cavities at supersonic flight speeds
  - Supersonic missile aerodynamic and performance relationships for low observables mission profiles
  - Design criteria for a missile distance target model
  - A terminal guidance simulator for evaluation of millimeter wave seekers
  - Subsonic and transonic roll damping measurements on fixed Finner - finned missile calibration model
  - Modelling of target radar scattering with application to guidance simulation
  - Store separation from cavities at supersonic flight speeds
Optimal control and estimation for strapdown seeker guidance of tactical missiles

Air-to-air missile guidance

Fixed pattern noise correction for staring arrays in guidance systems

Algorithms development for infra-red air-to-air guidance systems

Extension of proportional navigation by the use of optimal filtering and control methods

Optimal terrain-following feedback control for advanced cruise missiles

Quasilinearization solution of the proportional navigation problem

MISSILE DEFENSE

Performance considerations in the design of subsonic cruise missiles

Performance considerations in the design of supersonic cruise missiles

An aerodynamic and signature shaping technique for developing advanced supersonic missile concepts

Evaluation of supersonic missile aerodynamic prediction techniques

The cruise missile era dawns

Outsider's look at flight instrumentation

MISSILE DETECTION

By TARGET DETECTION

MISSILE GUIDANCE

U MISSILE CONTROL

MISSILE LAUNCHERS

A methodology for missile launch envelope display evaluation

The cruise missile era dawns

MISSILE SIGNATURES

An aerodynamic and signature shaping technique for developing advanced supersonic missile concepts

MISSILE STABILIZATION

U STABILIZATION

MISSILE SYSTEMS

Perspective for Controlled Weapons Technology: Report of the 90th Helicopter Forum

Naval versions of the Dauphin and the ASW-tailed weapon system - helicopter

MISSILE TESTS

Naval Weapons Center - Test and evaluation in the 1980's

Harpoon missile captive-carry dynamic environments on the A-6 aircraft

Pressure distributions on three different cruciform cruciform tail control surfaces of a wingless missile at Mach 1.60, 2.36, and 3.70,

Volume 1: Trapezoidal tail

MISSILE TRACKING

Automated radome performance evaluation in the Radio Frequency Simulation System /EFS/ facility at NCGM

Application of adaptive estimation to target tracking

Automatic handoff of multiple targets

Design criteria for a miss distance radar

Quasilinearization solution of the proportional navigation problem

Harpoon missile captive-carry dynamic environments on the A-6 aircraft

MISSILES

Air-to-air missiles

Air-to-surface missiles

Anti-ship missiles

Anti-tank missiles

Harpoon missile

Air-to-air missiles

Supersonic low altitude missiles

Surface to air missiles

Missile seeker guidance of tactical missiles

Missile launcher

Missile control

Missile systems

Perspective for Controlled Weapons Technology: Report of the 90th Helicopter Forum

Naval versions of the Dauphin and the ASW-tailed weapon system -- helicopters

Naval Weapons Center - Test and evaluation in the 1980's

Harpoon missile captive-carry dynamic environments on the A-6 aircraft

Pressure distributions on three different cruciform tail control surfaces of a wingless missile at Mach 1.60, 2.36, and 3.70,
NAVIER-STOKES EQUATION

A simple finite difference procedure for the vortex controlled diffuser
[AIAA PAPER 82-0109] p0115 A82-17788

Relaxation solution for viscous transonic flow
about fighter-type forebodies and afterbodies
[AIAA PAPER 82-0252] p0110 A82-17665

Aerodynamics - Retrospect and prospect /The 21st
Lancaster Memorial Lecture/
[AD-A111279] p0275 A82-26098

Numerical solution of Space Shuttle Orbiter flow
field
[AIAA PAPER 82-0028] p0286 A82-27083

Analysis of two-dimensional internal flows using a
primitive-variable relaxation Navier-Stokes
procedure
[AIAA PAPER 82-1003] p0416 A82-34998

Computational aerodynamics
p0581 A82-45851

Computation of high Reynolds number
internal/external flows
[NASA-TP-40049] p0935 A82-11046

Prediction of subsonic aircraft flows with jet
exhaust interactions
p0997 A82-13096

Numerical analysis of the scramjet-inlet flow
field by using two-dimensional Navier-Stokes
equations
[NASA-TP-1940] p0999 A82-13142

ACTA Mechanica Sinica (selected articles)
p0111 A82-14060

Blade-to-blade computations and boundary layer
corrections in axial compressors and turbines
p0206 A82-17202

The numerical solution of the Navier-Stokes
equations for incompressible turbulent flow over
airfoils
[AD-A111279] p0640 A82-26612

NAVIGATION

AT AIR NAVIGATION
AT AIR-WEATHER AIR NAVIGATION
AT AREA NAVIGATION
AT DEAD RECONING
AT DIGITAL NAVIGATION
AT DOPPLER NAVIGATION
AT INERTIAL NAVIGATION
AT LORAN
AT LORAN C
AT MAP-OF-THE-EARTH NAVIGATION
AT ORHGA NAVIGATION SYSTEM
AT RADAR NAVIGATION
AT RADIO NAVIGATION
AT SPACE NAVIGATION
AT SURFACE NAVIGATION
AT VACAN
AT THE OMNI RANGE NAVIGATION
Flight trajectory control investigation
[AD-A109542] p0935 A82-11048

An overview of optimal control in aerospace systems
p0938 A82-11074

Integrated control design techniques
p0257 A82-18224

Analysis of computing system configurations for
highly integrated guidance and control systems
p0363 A82-23189

Improvement program for the C-141 Navigation
Selector Panel
[AD-A111969] p0908 A82-25248

Visual technology research simulator, visual and
motion system dynamics
[AD-A111001] p0457 A82-26325

Quasilinearization solution of the proportional
navigation problem
[AD-A113668] p0668 A82-27273

Assessment of stereophotographs for fire control and
navigation in fighter aircraft
[AD-A111541] p0558 A82-30206

Aeronautics system development for the Tornado F MK
2
[AD-A1116179] p0590 A82-32361

A-7 flight software analysis
[AD-A1116179] p0594 A82-32386

NAVIGATION AIDS

AT RADAR BEACONS
AT RADAR DIRECTION FINDERS

Three navigation systems and their costs of
acquiring remote sensing data
p0801 A82-10049

Time referencing of data in an asynchronous
environment --- for fighter aircraft
[AIAA 81-2341] p0502 A82-13531

Estimation of the efficiency of radioelectronic
flight navigation systems
p0653 A82-13710

The application of programmable pocket calculators
for computations during survey flights
p0104 A82-16164

FLARS *60 - Position Location and Navigation
Symposium, Atlantic City, N.J., December 8-11,
1980, Record
p0122 A82-18126

Selecting the post 1990 civil aviation
radionavigation system
p0122 A82-18141

Solid-state VORTAC with remote maintenance and
monitoring
p0122 A82-18144

Flight measurements of Area Navigation System
performance using various combinations of ground
aids and airborne sensors
p0123 A82-18147

Evaluation of Loran-C enroute navigation and
non-precision approaches within the State of
Vermont
p0124 A82-18160

Navaidical aids on-board the Concorde
p0225 A82-24065

Radio-navigation equipment of aircraft - Devices
and operation --- Russian book
p0282 A82-26500

RNP - A fault tolerant distributed microcomputer
structure for aircraft navigation and control
p0293 A82-27714

Corona and antenna effects on the RH-53D
mine-sweeping helicopter and Bay seal navigation set
p0295 A82-27946

Problems in the simulation of correlation-extremal
navigation systems
p0492 A82-39403

Simulation of correlation-extremal receivers of
signals from mapping-phase radio-navigation
systems
p0492 A82-39404

The Center Weather Service Unit program/CW50/
civil aviation
p0580 A82-85288

Weather support for helicopter operations in the
Gulf of Mexico
p0580 A82-85298

The Aviation Route Forecast /ARF/ program - an
interactive system for Pilot Self-Briefing ---
computerized weather service
p0580 A82-85303

Flight evaluation of LORAN-C as a helicopter
compass and navigation aid in the Baltimore Canyon oil
exploration area
[AD-A105260] p0806 A82-12059

System for providing an integrated display of
instantaneous information relative to aircraft
attitude, heading, altitude, and horizontal
situation
[NASA-CR-3105-1] p0189 A82-16075

Terminal area automatic navigation, guidance, and
control research using the Microwave Landing
System (MLS). Part 2: BMV/MLS transition
problems for aircraft
[NASA-CR-3511] p0200 A82-17142

Aeronautical Information Data Subsystem (AIDS): A
ground-based component of air navigation
services systems
p0201 A82-17150

United States Coast Pilot 5. Pacific and Arctic
Coasts Alaska: Cape Spencer to Beaufort
[AZS-109562] p0254 A82-18201

Design of a catadioptric VCSB helmet-mounted
display
[AD-A109431] p0305 A82-20181

Round table discussion on the transfer of results
from the project "Aids to navigation and control of
air traffic"
[FUS-20-ATC-1981] p0395 A82-24192
**Subject Index**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wide field of view laser beacon system for three dimensional aircraft range measurements</td>
<td>p0468 H82-26216</td>
</tr>
<tr>
<td>Magnetic heading reference</td>
<td>p0468 H82-26260</td>
</tr>
<tr>
<td>Study of the global positioning system for maritime concepts/applications: Study of the feasibility of replacing maritime shipborne navigation systems with NAVSTAR</td>
<td>p0449 H82-26263</td>
</tr>
<tr>
<td>A laboratory evaluation of the suitability of a xenon flashtube signal as an aids-to-navigation beacon</td>
<td>p0449 H82-26265</td>
</tr>
<tr>
<td>General aviation activity and aviation survey</td>
<td>p0522 H82-28244</td>
</tr>
<tr>
<td>Flight evaluation of LOBA-C in the State of Vermont</td>
<td>p0523 H82-28278</td>
</tr>
</tbody>
</table>

**Network Synthesis**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study of the global positioning system for maritime concepts/applications: Study of the feasibility of replacing maritime shipborne navigation systems with NAVSTAR</td>
<td>p0449 H82-26263</td>
</tr>
<tr>
<td>FAA acceptance tests on the navigation system using time global positioning system Z set receiver</td>
<td>p0568 H82-13115</td>
</tr>
<tr>
<td>NAVI</td>
<td></td>
</tr>
<tr>
<td>U.S. Navy life support development trends</td>
<td>p0577 H82-14952</td>
</tr>
<tr>
<td>HASEP - Survival from crashed Navy helicopters</td>
<td>p0579 H82-14977</td>
</tr>
<tr>
<td>Initial F-18 carrier suitability testing</td>
<td>p0576 H82-20752</td>
</tr>
<tr>
<td>VSTOLs - We can build them, but can we sell them</td>
<td>p0596 H82-28281</td>
</tr>
<tr>
<td>Sea-based remotely piloted vehicles - X - Issues and concepts</td>
<td>p0332 H82-29714</td>
</tr>
<tr>
<td>X-wing and the Navy V/STOL initiative</td>
<td>p0385 H82-33915</td>
</tr>
<tr>
<td>A summary of the Naval Postgraduate School Research Program</td>
<td>p0102 H82-13975</td>
</tr>
<tr>
<td>Investigation of functional commonality of avionics systems in naval aircraft</td>
<td>p0133 H82-14088</td>
</tr>
<tr>
<td>Proceedings of the 12th Navy Symposium on aerocollisions, volume 1</td>
<td>p0463 H82-27225</td>
</tr>
<tr>
<td>Proceedings of the 12th Navy Symposium on aerocollisions, volume 2</td>
<td>p0472 H82-27312</td>
</tr>
<tr>
<td>Life enhancement of naval systems through advanced materials</td>
<td>p0560 H82-30404</td>
</tr>
<tr>
<td>WC-130 AIRCRAFT</td>
<td></td>
</tr>
<tr>
<td>UC=130 AIRCRAFT</td>
<td></td>
</tr>
</tbody>
</table>

**Bear fields**

The testing of aircraft under near field conditions | p0229 H82-24361 |

**Bear field analysis of airborne antennas** | p0361 H82-30462 |

**A computer program for the prediction of near field noise of aircraft in cruising flight:** User's guide | p0600 H82-33148 |

**Bear Wakes**

Theoretical analysis of wake-induced parachute collapse | p0661 H82-13963 |

**BearShore Water**

W/ COASTAL WATER

**Sho trouble Lahs**

Options for GTE precision automated tracking system --- airborne laser tracking system | p0403 H82-13020 |

**Netherlands**

Orienting description of air traffic control in the Netherlands | p0007 H82-12063 |

**NETS**

The net-skirt to a parachute canopy as a device to prevent inversion | p0007 H82-10412 |

**Network Analysis**

System data communication structures for active-control transport aircraft, volume 1 | p038 H82-29510 |

**Network Control**

A solution to the static geometry problem for JTIDS relative navigation | p0222 H82-12634 |

A new class of routing protocols for a proposed computer network linking tactical radar systems | p0553 H82-30393 |

A reconfigurable change network for distributed process control | p0197 H82-17108 |

Preliminary functional description of integrated flow management --- for air traffic control systems | p0313 H82-21171 |

**Network Synthesis**

Conceptual design of an integrated power and avionics information system | p072 H82-14788 |
AIRCRAFT ELECTRICAL EQUIPMENT - DESIGN AND OPERATION
--- Russian book

POWER SYSTEM DESIGN OPTIMIZATION USING LAPLACIAN
MULTIPLIER TECHNIQUES

A MARINE NAVSTAR GPS RECEIVER

FLIGHT CONTROL SYNTHESIS USING ROBUST OUTPUT
OBSERVERS

AIRCRAFT ELECTRICAL EQUIPMENT - DESIGN AND OPERATION
--- Russian book

DEFINITION OF DISPLAY/CONTROL REQUIREMENTS FOR
ASSAULT TRANSPORT NIGHT/ADVERSE WEATHER CAPABILITY

HELICOPTER NIGHT VISION SYSTEM SIMULATION EVALUATION

NOISEMANN
A STRESS REVIEW OF NASA'S COSAH (CONSERVATION OF
STRATEGIC SPACE MATERIALS) PROGRAM

NOXIDES

SILICON NOXIDES
SILICON NITRIDES
SILICON CARBIDES
SILICON OXIDES
SILICON NITRIDE

DEPOSIT FORMATION IN LIQUID FUELS. II - THE EFFECT
OF SELECTED COMPOUNDS ON THE STORAGE STABILITY
OF JET A TURBINE FUEL

EFFECT OF SOME METHANE COMPOUNDS ON THE STABILITY
OF JET A FUEL

NOX FORMATION IN FLAT, LAMINAR, OPPOSED JET
MIXED-DIFFUSION FLAMES

EFFECT OF FUEL-AIR-RATIO NONUNIFORMITY ON EMISSIONS
OF METHANE FLAMES

DEFINITION OF DISPLAY/CONTROL REQUIREMENTS FOR
ASSAULT TRANSPORT NIGHT/ADVERSE WEATHER CAPABILITY

HELICOPTER NIGHT VISION SYSTEM SIMULATION EVALUATION

NOISEMANNE
A STRESS REVIEW OF NASA'S COSAH (CONSERVATION OF
STRATEGIC SPACE MATERIALS) PROGRAM

NOXIDES

SILICON NOXIDES
SILICON NITRIDES
SILICON CARBIDES
SILICON OXIDES
SILICON NITRIDE

DEPOSIT FORMATION IN LIQUID FUELS. II - THE EFFECT
OF SELECTED COMPOUNDS ON THE STORAGE STABILITY
OF JET A TURBINE FUEL

EFFECT OF SOME METHANE COMPOUNDS ON THE STABILITY
OF JET A FUEL

NOX FORMATION IN FLAT, LAMINAR, OPPOSED JET
MIXED-DIFFUSION FLAMES

EFFECT OF FUEL-AIR-RATIO NONUNIFORMITY ON EMISSIONS
OF METHANE FLAMES
On the generation of side-edge flap noise

A comprehensive bibliography of literature on
helicopter noise technology
(AD-A103331)

Some applications of Hartman-type sources in
aircraft noise research — airborne shielding
(EAS-TF-AERO-1877)

Generation of noise by turbulence
(NOISECHECK-H-2005)

Aerosound from corner flow and flap flow
(NOISECHECK-C-166396)

NOISE HAZARDS
U. HAHBDS
U. NOISE (SOUND)

Quantification of airport community noise impact
in terms of noise levels, population density,
and human subjective response

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

Preliminary thoughts on helicopter cabin noise
prediction methods

Field studies of the Air Force procedures
(NOISECHECK) for measuring community noise
exposure from aircraft operations
(AD-A113672)

Airport noise

NOISE MEASUREMENT

Model helicopter rotor impulsive noise

Noise control measures in the new Singapore
International Airport

The effect of non-linear propagation in jet noise

Noise monitoring in airport communities

Ground reflection effects in aircraft noise
measurements

Mean flow and noise measurements in a Mach 3.5
pilot test tunnel

Exterior noise on the fuselage of light propeller
driven aircraft in flight

SEL and SPEL noise design coefficients for the
767 and T-38 aircraft

Noise of the SR-71 propeller model at 2 deg and 4
deg angle of attack

Effect of facility variation on the acoustic
characteristics of three single stage nozzles

Computer-program model for predicting horizontally
and vertically polarized VLF atmospheric radio
noise at elevated receivers

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

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

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

Fluctuating pressures on fan blades of a turbofan
engine: Static and wind-tunnel investigations

A preliminary comparison between the SR-71
propeller noise in flight and in a wind tunnel

The role of coherent structures in the generation
of noise for subsonic jets

Program for narrow-band analysis of aircraft
flight noise using ensemble averaging techniques

Recommendations for field measurements of aircraft
noise

An investigation of rotor harmonic noise by the
use of small scale wind tunnel models

Field studies of the Air Force procedures
(NOISECHECK) for measuring community noise
exposure from aircraft operations

Use of the cavitation tunnel at the Dutch Naval
Experiment station (NSP), Wageningen for the
determination of the acoustic source strength of
propeller cavitation

Estimated airplane noise levels in A-weighted
decibels

Forward velocity effects on fan noise and the
suppression characteristics of advanced inlets
as measured in the NASA T-40 by 80 foot wind
tunnel

A comprehensive bibliography of literature on
helicopter noise technology

Summary of airport technology needs

The impact and future direction of aircraft noise
certification

Noise pollution

Costs of noise nuisance from aircraft

Noise monitoring in airport communities

Quantification of airport community noise impact
in terms of noise levels, population density,
and human subjective response

Direct comparison of community response to road
traffic noise and to aircraft noise

The impact and future direction of aircraft noise
certification

Noise pollution and airport regulation

O'Hare International Airport — Impervious to
proposed state efforts to limit airport noise

The determination of the duration of an exposure
to aircraft noise — German theses

A comprehensive bibliography of literature on
helicopter noise technology

Assessment of community response to high-energy
aerodynamic noise

The impact of aircraft noise on the equilibrium of
airport residents: Supplementary analyses to
the study carried out around Orly

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

Effects of aircraft noise on the equilibrium of
airport residents: Supplemental analyses to
the study carried out around O'Hare

Taking into account nighttime annoyance in the
calculation of the psophic index

Noise impact on communities from aircraft

Assessment of community response to high-energy
impulsive sounds

Transportation noise, its impact, planning and
regulation

A study of general aviation community noise
impact and annoyance

Community noise
Subject Index

- Summary of airport technology needs
- Summary of community technology needs
- The noise impact of proposed runway alternatives at Craig Airport
- USAF Bioenvironmental noise data handbook. Volume 168: MD-3 tester, pressurized cabin leakage, aircraft
- USAF Bioenvironmental noise data handbook. Volume 169: P-106A aircraft, near and far-field noise

Noise Prediction

- An iterative finite element-integral technique for predicting sound radiation from turbomfan inlets in steady flight
- Pressure dependence of jet noise and silencing of blow-offs

Noise Prediction (Aircraft)

- Helicopter rotor trailing edge noise
- Rotortake characteristics relevant to rotor-stator interaction noise generation
- Effects of vane/blade ratio and spacing on fan noise
- The FAA's proposed helicopter certification rules

'Single Noise': An automatic calculation model for the prediction and control of fixed-wing aircraft noise. I - General considerations, theoretical bases and model analysis

Analytical prediction of aerospace vehicle vibration environments

Prediction of aircraft interior noise using the statistical energy analysis method

Comprehensive flight test flyover noise program

Can low-speed jet noise be predicted?

Methodology for small aircraft noise impact landing trajectories

The status of airport noise prediction, with special reference to the United Kingdom and Europe

The impact and future direction of aircraft noise certification

Interior noise considerations for advanced high-speed turboprop aircraft

Development and validation of preliminary analytical models for aircraft interior noise prediction

The prediction of helicopter rotor discrete frequency noise

A semiempirical high-speed rotor noise prediction technique

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

Helicopter rotor trailing edge noise prediction

Turboport cargo aircraft systems study

A shock wave approach to the noise of supersonic propellers

Study of cabin noise control for twin-engine general aviation aircraft

Annoyance caused by propeller airplane flyover noise: Preliminary results

Aircraft noise prediction program theoretical manual, part 1

Aircraft noise prediction program theoretical manual, part 2

STOL aircraft structural vibration prediction from acoustic excitation

Analytical prediction of the interior noise for cylindrical models of aircraft fuselages for prescribed exterior noise fields. Phase 2: Models for sidewall stiffened fuselage and stall acoustics with floor partition

Prediction of flyover jet noise spectra from static tests

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

Noise and economic characteristics of an advanced blended supersonic transport concept

A description of methodologies used in estimation of a-t weighted sound levels for FAA advisory circular AC-36-3P

'Integral Noise': An automatic calculation model for the prediction and control of fixed-wing aircraft noise. II - Noise measurement of a A-weighted sound levels for FAA Advisory circular AC-36-3P

An iterative finite element-integral technique for predicting sound radiation from turbomfan inlets in steady flight

Noise Propagation

The effect of nonlinear propagation in jet noise

Prediction of aircraft interior noise using the statistical energy analysis method

Helicopter propulsion systems. I: Vibration prevention systems on helicopters 2: Problem of noise in the cabin

Study of cabin noise control for twin-engine general aviation aircraft

Experiments on propeller noise

Propeller flow visualization techniques

Measurements of mean static pressure and far field acoustics of shock containing supersonic jets

Noise Reduction

'Quiet Please' --- aircraft hydraulic systems noise reduction

Design predictions for noise control in the cryogenic National Transonic Facility

Aircraft absorbers - Promise and practice --- sound attenuation

Noise control measures in the new Singapore International Airport
Inclusions and service induced cracks in a nature

Computer enhanced analysis of a jet in a cross-

Comparing the relationships between noise level
and annoyance in different surveys - A railway
noise vs. aircraft and road traffic comparison

Effects of repetition rate and impulsiveness of
simulated helicopter rotor noise on annoyance

The role of coherent structures in the generation
of noise for subsonic jets

Program for narrow-band analysis of aircraft
flyover noise using ensemble averaging techniques

Prediction of flyover jet noise spectra from
static tests

The role of coherent structures in the generation
of noise for subsonic jets

Comparison between probability of detection,
sensitivity and accuracy of five nondestructive
inspection methods - high strength steel
aircraft undercarriage retraction cylinders

Detective and prevention of corrosion in Royal Air
Force aircraft

Positron annihilation --- aircraft industry

APPLICATIONS; fault detection

Comparison between probability of detection,
sensitivity and accuracy of five nondestructive
inspection methods - high strength steel
aircraft undercarriage retraction cylinders

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

Program for narrow-band analysis of aircraft
flyover noise using ensemble averaging techniques

Prediction of flyover jet noise spectra from
static tests

Acoustic emission in jet engine fan blades

Nondestructive testing in aircraft construction
using holographic methods

Recommended practice for a demonstration of
Nondestructive Evaluation /NDE/ reliability on
aircraft production parts - Introduction to the
guidelines

Acoustic emission inspection of aircraft engine
noise turbine blades for intergranular corrosion

In-flight acoustic emission monitoring

A review of the history of nondestructive testing in
Japan

In-service inspection methods for graphite-epoxy
structures on commercial transport aircraft

Control methodology: Nondestructive testing in the
aeronautics industry

US Naval fleet aircraft corrosion

Detection and prevention of corrosion in Royal Air
Force aircraft

Positron annihilation --- aircraft industry

APPLICATIONS; fault detection

Comparison between probability of detection,
sensitivity and accuracy of five nondestructive
inspection methods - high strength steel
aircraft undercarriage retraction cylinders

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

Program for narrow-band analysis of aircraft
flyover noise using ensemble averaging techniques

Prediction of flyover jet noise spectra from
static tests

Acoustic emission in jet engine fan blades

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noise turbine blades for intergranular corrosion

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Japan

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structures on commercial transport aircraft

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aeronautics industry

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Detection and prevention of corrosion in Royal Air
Force aircraft

Positron annihilation --- aircraft industry

APPLICATIONS; fault detection

Comparison between probability of detection,
sensitivity and accuracy of five nondestructive
inspection methods - high strength steel
aircraft undercarriage retraction cylinders
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
[p0013 A82-1122A]
The design of exact nonlinear model followers --- with application to trajectory autopilot for helicopter
[p004a A82-13125]
An approach to robust nonlinear control design --- with illustration of J-85 turbojet engine simulation
[p0045 A82-13128]
Application of the concept of dynamic trac control and nonlinear system inversion to automatic control of a vertical attitude takeoff and landing aircraft
[p0047 A82-13466]
Integrated flight testing based on nonlinear system identification data processing techniques
[p0064 A82-14389]
Describing function analysis of nonlinear nose gear failure
[ASME PAPER 81-WA/DSC-20] p0234 A82-24565
Flutter analysis using nonlinear aerodynamic forces
[p0030 N82-10056]
A nonlinear response analysis for coupled rotor-fuselage systems
[p0043 A82-37794]
An analysis of a nonlinear instability in the implementation of a VTOL control system during hover
[AIAA 82-1611] p0605 A82-38990
Theoretical and experimental investigation of some nonlinear characteristics of electrohydraulic servovalves --- Graman thesis
[p0552 A82-43660]
A geometric approach to multivariable control system synthesis
[p0303 N82-10056]
Theory of stochastic optimal control some basic notions
[p0038 N82-11075]
Application of nonlinear systems inversion to automatic flight control design: System concepts and flight evaluations
[p0039 N82-11083]
Analysis of a nonlinear attitude tracking method
[AD-100876] p0363 N82-19197
Application of the theory of bifurcations to the study of the loss of control in combat aircraft
[p0367 N82-22198]
An analysis of a nonlinear instability in the implementation of a VTOL control system
[NASA-TM-82420] p0356 N82-22281
The determination of critical flutter conditions of nonlinear systems
[BAE-TR-7006C-986] p0397 N82-24210
Nonlinear structural and life analyses of a combustor liner
[NASA-TM-82848] p0399 N82-24501
Notes on lateral-directional pilot induced oscillations
[AD-1113996] p0472 N82-27322
The determination of gust loads on nonlinear aircraft using a power spectral density approach
[ARL-TR-81203-U] p0526 N82-28303
System identification of nonlinear aerodynamic models
[p0540 N82-29996]
Applications to aeronautics of the theory of transformations of nonlinear systems
[NASA-TM-82429] p0540 N82-30013
Modeling of a tracking radar in terms of a nonlinear second order phase loop lock
[AD-1115628] p0596 N82-32580
NONLINEARITY
Linear and nonlinear analysis of vortex whistle: Another blade buster
[p0146 N82-15067]
The effects of slight non-linearities on modal testing of helicopter-like structures
[p0246 N82-18130]
Quantization solution of the proportional navigation problem
[AD-1116668] p0468 N82-27273

NOSSES (FOREBODIES)

NOSSEPFLATION
U ENERGY ABSORPTION

NOSSEIDITY
U FLEXIBILITY

NOSSEPITON FLOW
Recent improvements in prediction techniques for supersonic weapon separation
[AIAA PAPER 81-0170] p0116 A82-17820
Allowance for flow nonuniformity in the minimum section in the optimal contouring of the expanding part of a nozzle
[p0274 A82-25798]
Effect of fuel-air-ratio nonuniformity on emissions of nitrogen oxides
[NASA-TP-1798] p0099 N82-13143
Research on turbine rotor-stator aerodynamic interaction and rotor negative incidence stall
[AD-110341] p0318 N82-21203
Rough analysis of installation effects on turboprop noise
[NASA-TH-82929] p0574 N82-32082
Computation of three dimensional unsteady nonuniform flow in the blade-free annular channel of a turbomachine --- military aircraft, turbocompressors
[ONERA-MF-1982-2] p0592 N82-32372

NOSSEPICIS FLOW
U INVISICID FLOW

NOSPE AIRCRAFT
MC-160 AIRCRAFT
NORMAL FORCE DISTRIBUTION
U FORCE DISTRIBUTION

NORMAL SHOCK WAVES
An inviscid-viscous interaction treatment to predict the blade-to-blade performance of axial compressors with leading edge normal shock waves
[ASME PAPER 82-02-135] p0425 A82-35363

NORTH AMERICAN AIRCRAFT
NT B-1 AIRCRAFT
NT B-70 AIRCRAFT
NT F-100 AIRCRAFT
NT F-10 AIRCRAFT
NT F-2 AIRCRAFT

NORTH DAKOTA
Airborne gamma-ray spectrometer and magnetometer survey. Jamestown quadrangle, North Dakota, volume
[DE82-004169] p0399 N82-24630
Airborne gamma-ray spectrometer and magnetometer survey. Jamestown quadrangle, North Dakota, volume 2
[DE82-004169] p0399 N82-24630

NORTHERN HEMISPHERE
NU ARTIC REGIONS

NORTHROP AIRCRAFT
NT P-5 AIRCRAFT
NT P-18 AIRCRAFT
NT T-38 AIRCRAFT

NOSE INLETS
Thrust modulation methods for a supersonic VTOL aircraft
[NASA-TM-82747] p0048 N82-13112

NOSE TIPS
Analysis and wind tunnel tests of a probe used to sense altitude through measurement of static pressure
[AIAA PAPER 82-1361] p0489 N82-39128
Development and laboratory testing of a thermal emission velocimeter for application to an erosion nose tip test facility
[AD-1107713] p0213 N82-17462
Comparison of numerical results and measured data for smooth and indented nosetips
[AD-111778A] p0460 N82-26615

NOSE WHEELS
Describing function analysis of nonlinear nose gear shaker
[ASME PAPER 81-WA/DSC-20] p0234 A82-24565
Electro-hydraulic nose wheel steering of the Dornier 228
[p0389 N82-34737]
CV-10A nose gear fork damage analysis
[AD-111492] p0607 N82-25240

NOSES (FOREBODIES)
P-5 Shark Nose Badges - A development overview
[p0281 A82-26470]
Corporate flight test boos for Nomad #22 aircraft
[ARL-0006-78] p0607 N82-27289

A-319
SUBJECT INDEX

HISTOCLES
Development of improved high temperature coatings for IH-792 - HF
[TASA-CH-165395]
op0136 882-1833

Tests and analysis of a vented D thrust deflecting nozzle on a turbofan engine --- conducted at the outdoor aerodynamic research facility of the
Aero Research Center
[TASA-CH-165299]
op0301 882-20143

NUCLEAR AUXILIARY POWER UNITS

NT SNAP
NUCLEAR ELECTRIC POWER GENERATION
NT NUCLER POWER PLANTS
NT SNAP

NUCLEAR PARTICLES
NT ALPHA PARTICLES
NT PROTONS
NUCLEAR POWER PLANTS

Advanced display-control concepts for power plant operation
[p0275 A82-26121

NUCLEAR PROPULSED AIRCRAFT

Very large aircraft with alternate fuels - LH2
[ALAA PAPER 82-0513]
op0376 882-31986

NUCLEAR PROPULSION

The feasibility of a high-altitude aircraft platform with consideration of technological and societal constraints
[TASA-TH-64508]
op0535 882-29313

NUCLEAR RADIATION

Effects of lightning and nuclear electrostatic pulse on an advanced composite aircraft
[p0288 A82-27144

NUCLEAR REACTIONS
NT POSITION AMPLIFICATION
NUCLEAR WASTES
NT RADIOACTIVE WASTES
NUCLEAR (NUCLEAR PHYSICS)
NT ALPHA PARTICLES

NUCLEUS
NT TEITION
NUMBER THEORY
NT FLOATING POINT ARITHMETIC
NUMERICAL ANALYSIS
NT APPROXIMATION
NT COMPUTATIONAL FLUID DYNAMICS
NT ERROR ANALYSIS
NT FINITE DIFFERENCE THEORY
NT FINITE ELEMENT METHOD
NT FINITE VOLUME METHOD
NT INTERPOLATION
NT ITERATION
NT ITERATIVE SOLUTION
NT LEAST SQUARES METHOD
NT MONTE CARLO METHOD
NT MONOGRAPHS
NT NUMERICAL INTEGRATION
NT PADE APPROXIMATION
NT RAILEIGH-SITZ METHOD
NT RELAXATION METHOD (MATHARISCTICS)
NT HEDGE-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 mass control speeds
[p0021 A82-12564

Air-to-air combat analysis - Review of
differential-gaming approaches
[p0054 A82-13115

Numerical computation of optimal atmospheric trajectories involving staged vehicles
[ALAA PAPER 82-0360]
op0119 882-17902

A unified and generalized definition of static longitudinal stability in aircraft
[p0077 A82-32135

Trends in structural analysis at ONERA
[ONERA, TP NO. 1962-2]
op0389 A82-33549

Numerical methods for solving boundary value problems for noncavitating and cavitating flow past wing profiles
[p0483 A82-39722

NUMERICAL CONTROL

The need for multivariable design and analysis techniques
[p0029 882-10049

Lifting surface theory for wings in low frequency small amplitude yawing and side slipping oscillating motions at low speeds
[p0131 882-14061

Results of calculations
[p0206 882-17198

The through flow calculations
[p0205 882-17199

A complete method for computation of blade node characteristics and responses in forward flight
[p0245 882-18126

Comparison of numerical results and measured data
[AD-A111794]
op0460 882-26619

Theoretical and experimental investigation of a new control system for the noncavitating and cavitating flow
[p0044 A82-13115

Integration of aerodynamic and geometric data
[p0137 882-14783

Analysis of numerical and experimental results for smooth and indented nosetips
[p0483 A82-38722

A computer-aided design tool for aerodynamic design
[p0499 882-40522

Aerospace digital system for the air traffic system
[p0507 A82-40906

Programmable controller system for wind tunnel
diversion valves
[p0543 A82-41046

Automated flight data processing
[p0554 A82-44222

The flight management computer
[FITE PAPER 811762]
op0555 A82-46233

Fits’ principles still applicable -- Computer
[p0581 A82-46254

monitoring of fighter aircraft emergencies
[AD-A108511]
op0554 A82-18195

Automation in the skies --- automatic air traffic control
[p0568 A82-44222

The Modular Automated Weather System (MAWS) concept
[p0568 A82-47224

--- airfield weather support
[p0137 882-14783

Distributed intelligence for air fleet control
[AD-A1080611]
op0253 882-18195

Software features applicable to inertial measurement unit self alignment
[AD-A1080511]
op0253 882-18195

Air traffic control en route computer modernization
[GPS-82-773]
op0303 882-20167

FAA air traffic control computer modernization
[GPS-82-375]
op0303 882-20168

Advanced aircraft electrical system control technology demonstrator. Phase I: Analysis and...
Numerical Flow Visualization

Problems of numerical simulation of unsteady three-dimensional viscous-gas flows in nozzles

Numerical solution of Space Shuttle Orbiter flow field

Application of computer generated color graphic techniques to the processing and display of three-dimensional fluid dynamic data --- for turbomfan mixer nozzle mixing process analysis

A system for the numerical simulation of sub- and transonic viscous attached flows around wing-body configurations

Mathematical modeling of unsteady separated flow past solid airfoil cascades

Turbulence modeling - Report of a Working Party

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

A numerical three-dimensional turbulent simulation of a subsonic VSTOL jet in a cross-flow using a finite element algorithm

The numerical solution of incompressible turbulent flow over airfoils

The problem of calculation of the flow around helicopter rotor blade tips

Separated flow around helicopter bodies

Current status of inlet flow prediction methods

A Schwer-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

WNYO RESINS

U POLYARID RESINS

Nyquist Diagram

Characteristic and principal gains and phases and their use as a multivariable control design tools --- generalizing Nyquist and root-locus diagram techniques

Oblique Wings

AD-1 oblique wing aircraft program

Unique flight characteristics of the AD-1 oblique-wing research airplane

Spine-tunnel investigation of a 1/13-scale model of the NASA AD-1 oblique-wing research aircraft

Observability (systems)

The use of observers on relaxed static stability aircraft

Instrument failure detection in partially observable systems

Flight control synthesis using robust output observers

Observability of the parameters of an inertial navigation system for a 360-degree coordinated turn

Observation

Navigation system for a 360-deg coordinated turn

A survey of U.S. Army helicopter main and tail rotor blade obstacle strikes

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

Terrain following/terrain avoidance system concept development

Oscillating

Ocean Data Acquisitions Systems

Two-frequency /Delta k/ microwave scatterometer measurements of ocean wave spectra from an aircraft

A comparison of Seasat-derived wave height with surface data

Ocean Data Platforms

Ocean Data Acquisitions Systems

Ocean Data Stations

Ocean Data Acquisitions Systems

Ocean Surface

Two-frequency /Delta k/ microwave scatterometer measurements of ocean wave spectra from an aircraft

Oceanographic 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

A survey of U.S. Army helicopter main and tail rotor blade obstacle strikes

Ventilation: Technigue to prevent helicopter rotor blade obstacle strikes

Advisory

Ocean Data Acquisitions Systems

Offshore Energy Sources

Flight evaluation of LOH-A-C as a helicopter navigation aid in the Baltimore Canyon oil exploration area

Offshore Platforms

The case for helicopter hoisting

Real-time simulation of an airborne radar for overwater approaches

Ongoing

Space Transportation System Flights

Ogden Wings

Variable Sweep Wings

On-3 Helicopter

Evolution of the Aeroscout

On-58 Helicopter

Cruise main rotor tunnel braced

Desain of a composite main rotor blade spar for fabrication by tunnel bracing

Airworthiness and flight characteristics test of an On-58C configured to a Light Coabat Helicopter (LCH)

Oil Additives

Optimization of requirements on the pitting-prevention properties of turbojet-engine oils

A-322
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
- Determination of an optimal control program for an aircraft power plant during climb
- 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
- Optimization of blade pitch angle for higher harmonic rotor control
- Considerations of open-loop, closed-loop, and adaptive multivariable control systems
- Robust Kalman filter design for active flutter suppression systems
- Parameter estimation applied to general aviation aircraft -- a case study
- Optimal three-dimensional turning performance of supersonic aircraft
- A modern approach to pilot/vehicle analysis and the real-time criteria
- Optimal control application in supersonic aircraft performance
- Design and flight testing of a digital optimal control general aviation autopilot
- Optimal open-loop aircraft control for go-around maneuvers under wind shear influence
- Models for controlling reliability in aviation --- Russian book
- Optimization of dispatching discipline in queueing systems with limited queues
- Choice of weight coefficients in the problems of the optimal damping of the elastic oscillations of a wing
- Design of high integrity multivariable control systems
- Multivariable design: The optimization of approximate inverses
- Flight trajectory control investigation
- Theory and applications of optimal control in aerospace systems
- An overview of optimal control in aerospace systems
- Theory of stochastic optimal control some basic notions
- An introduction to stochastic optimal control theory
- Design considerations for optimal flight control systems
- Design techniques for multivariable flight control systems
- Control law design for transport aircraft flight

OPTICAL BARRIERS

- Options for GTE precision automated tracking system
- Airborne laser tracking system
- Remote sensing of turbine engine gases
- Optical rangefinders
- Optical deflection
- Reducing reflections on the front surface of air traffic control displays

OPTICAL SCANNERS

- ST MULTISPECTRAL BAND SCANNERS
- An optical data link for airborne scanning systems
- Application of an optical data link in the airborne scanning system
- Opto-electronic 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 IIS 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 Aeronave Applications
- Test and evaluation of UV fiber optics for application for aircraft fire detector systems

OPTIMAL CONTROL

- Digital control for flexible aircraft using reduced order models
- On-line optimization of aircraft altitude and flight path angle dynamics
- Optimal trajectories in supersonic flight
- Target acceleration modeling for tactical missile guidance
- Game-theoretical method for the synthesis of aircraft control during landing approach
- Analysis and optimization of control system in piloted flight vehicles --- Russian book
OPTIMIZATION

Control design of flexible spacecraft
Optimal climb 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 aerodynamic flutter suppression
Extension of proportional navigation by the use of optimal filtering and control methods
Multi-variable aircraft control by maneuver commands: An application to air to surface gundery
A method for applying linear optimal control theory to the design of a regulator for a flexible aircraft --- improving riding quality in fighter aircraft
Optimal terrain-following feedback control for advanced cruise missiles
Multi-variable closed loop control 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

OPTIMIZATION

ST FLIGHT OPTIMIZATION
ST OPTIMAL CONTROL
ST TIME OPTIMAL CONTROL
ST TRAJECTORY OPTIMIZATION
Optimization of the principal design parameters of a passenger aircraft
Flight vibration optimization via conformal mapping
Multi-level optimal design of structures with fiber-composite stiffened-panel composite
Optimum journal bearing parameters for minimum rotor vibration response in synchronous whirl
Optimal shape design of turbine blades
Application of structural optimization techniques to reduce the external vibrations of a gas-turbine engine

OPTIMIZATION

Optimization of propeller blade shape by an analytical method
The use of optimization technique to design controlled diffusion compressor blades
A cost modeling approach to engine optimization
Efficient optimum design of structures - Program D000
Application of the sequential optimization method to the tuning of the natural frequencies of gas-turbine engine compressor blades
Optimum structural design for high speed transports
Optimizing aerospace structures for manufacturing cost
Optimization of canard configurations - An integrated approach and practical drag estimation method
Mathematical models of rotor strength and optimization in computer-aided design
An optimum design of fuselage structure
The application of geometric programming to the structural design of aircraft wings
Optimization in multi-variable design
Sensitivity analysis and optimization of aerelastic stability
Optimization of dispatching discipline in queueing systems with limited queues
The use of optimization techniques to design controlled diffusion compressor blades
Experimental verification of an aerodynamic parameter optimization program for wind tunnel testing

OPTIMIZATION

Optimization of compressor vane and blade settings
Experimental verification of an aerodynamic parameter optimization program for wind tunnel testing
A concept for a fuel efficient flight planning aid for general aviation
A linear decomposition method for large optimization problems. Blueprint for development
Combining analysis with optimization at Langley Research Center. An evolutionary process
Opportunities for wind-tunnel/flight correlation with new Boeing airplanes

Panel Optimization with Integrated Software (POIS). Volume 1: PANDA: Interactive program for preliminary minimum weight design
Mathematical models for the synthesis and optimization of spiral level gear tooth surfaces --- for helical gear transmissins

A-326
Supplementary studies on the sensitivity of optimized structures p0412 H82-25545
Use of optimization to predict the effect of selected parameters on computer aircraft performance [NASA-CH-169027] p0451 H82-26279
Minimum time turns constrained to the vertical plane [AD-A110946] p0416 H82-26317
Cost and benefits design optimization model for fault tolerant flight control systems [NASA-CH-159281] p0593 H82-22379
Circumferentially segmented duct lines optimized for azimuthal and standing wave sources --- reducing noise from turbofans engines galerkin method acoustic attenuation [NASA-TD-2075] p0614 H82-34190
OPTIMUM CONTROL
U OPTIMAL CONTROL
OPTIMUM THRUST PROGRAMMING
U THRUST PROGRAMMING
ORBIT DECAY
Prelaunch estimates of near Earth satellite lifetimes using quasi-dynamic atmosphere models — application to a proposed Brazilian satellite [INPE-2325-PFS/000] p0530 H82-29347
ORBIT SPACER UTILIZATION
Frequency sharing between passive sensors and aerodynamical navigation systems employing ground transponders in the band 4.2 - 4.4 GHz [NASA-CH-160041] p0449 H82-26261
ORBITAL FLIGHT TESTS (SHUTTLE)
U SPACE TRANSPORTATION SYSTEM FLIGHTS
ORTITAL SIMULATORS
U SPACE SIMULATORS
ORBITAL TRANSFER
U TRANSFER ORBITS
ORBITS
U TRANSFER ORBITS
ORSANCE
Relating Mach's mechanics - boats away --- weapons delivery of fighter aircraft at transonic speed p0556 H82-04467
ORES
U MINERALS
ORGANIC COMPOUNDS
U CARBON TETRAFLUORIDE
U CASTOR OIL
U CYCLIC COMPOUNDS
U FATTY ACIDS
U ORGANIC LIQUIDS
ORGANIC LIQUIDS
Ehological behavior of progressively shear-thickening solutions --- aircraft fuel polymer additives for fire protection in surrvable canister p0013 H82-11177
ORIFICE FLOW
Experimental investigation of total pressure loss and airflow distribution for gas turbine combustors p0081 H82-15606
Semi-empirical analysis of liquid fuel distribution downstream of a plain surface injector under cross-stream air flow [ASME PAPER 82-CT-16] p0420 H82-35285
ORJON AIRCRAFT
U F-3 AIRCRAFT
ORSITEOPPER AIRCRAFT
U RESEARCH AIRCRAFT
ORTGOLOGY
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 l-surface twisted p0033 H82-11015
OSCILLATING FLOW
Bifurcation analysis of nonlinear stability of aircraft at high angles of attack [ASME PAPER 82-0244] p0117 H82-17862
Computations of transonic flow over an oscillating airfoil with shock-induced separation [ASME PAPER 82-0350] p0119 H82-17900
Instantaneous turbulence profiles in the wake of an oscillating airfoil [ASME PAPER 82-0352] p0119 H82-17901
Responses of oscillating wings in weak shear flow p0121 H82-18021
The velocity potential for the harmonically oscillating, rectangular wing with inifinite span in nonlinear theory p0154 H82-19198
Flow field around an oscillating airfoil p0179 H82-20813
Suppression of self-oscillations in open wind tunnels p0274 H82-25794
Conditions of pulsed starting of supersonic wind tunnel diffusers p0274 H82-25795
The relaxation oscillation in ramjet combustion p0326 H82-28738
Developments in rotary wing aircraft aerodynamics p0265 H82-18120
INTERPICATION AND CONSTRUCTION OF A DYNAMIC SIMILARITY MODEL OF THE & 310 WINGS [SBE-PF-17/GFUB/62] p0255 H82-18121
OSCILLATIONS
U HARMONIC OSCILLATION
U PRESSURE OSCILLATIONS
U SELF OSCILLATION
U STABLE OSCILLATIONS
U WING OSCILLATIONS
Simulation of phugoid excitation due to hazardous wind shear [ASIA PAPER 82-0215] p0117 H82-17844
Analysis of a longitudinal pilot-induced oscillating experienced on the approach and landing test of the space shuttle [NASA-TH-61366] p0100 H82-13149
Comparison of analytical predictions of longitudinal short period pilot-induced oscillations with results from a simulation study of the space shuttle orbiter [NASA-TM-81267] p0368 H82-23236
Scinations on an F-43 in flight emergency [AD-A116873] p0605 H82-33358
OSCILLATIONS
U CARBON RAY TUBES
U PENDULUMS
OUTLETS
U WING DISPLACEMENTS
OUTPUT
Coupled rotor/airframe vibration analysis program manual. Volume 2: Sample input and output listings [NASA-CH-165952] p0573 H82-31966
OT-10 AIRCRAFT
OV-10A none gear fork damage analysis [AD-A111492] p0407 H82-25244
OVERCAST
U CLOUD COVER
OVERSHOTS
U HARMONICS
OXIDATION
Correlation of wear with oxidation of carbon-carbon composites p0285 H82-27068
Effect of some nitrogen compounds thermal stability of jet k [NASA-TM-82068] p0476 H82-27519
OXIDATION RESISTANCE
Improved plasma sprayed NiCrAlY coatings for aircraft gas turbine applications p0176 H82-20762
The effect of NaCl/v 1 in high temperature oxidation [ASME PAPER 82-CT-106] p0424 H82-35342
Oxidation-resistant materials for hot-gas turbines and jet engines, 1. p0563 H82-41725
Development of improved high temperature coatings for IN-792 + BF [NASA-CH-165395] p0136 H82-14333
GOXIDE FILMS
Correlation of surface characterization of phosphoric acid anodize oxide with physical properties of bonded specimens p0293 AB2-27437

OXIDES
N2 CARBON MONOXIDE
N2 NITROGEN OXIDES
N2 SILICON OXIDE
N2 OZONE
Oxidation of Fused Co and Gases

OXIDATION
Oxidation of Fused Co and Gases

GASKETS
Two-dimensional model studies of the impact of aircraft exhaust emissions on tropospheric ozone p0496 AB2-40124

Ozone and aircraft operations p0311 AB2-21145

In situ ozone data for comparison with laser absorption remote sensor: 1980-1982 program (NASA-TP-84471) p0413 AB2-25661

CONTRIBUTION
Air borne cabin air ozone contamination and compliance with regulations p0342 AB2-31057

Ozone and aircraft operations p0311 AB2-21145

P-3 AIRCRAFT
Configuration management techniques for automatic testing p0295 AB2-27893

P-31 HELICOPTER
Rotor preliminary design trade-offs for the Advanced Scout Helicopter p0280 AB2-26395

PACKAGES
N2 INSTUMENT PACKAGES
PACET SWITCHING
Next generation military aircraft will require hierarchical/multi-level information transfer systems --- packet switching p0197 AB2-17114

PACKET TRANSMISSION
N2 PACKET SWITCHING
Tactical Airborne Distributed Computing and Networks (AADC-CP-301) p0195 AB2-17086

PADE APPROXIMATION
Pade approximation applied to flow past thin airfoils p0176 AB2-20728

PAINTS
Automated Paint and Process Line /APPL/ --- for aircraft production (AIAA 81-2-166) p0002 AB2-10120

The experience of corrosion on French military aerodynamics p0211 AB2-17355

PANEL FLUTTER
Kelvin-Helmholtz stability analysis of air cushion landing gear truck flutters p0114 AB2-17608

PANEL METHOD (FLUID DYNAMICS)
Recent improvements in prediction techniques for supersonic weapon separation (AIAA PAPER 82-0-170) p0116 AB2-17820

Subsonic aerodynamics and flutter characteristics of several wings calculated by the SODA15% F1.1 panel method (AIAA PAPER 82-0772) p0341 AB2-30193

Subsonic 3-D surface panel method for rapid analysis of multiple geometry perturbations (AIAA PAPER 82-0993) p0374 AB2-31954

Lateral aerodynamics of delta wings with leading edge separation (AIAA PAPER 82-1306) p0490 AB2-39142

Computational aerodynamics p0581 AB2-45851

A numerical method for studying vanneel-jet-airfoil interaction in inviscid three-dimensional flow p0096 AB2-13094

Development of an efficient procedure for calculating the aerodynamic effects of planar variation (NASA-CR-3489) p0137 AB2-14529

The FPA wing body 81 computer program. A panel method for determination of aerodynamic characteristics at subsonic and supersonic speeds (NASA-TR-AD-1601) p0406 AB2-25230

User's manual for the Automated Paneling Technique (APT) and the Wing Body Aerodynamic Technique (WABAT) programs (NASA-CP-165895) p0566 AB2-31297

PANELS
N2 CURVED PANELS
N2 WING PANELS
Response of nonlinear aircraft structural panels to high intensity noise p0106 AB2-12041

Acceleration response of fuselage sidewall panels on a twin-engine, light aircraft p0129 AB2-18729

Design, fabrication and test of liquid metal heat-pipe sandwich panels (AIAA PAPER 82-0903) p0373 AB2-31898

Temperature fields in three-layer panels with a honeycomb filler during unsteady heating p0287 AB2-34135

Design and fabrication of coated composite hat-stiffened panels p0513 AB2-40978

Analysis of multiple load path panels containing impact damage p0203 AB2-17170

Study of noise reduction characteristics of composite fiber-reinforced panels, interior panel configurations, and the application of the tuned damper concept (NASA-CP-168745) p0322 AB2-21999

Flight service evaluation of Kevlar-49 epoxy composite panels in wide-bodied commercial transport aircraft (NASA-CR-165841) p0357 AB2-23216

Panel Optimization with Integrated Software (POIS) Volume 1: PANDA: Interactive program for preliminary minimum weight design (AD-A110961) p0411 AB2-25404

Panel Optimization with Integrated Software (POIS), Volume 2. User Instructions: ECHO and HRTS (AD-A112226) p0475 AB2-27411

Burtanic-induced wind loads (PB82-13267) p0476 AB2-27546

Noise transmission loss of aircraft panels using acoustic intensity methods (NASA-TP-2046) p0506 AB2-31069

PARABOLIC ANTENNAS
Prediction and performance of radome-covered reflector antennas p0080 AB2-15311

PARABOLIC BODIES
Helicopter rotor performance improvement by utilization of swept-back parabolic blade tip --- wind tunnel tests p0343 AB2-22151

PARABOLIC REFLECTORS
Prediction and performance of radome-covered reflector antennas p0080 AB2-15311

PARABOLIDS
U PARABOLIC BODIES
PARABOLIC DESCRIPT
Aerodynamics and performance of cruciform parachute canopies (AIAA PAPER 81-1919) p0006 AB2-10405

Experimental determination of parachute apparent mass and its significance in predicting dynamic stability (AIAA PAPER 81-1920) p0006 AB2-10405

Comparison of simulation and experimental data for a gliding parachute in dynamic flight (AIAA PAPER 81-1924) p0006 AB2-10409

Theoretical analysis of parachute inflation including fluid kinematics (AIAA PAPER 81-1925) p0006 AB2-10410

The constructed rigging line trials technique for assessing the opening characteristics of parachutes A-328
Advanced composite integral structures meet the challenge of future aircraft systems

Performance degradation of propeller/rotor systems due to ice accretion

A survey regarding the German-French development of the Circulation Control King-Upper

Digital computer simulation of modern aeronautical systems

Correlation of predicted vibrations and test data

The correlation of flight test and analytic fl-on-H model data

An experimental investigation of a bearingless variable speed fan

Analytic extrapolation to full scale aircraft

Analysis of an airplane windshield anti-icing system

General purpose research rotor

Evaluation criteria for aero engine materials

TUBOTRAINS - A programming language for the performance simulation of arbitrary gas turbine engines with arbitrary control systems

Development and application of a performance prediction method for straight rectangular diffusers

An inviscid-viscous interaction treatment to predict the blade-to-blade performance of axial compressors with leading edge normal shock waves

A stage-by-stage dual-spool compression system modeling technique

The certification of digital systems

Small turbojet engine augmentor design methodology

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

On the performance prediction of a centrifugal compressor scaled up

A critical appraisal of some current incidence loss models for the stator and rotors of a mixed flow gas turbine

Development and application of a performance prediction model for straight rectangular diffusers

General purpose research rotor

An alternate method of specifying bandwidth for flying qualities

Supersonic missile aerodynamic and performance relationships for low observables mission profiles

The correlation of flight test and analytic on-o-n air combat exchange ratios - Many-on-Many

Performance of an airplane windshield anti-icing system

Analytic extrapolation to full scale aircraft dynamics

An experimental investigation of a bearingless model rotor in hover

Correlation of predicted vibrations and test data for a wind tunnel helicopter model

Digital computer simulation of modern aeronautical digital communication systems

The prediction of propeller-wing interaction effects

Development of the Circulation Control Wing-Spacer Surface blowing powered-lift system for STOL aircraft

A survey regarding the German-French development of the program Alpha Jet

Electronic warfare system measure of effectiveness

Pneumatic tire model for aircraft simulation

A simplified method for predicting rotor blade airloads

The airplane manufacturer and meteorology - in prediction of weather effects on aircraft performance

Energy methods used in air combat performance comparisons

Computational aerodynamics

Parametric study of microwave-powered high-altitude airplane platforms designed for linear flight

Experimental and analytical studies of advanced air cushion landing systems

Simulator certification methods and the vertical motion simulator

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

The through flow calculations

Evaluation of profile loss predictions based on diffusion factors

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

Foundations for computer simulation of a low pressure oil flooded single screw air compressor

The benefits of data exchange --- between airline and engine manufacturers

Linear constitutive theory for turbine engine structural analysis

Performance tests

Interoperability testing of decentralized command, control, communications and intelligence /C3I/ systems

Air bag impact attenuation system for the AGH-390 remote piloted vehicle

Aerodynamics and performance of cruciform parachute canopies

The constructed rigging line trials technique for assessing the opening characteristics of parachutes

High-efficiency hydraulic power transfer units for multi system aircraft

The certification of digital systems

AIAA acceptance tests on the NAVSTAR GPS 2-Set receiver
PHYSICAL PROPERTIES
- Consideration of mechanical, physical, and chemical properties in landing gear of large transport aircraft (NASA TM-812587)
- The effects of absorbed moisture upon the physical properties of stretched acrylic materials (NASA CR-81-243388)

PHYSICAL OPTICS
- Numerical applications of the physical optics approach for the calculation of radar cross sections of convex perfect scatterers (ARL-TR-261)
- The ideal controlled element for real airplanes is not a/m (AIAA-82-1519)
- A modern approach to pilot/vehicle analysis and the Real-Time flight simulation (NASA CR-82-158718)
- The system of 'objective control' (NASA CR-82-159075)

PHYSIOLOGICAL EFFECTS
- Effects of aircraft noise on the equilibrium of aircraft residents: Supplementary analyses to the study carried out around Orly (NASA CTR-81-1263)
- Theoretical linear approach to the combined man-manipulation system in manual control of an aircraft (NASA CR-82-159822)
- Statistical analysis of pilot workload: An annotated bibliography (NASA CR-82-16655)
- Theoretical linear approach to the combined man-manipulation system in manual control of an aircraft (NASA CR-82-166387)

PHYSIOLOGY
- Aviation physiology research: An annotated bibliography (NASA CR-82-17604)
- Theoretical linear approach to the combined man-manipulation system in manual control of an aircraft (NASA CR-82-16655)
- Theoretical linear approach to the combined man-manipulation system in manual control of an aircraft (NASA CR-82-166387)

PHYSIOLOGICAL OSCILLATIONS
- An experimental investigation of the low field of an ejector wing design employing a photon correlation laser velocimeter (NASA-DW-24-182)

PHOTOELECTRICITY
- Photoconductive properties of light beams (NASA CR-82-17597)
- Photoelectric effects on light beams (NASA CR-82-17597)
- Estimation of human control over mid-air collisions (NASA CR-82-17597)
- Real-time simulation of helicopter IFR approaches into major terminal areas using BNAV, MLS, and CON (NASA CR-82-17597)

PHOTOELECTRIC REACTIONS
- An application of invariance principle to pilot model for NT-33 aircraft with variable coefficients and delays (AIAA PAPER 82-0367)
- Cost efficiency versus objective fidelity in flight simulation (DGLR PAPER 81-104)

PHOTOELECTRICITY
- Analyses and optimization of control systems in piloted flight vehicles -- Russian book (NASA CR-82-16655)
- Combined multisensor displays -- image preprocessing for shape coding to reduce pilot workload (NASA CR-82-16655)
- Transparency design decisions -- Assessing their impact on visual performance (NASA CR-82-16655)
- Effect of contrast on space perception in TV displays of the external scene observed by the pilot -- German book (NASA CR-82-16655)
- A restrained model helicopter, which is able to fly, for investigations regarding human multivariable control behavior -- German thesis (NASA CR-82-16655)

PHOTOELECTRICITY
- Analysis and optimization of control systems in piloted flight vehicles -- Russian book (NASA CR-82-16655)
- Combined multisensor displays -- image preprocessing for shape coding to reduce pilot workload (NASA CR-82-16655)
- Transparency design decisions -- Assessing their impact on visual performance (NASA CR-82-16655)
- Effect of contrast on space perception in TV displays of the external scene observed by the pilot -- German book (NASA CR-82-16655)
- A restrained model helicopter, which is able to fly, for investigations regarding human multivariable control behavior -- German thesis (NASA CR-82-16655)
PLASTIC AIRCRAFT STRUCTURES

- MY DELTA WINGS
- MY INFINITE SPANWINGS
- MY RECTANGULAR PLATES
- MY SWEEP FORWARD WINGS
- MY SWEEPBACK WINGS
- MY TRIANGULAR TAIL SURFACES
- MY TRIANGULAR WINGS
- MY VARIABLE SWEEP WINGS
- MY WING PLANFORMS

- 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: Triangular tail
  - Volume 2: Project planning

- A navigation systems planning model

- Lightweight ATC systems

- Aircraft displays devices

- Improved plasma sprayed CrAlY coatings for aircraft gas turbine applications

- Improved plasma sprayed CrAlY coatings for aircraft gas turbines: A review of NASA sponsored research

- On the use of carbon composites in armament and stabilizer construction

- Seven years experience with Kevlar-49 in the Lockheed L-1011 TriStar

- Lear Fan - The plastic aeroplane arrives

- On the use of carbon composites in armament and stabilizer construction


- Lightweight ATC systems

- Aircraft displays devices

- Improved plasma sprayed CrAlY coatings for aircraft gas turbine applications

- Improved plasma sprayed CrAlY coatings for aircraft gas turbines: A review of NASA sponsored research

- On the use of carbon composites in armament and stabilizer construction

- Seven years experience with Kevlar-49 in the Lockheed L-1011 TriStar

- Lear Fan - The plastic aeroplane arrives


- Lightweight ATC systems

- Aircraft displays devices
Drag reduction using pneumatic turbulators — laminar airfoils

DRAINAGE AND DRAINAGE SYSTEMS

Aerodynamic design of a high-lift system for a subsonic transport aircraft

A-339
POBODS BOOIDABI LAYEB COSIBOL POLIOBETHAHB FO4H POLTTBTR4FLOOBOETHYLEBB POlISETS AFLDOBOETHYIEBE POBOUS PLATES POBOUS BATBBIALS POBOUS HALLS

Development of low modulus material for use in Polyurethane foams for aircraft shock mounts. 3: Passive direction finding and signal location Results of experimental study of heat transfer to End losses in turbine cascades with porous cooling Thermal and flow analysis of a convection, recent sidewall boundary-layer investigations with porous surfaces

POBABLE EQUIPBBHT [Image 0x0 to 585x790]

POBOUS MATERIALS Development of low modulus material for use in ceramic gas path seal applications [NASI-CS-165469] Icing tunnel tests of a composite porous leading edge for use with a liquid anti-ice system --- Lewis icing research tunnel [NASI-CS-164966] Gas turbine ceramic-coated-vane concept with convection-cooled porous metal core

POBOUS PLATES Turbulent boundary layer on a porous surface with injection at various angles to the wall

POBOUS WALLS Thermal and flow analysis of a convection, air-cooled ceramic coated porous metal concept for turbine vanes [ASME PAPER 81-ST-64] End losses in turbine cascades with porous cooling [NASI-TP-1942]

POB1ABLE EQUIPBBHT

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POBOUS PLATES Turbulent boundary layer on a porous surface with injection at various angles to the wall

POBOUS WALLS Thermal and flow analysis of a convection, air-cooled ceramic coated porous metal concept for turbine vanes [ASME PAPER 81-ST-64] End losses in turbine cascades with porous cooling [NASI-TP-1942]

POB1ABLE EQUIPBBHT

POBOUS PLATES Turbulent boundary layer on a porous surface with injection at various angles to the wall

POBOUS WALLS Thermal and flow analysis of a convection, air-cooled ceramic coated porous metal concept for turbine vanes [ASME PAPER 81-ST-64] End losses in turbine cascades with porous cooling [NASI-TP-1942]

POB1ABLE EQUIPBBHT

POBOUS PLATES Turbulent boundary layer on a porous surface with injection at various angles to the wall

POBOUS WALLS Thermal and flow analysis of a convection, air-cooled ceramic coated porous metal concept for turbine vanes [ASME PAPER 81-ST-64] End losses in turbine cascades with porous cooling [NASI-TP-1942]

POB1ABLE EQUIPBBHT

POBOUS PLATES Turbulent boundary layer on a porous surface with injection at various angles to the wall

POBOUS WALLS Thermal and flow analysis of a convection, air-cooled ceramic coated porous metal concept for turbine vanes [ASME PAPER 81-ST-64] End losses in turbine cascades with porous cooling [NASI-TP-1942]

POB1ABLE EQUIPBBHT
POWER GAIN

Will power-by-wire replace power-by-hydraulics?

Recent improvements in aircraft Ni-Cd cells

Analysis of changes in the gas-dynamic parameters of a gas-turbine helicopter engine during acceleration

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

Performance analysis of the test results on a two-stage transonic fan

Accuracy expectations for gas turbine and centrifugal compressor performance testing

Evaluation of the Energy Efficient Engine /E3/

Accuracy expectations for gas turbine and centrifugal compressor performance testing

INTERIM REVIEW OF THE ENERGY EFFICIENT ENGINE /E3/

Evaluation of two analytical methods for the prediction of inlet flow fields in the vicinity of generalized forebodies

Effect of water on axial flow compressors. Part I: Computational program

Selection of optimum antennas for tracking telemetry intrumented airborne vehicles

Scanning LF and MF antenna radiation patterns by means of a helicopter

POWER GENERATORS

U ELECTRIC GENERATORS

POWER PROCESSING SYSTEMS

POWER CONDITIONING

POWER SERIES

NT TAILOR SERIES

POWER SUPPLY CIRCUITS

High voltage/high power for airborne applications

L-band power generation in the General Electric solid-state radar

Power system design optimization using Lagrange multiplier techniques

POWERED LIFT AIRCRAFT

Powered-lift takeoff performance characteristics determined from flight test of the Quiet Short-haul Research Aircraft /QSR/A

Development of the Circulation Control Wing-Upper Surface Blowing powered-lift system for STOL aircraft

Ejector powered propulsion and high lift subsonic wing

Flight experiments using the front-side control technique during piloted approach and landing in a powered lift STOL aircraft

QCE: over-the-wing engine acoustic data

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

POWERED MODELS

Wind tunnel tests of engine-equipped models: Comparison of two jet wash simulation methods

Development of a convoluted intake seal for model B66: effect of wind tunnel

PRACTICES

U PROCEDURES

PREAMPLIFIERS

A balanced active antenna and impulse noise blanket system for the Heydant T radio navigation receiver

SUBJECT INDEX

[AD-114074] p0468 862-27275

PRECAUTIONS

U ACCIDENT PREVENTION

PRECAUTIONS (ECONOMIOLY)

MT BAIN

The evolution of airborne weather avoidance radar toward a calibrated remote rain gauge using BART -- vans Echo Attenuation Compensation Hardware

Aircraft measurements and analysis of severe storms: 1976 field experiment

Preliminary investigation of effects of heavy rain on the performance of aircraft

Evaluation of a meteorological airborne pulse doppler radar

Predication HARDWARE

Forbability of INCLOT alloy Nh 956 - an oxide dispersion strengthened sheet alloy

PREDICTION ANALYSIS TECHNIQUES

A new thermal and trajectory model for high altitude balloons

Evaluation of two analytical methods for the prediction of smect flow fields in the vicinity of generalized forebodies

Evaluation of separated asymmetric trailing-edge flows at transonic Mach numbers

Blade loss transient dynamic analysis of turbomachinery

Turbine stage heat flux measurements

Powdered aerodynamic loads on aircrafts with external stores at transonic speeds

Prediction of flyover jet noise spectra from static tests

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

Prediction of sound radiation from different practical jet engine inlets

Gunfire blast pressure predictions

Predictions of aerodynamic characteristics of highly maneuverable configurations

Review of the 1960 Wind-Tunnel/Flight Correlation Panel

Current status of inlet flow prediction methods

Prediction of fatigue crack growth rates under variable loading using a simple crack closure model

Effect of water on axial flow compressors. Part 2: Computational program

Effects of higher order control systems on aircraft approach and landing longitudinal handling qualities

A-362
powered jet exhausts  [NASA-CH-165852]  p0262  B82-19167

The effect of a wall on the aerodynamics of a supersonic wind tunnel flow visualization and pressure measurement  [B0-263]  p0265  B82-19194

Tests and analysis of a vented D-thrust deflecting nozzle on a turbinfan engine -- conducted at the outdoor aerodynamic research facility of the NASA Research Center  [NASA-CH-166279]  p0301  B82-20143

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 -- in a wind tunnel  (BAE-TE-80066)  p0312  B82-21161

Pressure distributions on some delta wings at M = 4  (BAE-TE-80068)  p0313  B82-21164

Theoretical and experimental investigations of wind tunnel interference due to angle of attack  [BBB-FX-124/4/PUB/34]  p0320  B82-21226

A flight investigation of blade-section aerodynamics for a helicopter main rotor having EC-SC2 airfoil sections  [NASA-TE-83298]  p0363  B82-23192

Subsonic aerodynamic and flutter characteristics of several wings calculated by the 5005A P1.1 panel method  [NASA-TE-84405]  p0405  B82-25216

Aerodynamically induced vibration  [AD-110093]  p0455  B82-26306

Flow and pressure field of a model propelled by ramjet  [NASA-TH-76500]  p0557  B82-29320


PRESSURE DRAG

HT INTERFERENCE DRAG

HT SUPERSONIC DRAG

Part span damper loss prediction for transonic axial fan rotors  p0205  B82-17192

An experimental and theoretical investigation of the interaction between the engine jet and the surrounding flow field with regard to the pressure drag on afterbody  p0360  B82-23158

PRESSURE DROP

Experimental investigation of total pressure loss and airflow distribution for gas turbine combustors  p0081  B82-15606

PRESSURE EFFECTS

Influence of airblast atomizer design features on mean drop size  [AIAA PAPER 82-1073]  p0416  A82-34993

Effect of vacuum exhaust pressure on the performance of HHD ducts at high D-field  [NASA-TE-86400]  p0417  B82-13290

A new method of estimating the lateral wall effect on the airfoil incidence due to the suction at side walls  [NASA-TE-680]  p0198  B82-17123

PRESSURE FIELDS

U PRESSURE DISTRIBUTION

PRESSURE GRADIENTS

EXPERIMENTAL INVESTIGATION OF TURBULENT WALL-JETS IN THE PRESENCE OF ADVERSE PRESSURE GRADIENTS IN A RECTANGULAR DIFFUSER  [NASA-CH-165852]  p0262  B82-19167

Comparison of experimental and analytical performance for contoured endwall stators  [AIAA PAPER 82-1266]  p0497  A82-40422

The pressure signature method for blockage corrections, and its applications to the industrial wind tunnel  [B0-263]  p0267  B82-19231

Static and unsteady pressure measurements on a 50 degree clipped delta wing at M = 0.9 --- conducted in the Langley Transonic Dynamics Tunnel  (NASA-TE-83297)  p0263  B82-21395

Real time pressure signal system for a rotary engine  (NASA-CASE-12W-13622-1)  p0253  B82-26294

Comparison of experimental and analytical performance for contoured endwall stators  [NASA-CH-165852]  p0262  B82-19167

Experimental study of turbulence in blade endwall corner region  [NASA-CH-166273]  p0572  B82-31629

PRESSURE MEASUREMENT

Comparison of seven-hole probes suitable for high angles in supersonic compressible flows  [AIAA PAPER 82-0410]  p0121  A82-17931

An investigation of the swirl in an S-duct nozzle  p0297  B82-28316

Pressure measurements on twin vertical tails in buffet region  (AIAA-08-0641)  p0337  B82-30138

Static and unsteady pressure measurements on a 50 degree clipped delta wing at M = 0.9  [NASA-TH-8666]  p0338  B82-30153

Analysis and wind tunnel tests of a probe used to sense attitude through measurement of static pressure  [AIAA PAPER 82-1161]  p0469  B82-39128

An experimental investigation of leading-edge spanwise blowing  p0514  A82-40988

Programs for the transonic wind tunnel data processing installation. Part 9: Pressure measurements updated  p0192  B82-16095

Current pressure measuring system in the transonic wind tunnel  (AD-A106272)  p0192  B82-16096

Sea King flight tests pitot-static probe and directional vane instrumentation  [AD-A109427]  p0304  B82-20176

Pressure measurements on a wing oscillating in supercritical flow  [NASA-TH-79074]  p0113  B82-21163

Study of TVOL in ground-effect flow field including temperature effect  [NASA-CH-166258]  p0400  B82-25170

PRESSURE OSCILLATIONS

One reason for the onset of high-frequency self-excited oscillations -- in combustion chambers of aircraft engines  p0014  A82-11408

Experimental investigations on the flow in the impeller of a centrifugal fan  [NASA PAPER 82-GT-37]  p0421  A82-35298

Analysis of very low frequency oscillations in a ramjet combustor by use of a sensitive time lag model  p0321  B82-21404

Report of the JANNAF Workshop on High Frequency Instrumentation and Data Analysis Techniques  p0321  B82-21406

PRESSURE PROBES

PRESSURE SENSORS

PRESSURE PULSES

The excitation of compressor/duct systems  [AD-A106271]  p0327  B82-28993

Effects of repetition rate and impulsiveness of simulated helicopter rotor noise on aeroengine  [NASA-TP-19569]  p0269  B82-19707

PRESSURE RATIO

Fluctuations in aircraft engine controls  p0128  B82-18691

Casing treatments on a supersonic diffuser for high pressure ratio centrifugal compressors  [ASME PAPER 82-GT-85]  p0423  A82-35353

Performance analysis of the test results on a two-stage transonic fan  [ASME PAPER 82-GT-123]  p0425  A82-35353

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-1976]  p0266  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

PRESSURE RECOVERY

An experimental investigation of 5-duct diffusers for high-speed programs  [AIAA PAPER 82-1123]  p0417  A82-35019

The performance of centrifugal compressor channel diffusers  [ASME PAPER 82-GT-10]  p0420  A82-35279

A-344
Improved vane-island diffusers at high swirl
[AIAA PAPER 82-251] p0023 A82-35318
Development and application of a performance
prediction method for straight rectangular
diffuser
[AIAA PAPER 82-1076] p0042 A82-35352
PRESSURE REDUCTION
Thermal and flow analysis of a convection,
air-cooled ceramic coated porous metal concept
for turbine vane
[AIAA PAPER 81-87-46] p0012 A82-10952
Determination of losses in a channel with a sudden
expansion behind a diffuser
 Analysis of the characteristics of a bypass
engine, with allowance for variable pressure
losses in the channels
[AIAA PAPER 82-251] p0028 A82-26496
Optimization of compressor vane and bleed settings
[AIAA PAPER 82-61-81] p0042 A82-35327
Optimization of compressor vane and bleed settings
[AD-A106059] p0134 A82-14097
Part span damper loss prediction for transonic
axial fan rotors
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-169035] p0062 A82-27088
High pressure bleed for STOL and STO-VL
performance: A conceptual examination
[AD-A115762] p0559 A82-32357
PRESSURE REGULATORS
Simulation of turbofan engine models in the
Waybridge low speed wind tunnel --- gas supply
control
[ASA-CONF-N076-46] p0319 A82-21212
PRESSURE SENSORS
Calibration of seven-hole probes suitable for high
angles in subsonic compressible flows
[AIAA PAPER 82-0410] p0121 A82-17931
Pressure transducer calibration processes
[ASA PAPER 81-1076] p0233 A82-24048
Investigation of the transonic calibration
characteristics of turbine static pressure probes
[AIAA PAPER 82-251] p0030 A82-35454
Analysis and wind tunnel tests of a probe used to
measure altitudes through measurement of static
pressure
[AIAA PAPER 82-1361] p0049 A82-39126
Turbulent adiabatic system as a fuel saving aid in
jet transport aircraft operation --- a-300 and
a-310 aircraft
[AIAA PAPER 82-251] p0042 A82-25181
Real time pressure signal system for a rotary engine
[ASA-CASE-LIEN-13622-1] p0453 A82-26294
PRESSURE TRANSDUCERS
U PRESSURE SENSORS
PRESSURE WELDING
PT DIFFUSION WELDING
PT ULSYNOIC WELDING
PRESSURIZED CABINS
Air supply system data for Boeing 767 airplane ---
Built-In-Test-Equipment
[AIAA PAPER 81-1843-7] p0011 A82-10895
USAF Bio-environmental noise data handbook. Volume
168: 8-3 tester, pressurized cabin leakage,
aircraft
[AD-A116153] p0602 A82-33163
PRESSURE TUBES
U PRESSURE TUBES
U SPEED INDICATORS
PREBLENDING
U BLENDING
PRETESTING
Development of a preloaded hybrid advanced
composite wing pivot fairing
Flexible rotor
[AIAA PAPER 82-251] p0042 A82-35415
Experimental evaluation of squeeze film supported
rotor
[AIAA PAPER 82-233] p0287 A82-27131
PRETREATMENT
PT PRESTRESSING
PT PERTURBING
U PRESTRESSING
U TWISTING
Fuel quality processing study, Volume 1
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

PROCUREMENT
ST GOVERNMENT PROCUREMENT

PROCUREMENT MANAGEMENT
Government testing
[AI(AA PAPER 81-2375] p0055 882-13877
Flight test concept evolution
[AI(AA PAPER 81-2375] p0059 882-13944
Trends in maintainability and reliability of avionics systems with particular reference to DCAD Technical Publication 1/77
p016 882-16561
Procurement of the new flight and tactical simulators - experience, problems, meaning
[DGEL PAPER 81-095] p0159 882-19266

PROCUREMENT POLICY
The procurement of flight simulators at the German Luftwaffe
[DGEL PAPER 81-093] p0159 882-19268

PRODUCT DEVELOPMENT
ST WEAPONS DEVELOPMENT
Advanced fighter technology integration ATP2/F-16
test program overview
[AI(AA PAPER 81-2538] p0065 882-14390
Electromechanical actuation development program
[AI(AA PAPER 81-2538] p0067 882-14705
Aircrew composite materials and structures
p0103 882-16143
The well tempered transport aircraft engine /The
development of the Lockheed SR-71 Blackbad
p0112 882-17417
Design evolution of the Boeing 757
p0126 882-18322
NAVSTAR global positioning systems
p0175 882-24706
Evolution of the Aeroscout
p0239 882-16145

Very large aircraft - A common response to a rapidly changing global environment
[AI(AA PAPER 82-0799] p0375 882-31979
Development of an aircraft engine
p0386 882-34112

A survey regarding the German-French development program Alpha Jet
p0500 882-43332
High Order Languages /HOL/ for flight control applications
[AAS 82-21] p0578 882-45608
Study and development of an integrated head-up display
[AD-1104337] p0307 882-11062
Integrated analysis of engine structures
[NASA-TB-82711] p0081 882-11491
Advanced technology lightweight gondola system experimental fabrication program
[AD-1104157] p0133 882-14002
Development of Integrated Programs for Aerospace-Vehicle Design (IPAD) - IPAD user requirements
Advanced compressor components, Phase 1: 1978 to 1979 --- for aircraft engines
[BEMP-PB-W-81-025] p0148 882-15073
SH-60 test program
p0247 882-18141

Aerodynamic design: Product development matched to military combat development
p0247 882-18143
A design study of the Marshall --- lightweight twin-engined aircraft
[SM-262] p0265 882-19215
Cooled variable-area radial turbine technology program
[NASA-CR-165608] p0266 882-19221
Energy efficient engine shroudless, hollow fan
W300 techology report

Collaborative development of aero-engines
[PEH-90083] p0355 882-22277
The Airbus family of aircraft at the dawn of the 1990's
[SWIAS-81-111-101] p0393 882-24164
Preplanned product improvement and other modification strategies: Lessons from past aircraft modification programs
[AD-113559] p0463 882-27220
The development of terrain following displays for the Tornado aircraft
[REPT-200] p0557 882-32337
Aerospace system development for the Tornado F-82
[REPT-96] p0590 882-32361
Operational flow visualization techniques in the Langley Unitary Plan Wind Tunnel
p0597 882-32671

PRODUCTION COSTS
Skyship 500 - The development of a modern production airship
p0174 882-20559
Unmanned aircraft in future combat
p0492 882-39728

PRODUCTION ENGINEERING
ST PRODUCTION PLANNING
Automated Paint and Process Line /APPL/ --- for aircraft production
[AI(AA 81-2166] p0002 882-10120
Development of aircraft production engineering discipline at IIT, Bombay
p0113 882-11317
Quality optimization and unification of aviation turbine rotor blade alloys
p0199 882-15721
p0229 882-24373
Design and production of fiberglass helicopter rotor blades
p0289 882-27153
Transition of aerospace adhesive bonding technology from basic 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 /3rd revised and enlarged edition/ --- Russian book
p0578 882-45771

A CERP solleron for the Tornado: Construction and production --- horizontal stabilizer
[ER-PB-212/FAK/PUB/2] p0027 882-10035
Rational production methods for the manufacture of helicopter rotor blades --- BO-105 helicopter
[ER-00-312-80-06] p0316 882-21188
Directional solidification: Project B2 --- of gas turbine rotor blade alloys
[PB-90088] p0356 882-22279
Specification and estimation of dynamic cost functions for ariplane 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-A117976] p0452 882-26284

PRODUCITIVITY
CIS/CAM approach to improving industry productivity gathers momentum
p0181 882-21375

PROPRIETARY
C A BILITIES

PROPOSES
Developental possibilities and restrictions in air transport
[DFHJL-MR-7-B-9] p0350 882-22229
Developmental possibilities in civil aviation in the Federal Republic of Germany
p0350 882-22230

PROGRAM MANAGEMENT
ST PROGRAM MANAGEMENT
PROGRAM VERIFICATION (COMPUTERS)
The Space Shuttle vehicle checkout involving

A-346
SUBJECT INDEX

flight avionics software
[AIAA 81-2141]
p0001 A82-10100

The design and implementation of a canned scenario
function for the F-16 dynamic system simulator
p0066 A82-14678

Formal specification and mechanical verification
of SIFT - a fault-tolerant flight control system
p0436 A82-37446

F/A-18 weapons system support facilities
p0198 A82-17120

A program testing assistant
[AD-1001471] p0260 A82-18922

Production of Reliable Flight Crucial Software:
Validation Methods Research for Fault Tolerant
Avionics and Control Systems Sub-Working Group
Meeting
[NASA-CP-2222] p0400 A82-24845

Combining analysis with optimization at Langley
Research Center. An evoluntary process
[NASA-TP-84472] p0400 A82-24846

PROGRAMMING (SCHEDULE)

PYTHON PROGRAMMING

PROGRAMMING LANGUAGES

MT PASCAL

MT HIGH LEVEL LANGUAGES

MT PASCAL (PROGRAMMING LANGUAGE)

TURBOSTRANS: A programming language for the
performance simulation of arbitrary gas turbine
engines with arbitrary control systems
[AIAA PAPERS 82-97-203] p027 A82-35396

A simulation language approach to structural
interaction problems
p0610 A82-33758

PROGRAMS

MT DEFENSE PROGRAM

MT NASA PROGRAMS

MT QUIET ENGINE PROGRAM

MT SPACE PROGRAMS

MT SUPERSONIC CRUISE AIRCRAFT RESEARCH

MT TACT PROGRAM

MT TERYAL CONFIGURED VEHICLE PROGRAM

MT TILT ROTOR RESEARCH AIRCRAFT PROGRAM

MT UNIVERSITY PROGRAM

PROJECT MANAGEMENT

Implementation of AVADCOM MMST — for military
aircraft parts production engineering
p0009 A82-10565

Organizing and training for innovative flight test
management
[AIAA PAPERS 81-2456] p0054 A82-13856

EC-10, flight test program management - The
contractor’s viewpoint
[AIAA PAPERS 81-2380] p0064 A82-14380

The Federal Aeronautics Plan
p0100 A82-16170

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 A82-29002

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/systems, flight control and
aeromechanics
[AIAA PAPERS 81-34636] p0195 A82-17082

A systems safety model for developmental aircraft
programs
[NASA-CR-3534] p0350 A82-22228

PROJECT PLANNING

A survey regarding the German-French development
program alpha Jet
p0550 A82-43332

PROJECTILE CHARGING

Analysis methods for ballistic damage size and type
p0202 A82-17163

PROJECTILE PRODUCTION

MT THERMAL BALLISTICS

PROJECTILES

MT HYPERSONIC PROJECTILES

RADAR HOSTILE FIRE LOCATION
p0075 A82-14857

Sensor footprints and hoisting range of terminal
guidance munitions
[NASA-CHF-81-1] p0166 A82-15111

Design manual for impact damage tolerant aircraft
structure
[ADVAD-AD-238] p0202 A82-17160

Description of projectile threats
p0202 A82-17161

Analysis methods for projecting 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
p0333 A82-35881

Propulsion/AICEE
[NASA-TPCST-93/8-81] p0408 A82-25251

Advanced turboprop testbed systems study.
Volume 1: Testbed project objectives and priorities,
drive systems, and aircraft design studies,
evaluation and recommendations and wind tunnel
test plans
[NASA-CR-167928-VOI-1] p0591 A82-32370

Advanced turboprop testbed systems study
[NASA-CR-167895] p0607 A82-33375

PROPAGATION (EFFECTS)

MT CRACK PROPAGATION

MT FLAME PROPAGATION

PROPAGATION MODES

Influence of exit impedance on finite difference
solutions of transient acoustic mode propagation
in ducts
[AIAA PAPERS 81-WA/C1A-13] p0235 A82-24602

PROPANE

Deposit formation in hydrocarbon fuels
[AIAA PAPERS 82-GT-49] p0422 A82-35307

PROPPELLANT ADDITIVES

Antifreeze properties of additives based on higher
fatty acids --- for jet fuels
p0548 A82-42893

PROPPELLANT CORROSION

MT SOLID PROPPELLANT CORROSION

PROPPELLANT DECOMPOSITION

Deposit formation in hydrocarbon fuels
[AIAA PAPERS 82-GT-49] p0422 A82-35307

PROPPELLANT EXPLOSIONS

Gunfire blast pressure predictions
p0345 A82-22170

PROPPELLANT 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 PAPERS 82-1099] p016 A82-35000

Characterization of an Experimental Reference
Jet/powered Specification (ERBS) aviation turbine
fuel and ERBS fuel blends
[NASA-TP-82883] p0595 A82-32504

PROPPELLANTS

MT CYCLIC/ROCKET PROPELLANTS

MT LIQUID ROCKET PROPELLANTS

MT RP-1 ROCKET PROPELLANTS

MT SOLID PROPELLANTS

PROPELLER BLADES

Recurrent whirling of aircraft propulsion-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
p0093 A82-39737

An analysis of civil aviation propeller-to-person
accidents: 1965-1979
A-347
PROPELLER DRIVE

[AD-A105365] p0086 N82-12053
Optimization and performance calculation of dual-rotation propellers
[AIAA-PAP-B-1653] p0131 N82-14049
Roll-up model for rotor wake vortices, part 5
Preliminary thoughts on helicopter cabin noise prediction methods
p0248 N82-18148

Study of cabin noise control for twin engines
[NASA-CH-165833] p0250 N82-18995
general aviation aircraft

Experimental methods for the prediction of the effect of viscosity on propeller performance
[AD-103986] p0301 N82-20162
A flight investigation of blade-section aerodynamics for a helicopter main rotor having SC-52 airfoil sections
[NASA-TN-83298] p0363 N82-23192
The dynamic flexural response of propeller blades
[NASA-CH-165316] p0585 N82-32313
Impact of advanced propeller technology on aircraft/mission characteristics of several general aviation aircraft
[NASA-CH-167504] p0604 N82-33347

PROPELLER DRIVE

VT HELICOPTER PROPELLER DRIVE

Resonant whirling of aircraft-propeller engine systems
due to ice accretion
[AIAA PAPER 82-0266] p0297 N82-28322
Propellers in full circle --- prop-fan technology for aircraft fuel savings
p0433 A82-35861

Turboprop cargo aircraft system study
[NASA-CH-165813] p0189 N82-16670

PROPELLER PANS

Propan installation aerodynamics of a supercritical swept wing transport configuration
[AIAA-PAPER 82-1120] p0416 N82-35017
Fuel efficient and fast aircraft, part II
[AD-A105463] p0009 N82-10466
New processes and methods of technical diagnostics and prognostics in the case of the engine
Nk-8-4. II
p0332 A82-29774
In-flight acoustic results from an advanced-design propeller at Mach numbers to 0.8
[ADIA PAPER 82-1123] p0416 N82-35017
An experimental investigation of 5-dct diffusers for high-speed propfans
[ADIA PAPER 82-1124] p0417 N82-35019
Selecting the best reduction gear concept for prop-fan propulsion systems
[ADIA PAPER 82-1125] p0417 N82-35020
Turboprop design - now and the future
p0512 A82-69965
Prop-fan integration at cruise speeds
p0097 N82-13097
A study to refine the research and technology requirements for advanced turbo/propfan transport aircraft
[NASA-CH-165130] p0254 N82-18202

PROPELLER SLIPSHEETS

Propeller tip vortex - a possible contributor to aircraft cabin noise
p0113 A82-17603
Static pressure in the slipstream of a propeller
p0225 A82-30023
The prediction of propeller/wing interaction effects
p0510 A82-69948

PROPELLER DRIVES

[AD-A105846] p0308 N82-20472
Use of the cavitation tunnel at the Dutch Naval Experiment station (HSI), Wageningen for the determination of the acoustic source strength of propeller cavitation
[AD-A105790] p0550 N82-29116

PROPELLERS

VT PROPELLER DRIVES

VT VARIABLE PITCH PROPELLERS

The dynamic behavior of propeller anemometers
p0276 N82-26104
Finite volume calculation of three-dimensional propeller flow around a propeller
[AIAA PAPER 82-0957] p0374 A82-31933
Propulsion opportunities for future commuter 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
p0444 A82-42035
Noise of the SK-3 propeller model at 2 deg and 4 deg angle of attack
[NASA-TN-62743] p0194 N82-16800
A shock wave approach to the noise of supersonic propellers
[NASA-TN-82751] p0194 N82-16809
An extension of the local momentum theory to the rotors operating in twisted flow fields
p0245 N82-18143
Annoyance caused by propeller airplane flyover noise: Preliminary results
[NASA-TN-8264] p0250 N82-18996
Collection and evaluation of propeller aircraft noise certification data
[JSVL-TR-61-20] p0363 A82-23193
A preliminary comparison between the SB-3 propeller model at 2 deg and 4 deg angle of attack
[NASA-TN-62743] p0447 N82-16809
Experiments on propeller noise
p0359 A82-29774
Future propulsion opportunities for commuter aircraft
[NASA-TN-82660] p0396 N82-24203
The vibratory behavior of a rotating propeller shaft. Part IV: Vibration tests of a rotating propeller shaft in a rubber stern tube bearing --- ship propellers
[WECO-507250-61-PF-2] p0398 A82-25414
Summary and recent results from the NASA advanced High Speed Propeller Research Program
[NASA-TN-82692] p0447 N82-26219
Propulsion opportunities for future commuter aircraft
[NASA-TN-82915] p0450 N82-26296
On the design and test of a low noise propeller
[AIAA-PAPER 82-29] p0462 N82-27089
Use of the cavitation tunnel at the Dutch Naval Experiment station (HSI), Wageningen for the determination of the acoustic source strength of propeller cavitation
[IPD-908-720] p0530 A82-29116
Heads up display
[NASA-CASE-LAB-12630-1] p0536 A82-29319
Flow and pressure field of a model propeller
[NASA-TN-7690] p0557 N82-30290
Large displacements and stability analysis of nonlinear propeller structures
[NASA-TN-8260] p0572 N82-31707
Rough analysis of installation effects on turboprop noise
[NASA-TN-92924] p0574 N82-32062
Computer prediction of three-dimensional potential flow fields in which aircraft propellers operate
[NASA-CR-169317] p0585 N82-32312
Propeller flow visualization techniques
p0597 N82-32672
In-flight propeller flow visualization using fluorescent smectics
p0597 N82-32673
Development of a laser velocimeter for a large transonic wind tunnel
p0598 N82-32688
LF measurements with an advanced turboprop
p0598 N82-32690

A-348
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 high power helicopter engines

Aerodynamic components for small turboshaft engines

Regenerative helicopter engines: Advances in performance and expected development problems

Advanced transmission component development

Helicopter propulsion systems: 1: Vibration prevention systems on helicopters 2: Problems of noise in the cabin

Prediction of off-design performance of turbo-shaft engines a simplified method

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

NASA/NAE Advanced Rotocraft Technology and Tilt Rotor Workshop. Volume 5: Propulsion systems

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 propeller research program

Propulsion opportunities for future computer aircraft

Integrated airframe propulsion control

PROPELLER EFFICIENCY

Aircraft propeller efficiency

Future technology and requirements for helicopter propellers

Mechanical advances in the design of small turboshaft engines

Advanced component development design basis for next generation high power helicopter engines

Aerodynamic components for small turboshaft engines

Regenerative helicopter engines: Advances in performance and expected development problems

Advanced transmission component development

Helicopter propulsion systems: 1: Vibration prevention systems on helicopters 2: Problems of noise in the cabin

Prediction of off-design performance of turbo-shaft engines a simplified method

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

NASA/NAE Advanced Rotocraft Technology and Tilt Rotor Workshop. Volume 5: Propulsion systems

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 propeller research program

Propulsion opportunities for future computer aircraft

Integrated airframe propulsion control

PROPELLER EFFICIENCY

Aircraft propeller efficiency

Future technology and requirements for helicopter propellers

Mechanical advances in the design of small turboshaft engines

Advanced component development design basis for next generation high power helicopter engines

Aerodynamic components for small turboshaft engines

Regenerative helicopter engines: Advances in performance and expected development problems

Advanced transmission component development

Helicopter propulsion systems: 1: Vibration prevention systems on helicopters 2: Problems of noise in the cabin

Prediction of off-design performance of turbo-shaft engines a simplified method

Three-engine control system for the prototype EH-101 helicopter
QUALITATIVE ANALYSIS

PETUSEION

Adaptation of pulsation to the manufacture of helicopter components

PULSERS

SST CENTRIFUGAL PULSES
SST TURBINE PULSES
High-efficiency hydraulic power transfer units for multisystem aircraft

PURIFICATION

SST AIR PURIFICATION
SST CASSETTE FILTERS
Opto-electronic push-broom scanners for navigation, reconnaissance and generation of digital data bases

PYLONS

Instability effects on pylon and engine loading in an aircraft with high-aspect-ratio wings
Evaluation of an experimental technique to investigate the effects of the engine position on engine/pylon/wing interference
Aerodynamic aspects of a high bypass ratio engine installation on a fuselage afterbody
Transonic perturbation analysis of wing-fuselage-pylon configurations with powered jet exhausts
Decoupler pylon: WAG/store flutter suppressor

PYREX

The formation of benzopyrene during the combustion of aviation fuels

PYRITES

Determination of pyridine in modified JP-4 via high Performance Liquid Chromatography (HPLC)

PYROELECTRICS

LQG multivariable design tools
LQG-based multivariable design: Frequency domain interpretation

PYROELECTRIC MATERIALS

Chem-Braze abradable seal attachment to aircraft gas turbine compressor components

PYROGENE

Emergency in-flight egress for general aviation aircraft

PYROGRAPHY

A ballistic design model for initiators for aircraft personnel escape systems

PYROTECHNICS

Aerodynamic aspects of a high bypass ratio engine

PYTHAGOREAN THEOREM

High Performance Liquid Chromatography (HPLC) of aviation fuels

PYTHAGOREAN TRIGONOMETRY

A concept for light-powered flight

PYTHAGOREAN THEOREM

A concept for light-powered flight

CONFIRMATION

A concept for light-powered flight

CONFIRMATION

A concept for light-powered flight

CONFIRMATION

A concept for light-powered flight

CONFIRMATION

A concept for light-powered flight
Subject Index

Discrete Address Beacon System (DABS)  p0220 AB-2-23322
Wide field of view laser beacon system for three-dimensional aircraft position measurement  p0229 AB-2-24563
Secondary radar for airborne collision avoidance  p0341 AB-2-30313
ATCRBS ground environment measurement near Jacksonville, Florida  p0188 AB-2-16063
Active beacon collision avoidance logic evaluation. Volume 2: Collision avoidance (RCAI) threat phase  p0464  AB-2-72625
Analysis of a nonlinear altitude tracking method  p0479 AB-2-17597
Surveillance simulation testing of terminal and on route mode S sensors  p0566 AB-2-32336
 Fiber optic remote sensing of terminal radar and beacon signals  p0574 AB-2-32400
Impact of an omnidirectional traffic alert and collision avoidance system on the air traffic control radar beacon system and the discrete address beacon system  p0587 AB-2-32336
Radar Beams
Analysis and tolerance study of an array antenna for a new generation of secondary radars  p0163 AB-2-19521
Radar Clutter Maps
Maximum-entropy spectral analysis of radar clutter  p0504 AB-2-74070
Radar Cross Sections
Performance considerations in the design of subsonic cruise missiles  [AIAA PAPER 82-0371]  p0120 AB-2-17911
An aerodynamic and signature shaping technique for developing advanced supersonic missile concepts  [AIAA PAPER 82-0373]  p0120 AB-2-17911
The bomber that radar cannot see  p0274 AB-2-25874
Numerical applications of the physical optics approach for the calculation of radar cross sections of convex perfect scatterers  [BAE-BM-261]  p0596 AB-2-32600
Radar Data
Description of the meteorological research radar system aboard NOAA/Research Facilities Center WP-3D aircraft  p0003 AB-2-10217
Using phased array radar for data communications  p0068 AB-2-14725
Extended time radar raw video recording  p0075 AB-2-14909
Radar Detection
Instrumented aircraft verification of clear-air radar detection of low-level wind shear  p0004 AB-2-10221
Detection range analysis of an airborne medium PBF radar  p0004 AB-2-10221
Radar hostile fire location  p0075 AB-2-14857
Techniques for overhead-air detection --- to prevent helicopter wipeout  p0106 AB-2-16560
The bomber that radar cannot see  p0274 AB-2-25874
Analysis of side-looking airborne radar /SLAR/ performance in the detection of search and rescue targets  p0293 AB-2-27641
Optimal target designatics techniques  [AD-102937]  p0293 AB-2-27709
Distributed airborne array concepts  p0342 AB-2-31669
A multifrequency adaptive radar for detection and identification of objects - Results on preliminary experiments on aircraft illusion into a sea-clutter background  p0379 AB-2-32979
Doppler processing, waveform design and performance measures for some pulsed doppler and STO-radars. II  p0390 AB-2-24671
Complete flexibility and realism in radar simulation  p0402 AB-2-30461
Demonstration of radar reflector detection and ground clutter suppression using airborne weather and mapping radar  p0500 AB-2-40532
Moving target Detector/Airport Surveillance radar (ASR-7) field evaluation  [AD-105196]  p0500 AB-2-12303
Test and evaluation of the airport radar wind shear detection system  [AD-112663]  p0478 AB-2-27929
Radar Detection Finders
U Radio Direction Finders
Radar Displays
Secondary radar problems - The presence of false echoes  p0242 AB-2-23323
Radar Equipment
NT DISCRETE ADDRESS BEACON SYSTEM
AT RADAR ANTENNAS
AT RADAIR RECEPTORS
AT RADAIR FILTERS
AT RADAIR RECEIVERS
AT RADAIR REFLECTORS
AT RADAIR TRANSMITTERS
AT RADAIRSCOPES
Some Italian research for developing new primary ATC radars  p0871 AB-2-14775
Management of a large avionics project  p0105 AB-2-16557
Airport radar systems --- Russian book  p0150 AB-2-19295
Radar environment simulation for software test  p0150 AB-2-19295
Simulation of modern radar installations in full-mission flight and tactics simulators  [DGRL PAPER 81-103]  p0160 AB-2-192972
An accurate Doppler navigator with microwave simplicity  p0435 AB-2-37037
Radars for UMA  p0494 AB-2-37942
The choice of technology for ATC radars. I - Transmitters  p0581 AB-2-45981
Terminal air traffic control with surveillance data from the mode S system: Results of system demonstrations to field controllers  [AD-112662]  p0467 AB-2-27268
Radar Filters
Some Italian research for developing new primary ATC radars  p0707 AB-2-14775
Radar Working Kinesills
Microwave systems for radar guided missiles  p0150 AB-2-18936
Radar Imagery
Inverse SAR and its application to aircraft classification  p0705 AB-2-14871
Radar Maps
NT RADAR IMAGERY
Simulation of modern radar installations in full-mission flight and tactics simulators  [DGRL PAPER 81-103]  p0160 AB-2-192972
Demonstration of radar reflector detection and ground clutter suppression using airborne weather and mapping radar  p0500 AB-2-40532
Radar Measurement
Multiple Doppler radar observations of PBL structure  p0004 AB-2-30292
Airborne lidar measurements of smoke plume distribution, vertical transmission, and particle size  p0181 AB-2-21386
Airborne lidar measurements of the Soufriere eruption of 17 April 1979  p0383 AB-2-33657
Two-frequency /bella k/ microwave scatterometer measurements of ocean wave spectra from an aircraft  p0584 AB-2-47493

A-353
Radar Navigation

Baseline monitoring using aircraft laser ranging
--- spaceborne laser simulation and aircraft laser tracking
[NASA-TM-73298] p0529 A82-20690
Remote sensing of turbine engine gases
[AD-A115843] p0559 A82-30310

Radar Navigation

Evaluating sources of error in EAR/GEAMS
navigation using a Kalman postprocessor ---
Electronically Agile Radar/Expanded Electrically
suspended gyro Airborne Navigation System
p0068 A82-14739

Short-term behavior of a Doppler navigation system
and comparison with position indication by means
of scanning radar
p0390 A82-24672

Marine Air Traffic Control and Landing System
(MATCALS Investigation), volume 1
[AD-A110854] p0394 A82-24168

Marine Air Traffic Control and Landing System
(MATCALS Investigation), volume 2
[AD-A110863] p0394 A82-24669

Radar Observation

U - Radar Tracking
Radar Range
Detection range analysis of an airborne medium PEF
radar p0068 A82-14723

U - Radar Receivers
Performance evaluation of target report extractor
in the monopulse ECRS --- Air Traffic Control
Radar Beacon System
p0071 A82-14776

U - Radar Reflectors
Demonstration of radar reflector detection and
ground clutter suppression using airborne
weather and mapping radar
p0500 A82-40532

Radar Resolution
F-15 SAR
p0077 A82-14938
Flight test evaluation of a video tracker for
enhanced offshore airborne radar approach
capability
p0500 A82-40531

Radar Scanning
Scanning strategies for air traffic control radars
p0235 A82-29466
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-A111733] p0450 A82-26737
Design and implementation of efficient algorithms
for automatic determination of corrected slant
range
[AD-A112268] p0467 A82-27267

Radar Scanning
- Commercial airborne weather radar technology
p0075 A82-14868
Modeling of target radar scattering with
application to guidance simulation
p0175 A82-20570
Comparison of various elevation angle estimation
techniques
p0175 A82-20589

Radar Signatures
Main rotor hub electromagnetic signature reduction
p0279 A82-26393

Radar Targets
Detection range analysis of an airborne medium PEF
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 mass distance radar
p0149 A82-18904
Modeling of target radar scattering with
application to guidance simulation
p0175 A82-20570

Synthetic aperture radar target simulator
[NASA-CS-150-15024]-1]
[AD-A118709] p0031 A82-10286
Moving target detector (Mod 2)
[AD-A118709] p0539 A82-29520

Radar Tracking

Hard limited approaches to correlation velocity
sensing
p0022 A82-12636

Radar hostile fire location
p0075 A82-14857

Air-to-ground ERI 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 Real 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
scattering interference environment
p0175 A82-20588

Comparison of various elevation angle estimation
techniques
p0175 A82-20589

Tracking of low-altitude targets by a combined
X/Ka-band radar system
p0175 A82-20590

Stereographic projection in the National Airspace
System
p0218 A82-20301

Optimal target designation techniques
[AD-A102937] p0293 A82-27709

The PATRIOT 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
[AAIA PAPER 82-1310] p0487 A82-39091

Target tracking using area correlation
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
p0503 A82-40562
Use of aircraft-derived data to assist in ATC
tracking systems. I - Accuracy and theoretical
considerations
p0586 A82-42504

Altitude estimation using asynchronous alpha-beta
tracking filters
p0582 A82-46387

Detection and tracking algorithm refinement
[AD-A105517] p0034 A82-20164
Modeling of a tracking radar in terms of a
nonlinear second order phase lock loop
[AD-A115629] p0596 A82-32580
Implementable differential equations for nonlinear
filtering --- radar tracking
[IEEE-SSR-81037 0] p0600 A82-33120

Improving conflict alert performance using moving
target detector data
[AD-A117691] p0607 A82-33370

Memory and computational requirements for tracking
in the advanced computer system
[AD-A117666] p0612 A82-33619

Radar Transmission

Kaver Jam - US Army studies EW helicopter
p0544 A82-18888
A new class of routing protocols for a proposed
computer network linking tactical radar sites
p0553 A82-13893

Radar Transmitters
L-band power generation in the General Electric
solid-state radar
p0150 A82-18914

Radar Scopos
A new approach to radar plot extraction for ATC
applications
p0075 A82-14908

A-354
The use of groundspeed, in a wind shear and the flight evaluation of a radar-altimeter-based system for the measurement of groundspeed

Determination of vertical profiles of aerosol size measurements. II - The effect of particle non-sphericity

Fuel property effects on radiation intensities in a gas turbine combustor

Determination of vertical profiles of aerosol size measurements. I - The effect of particle non-sphericity

Frequency sharing between passive sensors and aeronautical radionavigation systems employing ground transponders in the band 4.2 - 4.4 GHz

The development of terrain following displays for the Tornado aircraft

Rapid flow models for the静水和旋转的混合流

Calculation and measurement of electric field strength for airborne antennas in the LP/RF range

Terrain reflection effects on data reception from airborne vehicles

Measuring LF and MF antennas radiation patterns by means of a helicopter

The coupling of electromagnetic interference into aircraft systems

Electromagnetic Propagation Problems in the Tactical Environment

Federal radionavigation plan. Volume 3: Automatic direction finding (IDF) equipment

The statistical theory of radio direction finding

The development of terrain following displays for the Tornado aircraft

The use of groundspeed, in a wind shear and the flight evaluation of a radar-altimeter-based system for the measurement of groundspeed

Determination of vertical profiles of aerosol size measurements. II - The effect of particle non-sphericity

Fuel property effects on radiation intensities in a gas turbine combustor

Determination of vertical profiles of aerosol size measurements. I - The effect of particle non-sphericity

Frequency sharing between passive sensors and aeronautical radionavigation systems employing ground transponders in the band 4.2 - 4.4 GHz

The development of terrain following displays for the Tornado aircraft

Rapid flow models for the静水和旋转的混合流

Calculation and measurement of electric field strength for airborne antennas in the LP/RF range

Terrain reflection effects on data reception from airborne vehicles

Measuring LF and MF antennas radiation patterns by means of a helicopter

The coupling of electromagnetic interference into aircraft systems

Electromagnetic Propagation Problems in the Tactical Environment

Federal radionavigation plan. Volume 3: Automatic direction finding (IDF) equipment

The statistical theory of radio direction finding

The development of terrain following displays for the Tornado aircraft

The use of groundspeed, in a wind shear and the flight evaluation of a radar-altimeter-based system for the measurement of groundspeed

Determination of vertical profiles of aerosol size measurements. II - The effect of particle non-sphericity

Fuel property effects on radiation intensities in a gas turbine combustor

Determination of vertical profiles of aerosol size measurements. I - The effect of particle non-sphericity

Frequency sharing between passive sensors and aeronautical radionavigation systems employing ground transponders in the band 4.2 - 4.4 GHz

The development of terrain following displays for the Tornado aircraft

Rapid flow models for the静水和旋转的混合流

Calculation and measurement of electric field strength for airborne antennas in the LP/RF range

Terrain reflection effects on data reception from airborne vehicles

Measuring LF and MF antennas radiation patterns by means of a helicopter

The coupling of electromagnetic interference into aircraft systems

Electromagnetic Propagation Problems in the Tactical Environment

Federal radionavigation plan. Volume 3: Automatic direction finding (IDF) equipment

The statistical theory of radio direction finding
Radio Frequencies

Utilization of radio equipment at airports and on airplanes -- Russian book


Standard engineering installation package. Air traffic radio channel control equipment; Change 1

Multifunction multiband airborne radio architecture study

Radio Frequencies

NT C BAND
NT EXTREMELY HIGH FREQUENCIES
NT HIGH FREQUENCIES
NT LOW FREQUENCY BANDS
NT SUPERHIGH FREQUENCIES
NT ULTRARICH FREQUENCIES
NT VERY HIGH FREQUENCIES
NT VERY LOW FREQUENCIES

Radio Frequency Interference

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

Radio Frequency Interference

NT ATMOSPHERIC
NT ELECTROMAGNETIC NOISE
NT WHISTLE

Experimental measurement of the low angle terrain scattering interference environment

Static charging and its effects on avionic systems

FM broadcast interference related to airborne ILS, VOR and VHF communications

Investigation of technical requirements

Investigation of airborne VHF communication and navigation equipment

Investigation of the effects of airborne installation factors on receiver interference

FAA/FCC coordination procedures for FM broadcast stations

Radio Frequency Noise

NT ELECTROMAGNETIC NOISE

Radio Frequency Shielding

Materials aspects of aircraft EMC design

Radio Frequency Interference

Radio Navigation

NT Loran
NT Loran C
NT Tacan

NT VHF Omnirange Navigation

Omea station 10.2 kHz signal selection made easy

FAA acceptance tests on the NAVSTAR GPS Z-Set receiver

Instrumentation to determine the suitability of Loran systems for helicopter navigation in the national airspace system [NASA-CA-169240]

The Federal Radioavigation Plan

NAVSTAR Global Positioning System

Selecting the post 1990 civil aviation navigation system

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

A natural parameter-controller specification procedure for an integrated radio/tele operator navigation system

The influence of technology advances on integrated NAV avionics --- Integrated Communication, Navigation, and Identification Avionics for military aircraft

Radio-navigation equipment of aircraft -- Devices and operation -- Russian book

Corona and antenna effects on the EW-3D0 minenweeping helicopter and Baydast navigation set

The helicopter Navstar GPS test program

Measuring LF and HF antenna radiation patterns by means of a helicopter

Problems in the simulation of correlation-exteral navigation systems

Simulation of correlation-exteral receivers of signals from sampling-phase radio-navigation systems

Radio-navigation for civil aviation

A prototype interface unit for microprocessor-based Loran-C receiver

Investigation of air transportation technology at Princeton University, 1981

Frequency sharing between passive sensors and aeronautical radiolocation systems employing ground transponders in the band 4.2 - 4.4 GHz

Global Positioning System (GPS) geodetic receivers

A balanced active antenna and impulse noise blanket system for the Baydist T radio navigation receiver

Minimum operational performance standards for automatic direction finding (ADF) equipment

Multifunction multiband airborne radio architecture study

Federal radionavigation plan. Volume 3: radionavigation system characteristics

Radio Physics

Proposed multipurpose flying radio-physical laboratory using an IL-18 aircraft

Radio Propagation

Radio Transmission

Radio Range

High-accuracy ranging over voice radios for downed aircrew rescue

Radio Range

Radio Beacons

Radio Receivers

NT TRANSMITTER RECEIVERS

Tangential sensitivity of RF receivers

FAA acceptance tests on the NAVSTAR GPS Z-Set receiver

A Loran-C prototype navigation receiver for general aviation

New advances in signal processing technology for integrated CHI avionics --- Communication, Navigation, and Identification

A GPS receiver design for general aviation navigation

Land navigation with a low cost GPS receiver

A marine NAVSTAR GPS receiver

Loran for precise position location - The VIBN-BAY system

Automated radar range performance evaluation in the Radio Frequency Simulation System (RFSS) facility at RCOM

A-356
Automated radome performance evaluation in the Rادiao Frequency Simulation System /RFSS/ facility at AILCOM

The effect of radome scattering on ECM antenna patterns

[AD-A1155157] p0561 A82-30463

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

[AD-A115445] p0570 A82-31335

RAILS

Mt. LIFE RAILS

RAIL TRANSPORTATION

Comparing the relationships between noise level and annoyance in different surveys - a railway noise vs. aircraft and road traffic comparison

Helical rail glider launcher

p0125 A82-18200

RAILROADS

U RAIL TRANSPORTATION

RAILS

Airborne weather radar and severe weather penetration

Heavy rain/wind shear accidents

C-5A eastern airfield operational utility evaluation, Phase 2: Operation on unpaved soil surfaces following rainfall

[AD-A1085975] p0255 A82-18208

Preliminary investigation of effects of heavy rain on the performance of aircraft

[NASA-TM-82722] p0301 A82-202145

Environmental fog/rain visual display system for aircraft simulators

[NASA-CASE-NM-1159-1] p0301 A82-202145

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

p0011 A82-25179

Aerodynamic penalties of heavy rain on a landing aircraft

[NASA-CP-156865] p0558 A82-30298

RAIN EROSION

Mach 2.0 rotating arm rain erosion test apparatus

p0260 A82-26461

Effects of filler materials upon radome rain erosion performance at subsonic conditions

p0281 A82-26462

Radome rain damage - An environmental analysis technique

p0281 A82-26464

RAIN GAGES

The evolution of airborne weather avoidance radar toward a calibrated remote rain gauge using REACT --- Rain Echo Attenuation Compensation Hardware

p0004 A82-10225

RAIN IMPACT DAMAGE

Heavy rain penetrabilities for a flight simulator

[AIAS PAPER 82-0213] p0286 A82-27093

RADIOMETERS

MT THUNDERSTORMS

Effect of heavy rain on aircraft

p0311 A82-21149

RAILWAY ENGINES

MT PULL-OUT RAILWAY ENGINES

Air-film cooling returns to railjets

[AIAS PAPER 81-ENAS-8] p0011 A82-10656

The relaxation oscillation in railjet combustion

p0326 A82-28738

Numerical investigation of supersonic base flow with parallel injection --- An scramjet combustors

[AIAS PAPER 82-1001] p0375 A82-31560

Ideal railjet - Optimum G sub infinity for fuel limit and material limit

p0380 A82-33143

Characteristics of a side dump gas generator railjet

[AIAS PAPER 82-12168] p0418 A82-35609

An investigation of the combustion process in solid fuel railjets

[AD-A10666] p0040 A82-11232

Combustion behavior of solid fuel railjets. Volume 1: Correlation of reacting and non-reacting flow characteristics

SUBJECT INDEX

[AD-A106661] p0136 A82-14316

Fuel-rich plume combustion

[AD-A1088316] p0259 A82-18349

Thermodynamics of organic compounds

[AD-A110430] p0318 A82-21202

Analysis of very low frequency oscillations as a ramjet combustor by use of a sensitive time lag model

p0321 A82-21408

Factors influencing velocity distributions at inlet/combustor interfaces

p0321 A82-21408

Report of the JANNAF Workshop on High Frequency Instrumentation and Data Analysis Techniques

p0321 A82-21406

Coaxial dump Ramjet combustor combustion stability Part 1: Parametric test data

[AD-A111355] p0409 A82-25259


[AD-A10796] p0454 A82-26303

Modeling solid-fuel Ramjet combustion including radiation heat transfer to the fuel surface

[AD-A10794] p0475 A82-27436

The preparation and characterization of mixtures of polycyclopentadienes as solid ramjet fuels

p0560 A82-30414

An investigation of the effects of smoke suppressant fuel additives on engine and test cell exhaust gas opacities

[AD-A116171] p0571 A82-31540

HARVEY MISSELS

MT SUPERSONIC LOW ALTITUDE MISSILE

New developments in the field of ramjet missile propulsion

[AIN-DR-516-81-0] p0409 A82-25260

RANDOM ACCESS

Distributed Time Division Multiple Access /TDMA/

A Distributed Signaling Technique for Advanced Tactical Communications

p0067 A82-14719

RANDOM LOADS

MT GUST LOADS

Methods and models for predicting fatigue crack growth under random loading --- Book

p0169 A82-20506

Multi-parameter yield zone model for predicting spectrum crack growth

p0169 A82-20510

Crack growth behavior of center-cracked panels under random spectrum loading

p0169 A82-20511

Random spectrum fatigue crack life predictions with or without considering load interactions

p0169 A82-20512

Estimation methods for the determination of dynamic responses of elastic aircraft --- to random loads

[BRN-PR-81-6] p0141 A82-15037

RANDOM PROCESSES

MT RANDOM WALK

Estimates of human control over air-air collisions

p0114 A82-17604

RANDOM VIBRATION

Improved methods in ground vibration testing

[ANS PREPRINT 81-6] p0441 A82-37781

A random vibration test for the evaluation of stiff sensitive component parts

p0584 A82-47073

RANDOM WALK

An investigation of ring laser gyroscopes random walk experiments

p583 A82-47073

RANGE (EXTRAS)

MT RADIO RANGE

Wide field of view laser beacons system for three dimensional aircraft range measurements

p0446 A82-26216

RANGE CONTROL

U TRAJECTORY CONTROL

RANGE ERRORS

Stereographic projection in the National Airspace System

p0218 A82-23031

RANGE FINDERS

MT LASER RANGE FINDERS

RANGE MEASUREMENTS

RANGEFINDING
REAL TIME OPERATION

The DVFLR 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] p0165 A82-19801

Estimation of simulation errors in the European Transonic Wind Tunnel /SWT/

[AIAA PAPER 82-2392] p0058 A82-13808

The Advanced Range Instrumentation Aircraft Improvement and Modernization Program

[AIAA PAPER 81-2367] p0060 A82-13948

Lockheed Airborne Data System - Distributed microcomputers provide on-board real-time analysis

[AIAA PAPER 81-2367] p0060 A82-13949

General purpose real-time interaction panel for digital simulation --- of flight control systems

[AIAA PAPER 81-2340] p0052 A82-13530

Recent improvements at the Naval Air Test Center for increased test system flexibility

[AIAA PAPER 81-2392] p0056 A82-13808

Real-time simulation of helicopter approaches into major terminal areas using RNAV, MLS, and CDTI

[AIAA PAPER 82-0260] p0118 A82-17868

A stable decentralized filtering implementation for JETIDS RALNAV --- stable community relative navigation

p0124 A82-18156

A real time Pegasus propulsion system model for VSTOL piloted simulation evaluation

[AIAA PAPER 81-2663] p0157 A82-19221

Simulation of advanced cockpits

p0156 A82-19259

Real-Time Simulation Computer System --- for digital flight simulation of research aircraft

[AIAA PAPER 82-0260] p0118 A82-17868

Piloted simulation of an on-board trajectory optimization algorithm

p0167 A82-20296

Color graphics based real-time telemetry processing system

p0179 A82-20771

NAS system load - Utilization of the DABC system

p0219 A82-23315

A Microwave Landing System simulation

p0220 A82-23323

Real time digital filtering test in the 21 continuous wind tunnel at Modane

p0276 A82-26299

Quantitative interpretation of recirculated flow visualization by the analysis of video pictures

p0286 A82-27109

Advanced medium scale real-time system --- for Army helicopter tests

p0290 A82-27187

Real-time failure detection of aircraft engine output sensors

p0297 A82-28043

Advancements in real-time engine simulation technology --- of digital electronic aircraft engine control

[AIAA PAPER 82-1075] p0416 A82-34995

Air-to-air missile avoidance

[AIAA PAPER 82-1516] p0484 A82-38929

Terrain following/terrain avoidance system concept development

[AIAA 81-2340] p0052 A82-13530

The real-time aviation weather briefing procedures

p0580 A82-05834

Group 1: Scenario design and development issues

[AIAA PAPER 82-11131] p0080 A82-11131

A real time Pegasus propulsion system model for VSTOL piloted simulation evaluation

[AIAA PAPER 82-22770] p0100 A82-13144
REMOTE SENSORS

Two-frequency Delta k microwave scatterometer measurements of ocean wave spectra from an aircraft
[AD-A1150463] p0554 A82-47493

Remote sensing of turbine engine gases
[AD-A1150463] p0559 A82-30310

High-altitude imagery user guide
[FBFR-1081531] p0562 A82-30608

Aerospace and space report of the President: 1981 activities
[ASTM-TP-04719] p0603 A82-33332

REMOTE SENSORS

Combined multisensor displays --- image preprocessing for shape coding to reduce pilot workload
[AD-A1150463] p0218 A82-22905

Integration of multi-sensor navigation data using optimal estimation techniques
[AD-A1150463] p0273 A82-25577

Improvements to secondary radar for air traffic control
[AD-A1150463] p0341 A82-30311

Magnetic anomalies as a reference for ground-speed and map-matching navigation
[AD-A1150463] p0341 A82-30314

A system design for a multispectral sensor using two-dimensional solid-state imaging arrays
[AD-A1150463] p0341 A82-31991

Application of an optical data link in the airborne scanning system
[AD-A1150463] p0491 A82-39275

The design of a viewing system for near real time stereo images from a UMA borne linescan sensor --- Unmanned Aircraft
[AD-A1150463] p0494 A82-39746

In situ ozone data for comparison with laser absorption remote sensor: 1980 PEPE/HEBOS program
[NASA-TH-84471] p0413 A82-25661

REMOTELY PILOTED VEHICLES

HiMAT onboard flight computer system architecture and qualification
[AD-A1-1207] p0001 A82-10082

Air bay impact attenuation system for the UMA-34V remote piloted vehicle
[AD-A11-1207] p0006 A82-10403

Design and development of a low cost servoed rate gyro for unmanned aircraft
[AD-A1-1207] p0016 A82-11932

Flight experience with a remotely augmented vehicle flight test technique
[AD-A11-1207] p0054 A82-13857

HiMAT aerodynamic design and flight test experience
[AD-A11-1207] p0055 A82-13871

The development and flight test evaluation of an integrated propulsion control system for the HiMAT research airplane
[AD-A11-1207] p0059 A82-13921

In-flight deflection measurement of the HiMAT aerodynamically tailored wing
[AD-A11-1207] p0063 A82-14361

Microwave communications to remotely piloted vehicles
[AD-A11-1207] p0150 A82-16911

Sea-based remotely piloted vehicles, I - Issues and concepts
[AD-A11-1207] p0332 A82-29714

Remotely piloted vehicles: International Conference, 3MA, Bristol, England, April 6-8, 1981, Conference Papers and Supplementary Papers
[AD-A11-1207] p0492 A82-39727

Unmanned aircraft in future combat
[AD-A11-1207] p0492 A82-39728

Horses for courses in BPV operations --- system components design and development in terms of performance and cost
[AD-A11-1207] p0493 A82-39729

Short range tactical BPV system
[AD-A11-1207] p0493 A82-39730

Canadair rotary wing technology development
[AD-A11-1207] p0493 A82-39731

U.S. Army remotely piloted vehicle program
[AD-A11-1207] p0493 A82-39732

Stableye, B. Stephenson --- BPV performance, design and materials characteristics
[AD-A11-1207] p0493 A82-39733

The national dynamics 'observer' mini-BPV for tropical operation
[AD-A11-1207] p0493 A82-39734

SUBJECT INDEX

Mini-BPV propulsion
[AD-A11-1207] p0493 A82-39736

The application of small propellers to BPV propulsion
[AD-A11-1207] p0493 A82-39737

The control and guidance unit for BHEM
[AD-A11-1207] p0493 A82-39738

U.S. Army remotely piloted vehicle supporting technology program
[AD-A11-1207] p0494 A82-39739

A terrain following system, an algorithm and a sensor
[AD-A11-1207] p0494 A82-39740

Sensor stabilisation requirements for BPVs - A simulation study
[AD-A11-1207] p0494 A82-39741

Radar for UMA
[AD-A11-1207] p0494 A82-39742

Electric propulsion for a mini BPV system
[AD-A11-1207] p0494 A82-39744

Flight control systems for aerial targets
[AD-A11-1207] p0494 A82-39745

The design of a viewing system for near real time stereo images from a UMA borne linescan sensor --- Unmanned Aircraft
[AD-A11-1207] p0494 A82-39746

Opto-electronic push-broom scanners for navigation, reconnaissance and generation of digital data bases
[AD-A11-1207] p0494 A82-39747

The design of a BPV ground station simulator
[AD-A11-1207] p0495 A82-39750

Flight experience with a backup flight-control system for the HiMAT research vehicle
[AD-A11-1207] p0497 A82-40429

A restrained model helicopter, which is able to fly, for investigations regarding anemometer parameter control behavior --- German thesis
[AD-A11-1207] p0543 A82-41687

Perspectives for the use of remotely piloted vehicles in military technology
[AD-A11-1207] p0554 A82-44220

Control of the operations of a 'flight complex' --- Russian on ground installations to aid air and space navigation
[AD-A11-1207] p0577 A82-45213

Aquila - Robot eye in the sky
[AD-A11-1207] p0584 A82-48025

Parametric study of microwave-powered high-altitude airplane platforms designed for linear flight
[BASA-TP-1918] p0035 A82-11050

A true air speed sensor for miniature unmanned aircraft
[BASA-TP-SPACE-287] p0133 A82-14086

Low cost development of INS sensors for expendable BPV control and navigation
[AD-A11-2691] p0255 A82-20291

The feasibility of a high-altitude aircraft platform with consideration of technological and societal constraints
[BASA-TP-06508] p035 A82-29313

The Maneuverable Atmospheric Probe (MAP), a remotely piloted vehicle
[AD-A11-1116] p0589 A82-31323

Alternative employment concepts for Remotely Piloted Vehicle (BPV) FLIR/TV mission payload
[AD-A11-7977] p0608 A82-33379

Norton technology for electric Remotely Piloted Vehicle (BPV)
[AD-A11-7977] p0612 A82-33651

REMOVAL

Efficient part removal processes --- from molds
[AD-A11-2026] p036 A82-37097

RENDIENCES TRAJECTORIES

Piloted simulation of an on-board trajectory optimization algorithm
[AD-A11-2026] p0167 A82-20296

BICE 95

Supercycle power engine component; controls employed to assure high quality hardware
[AD-A11-2026] p0021 A82-12499

REPAIRING

U MAINTENANCE

REPLACING

New technology for the next generation of commercial transports - Real or imaginary
[AD-A11-2026] p0516 A82-41007

A-364
### SUBJECT INDEX

**Replacement of aboard naval aircraft**

**RESEARCH**

- NT CONGRESSIONAL REPORTS
- NT PRESIDENTIAL REPORTS

**Technical evaluation report on the Aerelasticity in Aircrafts Synergetics**

**PUBLIC AIRCRAFT**

- NT A-10 AIRCRAFT
- NT A-10 AIRCRAFT

**PUBLIC MILITARY AIRCRAFT**

**PUBLIC REPUBLIC OF KOREA**

**PUBLIC SOUTH KOREA**

**REQUIREMENTS**

- Analytical study of cockpit information requirements

**RESCUE OPERATIONS**

- SAR/SBS applications

**Flight testing the suspended maneuvering system**

**Status of the COSPAS-SARSAT project and its possible operation in conjunction with INMARSAT system**

**Survey of aeromedical evacuation in Italy**

**The network of civilian air rescue in Germany**

**Ambulance helicopter in the Stockholm archipelago**

**Military assistance to safety and traffic/MASSAN**

**The situation of air rescue in Argentina**

**Aeromedical evacuation in New Zealand**

**Helicopter secondary applications for neurotraumatic emergencies**

**Problems pertaining to aeronautical technology as the case of rescue operations with helicopters in mountainous areas**

**The helicopter in rescue operations in high-mountain areas**

**Design requirements for modern rescue helicopters**

**The case for helicopter hoisting**

**LEMS III recovery assist, securing and transferring /LEMS/ system --- Light Airborne Multi-Purpose System**

**Analysis of side-looking airborne radar /SLAR/ performance in the detection of search and rescue targets**

**The employment of helicopters in Austria in connection with large-scale fires in buildings**

**Performance characteristics and employment profiles of the new helicopter HE-119**

**Improving aircrewwater survival**

**Consideration of an international private sector satellite search and rescue locating system**

**Special investigation report. Search and rescue procedures and aiming of emergency locator transmitter: Aircraft accident near Michigan City, Indiana, 7 December, 1980**

**Project Sea Hunt: A report on prototype development and tests**

**Naval versions of the Dauphin and the AS 15 TT weapon system --- helicopters**

### RESEARCH AND DEVELOPMENT

**Aircraft fire safety**

**Aircraft fire mishap experience/crash fire scenario quantitation**

**Human response to fire**

**Aircraft post-crash fire fighting/rescue**

**Preliminary assessment of US Coast Guard Short Range Recovery (SBR) Forward Looking Infrared (FLIR) system small target detection performance**

**Aircraft icing research at NASA**

**Activation of the Institute of Sound and Vibration Research**

**An exploratory research and development program leading to specifications for aviation turbine fuel from whole crude shale oil, part 5**

**Research aircraft**

- NT A-10 AIRCRAFT

**NT MOTOR SYSTEMS RESEARCH AIRCRAFT**

**NT Z-14 AIRCRAFT**

**NT Z-11A AIRCRAFT**

**Powered-lift takeoff performance characteristics determined from flight test of the Quiet Short-haul Research Aircraft /QSBA/**

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

**The development and flight test evaluation of an integrated propulsion control system for the HS747 research airplane**

**Powered-lift STOL aircraft shipboard operations --- a comparison of simulation, land-based and sea trial results for the QSBA --- Quiet Short-haul Research Aircraft**

**New all-electric-system technology --- electromechanical actuators for aircraft**

**Ball-Bartoe Jetwing flight tests**

**Quiet Short-Haul Research Aircraft - The first 3 years of flight research**

**Real-Time Simulation Computation System --- for digital flight simulation of research aircraft**

**Performance flight test evaluation of the Ball-Bartoe De-1 Jetwing STOL research aircraft**

**Unique flight characteristics of the AD-1 oblique-wing research airplane**

**HACAN - A air unmanned aircraft flight research facility**

**Performance characteristics of a buoyant quad-rotor research aircraft**

**Preliminary design study of a hybrid airship for flight research**

**Aeronautics in China - An AIAA report --- Book**

---

**A-365**
BBSBUCB FACILITIES

Concept definition and aerodynamic technology

Civil aviation in China

Progress in aeronautical research and technology applicable to civil-air transports

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

High angle-of-attack characteristics of three-surface fighter aircraft - canard-wing-horizontal tail configuration for greater stability and control

Windshield system structural enhancement

APAR turbine engine controls research and development - Present and future

You Harman and VR2 - The first 25 years

Aerodynamics - Retrospect 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 R&D 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/Glenn Research Center /NASA-TP-81-1368

NASA/General Electric broadband-specific fuels combustion technology program - Phase I results and status

Aeronautical research applications at Boeing

Aircraft R&D in Europe - a perspective view

An examination of helicopter blade profiles and tips /NASA, SP No. 1982-257

Aeronomical research and development in Europe - Perspectives

It's too logical - It'll never work /Commercial applications of the J/7/

Development and construction of pilot ejection seats in Germany from 1938-1945

The influence of aeronautical R&D expenditure upon the productivity of air transportation /AFOSR-2877/46

Aeronautical and space report of the President, 1980 activities

The Royal Aircraft Establishment: 100 years of research and development

Research and development at AAA. Technical and scientific publications, 1981

A technical assessment of aeronautical engineering in Israel /AD-810900/

Historical research and development inflation indices for Army fixed and rotor wing aircraft /AD-1184368/

Present challenges of research and technology politics

Recent progress in VSTOL technology /NASA-TR-76720/

Research Facilities:

Description of the meteorological research radar system aboard NOAA/Research Facilities Center WP-3D aircraft

NACARS - a unmanned aircraft flight research facility

Applying advanced technology to flight station design

NASA Dryden Flight Loads Research Facility /NASA-TR-81-368/

Aeronautical Research Laboratories Structures Division /AD-1109049/

Functional requirements for the man-vehicle systems research facility --- identifying and correcting human errors during flight simulation /NASA-CR-166315/

Math model description for the Visual Technology Research Simulator (VTTS) conventional takeoff and landing (CTOL) weapon delivery visual system /NASA-TP-81-412/

There are presently three research and development programs that are visible at the NASA Dryden Flight Research Center:

- **Research Projects**: The F52 RAE Bedford civil flight research programme --- on components and system integration for optimum ATC

- **Airworthiness Development Program (ADP)**: Power control development

- **Research and Development (R&D)**: Redesign study for an advanced flight research rotor

NASDA research on viscous drag reduction

Advanced aerodynamic wing design for commercial transports - Review of a technology program in...
SUBJECT INDEX

the Netherlands  p0514 AB2-0985

RESEARCH VESICLES  p0434 AB2-3699
8inAT aerodynamic design and flight test experience  p0434 AB2-3699
[ AIAA PAPER 81-2433]  p0555 AB2-13871

RESEARCH AREAS  p0492 AB2-39399
Comparison of aircraft and ground vehicle noise levels in front and backyards of residences  p0492 AB2-39399
p0146 AB2-20058

EFFECTS OF AIRCRAFT NOISE ON THE EQUILIBRIUM OF AIRPORT RESIDENTS: TESTING AND UTILIZATION OF A NEW METHODOLOGY  p0042 AB2-11636
[ NASA-TB-76628]  p0042 AB2-11636

RESIDUAL STRESS  p0101 AB2-13957
A multidisciplinary crack-growth prediction methodology for flaws originating at fastener holes  p0101 AB2-13957
Stress intensity factors for radial cracks at outer surface of a partially autofrettaged cylinder subjected to internal pressure  p027 AB2-28932
[ AD-A116396]  p027 AB2-28932

RESIN BONDING  p0057 AB2-31714
A new resin for field repair  p0057 AB2-31714
Addition polyamide adhesives containing various end groups  p0291 AB2-27412
p0291 AB2-27412
p0329 AB2-29098

RESIN MATRIX COMPOSITES  p0329 AB2-29098
Femal fatigue assessment of candidate resins for use in fibre reinforced composite repair schemes  p0113 AB2-17531
Composite fasteners - A compatible joining technique for fibrous composites in structural design - Aircraft construction materials  p0289 AB2-27159
Efficient part removal processes - From molds  p0289 AB2-27159
Tailor-made structures: today, and tomorrow: New materials, an exploratory investigation into their potential use - In aircraft  p0436 AB2-37097
[ DAR-SDW-65/4/104/005]  p0436 AB2-37097
Design considerations and experiences in the use of composite material for an aerelastic research wing  p0535 AB2-22253
[ NASA-TN-83291]  p0535 AB2-22253

RESINS  p0523 AB2-28200
MT ACRYLIC RESINS  p0523 AB2-28200
MT EPoxy RESINS  p0523 AB2-28200
MT KEVLAR (TRADEMARK)  p0523 AB2-28200
MT PREMOLIC RESINS  p0523 AB2-28200
MT POLYAMIDE RESINS  p0523 AB2-28200
MT POLYESTER RESINS  p0523 AB2-28200
MT POLYURETHANE RESINS  p0523 AB2-28200
MT THERMOPLASTIC RESINS  p0523 AB2-28200

RESISTIVITY  p0156 AB2-19215
U ELECTRICAL RESISTIVITY  p0156 AB2-19215
RESISTORS  p0156 AB2-19215
MT THERMISTORS  p0156 AB2-19215

RESOLUTION  p0482 AB2-38045
MT IMAGE RESOLUTION  p0482 AB2-38045
MT RADAR RESOLUTION  p0482 AB2-38045
MT SPECTRAL RESOLUTION  p0482 AB2-38045
Study and development of an integrated head-up display  p0482 AB2-38045
[ AD-A104337]  p0482 AB2-38045

RESOLVING POWER  p0282 AB2-26511
U RESOLUTION  p0282 AB2-26511

RESPONDER  p0267 AB2-19227
U TRANSPONDERS  p0267 AB2-19227

RESPONSE-BIAS  p0267 AB2-19227
Flutter and time response analyses of three degree of freedom airfoils in transonic flow  p0267 AB2-19227
[ AD-A105987]  p0267 AB2-19227

RESPONSE TIME (COMPUTERS)  p0282 AB2-26511
Automating air-traffic control  p0282 AB2-26511

RESPONDS  p0282 AB2-26511
MT DYNAMIC RESPONSE  p0282 AB2-26511
MT MODAL RESPONSE  p0282 AB2-26511
MT TRANSIENT RESPONSE  p0282 AB2-26511

RESPONSIBLE  p0434 AB2-3699
MT CONSTRAINTS  p0434 AB2-3699

RESPONSIBILITIES  p0434 AB2-3699
MT FLAME RETARDANTS  p0434 AB2-3699
MT POLYURETHANE  p0434 AB2-3699
MT THERMOPLASTIC BLENDS  p0434 AB2-3699

RESPONSIVE  p0031 AB2-10452
MT DYNAMIC RESPONSE  p0031 AB2-10452
MT MODAL RESPONSE  p0031 AB2-10452
MT TRANSIENT RESPONSE  p0031 AB2-10452

RETAINMENT FOR CAUSE  p0434 AB2-3699
A retirement-for-cause study of an engine turbine  p0434 AB2-3699

Application of the sequential optimization method to the tuning of the natural frequencies of gas-turbine engine compressor blades  p0434 AB2-3699
Calculation of natural modes of vibration for rotor blades by the finite element method  p0434 AB2-3699
[ DFVLB-PB-81-07]  p0434 AB2-3699

-367
RETRACTABLE EQUIPMENT

RETRACTABLE EQUIPMENT

RETRACTABLE EQUIPMENT

RETRACTABLE LANDING GEAR

U-LANDING GEAR

U-RETRACTABLE EQUIPMENT

RETRIEVAL

NT DATA RETRIEVAL

NT INFORMATION RETRIEVAL

NT ACOUSTIC RETROFITTING

JP-8 FUEL CONVERSION EVALUATION

Preplanned product improvement and other modification strategies: Lessons from past aircraft modifications programs

BEYENLD'S STRESSES

The structure of a separating turbulent boundary layer. I - Mean flow and Reynolds stress. II - Higher-order turbulence results

Close-coupled canard-wing vortex interaction and Reynolds stress acquisition

EFFECTS OF BEYENLD'S NUMBER AND TURBULENCE LEVEL ON LOW BEYENLD'S NUMBER AIRFOIL SURVEY, VOLUME I

FORCE AND MOMENT, FLOW-VISUALIZATION, AND COMPUTATION OF HIGH BEYENLD'S NUMBER

ON THE PERFORMANCE PREDICTION OF A CENTRIFUGAL TURBINE

TURBULENT BOUNDARY-LAYER DEVELOPMENT ON A TWO-DIMENSIONAL AERODYNAMIC SYSTEM WITH SUPERCritical FLOW AT LOW REYNOLDS NUMBER

REYNOLDS NUMBERS

EXPERIMENTAL STUDIES OF THE EPPER 61 AIRFOIL AT LOW REYNOLDS NUMBERS

A new facility and technique for two-dimensional aerodynamic testing

A vortex sheet method for calculating separated two-dimensional flows at high Reynolds number

A review of Reynolds number studies conducted in the Langley 0.3-m Transonic Cryogenic Tunnel

Turbulent boundary-layer development on a two-dimensional aeroflot with supercritical flow at low Reynolds number

On the performance prediction of a centrifugal compressor scaled up

Computation of high Reynolds number internal/external flows

Studies of airfoils at Reynolds numbers comparable to flight in GHEA's P1 and SIVa wind tunnels

Force and moment, flow-visualization, and boundary-layer tests on a shuttle orbiter model at Mach 6

Low Reynolds number airfoil survey, volume I

Effects of Reynolds number and turbulence level on axial cascade performance

A-368

SUBJECT INDEX

Survey on the effect of blade surface roughness on compressor performance

Flow and acoustic properties of low Reynolds number underexpanded supersonic jets

Surface flow visualization requirements for testing in NTF

Supersonic jet noise generated by large scale installations

THE STRUCTURE OF A SEPARATING TURBULENT BOUNDARY LAYER. I - MEAN FLOW AND REYNOLDS STRESSES. II - HIGHER-ORDER TURBULENCE RESULTS

CLOSE-COUPLED CANARD-WING VORTEX INTERACTION AND REYNOLDS STRESS ACQUISITION

EFFECTS OF REYNOLDS NUMBER AND TURBULENCE LEVEL ON LOW REYNOLDS NUMBER AIRFOIL SURVEY, VOLUME I

FORCE AND MOMENT, FLOW-VISUALIZATION, AND COMPUTATION OF HIGH REYNOLDS NUMBER ON THE PERFORMANCE PREDICTION OF A CENTRIFUGAL TURBINE TURBULENT BOUNDARY-LAYER DEVELOPMENT ON A TWO-DIMENSIONAL AERODYNAMIC SYSTEM WITH SUPERCritical FLOW AT LOW REYNOLDS NUMBER

REYNOLDS NUMBERS EXPERIMENTAL STUDIES OF THE EPPER 61 AIRFOIL AT LOW REYNOLDS NUMBERS A new facility and technique for two-dimensional aerodynamic testing A vortex sheet method for calculating separated two-dimensional flows at high Reynolds number A review of Reynolds number studies conducted in the Langley 0.3-m Transonic Cryogenic Tunnel TURBULENT BOUNDARY-LAYER DEVELOPMENT ON A TWO-DIMENSIONAL AERODYNAMIC SYSTEM WITH SUPERCritical FLOW AT LOW REYNOLDS NUMBER On the performance prediction of a centrifugal compressor scaled up Computation of high Reynolds number internal/external flows Studies of airfoils at Reynolds numbers comparable to flight in GHEA's P1 and SIVa wind tunnels Force and moment, flow-visualization, and boundary-layer tests on a shuttle orbiter model at Mach 6 Low Reynolds number airfoil survey, volume I Effects of Reynolds number and turbulence level on axial cascade performance A-368
SUBJECT INDEX

ROLLERS

Advances in high-speed rolling-element bearings
[AD-A109503] p0529 882-28644

ROLLERS
Simulation of the interaction between airdrop platformed and aircraft rollers
[AD-1116370] p0569 882-31329

ROLLING MOMENTS

Subsonic and transonic roll damping measurements on basic planar -- fanned missile calibration model
p0165 882-19958

Effects of aerodynamic coupling on the dynamics of roll aircraft
p0088 882-12070

Leading edge flap system for aircraft control
p0088 882-12070

Augmentation

Rolling flow wind tunnel tests of F-18 aircraft

ROLLUP SOLAR ARRAYS

U SOLAR ARRAYS

HOOPS

A theoretical study of the impact of aircraft wake vortices on roofs in the final approach area of Dunkeldorf Airport
[DFV-TH-88-01] p0371 882-23561

ROTARY DRIVES

U MECHANICAL DRIVES

ROTARY GYROSCOPES

Fast and accurate gyrocomps using strapdown tuned rotor gyro as a solution to combat helicopters navigation problems
p0016 882-11927

Design considerations for the direct digital control of dry-tuned gyroscope
p0017 882-11933

3 DOF gyro analysis from measured and derived rates --- hypersonic reentry simulation test
[AIAA PAPER 82-0189] p0116 882-17831

The use of dynamometer readings for damping of the natural vibrations of twin-rotor gyrocompasses
p0298 882-28475

ROTARY STABILITY

WT GYROSCOPIC STABILITY

Dynamic stability of low effective flap hinge BHE concepts
p0277 882-26377

Stability and self-oscillations of coaxial rotors
p0342 882-31603

Use of rotary balance and forced oscillation test data in six degrees of freedom simulation
[AIAA PAPER 82-1364] p0409 882-39129

Whirl mode stability of the main rotor of the TAH-64 advanced attack helicopter
p0499 882-40513

Correlating measured and predicted inplane stability characteristics for an advanced bearingless rotor

A further study of helicopter rotor pitch-flap-phase coupling
[BO-259] p0265 882-19218

Test plan for SSB -- surveillance radar for air traffic control
[AD-A109503] p0307 882-20392

Family of airfoil shapes for rotating blades -- for increased power efficiency and blade stability

ROTARY WING AIRCRAFT

WT AH-66 HELICOPTER
WT BO-105 HELICOPTER
WT CH-46 HELICOPTER
WT CH-47 HELICOPTER
WT HEAVY Lift HELICOPTERS
WT HELICOPTERS
WT MILITARY HELICOPTERS
WT OH-13 HELICOPTER
WT OH-58 HELICOPTER
WT P-531 HELICOPTER
WT RIGID ROTOR HELICOPTERS
WT Rotor SYSTEMS RESEARCH AIRCRAFT
WT SA-330 HELICOPTER
WT SH-3 HELICOPTER
WT TANDEM ROTOR HELICOPTERS
WT TILT ROTOR AIRCRAFT
WT UH-1 HELICOPTER
WT UH-60A HELICOPTER
WT XV-15 AIRCRAFT

On computing Floquet transition matrices of roto-rocket
p0013 882-11225

Development of a comprehensive analysis for rotorcraft, II - Aircraft model, solution procedure and applications
p0656 882-14407

A new safety harness for mobile aircraft
p0708 882-14963

Factors shaping conceptual design of rotary-wing aircraft
p0440 882-37773

Performance characteristics of a buoyant quad-rotor research aircraft
p0513 882-40974

Rotorcraft flight simulation computer program CB1 with DAVE/HAP interface. Volume 2: Programmer's manual
[AD-A108294] p0250 882-18231

Design study into a high endurance mini-rotorcraft
[BO-265] p0266 882-19216

Review of rotorcraft accidents 1977-1979
[PB82-115601] p0351 882-22237

New development in flying qualities with application to rotary wing aircraft
p0366 882-23226

Past applications and future potential of variable stability research helicopters
p0367 882-23220

Applications of system identification methods to the prediction of helicopter stability, control and handling characteristics
p0367 882-23230

NASA/AIA Advanced Rotorcraft Technology and Tilt Rotor Workshop. Volume 6: Vehicle Configuration Session
[NASA-TH-84160] p0360 882-23242

Conceptual design study for an advanced cab and visual system, volume 1

Conceptual design study for an advanced cab and visual system, volume 2
[NASA-CR-166236] p0410 882-25267

Briefs of accidents involving rotorcraft, U.S. general aviation, 1979
[p0465 A82-27249

NASA aerodynamics
[NASA-SP-65] p0557 882-30283

Development of a rotorcraft. Propulsion dynamics interface analysis, volume 2
[p0591 A82-32369

ROTARY WINGS

WT BEARINGLESS ROTORS
WT CIRCULATION CONTROL ROTORS
WT LIFTING ROTORS
WT RIGID ROTORS
WT TILTING ROTORS
WT X WING ROTORS

Helicopter rotor trailing edge noise
[AIAA PAPER 81-2001] p0000 882-10455

Composite main rotor tubular braided
[p0009 A82-10547

Model helicopter rotor impulse noise
p0013 882-11300

Numerical treatment of helicopter rotor stability problems
p0019 882-12045

Advancing blade concept /ABC/ development test program
[AIAA PAPER 81-2347] p0055 882-13873

A set of finite elements developed for the dynamic computation of composite helicopter blades
[ONEBA, TP No. 1981-87] p0062 882-13390

Application of the ONEBA dynamic stall model to a helicopter blade in forward flight
[ONEBA, TP No. 1981-89] p0062 882-13392

Design requirements for modern rescue helicopters
[p0153 A82-19921

Fatigue behavior of selected non-woven fiber composites for helicopter rotor blades
p0170 882-20524

Structural testing of composites with known defects
p0239 882-24708

Fatigue test of the typical main rotor controls component
p0240 882-24715

Helicopter rotor load prediction
p0240 882-24719

A-370
ROTATING BODIES

U ROTATION

U ROTATION

ROTOR AERODYNAMICS

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

p0563 82-41666

Aerodynamic characteristics of a mistuned bladed-disc assembly

p0301 82-20142

A retirement-for-cause study of an engine turbine disk

p0305 82-20148

Defects and their effect on the behavior of gas turbine discs

p0386 82-22178

ROTATING DEVICES

A theoretical analysis of the stream surface of revolution with supersonic inlet flow in a transonic axial compressor

p0033 82-11025

ROTATING GENERATORS

X AC GENERATORS

X DYNAMOMETERS

High speed PM containment study for VSCP system

p0072 82-14791

Permanent Magnet Generator for Variable Speed Constant Frequency applications

ROTOR SHAFTS

X SHAFTS (MACHINE ELEMENTS)

X TURBOSHAFTS

Transonic vibration of high speed lightweight rotor due to sudden imbalance

p0428 82-35413

Axial compressor stall and surge

p0205 82-17914

Axial compressor stall and surge

p0186 82-22209

ROTATING VEHICLES

U ROTATING BODIES

U ROTATIONAL FLOW

U ROTATIONAL FLOW

U VORTEXES

ROTOR AERODYNAMICS

 ROTATING BODIES

U ROTATION

ROTOR AERODYNAMICS

ROTOR AERODYNAMICS

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

p0563 82-41666

Aerodynamic characteristics of a mistuned bladed-disc assembly

p0301 82-20142

A retirement-for-cause study of an engine turbine disk

p0305 82-20148

Defects and their effect on the behavior of gas turbine discs

p0386 82-22178

ROTATING DEVICES

A theoretical analysis of the stream surface of revolution with supersonic inlet flow in a transonic axial compressor

p0033 82-11025

ROTATING GENERATORS

X AC GENERATORS

X DYNAMOMETERS

High speed PM containment study for VSCP system

p0072 82-14791

Permanent Magnet Generator for Variable Speed Constant Frequency applications

ROTOR SHAFTS

X SHAFTS (MACHINE ELEMENTS)

X TURBOSHAFTS

Transonic vibration of high speed lightweight rotor due to sudden imbalance

p0428 82-35413

Axial compressor stall and surge

p0205 82-17914

Axial compressor stall and surge

p0186 82-22209

ROTATING VEHICLES

U ROTATING BODIES

U ROTATIONAL FLOW

U ROTATIONAL FLOW

U VORTEXES

ROTOR AERODYNAMICS

ROTATING BODIES

U ROTATION

ROTOR AERODYNAMICS

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

p0563 82-41666

Aerodynamic characteristics of a mistuned bladed-disc assembly

p0301 82-20142

A retirement-for-cause study of an engine turbine disk

p0305 82-20148

Defects and their effect on the behavior of gas turbine discs

p0386 82-22178

ROTATING DEVICES

A theoretical analysis of the stream surface of revolution with supersonic inlet flow in a transonic axial compressor

p0033 82-11025

ROTATING GENERATORS

X AC GENERATORS

X DYNAMOMETERS

High speed PM containment study for VSCP system

p0072 82-14791

Permanent Magnet Generator for Variable Speed Constant Frequency applications

ROTOR SHAFTS

X SHAFTS (MACHINE ELEMENTS)

X TURBOSHAFTS

Transonic vibration of high speed lightweight rotor due to sudden imbalance

p0428 82-35413

Axial compressor stall and surge

p0205 82-17914

Axial compressor stall and surge

p0186 82-22209

ROTATING VEHICLES

U ROTATING BODIES

U ROTATIONAL FLOW

U ROTATIONAL FLOW

U VORTEXES

ROTOR AERODYNAMICS

ROTATING BODIES

U ROTATION

ROTOR AERODYNAMICS

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

p0563 82-41666

Aerodynamic characteristics of a mistuned bladed-disc assembly

p0301 82-20142

A retirement-for-cause study of an engine turbine disk

p0305 82-20148

Defects and their effect on the behavior of gas turbine discs

p0386 82-22178

ROTATING DEVICES

A theoretical analysis of the stream surface of revolution with supersonic inlet flow in a transonic axial compressor

p0033 82-11025

ROTATING GENERATORS

X AC GENERATORS

X DYNAMOMETERS

High speed PM containment study for VSCP system

p0072 82-14791

Permanent Magnet Generator for Variable Speed Constant Frequency applications

ROTOR SHAFTS

X SHAFTS (MACHINE ELEMENTS)

X TURBOSHAFTS

Transonic vibration of high speed lightweight rotor due to sudden imbalance

p0428 82-35413

Axial compressor stall and surge

p0205 82-17914

Axial compressor stall and surge

p0186 82-22209

ROTATING VEHICLES

U ROTATING BODIES

U ROTATIONAL FLOW

U ROTATIONAL FLOW

U VORTEXES

ROTOR AERODYNAMICS

ROTATING BODIES

U ROTATION

ROTOR AERODYNAMICS

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

p0563 82-41666

Aerodynamic characteristics of a mistuned bladed-disc assembly

p0301 82-20142

A retirement-for-cause study of an engine turbine disk

p0305 82-20148

Defects and their effect on the behavior of gas turbine discs

p0386 82-22178

ROTATING DEVICES

A theoretical analysis of the stream surface of revolution with supersonic inlet flow in a transonic axial compressor

p0033 82-11025

ROTATING GENERATORS

X AC GENERATORS

X DYNAMOMETERS

High speed PM containment study for VSCP system

p0072 82-14791

Permanent Magnet Generator for Variable Speed Constant Frequency applications

ROTOR SHAFTS

X SHAFTS (MACHINE ELEMENTS)

X TURBOSHAFTS

Transonic vibration of high speed lightweight rotor due to sudden imbalance

p0428 82-35413

Axial compressor stall and surge
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

General purpose research rotor

Rotor state estimation for rotorcraft

Substructure program for analysis of rotor vibrations

Determination of rotor wake induced unbalance

Influence of unsteady aerodynamics on hingeless rotor ground resonance

A simplified approach to the free wake analysis of a hovering rotor

Calculation of free wake flow using radial grating

Calculation of quasi-stationary aerodynamic force acting on a cascade of oscillating airfoils in subsonic flow

Calculation of level flow using radial grating

Aircraft Forum
SUBJECT INDEX

A doublet lattice method for the determination of rotor induced unsteady vibration airloads.  
Analysis description and program documentation  
[NASA-CR-165593]  p0565 N82-31295

Coupled rotor/hub/torque vibration analysis program manual. Volume 1: User's and programmer's instructions  
[NASA-CR-165591]  p0573 N82-31965

Coupled rotor/airframe vibration analysis program manual. Volume 2: Sample input and output listings  
[NASA-CR-165592]  p0573 N82-31966

Development of a rotorcraft. Propulsion dynamics interface analysis, volume 1  
[NASA-CR-166380]  p0591 N82-32368

Development of a rotorcraft. Propulsion dynamics interface analysis, volume 2  
[NASA-CR-166381]  p0591 N82-32369

ROTOR BLADES  
A generalised Hill's method for the stability analysis of parametrically excited dynamic systems  
[NASA-TM-8274]  p0274 A82-25523

Ch-46 fiberglass rotor blade repair program  
[NASA-TM-8268]  p0278 A82-26384

S & D on composite rotor blades at Agusta  
[NASA-TM-8249]  p0439 A82-37754

Joint Anglo-American experience of the analysis of helicopter rotor blade pressure distribution  
[NASA-TM-8248]  p0440 A82-37770

Optimization of blade pitch angle for higher harmonic rotor control  
[NASA-TM-8247]  p0441 A82-37776

A simple system for helicopter individual-blade-control and its application to stall-induced vibration alleviation  
[NASA-PUB-81-12]  p0482 A82-37785

The effect of hybrid composite materials on the dynamic characteristics of helicopter rotor blades  
[NASA-TM-8246]  p0491 A82-39263

Effect of tip vices on the performance and flow field of a rotor in hover  
[NASA-TM-8245]  p0498 A82-40511

Helicopter vibration reduction by rotor blade nodal shaping  
[NASA-TM-8244]  p0498 A82-40514

Finite element analysis for bearingless rotor blade aeroelasticity  
[NASA-TM-8243]  p0499 A82-40517

A simplified method for predicting rotor blade airloads  
[NASA-TM-8242]  p0511 A82-47187

Study on pressure distribution on rotor blades with three-dimensional nonsteady theory of compressible fluid  
[NASA-TM-8241]  p0517 A82-47188

XH-59A ABC technology demonstrator altitude expansion and operational tests  
[AD-111116]  p0469 A82-27282

Helicopter vibration suppression using simple pendulum absorbers on the rotor blade  
[NASA-CR-169131]  p0523 A82-28282

Dynamic System Coupling (DSCO) program. Volume 1: User's manual  
[AD-115003]  p0573 A82-31974

Aeroelastic stability of rotor blades using finite element analysis  
[NASA-CR-166389]  p0588 A82-32342

Finite difference modeling of rotor flows including wake effects  
[NASA-TM-82410]  p0604 A82-33345

Design of helicopter rotor blades for optimum dynamic characteristics  
[NASA-CR-169352]  p0607 A82-33374

Rotor tip clearance effects on overall and blade-element performance of axial-flow transonic fan stage  
[NASA-TM-82409]  p0609 A82-33389

Helicopter vibration suppression using simple pendulum absorbers on the rotor blade  
[NASA-CR-3619]  p0613 A82-33734

ROTOR BLADES (TURBOMACHINERY)  
Effects of vane/blade ratio and spacing on fan noise  
[AIAA PAPER 82-1001]  p0245 A82-10457

Study of the load-carrying capacity of aviation gas-turbine engine impeller under low-cycle fatigue condition at normal and high temperatures  
[NASA-TM-82204]  p0245 A82-10457

Natural frequencies of rotating blade discs using clamped-free modes  
[NASA-TM-82204]  p0245 A82-15082

A critical appraisal of some current incidence models for the stator and rotor of a mixed flow gas turbine  
[NASA-PAPER 82-GT-120]  p0425 A82-35350

Transient vibration of high speed lightweight rotor due to sudden imbalance  
[NASA-PAPER 82-GT-23]  p0428 A82-35413

Engine experience of turbine rotor blade materials and coatings  
[NASA-PAPER 82-GT-244]  p0428 A82-35425

Heat transfer optimised turbine rotor blades - An experimental study using transient techniques  
[NASA-PAPER 82-GT-304]  p0430 A82-35469

A simplified approach to the free wake analysis of a hovering rotor  
[NASA-PAPER 82-GT-39]  p0433 A82-35474

Fluctuating forces and rotor noise due to distorted inflow  
[NASA-PAPER 82-GT-39]  p0510 A82-90095

Thrust modulation methods for a subsonic V/STOL aircraft  
[NASA-TR-8274]  p0998 A82-13112

Study of controlled diffusion stator blading. 1. Aerodynamic and mechanical design report  
[NASA-CR-165500]  p0190 A82-16081

Part span damper loss prediction for transonic axial fan rotors  
[NASA-TP-82743]  p0205 A82-17192

Deformation/turing angle correlations  
[NASA-TP-82741]  p0205 A82-17193

Static investigations of rotor blades under deadweight and during stationary operation  
[NASA-TP-82740]  p0210 A82-17639

Loading cycles and material data for the layout of a wind turbine of special hub concept  
[NASA-TP-273]  p0215 A82-17643

Seventh European Rotorcraft and Powered Lift Aircraft Forum  
[NASA-TP-82742]  p0245 A82-18120

A simplified approach to the free wake analysis of a hovering rotor  
[NASA-TP-82743]  p0245 A82-18121

An experimental analysis of the shape of a rotor wake  
[NASA-TP-82744]  p0245 A82-18122

A simplified method for predicting rotor blade airloads  
[NASA-TP-82745]  p0245 A82-18124

A three-dimensional approach to lift and moment characteristics and responses in forward flight  
[NASA-TP-82746]  p0245 A82-18126

Modal characteristics of rotor blades: Finite element approach and measurement by ground vibration test  
[NASA-TP-82747]  p0245 A82-18127

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-82748]  p0355 A82-22269

Rotor fragment protection program: Statistics on aircraft gas turbine engine failures that occurred in 0.6 commercial aviation operations 1978  
[NASA-CR-165388]  p0473 A82-27316

Establishment of a rotor model basis  
[NASA-TP-2026]  p0535 A82-29311
A prescribed wake rotor inflow and flow field prediction analysis, user's manual and technical approach

[NASA-CR-165804] p0866 N82-31296

ROTOR BODY INTERACTIONS

Development of a rotorcraft. Propulsion dynamics system - Generator system performance characteristics

[ASHE PAPEB 82-GT-296] p0428 A82-35415

ROTOR DISKS

A three-dimensional approach to lift and moment coefficients of rotating blades

p0245 N82-18125

Investigation of a rotor system incorporating a constant lift cap

[NASA-CR-166261] p0531 N82-29271

ROTOR SPEED

60 kVA axial permanent magnet VSCF starter generator systems - Generator system performance characteristics

p0916 N82-11743

Transient vibration of high speed lightweight rotor due to sudden imbalance

[ASHE PAPEB 82-05-23] p0928 N82-35413

Problems of engine response during transient maneuvers

p0208 N82-17221

An extension of the local momentum theory to the rotors operating in twisted flow field

p0245 N82-18123

A simplified method for predicting rotor blade airloads

p0245 N82-18124

Wind tunnel investigation of high speed rotor noise

p0240 N82-18146

ROTOR SYSTEMS RESEARCH AIRCRAFT

Rotor systems research aircraft /BSBA/ rotor force and moment measurement system

[IAIA PAPER 81-2516] p0057 N82-13913

Performance of the Rotor Systems Research Aircraft calibrated rotor loads measurement system

p0502 N82-10549

Pre-design study for a modern four-bladed rotor for the Rotor System Research Aircraft (BSBA)

--- integrating the YAH-64 main rotor

[ASHE PAPEB 82-166154] p0187 N82-16043

NASA/BAA Advanced Rotorcraft Technology and Tilt Rotor Workshops. Volume 3: Aerodynamics and Structures Session

[NASA-TR-88-4467] p0262 N82-19172

BSBA vertical drag test report --- rotor systems research aircraft

[NASA-CR-166399] p0587 N82-32341

ROTORCRAFT

U ROTARY WING AIRCRAFT

The use of frequency methods in rotorcraft system identification

[IAIA PAPER 81-2386] p0064 N82-14392

Dynamic stability of a buoyant quad-rotor aircraft --- for airlifting payloads externally on a sailboat

[IAIA PAPER 82-0242] p0117 N82-17661

The emerging need for improved helicopter navigation

p0162 N82-21591

Preliminary design study of a hybrid airship for flight research

[NASA-CR-166246] p0201 N82-17152

Tethered rotorcrafts and their mission potential

p0248 N82-16145

NASA/Lewis Research Center Icing Research Program

p0311 N82-21148

Cooled variable nozzle radial turbine for rotorcraft applications

[ASHE PAPEB 81-2733] p0536 N82-29323

ROUTERS

A prescribed wake rotor inflow and flow field prediction analysis, user's manual and technical approach

[NASA-CR-165804] p0866 N82-31296

HT TILTING ROTORS

HT TURBINE WHEELS

HT I WING ROTORS

Speed Constant Frequency applications

p0972 N82-14791

Balancing of flexible rotors by the complex modal method

[ASHE PAPEB 81-DRT-66] p0161 N82-19310

Optimum journal bearing parameters for minimum rotor unbalance response in synchronous whirling

[ASHE PAPEB 81-DRT-55] p0161 N82-19314

Application of combined balancing methods to flexible rotors of aviation gas-turbine engines

p0342 N82-31643

Experimental evaluation of squeal free supported flexible rotors

[ASHE PAPEB 82-05-233] p0208 N82-35415

The nonsynchronous whirls of the turbine rotor in aerojet engines

p0510 N82-40594

Rotor model for the verification of computational methods

(1SD-275) p0214 N82-17638

Loading cycles and material data for the layout of a wind turbine of special hub concept

(1SD-273) p0215 N82-17643

Approach to the fatigue analysis of vertical-axis wind-turbine blades

[DE82-003193] p0308 N82-20573

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

[AD-A103411] p0318 N82-21203

Basic technology of squeal-free dampers for rotor dynamics control

[AD-A10842] p0369 N82-23250

Wide field of view laser beacon system for three dimensional aircraft range measurements

p0466 N82-26216

Rotor fragment protection program: Statistics on aircraft gas turbine rotor failures that occurred in U.S. commercial aviation during 1978

p0473 N82-27316

Aerodynamic force acting on the blades of stall regulated propeller type windmills

[DE82-901178] p0573 N82-31718

User's guide for the rotorcraft flight simulation computer program CB1, AGAP80 version, CDC conversion

[AD-A115801] p0594 N82-32388

The Shock and Vibration Digest, volume 14, no. 3

[AD-A112586] p0596 N82-32525

Subsynchronous vibrations of rotor system stability

[AD-A116774] p0599 N82-32574

Lagrange's method of harmonic analysis with general nonlinear finite element code. Part 2: Bearing element implementation overall numerical characteristics and benchmarking

[ASHE PAPEB 82-16794] p0609 N82-33390

ROGLENESS

HT SEA ROUGLENESS

HT SURFACE ROUGLENESS

Aerodynamic penalties of heavy rain on a landing aircraft

[NASA-CR-156885] p0558 N82-30298

ROUTES

AIAA/WSC aviation route forecast /ASB/ development

[IAIA PAPER 82-0013] p0183 N82-22027

Maximizing South Carolina's aviation resources: Identifying potentially profitable coastal airline routes, volume 2

[PHOS-139353] p0532 N82-29277

A-376
SATELLITE NETWORKS
Satellite geometry considerations for low cost GPS user equipment
[1248 02-38047]
Propects for Navstar - A future worldwide civil navigation-satellite system
[40021 02-12630]
Consideration of an international private sector satellite search and rescue locating system
[0656 02-84699]
Study of the global positioning system for maritime concepts/applications: Study of the feasibility of replacing maritime shipborne navigation systems with NAVSTAR
[04049 02-26263]
SATELLITE OBSERVATION
A comparison of pole positions derived from GPS satellite and Navy navigation satellite observations
[20161] p0025 N82-10016
Scanner imaging systems, aircraft
[50529 02-28715]
SATELLITE SOUNING
Rapid extraction of layer relative humidity, geopotential thickness, and atmospheric stability from satellite sounding radiometer data
[0262 02-25113]
SATELLITE TRANSMISSION
Data communications within the Air Navigation Services system
[0125 02-18722]
Radiating elements for hemispherically scanned array - onboard aircraft for data links to satellites
[0379 02-32992]
SATellite-Borne PHOTOGRAPHY
Aerospatial convective weather systems and aviation operations
[15114 02-17733]
SATELLITES
AT COMMUNICATION SATELLITES
AT GONOCENTRIC SATELLITES
AT NAVIGATION SATELLITES
AT NAVSTAR SATELLITES
AT SCATSAT SATELLITES
AT SEASAT SATELLITES
AT TIAN
SATELLITE DEVICES
AT TIAN
SCALE EFFECT
Scaling effects on leakage losses in labyrinth seals
[150426 02-35380]
An investigation of F-16 nozzle-afterbody forces at transonic Mach numbers with emphasis on model scale effects
[0091 02-12392]
SCALE MODELS
Analysis of data from a wind tunnel investigation of a large-scale model of a highly maneuverable supersonic Y/STOL fighter - 2X2 configuration
[15015 02-19207]
Experimental performance evaluation of 'ventilated mixers' - a new mixer concept for high bypass turbofan engines
[0039 02-37695]
An experimental investigation of a bearingless model rotor in hover
[0098 02-40512]
An investigation of scale model testing of VTOL aircraft in hover
[00057 02-40911]
An improved propulsion system simulation technique for scaled wind tunnel model testing of advanced fighters
[00517 02-41019]
Standard tests of a research model rotor in a wind tunnel, including model similarity calculations compared with measurements
[0025 02-10016]
Scale-model studies for the improvement of flow patterns of a low-speed tunnel
[0209 02-17228]
Rotor model for the verification of computational methods
[0214 02-17638]
<table>
<thead>
<tr>
<th>Subject Index</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threat alert and Collision Avoidance System (TCAS) Symposium</td>
<td>[AD-1004563] p035 A82-11047</td>
</tr>
<tr>
<td>Moving target Detector/Airport Surveillance radar (ASR-7) field evaluation</td>
<td>[AD-1005196] p009 A82-12303</td>
</tr>
<tr>
<td>Utilization of AN/APS-96 side-looking airborne radar systems in search and rescue</td>
<td>[AD-1104864] p0561 A82-30437</td>
</tr>
</tbody>
</table>

**SEARCHING**

Status of the COSPAS-SARSAT project and its possible operation in conjunction with IMARSAT system  
[BAE-ABG-163] p0370 N82-23255  
R66 v/stol Mind tunnel  
[PB81-249427] p0188 N82-16058  
A result in the theory of spiral search  
[AD-A142641] p0466 A82-27262

**SEAS**

**NT BEARFOOT SEA (NORTH AMERICA)**  
A comparison of Seasat-derived wave height with surface data  
[AD-A114878] p0531 N82-29275

**SEAT BELTS**

Evaluation of a proposed modified F/PB-111 crew seat and restraint system  
[AD-110188] p0313 N82-21167  
Crashworthiness studies: Cabin, seat, restraint, and injury findings in selected general aviation accidents  
[AD-1104870] p0531 A82-29275

**SEAT BELTS**

**NT EJECTION SEATS**

Design of a crashworthy crew seat for the Boeing Vertol Chinook helicopter  
[AD-A104975] p0079 A82-14976  
Test methodology for evaluation of fireworthy aircraft seat cushions  
[AD-A104976] p0079 A82-14976

**SEALANT**

**NT LAMINATE SEAL**

Rob energetics of compressor blade tip seals  
[AD-A102708] p0291 A82-27407  
Service sensitivity of polysulfide seals  
[AD-A102708] p0291 A82-27407  
Chen-Braze adaptable seal practical  
[AD-A102708] p0291 A82-27407  
An experimental investigation of interfacial temperatures in blade-seal material rubbed by aircraft impellers  
[AD-A102708] p0291 A82-27407  
Development and application of airfoil impellers for compressor engine, seal teeth  
[AD-A102708] p0291 A82-27407

**SEARCH AND RESCUE SATellite**

**U SEASAT**

**SEARCH RADAR**

Analysis of side-looking airborne radar /SLAR/ performance in the detection of search and rescue targets  
[AD-A102708] p0293 A82-27641

**SECONDARY MOTIONS**

**SECONDARY FLOWS**

Experimental study of the effects of secondary air on the emissions and stability of a lean premixed combustor  
[AD-A102708] p0291 A82-27407  
Secondary flows and losses in axial flow turbines  
[AD-A102708] p0291 A82-27407  
Secondary flow mixing losses in a centrifugal impeller  
[AD-A102708] p0291 A82-27407  
Secondary flow effects and mixing of the wake behind a turbine stator  
[AD-A102708] p0291 A82-27407  
End-wall boundary layer calculation methods  
[AD-A102708] p0291 A82-27407
SUBJECT INDEX

Correlation for secondary flows and clearance effects p0205 #82-17189

SECONDARY RADAR
Analysis and tolerance study of an array antenna for a new generation of secondary radars p0163 #82-19521

Secondary problem - The presence of false echoes p0206 #82-25233

Improvements to secondary radar for air traffic control p0241 #82-30211

The reliability of height and identity data secondary surveillance radar error analysis p0214 #82-30312

Secondary radar for airborne collision avoidance p0341 #82-30313

Use of aircraft-derived data to assist an ATC tracking systems I - accuracy and theoretical considerations p0546 #82-42504

SECULAR DISTURBANCE
C LONG TERM EFFECTS

SECURITY
Effectiveness of the Civil Aviation Security program [AD-A117671] p0606 #82-33362

SEDIMENTARY ROCKS

SEISMIC
Hydrocarbon fuel chemistry: Sediment water interaction [AD-A117928] p0612 #82-33552

SEEDING / INOCULATION

SELF ALIGNMENT

SELF ADAPTIVE CONTROL SYSTEMS
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 [NASA-PF-172/5/PUB/39-P7-1] p0267 #82-19226

Self-tuning regulators for multicyclic control of helicopter vibration [NASA-PF-1996] p0305 #82-20188

SELF ALIGNMENT
Software features applicable to inertial measurement unit self alignment [AD-A108511] p0253 #82-18196

SELF INDUCED VIBRATION

NT PANEL FLUTTER
NT SUBSONIC FLUTTER
NT SUPERSONIC FLUTTER
NT TRANSSONIC FLUTTER

The effect of induced sound on the flow around a rectangular body in a wind tunnel p0276 #82-26194

Dynamic load measurements with delta wings undergoing self-induced roll-oscillations [AIAA PAPER 82-1320] p0463 #82-39098

SELF LUBRICATING MATERIALS
Performance of PTFE-lined composite journal bearings [ASME PREPRINT 82-AH-1A-1] p0463 #82-37854

SELF OSCILLATION

One reason for the onset of high-frequency self-excited oscillations - 1 combustion chambers of aircraft engines p0014 #82-11948

Self-oscillations of the front caster wheel strut for a given track width under the assumption of the wheel drift hypothesis p0015 #82-16290

Suppression of self-oscillations in open wind tunnels p0270 #82-25794

Stability and self-oscillations of coaxial rotors p0342 #82-31603

SELF REGULATING
C AUTOMATIC CONTROL

SELF-INDUCED DEVICES

ST CHARGE COUPLED DEVICES
ST CHOS
ST LIGHT EMITTING DIODES
ST PHOTOVOLTAIC CELLS
ST THERMISTORS

HIGH TEMPERATURE ELECTRONIC REQUIREMENTS IN AEROCOSMIC SYSTEMS

HIGH TEMPERATURE ELECTRONIC REQUIREMENTS IN AEROCOSMIC SYSTEMS

HIGH TEMPERATURE ELECTRONIC REQUIREMENTS IN AEROCOSMIC SYSTEMS

HIGH TEMPERATURE ELECTRONIC REQUIREMENTS IN AEROCOSMIC SYSTEMS

HIGH TEMPERATURE ELECTRONIC REQUIREMENTS IN AEROCOSMIC SYSTEMS

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HIGH TEMPERATURE ELECTRONIC REQUIREMENTS IN AEROCOSMIC SYSTEMS

HIGH TEMPERATURE ELECTRONIC REQUIREMENTS IN AEROCOSMIC SYSTEMS

HIGH TEMPERATURE ELECTRONIC REQUIREMENTS IN AEROCOSMIC SYSTEMS

HIGH TEMPERATURE ELECTRONIC REQUIREMENTS IN AEROCOSMIC SYSTEMS
An investigation of the use of a propulsion tanker/canard concept for improved maneuverability (AIAA PAPER 81-2625) p0017 A82-10605
Thrust-induced effects on low-speed aerodynamics of fighter aircraft (AIAA PAPER 81-2612) p0015 A82-19203
Tactical STOL moment balance through innovative configuration technology (AIAA PAPER 81-2616) p0015 A82-19204
Application of thrust vectoring for STOL (AIAA PAPER 81-2616) p0015 A82-19205
STOL capability impact on advanced tactical aircraft design (AIAA PAPER 81-2617) p0015 A82-19206
Quiet Short-Haul Research Aircraft — The first 3 years of flight research (AIAA PAPER 81-2625) p0016 A82-19209
Sea based support aircraft alternatives (AIAA PAPER 81-2645) p0017 A82-19217
Design features of a sea-based multiaxial V/STOL, SIV flight, and STOL aircraft in a support role for the U.S. Navy (AIAA PAPER 81-2650) p0017 A82-19218
Performance flight test evaluation of the Ball-Bartoe JW-1 Jetving STOL research aircraft (AIAA PAPER 81-1132) p0018 A82-20762
Analytical control law for desirable aircraft lateral handling qualities (AIAA PAPER 81-1132) p0018 A82-21941
US Navy begins slow shuffle towards V/STOL (AIAA PAPER 81-2631) p0026 A82-26311
STOL aircraft response to turbulence generated by a tall upward building (AIAA PAPER 81-2632) p0023 A82-35821
Advanced exhaust nozzle concepts using spanwise blowing for aerodynamic lift enhancement (AIAA PAPER 82-1132) p0043 A82-37692
Thrust reverser induced flow interference on tactical aircraft stability and control (AIAA PAPER 82-1132) p0043 A82-37693
Application of advanced exhaust nozzles for tactical aircraft (AIAA PAPER 82-1132) p0043 A82-37694
Design and experimental verification of the USB-flap structure for HAL STOL aircraft — Upper Surface Blowing (AIAA PAPER 82-1132) p0050 A82-40091
Development of the Circulation Control Wing-Upperc Surface Blowing powered-lift system for STOL aircraft (AIAA PAPER 82-1132) p0052 A82-40096
Test results of chordwise and spanwise blowing for low-speed lift augmentation (AIAA PAPER 82-1132) p0052 A82-40099
Design of a longitudinal ride-control system by Takano's method of inequalities (AIAA PAPER 82-1132) p0056 A82-41114
Quiet short-haul research aircraft familiarization document, revision 1 (NASA-TP-813298) p0006 A82-10031
Development and evaluation of automatic landing control laws for light wing loading STOL aircraft (NASA-CS-166160) p0028 A82-10043
Integration of advanced exhaust nozzles (NASA-CS-166160) p0004 A82-13075
HALSTOL aircraft guidance and navigation for a STOL airplane landing on an elevated STOLport (NASA-TN-81338) p0135 A82-14010
Surveys of flow-field around empennage of the HAL STOL-research-aircraft model (NASA-TN-677) p0198 A82-17120
A velocity vector measuring system with 31 asymmetric wedge yaw sensors — measuring flow distribution around the empennage of STOL models (NASA-TN-677) p0213 A82-17477
Review of defense-related vertical and short takeoff and landing (V/STOL) aircraft programs (GPO-55-278) p0254 A82-18205
IFV-124 diagnostic and development program (AD-A103358) p0258 A82-18206
Aerodynamic noise generated by jet wing/flap interactions of the external USB configuration of STOL aircraft. Part 2: Full scale model experimentation using P8710 turbofan engine (HAL-AS-6870-PT-2) p0270 A82-19945
A short takeoff performance computer program (AD-A109861) p0304 A82-20179
Design criteria for flightpath and airspeed control for the approach and landing of STOL aircraft (NASA-TP-1911) p0305 A82-20187
STOL aircraft structural vibration prediction from acoustic excitation (NASA-TP-1911) p0334 A82-22169
Aerodynamic noise generated by jet-wing/flap interactions of the external USB configuration of STOL aircraft. Part 1: Eight percent scale cold-flow model analysis (HAL-AS-6851) p0359 A82-22953
Flight experiments using the front-side control technique during piloted approach and landing in a powered lift STOL aircraft (NASA-TP-81337) p0436 A82-26310
High pressure bleed for STOL and STO-VL performance: A conceptual examination (AD-A115762) p0590 A82-32357
Analysis of several glidethrust and speed control autopilot concepts for a powered lift STOL aircraft (NASA-TN-84262) p0611 A82-33400
SHADOWS
SHADOWS BODIES
The subsonic performance of practical military variable area convergent nozzles (NASA-TP-813298) p0004 A82-13076
SHADOWS TURBINES
Investigation of vibration of shrudged turbine blades (NASA-TP-813298) p0162 A82-19343
A practical approach to systems mode analysis for Air-screw-blade-shroud assemblies (NASA-TP-813298) p0162 A82-19340
SHADOWS
Effect of ampler extended shrudges on centrifugal compressor performance as a function of specific speed (NASA-Paper-GT-226) p0428 A82-35411
Active clearance control system for a turbocharger (NASA-CSP-LRW-12938-1) p0591 A82-32366
SHIMES
U BYPASSES
U CYCLES
U SHUTTLE ORBITERS
U SPACE SHUTTLE ORBITERS
SIC (COEFFICIENTS)
U STRUCTURAL INFLUENCE COEFFICIENTS
SIDE-LOOKING RADAR
U RADAR RANGERS
Analysis of side-looking airborne radar /SLAR/ performance in the detection of search and rescue targets (NASA-TP-813298) p0293 A82-27604
Utilization of AN/APS-94 side-looking airborne radar systems in search and rescue (AD-A116486) p0561 A82-30447
SIDELOOKING Reduction
Secondary radar problems — The presence of false echoes (NASA-Paper-GT-226) p0242 A82-25323
SIDELOP
A cost effective method for the control of road due to side slip on a low speed aircraft (AIAA PAPER 81-2622) p0056 A82-13076
Effects of vortex breakdown on longitudinal and lateral-directional aerodynamics of slender wings by the suction analogy (AIAA PAPER 82-1285) p0049 A82-39141
Lateral aerodynamics of delta wings with leading edge separation (AIAA PAPER 81-2622) p0056 A82-13076
SIGNAL PROCESSING

- Flight-determined correction terms for angle of attack and sideslip
- Low-speed characteristics of a fighter-type configuration at high angles-of-attack and sideslip
- Effects of aerodynamic coupling on the dynamics of roll aircraft
- Sidelslip indication system as a fuel saving aid in jet transport aircraft operation — a-300 and a-300 aircraft
- Air data measurement using distributed processing and fiber optics data transmission

SIGNAL DETECTION

- Detection range analysis of an airborne medium PBF Omega station 10.2 kHz signal selection made easy
- Inflight IFB procedures simulator
- Performance evaluation of target report extractor
- Joint Tactical Microwave Landing system /JTLS/
- Simulation of correlation-extremal receivers of signals from sampling-phase radio-navigation systems
- Digital detection and processing of laser beacon signals for aircraft collision hazard warning
- Terrain reflection effects on data reception from airborne vehicles
- Terrain reflection effects on data reception from airborne vehicles
- Signal detection and processing of laser beacon signals for aircraft collision hazard warning
- Aircraft position measurement using laser beacon optics
- Aircraft position measurement using laser beacon optics
- A single-frequency multitransmitter telemetry technique

SIGNAL FADEOUT

- Signal fadeout analysis of anti-jam communication requirements in fading media
- Signal fadeout analysis of anti-jam communication requirements in fading media
- Experimental measurement of low angle terrain scattering interference environment
- Experimental measurement of low angle terrain scattering interference environment
- Digital signal processing on a background of rereflections for the international aircraft landing system
- Digital signal processing on a background of rereflections for the international aircraft landing system
- Digital signal processing on a background of rereflections for the international aircraft landing system
- Signal ripely applied to general aviation HWTD terrain reflection model with application to aircraft collision hazard warning
- Signal ripely applied to general aviation HWTD terrain reflection model with application to aircraft collision hazard warning
- Hardware and software integration for concurrent data acquisition and reduction of photon correlated laser Doppler velocimetry
- Hardware and software integration for concurrent data acquisition and reduction of photon correlated laser Doppler velocimetry
- Investigation of air transportation technology at Ohio University, 1981 --- locan
- Investigation of air transportation technology at Ohio University, 1981 --- locan
-rier target detector (Mod 2)
- Fiber optics remote of terminal radar and beacon signals
- Fiber optics remote of terminal radar and beacon signals
- Reliability and maintainability improvement program for the AV-8A,STM-01,HAV-08 Radar head-up display set, development of the signal data converter, CV-3600/AUT-30(V), volume 3
- Modeling of a tracking radar in terms of a nonlinear second order phase lock loop
- Modeling of a tracking radar in terms of a nonlinear second order phase lock loop
- Radar hostile fire location
- Radar hostile fire location
- Radar hostile fire location
- Radar hostile fire location
- Radar hostile fire location
- Radar hostile fire location
- Radar hostile fire location
- Radar hostile fire location
- Radar hostile fire location
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- Radar hostile fire location
- Radar hostile fire location
- Radar hostile fire location
- Radar hostile fire location
- Radar hostile fire location
- Radar hostile fire location
- Radar hostile fire location
- Radar hostile fire location
Distributed airborne array concepts
p030 882-31669
Median PBF performance analysis —
Pulse-Repetition Frequency
p0436 882-37378
Recent results in main beam nulling — aircraft
antenna design
p0553 882-43792
Investigation of air transportation technology at
Ohio University, 1981 — Ioran
p0445 882-26208

SIGNAL TRANSMISSION

p0150 882-18911
Lead optics using a low cost GPS receiver
p0175 882-20656
Fiber optics remoting of terminal radar and beacons
signals
[AD-1116403]
p0574 882-32140
SIGNATURE ANALYSIS

p0114 882-17606
On-sate vibration measurement, dynamic tracking
and balancing

p0172 882-20545
The pressure signature method for blockage
corrections, and its applications to the
industrial wind tunnel
p0267 882-19231

SIGNATURES

p0500 882-40526
Sikorsky HSS-2 HELICOPTER
U SH-3 HELICOPTER

p0046 882-13249
Sikorsky &C preliminary design — advanced
Composite Airframe Progral

p0211 882-17350
SILICON VITREOUS

p0387 882-3132
Standard tests of a research model rotor in a wind
chimney, including model similarity —
calculations compared with measurements
[BBV-CM-79-16]
p0025 882-10016
Acoustic similarity laws for centrifugal fans
[ESA-77-712]
p0503 882-33172

SIMILARITIES

SILICONE

SIMILARITY THEOREM

Similarity parameters for the geometric structure
of a supercimicjet propagating in a channel and
in a submerged space

p0175 882-20656
A piecewise linear state variable technique for
real time propulsion system simulation

[NASA-TR-82645]
p0355 882-24201
Evaluation of a voice recognition system for the
MOVES pseudo pilot station function

[NASA-TR-84467]
p0406 882-25235
Laboratory-scale simulation of underground coal
gasification: Experiment and theory

[DEER-800163]
p0525 882-20470
A simulation language approach to structural
interaction problems

p0175 882-18911

SIMULATOR TRAINING

p0114 882-17606
SILICON VITREOUS

SILICON VITREOUS

Silicon liquid crystal light valve for flight
simulation applications
[AD-110520]
p0413 882-26005
Silicon Carbides

Brittle materials design, high temperature gas

turbine
[AD-106670]
p0191 882-16085
Silicon Carbides

Brittle materials design, high temperature gas
turbine
[AD-106670]
p0191 882-16085
Silicon Oxides

p0211 882-17350
Silicates

SILICON DIOXIDE

SILICON DIOXIDE

Silicones

Silicates

SILICON DIOXIDE
<table>
<thead>
<tr>
<th>SUBJECT INDEX</th>
<th>SOLID STATE DEVICES</th>
</tr>
</thead>
<tbody>
<tr>
<td>[AIAA PAPER 82-0230]</td>
<td>p0117 A82-17055</td>
</tr>
<tr>
<td>Slotting wall test section for automotive aerodynamic test facilities</td>
<td>p0237 A82-26661</td>
</tr>
<tr>
<td>Aerodynamic behavior of a slender slot in a wind tunnel wall</td>
<td>p0431 A82-38281</td>
</tr>
<tr>
<td>A look inside the Langley 16-foot transonic tunnel: User's guide</td>
<td>p0089 B82-12065</td>
</tr>
<tr>
<td>Measuring the flow properties of slotted test-section walls</td>
<td>p0529 B82-20571</td>
</tr>
<tr>
<td>SOLID PROPELLANTS</td>
<td></td>
</tr>
<tr>
<td>WT LIQUID FUELS</td>
<td></td>
</tr>
<tr>
<td>SOLAR PROPELLATION</td>
<td></td>
</tr>
<tr>
<td>WT LIQUID FUELS</td>
<td></td>
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<td>SOLAR PROPELLATION</td>
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<td>SOLAR PROPELLATION</td>
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</tr>
<tr>
<td>WT LIQUID FUELS</td>
<td></td>
</tr>
</tbody>
</table>
SOLID STATE LASERS

SOLID STATE LASERS

NT CHG
NT LIGHT EMITTING DIODES
NT PHOTOPOLYTIC CELLS
NT SEMICONDUCTOR DEVICES
NT THERMOLORS
NT TAG LASERS
Solid-state VORTAC with remote maintenance and monitoring

L-band power generation in the General Electric solid-state radar

A system design for a multispectral sensor using two-dimensional solid-state image converters

SOLID STATE LASERS

NT TAG LASERS
SOLID-SOLID INTERFACES

Diffusion bonding in superplastic forming/diffusion bonding

An experimental investigation of interfacial temperatures in blade-seal material rubbing of aircraft compressor

SOLIDIFICATION
Development of in-can melting process and equipment, 1979 and 1980

[S082-001050] p0195 A82-16634

SOLUTIONS

NT AQUEOUS SOLUTIONS
NT GAS MIXTURES

SOLVENT REMOVED COAL
Refining and upgrading of synfuels from coal and oil shale by advanced catalytic processes

Performance of SRC II fuels in gas-turbine combustors. Alternative-fuels-utilization program

[S082-001127] p0213 A82-17041

[S082-010471] p0959 A82-32518

SOLVENTS

Determination of selected distillate blending solvents in simple and complex aircraft fuel matrices via glass capillary gas chromatography

[S082-010556] p0135 A82-14312

SOUND

NT SORNOBOYDS
Sonic Booms
Assessment of community response to high-energy impulsive sounds

[AD-110110] p0322 A82-21777

Sonic Flow
U Transonic Flow
Sonic Noises
Sorbation suppression in supersonic jets

[UAPA PAPER 62-0050] p0114 A82-17753

Heat transfer from nozzles under the conditions of flow laminarization

p0583 A82-46831

Sonic Speed
U Acoustic Velocity
Soborbyos
Aerodynamic characteristics of no-noise parachute decelerators limited to a length of three feet

[UAPA PAPER 61-1950] p0007 A82-10425

SOOT

The sooting tendency of fuels containing polycyclic aromatics in a research combustor

[UAPA PAPER 62-0299] p0164 A82-19791

Evaluation of fuel injection configurations to control carbon and soot formation in small GT combustors

[UAPA PAPER 62-1175] p0417 A82-35041

Chemistry of combustion of fuel-water mixtures

[AD-110540] p0090 A82-12178

Investigation of soot and carbon formation in small gas turbine combustors

[NASA CR-167653] p0354 A82-22267

Predictive model for jet engine test cell capacity

[AD-117585] p0610 A82-33397

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 turbofan ailerons

in steady flight

(UAPA PAPER 62-0124) p0115 A82-17796

Fluctuating forces and rotor noise due to distorted inflow

p0510 A82-40495

SOUND GENERATORS
Experiments on propeller noise

p0359 A82-22978

SOUND LOCALIZATION
Study of the source function by the causality methods defined by Rihabe and Siddon

[PB82-205170] p0615 A82-34196

SOUND MEASUREMENT
U Acoustic Measurement
SOUND PRESSURE
Propeller tip vortex - a possible contributor to aircraft cabin noise

p0113 A82-17603

Pressure dependence of jet noise and shielding 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/201 wind tunnel test section with acoustically absorbent ceiling and floor treatments

[NASA CR-165796] p0300 A82-10059

Acoustic measurements of F-15 aircraft operating in hush house, 1584920-02-070-2721

[AD-1109826] p0310 A82-21042

Acoustic measurements of F-16 aircraft operating in hush house, 1584920-02-070-2721

[AD-1105920] p0310 A82-21043

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

p0692 A82-33168

SOUND PROPAGATION

U Impedance modeling of acoustic absorbing materials for aircraft engine applications

[S082-14043] p0062 A82-14043

Scattering of sound by a vortex ring

p0104 A82-16148

U Ultrasonic method for flow field measurement in wind tunnel tests

p0176 A82-20765

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

p0277 A82-26318

SOUND TRANSDUCERS

U Microphones
Sound Transmission
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 CR-165750] p0026 A82-10028

Preliminary thoughts on helicopter cabin noise prediction methods

p0240 A82-10148

Acoustic measurements of F-15 aircraft operating in hush house, 1584920-02-070-2721

[AD-1109826] p0310 A82-21042

Analytical prediction of the interior noise for light aircraft structures

p0128 A82-18728

U Cylindrical models of aircraft fuselages for prescribed exterior noise fields. Phase 2: Models for small-sized twin, stiffened structures and cabin acoustics with floor partition

[NASA CR-165869] p0358 A82-22252

Noise transmission loss of aircraft panels using acoustic intensity methods

[NASA TP-2046] p0564 A82-31069

Sound transmission through ducts and aircraft noise prediction, volume 1

[AD-115783] p0602 A82-33164

SOUND VELOCITY
U Acoustic Velocity
SOUND WAVES
U Aqueous Waves
U Aircraft Noise
U Engine Noise
U Jet Aircraft Noise

A-390
A study of flight control requirements for advanced, winged, earth-to-orbit vehicles with far-out center-of-gravity locations

Spacecraft Checkout Program
The Space Shuttle vehicle checkout involving flight avionics software

Space Vehicle Control
0 Space Vehicle Control
Space Weapons
Nt Laser Weapons
Spaceborne Photography
Nt Satellite-Borne Photography
Spacecraft Antennas
Spiral-slot phased array antenna array

Spacecraft Charging
A study of the effect of the flight vehicle body potential on the characteristics of ion attitude transmitters

Spacecraft Construction Materials

Aerospace Applications of Composites
Development and demonstration of manufacturing processes for fabricating graphite/LAC 160 polyimide structural elements

Spacecraft Control
Synthesis of systems for evaluating gyrostabilizer state with unknown disturbances
Selected stability and control derivatives from the first Space Shuttle entry

Nasair Global Positioning System
An on-board supervisory system for applications in space simulation

Comparison of analytical predictions of longitudinal short period pilot-induced oscillations with results from a simulation study of the space shuttle orbiter

Eigenspace techniques for active flutter suppression

Spacecraft Design
Nt Ipad
Nt Satellite Design
Aerospace highlights 1981
Inverse heat-transfer problem - Domain of application in the design and testing of technical systems

CBS-the designer's media, the analyst's model —— Configuration Development System for aircraft

Control design of flexible spacecraft

Research and Technology

Research and development at R&b. Technical and scientific publications, 1981

Spacecraft Electronics Equipment
Translating the gap from aircraft to space computers


Spacecraft Orbits
Nt Transfer Orbits

Spacecraft Performance
Hypersonic pocket statistics

Spacecraft Prelaunch Tests
0 Space Vehicle Checkout Program

Spacecraft Propulsion
Nt Solar Electric Propulsion
Nt Solar Propulsion
The technology of the assembly of engines for flight vehicles — Russian book

Electric Flight Systems

Electric flight systems, overview

Spacecraft Body
Selected stability and control derivatives from the first Space Shuttle entry

Spacecraft Structures
Calculation of sensitivity derivatives in thermal problems by finite differences

Finite element analysis of some aerospace shell structures

Electroforming of space and aircraft structures

Development and demonstration of manufacturing processes for fabricating graphite/LAC 160 polyimide structural elements

Spacecraft Patents
Nt Pointing Control Systems

Spacecraft Torbology Approaches Spacing

Spanshie Blowing
Unsteady response of rectangular wings in spanwise uniform shear flow

Downdraw behind a wing with spanwise blowing

Advanced exhaust nozzle concepts using spanwise blowing for aerodynamic lift enhancement

Close-coupled canard-wing vortex interaction and Reynolds stresses simulation

An experimental investigation of leading-edge spanwise blowing

Test results of chordwise and spanwise blowing for low-speed lift augmentation

A study on numerical method for evaluating spanwise integral in subsonic lifting-surface theory

Thrust-induced effects on low-speed aerodynamics of fighter aircraft — Langley 4- by 7-meter tunnel

Spacecraft Parts
Cannibalization of the F-16 and F-3J aircraft: A viable logistic

The Sortie-Generation Model System. Volume 6: Spares subsystem

A preliminary analysis of TF30-10G/400 jet engine rework data in support of the R&b system implementation at NARP Alameda

Palm's theorem for nonstationary processes

Thrust-induced effects on low-speed aerodynamics of fighter aircraft — Langley 4- by 7-meter tunnel

Spacecraft Ignition
A spark ignition model for liquid fuel sprays applied to gas turbine engines

Spacecraft Shadowgraph Photography
Nt Shadowgraph Photography

Spacecraft Lighting
Some potential novel approaches to the automatic airborne detection and identification of ground targets

Spacecraft Orientation
0 Attitude (Inclination)

Specifications
Nt Aircraft Specifications
Nt Equipment Specifications
Hierarchical specification of the SIFT fault tolerant flight control system

A-392
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 3: Production of specification of JP-8 fuel from geokinetics shale oil

Grob aircraft construction: The G 110 flaim

Helicopter noise definition report UH-60A, S-76, A-109, 206-L

SPECTRA

MT ABSORPTION SPECTRA
MT EMISSION SPECTRA
MT NOISE SPECTRA
MT SPECTRAL BANDS
MT VIBRATIONAL SPECTRA
MT SPECTRAL ANALYSIS
MT SPECTRAL BANDS
MT ABSORPTION SPECTRA

Program for narrow-band analysis of aircraft flyover noise using ensemble averaging techniques

THE SIXTEEN TO FORTY MICRON SPECTROSCOPY FROM THE NASA LEAR JET

SPECTRA, SENSITIVITY

High-sensitivity holographic plates PI-3M

SPECTRAL SIGNATURES

Collection and simulation of spatial infrared signatures of military jet aircraft

SPECTROMETER

U SPECTROMETERS

SPECTROPOLARIMETERS

U POLARIMETERS

SPECTROSCOPES

U SPECTROSCOPES

SPECTROSCOPIC ANALYSIS

The use of Doppler spectroscopy to study the characteristics of the polynsperse characteristics of emission water and solid microimpurities in aviation fuels

Determination and analysis of jet and missile fuel deposits

SPECTROSCOPY

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

Maximum-entropy spectral analysis of radar clutter

The lateral response of an airship to turbulence

SPEECH

MT CONVERSATION
SPEECH DISCRIMINATION
U SPEECH RECOGNITION
SPEECH RECOGNITION

Using voice control onboard combat aircraft

Evaluation of a voice recognition system for the NOTAS pseudo pilot station function

SPEED CONTROL

Procedures and analysis techniques for determining static air minimum control speeds

Flight investigations of integrated descent rate control systems

High speed VSCF generator design consideration --- computer aided design for Variable Speed Constant Frequency generator

The effect of critical design parameters on the selection of a VSCF system

Packaging the VSCF system for an aircraft engine environment

Yawing of wind turbines with blade cyclic-pitch variation

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

SPEED INDICATORS

MT AEROMETERS
MT HOT-FILM AEROMETERS
MT LASER AEROMETERS

A true air speed sensor for miniature unmanned aircraft

Evaluation of the helicopter low airspeed system

Correlation of Preston-tube data with laminar skin friction (Log Re. J12984)

SPEED REGULATION

U SPEED CONTROL

SPEED REGULATORS

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

U SPEED INDICATORS

SPIKE ANTENNAS

U MONOPOLY ANTENNAS

SPIKES (AERODYNAMIC CONFIGURATIONS)

Transient phenomena of shock-induced turbulent separation for a spikebody and stalling airfoil

SPEAR TRENDS

A microprocessor-based data acquisition system for stall/spin research

Wind tunnel investigations for the flat span of slender bodies at high angles of attack

An analytical technique for the analysis of airplane spin entry and recovery

Applications of parameter estimation in the study of spinning airplanes

Prediction of high alpha flight characteristics utilizing rotary balance data
SPRIAL ANTEMAS

The USAF Test Pilot School angle of attack and spin training program

Mary spin evaluation of the A-7 airplane configured with automatic maneuvering flaps

P/A-18A high angle of attack/spin testing

Wind tunnel investigations of the flat spin of slender bodies at high angles of attack

[IAAA Paper 82-0054] [NASA-CB-165826] p0356 A82-22314

Prediction of high alpha flight characteristics utilizing rotary balance data

Spin behavior of the Pilatus PC-7 Turbo Trainer

Spin tests of a single-engine, high-wing light airplane

A retirement-for-cause study of an engine turbine disk

[AD-A109724] p0305 A82-20184

SPRIAL ANTEMAS

Sprial slotted phased antennas array

[NASA-CASE-DOC-18532-1] p0476 A82-27558

SPRIAL WRAPPING

Mathematics models for the synthesis and optimization of spiral bevel gear tooth surfaces

[IAAA Paper 82-3553] p0412 A82-25516

SPLINE FUNCTIONS

Development of an efficient procedure for calculating the aerodynamic effects of planform variation

[NASA-CR-38483] p0137 A82-14529

SPRIILES

Flight testing the nonmetallic spline coupling technology at the Naval Air Test Center

[IAAA Paper 81-2405] p0056 A82-13891

SPLIIP FLIPS

Experimental flight test programs for improving combat aircraft maneuverability by maneuver flaps and pylon split flaps

[AD-A109715] p0347 A82-15759

SPRIOLE SLOTB ALLEBOS

Spoilers or auxiliary flaps

[AD-A109715] p0241 A82-24973

SPRIOLL S

Flight investigations of integrated descent rate control systems

[AD-A109715] p0076 A82-14929

Unsteady flow patterns associated with spoiler control devices

[IAAA Paper 82-0127] p0115 A82-17798

Basic studies of the flow fields of airfoil-flap-spoiler systems

[IAAA Paper 82-0173] p0184 A82-22060

Experimental study of the flowfield of an airfoil with deflected spoiler

[IAAA Paper 82-0126] p0286 A82-27086

Development of the advanced composite ground spoiler for C-1 medium transport aircraft

[AD-A109715] p0495 A82-35895

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

[ESA-77-681] p0027 A82-10036

Development and evaluation of automatic landing control laws for light wing loading STOL aircraft

[NASA-CR-166160] p0260 A82-10043

System identification of the longitudinal motion of the DFYIR HFB 320 research aircraft with particular consideration of control surface effectiveness

[ESA-77-666] p0028 A82-10045

Summary of theoretical considerations and wind tunnel tests of an aerodynamic spoiler for stall proofing a general aviation airplane

[NASA-CR-165100] p0187 A82-16046

The effect of a wall on the aerodynamics of a spoiler -- wind tunnel flow visualization and pressure measurement

[EE-266] p0263 A82-19198

Analysis and flight evaluation of a small, fixed-wing aircraft equipped with hinged plate spoilers

[IAAA Paper 82-166267] p0352 A82-22323

The 737 graphite composite flight spoiler flight service evaluation
STABLE OSCILLATIONS

Non-honeycomb F-16 horizontal stabilizer structural design
p0509 A82-40936

Some observations on the corrosion of aircraft at the air force base in Bandirma, Turkey
p0211 A82-17353

Investigation of an improved structural model for damaged F-38 horizontal stabilizer flutter analysis using NASA/TP
[AD-A111095]
p056 A82-26316

STABLE OSCILLATIONS
Stability and self-oscillations of coaxial rotors
p0342 A82-31603

STAGGERING
Local heat transfer to staggered arrays of impinging circular air jets
[ASME PAPER 82-GT-211]
p0427 A82-35401

STAGGERING FLOW
Effects of intake geometry on circular pitot intake performance at zero and low forward speeds
p0093 A82-13070

STAGGERING PRESSURE
The influence of flow rate on the wake in a non-honeycomb F-16 horizontal stabilizer
p0327 A82-28993

STAGGERING PRESSURE
The influence of flow rate on the wake in a centrifugal impeller
[ASME PAPER 82-GT-45]
p0421 A82-35303

STAGGERING PRESSURE
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: Isosceles tail
[NASA-TP-60097]
p0098 A82-13110

STAGGERING TEMPERATURE
Ideal radiator- Optimum sub infinity for fuel limit and material limit
p0380 A82-33143

STAINLESS STEELS
Geometrical aspects of the tribological properties of graphite fiber reinforced polyimide composites
[ASLE PAPERS 82-AM-9A-2]
p0443 A82-37855

STAMPING
The technology of sheet-metal stamping in the production of aircraft/2nd revised and enlarged edition/ Russian book
p0080 A82-14998

STANDARDIZATION
MT CONSIDERATION (EQUIPMENT)
Aircraft alerting systems standardization study
p0046 A82-13468

STANDARDIZATION
Airworthiness regulation: What is our strategy- what are the issues
p0224 A82-24006

STANDARDIZATION
The challenge of standardizing fatigue methodology
p0238 A82-24703

STANDARDIZATION
NARAL AIR SYSTEMS Command/NAVAF/ATE program - Standardized ATE for the carrier environment
p0294 A82-27892

STANDARDIZATION
A standard control display unit for multi-aircraft application
p0092 A82-13058

STANDARDIZATION
Standardization study for advanced aircraft armament system program
[AD-A107681]
p0201 A82-17156

STANDARDIZATION
Development and use of dynamic qualification standards for Air Force stores
p0343 A82-22155

STANDARDIZATION
Report from the Working Party on New Fiber Materials --- standardization and strength
p0398 A82-24512

STANDARDIZATION
Opportunities exist to achieve greater standardization of aircraft and helicopter seats
[AD-A111718]
p0498 A82-26259

STANDARDIZATION
Photointerpretation key for pane regeneration analysis using high-altitude color infrared panoramic photography
[PB82-166450]
p0562 A82-30606

STANDARDS
MT FREQUENCY STANDARDS
Standardization of helicopter fatigue methodology - A manufacturer's view
p0238 A82-24704

STANDARDS
Perspectives of the flying qualities specification
[AIAG PAPER 82-1356]
p0489 A82-39123

STANDARDS
Helicopter icing: Status and prospects
[AGARD-AR-46]
p0036 A82-11056

STANDARDS
Proposed standard requirements and procedures for icing clearance
p0036 A82-11061

SUBJECT INDEX
Joint OS/USSR mode S compatibility test program, volume 1
[pB82-124616]
p0314 A82-21173

Joint OS/USSR mode S compatibility test program, volume 2
[PB82-126624]
p0314 A82-21174

Standards in aircraft noise certification
[pB82-90052]
p0322 A82-22005

Minimum operational performance standards for automatic direction finding (ADF) equipment
[RTCA/DO-179]
p0523 A82-26270

Helicopter noise definition report 08-408, 8-76, A-109, 206-L
[AD-A116363]
p0574 A82-32083

Development of avionics installation interface standards
[AD-A116553]
p0608 A82-33384

STANDING WAVES
Circumferentially staggered duct lines optimized for axi-symmetric and standing wave sources--- reducing noise from turbomachinery engines galileo method acoustic attenuation
[NASA-TF-2075]
p0614 A82-34190

STANDS
U SUPPORTS
STANDBY AIRCRAFT
U C-141 AIRCRAFT
STARTERS
ENGINE STARTERS
STARTING
Conditions of pulsed starting of supersonic wind tunnel diffusers
p0274 A82-25795

STARTING
Starting transients in supersonic nozzles and nozzle-diffuser assemblies
p0306 A82-25226

STATE EQUATIONS
U EQUATIONS OF STATE
STATE VECTORS
Synthesis of systems for evaluating gyrostabilizer state with unknown disturbances
p0015 A82-11469

STATE VECTORS
Optimization of measurements in the state estimation of systems using the least squares method
p0333 A82-29826

STATIC AERODYNAMIC CHARACTERISTICS
The effect of a well on the aerodynamics of a spoiler --- wind tunnel flow visualization and pressure measurement
[AD-268]
p0263 A82-19194

STATIC AERODYNAMIC CHARACTERISTICS
Static internal performance of single expansion-ramp nozzles with thrust vectoring and reversing
[NASA-TP-1962]
p0302 A82-20156

STATIC AERODYNAMIC CHARACTERISTICS
Methodology for determining eleven deflections to trim and maneuver the FAST vehicle with negative static margin
[NASA-TP-84699]
p0526 A82-28299

STATIC AERODYNAMIC CHARACTERISTICS
Static investigation of the circulation control wing/upper surface blowing concept applied to the quiet short haul research aircraft
[NASA-TP-84232]
p0588 A82-32343

STATIC ELECTRICITY
Instrumentation for testing aircraft antistatic protection
[OBHRA TP NO. 1982-7]
p0389 A82-34945

STATIC ELECTRICITY
Static charging and its effects on avionic systems
p0432 A82-35732

STATIC ELICONIC SITE
Static charging and its effects on avionic systems
p0432 A82-35732

STATIC LOADS
Static and aeroelastic optimization of aircraft
p0444 A82-37945

STATIC LOADS
Static investigations of rotor blades under deadweight and during stationary operation
[ISO-269]
p0214 A82-17639

STATIC PRESSURE
Static pressure in the slipstream of a propeller
p0297 A82-26318

STATIC PRESSURE
An investigation of the swirl in an S-duct
[AIAG PAPER 82-25865]
p0330 A82-30153
Experimantal 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-GT-250)

Aerodynamic behavior of a slender slot in a wind tunnel wall

Analysis and wind tunnel tests of a probe used to sense altitude through measurement of static pressure (AIAA Paper 82-1361)

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

[NASA-CR-165066] p0119 #82-15014

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 --- in a wind tunnel [RAE-TE-80066]

Static and unsteady pressure measurements on a 50 degree clipped delta wing at M = 0.9 --- conducted in the Langley Transonic Dynamics Tunnel [NASA-TN-83297]

Multistage axial-compressor program on tip clearance effects (AD-A017445)

[STATIC STABILITY]

[STATIC SHELL STABILITY]

[STATIC STRUCTURAL STABILITY]

The use of observers on relaxed static stability aircraft

Control law development for a close-coupled canard, relaxed static stability fighter (AIAA Paper 82-0180)

A unified and generalized definition of static longitudinal stability in aircraft

Model control of relaxed static stability aircraft (AIAA 82-1524)

Aerodynamic characteristic and store loads of a 1/26 scale F-111 aircraft model with three external store loadings (AD-A090465)

As 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 [NASA-CR-165066]

Development of methods for assessment of gliding parachute applications (AD-A117603)

[STATIC TESTS]

Design features of a sea-based multipurpose YSTOL, STCV, and STOL aircraft in a support role for the U.S. Navy (AIAA Paper 81-2650)

A comprehensive flight test flyover noise program (NASA TM-83219)

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 ([ISD-272])

Aerodynamic noise generated by jet wing/flipper interactions of the external USB configuration of STOL aircraft. Part 2: Full scale model experiments using P6710 turboshaft engine ([NASA TM-66079-PT-2])

Static internal pressure of sample expansion-ramp nozzles with thrust vectoring and reversing (NASA TP-1962)

Fluctuating pressures on fan blades of a turboshaft engine: Static and wind-tunnel investigations

Prediction of flyover jet noise spectra from static tests

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 rates of 1.82

Laser anemometer measurements in an annular
cascade of core turbine vane and comparison
with theory

Square dynamic analysis with general nonlinear
finite element codes. Part 2: Bearing element
implementation overall numerical characteristics
and benchmarking

Secondary flow effects and mixing of the wake
behind a turbine stator

Comparison of experimental and the wake
performance for contoured endwall stators

Cold-air performance of a 15,41-ca-tip-diameter
axial-flow power turbine with variable-area
stator designed for a 75-kW automotive gas
turbine engine

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

Coordinated experimental and analytical
performance for contoured endwall stators

Status of laser anemometry in turbomachinery
research at the Lewis Research Center

STEADY FLOW

Steady and unsteady nonlinear hybrid vortex method
for lifting surfaces at large angles of attack

Transonic flow past wings

Supercritical flow past symmetrical airfoils

Feedback control of a cantilever wing in steady
airflow

Hyperonic interactions with surface mass
transfer - I: Flow over a slender wedge wing

Finite difference computation of the steady
transonic potential flow around airplanes

STEADY STATE

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

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

STEAM TURBINES

The effects of mechanical surface and heat treatments
on erosion resistance

Advantages and limitations in the use of diverse
materials for aircraft construction --
composite versus metallic materials

STEEL GRADIENT AIRCRAFT

U/T/STOL AIRCRAFT

STEERING

U/SLOPES

STEERING ANTENNAS

Radiating elements for hemispherically scanned
arrays - onboard aircraft for data links to
d satellites

STEERING

Describing function analysis of nonlinear nose
gear shimmy

Electro-hydraulic nose wheel steering of the
Dornier 228

STEERING ROCKETS

U CONTROL ROCKETS

TELEFONE BODYWORKS

The design of a viewing system for near real time
stereo images from a USAF linescan sensor

Assessment of stereographies for fire control and
navigation in fighter aircraft

Stereo images from a DBA borne linescan sensor

THERMAL DEGRADATION

Thermal degradation of impact damaged structure

TORSIONAL STIFFNESS ELEMENT BASED ON
COBALT-SAMARIUM MAGNETS -- FOR A TURN AND BANK
INDICATOR

STIFFNESS MATRIX

Formation of triangular-element stiffness matrix
using sliding interpolation

An algorithm for calculating the compliance
matrices of aircraft structures by the
substructure method as applied to aerelasticity
problems

Calculation of the cross section properties and
the shear stresses of composite rotor blades

An influence coefficient method for the
application of the modal technique to wing
flutter suppression of the DAST ABW-1 wing

Modal characteristics of rotor blades: Finite
element approach and measurement by ground
vibration test

Calculation of the cross section properties and
the shear stresses of composite rotor blades

STIRRATIZED EMISSION DEVICES

U CARBON DIOXIDE LASERS

U EXCIMER LASERS

U GAS LASERS

U GASDYNAMIC LASERS

U HELIUM-NEON LASERS

U HIGH POWER LASERS

U LASERS

U LITHIUM LASERS

U PULSED LASERS

U RING LASERS

U TIG LASERS

A-398
STOCHASTIC PROCESSES
   WT BARGO CHAINS
   WT BARGO PROCESSES
   WT RANDOM PROCESSES
   WT RANDOM WAVE
   Synthesis of system for evaluating gyrostabilizer
   state with unknown disturbances
   p0015 A82-11715

   The correlation of flight test and analytic F-o-N
   air combat exchange ratios --- many-o-many
   [AIAA PAPER 82-1250]
   p0489 A82-39105

   The role of the scale parameter in service load
   assessment and simulation --- of aircraft flight
   p0516 A82-43184

   Theory of stochastic optimal control some basic
   notions
   p0038 A82-11075

   An introduction to stochastic optimal control theory
   p0038 A82-11076

   Implementable differential equations for nonlinear
   filtering --- radar tracking
   [MLP-82-81037 U]
   p0600 A82-33120

   Pai'n theories for nonstationary processes
   [AD-A117689]
   p0614 A82-34135

STOCKPILEING
   where is cobalt irreplaceable
   p0243 A82-25538

STOL AIRCRAFT
   U SHORT TAKEOFF AIRCRAFT
   U STOPOCKS
   U COCKS

STORABLE PROPPELLANTS
   WT AIRCRAFT FUELS
   WT RP-1 ACCEPTED PROPPELLANTS

STORAGE BATTERIES
   WT LEAD ACID BATTERIES
   WT NICKEL CADMIUM BATTERIES
   New separators for battery systems
   p0015 A82-11715

STORAGE STABILITY
   Deposit formation in liquid fuels. II - The effect of
   selected compounds on the storage stability of
   jet a turbine fuel
   p0186 A82-22240

   Deposit formation in liquid fuels. I - Effect of
   coal-derived lewis bases on storage stability of
   jet a turbine fuel
   p0186 A82-22241

STORAGE TANKS
   Vapor condensation control of JP-4 exchanges from
   underground storage tanks at March Air Force
   Base, California
   [AD-A117689]
   p0614 A82-33120

STORE RELEASE
   U EXTERNAL STORE SEPARATION

STORM DAMAGE
   Operational evaluation of thunderstorm penetration
   tests during project Storm Hazards '80
   p0078 A82-14954

STORMS
   WT BAINSTORMS
   WT STORMS (METEOROLOGY)
   WT THUNDERSTORMS
   Field program operations: Turbulence and gust front
   p0562 A82-30004

STORMS (METEOROLOGY)

   WT BAINSTORMS
   WT THUNDERSTORMS
   Applications of conventional and doppler radars
   for aviation safety
   p0003 A82-10215

   X-band vs C-band aircraft radar - The relative
   effects of beamwidth and attenuation in severe
   storm situations
   p0165 A82-19858

   Aircraft measurements and analysis of severe
   storms: 1976 field experiment
   [NASA-CR-166519]
   p0259 A82-18803

   Detection and tracking algorithms refinement
   [AD-A155817]
   p0303 A82-20164

STRAIGHT WINGS
   U RECTANGULAR WINGS

STRAIN AGING
   U PRECIPITATION HARDENING

STRAIN DISTRIBUTION
   U STRAINS CONCENTRATION

STRAIN ENERGY METHODS
   A fatigue crack growth theory based on strain
   energy density factor
   p0052 A82-43742
SUBJECT INDEX

Engineering property comparisons of 7050-T7651, 7075-T651 and 7070-T651 aluminum alloy plate --- for aircraft construction p0357 A82-22360

STRESS DISTRIBUTION

STRESS INTENSITY FACTORS
Stress intensity factor measurements in composite sandwich structures p0113 A82-17535

Spectrum crack growth p0160 A82-20510

Crack growth behavior of center-cracked panels under random spectrum loading p0169 A82-20511

Integrity analyses of surface-flawed aircraft attachment lugs - A new, inexpensive, 3-D alternating method p0336 A82-30107

Environmental and high strain rate effects on composites for engine applications (AIAA 82-0758) p0336 A82-30118

Cracks interacting with contact forces - A finite element study on loaded holes p0511 A82-40959

A compilation of stress intensity factor solutions for flawed fastener holes (AB-100873) p0259 A82-18628

CRACK GROWTH

Stress measurements in a ribbon parachute canopy during inflation and at steady state [AIAA PAPER 81-1944] p0007 A82-10420

Stress measurements in bias constructed parachute canopies during inflation and at steady-state [AIAA PAPER 81-1945] p0007 A82-10421

Stress intensity factor measurements in composite sandwich structures p0113 A82-17535

Method for the measurement of elastic deformations of aircraft models in a wind tunnel p0208 A82-24162

Performance of the Rotor Systems Research Aircraft calibrated rotor loads measurement system p0502 A82-40549

STRESS MEASUREMENT

Stress measurements in a ribbon parachute canopy during inflation and at steady state [AIAA PAPER 81-1944] p0007 A82-10420

Stress measurements in bias constructed parachute canopies during inflation and at steady-state [AIAA PAPER 81-1945] p0007 A82-10421

Stress intensity factor measurements in composite sandwich structures p0113 A82-17535

Method for the measurement of elastic deformations of aircraft models in a wind tunnel p0208 A82-24162

Performance of the Rotor Systems Research Aircraft calibrated rotor loads measurement system p0502 A82-40549

STRESS RATIO

A fatigue crack growth theory based on strain energy density factor p0552 A82-43742

CRACK GROWTH

STRESS SUSTAINED STRENGTH

STRESS-STRAIN DISTRIBUTION

STRESS-STRAIN RELATIONSHIPS
Investigation of the stress-strain state of a rectangular wing section of variable thickness under concentrated loads and heating p0127 A82-18588

Studies on the stability of thin-walled shells with cutouts /Review/. I p0182 A82-21629

Thermal stability analysis for conical shells with variable parameters p0334 A82-29844

Solution of creep problems by a finite element method p0388 A82-34172

Bi-linear plastic finite-element analyses of thermally cycled double-edge wedge specimens (NASA-TP-1573) p0308 A82-20566

Nonlinear constitutive theory for turbine engine structural analysis p0613 A82-33744

STRESSED-SKIN STRUCTURES

Buried field repair of graphite/epoxy wing skin laminates p0180 A82-20901

STRESSES

HT AXIAL STRESS
HT COMBINED STRESS
HT CRITICAL LOADING
HT RESIDUAL STRESS
HT REINFORCED STRESS
HT SHEAR STRESS
HT TENSILE STRESS
HT THERMAL STRESSES
HT TORSIONAL STRESS
HT VIBRATIONAL STRESS

STRETCH FORMING

Problems associated with the quality assurance of stretched acrylic sheet p0228 A82-24319

STRETCHING

Lucas stretched acrylic p0227 A82-24318

STRIP TRANSMISSION LINES

ST MICROSTRIP TRANSMISSION LINES
Leaky wave antenna using an inverted strip dielectric waveguide --- for aircraft applications p0163 A82-19552

STRUCTURAL ANALYSIS

ST DYNAMIC STRUCTURAL ANALYSIS
ST ENERGY METHODS
ST FLUTTER ANALYSIS
ST FATIGUE METHODS
ST STRAIN ENERGY METHODS

Formation of triangular-element stiffness matrix using sliding interpolation p0014 A82-11664

Crack growth evaluation of a method to convert real-time loads history to a simplified engineering spectra --- for aircraft structural analysis p0014 A82-11664

Fatigue methodology - A technical management system for helicopter safety and durability p0045 A82-13240

Comparison of wind tunnel and theoretical aerodynamic predictions with flight measured airloads for the B-1 aircraft [AIAA PAPER 81-2367] p0065 A82-14393

Development of a comprehensive analysis for rotorcraft. II - Aircraft model, solution procedure and applications p0065 A82-14407

Quick learning diagnostics --- helicopter vibration analysis and component condition monitoring p0172 A82-20543

Development of maintenance programmes through the functional, structural and flight test phases p0223 A82-24003

BES-3 structures --- inspection program for aircraft maintenance p0224 A82-24011

Application of damage tolerance technology to type certification [SAA PAPER 81-1062] p0231 A82-24388

Structural modeling of high Reynolds number wind tunnel models [AIAA 82-0602] p0238 A82-24674

Structural testing of composites with known defects p0239 A82-24708

A review of U.S. Air Force research related to airframe and engine materials p0329 A82-29260

777 graphite-epoxy horizontal stabilizer certification [AIAA 82-0745] p0336 A82-30109

Environmental and high strain rate effects on composites for engine applications [AIAA 82-0758] p0336 A82-30118

Integrated structural analysis and design support for advanced launch vehicles [AIAA 82-0675] p0338 A82-30144

Bird impact analysis package for turbine engine fan blades [AIAA 82-0696] p0339 A82-30162

Structural modification to achieve antiresonance in helicopters p0379 A82-32849

Finite element analysis of some aerospace shell structures p0382 A82-33515

Unstructure - A new concept for light weight integrally stiffened skin structure p0389 A82-34086

Trends in structural analysis at ONERA [ONERA, TP No. 982-2] p0389 A82-34091

Research on the behavior of a turbojet engine during internal and external disturbances with respect to early recognition of damage --- German thesis p0503 A82-40561

An optimum design of fuselage structure p0546 A82-42533
Design and analysis of advanced composite structures
Calculation of the stability and post-buckling behavior of thin shell structures using the finite element method - German thesis
Mathematical model for the maintenance program of modern jet aircraft -- crack detection; inspection intervals
Structural analysis of fuselages with cutouts by finite element method
Matrix analysis of wings
Integrated analysis of engine structures
Structural analysis computer programs for rapid multicomponent pavement structures with discontinuities, WESLILD and WESLATER
La Recherche Aérospatiale, Bi-monthly Bulletin No. 234, February - March 1981 -- aerodynamic research
Research and development program for non-linear structural modeling with advanced time-temperature dependent constitutive relationships
Strength degradation of impact damaged structures
Investigations of helicopter structural dynamics and a comparison with ground vibration tests ---- using nasa skin
A linear decomposition method for large optimization problems. Blueprint for development
Evaluation of inelastic constitutive models for nonlinear structural analysis -- for aircraft turbine engines
Supplementary studies on the sensitivity of optimized structures
Bird impact analysis package for turbine engine fan blades
Cooled variable nozzle radial turbine for rotor craft applications
Structures and Dynamics Division research and technology plan, FY 1982
Environmental and High-Stream Rate effects on composites for engine applications
Development of a Structural Integrity Recording System (SIBSJ for US Army AH-1S helicopters
Nonlinear constitutive theory for turbine engine structural analysis

Optimal subsonic diffuser wall design for arbitrary entry conditions
Flutter mode suppression using hyperstable feedback
The residual strength criterion for added reduction in the analysis of the NASA Space Shuttle's digital flight control system
Highlights of a design concept for a close ground support fighter
Design and testing of a new double labyrinth seal
Optimal shape design of turbine blades
Calculation of sensitivity derivatives in thermal problems by finite differences
Structural design and construction of the New Technology Wing
One year flight testing of the Transonic Wing
Fabrous composites in structural design --- Book are presented
Composite wing substructure technology on the AV-8 advanced aircraft
Composite fasteners - A compatible joining technique for fabric composites in structural design --- aircraft construction materials
Damage tolerance and durability design of composite structures for commercial aircraft
Finite element analysis of the canopy emergency crew escape from the T-38 aircraft
Integrated structural analysis and design support for advanced launch vehicles
Damage tolerant design using collapse techniques
Design, fabrication and test of liquid metal heat-pipe sandwich panels
Aircraft carrier - Surface effect ship
Next generation turboprop gearboxes
Efficient optimum design of structures - Program DODU
Optimum structural design --- for hollow composite structures
An optimum design of fuselage structure
Determination of airplane model structure from flight data by using modified stepwise regression
Control design of flexible spacecraft
Design of airport pavements for expansive soils
The design of a jet catcher --- for wind tunnels
Design Manual for impact damage tolerant aircraft structure
Impact of systems technology and integration on helicopter design
A linear decomposition method for large optimization problems. Blueprint for development
Design of helicopter rotor blades for optimum dynamic characteristics

Design and analysis of advanced composite structures
Light aircraft structural design in non-metallics
- Use of composite honeycomb for light aircraft
Status and tracking system for flight test data products
Performance assessment of the ICS-11 ejection seat-K-10 configuration
Mathematical programming in engineering design problems
Design procedures for compressor blades
Modern aircraft accident investigation equipment and techniques

A-402
A comparative study on mechanical vibration and non-damaged structural vibration analysis and component condition monitoring

Structural vibration

WT FLUTTER
WT LINEAR VIBRATION
WT MISSILE VIBRATION
WT PANEL FLUTTER
WT SELF INDUCED VIBRATION
WT SUBSONIC FLUTTER
WT SUPERSONIC FLUTTER
WT TRANSITIONAL VIBRATION
WT TRANSIENT FLUTTER

Helicopter engine technology - with particular reference to the Rolls-Royce Gem engine

Investigation of vibration of shocked turbine blades

Investigation of vibration of shocked turbine blades

A comparative study on mechanical vibration and noise during patient transportation

Analytical prediction of aerospace vehicle vibration environments

SUBJECT INDEX

Investigation of vibration of shocked turbine blades

Investigation of vibration of shocked turbine blades

A study of the vibration loading of the turbine blades of an aircraft gas-turbine engine with dry-friction dampers

The use of performance-monitoring to prevent compressor and turbine blade failures

Solution to a bistable vibration problem using a bistable vibration controller

Determination of in-flight helicopter loads and vibration

On-site vibration measurement, dynamic tracking and balancing

An automated technique for improving modal test/analysis correlation

Pressure measurements on twin vertical tails in buffetting flow

Flutter suppression using hyperstable feedback

Analysis of a multihinged engiment with allowance for shear strain

Effect of operating life on the mechanical properties of the materials and load-bearing capacity of the rotor elements of gas-turbine engines

Stiffness degradation of impact damaged structure

Stability and response to gravity of the flap lay motion for a rigid rotor blade with flap-pitch coupling

Optical sensors for displacement measurement

A manipulator language approach to structural interaction problems

A finite element analysis of coupled rotor-fuselage systems

Substructure program for analysis of helicopter vibrations

Use of optimization in helicopter vibration control by structural modification

Correlation of predicted vibrations and test data for a wind tunnel helicopter model

The non-synchronous whirls of the turbine rotor in aerojet engines

Laser pointing in a turbulent atmosphere

An examination of the dynamics of rotary machines - A French thesis
SUBJECT INDEX

New estimation method for flutter or divergence
boundary from random responses at subcritical
speeds [HAL-TR-6677]

Analysis of a longitudinal pilot-induced
oscillation experienced on the approach and
landing test of the space shuttle
[NASA-TS-81366]

Structural dynamics: Modified calculations
---

345x97 natural and harmonically excited vibrations of
modified structures; increased computation
efficiency
[HTEG-PHET-81-1]

Ice phonics: Blanchard and comparison of
vibration analysis techniques

Adv-1100121

Vibration of structures excited acoustically

345x214 0 307 N 20343

Suppression of structural vibration by a dynamic

345x695 0 21505 absorber --- helicopter cabin

[NAS-TR-408-1081]

Development of vibration qualification test

345x1670 spectra for the F-15 aircraft

Approach in dynamic qualification of light

345x2590 helicopter stores and equipment

The dynamic qualification of equipment and

345x3470 external stores for use with rotary winged

aircraft

STOL aircraft structural vibration prediction from

345x4350 acoustic excitation

Limiting performance of nonlinear systems with

345x5230 applications to helicopter vibration control

problems

[A-D-1113219]

User's manual for the coupled rotor/airframe

345x6210 vibration analysis graphic package

[NASA-CR-166597]

Helicopter vibration suppression using simple

345x7090 pendulum absorbers on the rotor blade

[NASA-CR-3615]

MULTILEVEL WEIGHT

Multilevel optimal design of structures with

345x8070 fiber-composite stiffened-panel components

[AIAA PAPER 81-0723]

Optimal shape design of turbine blades

345x9050 [NAS-Paper 81-1279]

Minimum assumption of a large low-aspect ratio

345x1003 airframe for flutter-free performance

[AIAA PAPER 80-0724] 0 22422

Some thoughts on design optimization of transport

345x1101 helicopters

345x2577 0 22422

Comparison of light aircraft with strutted and

345x1209 cantilever wings

345x2577 0 22422

Integration of a code for aeroelastic design of

345x1305 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; C790 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

345x1505 0 22422

Multiple pure tone elimination strut assembly ---

air breathing engines

[NASA-CSF-PAC-11062-1]

Energy efficient engine: Turbine transition duct

345x1309 model technology report

[NASA-CR-167956]

Performance deterioration due to acceptance
testing and flight loads; C790 jet engine
diagnostic program

0 1707 0 22422

SYS

U SPACE TRANSPORTATION SYSTEM

STUDIES

U INVESTIGATION

STORM-LIouvile OPERATOR

U STORM-LIouvile THEORY

STORM-LIouvile THEORY

An algorithm, invariant relative to the initial
data, for implementing the polynomial contouring
method --- for computer aided design and

manufacturing

SUBCIRCUITS

U CIRCUITS

GRAVITY

U REDUCED GRAVITY

SUBLATTICES

U LATTICES (MATHEMATICS)

SUBMULTIPLIES

U SET THEORY

SUBSONIC AIRCRAFT

The use of the Weber method for

345x1720 minicomputer-assisted numerical analysis of
airscrews

Experimental study of subsonic and transonic flows
past a wing

345x1720 0 22422

Nonlinear prediction of subsonic aerodynamic loads
on wings and bodies at high angles of attack

345x1720 0 22422

Subsonic flow over airborne optical turrets

345x2410 [AIAA PAPER 82-0132] 0 17605

Optimal subsonic diffuser wall design for

arbitrary entry conditions

[AIAA PAPER 82-0132] 0 17605

Calculation of seven-hole probes suitable for high
angles in subsonic compressible flows

[AIAA PAPER 82-0140] 0 17931

Aerodynamic characteristics of a cascade of
mismatched blades in subsonic and supersonic flows

[AIAA PAPER 81-0723] 0 19337

Aerodynamic characteristics of wavevectors at
subsonic flight speeds

AIAA PAPER 82-0140

An investigation of the swirl in an S-duct

[AIAA PAPER 82-0127] 0 30193

Subsonic aerodynamic and flutter characteristics
of several wings calculated by the SOUSA F1.1
panel method

[AIAA PAPER 82-0127] 0 30193

Subsonic 3-D surface panel method for rapid
analysis of multiple geometry perturbations

[AIAA PAPER 82-0535] 0 31952

Subsonic 3-D surface panel method for rapid
analysis of multiple geometry perturbations

[AIAA PAPER 82-0535] 0 31952

Incompressible symmetric flow characteristics of
sharp-edged rectangular wings
<table>
<thead>
<tr>
<th>SUBJECT INDEX</th>
<th>SUPERPLASTICITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>[NASA-TH-680] NASA Langley laminar flow control airfoil experiment</td>
<td>[AIAA PAPER 82-0960] Improved solutions to the Falkner-Skan boundary-layer equation</td>
</tr>
<tr>
<td>Stability of boundary layers with porous suction strips: Experiment and theory</td>
<td>[AIAA 82-34008]</td>
</tr>
<tr>
<td>Prediction of wing side-edge suction forces and maximum induced lift</td>
<td>[AIAA 82-38263]</td>
</tr>
<tr>
<td>[NASA-TH-682] High-speed aerodynamic testing for a high-speed wind tunnel</td>
<td>[AIAA 82-40971]</td>
</tr>
<tr>
<td>[NASA-TH-685] Supercritical wing with/without winglet</td>
<td>[NASA-TH-81335]</td>
</tr>
<tr>
<td>[NASA-TH-687] Design considerations and experiments in the use of composite material for an aerodynamic research wing</td>
<td>[NASA-TH-81337]</td>
</tr>
<tr>
<td>[NASA-TH-692] Structural modeling of high Reynolds number wind tunnel models</td>
<td>[NASA-TH-81342]</td>
</tr>
<tr>
<td>[NASA-TH-697] High-speed aerodynamic testing for a high-speed wind tunnel</td>
<td>[NASA-TH-81347]</td>
</tr>
<tr>
<td>[NASA-TH-701] Design considerations and experiments in the use of composite material for an aerodynamic research wing</td>
<td>[NASA-TH-81351]</td>
</tr>
<tr>
<td>[NASA-TH-706] Structural modeling of high Reynolds number wind tunnel models</td>
<td>[NASA-TH-81356]</td>
</tr>
<tr>
<td>[NASA-TH-715] Design considerations and experiments in the use of composite material for an aerodynamic research wing</td>
<td>[NASA-TH-81365]</td>
</tr>
<tr>
<td>[NASA-TH-720] Structural modeling of high Reynolds number wind tunnel models</td>
<td>[NASA-TH-81370]</td>
</tr>
</tbody>
</table>

**A-407**
SUPERSONIC AIRCRAFT

SPF of high strength aluminum structures - superplastic forming for complex aircraft structures

Superplastic aluminum evaluation

Evaluation of superplastic forming and co-diffusion bonding of Ti-6Al-4V titanium alloy expanded sandwich structures

[SAA-GE-165027] p0268 802-19358

SPF/DB titanium concepts for structural efficiency for IC

[SAA-DB-20154] p0302 802-20154

SUPERSONIC AIRCRAFT

NT 3-70 AIRCRAFT

NT CONCORDE AIRCRAFT

NT 7-4 AIRCRAFT

NT 7-5 AIRCRAFT

NT 7-6 AIRCRAFT

NT 7-14 AIRCRAFT

NT 7-15 AIRCRAFT

NT 7-16 AIRCRAFT

NT 7-100 AIRCRAFT

NT 7-106 AIRCRAFT

NT 7-111 AIRCRAFT

NT JACOB AIRCRAFT

NT MARGE AIRCRAFT

NT SAB 37 AIRCRAFT

NT SUPERSONIC TRANSPORTS

NT 7-38 AIRCRAFT

NT 9-104 AIRCRAFT

Real-time, on-line digital simulation of optimum maneuvers of super sonic aircraft

[AIAA-81-2176] p0002 802-10127

V/STOL propulsion control technology

[AIAA PAPER 81-26194] p0108 802-16909

Optimal trajectories in supersonic flight

[AIAA PAPER 82-02661] p0119 802-17906

STOL capability impact on advanced tactical aircraft design

[AIAA PAPER 81-26171] p0155 802-19206

Comparison of two parallel/meridional flow turbofan propulsion concepts for supersonic V/STOL

[AIAA PAPER 81-26237] p0156 802-19214

A new look at the Tupolev Tu-26 'Backfire'

[AIAA PAPER 81-21911] p0180 802-21191

Reduction of the subsonic pitch-up of delta wings

[AIAA PAPER 82-0129] p0113 802-22052

Minimum mass sizing of a large low-aspect ratio airframe for flutter-free performance

[AIAA PAPER 80-0724] p0225 802-24022

Optimal three-dimensional flight of a super sonic aircraft

[Naca 20240] p0274 802-26039

Forward-swept wings add supersonic zip

[p0401 802-38216

Optimal three-dimensional turning performance of super sonic aircraft

[AIAA PAPER 82-1326] p0488 802-39103

Optimal control effects in supersonic aircraft performance

[AIAA PAPER 82-1029] p0491 802-39374

NASA research on supersonic propulsion - A decade of progress

[AIAA PAPER 82-1048] p0497 802-40017

Calculations of transonic steady state aerelastic effects for a cascade airplane

[p0504 802-40882

An initial look at the supersonic aerodynamics of twin-fuselage aircraft concepts

[p0516 802-41008

A supersonic V/STOL fighter design project

[p0596 802-62595

Aerodynamic computational procedures for subsonic and transonic aircraft

[p0550 802-63330

Maximum-time three-dimensional turn to a point of super sonic aircraft

[p0556 802-64492

Aerodynamics of Power Plant Installation

[AGARD-CP-301] p0093 802-13065

Performance of highly integrated inlets for super sonic aircraft

[p0093 802-13066

SUBJECT INDEX

NASA Dryden Flight Research Facility

[AIAA-82-01366] p0145 802-15079

NASA research in supersonic propulsion - A decade of progress

[AIAA-82-02663] p0054 802-26300

Noise and economic characteristics of an advanced blended supersonic transport concept

[p0565 802-31924

SUPERSONIC AIRFOILS

Research model wing/tail configuration --- transonic wind tunnel 1/7.5-scale model

[AD-1114101] p0524 802-28388

SUPERSONIC CORROSION

Numerical investigation of supersonic base flow with parallel injection --- in scramjet combustors

[AIAA PAPER 82-1061] p0375 802-31950

Effect of vacuum exhaust pressure on the performance of R&D ducts at high D/D field

[AIAA-82-02750] p0101 802-13908

SUPERSONIC CORROSION RAPIDITY ENGINE

Multiple-scale turbulence modeling of free turbulent flows

[AIAA PAPER 81-26-20] p0102 802-10934

Increased capabilities of the Langley Mach 7 Scramjet Test Facility

[AIAA PAPER 82-1216] p0118 802-35080

Numerical analysis of the scramjet-inlet flow field by using two-dimensional Navier-Stokes equations

[AIAA-82-1942] p0099 802-13162

New developments in the field of rafate missile propulsion

[ABB-81-516-0-0] p0049 802-25250

SUPERSONIC COMMERCIAL AIR TRANSPORT

NT TU-144 AIRCRAFT

SUPERSONIC CRUISE AIRCRAFT RESEARCH

Piloted simulator evaluation of a relaxed static stability fighter at high angle-of-attack

[AIAA PAPER 82-1295] p0486 802-19082

Upper Vortex Flap - a versatile surface for highly swept wings

[p0515 802-41002

Analytical study of vortex flaps on highly swept delta wings

[p0515 802-41003

Wind-tunnel investigation of vortex flaps on a highly swept interceptor configuration

[p0516 802-41004

Langley test highlights, 1981

[AIAA PAPER 85-202] p0603 802-33330

SUPERSONIC DIFFUSERS

Conditions of bypassed starting of supersonic wind tunnel diffusers

[p0274 802-25795

Casing treatments on a supersonic diffuser for high pressure ratio centrifugal compressors

[AIAA PAPER 82-07-85] p0423 802-35331

Starting transients in supersonic nozzles and nozzle-diffuser assemblies

[AIAA-82-11143] p0406 802-25226

SUPERSONIC DRAG

Problems in correlation caused by propulsion systems

[p0404 802-25202

SUPERSONIC FLOW

Optimal flight paths for winged, supersonic flight vehicles - Extension to the case where thrust can be vectored

[p0005 802-10310

Optimal trajectories in supersonic flight

[AIAA PAPER 82-0366] p0119 802-17906

An aerodynamic and signature shaping technique for developing advanced supersonic missile concepts

[AIAA PAPER 82-0373] p0120 802-17912

Store separation from cavities at supersonic flight speeds

[AIAA PAPER 82-0372] p0165 802-22296

Military aircraft

[p0387 802-34121

Wing design for supersonic cruise/transonic maneuver aircraft

[p0517 802-41021

Supersonic cruise/transonic maneuver wing section development study

[AD-110068] p0498 802-26256

Measurements of mean static pressure and far field acoustic of shock containing supersonic jets

[AIAA-82-04521] p0400 802-33150

SUPERSONIC FLOW

Pressure distribution on an ogive wing in...
SURFACE TO AIR MISSILES
MT PATRIOT MISSILE
Duplication of radome aerodynamic heating using the Central Receiver Test Facility solar furnace
p0261 A82-26468

SURFACE TO SURFACE MISSILES
MT ARTHAB MISSILES
MT CRUISE MISSILES
MT ELB MISSILE
MT SUPERSONIC LOW ALTITUDE MISSILE

SURFACE TREATMENT
U SURFACE FINISHING

SURFACE VEHICLES
MT AIRCRAFT CARRIERS
MT AUTOMOBILES
MT ELECTRIC AUTOMOBILES
MT TRUCKS
MT SURFACE EFFECT SHIPS
MT TANKS (COMBAT VEHICLES)
MT TRACKED VEHICLES
MT TRACKS

Characteristics and trends of energy consumption in transport missions with aircraft and surface vehicles
p0009 A82-10495

SURFACE WAVES
MT ELECTROMAGNETIC SURFACE WAVES
A global atlas of GEOS-3 significant waveheight data and comparison of the data with national buoy data
[NASA-CR-156882] p0146 A82-15498

SURFACES
A study on a numerical method for evaluating spanwise integral in subsonic lifting-surface theory
[ML-TE-66-117] p0034 A82-11035

SURFACE EFFECTS
Improving the accuracy of the estimates of surfactant content in jet fuels
p0218 A82-23250

SURGES
High voltage surge and partial discharge test to evaluate aerospace equipment parts
p0016 A82-11740

SURVEY RADAR
MT AIRBORNE SURVEY RADAR
Airborne associative processor /ASPRO/ --- for early warning radar surveillance, command, and control applications
[AD-A105058] p0002 A82-10108

Computational considerations for fusion in target identification systems --- multisensor correlation
p0668 A82-14735

IMPROVEMENTS TO SECONDARY RADAR FOR AIR TRAFFIC CONTROL
p0341 A82-30311

THE RELIABILITY OF HEIGHT AND IDENTITY DATA --- SECONDARY SURVEILLANCE RADAR ERROR ANALYSIS
p0241 A82-30312

Test plan for SSR --- surveillance radar for air traffic control
[AD-A105053] p0307 A82-20392

Test and evaluation of the airport radar wind shear detection system
[AD-A112663] p0470 A82-27924

Fiber optics rotating of terminal radar and beacon signals
[AD-A116403] p0574 A82-32140

SURVEYING
U SURVEYS
SUBSURFACES
MT GEODETIC SURVEYS
MT GEOLOGICAL SURVEYS

SURVEY VEHICLE

SUBJECT INDEX

SURVEY VEHICLES
MT AIRCRAFT CARRIERS
MT AUTOMOBILES
MT ELECTRIC AUTOMOBILES
MT TRUCKS
MT SURFACE EFFECT SHIPS
MT TANKS (COMBAT VEHICLES)
MT TRACKED VEHICLES
MT TRACKS

Characteristics and trends of energy consumption in transport missions with aircraft and surface vehicles
p0009 A82-10495

SURFACE WAVES
MT ELECTROMAGNETIC SURFACE WAVES
A global atlas of GEOS-3 significant waveheight data and comparison of the data with national buoy data
[NASA-CR-156882] p0146 A82-15498

SURFACES
A study on a numerical method for evaluating spanwise integral in subsonic lifting-surface theory
[ML-TE-66-117] p0034 A82-11035

SURFACE EFFECTS
Improving the accuracy of the estimates of surfactant content in jet fuels
p0218 A82-23250

SURGES
High voltage surge and partial discharge test to evaluate aerospace equipment parts
p0016 A82-11740

SURVEY RADAR
MT AIRBORNE SURVEY RADAR
Airborne associative processor /ASPRO/ --- for early warning radar surveillance, command, and control applications
[AD-A105058] p0002 A82-10108

Computational considerations for fusion in target identification systems --- multisensor correlation
p0668 A82-14735

IMPROVEMENTS TO SECONDARY RADAR FOR AIR TRAFFIC CONTROL
p0341 A82-30311

THE RELIABILITY OF HEIGHT AND IDENTITY DATA --- SECONDARY SURVEILLANCE RADAR ERROR ANALYSIS
p0241 A82-30312

Test plan for SSR --- surveillance radar for air traffic control
[AD-A105053] p0307 A82-20392

Test and evaluation of the airport radar wind shear detection system
[AD-A112663] p0470 A82-27924

Fiber optics rotating of terminal radar and beacon signals
[AD-A116403] p0574 A82-32140

SURVEYING
U SURVEYS
SUBSURFACES
MT GEODETIC SURVEYS
MT GEOLOGICAL SURVEYS

SURVEY VEHICLE
A method for the investigation of synergetization systems

Economic analysis for data base management

Analysis of built-in-test accuracy

Optimization of dispatching discipline in queueing systems with limited queues

Multi-variable analysis and design techniques

Inlet and airframe compatibility for a V/STOL SB-608 test program

A practical approach to the design of multivariable control systems for gas turbines (ASME PAPER 82-GT-150)

A new facility and technique for two-dimensional aerodynamic testing

Lightning detection and ranging

Design of higher harmonic control for the BCB

The role of modern control theory in the design of controls for aircraft turbine engines (AIAA PAPER 82-0320)

No-Tail Rotor helicopter

A system design for a multispectral sensor using two-dimensional solid-state imaging arrays

A practical approach to the design of multivariable control strategies for gas turbines (ASME PAPER 82-GT-150)

Assembly of aircraft instruments --- Russian book

Simplified digital design tools

Design and evaluation of a state-feedback vibration controller [ARDS PEBP 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 82-1341)

A practical approach to the incorporation of technical advances in avionics

Design and experience with a low-cost digital fly-by-wire system in the SAA J37 Viggen L/C

Design of a longitudinal ride-control system by Zakian's method of inequalities

Multi-variable analysis and design techniques

The need for multivariable design and analysis techniques

Design of high integrity multivariable control systems

A geometric approach to multivariable control syntheses

Multivariable design: The optimization of approximate inverses

Design considerations for optimal flight control systems

Design techniques for multivariable flight control systems

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

Design for active and passive flutter suppression and gust alleviation (NASA-CR-2842)

Advanced crack survivable flight data recorder and Accident Information Retrieval System (AIRS) (AD-810554)

ADAMS executive and operating system

Research and technology annual report, 1981

The influence of sensor and actuator characteristics on overall helicopter FCS design

A system design for a multispectral sensor using two-dimensional solid-state imaging arrays

A practical approach to the design of multivariable control strategies for gas turbines (ASME PAPER 82-GT-150)

Assembly of aircraft instruments --- Russian book

Simplified digital design tools

Design and evaluation of a state-feedback vibration controller [ARDS PEBP 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 82-1341)

A practical approach to the incorporation of technical advances in avionics

Design and experience with a low-cost digital fly-by-wire system in the SAA J37 Viggen L/C

Design of a longitudinal ride-control system by Zakian's method of inequalities

Multi-variable analysis and design techniques

The need for multivariable design and analysis techniques

Design of high integrity multivariable control systems

A geometric approach to multivariable control syntheses

Multivariable design: The optimization of approximate inverses

Design considerations for optimal flight control systems

Design techniques for multivariable flight control systems

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

Design for active and passive flutter suppression and gust alleviation (NASA-CR-2842)

Advanced crack survivable flight data recorder and Accident Information Retrieval System (AIRS) (AD-810554)

ADAMS executive and operating system

Research and technology annual report, 1981

The influence of sensor and actuator characteristics on overall helicopter FCS design

Transport aircraft cockpit standardization (Federal Aviation regulations part 25)
Electronic Warfare Avionics Integration Support Facility support processor
(AI-811641)
Current ADR restraint system status, trade-off constraints and long range objectives for the
Minutex Performance Ejection System (MPE)
(AI-811645)
Development of a backpack survival kit for
ejection seats
(AI-811653)
Terminal air traffic control with surveillance data from the node 5 system: Results of system
demonstrations to field controllers
(AI-811632)
Hydraulic Universal Display Processor System (HUDPS)
(AI-81-228)
Navaerical systems technology needs: Escape, rescue and survival, test facilities and test
equipment and training/simulation equipment
(AI-811543)
Functional design to support COTI/DABS flight experiments
[NASA-CH-165947]
Wide-angle, multiviewer, infinity display system
(AI-811630)
Systerms for nuclear auxiliary power
U SNAP
Syste ms integration
KC-135 Avionics Modernization Hot Bench
[AIAA 82-2085]
Develop address beacon, navigation and landing system
(AI-82-10650)
The integrated inertial sensor assembly (ISSA) - A redundant strapdown system for advanced aircraft
navigation and flight control functions
(AI-82-12642)
Integrated satellite navigation and strapdown attitude and heading reference systems for civil
air carriers
(AI-82-12643)
Light airborne Multi-Purpose System
(AI-82-1304)
Integrated avionics - Concepts and concerns
(AI-82-13952)
Design and analysis of a digitally controlled integrated flight/fire control system
(AI-82-13470)
LIN - An advanced avionics system design
(AI-82-2249)
An update of an integrated CNI system - TIES - Comminication, Navigation, and Identification
provided by Tactical Information Exchange System
(AI-82-2292)
Development and laboratory test of an integrated monocular system TISS for advanced aircraft
(AI-82-2297)
An integrated control panel utilizing a programmable variation multipliers dacronic liquid crystal display
(AI-82-2303)
Heter order Information Transfer Systems are coming
(AI-82-2317)
Advanced weapon systems - Integration technology
(AI-82-2313)
F-4 Advanced Avionics Flight Test
(AIAPAPER 81-2466)
The development and flight test evaluation of an integrated propulsion control system for the
HMSF research airplane
(AIAPAPER 81-2467)
Integrated flight testing based on nonlinear system identification data processing techniques
(AIAPAPER 81-2499)
Future directions in CNI integrated avionics
(AI-82-13931)
New advances in signal processing technology for integrated avionics as a whole
(AI-82-13939)
Advanced integrated CNI architectures - Integration of navigation and identification avionics for tactical aircraft and attack
helicopters
(AI-82-13929)
The agile transversal filter - A flexible building block for ICHIA - Integrated Communications,
Navigation and Identification Avionics
(AI-82-13927)
Navigation and Identification Avionics
Navionics conceptual design of an integrated power and avionics information system
Navionics design of a digital integrated automatic
landing system /DIALS/ for steep approach and landing
The PSR BAE Bedford civil flight research programme panel on components and system integration for
optimum ATC
The influence of technology advances on integrated
tactile avionics - Integration Communication,
Navigation, and Identification Avionics for military aircraft
The use of dynamic mock-ups in the design of advanced avionics systems - USAF's Digital Avionics Information System and NAVY's Advanced
Integrated Display System
The air carrier's view on integrated avionics
[AIAA 81-2493]
Integrated achievement of digital avionics - Integration Communication, Navigation, and Identification Avionics for military aircraft
Integrated avionics system - E/A/IFC -
Integrated display systems
[AIAA 81-2317]
Joint Aircraft Information System and NAVY's Advanced
Integrated Display System
The influence of technology advances on integrated
CNI avionics --- Integration Communication,
Navigation, and Identification Avionics for military aircraft
Integrated avionics system - E/A/IFC -
Integrated display systems
[AIAA 81-2317]
The influence of technology advances on integrated
CNI avionics --- Integration Communication,
Navigation, and Identification Avionics for military aircraft
Integrated
display
time
test
instrumentation
Aircraft meteorological data relay /AMDAR/
A look inside the Langley 16-foot transonic
tunnel: User's guide
(BAA-TR-81386)
Integrity of advanced aircraft NOX
[AIAA 81-2317]
Techniques for interfacing multiple systems
(AI-810167)
Modular Multi-Function Multi-Band Airborne Radio
System (MBRAS). Volume 2: Detailed report
(AI-810652)
The modular automated Weather System (MAWS) concept
(AI-810424)
Next generation military aircraft will require
hierarchical/multilevel information transfer systems - packet switching
(AI-811714)
Integrated control of mechanical system for future
combat aircraft
(AI-811717)
Impact of systems technology and integration of
helicopter design
(AI-811816)
Integration of inertial sensors in helicopters
(AI-811817)
Integrated control design techniques
(AI-811816)
Electric Flight Systems integration
(AI-811817)
National Airspace Data Interchange Network (NADIN)
Support of Remote Maintenance Monitoring System
(AIAA 81-2105)
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.  

SISTERS HAIBAGHEIT

SISTIBBS SIBOLATI08

Air-ground attack: Axes of research for airborne systems

Pave Hammer aided integrated strike avionic system

Tactical systems approach to interdiction of 2nd echelon moving targets using real time sensors

Multifunction multimodal airborne radio architecture study

Interoperability testing of decentralized command, control, communications and intelligence /C3I/ systems

Experimental investigation of turbine endwall heat transfer. Volume 2: Linear and annular cascade summary data sets

Hardware and software integration for concurrent data acquisition and reduction of photon correlated laser Doppler velocimetry

SISTERS OAILAGEHEIT

Problems related to the integration of fault tolerant aircraft electronic systems

[NASA CR-165926]

Wind tunnel capability related to test sections, cryogenics, and computer- wind tunnel integration

[AGARD-AB-171]

SYSTEMS MANAGEMENT

Redundancy management of skewed and dispersed inertial sensors

Preliminary functional description of integrated flow management --- for air traffic control systems

[AIAA 81-2205]

Special investigation report: Air traffic control systems

[AGARD-AB-171]

SOFTWARE SIMULATION

Interoperability testing of decentralized command, control, communications and intelligence /C3I/ systems

Simulation study on a hybrid stratified altitude and heading reference system

Aerospace implications from weapon system operational utility studies on manned Air Combat Simulators

[AGARD-AB-171]

The design and implementation of a canned scenario function for the F-16 dynamic system simulator

[FB-82-136276]

Stratified inertial reference systems performance analysis

(A) Failure detection and isolation system for tactical aircraft with separated IBDs

The use of observers on relaxed static stability aircraft

Computer modeling of an aircraft hydraulic electrical system

Digital simulation of aircraft electrical generating system by means of Sceptre program

Real-time simulation of helicopter IR navigation and control research using the Microwave Landing System (MLS). Part 3: A comparison of waypoint guidance algorithms for BNAX/MLS transitions

[NASA CR-3512]

FIRE engineering development testing - Early results --- Position Location Reporting System with data communication network for community users in tactical environment

Radar environment simulation for software test

Real-Time Simulation Computer System --- for digital flight simulation of research aircraft

The simulation study on a redundant flight control system

Automated radar performance evaluation in the Radio Frequency Simulation System /RFSS/ facility at NICON

TURBOTRANS - A programming language for the performance simulation of arbitrary gas turbine engines with arbitrary control systems

[ASME PAPER 82-GT-200]

Problems in the simulation of correlation-extremal navigation systems

Sensor stabilization requirements of HPV's - A simulation study

FA/18 weapons system support facilities

SYSTEMS STABILITY

A stable decentralized filtering implementation for JIIDS BelHav --- stable community relative navigation

Evaluation of the effect of elastomeric damping material on the stability of a bearingless main rotor system

T-2 AIRCRAFT

Developments on graphite/epoxy T-2 nose landing gear door

Design, fabrication and qualification of the T-2 composite rudder

T-33 AIRCRAFT

An application of invariance principle to pilot model for BT-33 aircraft with variable coefficients and delays

T-37 AIRCRAFT

NASA biomechanical noise data handbook. Volume 148, T-378 in-flight crew noise

T-38 AIRCRAFT

A ballistic design model for initiators for aircraft personnel escape systems

Effect on surface pressures of trapazoidal holes in a T-38 stabilator

Finite element analyses of through the canopy emergency crew escape from the T-38 aircraft

SEL and BNHL noise duration coefficients for the 767 and T-38 aircraft

T-56 ENGINE

Next generation turboprop gearboxes

Results of 756 engine performance monitoring trial on Hercules aircraft, February - July 1977

Exponential distribution model for 81-33 aircraft with variable coefficients and delays

TABLES (DATA)

BHC/Gulser. 4 stage transonic compressor

Experimental investigation of turbine endwall heat transfer. Volume 2: Linear and annular cascade summary data sets

Update of the summary report of 1977-1978 task force on aircrew workload

Flight attendant injuries: 1971-1976

TABLES (CONTROL SURFACES)

TACAN

Interoperability testing of decentralized command, control, communications and intelligence /C3I/ systems

Terminal area automatic navigation, guidance, and heading reference system

[AD-A114943]

TACTICAL AIR NAVIGATION U TACAN
The optical recognition of sea targets as a function of surrounding and observation parameters in air to water observations

The shape of the air traffic control system of the future - A U.S. perspective

The influence of smart computers on the cockpit of the future

The outlook for advanced transport aircraft - Perspectives for the future

The influence of smart computers on the cockpit of the future - A U.S. perspective

The shape of the air traffic control system of the future - A U.S. perspective

Selecting the post 1990 civil aviation radionavigation system

Briefs of accidents involving computer air carriers and on-demand air taxi operations, U.S. general aviation, 1979

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

A methodology for missile launch envelope display evaluation

Airbus - Perspectives for the future

The shape of the air traffic control system of the future - A U.S. perspective

Selecting the post 1990 civil aviation radionavigation system

We have just begun to create efficient transport aircraft

The outlook for advanced transport aircraft

Very high speed integrated circuits: Into the second generation. II - Entering Phase 1

Effect of course on tension in target identification systems --- multisensor correlation

A new approach to radar plot extraction for ATC applications

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

The TADS/PNVS 'eyes' for the AH-64 attack helicopter

The TADS/PNVS 'eyes' for the AH-64 attack helicopter

The TADS/PNVS 'eyes' for the AH-64 attack helicopter
**TECHNOLOGY TRANSFER**

Advanced composites integral structures meet the challenge of future aircraft systems

Studied in the history and theory of development of aviation and rocketry and space science and technology — Russian book

Engine industry cost considerations for emerging technologies

Precision casting for gas turbine engines

Simple vs. sophisticated TacAir avionics, II — Soviet TacAir avionics technology

Advanced engine technology and its influence on aircraft performance

Fuel efficient and Bach 0.8, too

Hydrogen economy assessment for long-term energy systems in Japan

Forward-swept-wing technology

The ubiquitous helicopter

X-wing and the Navy V/STOL initiative

Wall ABC technology produce the next-generation helicopter

Technical trends in the civil aircraft and helicopter industry

Energy efficient engine /B3/ technology status

Development of hybrid gas turbine bucket technology

Technology advancements for energy efficient aircraft engines

Canadian rotary wing technology development

On the state of technology and trends in composite materials in the United States

Touchdown technology — large aircraft landing gear stress

CIVIL HELICOPTER PROPULSION SYSTEM RELIABILITY AND ENGINE MONITORING TECHNOLOGY ASSESSMENTS

Support of the HH-65A — The impact of advanced technology of V/STOL systems upon existing product support

Recent advances in the performance of high bypass ratio fans

Advanced technologies applied to reduce the operating costs of small commuter transport aircraft

Assessment of advanced technologies for high performance single-engine business airplanes

Turbo prop design — Now and the future

New technology for the next generation of commercial transports — Beal or imaginary

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

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

The technology of the assembly of engines for flight vehicles — Russian book

The choice of technology for ATC radars, I Transmitters

Jet fuel locks to shale oil: The 1980 technology review

AERONAUTICAL APPLICATIONS OF BONDING TECHNOLOGY

COMMUNITY ROTORCRAFT AIR TRANSPORTATION BENEFITS AND OPPORTUNITIES

SYSTEMS STUDY OF TRANSPORT AIRCRAFT INCORPORATING ADVANCED ALUMINUM ALLOYS

TECHNOLOGY OVERVIEW FOR ADVANCED AIRCRAFT ARMAMENT SYSTEM PROGRAM

IN THE PERIOD UP TO 1914 /2ND REVISED AND ENLARGED EDITION/ RUSSIAN BOOK

TRANSMITTERS

AIRBORNE ELECTRONICS SIMULATION SYSTEMS II — APPLICATIONS

AIRCRAFT COMPOSITE MATERIALS AND STRUCTURES

TECHNOLOGICAL INNOVATION FOR SUCCESS — LIQUID HYDROGEN PROPULSION

V/STOL AS IT APPLIES TO RESOURCE DEVELOPMENT IN THE CANADIAN NORTH

**SUBJECT INDEX**

Aeronautical applications of bonding technology

Community rotorcraft air transportation benefits and opportunities

Systems study of transport aircraft incorporating advanced aluminum alloys

Technology overview for advanced aircraft armament system program

In the period up to 1914 /2nd revised and enlarged edition/ Russian book

Transmitters

Airborne electronics simulation systems II — Applications

Aircraft composite materials and structures

Technological innovation for success — Liquid hydrogen propulsion

V/STOL as it applies to resource development in the Canadian north

**TECHNOLOGY TRANSFER**

A perspective on civil use of GPS


Optimizing aerospace structures for manufacturing cost

Impact of systems technology and integration on helicopter design

Present challenges of research and technology politics

**TECHNOLOGY UTILIZATION**

Use of Space Shuttle technology in conventional aircraft

The balloon and the airship technological heritage

SAR/SAT applications

Airborne Electronic Terrain Bap System. II - Applications

Aeronautics and Astronautics: Volume 1, 1981

Advanced Aluminum Alloys

Aircraft composite materials and structures

Technological innovation for success — Liquid hydrogen propulsion

V/STOL as it applies to resource development in the Canadian north

A-420
Test Pilots

Test site instrumentation study. Volume 2: Crash
1 and crash 2 raw data

Equipment for simulating and measuring a "helmet-
mounted sight and display" system with a coupled
movable TV camera in the flight simulator for
research of the DVLK

[ESA-TP-675] p0266 H82-19219

Acoustic measurements of F100-PW-100 engine
Mach 3 operating in hush house NASA 4920-02-070-2721

[AD-A108814] p0270 H82-19952

Development of a transmission loss test facility

for light aircraft structures

[AIAA-PAPER-82-2490] p0281 A82-24667

Analyzing stable pad disturbances and design of a
sensor vault to monitor pad stability

[IAAI-PAPER-82-1585] p0486 A82-39011

Further development of the test concept of the

Delta Jet engine LABEC 04

[AD-A117569] p0263 H82-33340

Test Vehicles

Aerodynamic lag functions, divergence, and the

British flutter method

[AD-A117089] p0614 H82-34135

Optimization and performance calculation of
dual-rotation propellers

[NASA-CP-156550] p0146 H82-15498

Scanner imaging systems, aircraft

[PB82-111832] p0258 H82-18233

Effect of a part span variable inlet guide vane on

TF34 fan performance

[NASA-CP-156550] p0146 H82-15498

TF34 Engine

Effect of a part span variable inlet guide vane on

TF34 fan performance

[NASA-CP-156550] p0146 H82-15498

Helicopter icing spray system

Sanctuary radar ... with digital processor for

Doppler filtering and pulse compression

[AIAA-PAPER-82-1237] p0418 H82-35078

Further development of the test concept of the

Delta Jet engine LABEC 04

[AD-A117569] p0263 H82-33340

The Boeing Flight Test Data System 1980

Helicopter icing spray system

[AD-A108814] p0266 H82-19219

Air cooling engine test facilities

Aerodynamic Engineering Conference, 12th,

Williamsburg, VA, March 22-24, 1982, Collection

of Technical Papers

[SAND 82-0585] p0236 A82-24661

Slotted wall test section for automotive

electronical test facilities

[AIAA-PAPER-82-0604] p0236 A82-24661

Status of the national transonic facility

[AIAA-PAPER-82-0604] p0236 A82-24661

Large scale aeroengine compressor test facility

[AIAA-PAPER-82-0604] p0236 A82-24661

Test facility and data handling system for the
development of axial compressors

[JSME-PAPER-82-02-73] p0236 A82-24661

Boeing's new transports in a flight-test marathon

[AIAA-PAPER-82-02-73] p0236 A82-24661

Current techniques for jet engine test cell modeling

[AIAA-PAPER-82-02-73] p0236 A82-24661

Air-breathing engine test facilities report

[AGARD-AG-269] p0030 H82-10063

Rotocraft icing: Status and prospects

[AGARD-AR-166] p0036 H82-11056

Facilities for development and clearance

[AGARD-AR-166] p0036 H82-11056

Adaptation of a turbine test facility to

temperature research

[SAND-IM-TRANS-360-2646] p0040 H82-11059

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

[AD-A108557] p0041 H82-11354

NASA Dryden Flight Loads Research Facility

[NASA-TR-81536] p0145 H82-15079

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

[AD-A108557] p0041 H82-11354

Evaluation of the North Island A/C crash/escape

training facility

[AD-A108557] p0041 H82-11354

SUBJECT INDEX

A-426

Test site instrumentation study. Volume 2: Crash

1 and crash 2 raw data

[AIAA-PAPER-82-02-73] p0040 H82-11059

System safety program plan --- electromagnetic

pulse testing of the A-7B aircraft

[AD-A108557] p0041 H82-11354

NASA Dryden Flight Loads Research Facility

[NASA-TR-81536] p0145 H82-15079

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

[AD-A108557] p0041 H82-11354

Evaluation of the North Island A/C crash/escape

training facility

[AD-A108557] p0041 H82-11354
SUBJECT INDEX

THERMAL CONTROL COATINGS
Development of improved high temperature coatings for T2-792 + HP
[NASA-CR-165395] p0136 882-14333
The contribution of thermal barrier coatings to improvements in the life and performance of gas turbine components
[PHR-90076] p0355 882-22271 THERMAL CORROSIONS
U CONVECTIVE FLOW
U CONVECTIONAL FLOW THERMAL CYCLING TESTS
T700 - Modern development test techniques, lessons learned
[ASAE PAPER 82-1183] p0418 882-35048
Elastica-plastic finite-element analyses of thermally cycled double-edge wedge specimens
[NASA-TP-1973] p0308 882-20566 THERMAL DECOMPOSITION
N THERMAL INSTRUMENTATION
Thermal decomposition of aviation fuel
[ASAE PAPER 82-07-27] p0420 882-35292
Deposit formation in hydrocarbon fuels
[ASAE PAPER 82-07-49] p0422 882-35307 THERMAL DEGRADATION
Effects of 50,000 hours of thermal aging on graphite/epoxy and graphite/polyimide composites
[ASAE 06-057] p0335 882-30087
On the characterization of damages in graphite/epoxy composites
[ASAE 06-057] p0336 882-30117 THERMAL EFFECTS
U TEMPERATURE EFFECTS
U THERMOCHEMISTRY
THERMAL EMISSION
A light helicopter for night firing
[SHIA-821-210-105] p0353 882-22256 THERMAL ENVIRONMENTS
Closed loop environmental control systems for fighter aircraft
[ASAE PAPER 81-EMAS-2] p0411 882-10890
Quantification of the thermal environment for externally carried aircraft stores and ordnance
[p019 882-12100 THERMAL EXPANSION
Thermal expansion accommodation in a jet engine frame
[p0017 882-11999 Operating flight loads and their effect on engine performance
[SHIA-11071] p0233 882-26405
Evaluation of an asymptotic method for helicopter rotor airloads
[p0498 882-60590 Helicopter rotor loads using a matched asymptotic expansion technique
Thermal expansion accommodation in a jet engine frame
[p0017 882-11999 Study of the load-carrying capacity of gas-turbine engine impellers under low-cycle loading at normal and high temperatures
[p0061 882-15682 A method for predicting the lifetime of gas turbine blades
[p0017 882-11999 Dispersion and temperature-force dependence of the high-temperature strength characteristics of a gas-turbine-engine disk alloy
[p0182 882-21636 THERMAL STRESSES
The effect of temperature-time factors on the metal damage and endurance characteristics of gas-turbine-engine rotor blades
[p0295 882-26019 Structural strength of materials and parts of gas turbine engines
-Russian book
[p0544 882-52063 Modeling of thermal effects when investigating the thermal fatigue life of the blades of a gas-turbine engine
[p0583 882-66832 Development of improved high temperature coatings for T9-792 + HP
[NASA-CR-165395] p0136 882-14333 THERMAL INSULATION
The use of 'Epsom' polyamide film in aerospace applications

THERMOCHEMICAL PROPERTIES
[SAE PAPER 811091] p0234 882-29413 Failure analysis of silica phenolic nozzle liners
[p0391 882-34882 THERMAL MAPPING
An optical data link for airborne scanning system
[p0391 882-34737 THERMAL PROPERTIES
U THERMODYNAMIC PROPERTIES
THERMAL PROTECTION
Calculation of sensitivity derivatives in thermal problems by finite differences
[p0181 882-21391
The Shock and Vibration Digest, volume 13, no. 9
[NASA-TR-92740] p0900 882-12216
Research and Technology
[NASA-TR-63221]
[p0091 882-13043
THERMAL RESISTANCE
Design analysis of high temperature transparent windshield for high performance aircraft
[ASAE PAPER 81-EMAS-5] p0411 882-10893 Test methodology for evaluation of fireworthiness of aircraft seat cushions
[p0332 882-29596 Thermal-barrier-coated turbine blade study
[NASA-CR-165351] p0028 882-10040 Formulation and characterization of polyimide resilient foam for various densities for aircraft seating applications
[NASA-CR-167621] p0090 882-12230 THERMAL SIMULATION
A new thermal and trajectory model for high altitude balloons
[ASAE PAPER 81-1926] p0007 882-10411
Modeling of thermal effects when investigating the thermal fatigue life of the blades of a gas-turbine engine
[p0583 882-46832 THERMAL STABILITY
N THERMAL DEPENDENCE
A concept for a high-accuracy, low-cost accelerometer
[p0066 882-14605 Calculation of the stability of crosswise-reinforced cylindrical shells
[p0128 882-10621 Deposit formation in liquid fuels. I - Effect of coal-derived Lewis bases on storage stability of jet A turbine fuel
[p0186 882-22241 Thermal stability analysis for conical shells with variable parameters
[p0334 882-9994 Composite bonds improve thermal integrity
[p0335 882-30004 An alternate test procedure to qualify future fuels for Navy aircraft
[ASAE PAPER 82-1233] p0434 882-36175 Evaluating the effectiveness of hydroforming of the low-stability component of T-1 fuel
[p0434 882-36673 Effect of some nitrogen compounds thermal stability of jet A
[NASA-TR-62908] p0476 882-27519 THERMAL STRESSES
Automated calculation of the stressed state of shell systems under asymmetrical mechanical and thermal loading
[p0165 882-19928 Problems in the automation of the thermal-stress analysis of flight vehicles
[p0293 882-27509 Variational equation of an eccentrically reinforced panel with allowance for nonuniform heating
[p0582 882-46617 Acoustic fatigue endurance test of USB flap
-structure models at elevated temperature
[NAL-TR-6883] p0269 882-19570 THERMOHERMETICS
Boundary layer transducers /DCL/ developed for the study of the flow over helicopter rotor blades
[p0540 882-42017 THERMOHEATICAL PROPERTIES
N THERMAL PROTECTION
THETA HEAT OF COMBUSTION
THETA HEAT OF FUSION
A-425
THERMOPLASTIC RESINS
Heat release rate calorimetry of engineering plastics
p0518 882-41075

THERMOPLASTICITY
Nonlinear structural and life analyses of a combustor liner
[NASA-TB-82866] p0398 882-24501

THERMOCHEMISTRY
ST EQUATION SETS
ST PREDICATE TRADemarks
ST PHASE RESINS
ST POLYMER RESINS

THERMOELECTRICITY
U THERMAL STABILITY

THERMODYNAMICS
THERMOCHEMISTRY
U HTIONAL EFFECTS

THERMOELECTRICITY
Research and development program for non-linear structural modeling with advanced time-temperature dependent constitutive relationships

Recent development in hygrothermoelastic analysis of composites
p0529 882-20676

THIN FILMS
Pade approximation applied to flow past thin airfoils
p0176 882-20728

Modified version of LTEAN2: A calculation method for inviscid transonic flow about thin airfoils in moderately slow unsteady motion
[HEL-TR-88055] p0406 882-25231
Wind tunnel investigations on thin supercritical airfoils in high subsonic flow
[DFVRL-PB-82-06] p0557 882-30296

THIN FILMS
High-frequency monitoring of surface layers of metals
p0221 882-23603

THIN LAYER CHROMATOGRAPHY
Determination of antioxidant content in aviation fuels using thin-layer chromatography
p0548 882-42894

THIN PLATES
In-plane shear test of thin panels
p0502 882-40545

THIN WALLED SHELLS
Automated calculation of the stressed state of shell systems under asemetrical mechanical and thermal loading
p0165 882-19928

Studies on the stability of thin-walled shells with cutouts (Review). I
p0182 882-21629

Thermal stability analysis for conical shells with variable parameters
p0336 882-29044

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 method
p0165 882-19928
Investigations of the separation behavior on airfoils at high angles of attack, using linear lift theory
[HDB-PF-123/500/37] p0252 B82-18189
Numerical aircraft design using 3-D transonic analysis with optimization, volume 3. Part 2: User's guide to fighter design computer program
[AD-110037] p0135 B82-21064
Three-dimensional separation and reattachment
[AIAA-79-04421] p0393 B82-24167

THREE DIMENSIONAL FLOW

BY SECONDARY FLOW

Supersonic nozzles without shocks
p0104 B82-16172
Supersonic flow studies on a slotted transonic wind tunnel wall
AIAA PAPER 82-0230
p0117 B82-17855
Transonic wind tunnel wall interference corrections for three-dimensional models
AIAA 82-0588 p0237 B82-24463
Problems of numerical simulation of unsteady three-dimensional viscous-gas flows in nozzles
AIAA 82-02542 p0192 B82-25347
Application of computer generated color graphic techniques to the processing and display of three-dimensional fluid dynamic data — for turbofan mixer nozzle mixing process analysis
p0328 B82-29008

Comparison between computations and experimental data in unsteady three-dimensional transonic aerodynamics, including aeroelastic applications
p0114 B82-22002

Nonlinear transonic flutter analysis
AIAA PAPER 81-0606
p0563 B82-46847
Some experimental investigations on transonic flutter characteristics of thin plate wing models with sweepback and tapered tips
[AEI-TB-68-1191] p0187 B82-16050
Vortex flow correlation — water tunnel tests on thin slender wings
[AD-A106725] p0307 B82-20468
Investigation of upward schemes for finite element analysis of transonic flow over thin airfoils
[AD-A111168] p0405 B82-25225
On embedded flow characteristics of sharp edged rectangular wings
[LOG-C6712] p0531 B82-29263

FEATHERS

U SOLVENTS

FLUIDS

Service sensitivity of polysulfide sealants
p0291 B82-27407

THERMIS

Airborne gamma-ray spectrometer and magnetometer survey, Eielson quadrangle, Alaska, volume 2
[DEEQ-000312] p0399 B82-24632

THERMAL EVALUATION

Threat perception while viewing single intruder conflicts on a cockpit display or traffic information
[NASA-TP-4131] p0190 B82-16076

THREE DIMENSIONAL BOUNDARY LAYER

Transonic three-dimensional viscous-inviscid interaction for wing-body configuration analysis
AIAA PAPER 82-0163
p0116 B82-17816
Measurements of a three-dimensional boundary layer on a sharp cone at Mach 3
AIAA PAPER 82-0289
p0185 B82-22083
Three-dimensional turbulent boundary layer development on a fan rotor blade
AIAA PAPER 82-1007
p0375 B82-31965
Accurate numerical solution of compressible, linear stability equations
p0382 B82-33571
Experimental and theoretical studies of three-dimensional turbulent boundary layers on an enginement of a typical transport airplane
p0511 B82-40955
Generation of boundary-occluding grids around wing-body configurations using transfinite interpolation
p0553 B82-44091
The effect of heat transfer on three-dimensional spatial stability and transition of flat plate boundary layer at Mach 3
p0581 B82-45877

Investigations of the separation behavior on airfoils at high angles of attack, using linear lift theory
[HDB-PF-123/500/37] p0252 B82-18189
Numerical aircraft design using 3-D transonic analysis with optimization, volume 3. Part 2: User's guide to fighter design computer program
[AD-110037] p0135 B82-21064
Three-dimensional separation and reattachment
[AIAA-79-04421] p0393 B82-24167

THREE DIMENSIONAL FLOW

BY SECONDARY FLOW

Supersonic nozzles without shocks
p0104 B82-16172
Supersonic flow studies on a slotted transonic wind tunnel wall
AIAA PAPER 82-0230
p0117 B82-17855
Transonic wind tunnel wall interference corrections for three-dimensional models
AIAA 82-0588 p0237 B82-24463
Problems of numerical simulation of unsteady three-dimensional viscous-gas flows in nozzles
AIAA 82-02542 p0192 B82-25347
Application of computer generated color graphic techniques to the processing and display of three-dimensional fluid dynamic data — for turbofan mixer nozzle mixing process analysis
p0328 B82-29008

Comparison between computations and experimental data in unsteady three-dimensional transonic aerodynamics, including aeroelastic applications
p0114 B82-22002

Nonlinear transonic flutter analysis
AIAA PAPER 81-0606
p0563 B82-46847
Some experimental investigations on transonic flutter characteristics of thin plate wing models with sweepback and tapered tips
[AEI-TB-68-1191] p0187 B82-16050
Vortex flow correlation — water tunnel tests on thin slender wings
[AD-A106725] p0307 B82-20468
Investigation of upward schemes for finite element analysis of transonic flow over thin airfoils
[AD-A111168] p0405 B82-25225
On embedded flow characteristics of sharp edged rectangular wings
[LOG-C6712] p0531 B82-29263

FEATHERS

U SOLVENTS

FLUIDS

Service sensitivity of polysulfide sealants
p0291 B82-27407

THERMIS

Airborne gamma-ray spectrometer and magnetometer survey, Eielson quadrangle, Alaska, volume 2
[DEEQ-000312] p0399 B82-24632

THERMAL EVALUATION

Threat perception while viewing single intruder conflicts on a cockpit display or traffic information
[NASA-TP-4131] p0190 B82-16076

THREE DIMENSIONAL BOUNDARY LAYER

Transonic three-dimensional viscous-inviscid interaction for wing-body configuration analysis
AIAA PAPER 82-0163
p0116 B82-17816
Measurements of a three-dimensional boundary layer on a sharp cone at Mach 3
AIAA PAPER 82-0289
p0185 B82-22083
Three-dimensional turbulent boundary layer development on a fan rotor blade
AIAA PAPER 82-1007
p0375 B82-31965
Accurate numerical solution of compressible, linear stability equations
p0382 B82-33571
Experimental and theoretical studies of three-dimensional turbulent boundary layers on an enginement of a typical transport airplane
p0511 B82-40955
Generation of boundary-occluding grids around wing-body configurations using transfinite interpolation
p0553 B82-44091
The effect of heat transfer on three-dimensional spatial stability and transition of flat plate boundary layer at Mach 3
p0581 B82-45877
THREE DIMENSIONAL MOTION

Study on pressure distribution on rotor blades with three-dimensional nonsteady theory of compressible fluid
(Acta mechanica sinica [AD-A105184])
1057 82-45188

The arbitrary quasi-orthogonal surface method for computing three-dimensional flow in turbine machinery. 2. Calculation of the three-dimensional flow with the sub-surface twisted
(Trans Sci [NASA-SC-165513])
1033 82-11015

A theoretical analysis of the stream surface of revolution with supersonic inlet flow in a transonic axial compressor
(Trans Sci [NASA-SC-165513])
1033 82-11025

A numerical three-dimensional turbulent simulation of a supersonic V/STOL jet in a cross-flow using a finite element algorithm
(Trans Sci [NASA-SC-165513])
1036 82-11055

Aeroacoustic theory for noncompact wing-root interaction
(TPB - 81-7)
1038 82-11071

Three-dimensional flow investigation with a method of characteristics in the inlet region and the blade-to-blade channels of supersonic axial compressors
(Trans Sci [NASA-SC-165513])
1008 82-12078

Prediction and measurement of time-variant, three-dimensional flows in military aircraft intakes
(Trans Sci [NASA-SC-165513])
1009 82-12069

A numerical method for studying nacelle-jet-airfoil interaction in inviscid three-dimensional flow
(Trans Sci [NASA-SC-165513])
1006 82-12094

Analytical study of twin-jet shielding development of a 3-dimensional model
(Trans Sci [NASA-SC-165513])
1019 82-16005

A three-dimensional approach to lift and moment coefficients of rotating blades
(Trans Sci [NASA-SC-165513])
2025 82-18125

On the calculation of transonic blade tip flow for helicopter rotors
(Trans Sci [NASA-SC-165513])
2025 82-18187

Computation of wing-vortex interaction in transonic flow using implicit finite difference algorithms
(Trans Sci [NASA-SC-165513])
2031 82-21159

Three-dimensional separation and reattachment
(Trans Sci [NASA-SC-165513])
2039 82-20167

Application of Computational Fluid Dynamics (CFD) in transonic wind-tunnel/test-flight correlation
(Trans Sci [NASA-SC-165513])
2040 82-25211

Comparison of boundary layer calculations for the root section of a wing. The September 1979 Amsterdam Workshop test case
[MLR- SP-80028-1]
2006 82-25232

The problem of calculation of the flow around a helicopter rotor blade tips --- and adapting computer programs
(Trans Sci [NASA-SC-165513])
2006 82-25233

Three-dimensional mean velocity and turbulence characteristics in the annulus wall region of an axial flow compressor rotor passage
(Trans Sci [NASA-SC-165513])
2040 82-25252

Comparison of experimental and analytical performance for contoured endwall stators
(Trans Sci [NASA-SC-165513])
2050 82-26299

Wind tunnel measurements of three-dimensional wakes of buildings for aircraft safety applications
(Trans Sci [NASA-SC-165513])
2046 82-26921

Computer prediction of three-dimensional potential flow fields in which aircraft propellers operate
(Trans Sci [NASA-SC-165513])
2056 82-32312

Computation of three-dimensional unsteady nonuniform flow in the blade-free annular channel of a turbocharger --- military aircraft, turbocompresers
(Trans Sci [NASA-SC-165513])
2059 82-32372

THREE DIMENSIONAL MOTION

WIDE FIELD OF VIEW LASER BEACON SYSTEM FOR THREE-DIMENSIONAL AIRCRAFT POSITION MEASUREMENT
(ASEE-PAPER-81-3/A/DSC-9)

Optima three-dimensional flight of a supersonic aircraft
(Trans Sci [NASA-SC-165513])

Three-dimensional analysis of cascade flutter in parallel shear flow
(Trans Sci [NASA-SC-165513])

THREAT INDIVIDUAL Bypass throttling in fighter engines
(ASEE-PAPER-81-1285)

External fuel vaporization study
(ASEE-SC-165513)

THREAT

IN JET THRUST

AS LOW THRUST

AS STATIC THRUST

A VARIABLE THRUST

An experimental study of flow rate and thrust characteristics of a four-nozzle ejector with flow twist
(Trans Sci [NASA-SC-165513])
2058 82-25216

Application of thrusting ejectors to tactical aircraft having vertical lift and short-field capability
(ASEE-PAPER-81-2629)
2009 82-19211

Performance flight test evaluation of the Ball-Barco J-21 Jetwing STOL research aircraft
(Trans Sci [NASA-SC-165513])
2018 82-20762

Influence augmentation effects
(ASEE-PAPER-81-2629)
2056 82-40548

XPV-12A diagnostic and development programs
(ASEE-PAPER-81-1285)
2074 82-18206

Thrust augmenting ejectors: A review of the application of jet mechanics to V/STOL aircraft propulsion
(ASEE-PAPER-81-2629)
2061 82-23169

Improvement of ejector thrust augmentation by pulsating or flapping jets
(ASEE-PAPER-81-2629)
2062 82-23172

An experimental study of rectangular and circular thrust augmenting ejectors
(ASEE-PAPER-81-1285)
2054 82-26204

NASA vertical drag test report --- rotor systems research aircraft
(Trans Sci [NASA-SC-165513])
2057 82-32341

THREAT CONTROL

A METHOD FOR PROPELLER CONTROL OF V/STOL AIRCRAFT
(ASEE-PAPER-81-2629)
2010 82-16909

Optimal trajectories in supersonic flight
(ASEE-PAPER-81-2629)
2019 82-17906

Thrust modulation methods for a subsonic V/STOL aircraft
(ASEE-PAPER-81-2629)
2015 82-19213

Thrust management - Current achievements and future developments
(ASEE-PAPER-81-2629)
2010 82-20520

No-tail-rotor helicopter test results for V/STOL aircraft and fluid dynamics
(ASEE-PAPER-81-2629)
2026 82-10029

Thrust modulation methods for a subsonic V/STOL aircraft
(ASEE-PAPER-81-2629)
2009 82-13112

Potential reductions in aircraft operation and maintenance costs by using thrust computing support equipment
(ASEE-PAPER-81-2629)
2025 82-18207
THrust DISTRIBUTION

THrust MEASUREMENT
Potential reductions in aircraft operation and maintenance costs by using thrust support equipment [AD-A100562] p0258 882-10207
Optimization of thrust algorithm for the Computing System (TCS) for Thrust the NASA Highly Maneuverable Aircraft Technology (HiMAT) vehicle's propulsion system [NASA-CR-163121] p0317 882-21198

THrust POWER
U THRUST

THrust PROGRAMMING
Flight management computer [SWIA-82-111-110] p0399 882-24842

THrust REVERSAL
Study of ingestion of exhaust gases with different intake temperature in a reversed turbojet engine [AIAA 882-11444]
Thrust reverser effects on twin-engine aircraft having asymmetric nozzles [AIAA PAPER 81-2630] p0108 882-16911
Thrust-induced effects on low-speed aerodynamics of fighter aircraft [AIAA PAPER 81-2612] 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 81-1138] p0248 882-37693
Symmetric approach and landing thrust reverser impacts on usage and LCC --- life cycle cost [NASA CR-163121] p0505 882-40892
Advanced exhaust nozzle technology [NASA CR-163121] p0095 882-13078
Static internal performance of single expansion-ramp nozzles with thrust vectoring and reversing [NASA TP-1962] p0302 882-20156
Static internal-performance characteristics of two thrust reverser concepts for asymmetric nozzles [NASA TP-2025] p0445 882-26235
Thrust reverser for a long duct fan engine --- for turbofan engines [NASA CASE LW-1399-1] p0453 882-26293
Minimum time turn constrained to the vertical plane [AD-A110937] p0573 882-26317

THrust VECToR CONTROL
Optimal flight paths for warped, supersonic flight vehicles --- Extension to the case where thrust can be vectored [NASA CR-163121] p0005 882-10310
Developments in boundary layer thrust vector control [AIAA PAPER 81-2630] p0108 882-16907
Ground test of a large scale D" vented thrust deflecting nozzle [AIAA PAPER 81-2630] p0108 882-16907
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 STOL, VTOL, and STOL aircraft in a support role for the U.S. Navy [NASA CR-163121] p0095 882-13078

Tilt Rotor Aircraft

(a) Thrusters
Fiatgers --- Tomorrow's terminology [AIAA PAPER 81-2650] p0157 882-19218
Performance of a 20 CD nonsymmetric exhaust nozzle on a turbojet engine at altitude [AIAA PAPER 81-1137] p0497 882-40420
New nozzle design aimed at F-15, F-16 aircraft [NASA CR-163121] p0095 882-34978
Effect of a part span variable inlet guide vane on TF34 fan performance [AIAA PAPER 81-34978] p0088 882-12075
Advanced exhaust nozzle technology [AIAA PAPER 81-13078]
A real time Pegasus propulsion system model for STOL piloted simulation evaluation [NASA CR-163121] p0100 882-13144
Static internal performance of single expansion-ramp nozzles with thrust vectoring and reversing [NASA TP-1962] p0302 882-20156
Wind-tunnel investigation of the powered low-speed longitudinal aerodynamics of the Vectored-Engine-Over (VEO) wing fighter configuration [NASA TP-1962] p0302 882-20156
High pressure bleed for STOL and STOVL performance: A conceptual examination [AIAA PAPER 81-2612] p0505 882-32357

(b) Enhanced F-15 air-to-ground flight demonstrations [AIAA PAPER 81-2612] p0095 882-13078

(c) U ROLLER ENGINES
THUNDERSTORMS

Thunderstorms hazards flight research --- Program overview [AIAA PAPER 81-2142] p0053 882-13853
Operational evaluation of thunderstorms penetration test flights during project Storm Hazards '80 [AIAA PAPER 81-2650] p0078 882-19450
Simulation of plume excitation due to hazardous wind shear [AIAA PAPER 81-20215] p0117 882-17844
Mesoscale convective complexes and general aviation [AD-A109846] p0303 882-20163
NASA research programs responding to workshop recommendations [NASA CR-163121] p0311 882-21146
The 1981 direct strike lightning data --- utilizing the F-106 aircraft [NASA TP-82-3273] p0358 882-22848
A study of wind shear effects on aircraft operations and safety in Australia [AD-A109846] p0358 882-22848

(d) TIG WELDING
U GAS TUNGSTEN ARC WELDING

TILT U ATTITUDE (INCLINATION)

TILT Rotor Aircraft

(a) N2 XV-15 Aircraft

Ground effect hover characteristics of a large-scale twin tilt-nacelle V/STOL model [AIAA PAPER 81-2610] p0155 882-19201
Analysis of selected V/STOL concepts for a civil transportation mission [AIAA PAPER 81-2655] p0157 882-19220
Flexibility is offered by XV-15 tilt-rotor concept [AIAA PAPER 81-2612] p0160 882-19300
Design optimization of rotor systems for tilt-rotor aircraft that fold for shipboard compatibility [AIAA PAPER 81-2612] p0280 882-26399
Advanced helicopter concepts compete [AIAA PAPER 81-2612] p0283 882-26537

(b) XV-15 - Foretelling things to come [NASA CR-163121] p0064 882-16386

(c) JXV, what an opportunity Joint Services XV - Foretelling things to come [NASA CR-163121] p0155 882-19201

(d) Advanced Vertical Lift Aircraft Program

Aerospace characteristics of a large-scale, twin tilt-nacelle V/STOL model [AIAA PAPER 81-0150] p0482 882-38403
Flight dynamics of rotorcraft in steep high-g turns [AIAA Paper 82-1345] p0488 A82-39117

A recursive time domain analysis of distributed line grid networks with application to the LTA/ATE problem --- Lightning Threat Analysis [AIAA Paper 82-14761] p0070 A82-14761

Tiltrotor research aircraft program

Subject index

**TILTING**

U ATTITUDE (inclination)

U TILTING DIRECTION

TILTING ROTOORS

Advanced technology airfoil development for the XV-15 tilt-rotor vehicle [AIAA Paper 82-1606] p0104 A82-16060

Aeroelastic survey of wind tunnel testing of small and large scale rotors [SRI.AS-91-210-107] p0350 A82-22225

TILTING INVENTIONS

A VHF homing system with VHF radiotelephony for area-representative ramp-survey flights conducted, as part of combined forest inventories, with light aircraft carrying 70 am and 35 am cameras p0082 A82-15748

Tilt

MT FLIGHT TIME

MT TBW

MT RESPONSE TIME (COMPUTERS)

SRE and PAM, noise duration coefficients for the 747 and T-38 aircraft [NASA-TN-83214] p0043 A82-34180

Tilt delay

U TILT DEPENDENCE

The effect of temperature-time factors on the metal damage and endurance characteristics of gas-turbine-engine rotor blades p0295 A82-20019

System optimization by periodic control [NASA-31176] p0611 A82-33402

Tilt discrimination

Passive aircraft location p0547 A82-42791

Tilt division multiple access

Distributed Time Division Multiple Access /TDMA/ - A distributed signaling technique for advanced tactical communications [NAVS-82-14719] p0067 A82-14719

JCIDS distributed TDMA /TDMA/ terminal development results with emphasis on relative navigation performance p0123 A82-18152

Tilt division multiplexing

A modular multiplexed digital voice intercommunications system p0668 A82-14721

A design for a 32-channel multiplexer --- for unmanned aircraft navigation sensors [NASA-TN-RAD-NAV-145] p0259 A82-18503

Tilt functions

A recreational sports analysis of distributed line grid networks with application to the LTA/ATE problem --- Lightning Threat Analysis p0070 A82-14761

Tilt lag

Hard limited approaches to correlation velocity sensing p0022 A82-12636

The effects of the delays on systems subject to manual control p0488 A82-33403

Analysis of very low frequency oscillations in a random combinator by one of a sensitive time lag model p0321 A82-21400

Tilt sharing

Time-marching transonic flutter solutions including angle-of-attack effects [NASA-TN-83295] p0363 A82-23196

Tilt sharing equations

Motor control

Comparison between the exact and an approximate feedback solution for medium range interception problems p0044 A82-13106

Comment on ‘‘Optimal control via mathematical programming’’ [AIAA Paper 82-13106] p0342 A82-31125

Minimum-time three-dimensional turn to a point of supercruising aircraft p0556 A82-44482

LQG-based multivariable design: Frequency domain interpretation p0029 A82-10053

Minimum time turn constrained to the vertical plane [AD-111096] p0456 A82-26317

Optimal periodic Doppler sliding flight p0559 A82-30133

Tilt response

Transonic time-response analysis of three D.O.P. conventional and supercritical airfoils [AIAA 82-3015] p0339 A82-30155

Tilt series analysis

Statistical analysis and time series modeling of air traffic operations data from flight service stations and terminal radar approach control facilities: Two case studies [NASA-TN-810973] p0304 A82-20172

Identification of multivariable high performance turbofan engine dynamics from closed loop data [NASA-TN-82785] p0307 A82-20339

Tilt sharing

A pulsed contention multiplex system using MIL-STD-1553 protocol [AIAA Paper 82-2271] p0049 A82-13487

The role of software in commercial ATS p0294 A82-27885

Random order time sharing filters for TMS in-flight alignment p0482 A82-38439

Tilts

U TILTING DEVICES

Tilting devices

Global positioning system timing receivers in the DSM p0271 A82-20126

TIP SPEED

Forward velocity effects on fan noise and the suppression characteristics of advanced inlets as measured in the NASA-Langley 40 by 80 foot wind tunnel [NASA-TR-52328] p0540 A82-30030

TIPS

MT BLADE TIPS

MT NOSE TIPS

MT WING TIPS

TIPs

MT AIRCRAFT TIPS

TITAN

Radiation enhancement of nonequilibrium during flight through the Titan atmoosphere [AIAA Paper 82-0070] p0373 A82-31883

TITAN

Structural dynamics of shroudless, hollow, fan blades with composite in-lays [AIAA Paper 82-02-284] p0430 A82-35456
TRAI\$OCTOS

1. Minutes of physical configuration audit for the F-16 Electronic Warfare Training Device [AD-A110321] p0320 882-21222
2. TRAJECTORIES
   a. D\$C\$ENT TRAJECTORIES
   b. MISSILE TRAJECTORIES
   c. BENTLEY TRAJECTORIES
   d. PERSEUS TRAJECTORIES
   e. A new thermal and trajectory model for high altitude balloons [AIAA PAPER 01-1926] p0007 882-10411
   f. Constant L/D glide trajectories [AIAA PAPER 02-2042] p0061 882-21493
   g. Wind tunnel studies of store separation with load factor - Freedrops and captive trajectories [AIAA PAPER 02-3156] p0056 882-23061
   h. A laser-interferometer method for determining the forces on a freely-flying model in a shock tunnel [LA-1000-82] p0161 882-14821
   i. Sensor footprints and homing range of tactical guidance munitions [BMG-FSW-61-5] p0016 882-15111
   j. User's manual for the AMBER flight path-trajectory simulation code [DE82-07004] p0538 882-29343

TRAJECTORY OPTIMIZATION
1. NJ TRAJECTORY OPTIMIZATION
   a. Experience with flight test trajectory guidance [AIAA PAPER 82-1109] p0119 882-17504
   b. The Maneuvering Flight Path Display - A flight trajectory solution display concept [NASR-Cr-1427] p0074 882-14824
   c. The use of adaptive control for helicopter trajectories in search operations [LA-1000-82] p0154 882-19065
   d. Determination of the glide path of an aircraft with power off [AIAA PAPER 82-3454] p0388 882-24154
   f. Optimum climb and descent trajectories for airliner missions [AIAA PAPER 82-1109] p0048 882-11082
   g. Singular perturbation techniques for real time aircraft trajectory optimization and control [NASR-Cr-1507] p0570 882-31330

TRAJECTORY OPTIMIZATION
1. Optimal flight paths for winged, supersonic flight vehicles - Extension to the case where thrust can be vectored [AIAA PAPER 82-0366] p0005 882-10310
2. Darbox points in minimum-fuel aircraft landing problems [AIAA PAPER 82-0366] p0043 882-13077
4. On-line optimization of aircraft altitude and flight path angle dynamics [AIAA PAPER 82-0366] p0044 882-13079
6. Optimal trajectories in supersonic flight [AIAA PAPER 82-0366] p0119 882-17906
7. Optimum climb and descent trajectories [AIAA PAPER 82-0366] p0119 882-17906
8. Optimal trajectory optimization algorithms [AIAA PAPER 82-0366] p0167 882-20296
11. Determination of an optimal control program for an aircraft power plant during climb [AIAA PAPER 82-0366] p0334 882-29865

COMMENT ON 'OPTIMAL CONTROL VIA MATHEMATICAL PROGRAM' [AIAA paper 82-0366] p0320 882-21222

TRAVERSUS C-160 AIRCRAFT
1. G C-160 AIRCRAFT
2. TRANSMITTER RECEIVERS
3. TRANSCENDENTAL FUNCTIONS
4. NT TARGETS
5. TRANSCONTINENTAL SYSTEMS
   a. Aircraft meteorological data relay /AIAA/ [AIAA PAPER 82-0366] p0007 882-10411
   b. Transportation systems evaluation methodology, development and applications, phase 3 [AIAA PAPER 82-16499] p0085 882-12051

TRANSDUCERS
1. NT ELECTRONIC TRANSDUCERS
2. NT MICROPHONES
3. NT PRESSURE SENSORS
4. NT QUARTS TRANSDUCERS

BOUNDARY LAYER TRANSDUCERS /DCL/ developed for the study of the flow over helicopter rotor blades [HERA, TP NO. 1981-93] p0548 882-42817

TRAYLERS
1. LA TRAYLERS
2. FTRANSLATION EFFECTS
3. TRACKED VEHICLES
   a. AIRCRAFT AUTOMATION FOR AIRCRAFT METEOROLOGICAL DATA RELAY
   b. INTEGRATING TRAYLERS FOR JIDS "BELHAV" simple relative navigation [AD-A110321] p0124 882-18156

TRANSFER FUNCTION
1. NT MODULATION TRANSFER FUNCTION
2. NT SYNCHRONIZATION TRANSFER FUNCTION
3. NT SCRAMBLING TRANSFER FUNCTION

FUTURE MODES suppression using hyperstable feedback [AIAA PAPER 82-0366] p0120 882-17908

SIMPLIFIED DIGITAL DESIGN TOOLS
1. NT MODULATION TRANSFER FUNCTION
2. NT SYNCHRONIZATION TRANSFER FUNCTION
3. NT SCRAMBLING TRANSFER FUNCTION

Simplified digital design tools [AIAA PAPER 82-0366] p0435 882-37034

The ideal controlled element for real aircraft is not K/s [AIAA PAPER 82-0366] p0405 882-38994

Investigation of low order lateral directional transfer function models for augmented aircraft [AIAA PAPER 82-0366] p0085 882-38994

The effects of atmospheric turbulence on a quadruped heavy lift airship [AIAA PAPER 82-0366] p0486 882-39009

Limitations on achievable performance of multivariable feedback systems [AIAA PAPER 82-0366] p0029 882-10052

The lateral response of an airship to turbulence [AIAA PAPER 82-0366] p0559 882-30312

TRANSFER OF TRAINING
1. NT MODULATION TRANSFER FUNCTION
2. NT SYNCHRONIZATION TRANSFER FUNCTION
3. NT SCRAMBLING TRANSFER FUNCTION

The Link-11/420 flight training simulator for tracked vehicles: The effect of method and duration of training on the effectiveness of the training [AD-A110321] p0257 882-18226

TRANSFER ORBITS
1. NT MODULATION TRANSFER FUNCTION
2. NT SYNCHRONIZATION TRANSFER FUNCTION
3. NT SCRAMBLING TRANSFER FUNCTION

Consent on 'Optimal control via mathematical programming' [AIAA PAPER 82-0366] p0342 882-11125

TRANSFORMATIONS (MATHEMATICS)
1. NT COORDINATE TRANSFORMATIONS
2. NT TRANSFORMATION TECHNIQUES
3. NT TRANSFORMATION TECHNIQUES

A stable decentralized filtering implementation for JIDS 'BELHAV' --- simple relative navigation [AIAA PAPER 82-0366] p0124 882-18156

Applications to aerodynamics of the theory of transformations of nonlinear systems [AIAA PAPER 82-0366] p0540 882-30013
SUBJECT INDEX

TRANSFORMS
0 TRANSFORMATIONS (MATHEMATICS)
TRANSFORMATIONS (MATHS)
Beyond the horizon coverage for air navigation/traffic control p0235 A82-24647

TRANSPORT HEATING
Transient two-dimensional temperature distributions in air-cooled turbine blades p0149 A82-18893

TRANSPORT LOADS
HT BLAST LOADS
HT GUST LOADS
HT IMPACT LOADS
HT LANDING LOADS
HT SHOCK LOADS

TRANSPORT RESPONSE
Blade loss transient dynamic analysis of turboshaft engines p0615 A82-34982
Transient vibration of high speed lightweight rotor due to sudden imbalance p0628 A82-35413
Engine dynamic analysis with general nonlinear finite element codes. II - Bearing element implementation, overall numerical characteristics and benchmarking (NASA PAPER 82-GT-292) p0430 A82-35462
Aeroelastic lag functions, divergence, and the British flutter method p0619 A82-35820
Problem of engine response during transient maneuvers p0208 A82-17221
Analysis of transient data from aircraft gas turbine engines using AIDS p0603 A82-25109
Transient simulation of gas turbines including the effects of heat capacity of the solid parts (NASA PAPER 82-551-752-594-1) p0653 A82-26296
Amendment of lightning simulation test techniques, part 1 p0477 A82-27663

TRANSIENTS (SUGGESTS)
0 SUGGESTS

TRANSIENT FLOW
Effect of wakes of upstream stator blades on the rotor of an axial flow compressor p0276 A82-26208

TRANSITION METALS
HT CHROMIUM
HT COBALT
HT NIOBium
HT TANTALUM
HT TITANIUM

TRANSITIONAL MOTION
HT SECONDARY FLOW
HT THREE DIMENSIONAL FLOW
HT THREE DIMENSIONAL MOTION

TRANSMISSION
HT ACOUTIC PROPAGATION
HT AERODYNAMIC HEAT TRANSFER
HT CONVECTIVE HEAT TRANSFER
HT DATA TRANSMISSION
HT ELECTRIC POWER TRANSMISSION
HT ELECTROMAGNETIC WAVE TRANSMISSION
HT GROUND WAVE PROPAGATION
HT HEAT TRANSFER
HT HEAT TRANSITION
HT IONOSPHERIC F-SCATTER PROPAGATION
HT IONOSPHERIC PROPAGATION
HT LAMINAR HEAT TRANSFER
HT MULTIPATH TRANSITION
HT MULTIPLE ACCESS
HT MULTIPLEXING
HT PCM TELEMETRY
HT RADAR TRANSMISSION
HT RADIO TRANSMISSION
HT SATELLITE TRANSMISSION
HT SHOCK WAVE PROPAGATION
HT SIGNAL TRANSMISSION
HT SOUND TRANSMISSION
HT SPREAD SPECTRUM TRANSMISSION
HT SUPERSONIC HEAT TRANSFER
HT TIME DIVISION MULTIPLEXING
HT TRANSMISSION RADIO PROPAGATION

ST TURBULENT HEAT TRANSFER
ST WAVE PROPAGATION

TRANSMISSION EFFICIENCY
Microwave systems for radar guided missiles p0529 A82-26444
Combined amplitude-phase modulation for a VHF communication link p0150 A82-18936
Columbus, Ohio, Voice response system demonstration and evaluation (AD-A104750) p0091 A82-12304

TRANSMISSION LINES
HT BEAM WAVES
HT COMMUNICATION CABLES
HT MICROWAVE TRANSMISSION LINES
HT OPTICAL WAVEGUIDES
HT STEER TRANSMISSION LINES

Wire strike protection p0046 A82-13246
Portable air driven variable speed fiber optic cable termination polisher (AD-A104797) p0091 A82-12468
Effects of high voltage transmission lines on non-directional beacon performance (AD-A112311) p0664 A82-27261
Feasibility study of a 270V dc flat cable aircraft electrical power distributed system (AD-A114026) p0528 A82-28552

TRANSMISSION LOSS
Development of a transmission loss test facility for light aircraft structures p0128 A82-18726
Noise transmission loss of aircraft panels using acoustic intensity methods (NASA-GT-2046) p0564 A82-31069

TRANSMISSIONS (MACHINE ELEMENTS)
In-flight computation of helicopter transmission fatigue life expenditure (NASA PAPER 81-2634) p0655 A82-13872
Airworthiness of helicopter transmissions p0172 A82-20541
Helicopter transmission philosophy - The way ahead p0173 A82-20546
Aviation gear drives and reducers: Handbook --- an Russian p0341 A82-30675
Selecting the best reduction gear concept for prop-fan propulsion systems (NASA PAPER 82-1124) p0417 A82-35020
Helicopter Propulsion Systems (AGARD-CP-302) p0206 A82-17203
Advanced transmission component development p0208 A82-17214
Mathematical models for the synthesis and optimization of spiral bevel gear tooth surfaces --- for helicopter transmissions (NASA-CR-3553) p0412 A82-25516
Lubricant effects on efficiency of a helicopter transmission (NASA-TR-62857) p0412 A82-25520
Reliability model for planetary gear transmission (NASA-TR-62859) p0529 A82-26843
Kinematic precision of gear trains Always better (NASA-TR-62867) p0599 A82-32733

TRANSMITTER RECEIVERS
Small ERP/SHP airborne SATCOM terminal Extravascular Activity/Air Traffic Control (EVA/ATC) test report --- communication links to the astronaut (NASA-CR-167600) p0370 A82-23381

TRANSMITTERS
HT EMERGENCY LOCATOR TRANSMITTERS
HT RADAR TRANSMITTERS
HT RADIO BEACONS
HT RADIO TRANSMITTERS
HT RADIO TELEPHONES
HT SONGS
HT TRANSMITTER RECEIVERS

TRANSOSCOPIC FLIGHT
Consequences of American airline deregulation - Legislative theory in a concrete example p0165 A82-19947
TRANSONIC AIRCRAFT

Gateway diversity and competition in international air transportation

Characteristics of a Paris-New York flight on board the Concord

TRANSONIC AIRCRAFT

U SUPERSONIC AIRCRAFT

SUBJECT INDEX

TRANSONIC TECHNOLOGY PROGRAM

O F ACT PROGRAM

TRANSONIC COMPRESSORS

Performance analysis of the test results on a two-stage transonic fan

A theoretical analysis of the stream surface of revolution with supersonic inlet flow in a transonic axial compressor

Aerodynamic considerations in the prediction of stalled supersonic flow in transonic fans

The through flow calculations

Performance of single-stage axial-flow transonic compressor with rotor and stator pitch ratios of 1.62 and 1.78, respectively, and with design pressure ratio of 1.82

[NASA-TF-1974]

TRANSONIC FIGHTER

One year flight testing of the Transonic Wing

Commercial transports - Aerodynamic design for cruise performance efficiency

Practical aerodynamic problems - Military aircraft

Extension of FLO codes to transonic flow prediction for fighter configurations

Wing design for supersonic cruise/transonic maneuver aircraft

Redating Bach's mechanics - Bombs away --- weapons delivery of fighter aircraft at transonic speed

Supersonic cruise/transonic maneuver wing section development study

Supercritical maneuvering fighter configuration. Wind-tunnel investigation at Mach numbers of 0.60 to 0.25

[NASA-TR-84513]

TRANSONIC FLOW

Experimental study of subsonic and transonic flows past a wing

Strong matching method for computing transonic viscous flows including wakes and separations - Lifting airfoils

Remarks on the calculation of transonic potential flow by a finite volume method

Computational treatment of transonic canard-wing interactions

A more-accurate transonic computational method for wing-body configurations

Transonic three-dimensional viscous-inviscid interaction for wing-body configuration analysis

Relaxation solution for viscous transonic flow about fighter-type forebodies and afterbodies

Computations of transonic flow over an oscillating airfoil with shock-induced separation

A contribution to the hodograph method for shock-free transonic airfoil sections

Numerical solution of three-dimensional unsteady transonic flow over wings including inviscid/viscous interactions

Transonic perturbation analysis of wing-fuselage-nacelle-pylon configurations with powered jet exhausts

Aerodynamic design of the contoured wind-tunnel liner for the NASA swept-wing LFC test

Transonic flow past thin wings

Application of a transonic potential flow code to the static aerodynamic analysis of three-dimensional wings

A system for the numerical simulation of sub- and transonic viscous attached flows around wing-body configurations

The equivalent simple body /ESB/ method for transonic wing analysis

A high-frequency transonic small disturbance code for unsteady flows in a cascade

Calculation of the flow-field velocities of a prediction of inlet flow fields in the vicinity of generalized airfoils

Calculation of viscous transonic flow over airfoils

Design of finite element grids for the computation of the three-dimensional transonic flow around a wing

Prediction of separated asymmetric trailing-edge flows at transonic Mach numbers

Transonic flow past bodies of the type wing-fuselage with allowance for boundary effects

A computational design method for transonic turbomachinery cascades

Application of computational methods to transonic wing-design

A-7 transonic wing designs

Transonic computational experience for advanced tactical aircraft

Extension of FLO codes to transonic flow prediction for fighter configurations

A series of airfoils designed by transonic drag minimization for Gates Learjet aircraft

Applied computational transsonics - Capabilities and limitations

Evaluation of full potential flow methods for the design and analysis of transport wings

A grid interfacing zonal algorithms for three-dimensional transonic flows about aircraft configurations

Numerical solution of a problem concerning transonic flow past a wing-fuselage configuration

A new Transonic Airfoil Design Method and its application to helicopter rotor airfoil design

Calculations of transonic steady state aerelastic effects for a canard airplane

Viscous transonic airfoil flow simulations

Transonic small disturbance code for body-wing configuration coupled with full potential code for wing alone

An implicit finite-volume method for solving the Euler equations
Application of a transonic potential flow code to aeroelastic properties of wings in transonic flow

Investigation of passive shock wave-boundary layer interaction effects

Numerical aircraft design using 3-D transonic computational fluid dynamics (CFD)

Computation of wing-vortex interaction in transonic flow

On the calculation of transonic blade tip flow for helicopter rotors

Transonic perturbation analysis of wing-fuselage-nacelle-pylon configurations with powered jet exits

Flutter and time response analyses of three degree of freedom airfoils in transonic flow

Single stage transonic compressor and equivalent plane cascade

On the calculation of transonic blade tip flow for fan blade cascade

Transonic perturbation analysis of wing-fuselage-nacelle-pylon configurations with powered jet exits

Acta Aeronautica et Astronautica Sinica

Computation of wing-vortex interaction in transonic flow using implicit finite difference algorithm

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

Numerical aircraft design using 3-D transonic analysis with optimization. Volume 1: Executive summary

Numerical aircraft design using 3-D transonic analysis with optimization, volume 2. Part 1: Transport design

Numerical aircraft design using 3-D transonic analysis with optimization, volume 2. Part 2: Fighter design

Numerical aircraft design using 3-D transonic analysis with optimization, volume 3. Part 1: User's guide to transport design computer programs

Numerical aircraft design using 3-D transonic analysis with optimization, volume 3. Part 2: User's guide to fighter design computer programs

Investigation of passive shock wave-boundary layer interaction effects

Application of a transonic potential flow code to the static aeroelastic analysis of three-dimensional wings

A harmonic analysis method for unsteady transonic flow and its application to the flutter of airfoils

Application of Computational Fluid Dynamics (CFD) in transonic wind-tunnel/flight-test correlation

Investigation of upwind schemes for finite element analysis of transonic flow over two-dimensional airfoils

Modified version of LITAN2: A calculation method for incompressible transonic flow about airfoils in moderately slow unsteady motion

A finite difference method for the calculation of transonic flow about a wing, based on small perturbation theory

Finite difference modeling of rotor flows including wake effects

Recent applications of the transonic wing analysis computer code, TWAING

Recent developments in wing with stores flutter suppression

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 flutter onset in wind-tunnel tests

Measured and calculated effects of angle of attack on the transonic flutter of a supercritical wing

Transonic time-response analysis of three D.O.F. conventional and supercritical airfoils

Comparison between computational and experimental data on unsteady three-dimensional transonic aerodynamics, including aeroelastic applications

Transonic flutter study of a wind-tunnel model of a supercritical wing with/without winglet

Flutter analysis using nonlinear aerodynamic forces

An experimental examination of compressor blade flutter

Nonlinear transonic flutter analysis

Some experimental investigations on transonic flutter characteristics of thin plate wing models with sweptback and tapered tips

A wind tunnel study of the flutter characteristics of a supercritical wing

Aerelastic properties of wings in transonic flow

Time-marching transonic flutter solutions including angle-of-attack effects

Transonic flutter study of a wind-tunnel model of a supercritical wing with/without winglet conducted in Langley Transonic Dynamics Tunnel

The determination of critical flutter conditions of nonlinear systems

Time-marching transonic flutter solutions including angle-of-attack effects

Transonic flutter

0 Supersonic Inlets

Transonic Nozzles

Heat transfer measurements of a transonic nozzle guide vane

NASA-Paper 82-GT-247
The development of cryogenic wind tunnels and three-dimensional flow studies on a slotted design predictions for noise control in the transient phenomena of shock-induced turbulent transonic wind tunnel vail interference 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 basis-tunnel-flight-drag correlation: some 'new' guide current pressure measuring system in the transonic wind tunnel induction drawn transonic wind tunnel: test at room temperature and cryogenic adaptation nasa langley laminar flow control airfoil experiment cryogenic technology, part 1 --- conference proceedings; cryogenic wind tunnel design and instrumentation structural modeling of high Reynolds number wind tunnel models 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 (hasa-cx-166344) national transonic facility (nft) prototype fan wind fatigue test programs for the transonic wind tunnel data processing installation: part ii: programs for processing data on the central site computer design basis for a new transonic wind tunnel (hasa-cx-1612899)
On-board communication for active-control transport aircraft
([AIAA PAPER 81-2173])
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
([AIAA PAPER 81-2377])
p0061 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
([AIAA PAPER 81-2398])
p0065 A82-14410

Enhanced aircraft handling qualities by longitudinal dynamics mode decoupling
([AIAA PAPER 81-2398])
p0074 A82-14826

The well tempered transport aircraft engine / The Sir Henry Boyce Memorial Lecture
(p0103 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 debris selection for landing gear of large transport aircraft
([ASLE PUBLISH 81-LC-20-3])
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 81-2665])
p0157 A82-19220

Aerodynamics of a transport aircraft-type wing-fuselage assembly
(WFOEA, TP 9G. 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
(p0181 A82-21374

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 A82-24204

Airworthiness considerations in the design of commercial transport aircraft
([SAE PAPER 811039])
p0232 A82-24396

Aircrew training for commercial transport aircraft
([SAE PAPER 811070])
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 A82-25316

Very large vehicles | Technology looking for a need
(p0273 A82-25771

Application of a damasceneless criterion of transport efficiency in evaluating aircraft modifications
(p033a A82-28837

Very large aircraft | A common response to a rapidly changing, global environment
([AIAA PAPER 82-0793])
p0375 A82-31979

The potential of large aircraft
([AIAA PAPER 82-0804])
p0376 A82-31980

Multi-body 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 2000's
(p0386 A82-34109

Transport engine control design
([AIAA PAPER 82-1076])
p0416 A82-34996

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
(p0436 A82-34999

A concept for 40-guidance of transport aircraft in the TMA --- Terminal Maneuvering Area
(p0511 A82-40942

Experimental and theoretical studies of three-dimensional turbulent boundary layers on an eavespan 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 A82-40960

Application of composite materials and new design concepts for future transport aircraft
(p0515 A82-40994

Aerodynamic research applications at Boeing
(p0515 A82-11000

Analysis of jet transport wings with deflected control surfaces using 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
([ESA-TP-661])
p0277 A82-10036

Propulsion study for Small Transport aircraft Technology (STAT)
([NASA-CR-165499])
p0277 A82-10037

Propulsion study for Small Transport aircraft Technology (STAT), Appendix B
([NASA-CR-165499-APP-B])
p0277 A82-10038

Control law design for transport aircraft flight tasks
(p0279 A82-11000

In-service inspection methods for graphite-epoxy structures on commercial transport aircraft
([NASA-CR-165746])
p0289 A82-12142

Electronic flight deck displays for military transport aircraft
(p0292 A82-13050

Aerodynamics of Power Plant Installations
([AGARD-CP-301])
p0293 A82-13065

Aerodynamic aspects of a high bypass ratio engine installation on a fuselage afterbody
(p0296 A82-13093

Accelerated development and flight evaluation of active controls concepts for subsonic transport aircraft. Volume 2: AFT C.G. simulation and analysis
([NASA-CR-159098])
p0296 A82-13093

Symposium on commercial-aviation energy-conservation strategies
([DBH1-028406])
p0296 A82-16057

Systems study of transport aircraft incorporating advanced aluminum alloys
([NASA-CR-165820])
p0297 A82-17153

Laminar airflow for transport aircraft
([ESA-TP-680])
p0302 A82-18190

C-SA austere airfield operational utility evaluation. Phase 2: Operation on unpaved soil surfaces following rainfall
([AD-100597])
p0305 A82-18206
Tendencies in the development of subsonic transport aircraft with special consideration of aerodynamics [NASA-TT-705]
p0255 882-10214

Transport aircraft cockpit standardization (Federal Aviation Regulation part 25) [AD-A108926]
p0264 882-19207

Simulator 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

p0315 882-21181

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]
p0366 882-23207

Definition of display/control requirements for regional/night/ adverse weather capability [NASA-TP-20852]
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-TR-102062]
p0396 882-26022

Cost and fuel consumption per nautical mile for two engine jet transports using OPTIS and TRAEGEN [NASA-CR-165723]
p0407 882-25299

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 of turbulence responses, including horizontal tail loads, of an anomalous configured jet transport with relaxed static stability [NASA-TP-19612]
p0455 882-26313

Characteristics of future aircraft impacting aircraft and airport compatibility [NASA-TP-19647]
p0463 882-27233

Cabin safety in large transport aircraft [NASA-TP-19697]
p0464 882-27268

Analytical and simulator study of advanced transport [NASA-CR-3572]
p0526 882-28298

Fireworthiness of transport aircraft interior system [NASA-CR-165852]
p0533 882-29280

System data communication structures for active-control transport aircraft, volume 1 [NASA-CR-165773-VOL-1]
p0538 882-29510

System data communication structures for active-control transport aircraft, volume 2 [NASA-CR-165774-VOL-2]
p0539 882-29511

Aerodynamics on a transport aircraft type wing-body model [NASA-TP-76678]
p0557 882-30207

Integrated application of active controls (IAC) technology to an advanced subsonic transport project. Initial ACT configuration design study [NASA-CR-13366]
p0589 882-32309

Integrative 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-770]
p0603 882-33206

TRANSPORT COEFFICIENTS / TRANSPORT PROPERTIES TRANSPORT PROPERTIES

HEAT TRANSFER / 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-TP-83220]
p0146 882-15359

Thermodynamic and transport combustion properties of hydrocarbons with air. Part 1: Properties in SI units [NASA-TP-1906]
p0574 882-32166

Thermodynamic and transport combustion properties of hydrocarbons with air. Part 2: Compositions corresponding to Kelvin temperature schedules in part 1 [NASA-TP-1907]
p0575 882-32187

Thermodynamic and transport combustion properties of hydrocarbons with air. Part 3: Properties in US customary units [NASA-TP-1908]
p0575 882-32188

Thermodynamic and transport combustion properties of hydrocarbons with air. Part 4: Compositions corresponding to Rankine temperature scales in part 3 [NASA-TP-1909]
p0575 882-32189

TRANSPORT THEORY

NT HEATING LENGTH FLOW THEORY

TRANSPORT VEHICLES

Use of CCGHP in transport --- Carbon and Glass Hybrid Reinforced Plastics [NASA-TP-2508]
p0435 882-37061

TRANSPORTATION

NT AIR TRANSPORTATION

NT MARINE TRANSPORTATION

NT RAIL TRANSPORTATION

NT SPACE SHUTTLE ORBITERS

NT SPACE TRANSPORTATION

NT SPACE TRANSPORTATION SYSTEMS

NT URBAN TRANSPORTATION

Transportation noise, its impact, planning and regulation [S-258]
p0478 882-27664

Maximizing South Carolina's aviation resources: Identifying potentially profitable commuter airline routes, volume 2 [PB82-139535]
p0532 882-29277

TRANSPORTATION ENERGY

NT TECHNOLOGICAL INNOVATION FOR SUCCESS - Liquid hydrogen propulsion [NASA-TP-196734]
p0107 882-16734

Requirements and trends in fuel consumption in transport mission with aircraft and surface vehicles [NASA-TP-196735]
p0511 882-40956

TRANSPORTATION NETWORKS

Beyond 2000 - The airlift challenge ahead [AIRWAYS PAPER 82-0015]
p0377 882-31908

Aircraft evaluation in air network planning [NASA-TP-196736]
p0360 882-33125

TRANSMITTED WAVES

Transverse electric waves for VLP/LF communication between aircraft [AD-A115834]
p0596 882-32582

TRIGONOMICAL 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: Trigonoidal tail [NASA-TP-60097]
p0990 882-13110

TRIGONOMICAL WINGS

Experimental study of subsonic and transonic flows past a wing [NASA-TP-60098]
p0991 882-13110

An experimental investigation of leading-edge spanwise blowing [NASA-TP-60099]
p0510 882-40988

Unsteady pressure measurements at stall and buffeting [PRESSURE-127-477-49-09]
p0364 882-23198

TRAVELING WAVES

A practical approach to systems mode analysis --- for disc-blade-assembled assemblies [AIAA PAPER 81-DTP-130]
p0162 882-19304

Antenna (selected articles) [NASA-TP-19074]
p0268 882-19448

Amendment of aircraft capacitive circuit medium wave antennas according to their efficiency [NASA-TP-19075]
p0269 882-19453

THREATS

Tire tread temperatures during antiskid braking [NASA-TP-19075]
p0269 882-19453
<table>
<thead>
<tr>
<th>SUBJECT INDEX</th>
<th>TURBINE ENGINES</th>
</tr>
</thead>
<tbody>
<tr>
<td>The effect of coolant flow on the efficiency of a transonic HP turbine profile suitable for a small engine</td>
<td>NT J-85 ENGINE</td>
</tr>
<tr>
<td>[ASME PAPER 82-GT-63]</td>
<td>[ASME PAPER 82-GT-63]</td>
</tr>
<tr>
<td>The use of performance-monitoring to prevent compressor and turbine blade failures</td>
<td>NT JET ENGINES</td>
</tr>
<tr>
<td>[ASME PAPER 82-GT-66]</td>
<td>[ASME PAPER 82-GT-66]</td>
</tr>
<tr>
<td>A two-dimensional boundary-layer program for turbine airflow heat transfer calculations</td>
<td>NT PULSEJET ENGINES</td>
</tr>
<tr>
<td>[ASME PAPER 82-GT-53]</td>
<td>[ASME PAPER 82-GT-53]</td>
</tr>
<tr>
<td>Effect of crossflows on the discharge coefficient of film cooling holes</td>
<td>NT POCKET ENGINES</td>
</tr>
<tr>
<td>[ASME PAPER 82-GT-147]</td>
<td>[ASME PAPER 82-GT-147]</td>
</tr>
<tr>
<td>Dry friction damping mechanisms in engine blades</td>
<td>NT SUPERSONIC COMBUSTION POCKET ENGINES</td>
</tr>
<tr>
<td>[ASME PAPER 82-GT-162]</td>
<td>[ASME PAPER 82-GT-162]</td>
</tr>
<tr>
<td>Measurements of heat transfer coefficients on gas turbine components; I - Description, analysis and experimental verification of a technique for use in hostile environments</td>
<td>NT T-56 ENGINE</td>
</tr>
<tr>
<td>[ASME PAPER 82-GT-350]</td>
<td>[ASME PAPER 82-GT-350]</td>
</tr>
<tr>
<td>The effect of rotor blade thickness and surface finish on the performance of a small axial flow turbine</td>
<td>NT TURBOPAN ENGINES</td>
</tr>
<tr>
<td>[ASME PAPER 82-GT-222]</td>
<td>[ASME PAPER 82-GT-222]</td>
</tr>
<tr>
<td>The effect of erosion wear on the vibration characteristics of axial-turbine blades</td>
<td>NT TURBOPOP ENGINES</td>
</tr>
<tr>
<td>[ASME PAPER 82-GT-264]</td>
<td>[ASME PAPER 82-GT-264]</td>
</tr>
<tr>
<td>Aerodynamic performance of high turning core turbine vanes in a two-dimensional cascade</td>
<td>Superalloy turbine components - Which is the superior manufacturing process, an-HIP, HIP plus land forming, or 'gatorizing' of extrusion consolidated billet</td>
</tr>
<tr>
<td>[AIAA PAPER 82-1268]</td>
<td>[ASME PAPER 82-GT-184]</td>
</tr>
<tr>
<td>Comparison of HP turbine 'deep blade design' effects in turbofan engine gas generators with different bearing structure configurations</td>
<td>Superalloy powder engine components; controls employed to assure high quality hardware</td>
</tr>
<tr>
<td>[ASME PAPER 82-GT-377]</td>
<td>[ASME PAPER 82-GT-377]</td>
</tr>
<tr>
<td>Acoustic emission inspection of aircraft engine turbine blades for intergranular corrosion</td>
<td>Aviation turbine fuel properties and their trends</td>
</tr>
<tr>
<td>[ASME PAPER 82-GT-409]</td>
<td>[ASME PAPER 82-GT-409]</td>
</tr>
<tr>
<td>Mathematical models of rotor strength and optimization in computer-aided design</td>
<td>[ASME PAPER 82-GT-409]</td>
</tr>
<tr>
<td>[ASME PAPER 82-GT-3506]</td>
<td>[ASME PAPER 82-GT-3506]</td>
</tr>
<tr>
<td>Thermal-barrier-coated turbine blade strength</td>
<td>[NASA-CR-165351]</td>
</tr>
<tr>
<td>[NASA-CR-165351]</td>
<td>[NASA-CR-165351]</td>
</tr>
<tr>
<td>A new method of cooling turbine vanes</td>
<td>[NASA-CR-165351]</td>
</tr>
<tr>
<td>[ASME PAPER 82-GT-11027]</td>
<td>[ASME PAPER 82-GT-11027]</td>
</tr>
<tr>
<td>New welding method of three-dimensional hollow photostatic model and centrifugal stress analysis of air cooled turbine blade model</td>
<td>Ceramic turbine housings</td>
</tr>
<tr>
<td>[NASL-T8-4277]</td>
<td>[NASL-T8-4277]</td>
</tr>
<tr>
<td>Program in protective coatings for aircraft gas turbines: A review of NASA sponsored research</td>
<td>[NASL-T8-22740]</td>
</tr>
<tr>
<td>[NASL-T8-22740]</td>
<td>[NASL-T8-22740]</td>
</tr>
<tr>
<td>Stability and flutter analysis of turbine blades at low speed</td>
<td>[NASA-PAP-82-GT-293]</td>
</tr>
<tr>
<td>[NASA-PAP-82-GT-293]</td>
<td>[NASA-PAP-82-GT-293]</td>
</tr>
<tr>
<td>On the numerical analysis of stall flutter in turbine cascades</td>
<td>Evaluation of a multivariable control design on a variable cycle engine simulation</td>
</tr>
<tr>
<td>[NASA-PAP-82-GT-15050]</td>
<td>[NASA-PAP-82-GT-15050]</td>
</tr>
<tr>
<td>Seventh European Rotocraft and Powered Lift Aircraft Forum</td>
<td>Development of multivariable controllers for aircraft turbine engines</td>
</tr>
<tr>
<td>[NASA-PAP-82-GT-15054]</td>
<td>[NASA-PAP-82-GT-15054]</td>
</tr>
<tr>
<td>Electroturbine cooled and powered lift aircraft</td>
<td>Corrosion inhibiting engine oils</td>
</tr>
<tr>
<td>[NASA-PAP-82-GT-15056]</td>
<td>[NASA-PAP-82-GT-15056]</td>
</tr>
<tr>
<td>Fluctuating pressures on fan blades of a turbofan engine: Static and wind tunnel investigations</td>
<td>[NASA-PAP-82-GT-15058]</td>
</tr>
<tr>
<td>[NASA-PAP-82-GT-15058]</td>
<td>[NASA-PAP-82-GT-15058]</td>
</tr>
<tr>
<td>Energy efficient engine shroudless, hollow fan blade technology report</td>
<td>Bird impact analysis package for turbine engine fan blades</td>
</tr>
<tr>
<td>[NASA-CR-165565]</td>
<td>[NASA-CR-165565]</td>
</tr>
<tr>
<td>Engine inlet maintenance repair technology</td>
<td>[NASA-CR-165565]</td>
</tr>
<tr>
<td>[NASA-CR-165565]</td>
<td>[NASA-CR-165565]</td>
</tr>
<tr>
<td>Repair and regeneration of turbine blades, vanes and discs</td>
<td>Ceramic turbine housings</td>
</tr>
<tr>
<td>[NASA-CR-165565]</td>
<td>[NASA-CR-165565]</td>
</tr>
<tr>
<td>Laser interferometer measurements in an annular cascade of core turbine vanes and comparison with theory</td>
<td>[NASA-CR-82-22185]</td>
</tr>
<tr>
<td>[NASA-CR-82-22185]</td>
<td>[NASA-CR-82-22185]</td>
</tr>
<tr>
<td>Static internal performance characteristics of two thrust reverser concepts for asymmetrical nozzle</td>
<td>Advanced turbine study --- airflow cooling in rocket turbines</td>
</tr>
<tr>
<td>[NASA-PAP-82-GT-2018]</td>
<td>[NASA-PAP-82-GT-2018]</td>
</tr>
<tr>
<td>[NASA-PAP-82-GT-2018]</td>
<td>[NASA-PAP-82-GT-2018]</td>
</tr>
<tr>
<td>Towing of wind turbines with blade cyclic pitch variation</td>
<td>Fracture mechanics criteria for turbine engine hot section components</td>
</tr>
<tr>
<td>[NASA-PAP-82-GT-26234]</td>
<td>[NASA-PAP-82-GT-26234]</td>
</tr>
<tr>
<td>[NASA-PAP-82-GT-26234]</td>
<td>[NASA-PAP-82-GT-26234]</td>
</tr>
<tr>
<td>TOWING ENGINES</td>
<td>[NASA-PAP-82-GT-26234]</td>
</tr>
<tr>
<td>NT BRISTOL-SIDDELEY BS 53 ENGINE</td>
<td>[NASA-PAP-82-GT-26234]</td>
</tr>
<tr>
<td>NT GAS TURBINE ENGINES</td>
<td>[NASA-PAP-82-GT-26234]</td>
</tr>
<tr>
<td>NT J-58 ENGINE</td>
<td>[NASA-PAP-82-GT-26234]</td>
</tr>
<tr>
<td>NT J-79 ENGINE</td>
<td>[NASA-PAP-82-GT-26234]</td>
</tr>
</tbody>
</table>
TURBINE EXHAUST NOZZLES

fuel from whole crude shale oil. Part 1:
Preliminary process analyses
[AD-3112081] p0527 A82-280462

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-3112082] p0528 A82-280463

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
gaseous shale oil
[AD-3112083] p0528 A82-280464

Aviation fuels—future outlook and impact on
aircraft fire threat
p0532 A82-29282

Remote sensing of turbine engine gases
[AD-3115043] p0559 A82-30310

Energy efficient engine: High pressure turbine
uncooled rig technology report
p0593 A82-32383

TURBINE EXHAUST NOZZLES

Infrared emissions from turbofans with high aspect
ratio nozzles
p103 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
[ASME PAPEB 82-GT-103] p0246 A82-18120

TURBINE WHEELS

Optimal journal bearing parameters for manned
rotor assembly response in synchronous whirl
[ASME PAPEB 81-DT-55] p0161 A82-19314

Natural frequencies of rotating bladed discs using
clamped-free blade modes
[ASME PAPEB 81-DT-124] p0162 A82-19338

An investigation of dual mode phenomena in a
mystalled bladed-disk
[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
p0162 A82-21636

Sliced disc design — A composite concept for
turbine engine axial nozzle
p015 A82-40995

An examination of the dynamics of rotary machines
--- French thesis
p0552 A82-43724

TURBINES

WT AXIAL FLOW TURBINES

WT GAS TURBINES

WT SHROUDED TURBINES

WT STRA TUB RINES

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
p095 A82-13087

Roll up model for rotor wake vortices, part 5
[ASME-TT-194-4] p198 A82-17127

User's manual for the vertical axis wing turbine
code VORTAX
[DE82-0000796] p0461 A82-26828

CF6 jet engine performance improvements: High
pressure turbine active clearance control
[NASA-CS-165556] p0526 A82-28297

Cooled variable nozzle radial turbine for rotor
craft applications
[NASA-CS-165397] p0536 A82-29323

The CF6 jet engine performance improvement: Low
pressure turbine active clearance control
[NASA-CS-165397] p0561 A82-33333

TURBOMACHINES

G SUPERCHARGERS

SUGAR COMPRESSORS

TURBOCOMPRESSORS

Wind tunnel tests on airfoils in tandem cascade
p0012 A82-10987

Design procedures for compressor blades
p0109 A82-17135

Water injection into jet engine axial compressors
[AI A PAPEB 82-0196] p0017 A82-17836

Four pad tilting pad bearing design and
application for multistage axial compressors
[AI A PAPEB 82-102-12] p0126 A82-18429

Effect of wake on pressure at stator blades on
the rotor of an axial flow compressor
p0276 A82-26208

The excitation of compressor/duct systems
p0327 A82-28933

An experimental investigation of interfacial
temperatures in blade-steel material rubbing of
aircraft compressors
[ASME PAPEB 82-GT-136] p0373 A82-31691

Test facility and data handling system for the
development of axial compressors
[ASME PAPEB 82-GT-76] 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
show 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
certain diffusing 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
p0426 A82-35409

The calculation of deviation angle in axial-flow
compressor cascades
p0428 A82-35412

Progress in the development of energy efficient
engine components
p0428 A82-35450

The effect of intake flow disturbances on APUs
compressor blade high cycle fatigue in the
Airbus A300
p0429 A82-40993

Sliced disc design — A composite concept for
turbine engine axial nozzle
p0515 A82-40995

An experimental examination of compressor blade
finish
[ONERA, TP NO. 1982-31] p0547 A82-42808

Numerical calculation of the flow in compressor
and turbine cascades --- German thesis
p0570 A82-45222

An aerodynamic design method for transonic axial
flow compressor stage
p0532 A82-10984

Initial experimental research into the response of
turbocompressor compressors to distortion of
intake pressure
p0532 A82-11006

An experimental investigation of the rotating
stall, surge and wake behind the rotor for a
double stage axial compressor
p0533 A82-11008

A theoretical analysis of the stream surface of
revolution with super sonic inlet flow in a
transonic axial compressor
p0533 A82-11025

Three dimensional flow investigation with a method
of characteristics in the inlet region and the
blade-to-blade channels of supersonic axial
compressors
[ESA-TR-637] p0088 A82-12078

The use of optimization techniques to design
certain diffusing compressor blading
[NASA-TM-82763] p0134 A82-14094

Optimization of compressor vane and bleed settings
[NASA-TM-82763] p0140 A82-15039

Practical experience with a noncontact blade
vibration measuring system in industrial
turbocompressors — a vibration mode identification
[AD-A1094-5] p0144 A82-15065

A-444
Performance improvement features of General Electric turbofan engines
[ASME PAPER 82-GT-270] p0429 A82-3546
Flight evaluation of a digital electronic engine control system in an F-15 airplane
[NASA PAPER 82-1093] p0430 A82-37683
Experimental performance evaluation of "ventilated mixers" - A new mixer concept for high bypass turbofan engine
[AIAA PAPER 82-1136] p0430 A82-37665
Optimized 10 ton class commercial aircraft engine
[NASA PAPER 82-4080] p0505 A82-08080
Recent advances in the performance of high bypass ratio fans
[NASA PAPER 82-40891] p0505 A82-40891
Third generation turbo fans
[NASA PAPER 82-40996] p0511 A82-40996
Comparison of HP turbine 'deep blade design' effects in turbofan engine gas generators with different bearing structure configurations

Sensor failure detection system --- for the F100 turbofan engine
[NASA-CR-165515] p0100 A82-13145
Tests of a D vented thrust deflecting nozzle behind a simulated turbofan engine
[NASA-CR-3568] p0198 A82-17122
CF6 jet engine performance improvement: High pressure turbine roundness
[NASA-CR-165555] p0203 A82-17174
Damage tolerance design for cold-section turbine engine direct drive system
[AD-A107863] p0204 A82-17176
A study to define the research and technology requirements for advanced turbo/propfan transport aircraft

Effects of fan Inlet temperature disturbances on the stability of a turbofan engine
[NASA-TM-82695] p025a A82-18202
Aerodynamic noise generated by jet wing/flap interactions of the external USB configuration of STOL aircraft. Part 2: Full scale model experiment using FJ710 turbofan engine
[BAL-TB-6877-PT-2] p0270 A82-19945 Tests and analysis of a vented D thrust deflecting nozzle on a turbofan engine --- conducted at the outdoor aerodynamic research facility of the Aeron Research Center
[AD-A107863] p0301 A82-20143
Identification of multivariable high performance turbofan engine dynamics from closed loop data
[NASA-TM-82676] p0307 A82-20339 Fluctuating pressures on fan blades of a turbofan engine: Static and wind-tunnel investigations
[NASA-TM-82796] p0309 A82-21037 V/STOL Tandem Fan transition section model test --- in the Lewis Research Center 10-by-10 foot wind tunnel
[NASA-CR-165587] p0312 A82-21150 Energy efficient fan blade shrouds, hollow fan blade technology report
[P9H-90061] p0318 A82-21207 The Rolls royce role in aircraft noise reduction --- jet engines, acoustic lining
[P9H-90069] p0319 A82-21210 Simulation of turbofan engine models in the Weybridge low speed wind tunnel --- gas supply control
[BAB-INFORM-8072-96] p0319 A82-21212 Energy efficient engine exhaust axer mixer technology
[NASA-CR-165559] p0354 A82-22264 Computer modeling of fan-exit-splitter spacing effects on F100 response to distortion
[NASA-CR-167879] p0369 A82-23246 Alternatives for jet engine control
[NASA-CR-168894] p0369 A82-23247 Propulsion/AICEE
[NASA-FACTS-92-0-81] p0403 A82-25251 Exhaust emissions survey of a turbofan engine for flame holder swirl type augmenters at simulated altitude flight conditions
[NASA-TM-62787] p0408 A82-25255
SUBJECT INDEX

Analysis of the characteristics of a bypass engine, with allowance for variable pressure losses in the channels  
[ASME JOURNAL OF TURBOMACHINERY 31(1979)] p0282 882-26496

Advanced engine technology and its influence on aircraft performance  
[ASME JOURNAL OF TURBOMACHINERY 31(1979)] p0298 882-28515

Environmental and high strain rate effects on composites for engine applications  
[AIAA JOURNAL OF COMPOSITES 32(1990)] p0036 882-30118

Solution to a bistable vibration problem using a plain, unconfined squeeze film damper bearing  
[ASME JOURNAL OF TURBOMACHINERY 31(1979)] p0430 882-35455

The powerplant of the Tak-40 and S-15 aircraft --- Russian book  
[ASME JOURNAL OF TURBOMACHINERY 31(1979)] p0434 882-36947

Performance of a 2D-C0 nonaxisymmetric exhaust nozzle on a turbojet engine at altitude  
[ASME JOURNAL OF TURBOMACHINERY 31(1979)] p0457 882-40420

Research on the behavior of a turbomachine during internal and external disturbances with respect to early recognition of damage --- German thesis  
[ASME JOURNAL OF TURBOMACHINERY 31(1979)] p0563 882-40561

The nonsynchronous whirls of the turbine rotor in aerocraft engines  
[ASME JOURNAL OF TURBOMACHINERY 31(1979)] p0510 882-40944

Initial experimental research into the response of a turbomachine to compressor to distortion of intake pressure  
[ASME JOURNAL OF TURBOMACHINERY 31(1979)] p0012 882-11006

A preliminary experimental investigation of the response of a turbine engine to intake pressure distortion  
[ASME JOURNAL OF TURBOMACHINERY 31(1979)] p0032 882-11007

Vacuum test procedures for accessory angle drive gearboxes on Axis 09C engines --- turbojet engines  
[AD-A105269] p0068 882-12076

Conditions of generation and methods of damping the inlet vortex of a turbine engine  
[NASA-TR-67678] p0305 882-20182

Optimization of thrust algorithm calculation for Computing System (For) for Thrust the NASA  
[NASA-CH-163121] p0317 882-21198

Turboprop and turbojet engine optimization  
[ASME JOURNAL OF TURBOMACHINERY 31(1979)] p0362 882-23174

Basic technology of squeeze-film dampers for rotor dynamic control  
[AD-A110842] p0369 882-23250

Development of high-speed rolling-element bearings. A historical and technical perspective  
[NASA-TH-62884] p0398 882-24947

An investigation of engine and test cell operating conditions on the effectiveness of smoke suppressant fuel additives  
[AD-A112800] p0476 882-27527

Environmental and High-Strain Rate effects on composites for engine applications  
[NASA-TH-62882] p0571 882-31449

An investigation of the effects of smoke suppressant fuel additives on engine and test cell exhaust gas emissions  
[AD-A116171] p0571 882-31548

TURBOMACHINE BLADES

WT COMPRESSOR BLADES

WT COMPRESSOR BLADES (TURBOMACHINERY)

WT MOTOR BLADES (TURBOMACHINERY)

WT STATOR BLADES

WT TURBINE BLADES

Dynamic response of blades and vanes to wakes in axial turbomachinery  
[ASME JOURNAL OF TURBOMACHINERY 31(1979)] p0160 882-19307

A practical approach to systems mode analysis --- for disc-blade-shroud assemblies  
[ASME JOURNAL OF TURBOMACHINERY 31(1979)] p0162 882-19340

A parametric study of dynamic response of a discrete model of turbomachinery bladed disk  
[ASME JOURNAL OF TURBOMACHINERY 31(1979)] p0163 882-19349

Torsional vibrations of non-uniformly rotating blades with attachment flexibility  
[AD-A102766] p0276 882-26313

Prediction of aerodynamically induced vibrations in turbomachinery blade  
[ASME JOURNAL OF TURBOMACHINERY 31(1979)] p0327 882-28986

Turbulent boundary-layer development on a two-dimensional aerofoil with supercritical flow at low Reynolds number  
[AD-A104147] p0447
TURBOPROP AIRCRAFT

Acta mechanica sinica

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

The role and implementation of different nacelle/engine simulation concepts for wind-tunnel testing in research and development work on transport aircraft

Technical evaluation report on the Aerocentricity in Turbomachines Symposium

Subsynchronous vibrations of rotor systems

TURBOPROP AIRCRAFT

NT C-130 AIRCRAFT

Lear Fan - The plastic aeroplane arrives

The beginning of the A2A 42 program and its importance

Interior noise considerations for advanced high-speed turboprop aircraft

Next generation turboprop gearbox

Turboprop design - Now and the future

Turboprop cargo aircraft systems study

A shock wave approach to the noise of supersonic propellers

Engine superficial temperature and infrared signature

A study to define the research and technology requirements for advanced turbo/propfan transport aircraft

A preliminary comparison between the SR-3 propeller noise in flight and an open water tunnel

Use of optimization to predict the effects of selected parameters on computer performance

Advanced turboprop testbed systems study. Volume 1: Tested program objectives and priorities, drive system, and aircraft design studies, evaluation and recommendations and wind tunnel test plans

Advanced turboprop testbed systems study. Volume [HASA-CR-169027]

Advanced turboprop testbed systems study. Volume [HASA-CR-169026]

Advanced turboprop testbed systems study. Volume [HASA-CR-169025]

TURBOPROP ENGINES

NT T-56 ENGINE

Advanced turboprop engines for long endurance naval patrol aircraft

The influence of engine characteristics on patrol aircraft life cycle cost optimization

Propulsion options for future commercial aircraft

Summary and recent results from the NASA advanced high-speed propeller research program

Turboprop design - Now and the future

Exterior noise on the fuselage of light propeller driven aircraft in flight

TURBULENCE

NT ATMOSPHERIC TURBULENCE

NT CLEAR AIR TURBULENCE

NT GUSTS

NT LOW LEVEL TURBULENCE

Effects of Reynolds number and turbulence level on axial cascade performance

Generation of noise by turbulence

Three dimensional mean velocity and turbulence characteristics in the annulus well region of an axial flow compressor rotor passage

An analytical study of turbulence response, including unsteady axial load, shock, and static stability

Flight attendant injuries: 1971-1976

The lateral response of an airship to turbulence

TURBULENCE EFFECTS

The influence of turbulence models on computer-simulated aircraft landing
SUBJECT INDEX

1. TURBULENCE-JETS

- Turbulence-excited flapping motion of a rotor blade in hovering flight [AIAA PAPER 82-0342] p0119 A82-17896
- STL aircraft response to turbulence generated by a tall upwind building [AIAA PAPER 82-29062] p0329 A82-29062
- Adapting filters for an airplane flying in turbulent atmosphere [JETS] p0062 A82-38044
- The effects of atmospheric turbulence on a quadrotor heavy lift aircraft [AIAA PAPER 82-15427] p0066 A82-39009
- Comparison of experimental and theoretical turbulence reduction characteristics for screens, honeycomb, and honeycomb-screen combinations [NASA-TP-1958] p0131 A82-14055
- Some remarks on buffeting --- of wings, wind tunnel models [NASA-TE-STRUCT-980] p0319 A82-21216
- Program presentation of the working group on separated flow: Problems with rotary wings [NASA-UD-336-81-0] p0406 A82-25234
- Correlating for turbulence effects on average velocity measurements made using five-hole spherical pitot tube probes [NASA-TP-F-112573] p0070 A82-27290

2. TURBULENT BOUNDARY LAYER

- The effect of the cooling of the wing surface on laminar-to-turbulent boundary layer transition at supersonic flow velocities [AIAA PAPER 82-18591] p0128 A82-18591
- The structure of a separating turbulent boundary layer: I - Mean flow and Reynolds stresses. II - Higher-order turbulence results [AIAA PAPER 82-16776] p0129 A82-16776
- Three dimensional turbulent boundary layer development on a fan rotor blade [AIAA PAPER 82-31965] p0375 A82-31965
- Turbulent boundary-layer development on a two-dimensional aerofoil with supercritical flow at low Reynolds number [AIAA PAPER 82-34398] p0369 A82-34398
- Turbulent boundary layer on a porous surface with injection at various angles to the wall [AIAA PAPER 82-39482] p0492 A82-39482
- Experimental and theoretical studies of three-dimensional turbulent boundary layers on an aerofoil of a typical transport airplane [NASA-TP-40955] p0511 A82-40955
- Theoretical investigations and experimental researches for higher subscale two-dimensional compressor cascade [NASA-TP-11024] p0033 A82-11024
- Drag reduction using pneumatic turbulators --- laminar airflow [DFVLR-FB-81-33] p0350 A82-22223
- Three-dimensional separation and reattachment [NASA-TR-84221] p0393 A82-24167
- Comparison of boundary layer calculations for the root section of a wing. The September 1979 --- Amsterdam Workshop test case [NASA-TR-84221] p0393 A82-24167
- Wind tunnel measurements of three-dimensional wakes of buildings --- for aircraft safety applications [NASA-CH-3565] p0461 A82-26521

3. TURBULENT FLOW

- Multiple-scale turbulence modeling of free turbulent flows [AIAA PAPER 82-10534] p0012 A82-10534
- On the prediction of swirling flowfields found in axisymmetric combustor geometries [AIAA PAPER 82-12120] p0019 A82-12120
- Validation studies of turbulence and combustion models for aircraft gas turbine combustors [AIAA PAPER 82-12267] p0020 A82-12267
- The dynamic behaviour of propeller anemometers [AIAA PAPER 82-26184] p0276 A82-26184
- On the generation of side-edge flap noise [AIAA PAPER 82-26319] p0277 A82-26319

4. TURBULENT BOUNDARY LAYER

- A new method of cooling turbine vanes [AIAA PAPER 82-11027] p0034 A82-11027
- Wind-tunnel results for a modified 17-percent-thick low-speed airflow section [NASA-TP-1919] p0034 A82-11023
- A numerical three-dimensional turbulent simulation of a subsonic flat plate jet in a cross-flow using a finite element algorithm [AIAA PAPER 82-13051] p0036 A82-11055
- The numerical solution of incompressible turbulent flow over airfoils [AIAA PAPER 82-24950] p0504 A82-24950
- Turbulent wake development behind streamlined bodies [AIAA PAPER 82-12030] p0085 A82-12030
- Combustion behavior of solid fuel rocket motors. Volume 1: Correlation of reacting and non-reacting flow characteristics [AIAA PAPER 82-10061] p0136 A82-10061
- Flowfield and noise sources of jet impingement on flaps and ground surface [AIAA PAPER 82-14316] p0361 A82-14316
- Effect of modification of the trailing edge of a separating wall on the downstream mixing of parallel flowing streams [AIAA PAPER 82-24818] p0394 A82-24818
- The numerical solution of the Navier-Stokes equations for incompressible turbulent flow over airfoils [AIAA PAPER 82-11279] p0460 A82-26612
- Experimental study of turbulence in blade and wall corner region [NASA-CH-169283] p0572 A82-31639

5. TURBULENT JETS

- Scrub suppression in supersonic jets [AIAA PAPER 82-0050] p0114 A82-17753
- Widely-spaced co-axial jet, diffusion-flame combustor - Isothermal flow calculations using the two-equation turbulence model [AIAA PAPER 82-0113] p0115 A82-17791
- Pressure dependence of jet noise and silencing of blow-offs [AIAA PAPER 82-02163] p0167 A82-20266
- Can low-speed jet noise be predicted [AIAA PAPER 82-22222] p0186 A82-22222
- Complete velocity profile and 'optimum' skin friction formula for the plane wall-jet [AIAA PAPER 81-WF-0020-3] p0230 A82-24566
- Experimental investigation of turbulent-wall jets in the presence of adverse pressure gradients in a rectangular diffuser [AIAA PAPER 82-32330] p0278 A82-32330
- Aerodynamic interactions with turbulent jet exhaust plumes [AIAA PAPER 82-33325] p0384 A82-33325

A-499
Static and unsteady pressure measurements on a 50 degree clipped delta wing at $\alpha = 0.9$ [482-02-19072]

Efficient transfer of weather information to the pilot in flight [482-20-1003]

Surface blowing power-lift system for STOL aircraft [482-02-0972]

UVVENS

North Atlantic Treaty Organization

Surface Blowing

Ball-Barlow Jetwing flight tests [482-02-19075]

Development of the Circulation Control Wing-Upper Surface Blowing powered-lift system for STOL aircraft [482-02-0972]

Design integration of CCW/USB for a sea-based aircraft [482-02-0972]

Parasol jets. I --- upper surface blowing [482-02-0972]

Quiet short-haul research aircraft familiarization document, revision 1 [482-02-19075]

Acoustic fatigue endurance test of USB flap structure models at elevated temperature [482-02-19075]

Aerodynamic characteristics of the external USB powered lift system using side fences for enhancement of Coanda flow attachment [482-02-19075]

Aerodynamic noise generated by jet-wake/flip interactions of the external USB configuration of STOL aircraft. Part 1: Eight percent scale cold-flow model analysis [482-02-19075]

Aerodynamic noise generated by jet-wake/flip interactions of the external USB configuration of STOL aircraft. Part 2: Eight percent scale cold-flow model analysis [482-02-19075]

Static investigation of the circulation control wing/upper surface blowing concept applied to the quiet short haul research aircraft [482-02-19075]

Upper Surface Blowing [482-02-19075]
V/STOL AIRCRAFT

Operational delay day forecasts for the 20 air route traffic control centers for the year 1982 through 2011

[AD-A109644] p0304 B82-20173

V/STOL AIRCRAFT

V EXTREMELY HIGH FREQUENCIES

A new approach to the design of a high frequency V/STOL aircraft

[AD-A1100546] p0566 B82-31298

Coupled rotor/airframe vibration analysis program manual. Volume 1: User's and programer's instructions

[NASA-CR-165986] p0566 B82-31298

Dynamic System Coupling (DYSOC) program. Volume 2: Theoretical manual

[NASA-CR-165987] p0573 B82-31965

A computer program for the prediction of near field noise of aircraft in cruising flight: User's guide

[NASA-CR-152727] p0600 B82-32148

Chief of Naval Air Training automated management information system (CMIS) users guide

[AD-A115825] p0247 B82-33280

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

[NASA-TE-78504] p0604 B82-33340

NER REQUIREMENTS

Public service helicopters - Is the grass greener on the other side of the fence

Airline ATE requirements

Next generation trainer /N/A/ engine requirements - An application of lessons learned

[ADIA PAPER 82-1184] p0248 A82-27804

Transportation systems evaluation methodology development and applications, phase I summary

[NASA-CR-164997] p0005 B82-12051


[NASA-CR-2206] p0130 B82-14829

Development of Integrated Programs for NASA/UAA Advanced Rotorcraft Technology and Tiltrotor: the flight test program requirements

[AIBA TNAAS-84] p0141 B82-13348

A versatile data acquisition system for a low speed wind tunnel

[AD-A106269] p0192 B82-16097

Military requirements: Too little or too much

[ADIA PAPER 82-1184] p0418 A82-35049

NASA/UAA Advanced Rotorcraft Technology and Tiltrotor Workshops. Volume 1: Executive Summary

[NASA-CR-84489] p0262 B82-19170

NASA/UAA Advanced Rotorcraft Technology and Tiltrotor Workshops. Volume 2: Operators' Views

[NASA-TE-84488] p0262 B82-19171

NASA/UAA Advanced Rotorcraft Technology and Tiltrotor Workshops. Volume 4: Flight Control

[NASA-TN-8446] p0263 B82-19173

SAFEA: Controlled requirements expression and avionics specification through computer techniques [BAE-TNAAS-84] p0316 B82-21912

Identification of terms to define unconstrained air transportation demand [NASA-CR-165961] p0568 B82-31311

Terminal Information Processing System (TIPS) Consolidated CAD Display (CCD) comparative analysis

[FAA-CR-81-6] p0587 B82-32331

UTILITY AIRCRAFT

VTB-105 HELICOPTER

VT CH-47 AIRCRAFT

VT OH-13 HELICOPTER

VT P-353 HELICOPTER

VT UH-1 HELICOPTER

VT OH-50A HELICOPTER

The model 412 multi-bladed rotor system

[ADIA PAPER 81-2607] p0056 B82-13892

The X-14 - 24 years of V/STOL flight testing

[ADIA PAPER 82-1184] p0205 B82-14927

Experience with high performance V/STOL fighter projects at NASA/MSFC

[ADIA PAPER 81-2614] p0207 A82-16901

A summary of V/STOL inlet analysis methods

[ADIA PAPER 81-2620] p0207 A82-16902

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

[ADIA PAPER 81-2611] p0207 A82-16903

Ground test of a large scale 'D' vented thrust deflecting nozzle

[ADIA PAPER 81-2630] p0208 A82-16907

NASA V/STOL Propulsion Control Analysis - Phase I and II program status

[ADIA PAPER 81-2632] p0208 A82-16908

V/STOL propulsion control technology

[ADIA PAPER 81-2634] p0010 A82-16909

V/STOL status from the engine technology viewpoint

[ADIA PAPER 81-2640] p0010 A82-16910

A cost comparison of V/STOL systems - antiship weapon system

[ADIA PAPER 81-2650] p0010 A82-16916

Type 'A' V/STOL - One aircraft for all support missions

[ADIA PAPER 81-2661] p0019 A82-16917

Introduction to V/STOL airframes

[ADIA PAPER 81-2662] p0022 A82-18138

Large-scale wind tunnel test results for the 20 air route traffic control centers for the year 1982 through 2011

[ADIA PAPER 81-2670] p0030 A82-20173

Large-scale wind tunnel tests of a sting-supported V/STOL fighter model

[ADIA PAPER 81-2672] p0015 A82-19208

Large-scale wind tunnel test results for the 20 air route traffic control centers for the year 1982 through 2011

[ADIA PAPER 81-2672] p0030 A82-20173

Low speed testing of the inlets designed for a tandem-fan V/STOL nacelle

[ADIA PAPER 81-2672] p0015 A82-19208

Application of thrusting ejectors to tactical aircraft having vertical lift and short-field capability

[ADIA PAPER 81-2672] p0015 A82-19211
Airframe effects on top-mounted inlet systems for VSTOL fighter aircraft
[AMAA PAPER 81-2631] p0156 A82-19212
Thrust modulation methods for a subsonic VSTOL aircraft
[AMAA PAPER 81-2633] p0156 A82-19213
Comparison of two parallel-series flow turbofan propulsion concepts for supersonic VSTOL
[AMAA PAPER 81-2637] p0156 A82-19214
Concept definition and aerodynamic technology studies for single-engine VSTOL fighter/attack aircraft
[AMAA PAPER 81-2647] p0157 A82-19216
Sea based support aircraft alternatives
[AMAA PAPER 81-2650] p0157 A82-19217
A real-time Pegasus propulsion system model for VSTOL piloted simulations evaluation
[AMAA PAPER 81-2660] p0157 A82-19218
The design of a wind tunnel V/STOL fighter model
[AMAA PAPER 81-2663] p0157 A82-19221
AV-8B Harrier II
p0158 A82-21260
The design of a wind tunnel VSTOL fighter model incorporating a single-engine powered engine simulators
[AMAA PAPER 81-2635] p0158 A82-21545
AV-8B/Harrier GB.5 - Range, payload and VSTOL performance
[AMAA PAPER 81-2644] p0158 A82-26044
Advanced helicopter concept competitors
[AMAA PAPER 81-1292] p0158 A82-26057
Design concepts for composite fuselage structure
[AMAA PAPER 81-1287] p0158 A82-27132
V/STOLs - We can build them, but can we sell them
[AMAA PAPER 81-1286] p0158 A82-29281
X-wing and the Navy V/STOL initiative
[AMAA PAPER 81-1295] p0158 A82-39919
Aerodynamic characteristics of a large-scale, twin-tail-cone V/STOL model
[AMAA PAPER 81-1505] p0159 A82-38443
U.S. Marine Corps AV-8A maintenance experience
[AMAA PAPER 81-2657] p0159 A82-38446
Handling qualities criteria for flight path control of V/STOL aircraft
[AMAA PAPER 81-1293] p0159 A82-19220
A summary of weight savings data for composite VSTOL structure
[AMAA PAPER 81-1294] p0159 A82-19221
Inlet and airframe compatibility for a V/STOL fighter/attack aircraft with top-mounted inlets
[AMAA PAPER 81-1298] p0159 A82-90980
A summary of VSTOL inlet analysis methods
[AMAA PAPER 81-1299] p0159 A82-19222
Wind-tunnel testing of VSTOL configurations at high lift
[AMAA PAPER 81-1299] p0159 A82-19223
Turbofan design - Now and the future
[AMAA PAPER 81-1299] p0160 A82-19224
A supercritical VSTOL fighter design project
[AMAA PAPER 81-1299] p0160 A82-19225
It's too logical - it'll never work / Commercial applications of the JTE/
[AMAA PAPER 81-1299] p0160 A82-44469
V/STOL aircraft and fluid dynamics
[AMAA PAPER 81-1299] p0160 A82-10029
Low speed testing of the inlets designed for a tandem-fan V/STOL nacelle - Conducted in the Lewis 10 by 10 foot wind tunnel
[AMAA PAPER 81-1299] p0160 A82-10032
A summary of VSTOL inlet analysis methods
[AMAA PAPER 81-1299] p0160 A82-11042
A numerical three-dimensional turbulent simulation of a supersonic VSTOL jet in a cross-flow using a finite element algorithm
[AMAA PAPER 81-1299] p0160 A82-11043
Thrust modulation methods for a subsonic VSTOL aircraft
[AMAA PAPER 81-1299] p0160 A82-13112
A real-time Pegasus propulsion system model for VSTOL piloted simulation evaluation
[AMAA PAPER 81-1299] p0160 A82-13114
Scale-model studies for the improvement of flow patterns of a low-speed tunnel
[AMAA PAPER 81-1299] p0160 A82-17228
V/STOL Tandem Fan Transition section model tests - in the Lewis Research Center 10-by-10 foot wind tunnel
[AMAA PAPER 81-1299] p0160 A82-19219
Optimization of compressor vane and bleed settings

Aerodynamic performance of high turning core turbine vane in a two-dimensional cascade

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

Gas turbine ceramic-coated-vane concept with convection-cooled porous metal core

Hover tests of a model H-force rotor

VAPEBS

U TRUCKS

VAPE GEBEABGS

U VAPOR TRAILS

U CONTAINS

VAPORIZED

Experimental study of external fuel vaporization

VAPORIZATION

NY COAL GASIFICATION

NY FLASHING (VAPORIZATION)

NY VAPORIZATION

A Vapor cycle cabin cooling system for the Sea King AS-50 helicopter

Vapor condensation control of JP-4 emissions from underground storage tanks at March Air Force Base, California

VARIABLE

Structure and variability of the Alboran Sea

FRONTAL SYSTEM

p0168 82-20447

Characteristics and principal gains and phases and their use as multivariable control design tools --- generalizing Nyquist and root-locus diagrams techniques

Multivariable design techniques based on singular value generalizations of classical control

VARIABLE AREA WINGS

U TRAILING-EDGE FLAPS

VARIABLE CYCLE ENGINES

A concept for light-powered flight

Individual bypass throttling in fighter engines

Evaluation of a multivariable control design on a variable cycle engine simulation

Reliability design study for a fault-tolerant electronic engine control

Y/Stol Tandem Fan transition section model test --- in the Lewis Research Center 10- by-10 foot wind tunnel

VARIABLE GEOMETRY STRUCTURES

Investigation of the stress-strain state of a rectangular wing section of variable thickness under concentrated loads and heating

Comprehensive analysis of an axial compressor test with adjustable guide vanes

Variable geometry aerofoils as applied to the Beatty B-5 and B-6 sailplanes

Integral characteristics in the computer-aided design of geometrical objects of complex configuration

The subsonic performance of practical military variable area convergent nozzles

Pollution reduction technology program small jet aircraft engines, phase J

VARIABLE LIFT

U LIFT

VARIABLE PITCH PROPELLERS

Optimization of blade pitch angle for higher harmonic rotor control

PAST APPLICATIONS AND FUTURE POTENTIAL OF VARIABLE STABILITY RESEARCH HELICOPTERS

VARIABLE SWEEP WINGS

Pressure distribution on an ogee wing in supersonic flow

A new look at the Tupolev Tu-26 'Backfire'

Mission-adaptive wing flight demonstration program

Low-speed aerodynamic characteristics of wings with sweep discontinuities

VARIABLE THROTTLE

Experimental study of oscillating-wing propulsion

VARIABLES (STATISTICS)

MT ANALYSIS OF VARIANCE

MT COVARIANCE

MT MULTIVARIATE STATISTICAL ANALYSIS

MT REGRESSION ANALYSIS

VARIATION METHOD

U CALCULUS OF VARIATIONS

VARIATIONAL PRINCIPLES

Analysis of shells of straight-wing type

VARIATIONS

MT PERIODIC VARIATIONS

MT WIND VARIATIONS

VARIOMETERS

Checking and calibrating variometers in place in the noseplate instrument panel

VATOL AIRCRAFT

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

Piloted simulation of hover and transition of a vertical attitude takeoff and landing aircraft

WC5

U VARIABLE CYCLE ENGINES

VECTOR ANALYSIS

MT VORTICITY

Electro-optical vector scoring system --- for manned mass distance in fleet training exercises

VECTOR CONTROL

DIRECTIONAL CONTROL

VECTOR SPACES

MT EIGENVALUES

MT EIGENVECTORS

MT MATRICES (MATHEMATICS)

MT STATE VECTORS

MT STIFFNESS MATRIX

MT VORTICITY

MT VECTORS (MATHEMATICS)

MT EIGENVECTORS

MT STATE VECTORS

MT VORTICITY

VEHICLE WHEELS

MT WHEELS

VELOCITY

MT ACCELERATION

MT VELOCITY

MT AEROSPEED

MT AERODYNAMIC VELOCITY

MT EXHAUST VELOCITY

MT FLOW VELOCITY

MT GROUND SPEED

MT HIGH SPEED

MT HYPERSPEED

MT LOW SPEED

MT PHASE VELOCITY

MT ROTOR VELOCITY

MT SUBSONIC VELOCITY

MT SUPERSPEED

MT TIP SPEED

MT TRANSONIC VELOCITY

MT WIND VELOCITY

VELOCITY DISTRIBUTION

Design procedures for compressor blades

Instantaneous turbulence profiles in the wake of an oscillating airfoil

SUBJECT INDEX

A-455

C-171

D-711

E-311

F-311

G-311

H-311

I-311

J-311

K-311

L-311

M-311

N-311

O-311

P-311

Q-311

R-311

S-311

T-311

U-311

V-311

W-311

X-311

Y-311

Z-311
VIBRATION EFFECTS

Flight testing the nonmetallic spline coupling technology at the Naval Air Test Center

[1973 AIAA Paper 82-2405]

Mechanisms for the elimination of instability in a shiny panel

[1975 AIAA Paper 82-1891]

Self-oscillations of the front seat of a four-wheel-strut for a given track width under the assumption of the wheel drift hypothesis

[1975 AIAA Paper 82-1829]

Flutter mode suppression using hyperstable feedback

[1976 AIAA Paper 82-0360]

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

[1976 AIAA Paper 82-1846]

Balancing of flexible rotors by the complex modal method

[1975 ASME Paper 81-DE-46]

Suppression of self-oscillations in open wind tunnels

[1975 ASME Paper 81-DE-46]

Optimal design of a higher harmonic control for the ABC

[1975 ASME Paper 81-DE-46]

Evaluation of the effect of elastomeric damping material on the stability of a composite main rotor system

[1975 ASME Paper 81-DE-46]

Application of combined balancing methods to flexible rotors of aviation gas-turbine engines

[1975 ASME Paper 81-DE-46]

Helicopter vibration suppression using simple pendulum absorbers on the rotor blade

[1975 ASME Paper 81-DE-46]

The use of damper readings for damping of the natural vibrations of twin-rotor gyrocopters

[1975 ASME Paper 81-DE-46]

Active flutter suppression on an F-18 aircraft

[1975 ASME Paper 81-DE-46]

Damping and a balance of aligned discontinuous fiber reinforced polymer composites

[1975 ASME Paper 81-DE-46]

Test demonstration of digital control of wing/store flutter

[1975 ASME Paper 81-DE-46]

Rigid body-structural mode coupling on a forward swept wing aircraft

[1975 ASME Paper 81-DE-46]

Active control of aeroelastic divergence

[1975 ASME Paper 81-DE-46]

Feedback control of a cantilever wing in steady airflow

[1975 ASME Paper 81-DE-46]

Dry friction damping mechanisms in engine blades

[1975 ASME Paper 81-DE-46]

Experimental evaluation of squeeze-film supported flexible rotors

[1975 ASME Paper 81-DE-46]

Solution to a bistable vibration problem using a pendulum absorber

[1975 ASME Paper 81-DE-46]

Parameter identification for structures with neighboring natural frequencies especially for the case of flight resonance tests

[1975 ASME Paper 81-DE-46]

Dry friction damping mechanisms in engine blades

[1975 ASME Paper 81-DE-46]

Experimental evaluation of squeeze-film supported flexible rotors

[1975 ASME Paper 81-DE-46]

The effect of journal misalignment on the oil-film forces generated in a squeeze-film damper

[1975 ASME Paper 81-DE-46]

A simple system for helicopter individual-blade-control and its application to stall flutter suppression

[1975 AIAA Paper 82-1876]

The Helicopter Blade Revolution

[1975 AHS Paper 82-2405]

Survey of active and passive means to reduce rotorcraft vibrations

[1975 AIAA Paper 82-1891]

F-16 active flutter suppression program

[1975 AIAA Paper 82-1829]

Robust Kalman filter design for active flutter suppression systems

[1975 AIAA Paper 82-1846]

Application of the sequential optimization method to the tuning of the natural frequencies of gas-turbine engine compressor blades

[1975 AIAA Paper 82-1829]

Helicopter vibration reduction by rotor blade modal shaping

[1975 AIAA Paper 82-1846]

Pre-design study for an advanced flight research rotor

[1975 AIAA Paper 82-1829]

Theoretical and experimental investigation of joint-structural damping interaction for airplane construction

[1975 AIAA Paper 82-1846]

An experimental examination of compressor blade flutter

[1975 AIAA Paper 82-1829]

Polyurethane foams for aircraft shock mounts. 3: Vibration damping by polymer foams

[1975 AIAA Paper 82-1829]

Damping for turbocharger blade vibrations in subsonic flow

[1975 AIAA Paper 82-1846]

Review of helicopter fast mounted sight (HMS) base motion isolation and Line-of-Sight (LOS) stabilization concepts

[1975 AIAA Paper 82-1846]

Self-tuning regulators for multicyclic control of helicopter vibration

[1975 AIAA Paper 82-1846]

Reduction of structural vibration by a dynamic absorber --- helicopter cabins

[1975 AIAA Paper 82-1846]

Experimental on active flutter suppression of a cantilever wing

[1975 AIAA Paper 82-1846]

Basic technology of squeeze-film dampers for rotor dynamics control

[1975 AIAA Paper 82-1846]

Helicopter vibration suppression using simple pendulum absorbers on the rotor blade

[1975 AIAA Paper 82-1846]

VIBRATION EFFECTS

Hypothetical fatigue life problem - Application of Aerospaiteal method

[1975 AIAA Paper 82-1846]

Army helicopter crew seat vibration - Past performance, future requirements

[1975 AIAA Paper 82-1846]

The Shock and Vibration Digest, volume 13, no. 9

[1975 AIAA Paper 82-1846]

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

[1975 AIAA Paper 82-1846]

Vibration damping by polyether foams

[1975 AIAA Paper 82-1846]

Flutter

[1975 AIAA Paper 82-1846]

The effect of journal misalignment on the oil-film forces generated in a squeeze-film damper

[1975 AIAA Paper 82-1846]

A simple system for helicopter individual-blade-control and its application to stall flutter suppression

[1975 AIAA Paper 82-1846]

The Helicopter Blade Revolution

[1975 AIAA Paper 82-1846]

A simple system for helicopter individual-blade-control and its application to stall-induced vibration alleviation.

[1975 AIAA Paper 82-1846]

Substructure program for analysis of helicopter vibrations

[1975 AIAA Paper 82-1846]

Use of optimization in helicopter vibration control by structural modification

[1975 AIAA Paper 82-1846]

Survey of active and passive means to reduce rotorcraft vibrations

[1975 AIAA Paper 82-1846]
VIBRATIONAL FREQUENCIES

The United States Air Force automated Vibration Diagnostics System (AVID) for improved jet engine maintenance

An automated technique for improving modal test/analysis correlation

[AIAA 62-0940]

Quantification of helicopter vibration ride qualities

Improved methods in ground vibration testing

[AHS PAPER 81-6]

Correlation of predicted vibrations and test data for a wind tunnel helicopter model

Error minimization in ground vibration testing

AN experimental examination of compressor blade flutter

[ONERA TP 80 1982-31]

A random vibration test for the evaluation of stiff sensitive component parts

The Shock and Vibration Digest, volume 13, no. 9

[VIBRATIONAL STRESSES]

Dynamic response of blades and vanes to wakes in axial turbomachinery

[ASME PAPER 81-HT-33]

Development of experimentally compatible subsystem methods for the analysis of aircraft structures

[AD-111242]

VIBRATIONAL LOADS

Lineup of the IH-series aircraft-derivative gas turbines

A study of the vibration loading of the turbine blades of an aircraft gas-turbine engine with dry-friction dampers

[AD-A21-12560]

Transient vibration of high speed lightweight rotor due to sudden imbalance

[AD-A21-35413]

Determination of in-flight helicopter loads and vibration

[AD-A21-3780]

Wind tunnel modeling of rotor vibratory loads

[AD-A21-40516]

Aerodynamic characteristics of a tuned cantilever blade

[AD-A21-12630]

An experimental examination of compressor blade flutter

[AD-A110583]

A study of the vibration loading of the turbine blades of an aircraft gas-turbine engine with dry-friction dampers

[AD-A21-12560]

Transient vibration of high speed lightweight rotor due to sudden imbalance

[AD-A21-35413]

Determination of in-flight helicopter loads and vibration

[AD-A21-3780]

Wind tunnel modeling of rotor vibratory loads

[AD-A21-40516]

An experimental examination of compressor blade flutter

[AD-A110583]

A study of the vibration loading of the turbine blades of an aircraft gas-turbine engine with dry-friction dampers

[AD-A21-12560]

Transient vibration of high speed lightweight rotor due to sudden imbalance

[AD-A21-35413]

Determination of in-flight helicopter loads and vibration

[AD-A21-3780]

Wind tunnel modeling of rotor vibratory loads

[AD-A21-40516]

Aerodynamic characteristics of a tuned cantilever blade

[AD-A21-12630]
### SUBJECT INDEX

**VISCOELASTICITY**
- MT THERMOVISCOELASTICITY
- VISCOPLASTIC FLOW
- U VISCOELASTICITY

**VISCOELASTICITY**
- Research and development program for non-linear structural modeling with advanced time-temperature dependent constitutive relationships (NASA-CR-165513) p0190 N82-16080
- Non-linear constitutive theory for turbine engine structural analysis p0613 N82-33744

**VISCOSEITY**
- Relations for the thermodynamic and transport properties in the testing environment of the Langley hypersonic CPN tunnel p0146 N82-15359

**VISCOUS DAMPING**
- MT VISCOELASTIC DAMPING
- VISCOUS DRAG
  - NASA research on viscous drag reduction (NASA-TN-84510) p0604 N82-33344

**VISCOUS FLOW**
- MT BOUNDARY LAYER FLOW
- MT BOUNDARY LAYER SEPARATION
- MT SEPARATED FLOW
- MT SECONDARY FLOW
- Strong matching method for computing transonic viscous flows including wakes and separations - Lifting airfoils p0100 N82-10821
- Computation of the steady viscous flow over a tri-element 'augmentor wing' airfoil p0114 N82-17735
- Transonic three-dimensional viscous-inviscid interaction for wing-body configuration analysis (AIAA PAPER 82-0021) p0116 N82-17816
- Relaxation solution for viscous transonic flow about fighter-type forebodies and afterbodies (AIAA PAPER 82-0252) p0110 N82-17865
- Viscous flow - Sensitivity of the theoretical in pursuit of higher order accuracy (AIAA PAPER 82-0389) p0120 N82-17919
- Technical evaluation report of the AGARD Fluid Dynamics Panel Symposium on computation of viscous-inviscid interactions (NASA TP. 90-116) p0163 N82-19733
- Problems of numerical simulation of unsteady three-dimensional viscous-gas flows in nozzle p0242 N82-25347
- A system for the numerical simulation of sub- and transonic viscous attached flows around wing-body configurations (AIAA PAPER 82-0935) p0373 A82-31922
- Calculations of viscous transonic flow over aerofins (AIAA PAPER 82-0997) p0375 A82-31957
- Skin friction lines p0282 A82-33629
- An inviscid-viscous interaction treatment to predict the blade-to-blade performance of axial compressors with leading edge normal shock waves (ASME PAPER 82-07-135) p0425 A82-35363
- NASA research on viscous drag reduction p0505 A82-40896
- Viscous transonic airfoil flow simulation p0506 N82-40897
- The numerical solution of incompressible turbulent flow over airfoils p0685 N82-12030
- Experimental methods for the prediction of the effect of viscosity on propeller performance (AIAA PAPER 82-0021) p0308 N82-20472
- Aerodynamics on a transport aircraft type wing-body model (NASA-TN-76078) p0557 N82-30287

**VISCOUS FLOWS**
- More than meets the eye - The oil dot technique p0286 A82-27114
- A vortex sheet method for calculating separated two-dimensional flows at high Reynolds number (AIAA PAPER 82-1030) p0375 A82-31978

**VISIBILITY**
- MT LOW VISIBILITY
  - Deficiencies and constraints that affect the design of cockpit enclosures and transparencies p0226 A82-24303

**VISUAL FLIGHT**
- Transparency design decisions - Assessing their impact on visual performance p0226 A82-24306
- 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 p0092 N82-13061
- The optical recognition of sea targets as a function of surrounding and observation parameters in air to water observations p0147 N82-15930
- Rangefinder system for slant range visibility p0309 N82-20746
- Seeing through flows in Langley's 0.3-meter Transonic Cryogenic Tunnel p0597 N82-32678

**VISIBLE RADIATION**
- U LIGHT (VISIBLE RADIATION)
  - A vortex sheet method for calculating separated aerodynamics on a transport aircraft type p0190 N82-16080

**VISUAL ACIDITY**
- Study and design of high G augmentation devices for flight simulators p0306 N82-20195

**VISUAL AIDS**
- Flight simulators p0334 N82-29294
- Group 1: Scenario design and development issues p0098 N82-13113
- Night mounted visual aids p0251 N82-18167
- Experimental investigation of visual aids for helicopters: Low level flight at night and poor visibility p0251 N82-18168
- Displays p0534 N82-29300

**VISUAL CONTROL**
- The effect of visual information on manual approach and landing p0507 N82-12064
- Spectrally balanced chromatic landing approach lighting system (NASA-CASP-ARC-10990-1) p0107 N82-16054
- General visual accident airmen p0107 N82-16054
- Operational flow visualization techniques in the Langley Unsteady Plan Wind Tunnel p0597 N82-32671
- Math model description for the Visual Technology Research Simulator (VTBS) conventional takeoff and landing (CTOL) weapon delivery visual system (AD-A171761) p0611 N82-33407
- Concorde glazings - 5 years of Mach 2 service p0220 A82-24326
- Display of moving images p0228 482-24326

**VISUAL DISPLAYS**
- Display devices p0457 882-26325
- Influence of contrast on spatial perception in TV display of moving images (FB-50) p0477 882-27609
- Visual flight guidance and near miss collisions on two- and three-dimensional curvilinear flight paths (NASA-TP-665) p0253 N82-18290
- Unified results of several analytical and experimental studies of helicopter handling qualities in visual terrain flight p0365 N82-22315
VORTEX SHEETS
Recent advances in applying Free Vortex Sheet theory to the estimation of vortex flow aerodynamics
(AIAA Paper 82-0095)
p0183 A82-22045
The vortex flow field generated by a hovering helicopter
p0276 A82-26227
Vortex sheet method for calculating separated two-dimensional flows at high Reynolds number
(AIAA Paper 82-1030)
p0397 A82-37466
On the vortex flow over delta and double-delta wings
(AIAA Paper 82-0549)
p0250 A82-18164
A method of predicting fuselage loadings in hover
(VASA-CR-165859)
p0246 A82-26238
Flows over wings with leading-edge vortex separation
(VASA-CR-165858)

VORTEX TUNES
9 VORTEXES
VORTEXES
ST WING TIP VORTICES
Increasing the lift:drag ratio of a flat delta wing
p0016 A82-11899
The CIVIC - A concept in vortex induced combustion. II
(AAE Paper 81-67-12)
p0017 A82-11997
On unsteady aerodynamic forces and moments of the circular wing - wing blades /experiments of the outward-flow case/
p0103 A82-16040
Propeller tip vortex - A possible contributor to aircraft cabin noise
p0113 A82-17603
Vortex characteristics of waveriders at subsonic flight speeds
p0165 A82-19810
Recent advances in applying Free Vortex Sheet theory to the estimation of vortex flow aerodynamics
(AIAA Paper 82-0095)
p0183 A82-22045
The requirements for reduced IRE separations on final approach
p0219 A82-23311
Secondary flow effects and mixing of the wake behind a turbine engine
(AIAA Paper 82-07-46)
p0392 A82-35304
On the vortex flow over delta and double-delta wings
(AIAA Paper 82-0549)
p0437 A82-37466
Investigations regarding vortex formation at wings with bent leading edges
p0483 A82-38783
Measurements of velocity-distributions in the leading edge vortex of a delta wing by the laser-Doppler procedure
p0483 A82-38786
The use of linearized aerodynamics and vortex-flow methods in aircraft design /invited paper/
(AIAA Paper 82-1384)
p0697 A82-40294
Prediction of high alpha flight characteristics utilizing rotary balance data
p0510 A82-40953
Vortex formation over double-delta wings
p014 A82-20531
Spanwise distribution of vortex drag and leading-edge suction in subsonic flow
p0516 A82-41005
Fuselage effects in leading edge vortex flap aerodynamics
p0516 A82-41006
Experimental and analytical studies of a model helicopter rotor in hover

SUBJECT INDEX
W WINGS

Protection of advanced electrical power systems from atmospheric electromagnetic hazards [AD-A1107212] p0477 N82-27658

Alternative employment concepts for Remotely Piloted Vehicle (RPV) FBL/TV mission payload [AD-A1117877] p0608 N82-33379

W VORTEX SWEET WINGS

Wakes

NT AIRCRAFT WAKES

NT HELICOPTER WAKES

NT GEAR WAKES

NT PROPELLER SLIPSTREAMS

NT TURBULENT WAKES

Calculations of viscous transonic flow over aerfoils

[AIAA PAPER 82-0597] p0375 N82-31957

Secondary flow mixing losses in a centrifugal impeller

[AER PAPER 82-02-44] p0421 A82-35302

The influence of flow rate on the wake in a centrifugal impeller

[AER PAPER 82-02-45] p0421 A82-35303

Chicago monostatic acoustic vortex sensing system. Volume 2: Decay of b-707 and DC-0 vortexes [AD-A109516] [NO-28-1] p0201 A82-20157

Finite difference modeling of rotor flows including wake effects

[NASA-TM-84249] p0603 N82-33345

WALL FLOW

Control laws for adaptive wind tunnels

[P012 A82-10985

Optimal subsonic diffuser vail design for arbitrary entry conditions

[AIAA PAPER 82-0132] p0115 A82-17600

Recent sidewall boundary-layer investigations with suction in the Langley 0.3 a Transonic Cryogenic Tunnel

[AIAA PAPER 82-0234] p0117 A82-17658

Transonic wind tunnel wall interaction correction for three-dimensional models

[AIAA 82-0588] p0237 A82-24663

Self streamlining wind tunnels without computers

[ASA PAPER 82-26181] p0275 A82-26181

Bach reflection of a shock wave from an inclined wall

[P0391 A82-34748

Casing wall boundary-layer development through an isolated compressor rotor

[AER PAPER 82-07-18] p0420 A82-35287

Influence of casing treatment on the operating range of axial compressors

[AER PAPER 82-07-103] p0424 A82-35340

Turbulent boundary layer on a porous surface with injection at various angles to the wall

[ASA-PAPER 82-1286] p0492 A82-39482

Comparison of experimental and analytic performance for contoured endwall stators

[AIAA PAPER 82-1286] p0497 A82-40422

Corrections for wall effects in ONERA industrial wind tunnels

[ONERA, TP NO. 1982-34] p0548 A82-42810

Higher-order flow angle corrections for three-dimensional wind tunnel wall interference

[P0555 A82-44246

End-wall boundary layer calculation methods

[P0204 A82-17188

Experimental investigation of turbine endwall heat transfer. Volume 1: Description of experimental hardware and test conditions

[AD-A110332] p0371 N82-21199

Experimental investigation of turbine endwall heat transfer. Volume 2: Linear and annular cascade summary data sets

[AD-A110333] p0371 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-A111124] p0394 N82-24181

Three dimensional mean velocity and turbulence characteristics in the annulus wall region of an axial flow compressor rotor passage

[NASA-CR-169003] p0408 A82-25252

SUBJECT INDEX

Comparison of experimental and analytical performance for contoured endwall stators

[NASA-TM-82877] p0048 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-TN-84847] p0594 N82-32384

Wall Jets

Complete velocity profile and 'optimum' skin friction formulas for the plane wall-jet

[NASA-CR-166186] p0367 N82-23234

Determination of wind tunnel constraint effects by a unified pressure signature method. Part 1: Applications to winged configurations

[NASA-CR-166186] p0367 N82-23234

Determination of wind tunnel constraint effects by a unified pressure signature method. Part 2: Application to jet-in-crossflow

[NASA-CR-166186] p0367 N82-23235

Experimental study of turbulence in blade endwall corner regions

[NASA-CR-169283] p0572 N82-31639

Wall Temperature

An experimental and analytical study of mixing flow of turtofan engine exhaust through circular and 2-dimensional mixer/nozzle

[AIAA PAPER 82-0130] p0286 A82-27087

Walls

NT POROUS WALLS

NT TEEN WALLS

NT WIND TUNNEL WALLS

Winkel Engines

Advanced general aviation engine/airframe integration study

[NASA-CR-165565] p0354 N82-22268

Real time pressure signal system for a rotary engine

[NASA-CASE-LA/50-13622-1] p053 A82-26294

Advanced stratified charge rotary aircraft engine design study

[NASA-CR-165398] p0476 A82-27743

War Games

Evaluation of aircraft in simulated combat: Computer against computer or computer against human pilot

[P038 A82-22020

Warfare

NT ARTISAN WARFARE

NT COMBAT

NT ELECTRONIC WARFARE

Type 'A' V/STOL - One aircraft for all support missions

[AIAA PAPER 81-2661] p0109 A82-16917

SIMAT - An air battle simulation of the USAF Tactical Air Control System/TACS/ with Advanced Tactical Radars

[PNB-90067] p0319 A82-21209

Jet V/STOL wind-tunnel simulation and groundplane effects

[P0361 A82-23165

Determination of wind tunnel constraint effects by a unified pressure signature method. Part 1: Applications to winged configurations

[NASA-CR-166186] p0367 N82-23234

Determination of wind tunnel constraint effects by a unified pressure signature method. Part 2: Application to jet-in-crossflow

[NASA-CR-166186] p0367 N82-23235

Experimental study of turbulence in blade endwall corner regions

[NASA-CR-169283] p0572 N82-31639

Wall Pressure

Experimental investigation of turbulent wall-jets in the presence of adverse pressure gradients in a rectangular diffuser

[P0378 A82-3330

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

[NAL-TR-600] p0198 A82-17123

The pressure signature method for blockage corrections, and its applications to the industrial wind tunnel

[P0267 A82-19231

Allowing for the wall boundary layer in a stage of an axial compressor

[PB-90067] p0319 A82-21209

Jet V/STOL wind-tunnel simulation and groundplane effects

[P0361 A82-23165

Determination of wind tunnel constraint effects by a unified pressure signature method. Part 1: Applications to winged configurations

[NASA-CR-166186] p0367 N82-23234

Determination of wind tunnel constraint effects by a unified pressure signature method. Part 2: Application to jet-in-crossflow

[NASA-CR-166186] p0367 N82-23235

Experimental study of turbulence in blade endwall corner regions

[NASA-CR-169283] p0572 N82-31639

Wall Temperature

An experimental and analytical study of mixing flow of turtofan engine exhaust through circular and 2-dimensional mixer/nozzle

[AIAA PAPER 82-0130] p0286 A82-27087

Walls

NT POROUS WALLS

NT TEEN WALLS

NT WIND TUNNEL WALLS

Winkel Engines

Advanced general aviation engine/airframe integration study

[NASA-CR-165565] p0354 N82-22268

Real time pressure signal system for a rotary engine

[NASA-CASE-LA/50-13622-1] p053 A82-26294

Advanced stratified charge rotary aircraft engine design study

[NASA-CR-165398] p0476 A82-27743

War Games

Evaluation of aircraft in simulated combat: Computer against computer or computer against human pilot

[P038 A82-22020

Warfare

NT ARTISAN WARFARE

NT COMBAT

NT ELECTRONIC WARFARE

Type 'A' V/STOL - One aircraft for all support missions

[AIAA PAPER 81-2661] p0109 A82-16917

SIMAT - An air battle simulation of the USAF Tactical Air Control System/TACS/ with Advanced Tactical Radars

[PNB-90067] p0319 A82-19256

Warheads

Analysis methods for predicting structural response to projectile impact

[P0202 A82-17162

Warning

NT HEATING

NT WAR宁ING DEVICES

NT WARNING SYSTEMS
WARNING SIGNALS
WARNING SYSTEMS

ST EARY WARNING SYSTEMS
An aircraft wind shear detection and warning system using Doppler radar
[AD-A104563] p0353 H82-11047 Detection of obstacles by low flying aircraft --- using CO2 laser; mathematical model.
[FOA-C-30227-61] p0140 H82-15026 Aircraft alerting systems standardization study. Volume 2: Aircraft alerting system design guidelines
[AD-A106732] p0190 H82-16077 Active beacon collision avoidance system. Volume 2: Collision avoidance (BCAS) threat phase
[AD-A107905] p0200 H82-17140 AN/ALQ-135 tail warning system follow-on operational test and evaluation
[AD-A108248] p0259 H82-18471 Detection and tracking algorithms refinement
[AD-A109517] p0303 H82-20164 Aircraft collision avoidance and air traffic safety
[GPO-88-545] p0348 N82-22203 The assessment of aircraft combat effectiveness using a new computational method
[AD-A107972] p0450 H82-26276 Aircraft alerting systems standardization study. Volume 1: Candidate system validation and time-critical display evaluation
[AD-A107225] p0463 H82-27236 Analysis of active BCAS alert rates and protection based on actual aircraft tracks
[AD-A116402] p0568 H82-31319 Aircraft alerting systems standardization study. Phase 4: Accident implications on systems design
[AD-A117876] p0609 H82-33380 The Worldwide Navigational Warning Service
[AD-A107372] p0348 H82-22203 Calculation of the cross section properties and the shear stresses of composite rotor blades
[AD-A0-334-81-o] p0083 H82-38475 Calculation of the cross section properties and the shear stresses of composite rotor blades

WASHERS (SPACERS)
Evaluation of graphite/epoxy shims as a high capacity laminate helicopter bearing
[AD-A109517] p0259 H82-18471 Aircraft alerting systems standardization study. Volume 2: Collision avoidance (BCAS) threat phase
[AD-A106732] p0190 H82-16077 Active beacon collision avoidance system. Volume 2: Collision avoidance (BCAS) threat phase
[AD-A107905] p0200 H82-17140 AN/ALQ-135 tail warning system follow-on operational test and evaluation
[AD-A108248] p0259 H82-18471 Detection and tracking algorithms refinement
[AD-A109517] p0303 H82-20164 Aircraft collision avoidance and air traffic safety
[GPO-88-545] p0348 N82-22203 The assessment of aircraft combat effectiveness using a new computational method
[AD-A107972] p0450 H82-26276 Aircraft alerting systems standardization study. Volume 1: Candidate system validation and time-critical display evaluation
[AD-A107225] p0463 H82-27236 Analysis of active BCAS alert rates and protection based on actual aircraft tracks
[AD-A116402] p0568 H82-31319 Aircraft alerting systems standardization study. Phase 4: Accident implications on systems design
[AD-A117876] p0609 H82-33380 The Worldwide Navigational Warning Service
[AD-A107372] p0348 H82-22203 Calculation of the cross section properties and the shear stresses of composite rotor blades
[AD-A0-334-81-o] p0083 H82-38475 Calculation of the cross section properties and the shear stresses of composite rotor blades

WASTE DISPOSAL
Development of in-can melting process and equipment, 1979 and 1980
[DEB-00-10050] p0195 H82-16834 WASTE RECYCLING Open-cycle vapor compression heat pump
[PB8-110503] p0259 H82-18553 Primary sewage treatment plant as a source of bird hazards at airport
[DEB-00-10050] p0195 H82-16834 WASTE TREATMENT Development of in-can melting process and equipment, 1979 and 1980
[DEB-00-10050] p0195 H82-16834
Optimal placement model for the B-52G weapons system [AD-A110977] p0457 N82-26332
Impact of advanced avionics and munitions technology on ground attack weapons system in night and adverse weather conditions p0070 N82-27294
Weapon system of a future attack aircraft p0071 N82-27301
Kinematic investigation Hughes Helicopter 7.62mm chaingun [AD-A113116] p0524 N82-22827
Final engineering report for computer, weapon,航模CP-1444/A [AD-A115238] p0569 N82-31327
Maintenance support resource forecasting models. Volume 2: Equivalence testing of reliability and maintenance model and expected values model [AD-A117149] p0585 N82-32307
Math model description for the Virtual Technology Research Simulator (VT2S) conventional takeoff and landing (CTOL) vehicle delivery visual manual [AD-A117141] p0611 N82-33407
WEAPONS
NM GUNS (ORDNANCE) NT LASER WEAPONS NT WARHEADS NT WEAPONS DELIVERY
F-16 Advanced Avionics Flight Test [AIAA PAPER 81-2464] p0058 A82-13929
Development of a lifting parachute to provide self-dispensing capability for an Avco-designed tactical munition [AIAA PAPER 81-1028] p0060 A82-13962
Advanced fighter technology integration APTE/16 test program overview [AIAA PAPER 82-20513] p0065 A82-13999
Weapon delivery system using GPS network [AIAA 1982-14711] p0067 A82-14711
Integrated flight/weapon control system design and evaluation p0068 A82-14741
Airborne Electronic Terrain Map System II - Applications p0071 A82-14773
A high strength ejector release unit for the Tornado [TR-195] p0103 A82-16025
Recent improvements in prediction techniques for supersonic weapons separation [AIAA PAPER 82-0170] p0116 A82-17820
Recent developments in artillery telemetry [AIAA PAPER 82-18508] p0150 A82-18508
Application of thrust vectoring for SSTO [AIAA PAPER 81-2616] p0155 A82-19205
Laser application in weapon guidance and active imagers [AIAA PAPER 1982-35767] p0033 A82-13977
Target acquisition system/air-to-surface weapon compatibility analysis [AIAA 1982-1610] p0046 A82-38995
Unmanned aircraft in future combat [AIAA PAPER 82-0256] p0049 A82-39728
Guiding Mach's mechanics - Bombs away. --- weapons delivery of fighter aircraft at transonic speed p0056 A82-44667
Integrated flight and fire control demonstration on an F-15A aircraft: System development and ground test results p0363 A82-23185
A planning system for F-16 air-to-surface simulations [AIAA 1982-1610] p00471 A82-27297
WEAPONS DEVELOPMENT
Aerodynamics of tactical weapons to Mach number 8 and angle-of-attack of 180 deg [AIAA PAPER 82-0256] p0110 A82-17664
F-18 weapon system development p0223 A82-23774
WEAPONS DEVELOPMENT
WEATHER
WEATHER DATA RECORDERS
The effect of erosion wear on the vibration characteristics of axial-turbine blading p0433 A82-35074
Weave by generation of electrokinetic streaming currents [ASLE PREPRINT 82-AM-6A-3] p0483 A82-37857
Coatings in the atmosphere --- sprayed coatings (PHL-90049) p0310 A82-21204
Mechanical wear assessment of helicopter engines by ferrography [AD-A110772] p0454 A82-26305
Research and development on wear metal analysis [AD-A112100] p0450 A82-26406
Evaluation of plasma source spectrometers for the Air Force Oil Analysis Program [AD-A113809] p0475 A82-27512
Application of wear debris analysis to aircraft hydraulic systems [AD-A115060] p0550 A82-30305
WEAR INHIBITORS
Antiwear properties of additives based on higher fatty acids --- for jet fuels p0548 A82-20893
Life enhancement of Naval systems through advanced materials [AD-A114722] p0560 A82-30404
WEAR TESTS
Monitoring engine wear by oil analysis p0224 A82-24012
Proposed method for abrasion testing of paint, plastics and coatings p0227 A82-29311
Corrosion fatigue behaviour of some aluminium alloys p0210 A82-17365
Flight-by-flight corrosion fatigue testing p0210 A82-17360
Lubricant effects on efficiency of a helicopter transmission [NASA-TP-82086] p0412 A82-25520
WEATHER
ST COLD WEATHER
Weather impact on low-altitude imaging infrared sensors in Europe - an availability model p0072 A82-14777
The effects of weather on runway operations p0285 A82-27050
The operation of aircraft and helicopters in difficult meteorological and environmental conditions --- Russian book p0491 A82-39295
Operational procedures relative to severe weather p0310 A82-21142
Effect of heavy rain on aircraft [NASA-CP-2192] p0311 A82-21149
Prototype Regional Observation and Forecast System (PROPS) p0311 A82-21150
Briefs of fatal accidents involving weather as a cause/factor, U.S. general aviation, 1979 [PHR82-13993A] p0465 A82-27248
Software functional description of mass weather dissemination system exploratory engineering model [AD-A112706] p0477 A82-27573
Field program operations: Turbulence and gust front [AD-A115487] p0562 A82-30804
Testing of tritium-powered runway distance and taxiway markers [AD-A110458] p0612 A82-33468
WEATHER CONDITIONS
ST WEATHER
The Flight Service Automation System (FSAS) system benchmark. Volume 1: Summary, introduction and concepts [PB82-143538] p0468 A82-27277
The Flight Service Automation System (FSAS) system benchmark. Volume 2: The model of the application [PB82-143566] p0468 A82-27278
Determination of wind tunnel constraint effects by a unified pressure signature method. Part 2: Application to jet-in-crossflow (NASA-CR-166187) p0367 N82-22323

Metric half-span model support system (NASA-CASE-LAB-12461-1) p0370 N82-22325

Development of a convoluted intake seal for model B66-250 v/stol wind tunnel (NASA-ABG-163) p0370 N82-22325

Research model wing/tail fabrication --- transonic wind tunnel 1/7.5-scale model (AD-A1101) p0524 N82-28280

Investigation of correlation between full-scale and fifth-scale wind tunnel tests of a Bell helicopter Vertixon Model 222 (NASA-CR-166362) p0535 N82-29315

Sewing through flows in Langley's 0.3-meter Transonic Cryogenic Tunnel p0597 N82-32678

Cryogenic wind tunnels: A selected, annotated bibliography

German-Dutch wind tunnel as an aeroacoustic experimental installation p0510 N82-17136

Mean flow and noise measurements in a Mach 3.5 pilot quiet tunnel (AA82-05693) p0263 N82-24657

Research on an induction driven cryogenic wind tunnel p0136 N82-14394

WIND TUNNEL STABILITY TESTS

Direct free-flight analysis of aircraft dynamics at high angles of attack p0081 N82-15596

Review of support interference in dynamic tests (NASA-PAPER 81-0594) p0237 N82-24668

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

A modular asymmetric parachute for wind tunnel testing (NASA-PAPER 81-1933) p0007 N82-10414

Stress measurements in a ribbon parachute canopy during inflation and at steady state (NASA-PAPER 81-1946) p0007 N82-10420

Wind tunnel tests on airfoils in tandem cascade p0012 N82-10987

Navy performance modeling techniques (NASA-PAPER 81-2431) p0056 N82-13869

Overview of flight and ground testing with emphasis on the wind tunnel (NASA-PAPER 81-2874) p0059 N82-13920

A large-scale investigation of engine influence on inlet performance at angle-of-attack (NASA-PAPER 81-2841) p0059 N82-13993

Aeroelasticity matters - Some reflections on two decades of testing in the NASA Langley Transonic Dynamics Tunnel (NASA-CASE-LAB-12461-1) p0370 N82-22325

The development of cryogenic wind tunnels and their application to maneuvering aircraft technology p0061 N82-13969

Jet V/STOL wind-tunnel simulation and groundplane effects p0061 N82-13971

A review of flight-to-wind tunnel drag correlation (NASA-PAPER 81-2475) p0063 N82-14382

Comparison of wind tunnel and theoretical aeroelastic predictions with flight measured airloads for the B-1 aircraft (NASA-PAPER 81-2387) p0065 N82-14393

Analysis of escape systems at 667 KIAS p0079 N82-14976

Wind tunnel tests of ejection seat for high dynamic pressure escape p0079 N82-14979

Cranston Tomcat - In a class of its own p0079 N82-16600

Advanced technology airfoil development for the XV-15 tail-rotor vehicle (NASA-PAPER 81-2623) p0108 N82-16506

The German-Dutch wind tunnel an aeroacoustic experimental installation p0110 N82-17136
Effect on surface pressures of trapezoidal holes in a T-38 stabilizer
[AI EA 36 82-17602]
Propeller tip vortex - a possible contributor to aircraft cabin noise
[AI EA 36 82-17603]
Wind tunnel investigations for the flat spin of slender bodies at high angles of attack
[AI EA 36 82-0054] [AI EA 36 82-17755]
Trailing edge flap influence on leading edge vortex flap aerodynamics
[AI EA 36 82-0128] [AI EA 36 82-17799]
An experimental investigation of the influence of vertical wind shear on the aerodynamic characteristics of an airfoil
[AI EA 36 82-0216] [AI EA 36 82-17843]
Vortex lift augmentation by suction on a 60 deg swept Gothic wing
[AI EA 36 82-17856]
Large-scale wind tunnel tests of a twin-supported V/STOL fighter model at high angles of attack
[AI EA 36 82-2621] [AI EA 36 82-19208]
Low speed testing of the inlets designed for a tandem-fan V/STOL model
[AI EA 36 82-2627] [AI EA 36 82-19210]
Airframe effects on top-mounted inlet systems for STOL fighter aircraft
[AI EA 36 82-2631] [AI EA 36 82-19212]
Thrust modulation methods for a subsonic V/STOL aircraft
[AI EA 36 82-2633] [AI EA 36 82-19213]
Design features of a sea-based multipurpose V/STOL, STOL, and STOL aircraft in a support role for the U.S. Navy
[AI EA 36 82-2650] [AI EA 36 82-19218]
Subsonic and transonic cowl damping measurements on Basic Finner finned missile calibration model
[AI EA 36 82-2663] [AI EA 36 82-19250]
Ultrasonic method for flow field measurements in wind tunnel tests
[AI EA 36 82-20054]
Accumulated, [AI EA 36 82-20252]
Isolated nacelle performance - Measurement and simulation
[AI EA 36 82-0134] [AI EA 36 82-22054]
Aerodynamic characteristics of airfoils with Ice accretions
[AI EA 36 82-0282] [AI EA 36 82-22081]
Store separation from cavities at supersonic flight speeds
[AI EA 36 82-0272] [AI EA 36 82-22096]
Aerodynamic characteristics of maneuvering aircraft
[AI EA 36 82-0280] [AI EA 36 82-22110]
Aerodynamic evaluation of winglets for transport aircraft
[AI EA 36 82-1215] [AI EA 36 82-22245]
History of the sweptback wing
[AI EA 36 82-0700] [AI EA 36 82-22989]
Recent developments in wing with stores flap suppression
[AI EA 36 82-0710] [AI EA 36 82-24077]
[AI EA 36 82-1981-145] [AI EA 36 82-24651]
Numerical design of the contoured wind-tunnel liner for the NASA swept-wing LFC test
[AI EA 36 82-0056] [AI EA 36 82-24656]
Technical innovations in testing and analysis of heat and pressure models in hypersonic wind tunnels
[AI EA 36 82-0578] [AI EA 36 82-24660]
Slotted wall test section for automotive aerodynamic test facilities
[AI EA 36 82-0585] [AI EA 36 82-24661]
The use of a multi-degree-of-freedom dual balance system to measure cross and cross-coupling derivatives
[AI EA 36 82-0595] [AI EA 36 82-24669]
Suppression of self-oscillations in open wind tunnels
[AI EA 36 82-24794] [AI EA 36 82-25799]
The effect of induced sound on the flow around a rectangular body in a wind tunnel
[AI EA 36 82-26194]
Real-time digital filtering test in the S1 continuous wind tunnel at Norden
[AI EA 36 82-26194]
A study of flight control requirements for advanced, waged, earth-to-orbit vehicles with far-above center-of-gravity locations.  
[NASA-CE-159117] p0267 N82-19226

A descriptive study of the analysis of variance and regression techniques in an error analysis program for test data obtained in a 16 foot transonic tunnel.  
 p0309 N82-20997

Fluctuating pressures on fan blades of a turbofan engine: Static and wind-tunnel investigations.  
[NASA-TP-1976] p0309 N82-21037

V/STOL fans transition section model test --- in the Lowen Research Center 10-by-10 foot wind tunnel.  
[NASA-CE-165S77] p0312 N82-21158

Low-speed measurements of the static pressure distribution and overall forces on a canarded and a symmetric mild gothic wing of aspect ratio 1.0 --- in a wind tunnel.  
[NASA-TH-80066] p0312 N82-21161

Pressure distributions on some delta wings at M = 4 --- wind tunnel tests.  
[NASA-TH-80068] p0312 N82-21164

A preliminary comparison between the 12A-3 propeller noise in flight and in a wind tunnel.  
[NASA-TH-82065] p0322 N82-21998

Aeromotive survey of wind tunnel test sections of small and large scale rotors.  
[NASA-TH-82070-10-107] p0350 N82-22225

Experiments on active flutter suppression of a canister wing.  
[NASA-TH-6909] p0356 N82-22282

Fluid dynamics of jets with applications to V/STOL.  
[AARD-CN-308] p0360 N82-23150

Jet V/STOL wind-tunnel simulation and groundplane effects.  
 p0361 N82-23165

Wind tunnel investigations of sailplane fuselages with different lattices and wing settings --- aerodynamic drag measurement.  
 p0364 N82-23200

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-83278] p0368 N82-23240

Sonic half-span model support system.  
[NASA-CASE-LAB-1243-1] p0370 N82-23254

Wind-Tunnel/Flight Correlation, 1981.  
[NASA-CP-2225] p0403 N82-25196

 p0403 N82-25198

Wind-tunnel/flight-drag correlation.  
 p0403 N82-25199

Wind-tunnel/flight correlation program on XB-70-1, USAF.  
 p0404 N82-25201

Problems in correlation caused by propulsion systems.  
 p0404 N82-25202

F-15 wind-tunnel/flight correlations.  
 p0404 N82-25203

Opportunities for wind-tunnel/flight correlation with new Boeing airplanes.  
 p0404 N82-25206

F-16E program overview and wind tunnel/flight correlation.  
 p0404 N82-25207

I-29A forward-swept-wing demonstrator airplane.  
 p0404 N82-25209

Application of Computational Fluid Dynamics (CFD) in transonic wind-tunnel/flight-test correlation.  
 p0404 N82-25211

Elastic deformation effects on aerodynamic characteristics for a high-aspect-ratio supercritical-wing model.  
 p0404 N82-25214

Thrust-induced effects on low-speed aerodynamics of fighter aircraft --- Langley 4-7 meter tunnel.  
[NASA-TH-83277] p0405 N82-25218

Aerocentricity of compressor blades: Subsonic stall flutter.  
 p0414 N82-26189

Effects of wing-leading-edge modifications on a full-scale, low-speed general aviation airplane.  
 Wind-tunnel investigation of high-angle-of-attack aerodynamic characteristics --- conducted in Langley 30- by 60-foot tunnel.  
 [NASA-TP-20111] p0446 N82-26217

Aerodynamic interactions between a 1/6 scale helicopter rotor and a body of revolution.  
[NASA-TH-84247] p0521 N82-28252

Wind-tunnel evaluation of an aerodynamically controllable rotor.  
[AB-81133864] p0521 N82-28260

Investigation of correlation between full-scale and five-scale wind tunnel tests of a Bell helicopter Martin Model 222.  
 p0535 N82-29315

Windtunnel capability related to test sections, cryogenics, and computer-windtunnel integration.  
 [AAMD-KE.-174] p0537 N82-29334

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-CB-152238] p0540 N82-30030

Wind tunnel investigations on this supercritical airfoils in high subsonic flow.  
 [OPFLA-TE-82-06] p0557 N82-30296

Supercritical maneuvering fighter configuration.  
 Wind-tunnel investigation at Mach numbers of 0.60 to 0.96.  
 [NASA-TN-4513] p0567 N82-31303

WIND TUNNEL WALLS: Control laws for adaptive wind tunnels.  
 p0012 N82-10595

On low-speed wind tunnels with deformable boundaries.  
 p0014 N82-11462

Three-dimensional flow studies on a slotted transonic wind tunnel wall.  
 [AABA-PWRL-82-2230] p0117 N82-17055

Transonic wind tunnel wall interference corrections for three-dimensional models.  
 [AABA-82-0584] p0217 N82-24666

Self flow tunnel wind tunnels without computers.  
 p0275 N82-26181

Wind-tunnel wall interference corrections for three-dimensional flows.  
 p0279 N82-32047

Aerodynamic behavior of a slender slot in a wind tunnel wall.  
 p0841 N82-38261

Wind-tunnel testing of V/STOL configurations at high lift.  
 p0510 N82-40949

Corrections for wall effects in OHEBA industrial wind tunnels.  
 [TREBA, TP No. 1982-34] p0548 N82-42810

The use of adaptive walls in plane flows.  
 [OHEBA, TP No. 1982-38] p0548 N82-42813

Higher-order flow angle corrections for three-dimensional wind tunnel wall interference.  
 p0555 N82-44246

The pressure signature method for blockage corrections, and its applications to the industrial wind tunnel.  
 [BP-263] p0567 N82-19233

 [NASA-TH-76521] p0580 N82-20192

Theoretical and experimental investigations of wind tunnel interference due to angle of attack.  
 [NASA-PB-224-21226] p0320 N82-21226

A numerical investigation of two-dimensional, subsonic, linear, wind tunnel interference theory.  
 [AS/AEDO-N757-403] p0369 N82-23197

Determination of wind tunnel constraint effects by a unified pressure signature method.  Part 1: Applications to winged configurations.  
 [NASA-SP-161168] p0367 N82-23234

Determination of wind tunnel constraint effects by a unified pressure signature method.  Part 2: Applications to jet-in-crossflow.  
 [NASA-CE-166147] p0367 N82-23235

Adaptive-wall wind-tunnel research at NASA Ames.  
 [NASA-TH-82023] p0397 N82-24214

Wind-tunnel/Flight Correlation, 1981.  
[NASA-CP-2225] p0403 N82-25196

Tunnel-to-tunnel correlation.  
 p0404 N82-25200

Measuring the flow properties of slotted test-section walls.  
 [FPA-135] p0529 N82-28571
Analysis of an airplane windshield anti-icing system

Experimental trim drag values for conventional and supercritical wings

[Experimental drag values for conventional and supercritical wings]

Slotted variable camber flap

[Experimental data on slotted variable camber flaps]

Aerodynamic tailoring for control and performance: Are requirements compatible?

Increasing the lift/drag ratio of a flat delta wing

Aerodynamic noise generated by jet wing/flap interactions of the external USB configuration of STOL aircraft. Part 2; Full scale model experiment using FJ5710 turbofan engine

Experimental flight test programs for improving combat aircraft maneuverability by nacelle flaps and pylon split flaps

Aerodynamic from corner flow and flap flow

Experimental study of subsonic and transonic flows past a wing

Wing design for light transport aircraft with improved fuel economy

The NASA Langley laminar flow control experiment

The unsteady motion of a wing traveling at subsonic speed above a plane

Vortex formation over double-delta wings

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 stress-strain state of a rectangular wing section of variable thickness under concentrated loads and heating

Wing-canard aerodynamics at transonic speeds - Fundamental considerations on missile drag spanloads

Structural modeling of high Reynolds number wind tunnel models

Development of a preloaded hybrid advanced composite wing pivot fairing

Instability effects on pylon 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 V107 - 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

A study on numerical method for evaluating spanwise integral in subsonic lifting-surface theory

Aeracoustic theory for noncompact wing-gust interaction

Effect of fighter attack spectrum on composite fatigue life

Development of an efficient procedure for calculating the aerodynamic effects of planform variation

Experimental study of empennage snap-through

Aeroelastic tailoring for control and performance: Are requirements compatible?

Some unsteady aerodynamic effects on helicopter rotors

A surface singularity method for rotors in hover or climb

Prediction of wing side-edge suction forces and maximum inboard lift

Comparison of analytical and wind-tunnel results for flutter and gust response of a transport wing with active controls

Automated optimum design of wing structures. Deterministic and probabilistic approaches

Integration of a code for aerelastic design of conventional and composite wings into AC5RT, an aircraft synthesis program — wing aerelastic design (WADES)

Ground calibration of a strain-gauged CT-4A aircraft (1979)

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

A numerical method for studying nacelle-jet-airflow interaction in an inviscid three-dimensional flow

Transonic perturbation analysis of wing-fuselage-nacelle/pylon configurations with powered jet exhausts

The use of small strakes to reduce interference drag of close coupled civil nacelle/airframe configurations, using a full span model with turbine powered engine simulators

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

A numerical method for studying nacelle-jet-airflow interaction in an inviscid three-dimensional flow

Transonic perturbation analysis of wing-fuselage-nacelle/pylon configurations with powered jet exhausts

Selected advanced aerodynamics and active controls concepts development on a derivative B-747

WING MACHINE CONFIGURATIONS

Experimental study of airborne engine interference for an nacelle/pylon configuration

The use of small strakes to reduce interference drag of a low wing, twin engine airplane

The prediction of propeller/wing interaction effects

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

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

An experimental method for studying nacelle-jet-airflow interaction in an inviscid three-dimensional flow

Transonic perturbation analysis of wing-fuselage-nacelle/pylon configurations with powered jet exhausts

Experimental study of empennage snap-through vibrations

A method for locating aircraft wing damage by nonlinear vibration analysis

Instantaneous turbulence profiles in the wake of an oscillating airfoil

WING OSCILLATIONS

<table>
<thead>
<tr>
<th>Subject Index</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis of an airplane windshield anti-icing system</td>
<td>p0489 A82-39134</td>
</tr>
<tr>
<td>Experimental trim drag values for conventional and supercritical wings</td>
<td>p0198 A82-17126</td>
</tr>
<tr>
<td>Slotted variable camber flap</td>
<td>p0254 A82-18203</td>
</tr>
<tr>
<td>Aerodynamic tailoring for control and performance: Are requirements compatible?</td>
<td>p0348 A82-22200</td>
</tr>
<tr>
<td>Increasing the lift/drag ratio of a flat delta wing</td>
<td>p0016 A82-11899</td>
</tr>
<tr>
<td>Aerodynamic noise generated by jet wing/flap interactions of the external USB configuration of STOL aircraft. Part 2; Full scale model experiment using FJ5710 turbofan engine</td>
<td>p027C A82-19945</td>
</tr>
<tr>
<td>Experimental flight test programs for improving combat aircraft maneuverability by nacelle flaps and pylon split flaps</td>
<td>p0347 A82-22192</td>
</tr>
<tr>
<td>Aerosound from corner flow and flap flow</td>
<td>p0574 A82-32081</td>
</tr>
<tr>
<td>Experimental study of subsonic and transonic flows past a wing</td>
<td>p0005 A82-10363</td>
</tr>
<tr>
<td>Wing design for light transport aircraft with improved fuel economy</td>
<td>p0065 A82-14016</td>
</tr>
<tr>
<td>The NASA Langley laminar flow control experiment</td>
<td>p0381 A82-13327</td>
</tr>
<tr>
<td>The unsteady motion of a wing traveling at subsonic speed above a plane</td>
<td>p0491 A82-39350</td>
</tr>
<tr>
<td>Vortex formation over double-delta wings</td>
<td>p0514 A82-40989</td>
</tr>
<tr>
<td>Nonlinear prediction of subsonic aerodynamic loads on wings and bodies at high angles of attack</td>
<td>p0015 A82-11359</td>
</tr>
<tr>
<td>On the question of trailing airplane motion</td>
<td>p0053 A82-13560</td>
</tr>
<tr>
<td>Divergence of a sweptforward wing</td>
<td>p0127 A82-19586</td>
</tr>
<tr>
<td>Investigation of the stress-strain state of a rectangular wing section of variable thickness under concentrated loads and heating</td>
<td>p0183 A82-22046</td>
</tr>
<tr>
<td>Structural modeling of high Reynolds number wind tunnel models</td>
<td>p0238 A82-26674</td>
</tr>
<tr>
<td>Development of a preloaded hybrid advanced composite wing pivot fairing</td>
<td>p0287 A82-27131</td>
</tr>
<tr>
<td>Instability effects on pylon and engine loading in an aircraft with high-aspect-ratio wings</td>
<td>p0388 A82-34163</td>
</tr>
<tr>
<td>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</td>
<td>p0507 A82-40909</td>
</tr>
<tr>
<td>The design integration of wingtip devices for light general aviation aircraft</td>
<td>p0508 A82-40933</td>
</tr>
<tr>
<td>Operation V107 - Development of a composite material wing</td>
<td>p0509 A82-40934</td>
</tr>
<tr>
<td>A crack growth model under spectrum loading</td>
<td>p0511 A82-40961</td>
</tr>
<tr>
<td>Test results of chordwise and spanwise blowing for low-speed lift augmentation</td>
<td>p0515 A82-40999</td>
</tr>
<tr>
<td>Maximum induced drag of canard configurations</td>
<td>p0518 A82-41116</td>
</tr>
<tr>
<td>The design of airfoil profiles with trailing edge loading in transonic flow — French thesis</td>
<td>p0554 A82-42224</td>
</tr>
<tr>
<td>A study on numerical method for evaluating spanwise integral in subsonic lifting-surface theory</td>
<td>p0198 A82-17126</td>
</tr>
<tr>
<td>Aerocoustic theory for noncompact wing-gust interaction</td>
<td>p036 A82-11035</td>
</tr>
<tr>
<td>Effect of fighter attack spectrum on composite fatigue life</td>
<td>p036 A82-11071</td>
</tr>
<tr>
<td>Development of an efficient procedure for calculating the aerodynamic effects of planform variation</td>
<td>p069 A82-12143</td>
</tr>
<tr>
<td>Experimental study of empennage snap-through</td>
<td>p0137 A82-14529</td>
</tr>
<tr>
<td>Accelerated development and flight evaluation of active controls concepts for subsonic transport aircraft. Volume 1: Load alleviation/extended span development and flight tests</td>
<td>p0145 A82-1507a</td>
</tr>
<tr>
<td>Integration of a code for aerelastic design of conventional and composite wings into AC5RT, an aircraft synthesis program — wing aerelastic design (WADES)</td>
<td>p0189 A82-16069</td>
</tr>
<tr>
<td>Ground calibration of a strain-gauged CT-4A aircraft (1979)</td>
<td>p0189 A82-16073</td>
</tr>
<tr>
<td>Some unsteady aerodynamic effects on helicopter rotors</td>
<td>p0250 A82-18162</td>
</tr>
<tr>
<td>A surface singularity method for rotors in hover or climb</td>
<td>p0304 A82-20178</td>
</tr>
<tr>
<td>Prediction of wing side-edge suction forces and maximum inboard lift</td>
<td>p0403 A82-25192</td>
</tr>
<tr>
<td>Comparison of analytical and wind-tunnel results for flutter and gust response of a transport wing with active controls</td>
<td>p0460 A82-26703</td>
</tr>
<tr>
<td>Automated optimum design of wing structures. Deterministic and probabilistic approaches</td>
<td>p0535 A82-29317</td>
</tr>
<tr>
<td>Integration of a code for aerelastic design of conventional and composite wings into AC5RT, an aircraft synthesis program — wing aerelastic design (WADES)</td>
<td>p0509 A82-40989</td>
</tr>
<tr>
<td>Establishment of an experimental technique to reproduce accurate measurement of the installed drag of close coupled civil nacelle/airframe configurations, using a full span model with turbine powered engine simulators</td>
<td>p0506 A82-13089</td>
</tr>
<tr>
<td>Evaluation of an experimental technique to investigate the effects of the engine position on engine/pylon/wing interference</td>
<td>p0096 A82-13090</td>
</tr>
<tr>
<td>A numerical method for studying nacelle-jet-airflow interaction in an inviscid three-dimensional flow</td>
<td>p0096 A82-13090</td>
</tr>
<tr>
<td>Transonic perturbation analysis of wing-fuselage-nacelle/pylon configurations with powered jet exhausts</td>
<td>p0184 A82-22077</td>
</tr>
<tr>
<td>The use of small strakes to reduce interference drag of a low wing, twin engine airplane</td>
<td>p0487 A82-39100</td>
</tr>
<tr>
<td>The prediction of propeller/wing interaction effects</td>
<td>p0510 A82-10948</td>
</tr>
<tr>
<td>Experimental study of airborne engine interference for an nacelle/pylon configuration</td>
<td>p0506 A82-13094</td>
</tr>
<tr>
<td>Evaluation of an experimental technique to investigate the effects of the engine position on engine/pylon/wing interference</td>
<td>p0096 A82-13090</td>
</tr>
<tr>
<td>A numerical method for studying nacelle-jet-airflow interaction in an inviscid three-dimensional flow</td>
<td>p0096 A82-13090</td>
</tr>
<tr>
<td>Transonic perturbation analysis of wing-fuselage-nacelle/pylon configurations with powered jet exhausts</td>
<td>p0262 A82-19167</td>
</tr>
<tr>
<td>Selected advanced aerodynamics and active controls concepts development on a derivative B-747</td>
<td>p0586 A82-32346</td>
</tr>
</tbody>
</table>
In-flight deflection measurement of the HNAT aerodynamically tailored wing 
(AIAA PAPER 81-2050) p0063 A82-14381

WINGLETs
Aerodynamic evaluation of winglets for transport aircraft 
(AIAA PAPER 81-1215) p0106 A82-22445
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 
Transonic flutter study of a wind-tunnel model of a supercritical wing with/without winglet — conducted in Langley Transonic Dynamics Tunnel 
(AIAA-TH-83279) p0368 N82-23239
Selected winglet and mixed flow duct nacelle — development for DC-10 derivative aircraft 
[NASA-CH-3296] p0589 N82-32347
Application of an optimized winglet configuration to an advanced commercial transport 
[AIAA-CH-159156] p0589 N82-32348

WINGS
NT ARROW WINGS
NT BENDINGLESS ROTORS
NT CAMEL HUMP WINGS
NT CARGO WINGS
NT CARPET WINGS
NT DELTA WINGS
NT FIXED WINGS
NT FLEXIBLE WINGS
NT INFINITE SPAN WINGS
NT LIFTING ROTORS
NT LOW ASPECT RATIO WINGS
NT OBLIQUE WINGS
NT PANEL WINGS
NT RECTANGULAR WINGS
NT RIGID ROTORS
NT RIGID WINGS
NT ROTARY WINGS
NT SLENDER WINGS
NT SUPERCritical WINGS
NT SWEPT FORWARD WINGS
NT SWEPT WINGS
NT SWEPTBACK WINGS
NT THIN WINGS
NT TITLING ROTORS
NT TRAPEZODAL WINGS
NT TWISTED WINGS
NT UNSCRIPT WINGS
NT VARIABLE WING WINGS
Angle of downwash behind a wing in unsteady flow 
Structural design and construction of the New Technology Wing 
Experimental program for general aviation — wing design, construction and flight testing 
One year flight testing of the Transonic Wing 
Fracture control in ballistic-damaged graphite/epoxy wing structure 
Durability evaluation of highly stressed wing box structure 
Design considerations and experiences in the use of composite materials for an aerelastic research wing 
The equivalent simple body /E38/ method for transonic wing analysis 

Design of finite element grids for the computation of the three-dimensional transonic flow around a wing 
Multibody transport concept 
Application of computational methods to transonic wing-design 
A-7 transonic wing designs
Evaluation of full potential flow methods for the design and analysis of transport wing 
Investigations regarding vortex formation at wings with bent leading edges 
Optimization of flight with tilt wing 
Advanced aerodynamic wing design for commercial transports — Review of a technology program in the Netherlands 
A study of wing vorticity patterns 
Prediction of fatigue crack propagation in plane specimens and thin-walled structural elements of aircraft wing skins under programmable load factors — Freedrops and captive trajectories 
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 (NADS) 
Theory and experiment in unsteady aerodynamics 
Experimental verification of an aerodynamic parameter optimization program for wind tunnel testing 
Numerical aircraft design using 3-D transonic analysis with optimization. Volume 1: Executive summary 
Numerical aircraft design using 3-D transonic analysis with optimization. Volume 2: Part 1: Transport design 
Some remarks on buffetting — wing tunnel models 
Investigation of passive shock wave-boundary layer control for transonic airfoil drag reduction 
Experiment on active flutter suppression of a cantilever wing 
Application of a transonic potential flow code to the static aeroelastic analysis of three-dimensional wings 
Means for controlling aerodynamically induced tilt 
Aerodynamics of an airfoil with a jet issuing from its surface 
An effective algorithm for shock-free wing design 
Investigation of the interference effects of mixed flow long duct nacelles on a DC-10 wing 
A-679
Decoupler pylon: wing/store flutter suppressor
A color video display technique for flow field
surveys
p0592 H82-32373
Langley test highlights, 1983
[NASA-88-6518]
p0603 H82-33330
WIRE
ST ELECTRIC WIRE
Wire strike protection
p0046 A82-13246
Techniques for overhead-wire detection -- to
prevent helicopter wirestrikes
p0106 A82-16560
WIRE CLOTH
Metal honeycomb to porous wireform substrate
diffusion bond evaluation
[NASA-88-28793]
p0259 H82-18612
WIRE EMB
U WIRE CLOTH
WIRING
The variation of induced currents in aircraft wiring
p0220 A82-24355
WIRING SYSTEMS
U WIRING
WORK
The work environment
p0534 H82-29299
WORKING FLUIDS
Efficient use of working fluids in aviation
hydraulic systems
p0082 A82-15724
WORKLOADS (PSYCHOPHYSIOLOGY)
Assessing pilot workload -- without disturbing
pilot behavior
p0069 A82-14745
Flight simulation consoles, aid or obstruction --
Objective evaluation of control consoles of
modern flight and tactics simulators
[DGIL PAPER 81-079]
p0159 A82-19269
Combined multisensor displays -- image
preprocessing for shape coding to reduce pilot
workload
p0210 A82-22905
Utilizing the helicopter's versatility to improve
the ATC system
p0219 A82-23316
Boeing's new 767 lowers crew workload
p0497 A82-40348
Electronic master monitor and advisory display
system, operational functions report
[AD-A105516]
p0133 H82-14087
Update of the summary report of 1977-1978 tank
force on aircraft workload
[AD-A112547]
p0448 A82-26258
Real-time simulation of an airborne radar for
overwater approaches
[NASA-CR-166293]
p0449 A82-26262
Cockpit display of traffic information and the
measurement of pilot workload: An annotated
bibliography
[AD-A110516]
p0870 H82-27391
Special investigation report: Air traffic control
system
[p88-134276]
p0523 H82-28277
Pilot/vehicle model analysis of visual and motion
cue requirements in flight simulation
p0562 H82-30038
X
X BAND
0 SUPERHIGH FREQUENCIES
X BAND ASTRONOMY
Construction and testing of an Omega navigation
system for the balloon-borne X-ray experiment
-- German thesis
p0594 H82-43311
X BAND INSPECTION
Determination of material properties by limited
scan X-ray tomography
[AD-A116670]
p0594 H82-32422
X BAND SPECTROSCOPY
0 X BAND SPECTROSCOPY
X BAND SPECTROSCOPY
U X BAND SPECTROSCOPY
X BAND SPECTROSCOPY
Techniques suitable for a portable wear metal
analyzer

A-480
A multidimensional-crack-growth prediction methodology for flaws originating at fastener holes.

On the bearing strengths of CFP laminates.

ZERO GRAVITY
  0 WEIGHTLESSNESS
  ZONES
  0 REGIONS
A

ABBOTT, J. A.
Simulator study of a pictorial display for general aviation instrument flight
[NASA-TP-1963] p0304 882-20180

ABBOTT, M. E.
Evaluation of C88P prototype structures for aircraft
[NASA-FR-20895] p0580 882-40921

ABBOTT, R. L.
A summary of V/STOL inlet analysis methods
[NASA-TP-62865] p0521 882-28249

ABBOTT, R. L.
A summary of V/STOL inlet analysis methods
[AD-A108121] p0189 882-16074

ABBOTT, R. L.
TF34 Convertible Engine System Technology Program
p0499 882-40521

ABDELNABAB, M.
Effects of fan inlet temperature disturbances on the stability of a turbofan engine
[NASA-TP-62869] p0256 882-18220

ABBRE, L.
Evaluation of C88P prototype structures for aircraft
p0945 882-39092

ABBRE, L.
Comparison of analytical and wind-tunnel results for flutter and gust response of a transport wing with active controls
p0360 882-26703

ABELL, J. B.
The Sortie-Generation Model system. Volume 1: Executive summary
[AD-A110897] p0487 882-26222

ABELL, J. B.
The Sortie-Generation Model system. Volume 2: Sortie-Generation Model user's guide
[AD-A110898] p0487 882-26223

ABELL, J. B.
The Sortie-Generation Model system. Volume 4:
Sortie-Generation Model programmers manual
[AD-A110899] p0487 882-26224

ABELL, J. B.
The Sortie-Generation Model system. Volume 6:
Spares subsystem
[AD-A110900] p0487 882-26226

ABELL, J. L.
The toll of IIS-preventable aviation accidents
p0242 882-25325

ABELS, B. W.
Costs of noise nuisance from aircraft
p0066 882-13314

ABTINOSIS, W. E.
Transonic perturbation analysis of wing-fuselage-nacelle-play configurations with powered jet exhausts
[AIAA PAPER 82-0255] p0184 882-22077

ABBAG, R. G.
Determination of hinge moments and unpassenger airloads parameters from flight data for Learjet airliners
p0044 882-13120

ABBAG, R. G.
Determination of Learjet Longhorn airplane horizontal tail load and hinge moment characteristics from flight data
p0116 882-17207

ABBAG, V. S.
Proposed multipurpose flying radio-physical laboratory using an IL-18 aircraft
p0550 882-43278

ABBAG, R. C.
A design criterion for highly augmented fly-by-wire aircraft
[AIAA 82-1570] p0485 882-39869

ABBAG, L. E.
Results of Differential Omega experiment
p0122 882-18094

ABBAG, L. E.
Differential Omega system development and evaluation
[AD-A110757] p0200 882-17146

ABBAG, L. E.
Correlation of Preston-tube data with laminar skin friction
(Log No. J12904) p0539 882-29556

ACCHINO, M.
A new approach to radar plot extraction for ATC applications
p0075 882-19408

ACKENHARDT, J.
Robust flight control - A design example
p0082 882-15845

ACQUAVIVA, D. J.
Mechanical wear assessment of helicopter engines by ferrography
[AD-A110772] p0454 882-26305

ACCRE, C. W., JR.
Performance of the Rotor Systems Research Aircraft calibrated rotor loads measurement system
p0592 882-40549

ADACHI, T.
On the numerical analysis of stall flutter in turbine cascades
p0143 882-15054

ADAP, C. P.
Climatic laboratory evaluation YC8-47D helicopter
[AD-A115861] p0590 882-32355

ADAP, B. E.
F/A-18 'Hornet' - One man operability
[AIAA 81-2266] p0048 882-13848

F/A 18 Hornet crew station
p0093 882-13064

ADAP, B. E.
A concept for A/G-guidance of transport aircraft in the TMA
p0509 882-00902

ADAP, C. P.
Control law design for transport aircraft flight tasks
p0339 882-11800

ADAP, C. P.
Integration of a digital air data computer into the test aircraft BFB-320
[OFFML-81-01-09] p0141 882-15038

ADAP, C. P.
Charting propulsion's future - The ATES results
[AIAA PAPER 82-1159] p0417 852-35023

ADAP, C. P.
Preliminary functional description of integrated flow management
[AD-109909] p0313 882-21177

ADAP, J. J.
Simulator study of a pictorial display for general aviation instrument flight
[NASA-TP-1963] p0304 882-20180

ADAP, J. J.
Flight-test verification of a pictorial display for general aviation instrument flight
ADAMS, R.
Engine dynamic analysis with general nonlinear finite element codes. IX - Bearing element implementation, overall numerical characteristics and benchmarking

ADAMS, R.
Engine dynamic analysis with general nonlinear finite element codes. Part 2: Bearing element implementation overall numerical characteristics and benchmarking

ADAMS, R. E.
Recent results in main beam nulling

ADAMS, R. E., JW.
Control law design to meet constraints using SIMUL-synthesis package for active controls

ADAMS, R.
Active beacon collision avoidance logic evaluation. Volume 2: Collision avoidance (BCAS) threat phase

ADAMS, R.
Problems related to the integration of fault tolerant aircraft electronic systems

ADAMS, R.
The Air Force Flight Test Center - Utah Test and Training Range in the 1980's

APPLEBY, T. P.
Application of the sequential optimization method to the tuning of the natural frequencies of gas-turbine engine compressor blades

APFINKEN, L. F.
Instruments and installations for meteorological measurements at airports

APFINKEN, L. G.
Current aerial cameras

ARGABALSE, J. C.
Where is cobalt irreplaceable

ARGABALSE, E. L.
A summary of jet-impingement studies at McDonnell Douglas Research Laboratories

ARGABALSE, E. L.
Pavement management and rehabilitation of Portland cement concrete pavements

ARGABALSE, L. L.
Weapon delivery system using GPS

AGLIULLIN, L. M.
Basic problems of aircraft gasturbine engine analytic design. IX

AGREREL, L.
Calculations of transonic steady state aerelastic effects for a canard airplane

AHARON, R. E.
The military flying qualities specification, a help or a hindrance to good fighter design

AHILREDDY, R.
Collection and evaluation of propeller aircraft noise certification data

AHNAN, J.
Mechanical property characterization and modeling of structural materials

AHNAN, L. L.
Unsteady lifting-line theory with applications

AHLTEY, R. P.
Large scale model measurements of airframe noise using cross-correlation techniques

AIKIA, T.
Transient vibration of high speed lightweight rotor due to sudden imbalance

AKCHE, W.
Rotor model for the verification of computational methods

ALDALL, F.
Numerical aircraft design using 3-D transonic analysis with optimization. Volume 1: Executive summary

ALDALL, F.
Numerical aircraft design using 3-D transonic analysis with optimization. Volume 2. Part 2: Fighter design

ALLO, R. L.
Structural dynamics of shrouded, hollow, fan blades with composite in-lays

ALLO, R.
Large displacements and stability analyses of nonlinear propeller structures

ALLO, R.
An assessment of various side-stick controller/stability and control augmentation systems for night nap-of-Earth flight using piloted simulation

ALLO, S. J.
Stability and flutter analysis of turbine blades at low speed

AKRETEV, V. G.
Calculation of aerodynamic characteristics of jet flapped airplane

AKRETEV, S. G.
Evaluation of graphite epoxy shims in a high capacity laminate helicopter bearing

AKRETEV, S. G.
Composite control tubes

AKIXOYOS, N. K.
Investigation of the aerodynamic contour method with control functions in the form of smooth constant sign contours

AKRETEV, S. G.
Integral characteristics in the computer-aided design of geometrical objects of complex configuration

AKRETEV, SM. A.
Evaluating the effectiveness of hydroforming of the low-stability component of T-T fuel

AKRETEV, V. L.
Effect of operating life on the mechanical properties of the materials and load-bearing capacity of the rotor elements of gas-turbine engines

AKKRETEV, S. G.
Development of multivariable controllers for aircraft turbine engines

AKKRETEV, S. G.
Sensor failure detection system

AKKRETEV, S. G.
Study of regeneration of exhaust gases with different initial temperature in a reversed turbojet engine

AKKRETEV, S. E.
Methods for analysis of wind ripple in wind turbines
<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akihara, S.</td>
<td>Hydrogen economy assessment for long-term energy systems in Japan</td>
<td>p0378 A82-32159</td>
</tr>
<tr>
<td>Al-Fisi, J.</td>
<td>Analysis of vibration induced error in turbulence velocity measurements from an aircraft wing tip boom</td>
<td>p0530 A82-28881</td>
</tr>
<tr>
<td>Al-Borab, E. B.</td>
<td>Development and application of a performance prediction method for straight rectangular diffuser</td>
<td>p0425 A82-35352</td>
</tr>
<tr>
<td>Al-Bass, V. E.</td>
<td>Helicopter IFR - Past, present and future and future</td>
<td>p0066 A82-13245</td>
</tr>
<tr>
<td>Al-Bass, C. G.</td>
<td>Blockage and flow studies of a generalized test apparatus including various wing configurations in the Langley 7-inch Mach 7 Pilot Tunnel</td>
<td>p0370 A82-23471</td>
</tr>
<tr>
<td>Al-Bass, C. E.</td>
<td>Engine/drive/airframe compatibility: A way of life</td>
<td>p0208 A82-17220</td>
</tr>
<tr>
<td>Al-Bass, C. E.</td>
<td>CBS-the designer's media, the analyst's model</td>
<td>p0513 A82-40991</td>
</tr>
<tr>
<td>Al-Bass, J.</td>
<td>Technology overview for advanced aircraft armament systems program</td>
<td>p0201 A82-17155</td>
</tr>
<tr>
<td>Al-Bass, J. L.</td>
<td>The Agusta's solution of HSH's hypothetical fatigue life problem</td>
<td>p0230 A82-24701</td>
</tr>
<tr>
<td>Al-Bass, V. L.</td>
<td>Problems in the simulation of correlation-extreme navigation systems</td>
<td>p0492 A82-29403</td>
</tr>
<tr>
<td>Al-Bass, E. A.</td>
<td>F-15 inlet development experience</td>
<td>p0419 A82-35278</td>
</tr>
<tr>
<td>Al-Bass, J. E.</td>
<td>Advanced concepts for composite structures and attachment fittings. Volume 1: Design and optimization</td>
<td>p0321 A82-21261</td>
</tr>
<tr>
<td>Al-Bass, J. E.</td>
<td>Advanced concepts for composite structures and attachment fittings. Volume 2: Design guide</td>
<td>p0451 A82-26280</td>
</tr>
<tr>
<td>Al-Bass, E. E.</td>
<td>Optimization of thrust algorithm calibration for Computing System (FCS) for Thrust the NASA Highly Maneuverable Aircraft Technology (HMAAT) vehicle's propulsion system</td>
<td>p0317 A82-21198</td>
</tr>
<tr>
<td>Al-Bass, V. L.</td>
<td>The effect of a screen on the aerodynamic characteristics of an oscillating profile</td>
<td>p0583 A82-46693</td>
</tr>
<tr>
<td>Al-Bass, E. S.</td>
<td>Evaluation of the North Island A/C crash/Rescue training facility</td>
<td>p0257 A82-18228</td>
</tr>
<tr>
<td>Al-Bass, D.</td>
<td>Corrosion fatigue behaviour of some aluminium alloys</td>
<td>p0210 A82-17245</td>
</tr>
<tr>
<td>Al-Bass, A. A.</td>
<td>Evaluating the effectiveness of hydrorefining of the low-stability component of T-1 fuel</td>
<td>p0430 A82-36673</td>
</tr>
<tr>
<td>Al-Bass, O. M.</td>
<td>Inverse heat-transfer problems - Domains of application in the design and testing of technical systems</td>
<td>p0274 A82-25971</td>
</tr>
<tr>
<td>Al-Bass, A. M.</td>
<td>Problems in the automation of the thermal-stress analysis of flight vehicles</td>
<td>p0293 A82-27509</td>
</tr>
<tr>
<td>Al-Bass, A. M.</td>
<td>The prediction of propeller/wing interaction effects</td>
<td>p0510 A82-40948</td>
</tr>
<tr>
<td>Al-Bass, A. E.</td>
<td>Engine supercritical temperature and infrared signature</td>
<td>p0247 A82-18136</td>
</tr>
<tr>
<td>Al-Bass, A.</td>
<td>Comparison of two parallel/series flow turboset</td>
<td>p0342 A82-32159</td>
</tr>
</tbody>
</table>

**Al-Bass, J.**

- Propulsion concepts for supersonic V/STOL planes (AIAA Paper 81-2637) | p0156 A82-19214
- Aerodynamic development of laminar flow control on swept wings using distributed suction through porous surfaces | p0505 A82-40984
- Aerodynamics: The science of air in motion (2nd edition) | p0303 A82-33671
- Weather impact on low-altitude imaging infrared sensors in Europe - A feasibility model | p0072 A82-14779
- Algorithms development for infra-red air-to-air guidance systems | p0490 A82-39191
- Functional requirements for the transport aircraft systems research facility | p0352 A82-22248
- A theory of human error (NASA-166313) | p0352 A82-22250
- The Agusta's solution of HSH's hypothetical fatigue life problem | p0238 A82-24701
- Automation in the skies | p0584 A82-47224
- Airline fuel saving through JT9D engine refurbishment (NASA 811051) | p0232 A82-24395
- Standard tests of a research model rotor in a wind tunnel, including model similarity (NASA-SEP-79-16) | p0025 A82-10016
- Lightning effects on aircraft and composites Literature study on lightning strikes and protection | p0226 A82-10204
- Panel Optimization with Integrated Software (POI&S), Volume 2: User instructions: ECHO and HSTS | p0475 A82-27411
- Quasilinearization solution of the proportional navigation problem | p0468 A82-27273
- Problems related to the integration of fault tolerant aircraft electronic systems (NASA-165926) | p0530 A82-29022
- 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 | p0309 A82-20997
- Performance of the AEDC 7x1 Aeronautical Environmental Chamber without oil diffusion | p0435 A82-37065
- A significant role for composites in energy-efficient aircraft | p0435 A82-37065
- The challenge of standardizing fatigue methodology | p0238 A82-24703
- Fire extinguishing materials (NASA-CSP-ASC-11252-1) | p0090 A82-12168
- Development and testing of dry chemicals in advanced extinguishing systems for jet engine exhaust plume | p1011 A82-13186
- Preliminary functional description of integrated flow management (AIAA Paper 80-90909) | p0313 A82-21171
- Effect of a part span variable inlet guide vane on
Techniques suitable for a portable wear metal estimation of systems using the least squares method

A-7 flight software analysis

Solid-state flight incident recorder

The relative motion of a particle in the case of exponential changes of the velocity of the medium

Doppler test results of experimental GPS receiver

Aerodynamic investigations to determine possible flight paths

Measurements of velocity distributions in the leading edge vortex of a delta wing by the laser-Doppler procedure

Noise measurements on the helicopter R-117 plus 1 and 2 noise levels and influence of speed

Collection and evaluation of propeller aircraft noise certification data

Flow and pressure field of a model propeller

Techniques suitable for a portable wear metal analyzer

Application of computer generated color graphic techniques to the processing and display of three dimensional fluid dynamic data

Integration of avionics and advanced control technology

Aerodynamic characteristics and store loads of a 1/24 scale F-111 aircraft model with three external store loadings

A split coefficient/locally monotonic scheme for multishocked supersonic flow

A system safety model for developmental aircraft programs

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

Development of Integrated Programs for Aerospace-Vehicle Design (IPAD) - IPAD user requirements

Aircraft absorbers - Promise and practice

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

A system safety model for developmental aircraft programs

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

A system safety model for developmental aircraft programs

A system safety model for developmental aircraft programs

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

A system safety model for developmental aircraft programs

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

A system safety model for developmental aircraft programs

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

B

BAARS, D. D.
Mile-Tunnel/Flight Correlation, 1981
[NASA-CP-2225] p0403 882-25196

BABB, C. B.
Pressure distributions on three different cruciform aft-control surfaces of a wingless missile at Mach 1.60, 2.36, and 3.70.
[ASME PAPER 81-998-49] p0127 A82-18444

BABE, E. B.
Design analysis of high temperature transparent windshields for high performance aircraft
[ASME PAPER 81-FKSA-3] p0011 A82-10893

BAEMP, F. P.
Survey and design of airfields
[ASME PAPER 82-13603] p0552 A82-43603

BACH, L. J.
Blade loss transient dynamic analysis of transonic aircraft
[AMIA PAPER 82-1057] p0415 A82-34992

BACH, R. L. Jr.
Analysis of general-aviation accidents using ARC radar records
[AMIA PAPER 82-1310] p0407 A82-36091

BACHMANN, L. L.
Ring Laser Gyro Navigator /RLGN/ flight test results
[ASME PAPER 82-12644] p0023 A82-10893

BACK, L.
Experimental investigation of turbulent wall-jets in the presence of adverse pressure gradients in a rectangular diffuser
[ASME PAPER 82-32330] p0378 A82-12725

BACHE, B. C.
Future requirements for helicopter propulsion systems
[ASME PAPER 82-12725] p0209 A82-36091

BACON, R. J.
A modern approach to pilot/vehicle analysis and the Neil-Smith criteria
[AMIA PAPER 82-1357] p0409 A82-39125

BADAL, R. S.
A fatigue crack growth theory based on strain energy density factor
[ASME PAPER 82-1357] p0552 A82-43742

BARDENHOLTZ, J. C.
Effect of target attack spectrum on composite fatigue life
[AD-AI05091] p0089 A82-11953

BADER, R.
Computational aerodynamics
[ASME PAPER 82-54851] p0501 A82-12539

BADLEY, E.
Advanced stratified charge rotary aircraft engine design study
[ASME PAPER 82-17743] p0478 A82-27743

BADZIOCH, L. A.
Comparison of light aircraft with stressed and - cantilever wings
[ASME PAPER 82-29828] p0333 A82-29828

BAEGBENZ, J. L.
The development and flight test evaluation of an integrated propulsion control system for the EINST research airplane
[AMIA PAPER 82-29828] p059 A82-13931

BAESCHINGER, F.
Evaluation of a simplified gross thrust calculation method for a J85-21 afterburning turbojet engine in an altitude facility
[AMIA PAPER 82-1044] p0415 A82-34978

BAESE, J. C.
Restoration of performance, Models 727, 737, and 767
[ASME PAPER 81-10752] p0233 A82-24905

BARES, C. F.
Study of advanced propulsion systems for Small Transport Aircraft Technology (STAT) program
[ASME PAPER 82-16510] p0396 A82-24202

BARBAZZA, B.
Digital simulation of aircraft electrical generating system by means of Sceptre program
[ASME PAPER 82-18420] p0073 A82-18420

BAHL, L.
Investigation of passive shock wave-boundary layer control for transonic airfoil drag reduction
[81-CR-168844] p0349 A82-22209

BAJAIU H.
NASA General Electric broad-specification fuels combustion technology program - Phase I results and status
[AMIA PAPER 82-1009] p0416 A82-35000

BAIIE, B. J.
Computational aerodynamics
[ASME PAPER 82-17743] p0426 A82-35390

BAIIEA, B. J.
Mathematical programming in engineering design problems
[ASME PAPER 82-17743] p0083 A82-15864

BAILEEN, B. M.
Acoustic emission - An emerging technology for assessing fatigue damage in aircraft structure
[ASME PAPER 82-11419] p0113 A82-11419

BAILEE, B. E.
'Monitoring' systems to increase aircraft structural safety and reduce costs
[ASME PAPER 82-54851] p0492 A82-39539

BAILLET, D.
Electromechanical actuation Development Program (EADP). Power control development
[AD-AI16126] p0572 A82-31694

BAILLET, B. M.
Studies of modern technology ships for maritime patrol applications
[AD-AI16126] p0173 A82-20554

BAILEY, B. L.
Analysis of augmented aircraft flying qualities through application of the Neil-Smith criterion
[AMIA PAPER 81-1776] p0008 A82-10462

BAILEY, L. O.
The design of a wind tunnel VSTOL fighter model incorporating turbine powered engine simulators
[AMIA PAPER 82-2635] p0242 A82-25154

BAIN, J. D.
Modification of OB-258/UNK Tactical Air Navigation (TACAN) antenna group
[AD-A916680] p0498 A82-26246

BAIN, R.
Aircraft measurements of icing in supercooled and water droplet/ice crystal clouds
[ASME PAPER 82-36091] p0433 A82-36091

BAIRD, B.
Development of a taped random vibration technique for acceptance testing
[AMIA PAPER 82-22171] p0394 A82-22171

BAIRD, L. A.
A numerical three-dimensional turbulent simulation of a subsonic VSTOL jet in a cross-flow using a finite element algorithm
[AD-A104514] p0036 A82-11055

BAIRD, R.
Computer architecture study for VTITS simulators
[AD-A115006] p0504 A82-30953

BAKER, C. J.
Turbulent boundary-layer development on a two-dimensional aerofoil with supercritical flow at low Reynolds number
[ASME PAPER 82-36091] p0359 A82-36091

BAKER, R. M.
In-plane shear test of thin panels
[ASME PAPER 82-40545] p0502 A82-40545

BAKER, D. A.
Evaluation of methods for characterizing surface topography of models for high Reynolds number wind-tunnels
[AMIA PAPER 82-0603] p0238 A82-24675

BAKELANT, V. A.
Design for turbine machine blade variations in subsónico flow
[AMIA PAPER 82-15048] p0142 A82-15048

BALS, L.
Monopole antenna patterns on finite size composite ground planes
[ASME PAPER 82-40555] p0518 A82-40555

BALSHEK, B. F.
Structural strength of materials and parts of gas turbine engines
[ASME PAPER 82-42063] p0544 A82-42063

BALSUBRAMANIAN, T. S.
Numerical treatment of helicopter rotor stability problems
[ASME PAPER 82-42045] p0019 A82-2209
Thrust-induced effects on low-speed aerodynamics

Overview of flight and ground testing with the IAH-64A composite flexbeam tall rotor

Identification of the form of motion of an aircraft

Procurement of the new flight and tactics simulators - Experience, problems, meaning

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

Maneuver load control for the reduction of design loads and improvement of the maneuverability of modern fighter aircraft

Properties of the new flight and tactics simulators - Experience, problems, meaning

The Helicopter Rode Revolution

Checking and calibrating variometers in place in the sailplane instrument panel

Attack and en route avionics for in-flight operations

The Maneuverable Atmospheric Probe (SAP), a remotely piloted vehicle

An investigation of a stoppable helicopter rotor with circulation control

Computational aerodynamics and design

An experimental study of the effect of tail configuration on the spanwise characteristics of general aviation aircraft

Rotor wake characteristics relevant to rotor-stator interaction noise generation

Identification of the form of motion of an aircraft

Design and analysis of a multivariable control system for a CCF-type fighter aircraft

Analysis of flight data in the frequency domain

The YAH-64A composite flexbeam tail rotor

Overview of flight and ground testing with emphasis on the wind tunnel

AWS - realistic not futuristic

Thrust-induced effects on low-speed aerodynamics of fighter aircraft

Thrust-induced effects on low-speed aerodynamics of fighter aircraft

Thrust reversing effects on twin-engine aircraft having nonaxisymmetric nozzles

Effect of nozzle and vertical-tail variables on the performance of a 3-surface F-15 model at transonic Mach numbers

Thrust reversing effects on twin-engine aircraft having nonaxisymmetric nozzles

Distribution of the thermal environment for externally carried aircraft stores and ordnance

A practical approach to the incorporation of technical advances in avionics

Performance analysis of the test results on a two-stage transonic fan

Flying qualities criteria for single pilot IFR operations

Development of flying qualities criteria for single pilot instrument flight operations

Minimal order time sharing filters for IFS in-flight alignment

The effects on simulators of advances in aircraft technology

Fixed gain controller design for aircraft

Fixed gain controller design for aircraft

Air to air combat simulation

Scale-model studies for the improvement of flow transitions between two specified cross sections with applications to blended wing body configuration

Conformal antenna array design handbook

An analytical procedure for computing smooth transitions between two specified cross sections with applications to blended wing body configuration

-flight alignment

Tanker Avionics/Aircrew Complement Evaluation

Tanker Avionics/Aircrew Complement Evaluation

Volume 2: Crew system design

Quantification of the thermal environment for externally carried aircraft stores and ordnance

Flight control systems for aerial targets

Determination of the trimmed drag of an aircraft

Scale-model studies for the improvement of flow patterns of a low-speed tunnel

A survey of melting layer research

The study of combat aircraft maneuverability by air to air combat simulation
BABBED, V. G.

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

$\text{p0081 A82-15482}$

BACCOM, J. 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 measuring technique and predictions

$\text{ASME PAPER 82-GT-175}$

BAEHR, H. G., J.E.

The all composite Lear Fan 2100

$\text{p0077 A82-14936}$

BAEHR, H. C.

Airworthiness regulation: What is our strategy - What are the issues

$\text{p0224 A82-24006}$

BAEHR, S. G.

The electromagnetic theta gas and tabular projectivities

$\text{p0125 A82-18182}$

BRADON, W. D.

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

$\text{p0034 A82-11033}$

BRADST, L. C.

Sensor failure detection system

$\text{NASA-CP-165515}$

BRATS, L. E.

The design of a viewing system for near real time stereo images from a DBA borne linescan sensor

$\text{p0494 A82-39746}$

BRATY, L. D.

Predictions of aerodynamic characteristics of highly maneuverable configurations

$\text{p0348 A82-22199}$

BRADY, R.

Mirage 2000 - Towards possible high series production aircraft

$\text{p0461 A82-38249}$

BRECH, B. D.

The CF6 jet engine performance improvement: Low pressure turbine active clearance control

$\text{NASA-CP-165557}$

$\text{p0610 A82-33393}$

BRECH, L. H.

Wear by generation of electrokinetic streaming currents

$\text{ASLE PREPRINT 82-AM-6A-3}$

$\text{p0443 A82-37857}$

BRECH, F. E.

Open-cycle vapor compression heat pump

$\text{p0259 A82-18553}$

BRECH, J.

Gust load alleviation on Airbus A 300

$\text{p0504 A82-40881}$

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 gust load decrease and examination of its effectiveness in stochastic gusts

$\text{ASME-PF-172/5/FPB-3/P-1}$

$\text{p0267 A82-19228}$

BRECH, J.

Measurement of the influence of flow distortions on the blade vibration amplitude in an air turbine

$\text{ASME PAPER 81-DET-135}$

$\text{p0162 A82-19348}$

BRECHT, L. H.

Main flow and noise measurements in a Bach 3.5 pilot quiet tunnel

$\text{ASIA 82-0509}$

$\text{p0236 A82-24657}$

BRECH, J. F.

Wind tunnel tests of powered models: A comparison of two methods of simulating the jets of jet engines

$\text{p0095 A82-13087}$

Wind tunnel tests of engine-equipped models: Comparison of two jet wash simulation methods

$\text{NASA-TE-76764}$

$\text{p0134 A82-14091}$

BEDDE, J.

A new approach to the problem of stress corrosion cracking in 7075-T6 aluminum

$\text{p0222 A82-23772}$

BEDDIE, R. G.

Efficient use of working fluids in aviation hydraulic systems

$\text{p0082 A82-15724}$

BEDDOSS, R.

Application of structural optimization technique to reduce the external vibrations of a gas-turbine engine

$\text{ASME PAPER 81-DET-143}$

$\text{p0162 A82-19351}$

BERGH, P.

The future of integrated CAD/CAM systems - The Boeing perspective

$\text{p0167 A82-20278}$

BERDILL, D. L.

Design study into a high endurance mini-rotorcraft

$\text{p0266 A82-19216}$

BERENDOER, J. L.

Jet engine lubricant reclamation

$\text{p0455 A82-26312}$

BERG, M.

Attack and en route avionics for in-weather operations

$\text{p0471 A82-27300}$

BEERHART, E. L.

Local heat transfer to staggered arrays of impinging circular air jets

$\text{ASME PAPER 82-GT-211}$

$\text{p0427 A82-35401}$

BERES, L. H.

NASA research in aircraft propulsion

$\text{ASME PAPER 82-GT-177}$

$\text{p0426 A82-35389}$

NASA research in aircraft propulsion

$\text{NASA-TR-82771}$

$\text{p0100 A82-13146}$

BERG, E. M.

Implementing the DAIS executive

$\text{p0076 A82-14934}$

BERG, E. C.

Radiating elements for hemispherically scanned arrays

$\text{p0379 A82-32992}$

BEIN, T. H.

Foundations for computer simulation of a low pressure oil flooded single screw air compressor

$\text{AD-A108230}$

$\text{p0268 A82-19391}$

BELL, L.

Fuel quality processing study, volume 1

$\text{NASA-CP-165277-VOL-1}$

$\text{p0399 A82-24649}$

Fuel quality processing study. Volume 2: Appendix. Task 1 literature survey

$\text{NASA-CP-165277-VOL-2}$

$\text{p0399 A82-24650}$

BELAHO, J. L.

Electromechanical Actuation Development Program (EADP). Power control development

$\text{A82-116126}$

$\text{p0572 A82-31694}$

BELCHER, C.

Operablility of military aircraft - Avionic design aspects

$\text{p0174 A82-20564}$

BELCHER, D. A.

8 & 8 characteristics of a Microwave Landing System

$\text{p0548 A82-22216}$

BELINGO, E. T.

Proposed multipurpose flying radio-physical laboratory using an XL-16 aircraft

$\text{AD-A143278}$

BELNAP, H. H.

Performance characteristics of a buoyant quad-rotor research aircraft

$\text{p0513 A82-40974}$

BELK, R. F.

CH-47 fibreglass rotor blade design and fabrication

$\text{p0280 A82-26397}$

BELL, D. R.

Lucas stretched acrylic

$\text{p0227 A82-24318}$

BELL, H.

Telemetry Computer System at Wallops Flight Center

$\text{p0290 A82-27168}$

BELL, J. L.

A laboratory mock-up ultrasonic inspection system for composites

$\text{AD-A142526}$

$\text{p0419 A82-35256}$

BELL, W. L.

Investigation of Wilcox model 585B very high frequency omnidirectional radio range (VOR) system, part 3

$\text{AD-A107855}$

$\text{p0200 A82-17149}$

BELLAMY, M.

Development of a correlated finite element dynamic model of a complete aero engine

$\text{ASME PAPER 81-DGT-74}$

$\text{p0161 A82-19326}$
PERSOBN AUTHOR INDEX

Development of a correlated finite element dynamic model of a complete aero engine  
[PFA-90081] p0355 A82-22272

BELLINGER, R. D.
Acrodynamic lag functions, divergence, and the British flutter method  
[PHF-90083] p0433 A82-35820

BELTHERETSKII, S. L.
Computer aided investigation of turbocharge aerodynamics and aerolasticity  
[PHF-90084] p0143 A82-15053

BELTE, D.
Helicopter icing spray system - Improvements and flight experience  
[IAA-79-T-021] p0223 A82-12696

Helicopter icing spray system  
[IAA-79-T-022] p0177 A82-20754

Helicopter Icing Spray System (HISS) nozzle improvement evaluation  
[AD-1109405] p0264 A82-19208

BEL, D. J.
Measuring LF and HF antenna radiation patterns by means of a helicopter  
[PHF-90085] p0307 A82-34772

BERRY, L. J.
Emergency in-flight egress for general aviation aircraft  
[PHF-90086] p0077 A82-14953

BENDA, L.
Exterior noise on the fuselage of light propeller driven aircraft in flight  
[PHF-90087] p0581 A82-46114

BERGENS, R. L.
Digital active control system for load alleviation for the Lockheed L-1011  
[PHF-90088] p0104 A82-16147

BERGNI, R. J.
In situ ozone data for comparison with laser absorption remote sensor: 1980 PEP/BEOS program  
[ASA-PB-80-041] p0613 A82-25661

BENELLI, G.
VHF radio link for ground-air-ground communications using an integrated voice-data modulation  
[PHF-90089] p0681 A82-38005

Combined amplitude-phase modulation for a VHF communication link  
[PHF-90090] p0553 A82-43870

BERGKING, R. L.
Surface flow visualization requirements for testing in STF  
[PHF-90091] p0596 A82-32667

BENZENSCHE, S.
Effect of crossflows on the discharge coefficient of foil cooling holes  
[ASA-PB-80-042] p0266 A82-35371

BENZENSCHE, G. G. L.
New techniques in data retrieval and display  
[PHF-90092] p0401 A82-25174

BENNETT, G.
A study of the suitability of the all fiberglass X-11A aircraft for fuel efficient general aviation flight research  
[PHF-90093] p0178 A82-20764

BENNETT, L. L.
External aerodynamic design for a laminar flow control glove on a Lockheed JetStar wing  
[PHF-90094] p0505 A82-40895

BENNETT, J. C.
Development of a correlated finite element dynamic model of a complete aero engine  
[ASA-PB-81-DET-78] p0161 A82-19326

Development of a correlated finite element dynamic model of a complete aero engine  
[PHF-90095] p0355 A82-22272

BENNETT, L.
Meteorological aspects of North Atlantic flight tracks - The development of programs for minimum-time tracks  
[PHF-90096] p0549 A82-43249

BENNETT, L. L.
Optimum structural design  
[PHF-90097] p0502 A82-40593

BENNETT, L. L.
Application of a transonic potential flow code to the static aerelastic analysis of three-dimensional wings  
[PHF-90098] p0339 A82-30156

BERNSTEIN, H. L.
Application of a transonic potential flow code to the static aerelastic analysis of three-dimensional wings  
[PHF-90099] p0363 A82-23193

Time-marching transonic flutter solutions including angle-of-attack effects  
[PHF-90100] p0363 A82-23196

BERNSH, J. C.
Limited artificial and natural icing tests production US-60A helicopter (re-evaluation)  
[AD-A112582] p0452 A82-26287

BENTLEY, L. R.
Standards in aircraft noise certification  
[PHF-90101] p0322 A82-22005

BERNIE, K. L.
The city and aviation  
[PHF-90102] p0149 A82-18898

BERNHETEY, N. S.
Allowing for the wall boundary layer in a stage of the axial compressor  
[PHF-90103] p0319 A82-21209

BERKESCHE, V. R.
Proposed multipurpose flying radio-physical laboratory using an IL-18 aircraft  
[PHF-90104] p0550 A82-32728

BERG, K. L.
Development of a low rank augmentation system for an energy efficient transport having relaxed static stability  
[ASA-PB-81-159166] p0592 A82-32377

BERGER, K. L.
Comparison between the exact and an approximate feedback solution for medium range interception problems  
[PHF-90105] p0044 A82-13106

BERGER, J.
Theory and experiment in unsteady aerodynamics  
[PHF-90106] p0199 A82-17120

BERHOLLIDE, D. R.
The use of 'kaptan' polyimide film in aerospace applications  
[ASA-PB-81-109] p0234 A82-24413

BERKOVITE, L.
Fatigue life of laps under service loading - Test results and predictions  
[PHF-90107] p0015 A82-11665

BERKHOKE, M.
Advanced stratified charge rotary aircraft engine design study  
[ASA-PB-81-165398] p0478 A82-27743

BERLIN, K. L.
Repair and maintenance of buildings in civil aviation  
[PHF-90108] p0544 A82-42059

BERRAH, M.
Structural system identification technology verification  
[AD-109181] p0269 A82-19583

Dynamic System Coupling (DISCO) program. Volume 1: User's manual  
[AD-115003] p0573 A82-31974

Dynamic System Coupling (DISCO) program. Volume 2: Theoretical manual  
[AD-115004] p0573 A82-31975

BERRAH, M.
X-29A flight control system design experiences  
[ASA-PB-82-1538] p0486 A82-39003

BERRAH, P.
CATIA - A computer aided design and manufacturing tridimensional system  
[PHF-90109] p0514 A82-30990

BERRAH, M.
New image generators for the next generation of civil aircraft  
[ASA-PB-81-1767] p0555 A82-44236

BENNETT, R.
Measuring the flow properties of slotted test-section walls  
[TPA-135] p0529 A82-28571

BERKWEIT, L. L.
Digital signal processing on a background of rereflections for the international aircraft landing system  
[PHF-90110] p0053 A82-13703

BERNSTEIN, K. L.
Mechanical property characterization and modeling of structural materials  
[AD-A113841] p0478 A82-27784

B-11
A laser-interferometer method for determining the forces on a freely-flying model in a shock-tunnel environment.

(p0060 A82-13946)

BERGERON, R. L.

Static internal performance of single expansion-ramp nozzles with thrust vectoring and reversing.

([NASA TP 1962] p0302 B82-20156)

BERRY, J. D.

Investigation of subsonic nacelle performance improvement concept.

([AIAA PAPER 82-1042] p0437 B82-37676)

BERRY, G. E.

Flying qualities - A costly lapse in flight-control design.

(p0296 B82-28200)

BERRY, J. L.

Performance testing of a main rotor system for a utility helicopter at 1/4 scale.

([NASA TN D3274] p0352 B82-22251)

BERRY, J. L.

The LANTERN wide field-of-view raster Head-Up Display.

(p0074 B82-14825)

BERRY, V. L.

Crashworthy airframe design concepts: Fabrication and testing.

([NASA CR-3563] p0613 B82-33735)

BERSON, R. L.

Aircraft alerting systems standardization study.

(p0098 B82-13466)

Aircraft alerting systems standardization study.

(p0690 B82-16077)

Volume 2: Aircraft alerting systems design guidelines.

([AD-1106732] p0190 B82-26077)

Volume 1: Candidate system validation and time-sensitive display evaluation.

([AD-107225] p0463 B82-27236)

Aircraft alerting systems standardization study.

(p0690 B82-13388)

BETHANY, D.

Helicopter development in France.

(p0208 B82-17216)

BETHOLD, G.

Subsonic military aircraft engine intake: An integrated theoretical experimental design.

(p0094 B82-13073)

BUBBEL, R. A.

Digital avionics - What a pilot expects to see.

(p0047 B82-13455)

BICKLEB, P. E.

Advanced crash survivable flight data recorder and Accident Information Retrieval System (AIBS).

([AD-1105510] p0132 B82-14072)

BILKE, J.

The application of NAVSTAR differential GPS in the civilian community.

(p0235 B82-29465)

BILKE, R. C.

Civil (French/US) certification of the Coast Guard’s HH-65A Dauphin.

(p0364 B82-23210)

BRENTZ, K. L.

The outlook for advanced transport aircraft.

(p0181 B82-21370)

BRENTZ, F. C.

Detached flow past V-shaped low-aspect-ratio wings.

(p0387 B82-34136)

BRENTZ, J. L.

Aerodynamically induced vibration.

([AD-1100493] p0455 B82-26306)

BRENTZ, R. M.

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

([NASA TN D4247] p0251 B82-28252)

BRENTZ, J.

Corrosion prevention measures used in the construction of an aircraft airframe: The case of 2014 and 2214 alloys.

(p0212 B82-17360)

BEVER, C. L.

The development and use of a computer-interactive data acquisition and display system in a flight environment.

([AIAA PAPER 82-237] p0455 A82-13946)

BEVILAQUA, P. A.

IVF-12A diagnostic and development program.

([AD-1109354] p0254 B82-18026)

BEYER, L.

Experimental investigation of a helmet mounted sight/display for helicopter.

(p0092 B82-11306)

Experimental investigation of visual aids for helicopters: Low level flight at night and poor visibility.

(p0251 B82-18168)

BEYERS, R. E.

Direct free-flight analysis of aircraft dynamics at high angles of attack.

(p0081 B82-15596)

Design of dynamically-ocled, asymmetrical wind tunnel models.

(p0356 B82-22285)

BEEZER, W. J.

Digital test pilot concept.

([AIAA PAPER 82-0259] p0118 B82-17867)

BEEZER, J. C.

Parametric study of the influence of the engine upon the operating cost of a civil helicopter.

(p0246 B82-18131)

Parametric study of the influence of the engine upon the operating cost of a civil helicopter.

(p0355 B82-22273)

BENT, R. E.

Three-dimensional flow studies on a slotted transonic wind tunnel wall.

(p0117 B82-17855)

BENT, R. E.

Optimum journal bearing parameters for maximum rotor subharmonic response in synchronous whirl.

([AS88 A98 81-287-55] p0161 B82-19314)

BENT, A. M.

Sensor stabilization requirements of RPVs - a simulation study.

(p0494 B82-39791)

BENT, A. C.

Analysis of high load dampers.

([NASA CR-165503] p0369 B82-23248)

BENTLEY, L. C.

Application of computational methods to transonic wing-design.

(p0431 B82-35561)

BENTLEY, R. M.

Impact resistance of graphite and hybrid configurations.

(p0288 B82-27141)

BENDER, P. S.

Development and application of a performance prediction method for straight rectangular diffusers.

([AS88 A98 82-CT-122] p0425 B82-35352)

BERKAL, R. D.

Develop, demonstrate, and verify large area composite structural bonding with polylide adhesives.

([NASA CR-165839] p0459 B82-26465)

BERTUL, R. L.

Design of finite element grids for the computation of the three-dimensional transonic flow around a wing.

([AIAA PAPER 82-1019] p0375 B82-31972)

BECARO, L. J.

Advanced fighter technology integration program.

([AFTR/7-16] p0506 B82-40900)

BECLE, R. C.

Synthetic aperture radar target simulation.

([NASA CR-85-850-2-1] p0331 B82-40286)

BEECHER, K. L.

Aeroelastic analysis for helicopter rotor and a body of revolution.

([NASA TN D4247] p0251 B82-28252)

BEECHER, J. L.

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

([NASA CR-165866] p0566 B82-31298)

BEECHER, K. L.

A simple hybrid visual simulation for research flight simulators.

([NASA TF-650] p0210 B82-17223)

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 DPFLR.

([NASA TF-675] p0266 B82-19219)
### BLOBBIIITS, K.

**Bodies:**
- The effect of erosion near on the vibration characteristics of axial-turbine blades
  - P0491 A82-39279
- Aerodynamic behavior of a slender slot in a wind tunnel wall
  - P0461 A82-38201

### BLOBBUK, B.

**Bodies:**
- Physical data devices
  - P0491 A82-39279
- On the design of some airfoils for sailplane application
  - P0512 A82-40967

### BLOBBIYO, B.

**Bodies:**
- Aerodynamic behavior of a slender slot in a wind tunnel wall
  - P0461 A82-38201

### BLOBBIIK, B.

**Bodies:**
- Operational evaluation of a propeller test stand in the quiet flow facility at Langley Research Center
  - NASA-TR-84523
- Implementable differential equations for nonlinear filtering
  - NASA-RP-81037
- QCSEE under-the-wing engine acoustic data
  - NASA-TR-82691
- QCSEE over-the-wing engine acoustic data
  - NASA-R-82708
- FEDU - The interface for engine data to AIDSS
  - AIAA-paper 82-1127
- Automated flight data processing
  - AIAA-paper 82-1127

### BLOB, B. A. P.

**Bodies:**
- Implementation of high temperature transparent windshields for high performance aircraft
  - NASA-TR-82465
- Basic studies of the flow fields of airfoil-flap-spoiler systems
  - NASA-AR-82-0713
- Multifunction airborne radio architecture study
  - NASA-AI-82-114427
- Automated flight data processing
  - NASA-AI-82-114427

### BLOB, B. L.

**Bodies:**
- Multifunction airborne radio architecture study
  - NASA-AI-82-114427
- Automated flight data processing
  - NASA-AI-82-114427

### BLOB, B. P.

**Bodies:**
- Operational evaluation of a propeller test stand in the quiet flow facility at Langley Research Center
  - NASA-TR-84523
- Implementable differential equations for nonlinear filtering
  - NASA-RP-81037
- QCSEE under-the-wing engine acoustic data
  - NASA-TR-82691
- QCSEE over-the-wing engine acoustic data
  - NASA-R-82708
- FEDU - The interface for engine data to AIDSS
  - AIAA-paper 82-1127
- Automated flight data processing
  - AIAA-paper 82-1127

### BLOB, B. P.

**Bodies:**
- Aerodynamic behavior of a slender slot in a wind tunnel wall
  - P0461 A82-38201

### BLOB, B. P.

**Bodies:**
- Operational evaluation of a propeller test stand in the quiet flow facility at Langley Research Center
  - NASA-TR-84523
- Implementable differential equations for nonlinear filtering
  - NASA-RP-81037
- QCSEE under-the-wing engine acoustic data
  - NASA-TR-82691
- QCSEE over-the-wing engine acoustic data
  - NASA-R-82708
- FEDU - The interface for engine data to AIDSS
  - AIAA-paper 82-1127
- Automated flight data processing
  - AIAA-paper 82-1127
Dept. of Defense 1981-1986

Bosch, A. G.

Integrated electronics - Concepts and concerns

(AIAA 81-2211) p0014 A82-13952

The agile transversal filter - A flexible building block for ICRA

(AIAA 81-2300) p0070 A82-14765

Bosch, K. B.

Aerodynamic tailoring for control and performance: Are requirements compatible?

(AIAA 82-1140) p0343 A82-22200

Bosch, M. L.

Terrain model animation

(AIAA 82-10791) p0215 A82-17887

Bosco, B. L.

A study of the techniques of dynamic analysis of helicopter type structures

(p0246 A82-18129

Bosco, C. P., Jr.

The prevalence of visual deficiencies among 1979 pilot flight experience

[ABBE PAPBB 82-GT-106] p0424 482-35342

Boscoi, J. S., Jr.

Improvements to secondary radar for air traffic

control

(AIAA 81-2655) p0157 A82-19220

Boscoi, J. B.

Analysis of selected VTOL concepts for a civil transportation mission

(AIAA 81-2655) p0157 A82-19220

Boscoi, J. L. B.

Spin-tunnel investigation of a l/13-scale model of the HASA 4D-1 oblique-King research aircraft

(HASA-TH-83-236) p0070 A82-49899

Boscoi, J. L.

The effect of NaCl/g/ in high temperature oxidation

(AIAA PAPER 82-07-06) p0624 A82-35342

Boscoi, L.

The city and aviation

(p0119 A82-18898

Boscoi, L. P.

Proposed multipurpose flying radio-physical laboratory using an IL-18 aircraft

(p0550 A82-43278

Boscoi, V. O.

Basic problem of aircraft gasturbine engine analytic design. II

(p0014 A82-11063

Boscoi, R. E.

A numerical method for studying nozzle-jet-airfoil interaction in inviscid three-dimensional flow

(p0096 A82-13094

Boscoi, R. F.

Application of laser velocimetry to large industrial wind-tunnels

(OHEBA, TP NO. 1982-63) p0553 A82-47357

Boscoi, R. H.

Progress in aeronautical research and technology applicable to civil air transports

(p0061 A82-13974

Boscoi, R. L.

A summary of jet-impingement studies at McDonnell Douglas Research Laboratories

(AIAA PAPER 81-2613) p0107 A82-16004

Bossi, A.

An advanced nozzle integration for air combat fighter application

(AIAA PAPER 82-11235) p0439 A82-37694

Bossi, B. H.

Application of advanced exhaust nozzles for tactical aircraft

(p0505 A82-40889

Bossi, C.

Integration of advanced exhaust nozzles

(p0904 A82-13075

Bossi, C.

Improvements to secondary radar for air traffic control

(p0341 A82-30311

Bowden, J. M.

Analysis of selected VTOL concepts for a civil transportation mission

(AIAA 81-2655) p0157 A82-19220

Bowden, J. M., Jr.

Spin-tunnel investigation of a 1/13-scale model of the NASA AD-1 oblique-wing research aircraft

[NASA-TN-83236] p0252 A82-18183

tactical aircraft

(Wing design for supersonic cruise/transonic

maneuver aircraft

(Supersonic cruise/transonic maneuver wing section

development study /AD-110686/)

(BOOKE, D. E.

Aerodynamic tailoring for control and performance: Are requirements compatible?

(AIAA 82-1140)

BOOKE, D. L.

Terrain model animation

(AIAA 82-10791)

BOOKE, D. L.

A study of the techniques of dynamic analysis of helicopter type structures

(p0246 A82-18129)

BOOKE, C. P., Jr.

The prevalence of visual deficiencies among 1979 pilot flight experience

[ABBE PAPBB 82-GT-106] p0424 482-35342

BOOKE, J. S., Jr.

Improvements to secondary radar for air traffic

control

(AIAA 81-2655) p0157 A82-19220

BOOKE, J. L. B.

Spin-tunnel investigation of a l/13-scale model of the HASA 4D-1 oblique-King research aircraft

(HASA-TH-83-236) p0070 A82-49899

BOOKE, R. E.

A numerical method for studying nozzle-jet-airfoil interaction in inviscid three-dimensional flow

(p0096 A82-13094

BOOKE, R. F.

Application of laser velocimetry to large industrial wind-tunnels

(OHEBA, TP NO. 1982-63) p0553 A82-47357

BOOKE, R. H.

Progress in aeronautical research and technology applicable to civil air transports

(p0061 A82-13974

BOOKE, R. L.

A summary of jet-impingement studies at McDonnell Douglas Research Laboratories

(AIAA PAPER 81-2613) p0107 A82-16004

BOOKE, A.

An advanced nozzle integration for air combat fighter application

(AIAA PAPER 82-11235) p0439 A82-37694

BOOKE, B. H.

Application of advanced exhaust nozzles for tactical aircraft

(p0505 A82-40889

BOOKE, C.

Integration of advanced exhaust nozzles

(p0904 A82-13075

BOOKE, C.

Improvements to secondary radar for air traffic control

(p0341 A82-30311

BOOKE, J. M.

Analysis of selected VTOL concepts for a civil transportation mission

(AIAA 81-2655) p0157 A82-19220

BOOKE, J. M., Jr.

Spin-tunnel investigation of a 1/13-scale model of the NASA AD-1 oblique-wing research aircraft

[NASA-TN-83236] p0252 A82-18183

BOOKE, D. E.

Aerodynamic tailoring for control and performance: Are requirements compatible?

(AIAA 82-1140)

BOOKE, D. L.

Terrain model animation

(AIAA 82-10791)

BOOKE, D. L.

A study of the techniques of dynamic analysis of helicopter type structures

(p0246 A82-18129)

BOOKE, C. P., Jr.

The prevalence of visual deficiencies among 1979 pilot flight experience

[ABBE PAPBB 82-GT-106] p0424 482-35342

BOOKE, J. S., Jr.

Improvements to secondary radar for air traffic

control

(AIAA 81-2655) p0157 A82-19220

BOOKE, J. L. B.

Spin-tunnel investigation of a l/13-scale model of the HASA 4D-1 oblique-King research aircraft

(HASA-TH-83-236) p0070 A82-49899

BOOKE, R. E.

A numerical method for studying nozzle-jet-airfoil interaction in inviscid three-dimensional flow

(p0096 A82-13094

BOOKE, R. F.

Application of laser velocimetry to large industrial wind-tunnels

(OHEBA, TP NO. 1982-63) p0553 A82-47357

BOOKE, R. H.

Progress in aeronautical research and technology applicable to civil air transports

(p0061 A82-13974

BOOKE, R. L.

A summary of jet-impingement studies at McDonnell Douglas Research Laboratories

(AIAA PAPER 81-2613) p0107 A82-16004

BOOKE, A.

An advanced nozzle integration for air combat fighter application

(AIAA PAPER 82-11235) p0439 A82-37694

BOOKE, B. H.

Application of advanced exhaust nozzles for tactical aircraft

(p0505 A82-40889

BOOKE, C.

Integration of advanced exhaust nozzles

(p0904 A82-13075

BOOKE, C.

Improvements to secondary radar for air traffic control

(p0341 A82-30311

BOOKE, J. M.

Analysis of selected VTOL concepts for a civil transportation mission

(AIAA 81-2655) p0157 A82-19220

BOOKE, J. M., Jr.

Spin-tunnel investigation of a 1/13-scale model of the NASA AD-1 oblique-wing research aircraft

[NASA-TN-83236] p0252 A82-18183

B-15
Beat release rate calorimetry of engineering plastics

Determining performance parameters of general aviation aircraft

Heat release rate calorimetry of engineering plastics
channel of a turbomachine
(KOBRA-IF-1982-2) p0592 A82-23272

BRYANT, C. F.
Optimization in multivariable design
p0546 A82-42565

BRYANT, N. S.
Design and flight testing of a digital optimal control general aviation autopilot
p0507 A82-60906

Description of a dual fail operational redundant strapdown inertial measurement unit for
tegrated avionics systems research p0138 A82-14842

BUTSON, L. E., Jr.
An overview of optimal control in aerospace systems
p0036 A82-11074

BULIP, P.
Unsteady pressure measurements at stall and
buffeting [DPhL-VTTT-79-09] p0364 A82-23198

BUCH, L.
Fatigue life of leads under service loading - Test
results and predictions p0015 A82-11685

BUCHANAN, R.
Small turbine engine augmentor design methodology
[AIAA PAPER 82-1179] p0417 A82-35044

BUCHANAN, T. W.
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 A82-12047

BUCHOLZ, R.
Applications of covariance analysis simulation to
avionics flight testing p0070 A82-14767

BUCHOLZ, R.
Aerodynamic characteristics of a large-scale, twin
tilt-rotor V/STOL model
[AIAA PAPER 81-0150] p0482 A82-38443

BUCHARDER, R. K.
Design of a catadioptric VCAS helmet-mounted
display [AD-A109431] p0305 A82-20181

BUCK, E. M.
Flight crew management and cockpit performance
systems p0111 A82-17285

BUCER, E. G.
Inflatable system for fast deployment of
parachutes at low altitudes from slow moving
aircraft or stationary supports
[AIAA PAPER 81-1953] p0008 A82-10428

BUCKSICH, R. M.
Design challenges of high performance aircraft POD
[BUC Cooling systems
[AIR PAPER 81-EBAS-06] p0011 A82-10894

BUCKET, D. M.
Effect of mechanical surface and heat treatments on
erosion resistance p0285 A82-27071

BUCH, E. M.
Progress in the development of energy efficient
engine components
[AIAA PAPER 82-07-275] p0429 A82-35450

Technology advancements for energy efficient
aircraft engines
[AIAA PAPER 82-1051] p0030 A82-35479

BUDDALO, E.
Corrosion fatigue behaviour of some aluminum alloys
p0210 A82-17345

BuLBUN, C.
Helicopters - Night operations p0153 A82-19017

BULATROIC, V. L.
Proposed multipurpose flying radio-physical
laboratory using an IL-18 aircraft p0550 A82-63278

BULATOV, S. N.
Investigation of the stream-strain state of a
rectangular wing section of variable thickness
under concentrated loads and heating
[AD-A127598] p0127 A82-16598

Analysis of shells of straight-wing type
p0330 A82-29841

BULL, G.
Determining performance parameters of general
aviation aircraft
B-19

BULL, J. A.
Wind tunnel tests of ejection seat for high
dynamic pressure escape p0177 A82-20759

BULL, J. S.
Demonstration of radar reflector detection and
ground clutter suppression using airborne
weather and mapping radar p0500 A82-40532

BULLOCK, C.
On-board computers save fuel and help ATC
p0275 A82-26046

BULOW, J. W.
Present challenges of research and technology
politics [AIAA-TR-76-7072] p0565 A82-31147

BULGER, L. P.
Dispersion and temperature-force dependence of the
high-temperature strength characteristics of a
gas-turbine-engine disk alloy p0182 A82-21636

BUNIE, V. L.
Effects of cable geometry and aircraft attitude on
the accuracy of a magnetic leader cable system
for aircraft guidance during rollout and turnover
[AIAA-TP-1978] p0351 A82-22129

BUNKE, E. J.
Proposed method for abrasion testing transparent
plastics and coatings p0227 A82-24311

BUNN, T.
In situ' composites for jet propulsion and
stationary gas turbine applications
p0092 A82-15824

BUNES, V. G.
Finite element calculation of the aerodynamic
forces on a vibrating wing in supersonic flow
p0367 A82-39128

BUNNELL, R. W.
Development of low-order model of an X-wing
aircraft by system identification
[AD-A111760] p0469 A82-27286

BURGO, E. T.
Analysis of high load dampers
[AIAA-TR-165503] p0369 A82-23248

BUCIC, T.
Low grade fuels for turbo and jet engines
p0221 A82-23439

BUCIC, R. E.
Multiple pure tone elimination strut assembly
[AIAA-CASE-FC-1106-1] p0193 A82-16800

BUCIC, R. E., Jr.
Recent propulsion system flight tests at the NASA
Dryden Flight Research Center
[AIAA PAPER 81-2438] p0055 A82-13674

flight evaluation of a digital electronic engine
control system in an F-15 airplane
[AIAA PAPER 82-1080] p0438 A82-37683

BULL, J. A.
Flow control for a high energy laser turret using
trapped vortices p0561 A82-30547

BULDESS, L. B.
Simulation report: Advanced display for complex
flight trajectories
[AD-A111259] p0457 A82-26320

BURGES, R.
Propulsion problems associated with aircraft
communications systems
p0539 A82-29535

BURGES, T. J.
The electromagnetic theta gun and tubular
projectiles p0125 A82-18182

BUIE, C.
Aerodynamic investigations to determine possible
ace flight paths [AIAA-TR-76-7048] p0463 A82-27235

BUIE, J. M.
Presentation of a modern 4-bladed rotor for the
NASA rotor systems research aircraft
[AIAA-TR-16153] p0167 A82-16042

BURKE, E. J.
Application of a microprocessor controlled cockpit
display for enhanced pilot control of flight
p0287 A82-27126
BOBBBAB, A. C.

BOHKBABD, A. B.

BOBHS. I. F.

BDBBS. B.

BDBBS, J. P.

BOBBBAB, 6.

BOBKS. J. S.

BOBKBABD, A. B.

BOBBOBS, J. B.

BOBBSIDB, B. D.

BOBBS, B. C.

BOBBS, B. B. A.

BOBBAT, B.

BOBHEISTEB. B. B.

BOBTOB. B. A.

BDBBOIS. I_ I.

BOBXOB, 1. D.

GTD analysis of airborne antennas radiating in the B-747 vortex alleviation flight tests: Chicago monostatic acoustic vortex sensing system. Flow field studies using holographic • Supersonic nozzles without shocks Botor systeas research aircraft /BSBA/ rotor force

Fuel optimal trajectory computation

A survey of U.S. Army helicopter main and tail rotor blade obstacle strikes

A Pet-18 high authority/high gain digital flight control system development and flight testing

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

Describing function analysis of nonlinear nose gear shock

Panel Optimization with Integrated Software

PERSONAL AUTHOR INDEX

BORKHARD, L. H.

Development and use of dynamic qualification standards for Air Force stores

BORES, J. S.

Rotor systems research aircraft /BSBA/ rotor force and moment measurement system

BOREII, R. E.

Experimental and analytical results of tangential Blowing applied to a supersonic F/STOL inlet

BURKHISTAD, A. H.

Design to life cycle cost capability of the PRICE models

[TAP PAPER 82-221] p0556 A82-64695

BURNN, R. L.

Supersonic nozzles without shocks

BORES, E. R. A.

Advanced aerodynamic design for future combat aircraft

BORES, J. F.

Mapping in tropical forests - A new approach using the laser AFB

BORES, R.

Source assessment system

BORES, R. C.

Straydown inertial reference systems performance analysis

BORES, T. F.

Experimental studies of the Eppler 61 airfoil at low Reynolds numbers

BOURSIDE, W. A.

GTD analysis of airborne antennas radiating in the presence of lossy dielectric layers

Elevation plane analysis of on-aircraft antennas

Near field analysis of airborne antennas

FUEL optimal trajectory computation

A survey of U.S. Army helicopter main and tail rotor blade obstacle strikes

F/A-18 high authority/high gain digital flight control system development and flight testing

[AlAA PAPER 81-2635]

BORES, R. A.

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

BORES, T. D.

Panel Optimization with Integrated Software

BUTTARES, P. L.

Visual technology research simulator, visual and motion system dynamics

BUTTAR, C.

Complete flexibility and realism in radar simulation

BUTTLES, G. W.

Effect of downdraft on the induced drag of canard-wing combinations

OVERVIEW OF FLIGHT AND GROUND TESTING WITH EMPHASIS ON THE WIND TUNNEL

BUTTLES, L. M.

Low-speed measurements of the static pressure distribution and overall forces on a cambered and a symmetric mild gothic wing of aspect ratio

BIIRD, J. C.

The LANTIER wide field-of-view raster Head-Up Display

BIIRDSONG, T. A.

Wing flap-type control effectiveness and effects of control hinge gap seals for a supercritical wing

BIIRDSONG, T. A.

Lateral and longitudinal static stability and control characteristics of a 1/6-scale model of a remotely piloted research vehicle with a supercritical wing

CABBIT, P.

Parametric study of the influence of the engine upon the operating cost of a civil helicopter

Parametric study of the influence of the engine upon the operating cost of a civil helicopter

CADY, P. M.

A system design for a multispectral sensor using two-dimensional solid-state imaging arrays

CAFFEY, L. A.

Systems approach to the design of wind shear avionics

Community rotorcraft air transportation benefits and opportunities

ACAI?B-166266]

CAGLIATI, L. E.

An aircraft sensor fault tolerant system

ACAI?B-165876]

B-20


CH-46 fiberglass rotor blade repair program

Detection and display of wind shear and turbulence

Study and design of high G augmentation devices

X-band vs C-band aircraft radar - The relative

Final engineering report for computer, weapon

Material identification for the design of

K 6 D on composite rotor blades at Agusta

Experimental and analytical studies of advanced

Low freynolds number airfoil survey, volume I

Effects of installation of F101 DFE exhaust

Propulsion system controls design and simulation

The assessment of aircraft combat effectiveness

using a new computational method

CARR, R.

Effects of lightning and nuclear electromagnetic

pulse on an advanced composites aircraft

CARRIZOZA, J. A.

A single-frequency multitransmitter telemetry

technique

Communication link

The possibility of using deformerable rubber

components in landing gear

Material identification for the design of

composite rotary wings

CARR, K. R.

Experimental and analytical studies of advanced

air cushion landing systems

[NASA-CR-34776]

CARRIBBEAN, V.

Experimental and analytical studies of a model

helicopter rotor in hover

[NASA-TM-812132]

Pulse difference modeling of rotor flows

including wake effects

[NASA-TM-839280]

CARRASCO, R.

& D on composite rotor blades at Agusta

Material identification for the design of

composite rotary wings

CARRASCO, R. E.

Final engineering report for computer, weapon

aiming CP-144/A

[AD-A115220]

CARRASCO, R. E.

Study and design of high G augmentation devices

for flight simulators

[AD-A1109187]

CARR, O.

The birth of precision DME

Radiolocation for civil aviation

[RECAP 8117760]

CARRY, D. E.

The PATRIOT Radar in tactical air defense

[CARR, R. E.]

Ground calibration of a strain-gauged CR-44 aircraft

[AD-A107047]

CARRILLO, J. A.

Improved penetrant process evaluation criteria

[AD-A1115157]

CARRILLO, J. A.

Reconciliation system controls design and simulation

[RECAP 82-0322]

CARRASCO, R. E.

Effects of installation of F101 DFE exhaust

nozzles on the afterbody-nozzle characteristics

of the Y-14 airplane

[NASA-TM-832950]

CARR, L. L.

A new thermal and trajectory model for high

altitude balloons

[RECAP 81-1026]

CARRASCO, R. E.

Evaluating sources of error in SAR/GRMS

navigation using a Kalman postprocessor

[RECAP 82-14739]

CARR, L. L.

The biological degradation of spilled jet fuels:

A literature review

[AD-A1107508]

CARRASCO, R. E.

Aeroelastic analysis of the elastic gimballed rotor

[NASA-CR-166407]

CARRASCO, R. E.

Low Reynolds number airfoil survey, volume 1

[NASA-CR-165803-VOL-1]

CARRASCO, R. E.

Reliability and maintainability improvement

program for the AV-8A/TAV-8A Harrier head-up

display set, development of the signal data

converter, CV-360/DVQ-30 (F), volume 3

[AD-A1155541]

CARRASCO, J. A.

Cost of ownership advantages with a shared oil

system

[CARR, L. L.]

Experimental study of dynamic stall on advanced

airfoil sections. Volume I: Summary of the

experiment

[NASA-TM-84285-VOL-1]

CARRASCO, J. A.

A single-frequency multitransmitter telemetry

technique

[CARR, R. E.]

Effects of lightning and nuclear electromagnetic

pulse on an advanced composites aircraft

[CARR, L. L.]

Performance retention features of the PH2037

[CARR, L. L.]

An independent view of where civil simulation

should be headed

[CARR, L. L.]

Technical innovations in testing and analysis of

heat and pressure models in hypersonic wind

tunnels

[CARR, L. L.]

Comparison of wind tunnel and theoretical

aeroelastic predictions with flight measured

airloads for the B-1 aircraft

[CARR, L. L.]

A comprehensive bibliography of literature on

helicopter noise technology

[CARR, L. L.]

Wind tunnel test and analysis techniques using

powered simulators for civil nacelle

installation drag assessment

[CARR, L. L.]

FIA air traffic activity, FY 1981

[CARR, L. L.]

Modeling and Analysis of Power Processing Systems

(NAPPS). Volume 1: Technical report

[CARR, L. L.]

Atmospheric chemistry of hydrocarbon fuels.

Volume 2: Outdoor chamber data tabulations,

Part 1

[CARR, L. L.]

Main rotor hub electromagnetic signature reduction

[CASABICO, G.]

Experimental investigation of aeroelastic

instability of open field profiles

[CASE, R. H.]

Consideration of an international private sector

satellite search and rescue locating system

[

THE END

B-22
CBAFPBB, J.

CBADBICK, B. B.

CBAOBAO. A.

CBiDBICK, J. B.

CBACOI, A.

CBABABIB. J. P.

CBBBOSBK, J.

CBBIBB. J. L.

CBIIO, 1.

CBOB. B. a.

CASE, F. B.

CaUKB. F. B.

CtODILL, L. 0.

CATBB, 0.

CASTO, F. P.

CASTUBBBBZ. D, B.

CASTLE, B. B.

CASTRELLI, R. A.

CASSIBBL. 6. B.

CASSIBB, a.

CASSABIIO. S,

CASfUBBBBZ. D, B.

CASE, F. B.

Correlation of wear with oxidation of carbon-carbon composites

FATIGUE BEHAVIOR OF WELDBONDED JOINTS

Blade with composite in-lays

Environmental and High Strain Rate Effects on Composites for Engine Applications

Environmental and High Strain Rate Effects on Composites for Engine Applications

A model for sensor-interceptor trade-off analysis

Application of adaptive estimation to target tracking

Application of singular perturbation theory

A laboratory mock-up ultrasonic inspection system for composites

Fatigue test of the typical main rotor controls component

Importance of a tactical cargo aircraft in emergency relief

The use of adaptive control for helicopter trajectories in search operations

Electronic stabilization of an aircraft

Electronic aircraft stabilization

Electronic aircraft stabilization [SHE PAPER 811763]

JETIDS BELAY network off-line simulation

JETIDS BELAY network off-line simulation

Development of a clear air radar to detect meteorological hazards at airports [AD-A1008236]

Data processing at the Global Positioning System

Correlation of wear with oxidation of carbon-carbon composites

MANUFACTURING SYSTEM FOR CARBON-CARBON COMPOSITES
CHANG, L. D.

Optimization of propeller blade shape by an analytical method
[482-35021]

CHANG, L. D.

The effect of barriers on wave propagation phenomena: With application for aircraft noise shielding
[482-1125]

CHANG, L. L.

Methods and models for predicting fatigue crack growth under random loading
p0168 082-20506

Random spectrum fatigue crack life predictions with or without considering load interactions
p0169 082-20512

A review and assessment of fatigue crack growth rate relationships for metallic airframe materials
p0391 082-30879

CHANG, L. L.

Methodology for multi-aircraft miniature noise impact landing trajectories
p0218 082-23037

CHANG, C. C.

Optimal aircraft landing patterns for minimal noise impact
p0264 082-19200

CHANG, C. E.

Conformal antenna array design handbook
[AD-8110991]

CHANG, C. L.

An experimental investigation of the rotating stall, surge and wake behind the rotor for a single stage axial compressor
p0033 082-11006

CHAO, L.

Experimental investigation of total pressure loss and airflow distribution for gas turbine combustors
p0081 082-15606

CHAOQING, L.

Second order approximation theory of an arbitrary aerofoil in compressible potential flow
p0032 082-10982

Aerodynamic calculations and design of subcritical aerofoils
p0032 082-10983

CHAPMAN, L. F.

Application of high bypass turbofan computer simulation to flight and test data processing
[482-35021]

CHAPMAN, C.

Node S system accuracy
[AD-8112249]

CHAPMAN, L.

A progress testing assistant
[AD-8110847]

CHAPMAN, E. L.

Hard limited approaches to correlation velocity sensing
p0022 082-12636

CHARLES, M. J.

Applications of structural adhesives in production
p0326 082-28008

CHARLES, J.

Materials and aeronautics
p0274 082-26025

CHASE, R. D.

Spectrally balanced chromatic landing approach lighting system
[482-35021]

Environmental fog/steam visual display system for aircraft simulators
[482-35021]

CHASTAIN, V. A.

Results of recent measurements on an oscillating aerofoil
p0276 082-26223

CHAPLIN, B.

Instrumentation for testing aircraft antistatic protection
[482-35021]

CHATTAPADHYAY, A.

Shape optimization of fiber reinforced composites
[482-35021]
B-26

CHOW, E.
Damage tolerance and durability design of composite structures for commercial aircraft p0291 D82-27403

CHOW, S.
Digital computer simulation of modern aeronautical digital communication systems p0509 D82-60940

CHOW, W. L.
A numerical study of the turbulent flow past an isolated airfoil with trailing edge separation [AIAA PAPER 82-0998] p0375 D82-31958

CHRISTIANSEN, R. B.
A unified approach to helicopter NASFRA modeling [AIAA PREPRINT 81-17] p0443 D82-37793

CHRISTIE, D. C.
D.C.9 windshield - Effect of attachment retorque p0326 D82-28324

CHRISTIANSEN, B. M.
Ground test of a large scale 'D' wested thrust deflection nozzle [AIAA PAPER 81-1640] p0178 D82-16501

CHRISTIANSEN, R.
Traffic infrastructure: Can planning still be carried through p0350 D82-22232

CHESTNUT, T. J.
Development of engine operability [AIAA PAPER 82-1101] p0418 D82-35046

CHURCH, G. W.
3 DOP gyro analysis from measured and derived rates [AIAA PAPER 82-1016] p0116 D82-17831

CHU, C.-H.
AOD phase flow properties for infrared analysis p0074 D82-17050

CHU, L.-C.
Steady and unsteady nonlinear hybrid vortex method for lifting surfaces at large angles of attack [AIAA PAPER 82-0391] p0195 D82-22094

CHUANG, C. D.
Geodesic paths of an ellipsoid-mounted antenna [AD-A165453] p0596 D82-32573

CHUANG, D.
Accurate numerical solution of compressible, linear stability equations p0362 D82-33571

CHUDIN, D. W.
The effect of ejector augmentation on test-section flow quality in the Calspan 8-ft transonic wind tunnel [AIAA 82-0571] p0236 D82-24658

CHU, P. A.
Report of the JANNAF Workshop on High Frequency Instrumentation and Data Analysis Techniques p0321 D82-21466

CHUN, E. C.
ARINC 429 digital data communications on the Boeing 757 and 767 commercial airliners [AIAA 81-2247] p0049 D82-13465

CHUNG, C. J.
Modal control of relaxed static stability aircraft [AIAA 82-1128] p0004 D82-38944

CHUNG, Y. J.
Recent development in hygrothermoacoustic analysis of components p0529 D82-28676

CHURCHELL, A. W.
Aviation fuels-future outlook and impact on aircraft fire threat p0532 D82-29282

CHURCHELL, G. R.
Simulation of the XV-15 tilt rotor research aircraft [NASA TN-D-2622] p0304 D82-20174

CHU, W. J.
Computations of transonic flow over an oscillating airfoil with shock-induced separation [AIAA PAPER 82-0350] p0119 D82-17900

CICOLARO, L.
Application of nonlinear systems inverses to automatic flight control design: System concepts and flight evaluations p0039 D82-11083

CILKES, P. V.
Application of wear debris analysis to aircraft hydraulic systems [AD-A115060] p0558 D82-30305

CIPRACH, C. C.
Advanced subsonic transport propulsion [AIAA PAPER 81-0011] p0180 D82-20874

CIMA, E. S.
Subsonic cascade wind tunnel tests using a compressor configuration of DCA blades [AD-A104597] p0038 D82-11069

CITREITZ, G.
Design of finite element grids for the computation of the three-dimensional transonic flow around a wing [AIAA PAPER 82-1019] p0375 D82-31972

CLARK, C. A.
Canadair rotary wing technology development p0493 D82-39731

CLARK, L. A.
A study of wind shear effects on aircraft operations and safety in Australia [AIAA-81-072-24] p0522 D82-28265

CLARK, C. L.
Photointerpretation key for pale regeneration analysis using high-altitude color infrared panoramic photography [PS82-164540] p0562 D82-30606

CLARK, D.

CLARK, G. A.
Fuel property effects on radiation intensities in a gas turbine combustor p0166 D82-19966

CLARK, J. F.
The evolution of airborne weather avoidance radar toward a calibrated remote rain gauge using SBEACT p0004 D82-10225

CLARK, J. L.
Flying quality requirements for V/STOL transition [AIAA PAPER 82-1293] p0496 D82-40276

CLARK, L. G.
Replacement of aboard naval aircraft [AD-A152782] p0590 D82-32356

CLARK, P. J. F.
Slotted wall test section for automotoc aerodynamic test facilities [AIAA 82-0585] p0237 D82-24661

CLARK, R. E.
Instrument failure detection in partially observable systems p0436 D82-37380

CLARK, R.
Development of a simple, self-contained flight test data acquisition system p0177 D82-20756

A simple, low cost application of a flight test parameter identification system [AIAA PAPER 82-1122] p0487 D82-39093

Development of a simple, self-contained flight test data acquisition system [NASA-CR-168912] p0369 D82-23245

CLARKS, E. L.
VOR waveforms synthesis and calibration p0106 D82-16563

CLARKE, S. L.
Vibration of structures excited acoustically p0307 D82-20343

CLARRICHARD, P. J. B.
Prediction and performance of radome-covered reflector antennas p0080 D82-15311

CLAY, G. E.
Flight test evaluation of a video tracker for enhanced offshore airborne radar approach capability p0500 D82-40531

CLAY, C. R.
New all-electric-system technology for aircraft [AD-A1104940] p0067 D82-14710

CLAYPOOL, E. C.
Electric flight systems p0261 D82-19144

CLAYSBURG, L.
The effect of swirl burner aerodynamics on NOx formation p0326 D82-28968

CLAYTON, A.

CLEMENT, M. F.
Functional requirements for the man-vehicle systems research facility p0009 D82-35524

CORKLE, D. W.
Subsonic cascade wind tunnel tests using a compressor configuration of DCA blades [AD-A104597] p0038 D82-11069
Experimental determination of parachute apparent
A survey of melting layer research
Ihe 737 graphite composite flight spoiler flight
Aerodynamics and performance of cruciform
Mechanical properties of 4 fiberglass prepreg
Quiet Shoct-Haul Besearch Aircraft - Ihe first 3
Powered-lift takeoff performance characteristics
On the characterization of damages in
Global positioning sjsten timing receivers in the
The electromagnetic theta gun and tubular
Evolution and development of high voltage /270
Computation of high BeynoIds number
Lightning simulation and testing
Loran-C navigation as an aid to aerial
Productivity and safety
Hanenver stability of a vehicle with a toned body
Ihe effect of fuel composition on gronndfall from
Technical approaches for measurement of human errors
A theory of human error
Training aircraft design considerations based on
the successive organization of perception in
manual control

CLEBIITS, F. A.
Global positioning system timing receivers in the
OSBN

CLEBIITS, PA;
Function specifications for the A-7B Function
Driver module

CLEBI, L. M.
Loran-C navigation as an aid to aerial
photographic operations

CLEBBL, J. J., III
The effect of fuel composition on groundfall from
aircraft fuel jetting nosing

CLEFT, B. M.
Maneuver stability of a vehicle with a towed body

CLIFFR, R. E.
Productivity and safety

CLIFFORD, B. D.
Triggered lightning
Lightning simulation and testing
Assessment of lightning simulation test

CLELINE, B. E.
Computation of high Reynolds number
internal/external flows

CLIBN, R. G., Jr.
On the characterization of damages in
graphite-epoxy composites

CLODD, B. W.
Evolution and development of high voltage /270
volt/ dc aircraft electric systems in the United
States

COHEN, B. C.
The electromagnetic theta gun and tubular
projectiles

COLBION, R. S.
Status report of the USAF's Engine Model
Derivative Program

COCHMEND, B. E.
Powered-lift takeoff performance characteristics
determined from flight test of the Quiet
Short-Haul Research Aircraft /QSHRA/

COCHEMB, B. E.
Ihe Short-Haul Research Aircraft - The first 3
years of flight research

COCHEMB, B. E.
Mechanical properties of a fiberglass prepreg
system at cryogenic and other temperatures

COCHEMB, B. J.
Aerodynamics and performance of cruciform
parachute canopies
Experimental determination of parachute apparent
mass and its significance in predicting dynamic
stability

COGECNO, R. E.
The 737 graphite composite flight spoiler flight
surface evaluation

COHEN, L. B.
A survey of melting layer research

COHEN, B. B.
Adapter for mounting microphone flush with the
external surface of the skin of a pressurized
aircraft

COLBERD, D. M.
Prediction and measurement of time-variant,
three-dimensional flows in military aircraft
intakes

COLBRE, W. S.
Design study for a low-distortion holographic HUD

COLE, M. W.
The choice of technology for ATC radars. I -
Transmitters

COLE, B. R.
Fasteners for composite structures

COLLINS, R. A.
On the bearing strengths of CFRP laminates

COLLINS, W. E.
Review of defense-related vertical and short
takeoff and landing (VT/STOL) aircraft programs

COLLINS, B. C.
BB 211 powerplant deterioration - Review of
current situation and lessons learned

COFFORD, B. G.
A concept for a fuel efficient flight planning and
for general aviation

COCHRAN, G. G.
Three-dimensional flow studies on a slotted
transonic wind tunnel wall

COCHRAN, B. E.
A storage device for subsystem maintenance
information

COLT, J. L., Jr.
The Schladitz fuel injector: An initial
performance evaluation without burning

CORBA, R.
Automatic checking of measuring units in the
Bodane wind tunnels

COHN, R.
Boundary layer transducers /DCL/ developed for the
study of the flow over helicopter rotor blades

CORN, C. B.
XP-12A diagnostic and development programs

CORNPS, C. L.
Integrated flight trajectory control

CORNS, L.
Transport aircraft accident dynamics

COTTIT, P. E.
Design evolution of the Boeing 757

COTE, E. S.
Boeing's new transports in a flight-test marathon
Composite materials: Tomorrow for the day after

COHEN, R. H.
Slate material for the alpha-jet, made from
carbon-fibre reinforced plastic

COHEN, J.
Study of fiber optics to enhance an environmental
lighting laboratory
Characteristics of future aircraft impacting Alert aircraft roll over chocks

Special problems associated with aircraft radomes

Corrosion tests with ATL-B-83282 and BIL-B-6083

Maintenance posture for quick start

Alert aircraft roll over chocks

COOK, C. B.

COOK, G. B.

COOK, G.

COOK, J.

COOK, B. J.

COOK, P. A.

COOK, C. B.

COOLIB, B. I.

COOKSOB, B. A.

COORDINATE TRANSFORMATION IN PLBS

COMPUTATION OF THE EFFICIENCY OF A TRAILING EDGE FLAP IN UNSTEADY THREE-DIMENSIONAL FLOW

The outlook for advanced transport aircraft

Research through simulation

Acquisition of P-100/3/ high pressure compressor entrance profiles

The outlook for advanced transport aircraft

Third generation turbo fans

Aerospace Traffic Control and Landing System (MTCALS) investigation

A methodology for missile launch envelope display evaluation

Component coupling with time-invariant mass matrix for nonisotropic rotating and nonrotating systems

A criterion for determining the causes of wind shear at Pista Basil Airpot, on the basis of statistical data from barograph records

Relaxation solution for viscous transonic flow about lighter-type Mforobodies and afterbodies (AlAA Paper 82-0252)

Wind tunnel studies of store separation with load factor - Freedrops and captive trajectories

Wind tunnel studies of store separation with load factor. Freedrops and captive trajectories

Aircraft energy conservation during airport ground operations

Using voice control onboard combat aircraft

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

Ground calibration of a strain-gauged CT-4A

Bomb crater repair techniques for permanent airfields. Report 1: Series 1 tests

The effect of journal misalignment on the oil-film forces generated in a squeeze-film damper

Assessment of aircraft susceptibility/vulnerability to lightning and development of lightning-protection design criteria

Damage tolerant design for cold-section turbine

Determination of the efficiency of a trailing edge flap in unsteady three-dimensional flow

Coordinate transformation in PLBS

Digital Avionics Information System (DAIS): contractor's viewpoint
B-29
DASILVA, C.

Integration of controls and displays in U.S. Army helicopter cockpits
[AD-109499] p0306 A82-20191

Synthesis of an integrated cockpit management system
[AD-120959] p0366 A82-23222

DATKO, J. T.

Sound transmission through ducts and aircraft noise prediction, volume 1
[AD-115783] p0602 A82-33164

DAVIES, J. B.

A generalized escape system simulation computer program: A user's manual
[AD-109555] p0187 A82-16055

DAVIES, G. E.

Fluidics in aircraft engine controls
[AD-116992] p0120 A82-18691

DAVIES, R. F.

Powder metallurgical innovations for improved hot section alloys in aero-engine applications
[AD-106779] p0577 A82-22358

DAVIES, J. B.

The development of terrains following displays for the tornado aircraft
[REPT-200] p0587 A82-32237

DAVIES, R. L.

LMS - An advanced avionics system design
[AIAA 81-2249] p0048 A82-13472

DAVIES, C. C.

Three dimensional mean velocity and turbulence characteristics in the annulus wall region of an axial flow compressor rotor passage
[AD-169903] p0400 A82-25252

DAVIS, H. H.

Performance of multiple, angled nozzles with short mixing stack eductor systems
[AD-111087] p0454 A82-26302

DAVIS, B. L.

Coaxial dual gasjet combusting combustor installations, Part 1: Parametric test data
[AD-111135] p0409 A82-25259

DAVIS, G. L.

Pollution reduction technology program small jet aircraft engine, phase 1
[AD-165386] p0134 A82-14095

EBBS fuel additive: Pollution reduction technology program small jet aircraft engine, phase 1
[AD-165387] p0134 A82-14096

DAVIS, T. L.

Engine experience of turbine rotor blade materials and coatings
[AIAA PAPER 82-204] p0428 A82-35425

DAVIS, G. L.

Recent improvements at the Naval Air Test Center for increased test system flexibility
[AIAA PAPER 81-2392] p0056 A82-13888

DAVIS, J. B.

Fatigue behavior of selected non-woven fiber composites for helicopter rotor blades
[AD-20524] p0170 A82-20524

DAVIS, R. F.

Passive direction finding and signal location
[AD-45366] p0578 A82-45366

DAVIS, T. W.

A stage-by-stage dual-spool compression system modeling technique
[AIAA PAPER 82-98] p0427 A82-35394

DAVIS, B. L.

Fuel conservation now
[AD-2640] p0111 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
[AD-29583] p0331 A82-29583

DAVIS, L. L.

Probability of laminar flow loss because of ice crystal encounters
[AD-1205] p0302 A82-20153

DAVIS, J. S.

Advanced turboprop engines for long endurance naval patrol aircraft
[AIAA PAPER 82-1132] p0138 A82-37692

DAVISON, C. W.

Design principles of a computer-aided design system
[AD-1282-28292] p0333 A82-28292

DAWSON, G. R.

Aerospace applications of composites
[AIAA PAPER 82-227] p0056 A82-40434

DAWSON, M. H.

A Schwarzkopf method for generating internal flow grids
[AD-107199] p0328 A82-29005

DAYMITY, J. R.

A split coefficient locally monotonic scheme for multishocked supersonic flow
[AIAA PAPER 82-2087] p0048 A82-22082

DEBBOUR, J. J.

Effects of higher order control systems on aircraft approach and landing longitudinal handling qualities
[AD-1282-3048] p0563 A82-3048

DEBOUR, J. D.

Direct digital design method for reconfigurable multivariable control laws for the A-7D Digitac II aircraft
[AD-1282-14620] p0074 A82-14620

DE CAPITANI, L.

Material identification for the design of composite rotary wings
[AD-1282-40937] p0509 A82-40937

DE GILBERT, J.

Modernizing air traffic control in France
[AD-1282-27048] p0205 A82-27048

DE JONGEBRE, E.

Subsonic flow over airborne optical turrets
[AD-1282-17605] p0144 A82-17605

DE KONING, J. L.

A simple crack closure model for prediction of fatigue crack growth rates under variable-amplitude loading
[AD-1282-26630] p0204 A82-26630

DE LUCCHI, L. J.

Recent developments in materials and processes for aircraft corrosion control
[AD-1282-24825] p0214 A82-24825

DE LUCCHI, J. J.

Recent developments in materials and processes for aircraft corrosion control
[AD-1282-27446] p0293 A82-27446

DE MALHERBE, R. G.

A new approach to the probes of stress corrosion cracking in 7075-T6 aluminum
[AD-1282-17901] p0222 A82-23772

DE RUTS, J.

Instantaneous turbulence profiles in the wake of an oscillating airfoil
[AIAA PAPER 82-0353] p0119 A82-17901

DE SILVA, C. F.

Real-time failure detection of aircraft engine output sensors
[AD-1282-28403] p0297 A82-28403

DE SIROJK, G.

The impact of missiles on the preliminary design of an ABC rotor

D-32
DELL, R. L.
Thunderstorms hazards flight research - Program overview
[AMERICAN PAPER 81-2612] p0053 A82-13553
Operational evaluation of thunderstorms penetration test flights during project Storm Hazards "80" p0078 A82-16954

DELL, R. L.
National Federation of People with AIDS,f. a.

DELL, R. L.
Improvement in the use of digital acoustic imaging equipment for aircraft engine application p0062 A82-14043

DELINE, L. G.
APTC standard airspeed calibration procedures [AD-810408] p0080 A82-12076

DELINE, R. L.
Additional experiments on flowability improvements of aviation fuels at low temperatures, volume II [NASA-CH-167912] p0571 A82-31546

DEANDRES, V. R.
In-flight detection measurement of the HiMAT aerodynamically tailored wing [ASTAR PAPER 81-2650] p0063 A82-14300

DEAR, R. C.
Real time simulation of counter-assisted sequencing of terminal area operations [NASA-CH-166195] p0137 A82-16817

DEBBA, D. R.
Elastic suspension of a wind tunnel test section p0370 A82-23363

DECARBO, D.
Monopole antenna patterns on finite size composite ground planes p0518 A82-41055

DECARBO, D.
Airfield and airspace capacity/delay policy analysis [AD-81078] p0458 A82-26326

DECKER, R.
Infrared emissions from turbofans with high aspect ratio nozzles p0103 A82-16092

DECKER, R.
Aircraft meteorological data relay /NASA/ p0579 A82-65822

DECKER, R. W.
Recent progress in VTOL technology [NASA-TM-84238] p0603 A82-33338

DECHERS, R.
Optimal inertial navigation using terrain correlation: An attractive solution to the ground attack aircraft navigation problem p0362 A82-23104

DEDOU, J. P.
The distress regime on the bistored helicopter p0208 A82-17219

DEDOU, J. P.
Parametric study of the influence of the engine upon the operating cost of a civil helicopter p0246 A82-18313

DEDOU, J. P.
Parametric study of the influence of the engine upon the operating cost of a civil helicopter [SNIA-827-210-102] p0355 A82-22273

DEPPE, S. W.
Hydrocarbon fuel chemistry: Sediment water interaction [AD-811722] p0612 A82-33552

DEGUARDI, D.
Development and evaluation of automatic landing control law for light wing loading STOL aircraft [NASA-CH-166160] p0028 A82-10043

DEGUARDI, D.
Investigations of helicopter structural dynamic and a comparison with ground vibration tests [AM-UP-80-30-80-0] p0315 A82-21106

DEGRAAF, L. A. F.
Comparison of reliability, sensitivity and accuracy of some NDT-Techniques [NASA-CP-68039-0] p0371 A82-23542

DEGRAAF, L. A. F.
Comparison between probability of detection, sensitivity, and accuracy of five nondestructive inspection methods [NASA-CP-68030-0] p0398 A82-24500

DEGRAAF, L. F.
Frequency sharing between passive sensors and aeronautical radio-location systems employing ground transponders in the band 8.2 - 8.4 GHz p0333 A82-35081

FORWARD-LOOKING WING AXES EMPLOYING SUPERSONIC SLIPSTREAMS p0481 A82-38286

DBUSCO, L.
[NASA-CH-165041] p0449 A82-26261

DBUSCO, L.
Prediction of fatigue crack growth rates under high-temperature research [NASA-TD-1903-2049] p0049 A82-11089

DBUSCO, L.
Development of multivariable controllers for aircraft turbine engines p0040 A82-11087

DBUSCO, L.
Influence of casing treatment on the operating range of axial compressors [NASA-CP-82-103] p0424 A82-35340

DBUSCO, L.

DBUSCO, L.
Prediction of fatigue crack growth rates under variable loading using a simple crack closure model [HLN-80-01023-0] p0529 A82-20685

DBUSCO, L.
Flight simulation consoles, aid or obstruction - Objective evaluation of control consoles of modern flight and simulator simulators [DOE-PAPER 81-097] p0159 A82-19269

DBUSCO, L.
Combined amplitude-phase modulation for a VHF communication link p0553 A82-43870

DBUSCO, L.
An acquisition and analysis system for dynamic loads of air shafts p0095 A82-13082

DBUSCO, L.
System for acquisition and analysis of dynamic loads on air shafts [NASA-TM-76644] p0131 A82-14056

DBUSCO, L.
Test and evaluation of the airport radar wind shear detection system [AD-8112663] p0478 A82-27924

DELANO, J. C.
A new resin for field repair p0291 A82-27912

DELANO, J. C.
Experimental study of oscillating-wing propulsion p0298 A82-28541

DELANO, J. C.
Software functional description of mass weather dissemination system exploratory engineering model [AD-1112706] p0477 A82-27573

DELANO, J. C.
NAFS ACES II progress report p0444 A82-37969

DELANO, J. C.
Quantification of airport community noise impact in terms of noise levels, population density, and human subjective response p0129 A82-18032

DELANO, J. C.
The noise impact of proposed runway alternatives at Craig Airport [NASA-TM-85527] p0574 A82-32080

DELANO, J. C.
Recent developments in materials and processes for aircraft corrosion control p0212 A82-17361

DELANO, J. C.
Hortor fragment protection program: Statistics on aircraft gas turbine nose rotor failures that occurred in U.S. commercial aviation during 1978 [NASA-CH-165388] p0473 A82-27316

DELANO, J. C.
Utilizing the helicopter's versatility to improve the ATC system p0219 A82-23316

DELANO, J. C.
A case study of reliability and maintainability of the F-16 AGO-66 fire control radar [AD-1112387] p0411 A82-25425

DELANO, J. C.
A novel approach to the identification of aircraft surface defects in a postcrash fire environment [AD-1117629] p0605 A82-33360

DELANO, J. C.
Propellers come full circle p0433 A82-35081
An accurate method for evaluating the kernel of the integral equation relating lift to downwash in unsteady potential flow [NASA-TN-83281] p0363 A82-23194
Subsonic aerodynamic and flutter characteristics of several wings calculated by the SORSSA P1.1 panel method [NASA-TM-8485] p0405 A82-25216
DESERT, L. Experimental investigations on the flow in the impeller of a centrifugal fan [ASME PAPER 82-GT-37] p0421 A82-35298
DESSONEAU, A. Concept studies of an advanced composite helicopter fin [SIE-82-210-106] p0353 B82-22257
DESOPPER, R. Finite difference modeling of rotor flows including wake effects [NASA-TM-84280] p0604 A82-33345
DESTIETER, R. Recent developments in wing with stores flutter suppression [ASAE, TP No. 8131-165] p0125 482-40909
DETHONAR, A. P. A preliminary laboratory evaluation of a reconfigurable integrable flight control concept [AIAA 02-1597] p0405 A82-39826
DEYAN, L. E. Development of a clear air radar to detect meteorological hazards at airports [AIAA-82-105164] p0260 B82-18035
DEYAN, L. E. Aerodynamics of tactical weapons to mach number 8 and angle-of-attack of 180 deg [AIAA PAPER 82-0250] p0118 A82-17864
DEYAN, L. E. Advanced attack helicopter fatigue testing - Overview [AIAA PAPEB 82-0250] p0240 A82-24720
DEYAN, L. E. An improved propulsion system simulation technique for scaled wind tunnel model testing of advanced fighters [AIAA 02-41019] p0357 A82-22171
DEYAN, L. E. Development of a tapered random vibration technique for acceptance testing [AIAA 02-35298] p0345 A82-22171
DEYAN, L. E. Results of experimental study of heat transfer to turbine blades with porous cooling [AIAA 02-11446] p0104 B82-11446
DEYALCHAND, J. Digital simulation of aircraft electrical generating system by means of Sceptre program [AIAA 02-14820] p0673 A82-14820
DI PASSTO, M. Analysis and tolerance study of an array antenna for a new generation of secondary radars [AIAA 02-19521] p0162 A82-19521
DI-LEV, T. Initial experimental research into the response of turbojet engine compressors to distortion of intake pressure [AIAA PAPER 82-1006] p0302 A82-11007
DI-LEV, T. A preliminary experimental investigation of the response of a turbojet engine to inlet pressure distortion [AIAA 02-11007] p0302 A82-11007
DIAL, B. C. Study of air compressor hazards in underground and surface mines [FPS82-105164] p0214 A82-17597
DILEY, B. Energy savings with today's technology [AIAA 02-17262] p0111 A82-17262
DILEY, B. E. K. Operational and performance aspects of fuel management in civil aircraft [AIAA PAPER 82-1727] p0439 A82-20518
DICKER, R. A. Current techniques for jet engine test cell modeling [AIAA PAPER 82-1727] p0439 A82-37712

B-34
DICKBERG, R. A.
Optimal dolphin hang glider flight
p0201 A82-17157

DICKBERG, R. A.
Optimal periodic Dolphin hang glider flight
p0599 A82-30313

DICKERSON, L. J.
An effective algorithm for shock-free wing design
[AD-A146265]
p0569 A82-31322

DIDELLA, B.
Improvement of ejection threat augmentation by
palming of flapping jets
p0362 A82-23172

DIDKHOE, C. L.
Analysis of the temperature field of a
baffle-cooled gas-turbine-engine blade under
conjugated boundary conditions
p0295 A82-28015

DIDEK, J. H.
A summary of T/STOL inlet analysis methods
[AIAA PAPER 81-2628]
p0107 A82-16902

DIDKANN, W. L.
Limited artificial and natural icing tests
production 88-60A helicopter (re-evaluation)
[AD-A112562]
p0452 A82-26297

DURGIN, W.
Finite difference computation of the steady
transonic potential flow around airplanes
p0331 A82-10981

DIERKEN, R.
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 DFYIE
[ESA-TR-675]
p0266 A82-19219

DIESEG, K. K.
Characterized high temperature steels
[AD-A116559]
p0595 A82-32467

DISTRICK, C. G.
Life and Utilization Criteria Identification in
Design (LOCID), volume 1
[AD-A111939]
p0455 A82-26305

Life and Utilization Criteria Identification in
Design (LOCID), volume 2
[AD-A111960]
p0455 A82-26310

DIGERONIMI, T.
Airborne associative processor /ASPBO/
[AIAA 81-2156]
p0002 A82-10104

DIGGEREI, B. M.
High temperature, short term tensile strength of
C6000/PHS-15 graphite polyimide
[AIAA 82-0711]
p0337 A82-30125

DIEH, G.
Inverse SAS and its application to aircraft
classification
p0075 A82-14071

DILL, B. D.
Effect of fighter attack spectrum on composite
fatigue life
[AD-A105094]
p0089 A82-12143

DILLER, J. A.
The prevalence of visual deficiencies among 1979
general aviation accident aircrew
[AD-A146499]
p0107 A82-16054

DING, B. L.
An optimum design of fuselage structure
p0546 A82-82533

DINZ, B.
Problems of engine response during transient
maneuvers
p0208 A82-17221

DITRASERSO, N. A.
The integrated inertial sensor assembly /IISA/ - A
redundant strapdown system for advanced aircraft
navigation and flight control functions
p0022 A82-12642

DISTEMANN, F.
Cost efficiency versus objective fidelity in
flight simulation
[DGLR PAPER 81-104]
p0158 A82-19264

DITTMER, J. E.
Propeller tip vortex - A possible contributor to
aircraft cabin noise
p0113 A82-17603

In-flight acoustic results from an advanced-design
propeller at Mach numbers to 0.8
[AIAA PAPER 82-1120]
p016 A82-35017

Noise of the SH-J propeller model at 2 deg and 4
deg angle of attack
[AIAA-TR-82738]
p0194 A82-16508

A shock wave approach to the noise of supersonic
propellers
[AIAA-TR-82752]
p0194 A82-16809

A preliminary comparison between the SHJ
propeller noise in flight and in a wind tunnel
[AIAA-TR-82685]
p0322 A82-21998

DOWNS, G. E.
The dynamic flexural response of propeller blades
[AIAA-CP-165318]
p0585 A82-32313

DOBINS, R. A.
Structure and variability of the Alboran Sea
frontal system
p0168 A82-20447

DOBBS, G. E.
Fabrication of boron/aluminum fan blades for SCB
engines
[AIAA-Ch-165294]
p0192 A82-16176

DOBIE, W. C.
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
[BAR-TR-77406]
p0312 A82-21161

DOBREZL, B.
Ground reflection effects in measuring propeller
aircraft slipper noise
[DFYIE-SP-00-28]
p0359 A82-22990

DOBREZL, K. K.
Ground reflection effects in aircraft noise
measurements
p0166 A82-19970

DOBBS, W. J.
NASA/General Electric broad-specialization fuels
combustion technology program - Phase I results
and status
[AIAA PAPER 82-1049]
p0416 A82-35000

DODGE, L. C.
Investigation of an improved structural model for
damaged T-38 horizontal stabilizer flutter
analysis using NASTRAN
[AD-A111905]
p0456 A82-26316

DODGE, K. A.
The boiling tendency of fuels containing
polycyclic aromatics in a research combustor
[AIAA PAPER 82-9299]
p0164 A82-19791

DORFPL, G.
Cost efficiency versus objective fidelity in
flight simulation
[DGLR PAPER 81-104]
p0158 A82-19264

DORRIS, W. J.
Scaling effects on leakage losses in labyrinth seals
[ASBE PAPER 82-157]
p0426 A82-35380

DOUGGETT, S. W., JR.
Evaluation of four subcritical response methods
for on-line prediction of flutter onset in
wind-tunnel tests
[AIAA 82-0644]
p0337 A82-30140

Evaluation of four subcritical response methods
for on-line prediction flutter onset in
wind-tunnel tests
[AIAA-TR-82278]
p0368 A82-23240

DOUHEH, S. M.
We have just begun to create efficient transport
aircraft
p0180 A82-21373

An initial look at the supersonic aerodynamics of
twin-fuselage aircraft concepts
p0516 A82-41008

Noticific half-span model support system
[BASA-CASE-LH-12441-1]
p0370 A82-23254

DOLNIAK, H. C.
An approach to software for high integrity
applications
[AIAA PAPER 82-251]
p0429 A82-35430

DORSEY, B. E.
Integration of a digital air data computer into
the tent aircraft HPS-320
[DFYIE-TR-77-09]
p0141 A82-15038

DOMACK, R. L.
Conceptual design of the LSI integrated cockpit
p0500 A82-40527

DORRICE, K. L.
Ice phonics blade tracking and comparison of
vibration analysis techniques
[AD-A1108421]
p0189 A82-16074

DORRIS, J.
Mechanical advances in the design of small
turboshaft engines
p0207 A82-17208
PERSONAL AUTHOR INDEX

DULLE, C. W.
Local-C navigation as an aid to aerial photographic operations
p0551 A82-43469

DULKEI', R. K.
Structural strength of materials and parts of gas turbine engines
p0544 A82-42063

DUNAVY, A. V.
Damping for turbomachine blade variations in subsonic flow
p0442 A82-15048

DURRAS, I. G.
High voltage surge and partial discharge test to evaluate aerospace equipment parts
p0816 A82-11740

DURSA, D.
Computer image generation ; Advanced visual/sensor simulation
p0479 A82-28016

DUSC, J. P.
Process development and evaluation of gas turbine engine components in IMF 829
p0318 A82-21205

DUSTAS, R. B.
The use of perforance-monitoring to prevent compressor and turbine blade failures
p0422 A82-35316

DUTTON, B. A.
Tandem rotor helicopter characteristics in a continuous icing environment
p0499 A82-40523

DUSTAS, R. B.
Production of Reliable Flight Control Software: Validation Methods Research for Fault Tolerant Avionics and Control System Sub-Working Group Meeting [NASA-CP-2222]
p0460 A82-24045

DUSTAS, R. B.
Conceptual design of an integrated power and avionics information system
p0872 A82-14785

DUSTAS, R. B.
Preliminary design of an advanced integrated power and avionics information system
p0507 A82-40907

DUSTAS, R. B.
Advanced aircraft electrical system control technology demonstrator. Phase 1: Requirements analysis and conceptual design
p0031 A82-10326

DUSTAS, R. B.
Advanced aircraft electrical system control technology demonstrator. Phase 1: Analysis and preliminary design
p0526 A82-28284

DUSTAS, R. B.
Robust Kalman filter design for active flter suppression systems
p0482 A82-38042

DUSTAS, R. B.
Turbine stage heat flux measurements
p0419 A82-35102

DUSTAS, R. B.
Position extrapolation quality calculation for inertial and Doppler-ANSS navigation systems
p0123 A82-18151

DUSTAS, R. B.
A natural parameter-controller specification procedure for an integrated radio/beacon receiver navigation system
p0124 A82-18155

DUSTAS, R. B.
Performance evaluation of a kinesthetic-tactual display
p0366 A82-23221

DUSTAS, R. B.
Radar - A fault tolerant distributed microcomputer structure for aircraft navigation and control
p0293 A82-27714

DUSTAS, R. B.
Microcomputer communications to remotely piloted vehicles
p0150 A82-18911

DUSTAS, R. B.
The ILS in Category III operations
p0554 A82-44232

DUSTAS, R. B.
Fove hower aided integrated strike avionics system
p0471 A82-27299

DUSTAS, R. B.
Mechanisms of corrosion fatigue
p0210 A82-17343

D-37
DOBAN, B. G.

Secondary radar problems - The presence of false echoes
p0242 A82-25323

DOBBIN, J. A.

Rough analysis of installation effects on turboprop noise
[NAIA-TR-02929] p0574 A82-32082

DOBREZ, C.

The influence of protective treatment on the mechanical properties of superalloy parts
p0346 A82-22180

DÜLING, A. L.

An analysis of antenna communication requirements in fading media
p0176 A82-20695

DURSTON, D. A.

Concept definition and aerodynamic technology studies for single-engine V/STOL fighter/attack aircraft
[NAIA PAPER 81-2647] p0157 A82-19216

Inlet and airframe compatibility for a V/STOL fighter/attack aircraft with top-mounted inlets
p0507 A82-40908

DÜSA, D.

Investigation of subsonic aeroel performance improvement concept
[NAIA PAPER 82-1062] p0437 A82-37676

DÜSTERBERRY, J. C.

Status and capabilities of the National Full Scale Facility 40- by 80-foot wind tunnel modification
[NAIA 82-0607] p0238 A82-24676

DOVAL, B. C.

Applications of system identification methods to the prediction of helicopter stability, control and handling characteristics
p0367 A82-23230

DOVAL, B. C.

The use of frequency methods in rotorcraft system identification
[NAIA PAPER 81-2386] p0064 A82-14392

DUN, P. J.

A history of aerostatics and aviation in Russia - In the period up to 1914 /2nd revised and enlarged edition/
p0504 A82-42066

DUCIE, J. J.

Hydraulic Universal Display Processor System (HUDPS)
[AD-A114240] p0525 A82-28294

DUGET, L.

Transonic flows in an air intake with large incidence and the effect of a blowing trap
p0094 A82-13071

DUNES, P. J.

Development and demonstration of manufacturing processes for fabricating graphite/LARC 160 polylidane structural elements
[NASA-CR-165809] p0357 A82-22315

DEGEISKE, S.

A simplified wing procedure in connection with the lifting line theory and the double-lattice method
p0154 A82-19195

E

EARLE, E. T.

Propulsion study for Small Transport Aircraft Technology (START)
[NAIA-CR-165439] p0027 A82-10037

EARLS, B. L.

NASA on-board flight computer system architecture and qualification
[NAIA 81-2107] p0601 A82-10082

HANSEN, K. B.

Development of a clear air radar to detect meteorological hazards at airports
[AD-A108236] p0260 A82-18835

HASK, P. L.

A new all-purpose digital flight data recorder
p0401 A82-25177

HAST, L.

A further study of helicopter rotor pitch-flap-phase coupling
[BD-259] p0265 A82-19214

HAST, L. F.

The design of a jet catcher
[NAIA-TR-02929] p0135 A82-14102

HASTINGS, R.

Why safety
p0293 A82-27641

B-30
Comparison of different nozzle concepts for a minimum cost atmospheric cruise control - Host Harpoon missile captive-carry dynamic environments Development of a correlated finite element dynamic comparison of boundary layer calculations for the a safety appraisal of the air traffic control system An experimental investigation of interfacial Quality optimization and unification of aviation aeros truer are nondestructive evaluation by thermal Development of a correlated finite element dynamic NASA studies business aircraft avionics Elston, S. T. Development of a correlated finite element dynamic model of a complete aero engine Developed of a correlated finite element dynamic model of a complete aero engine Harpoon missile captive-carry dynamic environments on the A-62 aircraft Aerostucture nondestructive evaluation by thermal field detection, phase I: Fundamental information and basic technique development An experimental investigation of interfacial temperatures in blade-seal material rubbing of aircraft compressors How the helicopter cockpit designer uses digital avionics Minimum cost atmospheric cruise control - Most efficient aircraft for a given wind component Comparison of different nozzle concepts for a reheated turbfans A safety appraisal of the air traffic control system Coupled field/structure/response predictions for soft body impact of airfoil configurations Status and capabilities of the National Fall Scale Facility 40- by 80-foot wind tunnel modification. A study of the effect of the flight vehicle body potential on the characteristics of ion attitude wing/upper surface blowing concept applied to the quiet short haul research aircraft Potential assessment of a parallel structure for the solution of partial differential equations Distributed data processing: What is it? End losses in turbine cascades with porous cooling Quiet short-haul research aircraft familiarization A simple hybrid visual simulation for research flight simulators 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
Flight simulation studies on the feasibility of FAA acceptance tests on the NAVSTAR GPS Z-set models for a turbulent premixed dump combustor

The Shock and Vibration Digest, volume 14, no. 3

Automation of on-board flightpath management

Generation of boundary-conforming grids around aircraft configurations using transfinite interpolation

Performance characteristics of a buoyant quad-rotor research aircraft

Performance characteristics of a buoyant quad-rotor research aircraft

Flight simulation studies on the feasibility of laterally segmented approaches in an MLS environment

A method for applying linear optical control theory to the design of a regulator for a flexible aircraft

Study and development of an integrated head-up display

Turbulent boundary layer on a porous surface with injection at various angles to the wall

Material flow and defect formation in forging an airfoil shape from metal-matrix composites

Electronic control for small engines

Development of accelerated fuel-engines qualification procedures methodology, Volume 1

Development of accelerated fuel-engines qualification procedures methodology, Volume 1: Appendices

Optimised climb and descent trajectories for airline missions

Automation of on-board flightpath management

Land navigation with a low cost GPS receiver

Aircraft pitch attitude as a performance parameter

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

The Shock and Vibration Digest, volume 14, no. 3

Models for a turbulent premixed dump combustor

PAA acceptance tests on the NAVSTAR GPS Z-set receiver

PAA acceptance tests on the NAVSTAR GPS Z-set receiver
FALCHBBO, O.
FAIB, P. S.
FAIB, B. L.
FAIBUB, B. O.
FAIB, D.
FABIB, B. F.
FACE, J. O.
FABBIS, G.
FABIAB, H.
FABIBUB, B. 0.
FAIBBAX, B. K.
FAIIB, P. F.
FAIIBIL, B. I.
FAEBI, B. J.
FAEIBOHAB, B. R.
FAIBBEB, B. B.
FABIEI, B. E.
FANG, I.
FABILI, B. G.
FAB6, B.
Z.-B.
FAH, P.
PALCO, B.
FAEBB, P. F.
FAIBIL, B. E.
FAEBASSAT, F.
FAB6, B.

FAIB, R. A.
Experience during the development of the German-Japanese helicopter BK 117
[AD-A112318-61-0] p0265 82-19210
FAIB, C.
Multiple-scale turbulence modeling of free turbulent flows
[ASME PAPJR 81-FR-20] p012 82-10594
FAIBU, J. L.
Experimental verification of force determination and ground flying on a full-scale helicopter
[USAOPAPCR-91-0-11] p0395 82-24199
FAIB, C. M.
Investigation of spray characteristics for flashing injection of fuels containing dissolved air and superheated fuels
[NASA-CR-3561] p0453 82-26295
FACE, J. K.
Low level wind shear detection system for airport landing approach areas using the Bertin Doppler acoustic sounder
[SODA/ p0579 82-45816
FACCLANO, P.
Experimental investigation of aerelastic instability of open field thin profiles
p0572 82-31705
FAIB, R. L.
Overview of the O'Hare Runway configuration management system
[AD-1110137] p0320 82-21224
FAEB, D.
Digital simulation of aircraft electrical generating system by means of Sceptre program
p0073 82-14080
FAIB, P. S.
Research and development on wear metal analysis
[AD-1112100] p0450 82-26644
Evaluation of plasma source spectrometers for the Air Force Oil Analysis Program
[AD-1113809] p0475 82-27512
FAIBNAP, F.
A critical appraisal of some current incidence loss models for the stator and rotor of a mixed flow gas turbine
[ASME PAPJR 81-02-120] p0425 82-35530
FAIBCHILD, R. C.
Design study for a low-distortion holographic NDH
[AD-1113507] p0252 82-28292
FAIBFAI, B. E.
Information technology and its impact on test and evaluation at the Naval Test Center
[AD-A1123967] p0056 82-13894
FAIBES, B. D.
Programs for the transonic wind tunnel data processing installation. Part 8: Programs for processing data on the central site computer
[AD-1112900] p0527 82-28310
FAIBESE, B. D.
Ground effect hover characteristics of a large-scale twin-tail-nacelle V/STOL model
[AD-A112609] p0155 82-19201
Analysis of data from a wind tunnel investigation of a large-scale model of a highly maneuverable supercavitation V/STOL fighter - STOL configuration
[AD-A112620] p0155 82-19207
Aerodynamic characteristics of a large-scale, twin-tail-nacelle V/STOL model
[AD-A112606] p0482 82-38443
FALCHEN, D.
Application of the DBRA dynamic stall model to a helicopter blade in forward flight
[ONERA TP NO. 1981-89] p0062 82-13992
Application of the ONERA dynamic stall model to a helicopter blade in forward flight
p0250 82-18161
PERSOHAL AUTHOR INDEX

[ASME PAPER 82-GT-270] p0429 A82-35446
CP6 jet engine performance improvement: High pressure turbine roundness
[BASA-CR-165555] p0203 A82-17174
CP6 jet engine performance improvement: High pressure turbine active clearance control
[BASA-CR-165556] p0526 A82-28297
The CP6 jet engine performance improvement: Low pressure turbine active clearance control
[BASA-CR-165557] p0610 A82-33393

PAULKIN, D. E.
The cost of noise reduction for departure and arrival operations of commercial tilt rotor aircraft
[BASA-CR-137803] p0535 A82-29316

PAULKIN, B. S.
Protection of aircraft interior noise using the statistical energy analysis method
[ASME PAPER 81-DTM-102] p0161 A82-19332

PAULKIN, D.
Induced driven transonic wind tunnel T2: Operation at room temperature and cryogenic adaptation
p0262 A82-19158

PASSE, H. S.
Application of fatigue, crack propagation and strain survey testing to the CR-46 aft rotor drive shaft
p0238 A82-29705

PATEL, V. An experimental and numerical study of 3-D rotor wakes in hovering flight
p0510 A82-40946

PEYER, R. M.
Air cooling of gas turbine blades
p0390 A82-34700

PAW, J. E.
The benefits of data exchange
[ARE-90048] p0323 A82-22095

PAZAR, H. S.
NASA Broad Specification Fuels Combustion Technology Program - Pratt and Whitney Aircraft Phase I results and status
[AIAA PAPER 82-1088] p0416 A82-34999
NASA/General Electric broad-specification fuels combustion technology program - Phase I results and status
[AIAA PAPER 82-1089] p0416 A82-35000

PETERSON, H. E.
Fidelity requirements for future navigation systems
p0022 A82-12637

PETERSON, F. E.
Problems of numerical simulation of unsteady three-dimensional viscous-gas flows in nozzles
p0262 A82-25347

PETERS, R. L.
Mathematical modeling of unsteady separated flow past solid airfoil cascades
p0378 A82-32801

PETERS, K. A.
Automated calculation of the stressed state of shell systems under asymmetrical mechanical and thermal loading
p0165 A82-19928

PELD, J.
An aerodynamic design method for transonic axial flow compressor stage
p0032 A82-10984

PETERS, H. B.
Development and evaluation of automatic landing control laws for light wing landing STOL aircraft
[BASA-CR-166160] p0208 A82-10043

PETERS, G. A.
Acoustic emission inspection of aircraft engine turbine blades for intergranular corrosion
p0544 A82-41914

PETERS, J.
Aircraft energy conservation during airport ground operations
[ASME-81-GT-110] p0589 A82-32352

PETERS, H. L.
Tail configurations for highly maneuverable combat aircraft
p0340 A82-22201

PETERS, H.
The effect of journal misalignment on the oil-film forces generated in a squeeze-film damper
[ASME PAPER 82-GT-285] p0430 A82-35457

PETERSON, R. M.
Integrated airframe propulsion control
[BASA-CR-36/6] p0539 A82-32382

PETROFF, J. G.
Aircraft fire safety research with antimisting fuels - Status report
[AIAA PAPER 82-1235] p0418 A82-35076

PETRITY, R.
Model test and full scale checkout of dry-cooled jet pump sound suppressors
[AIAA PAPER 82-1239] p0418 A82-35079

PETERS, G. A.
Techniques suitable for a portable wear metal analyzer
[AD-811152] p0411 A82-25488

PELAGGIO, M. C.
Crack growth evaluation of a method to convert real-time loads history to a simplified engineering spectra
p0180 A82-12043

PETERS, G. A.
A criterion for determining the amount of wind shear at Paine Field Airport, on the basis of statistical data from barograph records
p0602 A82-15466

PERNADES, H.
The use of adaptive control for helicopter trajectories in search operations
p0154 A82-19065

PETER, P. J.
Computer-in-control selection logic for a triplex digital flight control system
[AIAA 81-2236] p0047 A82-13465

PETERS, H. M.
Application of a microprocessor controlled cockpit display for enhanced pilot control of flight test maneuvers
[AIAA PAPER 81-2510] p0057 A82-13908

PETZEL, H.
Engine dynamic analysis with general nonlinear finite element codes. II - Bearing element implementation, overall numerical characteristics and benchmarking
[BASA-CR-167944] p0609 A82-33390

PETTER, J. L.
Zero-Time Simulation Computation System
p0158 A82-19260

PETHELL, R. E.
Consideration of mechanical, physical, and chemical properties in bearing selection for large transport aircraft
[ASLE PREPRINT 81-LC-28-3] p0126 A82-18412

PETROLL, L.
Aircraft post-crash fire fighting/救援
p0533 A82-29287

PETTELL, L.
Community Sensitivity to Changes in Aircraft noise exposure
[BASA-CR-3490] p0194 A82-16607

PETTL, R. C.
Transverse electric waves for VLP/LF communication between aircraft
[AD-811584] p0596 A82-32502

FIELD, J.
A supercritical F/SST fighter design project
p0546 A82-42545

FIELD, 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

PETRAK, S. F.
Computer graphics for aircraft control
[AIAA 81-2313] p0051 A82-13515

FILIPPI, L. M.
Cryogenic turbine testing
[ASME PAPER 82-GT-113] p0425 A82-35346

FISCHER, R. M.
Maneuver dependent component error models and synchronizer reset filters for inertial navigation systems
p0122 A82-18139

B-43
FISHK, J. L.
Forecasting corrosion damage and maintenance costs for large aircraft
p0212 A82-17357

FISHK, B.
Multiple aircraft tracking system for coordinated research missions
p0433 A82-35869

FISHE, R.
Power systems
p0261 A82-19146

FISHEL, D. V.
A computerized system for the application of fracture tracking data to aircraft management for the C-5A military airlift transport
[AIAA 82-0760] p0336 A82-30119

FISCH, P.
A program to evaluate a control system based on feedback of aerodynamic pressure differentials
[NASA CR-163469] p0191 A82-16089

FISCH, P. W.
The use of differential pressure feedback in an automatic flight control system
[AIAA 82-1596] p0485 A82-38981

FINCH, R. E.
Elevation of graphite/epoxy shims in a high capacity laminat rotor bearing
p0289 A82-27155

FISCHER, A.
Some aerodynamic aspects of hang gliding
p0108 A82-17124

FISCHER, P. W.
aeronautional information data subsytem (AIDS): A ground-based component of air navigation services systems
p0201 A82-17150

Aerosational information data subsystems
p0401 A82-25170

FISCHER, B. A.
ACTTA: Investigation of new piloting and flight control technologies. Volume 1: Review; active wing
[NASA CR-05-81-VOL-1] p0369 A82-23252

ACTTA: Investigation of new piloting and flight control technologies. Volume 2: Aircraft with reduced lateral stability
[NASA CR-05-81-VOL-2] p0370 A82-23253

FISCHER, W. F.
Abrasion resistant coated plastic products for aircraft
p0226 A82-24310

FISHK, B. R.
Experimental and analytical studies of advanced air cushion landing systems
[NASA CR-3976] p0087 A82-12065

FISCHER, L. B.
NASA research in supersonic propulsion - A decade of progress
[AIAA PAPER 82-1046] p0497 A82-00417

NASA research in supersonic propulsion - A decade of progress
[NASA TM-82662] p0458 A82-26300

FISCHER, R. D.
Analysis of the Characteristics of a bypass engine, with allowance for variable pressure lossess in the channels
p0282 A82-26496

FISCHER, B. D.
Thunderstorms hazards flight research - Program overview
[AIAA PAPER 81-2142] p0053 A82-12853

Operational evaluation of thunderstorms penetration test flights during project Storm Hazards '80
p0070 A82-18954

FISCHER, C. P.
A laboratory mock-up ultrasonic inspection system for composites
p0419 A82-35256

FISCHER, R. A.
brittle materials design, high temperature gas turbine
[AD-A100067] p0191 A82-16085

FISHER, J. J.
The Navy F/A-18A Hornet electromagnetic compatibility program
p0070 A82-14760

FISHER, R. A.
The impact of missions on the preliminary design of an ABC rotor
p0279 A82-26392

FISHER, V. L.
Engine controls for the 1980s and 1990s
p0513 A82-00904

FISHER, W.
Contraction of centrifugal compressor performance curves considering non-similar flow conditions
[ASME PAPER 82-05-42] p0421 A82-35300

FITZGERALD, R. E.
Can low-speed jet noise be predicted
p0186 A82-22222

FITZGERALD, E. B.
Developments in boundary layer thrust Vector Control
p0010 A82-10855

FITZSIMMONS, R. D.
How large should a commuter transport be
[AIAA PAPER 81-1732] p0080 A82-10463

FISCHER, A.
Performance evaluation of a kinesthesis-tactieal display
p0366 A82-23221

FISCHER, J. E.
VSTOL - We can build them, but can we sell them?
p0296 A82-28281

FISHER, J. E.
Cold regions testing of an air transportable shelter
[AD-107131] p0475 A82-27325

FISHER, R. L.
Structural system identification technology verification
[AD-A109181] p0269 A82-19503

FISHER, B.
Prediction of aerodynamically induced vibrations in turbomachinery blading
p0327 A82-28986

FISCHER, P. L.
Sanctuary radar
p0150 A82-18906

FISCHER, E. A.
Analysis of computing system configurations for highly integrated guidance and control systems
p0363 A82-23189

FISCHER, R.
Structural design and construction of the New Technology Wing
p0283 A82-26541

FISCHER, R. J.
An evaluation of vertical drag and ground effect using the B-72 rotor balance system
p0499 A82-00510

ASIA vertical drag test report
[NASA CR-166399] p0507 A82-32341

FISCHER, J.
Operability of military aircraft - Some design and cost trends
p0174 A82-20565

FISCHER, J.
Prediction and measurement of time-variant, three-dimensional flows in military aircraft intakes
p0903 A82-13069

FISCHER, P. J.
Transonic flows in an air inlet with large incidence and the effect of a blowing trap
p0094 A82-13071

FISCHER, C.
The helicopter in rescue operations in high-mountain areas
p0153 A82-19019

FLORES, R.
Portable air driven variable speed fiber optic cable termination polisher
[AD-100479] p0091 A82-12448

FLOYD, R. L.
Design of advanced digital flight control systems via Command Generator Tracker (CGT) synthesis methods, volume 1
[AD-1115510] p0570 A82-31331

Design of advanced digital flight control systems via Command Generator Tracker (CGT) synthesis methods, volume 2
[AD-115511] p0570 A82-31332

B-44
FLUGH, H.
A low cost maritime control aircraft ship response system
[AIAA PAPER 81-2660]
p0109 882-16916

FLETCHER, J. B.
An investigation of ring laser gyroscope random walk experiments
[AD-A1194659]
p0584 882-47157

FORSCHING, E.
Technical evaluation report on the Aerelasticity in Turbomachines Symposium
[AD-A1060000]
p0203 882-17172

FORSTER, H.
Effects of aerodynamic coupling on the dynamics of roll aircraft
[AD-A1163636]
p0068 882-12070

FOLK, G. O.
Flight attendant injuries: 1971-1976
[AD-A1179333]
p0051 882-25274

FOLKENSHORN, H.
Design and experience with a low cost digital fly-by-wire system in the SAREX J37 Viggen A/C
[AD-A1163636]
p0051 882-49095

FOLKESSON, K.
A procedure for evaluating flight composition effects on commuter life
[AD-A1179333]
p0043 882-35465

FORD, L. E.
Transonic flow past bodies of the type wing-fuselage with allowase for boundary effects
[AD-A1163636]
p0036 882-34166

FOOTE, L.
Applications of covariance analysis simulation to aerosim flight testing
[AD-A1179333]
p0070 882-14767

FOOTE, R.
Reliability, Availability, Maintainability Data Tracking Plan Improved GUARDIAN 5
[AD-A1179333]
p0068 882-33378

FORDENBERG, C. L. Jr.
Improved solutions to the Falkner-Skan boundary-layer equation
[AD-A1163636]
p0061 882-38283

FORD, V. L.
Helicopter noise definition report UB-60A, 2-76, A-109, 206-L
[AD-A1163636]
p0051 882-32083

FORD, J.
The design of an FFP ground station simulator
[AD-A1163636]
p0045 882-39750

FORD, R. L.
Stability analysis of the twin node model of coupled flexion/torsion vibrations in turboshafts
[AD-A1163636]
p0043 882-15057

FORD, R. L.
Conflicts between random flights in a given area
[AD-A1163636]
p0042 882-25213

FORRENN, C. M.
Design concepts for composite fuselage structure
[AD-A1163636]
p0027 882-27132

FOREST, C. L.
Measurements of heat transfer coefficients on gas turbine components. I - Description, analysis and experimental verification of a technique for use in hostile environments
[AD-A1163636]
p026 882-35387

FOREST, C. L.
Heat transfer optimised turbine rotor blades - An experimental study using transient techniques
[AD-A1163636]
p026 882-35469

FOREST, C. L.
Preliminary investigation into the addition of an auxiliary longitudinal thruster on helicopter agility
[AD-A1163636]
p0249 882-18195

FORSHON, C. L.
The use of metal finishing in aircraft fuel systems
[AD-A1163636]
p0086 882-12077

FORREST, L.
Subsonic military aircraft engine intake: An integrated theoretical experiment design
[AD-A1163636]
p0094 882-13073

FORBER, J. A.
Prediction of cruise missile inlet peak instantaneous distortion patterns from steady state and turbulence data using a statistical technique
[AD-A1163636]
p0043 882-37685

FORREST, H. D.
Benefits of NASA/FAA ground and flight simulation experiments concerning helicopter IPS airworthiness criteria
[AD-A1163636]
p0366 882-23219

A ground-simulator investigation of helicopter longitudinal flying qualities for instrument approach
[NASA-TR-84225]
p0611 882-33398

FORESTER, C.
Digital Avionics Information System (DAIS) Documentation
[AD-A1163636]
p0203 882-17172

FOSTER, D. L.
SAFRA: Controlled requirements expression
[AD-A1163636]
p0316 882-21192

FOSTER, P. J. L.
Occurrence of fretting fatigue failures in practice
[AD-A1163636]
p0325 882-20843

FOSTER, D. J.
An investigation of a stoppable helicopter rotor with circulation control
[NASA-TR-81218]
p0026 882-10030

FOSTER, G. J.
The evolution of display formats for advanced fighters using multi mode color CRT display
[AD-A1163636]
p0505 882-40866

FOSCO, G.
Control of vibration in aeroelastic cascade experiments
[AD-A1163636]
p0143 882-15056

FOSS, R. M.
A practical approach to the design of multivariable control strategies for gas turbines
[AD-A1163636]
p0026 882-35737

FOSS, S. M.
Performance evaluation of target report extractor in the monopulse ATC/BS
[AD-A1163636]
p0071 882-14776

FOSS, G. L.
Evolution of the aerocout
[AD-A1163636]
p0239 882-24706

FOSTER, C. S.
Operational evaluation of the new generation of jet transport aircraft
[AD-A1163636]
p0059 882-13942

FOSTER, C. M.
Precision cooling for gas turbine engines
[AD-A1163636]
p0297 882-28131

FOSTER, J. R.
Helical helicopter approaches with microwave landing system guidance
[AD-A1163636]
p0109 882-16914

FOSTER, J. R.
Analysis of selected VTOG concepts for a civil transportation mission
[AD-A1163636]
p0157 882-19220

FOSTER, L.
Advanced technology DFCS control panel for the L-1011-500
[AD-A1163636]
p0328 882-29000

FOSTER, R. D.
Collection and simulation of spatial infrared signatures of military jet aircraft
[AD-A1163636]
p0058 882-13321

POWERS, E. M.
Nacht 2.0 rotating arm rain erosion test apparatus
[AD-A1163636]
p0280 882-26461

FOX, D.
Computer simulation of an advanced aircraft electrical system
[AD-A1163636]
p0073 882-14021

Preliminary design of an advanced integrated power and avionics information system
[AD-A1163636]
p0507 882-40907

FOX, J. C.
A-7 flight software analysis
[AD-A1163636]
p0594 882-32386

FOX, S. R.
Automated design of advanced drag light aircraft fuselages and nacelles
[AD-A1163636]
p0368 882-23238

FOX, R. W.
Adaptation and equipment of aircraft for the fighting of forest fires
[AD-A1163636]
p0331 882-29584

FOX, R. L.
A crashworthiness test for composite fuselage structure
[AD-A1163636]
p0288 882-27139

A summary of weight savings data for composite VTOG structure

D-85
Simulation of phased excitation due to hazardous wind shear

Fajardo, R. J.

[AIAA PAPER 82-0215] p0117 A82-17044

[AIAA PAPER 82-0215] p0117 A82-17044

The influence of turbulence models on computer-simulated aircraft landing

Fajardo, R. J.

[AIAA PAPER 82-0247] p0119 A82-17066

[AIAA PAPER 82-0247] p0119 A82-17066

Fajardo, R. J.

Proceedings: Fifth Annual Workshop on Meteorological and Environmental Inputs to Aviation Systems

[NASA-CP-2192] p0310 A82-21139

[NASA-CP-2192] p0310 A82-21139

Analysis of vibration induced error in turbulence velocity measurements from an aircraft wing tip boom

Fajardo, R. J.

[NASA-CE-3571] p0530 A82-28088

[NASA-CE-3571] p0530 A82-28088

Bijection and upgrading of synfuels from coal and oil shales by advanced catalytic processes

Fajardo, R. J.

[DE92-05860] p0562 A82-30020

[DE92-05860] p0562 A82-30020

Evaluation of a meteorological airborne pulse Doppler radar

Fajardo, R. J.

[PB82-15047] p0489 A82-39128

[PB82-15047] p0489 A82-39128

Initial experimental research into the response of a turbojet engine compressor to distortion of intake pressure

Fajardo, R. J.

[AIAA PAPER 82-1361] p0489 A82-39128

[AIAA PAPER 82-1361] p0489 A82-39128

A preliminary experimental investigation of the response of a turbojet engine to inlet pressure distortion

Fajardo, R. J.

[p0032 A82-11006]

[p0032 A82-11006]

Doppler processing, waveform design and performance measures for some pulsed Doppler and MTD radars, II

Fajardo, R. J.

[p0390 A82-34671]

[p0390 A82-34671]

Analysis and wind tunnel tests of a probe used to measure altitude through measurement of static pressure

Fajardo, R. J.

[p0489 A82-39128]

[p0489 A82-39128]

Aerodynamic characteristics of the external USN powered lift system using side fences for enhancement of Coanda flow attachment

Fajardo, R. J.

[p0349 A82-22212]

[p0349 A82-22212]

Design and experimental verification of the USN-flap structure for NAL STOL aircraft

Fajardo, R. J.

[p0500 A82-40917]

[p0500 A82-40917]

Aerodynamic response of a blade in pitching oscillation with partial and full separation

Fajardo, R. J.

[p0142 N82-15047]

[p0142 N82-15047]

Crossflow shock on the suction side of a flat delta wing with superonic leading edges

Fajardo, R. J.

[p0332 A82-29659]

[p0332 A82-29659]

A multidimensional crack-growth prediction methodology for flaws originating at fastener holes

Fajardo, R. J.

[p0327 A82-20932]

[p0327 A82-20932]

The emerging need for improved helicopter navigation

Fajardo, R. J.

[p0182 A82-21591]

[p0182 A82-21591]

Downbursts and microbursts - An aviation hazard

Fajardo, R. J.

[p0003 A82-10244]

[p0003 A82-10244]

The Joint Airport Weather Studies Project

Fajardo, R. J.

[p0114 A82-17734]

[p0114 A82-17734]

Austere fatigue endurance test of USN flap structure models at elevated temperature

Fajardo, R. J.

[p0269 A82-19570]

[p0269 A82-19570]

Design, fabrication and qualification of the T-2 composite rudder

Fajardo, R. J.

[p0945 A82-39994]

[p0945 A82-39994]

Enhanced piloting control through cockpit facilities and L.C.T.

Fajardo, R. J.

[p0347 A82-22195]

[p0347 A82-22195]

Integrated structural analysis and design support for advanced launch vehicles

Fajardo, R. J.

[p0338 A82-30144]

[p0338 A82-30144]

Rotors state estimation for rotorcraft
PERSONAL AUTHOR INDEX

GALDA, K. H.
Mathematical model for the maintenance program of modern jet aircraft
[DFYLR-PB-81-16] p0025 HB-10002
Mathematical model for a maintenance program for modern jet aircraft
[NASA-TP-7224] p0585 HB-22308

GALLOWAY, J. E.
Electronic flight instrument systems /EFIS/; the instrumentation of the 1980s
p0242 AS-25324

GALLAGHER, J.
Instrumentation to determine the suitability of HSI systems for helicopter navigation in the national airspace system /NAS/.
[AIAA PAPER 81-2514] p0057 HB-13911

GALLAGHER, J. L.
The effect of non-linear propagation in jet noise
[AIAA PAPER 80-0416] p0121 HB-17936

GALLARDO, V.
Blade loss transient dynamic analysis of turbomachinery
[AIAA PAPER 82-1057] p0015 HB-34982

GALKENT, R. G.
Automated radar performance evaluation in the Radio Frequency Simulation System /RFSS/; faculty at ECOM
p0281 HB-26471

GALLOWAY, R. T.
Digital test pilot concept
[AIAA PAPER 82-0259] p0118 HB-17867

GALLOWAY, R. J.
Assessment of community response to high-energy impulsive sounds
[AD-A1101110] p0322 HB-21777

GARRETT, S. H.
The V2 real-time/aviation weather information system - An alternative to standard general aviation weather briefing procedures
p0580 HB-45834

GARRETT, L. L.
Development of counter-rotating inter shaft support bearing technology for aircraft gas turbine engines
[AIAA PAPER 82-1054] p0413 HB-38769

GARNO, B. R.
Thermodynamics of organic compounds
[AD-A100430] p0318 HB-21202

GARON, E.
Transport aircraft crash dynamics
[NASA-CH-165051] p0394 HB-24166

GARGIOLI, A. T.
Determination of rotor wake induced empennage airloads
[ANS PREPRINT 81-26] p0443 HB-37796
A doublet lattice method for the determination of rotor induced empennage vibration airloads. Analysis description and program documentation
[NASA-CH-165893] p0565 HB-32195

GARSCHHEIN, H. F.
The effect of hybrid composite materials on the dynamic characteristics of helicopter rotor blades
p0991 HB-39263

GE, T.-L.
The effect of propeller geometry on the aerodynamic performance of a monopropeller axial-flow compressor
[ASPE PAPER 82-6T-110] p0424 HB-35364

GEORGE, R. M.
On computing Floquet transition matrices of aircraft
p0013 HB-11225

GEMMELL, P.
Sensitivity of helicopter aeromechanical stability to dynamic inflow
p0273 HB-25773

GEBBISDIAN, P.
Design of supercritical swept wings
p0223 HB-23826

GARAVAGLIA, A.
Design criteria of the A-129 helicopter drive system
p0208 HB-17215

GARESCIOGLIO, J. L.
Optimization of compressor vane and bleed settings
[ASPE PAPER 82-GT-81] p0423 HB-35327

GARDENER, R. H.
A laboratory mock-up ultrasonic inspection system for composites
p0419 AS-25256

GARDNER, R. H.
Energy efficient engine /E3/ technology status
[AIAA PAPER 82-7052] p0415 HB-34980
Internal review of the Energy Efficient Engine /E3/ Program
[ASA ARE PAPER 82-GT-2711] p0429 HB-35447
Energy efficient engine: High pressure turbine uncoked rig technology report
[NASA-CH-165149] p0593 HB-22383

GABBET, J.
Estimation of the peak count of actively controlled aircraft
p0482 HB-38447

GABBARD, S.
Estimation of the number of in-flight aircraft on instrument flight rules
p0518 HB-21117

GABBARD, S.
Magnetic heading reference
[NASA-CASE-LAB-12630-1] p0448 HB-26260
Head-up display
[NASA-CASE-LAB-12630-1] p0536 HB-29319

GARRETT, T. L.
Conceptual design study for an advanced cab and visual system, volume 1
[NASA-CH-166235] p0410 HB-25266
Conceptual design study for an advanced cab and visual system, volume 2
[NASA-CH-166236] p0410 HB-25267

GARRETT, J.
Large terminal maneuvering areas: Operational problems - Possible development of solutions.
[AD-A1 15625

GABBER, R. L.
The effects of flexibility on the steady-state performance of small ribbon parachute models
[AIAA PAPER 81-1922] p0006 HB-10408
Stress measurements in a ribbon parachute canopy during inflation and at steady-state
[AIAA PAPER 81-1944] p0007 HB-10420
Stress measurements in bias constructed parachute canopies during inflation and at steady state
[AIAA PAPER 81-1945] p0007 HB-10421
Robust Kalman filter design for active flutter suppression systems
p0482 HB-38442

EDENSPACE techniques for active flutter suppression
[NASA-CH-12031] p0396 HB-24266

GARRETT, R. A.
ACRA - Fact or fantasy
p019 HB-12048

GARRETT, L. R.
Considerations for international joint venture development of very large aircraft
[ASA PAPER 82-0809] p0376 HB-31982

GARRETT, L. R.
Laser Doppler velocimetry application in the Langley 0.3-meter Transonic Cryogenic Tunnel
p0599 HB-32696

GARES, T. G.
Some VHF laser velocimeter installation and operation considerations
p0599 HB-32698

GATES, T. G.
Starting transients in supersonic nozzles and nozzle-diffuser assemblies
[AD-A1 11140] p0406 HB-25226

GEHRE, L. J.
History of flight testing the L-1011 Tristar jet transport. II - Testing highlights since initial certification of the L-1011-1
p019 HB-12049

GABRIELI, G.
Design Criteria of the A-129 helicopter drive system
p0208 HB-17215

GATES, B. S.
Turboprop design - Now and the future
p0512 HB-40965

8-48
Aerodynamic effects of shape, camber, pitch, and guidance for the use of equivalent systems with flight test experience with high-alpha control.

The design and implementation of a canned scenario development of an efficient procedure for experimental modal analysis of the fuselage panels transient two-dimensional temperature distributions in air-cooled turbine blades

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

Development of an efficient procedure for calculating the aerodynamic effects of planform variation

Military assurance to safety and traffic 

Transparency design decisions — Assessing their impact on visual performance

A new angular deviation measurement device for aircraft transparencies

Portable transparency optical test system

Automated calculation of the stressed state of shell systems under asymmetrical mechanical and thermal loading

Helicopter propulsion systems. 1: Vibration prevention systems on helicopters 2: Problem of noise in the cabin

The reliability of height and identity data

Guidance for the use of equivalent systems with all-\textsuperscript{-7}0785C

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

Flight test experience with high-alpha control system techniques on the F-14 airplane

MiL-STD 1553B - Aircraft \( N \) environmental susceptibility effects

Results of NASA/FAG ground and flight simulation experiments concerning helicopter \( L \) airworthiness criteria

Evaluation of a trajectory command concept for manual control of carrier approaches and landings

A ground-simulator investigation of helicopter longitudinal flying qualities for instrument approach

The I-I4 - 24 years of V/STOL flight testing

Environmental exposure effects on composite materials for commercial aircraft
GIBSON, L. C.
A survey of eluting layer research
[AD-4115224] p050 N82-30006
GIBSON, R. H.
Efficiency exposure effects on composite materials for commercial aircraft
[NASA-CR-165981] p050 N82-32043
GIBBS, G. D.
Enhanced F-15 air-to-ground flight demonstrations
[AlAA PAPER 81-2413] p005 A82-3854
GIBBS, S. E.
Microwave communications to remotely piloted vehicles
p010 A82-18911
GIBSON, R. F.
Damping and stiffness of aligned discontinuous fiber reinforced polymer composites
p035 A82-30102
GIBSON, W. E.
Flight testing Dornier aircraft LimitedDados utilising onboard data systems by microprocessor
p057 A82-13907
GIBBES, J. W.
Size reduction flight test airborne data systems
p016 A82-20766
GIESCHE, F.
The external balance system of the German-Dutch wind tunnel RPS and its strain gage load cells
p059 A82-43184
GIBBENS, R. T.
The design integration of wingtip devices for light general aviation aircraft
p050 A82-40933
GIBBON, W. P.
Large angle-of-attack characteristics of a forward-swept wing fighter configuration
[AlAA PAPER 82-1322] p047 A82-39099
GILBERT, B. C.
System optimization by periodic control
GILBERG, G. A.
Helicopters and Navstar/GPS
p012 A82-21592
COMUNITY Aero transport benefits and opportunities
[NASA-CR-166486] p017 A82-16008
GILBERT, R. E.
Data reduction procedures for Sea King helicopter flight trials
[Adv. A117/84] p050 A82-32359
GILLES, H. M.
Study of reignition of exhaust gases with different initial temperature in a reversed turbojet engine
p004 A82-11444
GILL, F. H.
Design considerations for optimal flight control systems
p003 A82-11077
GILL, J. C.
Propulsion study for Small Transport Aircraft Technology (STAT)
[NASA-CR-165949] p007 A82-10037
GILL, R. A.
Advanced fighter technology integration AFIT/AF-16 test program overview
[AlAA PAPER 81-2353] p005 A82-14398
GILLES, L. A.
Development of a low risk augmentation system for an energy efficient transport having reduced static stability
[NASA-CR-159166] p059 A82-32377
GILREATH, R. C.
General aviation aircraft antennas for the global positioning system
[AlAA-TH-83212] p004 A82-11339
GILSON, R. D.
A tactical display and primary flight training
[NASA-CR-166202] p035 A82-22238
Performance evaluation of a kinesthetic-tactual display
p036 A82-23231
GILDER, G. W.
The application of strapdown inertial technology to attitude and heading reference system requirements
p018 A82-21590

PERSONAL AUTHOR INDEX

GIMPEL, R. A.
Suppression of self-oscillations in open wind tunnels
p027 A82-25794
GIESCHE, F.
Supersonic cruise/transonic maneuver wing section development study
[AD-1110686] p044 A82-26256
GIESCHE, F. B.
Transonic computational experience for advanced tactical aircraft
p043 A82-35563
GIBSON, J. W.
Wing design for supersonic cruise/transonic maneuver aircraft
p051 A82-41021
GIBBON, V. L.
Von Karman and VIII - The first 25 years
p073 A82-25673
GOLDBERG, L.
Quantitative interpretation of recirculated flow visualization by the analysis of video pictures
p028 A82-27109
GIBBON, D. G.
Air bag impact attenuation system for the AQM-34V remotely piloted vehicle
[AlAA PAPER 81-1917] p006 A82-10003
GIBBS, S.
The influence of new turbine technologies on their components
p007 A82-17210
GIBBENS, J.
Aircraft meteorological data relay /ADAB/...
p059 A82-45822
GIBBON, J.
New range generators for the next generation of civil aircraft
[SEE PAPER 811167] p055 A82-44236
GIBELL, B.
Performance evaluation of target report extractor in the monopulse ATCABS
p071 A82-14776
A multimicroprocessor system for ATCABS monopulse data processing
p071 A82-14777
GIBBENS, T. T.
A multifrequency adaptive radar for detection and identification of objects - Results on preliminary experiments on aircraft against a sea-clutter background
p039 A82-32979
GIBBS, G. D.
Depot support of gas turbine engines
p042 A82-27217
GIBBON, R.
Response of cloud microphysical instruments to aircraft landing conditions
[AD-11231] p049 A82-27284
GIBBON, R.
Flight simulation consoles, aid or obstruction - Objective evaluation of control consoles of modern flight and tactics simulators
p015 A82-19269
GIBSON, B.
Analysis of built-in-test accuracy
p054 A82-42211
GIBBEN, L. J.
Application of combined balancing methods to flexible rotors of aviation gas-turbine engines
p028 A82-26249
GILSH, E. E.
Electronic warfare system measure of effectiveness
p053 A82-43040
GIBBON, R. A.
Results of T56 engine performance monitoring trial in Hercules aircraft, February - July 1977
[AIAA-886-ENG-TECH-886-409] p056 A82-29322
GILBERG, R. J.
Advanced exhaust nozzle technology
p095 A82-13078
GIBBON, R. L.
Effects of base/blade ratio and spacing on fan noise
[AlAA PAPER 81-2033] p008 A82-10457
GIBBS, R. A.
Evaluation of methods for characterizing surface topography of models for high Reynolds number wind-tunnels
[AlAA PAPER 82-06004] p020 A82-22675
Status of the national transonic facility
p038 A82-33326
GOODMAN, R. A.
Reliability analysis of the F-8 digital fly-by-wire system
[NASA CR-163110] p0089 N82-12079

GOODMAN, R. E.
Micro-heads-up display
p0501 A82-40533

GOODRICH, T. E.
Advanced aluminum and titanium structures;
Proceedings of the Van Leer Annual Meeting,
Washington, DC, November 15-20, 1981
p0327 A82-26994

GOODRICK, P. F.
Comparison of simulation and experimental data for a gliding parachute in dynamic flight
[AIAA PAPER 81-1924] p0006 A82-10009
Development of methods for assessment of gliding parachute applications
[AD-A117103] p0605 N82-33356

GOODWIN, R.
Civil aviation in China
p0053 A82-13600

GOODWIN, R. V.
An investigation of the combustion process in solid fuel rockets
[AD-A110462] p0060 A82-11232
Modeling solid-fuel Ramjet combustion including radiation heat transfer to the fuel surface
[AD-A107481] p0475 A82-27436

GOOTER, R. J.
Control software for two dimensional airfoil tests using a self-streamlining flexible walled transonic test section
[NASA CR-165941] p0559 N82-30314

GOOTJAN, P. E.
Comparison between computations and experimental data in unsteady three-dimensional transonic aerodynamics, including aeroelastic applications
[AIAA 82-0499] p0339 A82-30157

GOSSET, L. E.
Process development and evaluation of gas turbine engine components in LBE 629
[PB-90-0050] p0318 A82-21205

GOSSON, G. G.
Principles of achieving damage tolerance with flexible maintenance programs for new and aging aircraft
p0517 A82-41016

GOVATO, A. A.
The formation of benzpyrene during the combustion of aviation fuels
p0282 A82-26494

GOVROST, R. M.
The technology of sheet-metal stamping in the production of aircraft /2ed revised and enlarged edition/
p0080 A82-14998

GOVVO, D. L.
Georgia Tech coherent jammer flight test
[AIAA PAPER 81-2452] p0056 A82-13898

GOVVO, S.
Thermodynamic and transport combustion properties of hydrocarbons with air. Part 1: Properties in SI units
[RASA TP-1986] p0574 N82-32106
Thermodynamic and transport combustion properties of hydrocarbons with air. Part 2: Properties corresponding to Kelvin temperature schedules as part 1
[RASA TP-1987] p0575 N82-32107
Thermodynamic and transport combustion properties of hydrocarbons with air. Part 3: Properties in US customary units
[RASA TP-1988] p0575 N82-32108
Thermodynamic and transport combustion properties of hydrocarbons with air. Part 4: Properties corresponding to Rankine temperature schedules as part 3
[RASA TP-1990] p0575 N82-32109

GOVVOVIK, L. F.
Improving the accuracy of the estimates of surfactant content in jet fuels
p0218 A82-23250

GOLBESKII, E. L.
Survey and design of airfields
p0552 A82-43603

GOOLL, A.
Wind tunnels of the institute of mechanics of Moscow State University

GOLLL, A.
Implementation of AVADCOM INET
p0397 N82-24213

GOORETSKII, V. A.
Optimization of requirements on the pitting-prevention properties of turbojet-engine oils
p0682 A82-15723

GOBERELL, V. E.
Computer program for aerodynamic and blading design of multistage axial-flow compressors
[AIAA TP-1946] p0411 H82-15039

GONTHER, E.
Air service, airport access and future technology
[PB82-105958] p0192 A82-16100

GOSSLIN, G. B.
Measures to increase airfield capacity by changing aircraft runway occupancy characteristics
[NASA CR-168841] p0351 N82-22240

GOSSNER, F. H.
U.S. Army remotely piloted vehicle supporting technology program
p0496 A82-39739

GOTT, V. A.
Computer graphics for quality assurance
p0167 A82-20276

GOLAS, L.
The calculation of deviation angle in axial-flow compressor cascades
[ASME PAPER 82-GT-230] p0428 A82-35612

GOULD, H. L.
Kneeless-adeptive wing flight demonstration program
[SAA PAPER 810135] p0232 A82-24399

GOULDE, H. E.
Study of the deicing properties of the ASD-3 rotodome
[AD-511548] p0570 H82-31335

GOVRAND, E. M.
Three dimensional turbulent boundary layer development on a fan rotor blade
[AIAA PAPER 82-1007] p0375 H82-31965

GOVRANDAII, H. M.
Modeling procedures for handling qualities evaluation of flexible aircraft
p0061 A82-13968

GOLLANDER, H.
Tool use in cutting operations involving integral structural components in aircraft construction
p0326 A82-26673

GOAV, P.
Compressor stall inducing installation effects of an engine control parameter for the CF-5 aircraft
p0095 H82-31085

GRABONSET, J. F.
Pavrev Rover Flight Test Program
[AIAA PAPER 81-2492] p0063 A82-14300

GRAZI, J. J.
Integrated cockpit for A-129
p0366 A82-23225

GRAD, T. E.
p0546 A82-42035

GRAD, T. E.
The system of 'objective control'
p0490 A82-39245

GRAD, S.
Marine Air Traffic Control and Landing System
[RTACALS Investigation], volume 1
[AD-A110862] p0390 H82-24188
Marine Air Traffic Control and Landing System
[RTACALS Investigation], volume 2
[AD-A110863] p0390 H82-24189
Marine Air Traffic Control and Landing System
[RTACALS Investigation]
p0466 A82-27260

GRAFF, S.
High angle-of-attack characteristics of three-surface fighter aircraft
[AIAA PAPER 82-0245] p0186 A82-22204
High angle-of-attack characteristics of a forward-swept wing fighter configuration
[AIAA PAPER 82-1322] p0087 A82-39099

GRAHAM, M. M.
The effect of aspect ratio on the unsteady aerodynamic forces induced by vibration of a
### PERSONAL AUTHOR INDEX

<table>
<thead>
<tr>
<th>Author</th>
<th>Title</th>
<th>Page</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAMAR, L. D.</td>
<td>Integrated control design techniques</td>
<td>[AD-A102823]</td>
<td>p0257 B2-18224</td>
</tr>
<tr>
<td>TAMAR, L. S.</td>
<td>Standardization study for advanced aircraft armament system program</td>
<td>[AD-A107681]</td>
<td>p0201 B2-17156</td>
</tr>
<tr>
<td>GRANGER, L. G.</td>
<td>Acrylic - A timely review</td>
<td></td>
<td>p0227 A2-24317</td>
</tr>
<tr>
<td>GRANT, R. W.</td>
<td>Technology for tomorrow's business aircraft</td>
<td></td>
<td>p0551 A2-4577</td>
</tr>
<tr>
<td>GRANTHAM, R. E.</td>
<td>Noise and economic characteristics of an advanced blended supercritical transport concept</td>
<td>[NASA TP-2073]</td>
<td>p0565 B2-31294</td>
</tr>
<tr>
<td>GRANIE, L. C.</td>
<td>Trailing edge flap influence on leading edge vortex flap aerodynamics</td>
<td>[AIAA PAPER 82-0128]</td>
<td>p0115 B2-17799</td>
</tr>
<tr>
<td>GRAY, R. W.</td>
<td>C-5A operational utility evaluation soil tests and analysis</td>
<td>[AD-A105555]</td>
<td>p0133 B2-14083</td>
</tr>
<tr>
<td>GRAFTEL, L. L.</td>
<td>The use of dynamic mock-ups in the design of advanced systems</td>
<td></td>
<td>p0699 B2-22902</td>
</tr>
<tr>
<td>GRAY, N. E.</td>
<td>An evaluation of helicopter autorotation assist concepts</td>
<td></td>
<td>p0500 B2-40524</td>
</tr>
<tr>
<td>GRAT, L. E.</td>
<td>Solution to a bistable vibration problem using a plain, uncentralized squeeze film damper bearing</td>
<td>[AIAA PAPER 82-07-281]</td>
<td>p0630 A2-35455</td>
</tr>
<tr>
<td>GRAYSONO, R. L.</td>
<td>Analysis of system problems using aviation safety reporting system data</td>
<td></td>
<td>p0219 B2-23312</td>
</tr>
<tr>
<td>GREEN, J.</td>
<td>Dilution jet behavior in the turn section of a reverse flow combustor</td>
<td>[AIAA PAPER 82-0192]</td>
<td>p0167 B2-20291</td>
</tr>
<tr>
<td>GREEN, J.</td>
<td>Post-flight assessment of the JTIDS Bel Havon</td>
<td></td>
<td>p0266 B2-19220</td>
</tr>
<tr>
<td>GREENLEY, D. H.</td>
<td>MARAT - An air battle simulation of the USAF Tactical Air Control System (TACS) with Advanced Tactical Airkars</td>
<td></td>
<td>p0158 B2-19256</td>
</tr>
<tr>
<td>GREENE, D. L.</td>
<td>Cockpit integration from a pilot's point of view</td>
<td></td>
<td>p0366 B2-23224</td>
</tr>
<tr>
<td>GREENE, E. J.</td>
<td>An optical data link for airborne scanning system</td>
<td>[AIAA PAPER 82-0128]</td>
<td>p0391 B2-34737</td>
</tr>
<tr>
<td>GREENE, F.</td>
<td>Application of an optical data link in the airborne scanning system</td>
<td></td>
<td>p0491 B2-39725</td>
</tr>
<tr>
<td>GREENE, E. E.</td>
<td>Post-flight assessment of the JTIDS Bel Havon</td>
<td>[AIAA 81-2312]</td>
<td>p0124 B2-18154</td>
</tr>
<tr>
<td>GREENBERG, E. G.</td>
<td>Development and operating characteristics of an advanced two-stage combustor</td>
<td>[AIAA PAPER 82-0191]</td>
<td>p0116 B2-17833</td>
</tr>
<tr>
<td>GREENE, R.</td>
<td>Development and operating characteristics of an advanced two-stage combustor</td>
<td>[AD-A108753]</td>
<td>p0057 A2-29332</td>
</tr>
<tr>
<td>GREENE, R. H.</td>
<td>Effects of filler materials upon radome rain erosion performance at subsonic conditions</td>
<td></td>
<td>p0281 B2-24642</td>
</tr>
<tr>
<td>GREENE, R. E.</td>
<td>An aerodynamic characteristics of airfoils with ice accretions</td>
<td>[AIAA PAPER 82-0282]</td>
<td>p0184 A2-22081</td>
</tr>
<tr>
<td>GREENE, B.</td>
<td>Secondary flows and losses in axial flow turbines</td>
<td>[AIAA PAPER 80-0724]</td>
<td>p0225 A2-24022</td>
</tr>
<tr>
<td>GREENE, R. E.</td>
<td>A new resid for field repair</td>
<td></td>
<td>p0291 B2-27412</td>
</tr>
<tr>
<td>GRAP, C. J., JR.</td>
<td>Aerodynamic characteristics of airfoils with ice accretions</td>
<td>[AIAA PAPER 82-0282]</td>
<td>p0184 A2-22081</td>
</tr>
</tbody>
</table>

B-53
The effect of temperature-time factors on the Sensitivity of bonded and bolted joints in Detached floor past V-shaped low-aspect-ratio wings Conditions of pulsed starting of supersonic wind Overview of flight and ground testing with Design considerations for duty cycle, life and Comparison of different nozzle concepts for a Damage of turbine blades due to interaction with Digital Avionics Information system (DAIS) Development of maintenance programmes through the flapping in tropical forests - A new approach using Hegenerative helicopter engines: Advances in Program for narrow-band analysis of aircraft flyover noise using ensemble averaging techniques An analytical methodology to predict potential aircraft losses due to canopy birdstrikes Overview of flight and ground testing with Theoretical and experimental investigations of wind tunnel interference due to angle of attack Airborne measurements with a sensitive high-resolution 90 GHz radiometer Boeing testing techniques for measuring inlet drag Model test and full scale checkout of dry-cooled jet engine sound suppressors Practical experience with a noncontact blade vibration measuring system in industrial turbocompressors Calculation and uncalibrated inertial navigation system performance in valid and jaunced global positioning system environments Aeronautics in China - an AIAA report International aerospace review: Proceeding of the First International Aerospace Symposium, Le Bourget, Seine-Saint-Denis, France, June 2, 3, 1981 Damage of turbine blades due to interaction with fuel resination products The effect of temperature-time factors on the metal damage and endurance characteristics of gas-turbine-engine rotor blades Program for narrow-band analysis of aircraft flyover noise using ensemble averaging techniques Regenerative helicopter engines: Advances in performance and expected development problems Design considerations for duty cycle, life and reliability of small limited life engines A wind-tunnel study of the aerodynamic characterization of a blotted versus smooth-skin supercritical-wing The flight management computer and coatings The external balance system of the German-Dutch windtunnel DNW and its strain gage load cells Experiments on propeller noise Techniques for interfacing multiplex systems Unsolved problems of nickel cadmium batteries A wind-tunnel study of the aerodynamic characterization of a blotted versus smooth-skin supercritical-wing Interactive system for pilot self-briefing An automated technique for improving modal test/analysis correlation An interactive system for pilot self-briefing Experimental measurements with a sensitive high-resolution 90 GHz radiometer
<table>
<thead>
<tr>
<th>Title</th>
<th>Author</th>
<th>Citation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The effect of rotor blade thickness and surface finish on the performance of a small axial flow turbine</td>
<td>HASS, J. E.</td>
<td>[AIAA PAPER 82-07-222]</td>
</tr>
<tr>
<td>Comparison of experimental and analytical performance for contoured endwall stators</td>
<td>[AIAA PAPER 82-12-166]</td>
<td>p0628 A82-35409</td>
</tr>
<tr>
<td>Comparison of experimental and analytical performance for contoured endwall stators</td>
<td>[AIAA PAPER 82-02-077]</td>
<td>p0654 A82-26299</td>
</tr>
<tr>
<td>Pavement design for general aviation with improved fuel economy</td>
<td>HABERLAND, W.</td>
<td>p0645 A82-14416</td>
</tr>
<tr>
<td>Experimental program for general aviation</td>
<td>HABERBAUER, D. E.</td>
<td>p0628 A82-26542</td>
</tr>
<tr>
<td>The use of a multi-degree-of-freedom dual balance system to measure cross and cross-coupling derivatives</td>
<td>HACKE, E. L.</td>
<td>p0637 A82-32335</td>
</tr>
<tr>
<td>Determination of wind tunnel constraint effects by a unified pressure signature method. Part 1: Applications to winged configurations</td>
<td>HACKETT, J. E.</td>
<td>p0637 A82-23232</td>
</tr>
<tr>
<td>Determination of wind tunnel constraint effects by a unified pressure signature method. Part 2: Application to jet-in-crossflow</td>
<td>[AIAA PAPER 82-16687]</td>
<td>p0637 A82-23235</td>
</tr>
<tr>
<td>Design and analysis of advanced composite structures</td>
<td>HADENBERG, A. F.</td>
<td>p0647 A82-2470</td>
</tr>
<tr>
<td>Investigation of the application of a cryogenic blending process to produce antiknitting diesel fuels</td>
<td>[AD-A110597]</td>
<td>p0611 A82-25399</td>
</tr>
<tr>
<td>Implementation of the recommendations made on the technical report titled analysis of advanced simulator for pilot training</td>
<td>[AD-A110779]</td>
<td>p0612 A82-16094</td>
</tr>
<tr>
<td>Investigations of the separation behavior on airfoils at high angles of attack, using linear lift theory</td>
<td>HABERREITER, L.</td>
<td>p0525 A82-18189</td>
</tr>
<tr>
<td>Processes and procedural approaches used in the dimensioning of the supporting structure and the demonstration of the airworthiness</td>
<td>HABERSTEIN, L.</td>
<td>p0550 A82-83331</td>
</tr>
<tr>
<td>Integration of complex systems in current and future aircraft projects for the example of avionics</td>
<td>HADENBERG, A. F.</td>
<td>p0132 A82-14080</td>
</tr>
</tbody>
</table>
B4BDBBBG. G. O.

B4ID. L. 4.

S4IIAB, C. 6.

BaRBI. B. P.

BABDSCHOB, B. F.

BABAGOD, S. V.

HAHBE. J. a.

B4BIAI, X. L.

BABOODA, B.-B. H.

B4ISEI, B. Z.

B4ISEI. B.

BAIOOT4, B. I. B.

BAKLI. B. 0.

BAILEY, I. D.

BABES, B- L.

B4BOODA, B. I. B.

B4HHOBD, G. P.

BABBOBD. 6. P.

Cloud top remote sensing by airborne lidar

Interim review of the Energy Efficient Engine /E3/

Composite materials

Comparison of theoretical and experimental
4-7 transonic King designs

Meteorological inputs to advanced simulators

New facility and technique for two-dimensional
Shape optimization of fiber reinforced composites

The effect of ejector augmentation on test-section
Limited artificial and natural icing tests

Advanced aircraft electrical system control
design and implementation of USAF avionics
integration support facilities

Integrated flight trajectory control

Abrasion resistant coated plastic products for aircraft

The DFDR digital flight data acquisition and
Processing Station and its Utility

Fatigue life prediction of helicopter pitch link
using random life calculation methods

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

Analysis of rotating structures using image
decomposition with multiple pulsed lasers and moire
techniques

Design criteria for flightpath and airspeed
control for the approach and landing of STOL
aircraft

Flight experiments using the front-side control
technique during piloted approach and landing in
a powered lift STOL aircraft

Stress intensity factor measurements in composite
sandwich structures

Numerical computation of optimal atmospheric
trajectories involving staged vehicles

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

B-58
B1BBISOB. B. 1.
B1B8IS, D. 3.
H1BBIS. 1. B.
H1BBISOI. B.
P0094 882-13076
HARPSTE. M. E.
Tactical Radar Threat Generator system
p0149 882-18903
HARRINGTON, W. H., Terrain following/terrain avoidance system concept development
[AIAA PAPER 82-1518] p0097 882-04026
HARRIS, L. E.
Terrain following/terrain avoidance system concept development
p0606 882-33363
HARRIS, D. J.
Hover tests of the YF-15 Tilt Rotor Research Aircraft
[AIAA PAPER 81-2501] p0064 882-14386
HARRIS, G. L.
Electric propulsion for a mini RPV system
p0494 882-39744
HARRIS, J. M.
Maintenance training simulator design and acquisition: Handbook of ISO procedures for design and documentation
[AD-AT11430] p0457 882-26321
HARRIS, K. J., Jr.
Engine component retirement for cause
p0345 882-22177
HARRIS, R. L.
Experimental study of oscillating-wing propulsion
p0298 882-28514
HARRIS, R. L.
Development of the Circulation Control Wing-Lower Surface Flowing powered-lift system for STOL aircraft
p0512 882-40969
HARRIS, R. L.
Future directions in CHI integrated avionics
p0067 882-14720
HARRIS, R. L.
Model helicopter rotor impulsive noise
p0013 882-11300
--- Model helicopter rotor low frequency broadband noise p0273 882-25772
--- Dynamic surface measurements on a model helicopter rotor during blade slap at high angles of attack p0503 882-40555
HARRISON, L. J.
The history of the development of the GQ aerocanonical parachute - 1971-1980
p0076 882-14961
HARRISON, P.
Powder metallurgical innovations for improved hot section alloys in aero-engine applications
[PM-9007] p0375 882-22358
HARRISON, R. H.
Reliability analysis of a dual-redundant engine controller
[SAE PAPER 810177] p0233 882-28410
HARRISON, R. L.
An operational evaluation of head up displays for civil transport operations. NASA/FAA phase I report
[NASA-TP-1815] p0608 882-33381
HARRISON, R. P.
TS/TS polarization ratios in a sample of 30 kHz sferics received at altitudes from 0 to 70 km
[AD-AT08168] p0250 882-18644
HARROLD, W. B.
Light-guided information distribution systems
[AIAA 81-2320] p0501 882-13519
HARSHBA, P. R.
Multiple-scale turbulence modeling of free turbulent flows
[ASME PAPER 81-FP-20] p0012 882-10934
HASS-GUH, L. A.
Mechanically-fastened joints for advanced composites - Phenomenological considerations and simple analyses
p0289 882-27156
HARR, D. L.
Failure analysis of variable reluctance stepper motor
p0072 882-14792
HART, P. D.
Noise-Coc 81; Proceedings of the National Conference on Noise Control Engineering, North Carolina State University, Raleigh, NC, June 8-10, 1981
p0128 882-18726
HART, J. C.
Civil (French/US) certification of the Coast Guard's HH-65A Dauphin
p0364 882-22310
HARTMAN, D.
Mechanical advances in the design of small turboshaft engines
p0207 882-17208
HARTMANN, G.
Practical design and realization of a digital adaptive flight control system
p0039 882-11079
HARTMANN, W.
A CTPP taileron for the Tornado: Construction and production
[SBP-F-212/156/1/F/B/2] p0027 882-10035
HARTWELL, B. L.
The contribution of thermal barrier coatings to improvements in the life and performance of gas turbine components
[PHD-90076] p0355 882-22271
HARVEY, C. A.
Wing/store flutter - An active adaptive control application
p0044 882-13122
HARVEY, C. A., Jr.
Test demonstration of digital control of wing/store flutter
[AIAA 82-0645] p0337 882-30141
--- Self-tuning regulator design for adaptive control of aircraft wing/store flutter
p0578 882-95538
HARVEY, J. F.
A versatile data acquisition system for a low speed wind tunnel
[AD-AT06269] p0192 882-16097
HARVEY, L. A., Jr.
The Schladitz fuel injector: An initial performance evaluation without burning
[AD-AT13612] p0473 882-27315
HARVEY, R. D.
The NASA Langley laser flow control airfoil experiment
[AD-AT00707] p0381 882-33327
--- NASA Langley laser flow control airfoil experiment
p0301 882-20150
HARASHOTO, E.
New molding method of three-dimensional hollow photonic-stard model and centrifugal stress analysis of air cooled turbine blade model
[ANL-TR-9271] p0307 882-11067
HARSH, J. P.
Effects of 50,000 hours of thermal aging on graphite/epoxy and graphite/polyimide composites
[PM-9007] p0335 882-30087
HASLE, L.
General purpose research rotor
[NSF-PERFEINT 61-9] p0841 882-37777
HASZ, M. D.
The procurement of flight simulators at the German Luftwaffe
[DGLR PAPER 61-093] p0159 882-19268
HASSANISSA, A. L.
Subcritical and supercritical airflows for given pressure distribution
p0085 882-12031
BASTIIGS, B. C., JB.

HAOCK, D.

HAIFIBID. O. J.

HASEB. J. P.

BABOBIB, L. A.

BABKBS. D. J.

BABKIHS, B. B.

BABKBS. D. J.

BAOSUECBI. B. J.

BBABOI, B. F.

BATES, P. C., JB.

BEIEEALI, L. D.

Bead, J. D.

BAIEEAL. B. C.

BAIFJE. K.

BABOBIB, L. A.

BAIFJE. K.

BABBI. J.

BABBI. J.

BABBI. J.

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BAIFIE. B.

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BABBI. J.
HOLT, L. K.  
Development of inlet turbulence and strut flow disturbances and their effect on turbomachinery rotor noise  
[AIAA Paper 82-16834] p0191 82-16091

HOBBS, B. J.  
An approach to the problem of predicting acoustic radiation from turbofan inlets  
[AIAA Paper 82-26465] p0599 82-12698

HOD, D.  
A new method of cooling turbine vanes  
[HASA-CB-162039] p0034 82-11027

HODGINS, L.  
Propulsion system noise in terms of the steady transonic potential flow around airplanes  
[AIAA Paper 82-10981] p0034 82-11027

HODKINSON, A.  
Study of acoustic resonance of cascaded jet engines  
[AIAA Paper 82-15068] p0140 82-15068

HODGES, J.  
Multibody aircraft study, volume 1  
[AIAA Paper 82-32346] p0588 82-32346

HODGES, R.  
Multibody aircraft study, volume 2  
[AIAA Paper 82-32345] p0588 82-32345

HODGSON, R.  
Electric Fly-by-Wire Systems  
[AIAA Paper 82-19134] p0260 82-19134

HOLDEN, R.  
A synthetic technique for highly uncertain and interacting multivariable flight control systems  
[AIAA Paper 82-14827] p0074 82-14827

HODROLD, R.  
Recent results in main beam nulling  
[AIAA Paper 82-43792] p0553 82-43792

HODROLD, S.  
An iterative finite element-integral technique for predicting sound radiation from turbofan inlets in steady flight  
[AIAA Paper 82-12124] p0145 82-17796

HODROLD, R.  
Acoustic properties of turbofan inlets  
[AIAA Paper 82-19016] p0462 82-27090

HODROLD, R.  
Preliminary analysis of the benefits and costs to implement the National Airspace System Plan  
[AIAA Paper 82-17064] p0086 82-33369

HOEST, D.  
Sideline indication system as a fuel saving aid in jet transport aircraft operation  
[AIAA Paper 82-25181] p0402 82-25181

HOGEN, K.  
Prediction of separated asymmetric trailing-edge flows at transonic Mach numbers  
[AIAA Paper 82-1021] p0375 82-31974

HOGERT, R.  
Drag reduction using pneumatic turbulators  
[AIAA Paper 82-22223] p0350 82-22223

HOFMANN, E.  
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  
[AIAA Paper 82-02-175] p0426 82-35308

HOLT, R.  
A synthesis technique for highly uncertain and interacting multivariable flight control systems  
[AIAA Paper 82-14827] p0074 82-14827

HOLT, R.  
A synthesis technique for highly uncertain and interacting multivariable flight control systems  
[AIAA Paper 82-14827] p0074 82-14827
oscillating supersonic/hypersonic wings at high
Bodified version of LIBAB2: A calculation method
Bifurcation analysis of nonlinear stability of
Low level wind shear detection system for airport
Pre-design study for a modern four-bladed rotor
Advanced stratified charge rotary aircraft engine
Development of a digital integrated automatic
Low-speed characteristics of a fighter-type
Integrated flight and fire control demonstration
Digital avionics systems - The BAF experience
Software features applicable to inertial
Casing wall boundary-layer development through an
Airborne lidar measurements of the Soufriere
Applications to aeronautics of the theory of
Thrust reverser induced flow interference on
Airplane performance sensitivities to lateral and
Vortex formation over double-delta wings
Airborne lidar measurements of the Soufriere
Thrust reverser induced flow interference on
tactical) aircraft stability and control
Investigation of upwind schemes for finite element
Elastic-plastic finite-element analyses of
diffusion bonded evaluation
for inviscid transonic flow about thin airfoils
on an F-15B aircraft: System development and
Development of a helicopter rotor/propulsion
design study for Small Transport Aircraft
Technology (STAT)
Advanced simulation
Repair and regeneration of turbine blades, vanes
and discs
Vortex lift augmentation by suction on a 60 deg
swept Gothic wing
Automated Low-cost Weather Observation System
(AWOS)
Advanced stratiﬁed charge rotary aircraft engine
design study
Advanced general aviation comparative
engine/airframe integration study
for the Rotor System Research Aircraft (RSRA)
Advanced accident prevention - A regulators view
Low level wind shear detection system for airport
landing approach areas using the Berlin Doppler
acoustic scanner /Sodar/
Synchronization analysis of nonlinear stability of
aircraft at high angles of attack
Oscillating epersonic/hypersonic wings at high
incidence
Modified version of LTRAN2: A calculation method
for advanced transonic flow about thin airfoils
in modernly low maeant motion
A finite difference method for the calculation of
transonic flow about a wing, based on small
perturbation theory
Development of a helicopter rotor/proposition
system dynamics analysis
Development of a rotorcraft. Propulsion dynamics
interface analysis, volume 1
Development of a rotorcraft. Propulsion dynamics
interface analysis, volume 2
Flight tests for the assessment of tank
performance and control activity
Solid-state VOR/TAC with remote maintenance and
monitoring
Software features applicable to inertial
measurement unit self alignment
Thrust reverser induced flow interference on
tactical) aircraft stability and control
Investigation of upwind schemes for finite element
analyses of transonic flow over thin airfoils
Elastic-plastic finite-element analyses of
diffusion bonded evaluation
for inviscid transonic flow about thin airfoils
on an F-15B aircraft: System development and
Development of a helicopter rotor/propulsion
design study for Small Transport Aircraft
Technology (STAT)
A summary of V/STOL inlet analysis methods
[NASA-TM-82885] p0344 A82-22651

HILTON, L. M.
Experimental investigation of turbine endwall heat transfer. Volume 1: Description of experimental hardware and test conditions
[AIAA-81-11032] p0317 A82-21199
Experimental investigation of turbine endwall heat transfer. Volume 2: Linear and annular cascade summary data sets
[AIAA-81-11033] p0317 A82-21200
Experimental investigation of turbine endwall heat transfer. Volume 3: Data base system
[AIAA-81-11034] p0317 A82-21201

HINTERMEIER, R. M.
The effect of critical design parameters on the selection of a VSCF system
p0330 A82-24381

HAKOLY, L. S.
Efficient use of working fluids in aviation hydraulic systems
p0082 A82-15724

HARRINGTON, R. L.
Cryogenic turbine testing
[ASBE PAPEB 82-6T-113] p0425 A82-35346

HARDEE, R. L.
Incorporation of the efficiency of radioelectronic flight navigation systems
p0053 A82-13701

HARVEY, C. D.
Surface Blowing powered-lift system for STOL aircraft
p0512 A82-40969

HARRISON, B. E.
Turbulent boundary layer on a porous surface with injection at various angles to the wall
p0492 A82-39462

HARSCH, R. F.
Structural optimization of a swept wing on the basis of the aileron efficiency condition
p0380 A82-34145

HARKRO, L. H.
The enhancement of heat exchange in channels /2nd revised and enlarged edition/
A82-12222

HALL, E. S.
Evaluation of the efficiency of radioelectronic flight navigation systems
p0053 A82-13701

HARSHUFEK, E. L.
Determination of the glide path of an aircraft with power off
p0380 A82-34154

HAPPE, J. J.
BASEF - Survival from crashed Navy helicopters
p0079 A82-14977

HARRISON, J.
Effects of high voltage transmission lines on non-directional beacon performance
[AIAA-81-11231] p0466 A82-2726

HARSHUFEK, E. L.
A study on numerical method for evaluating spanwise integral in subsonic lifting-surface theory
[NAL-TE-66-AT] p0034 A82-11031

HARSHUFEK, E. L.
Development status of a composite vertical stabilizer for a jet trainer
p0496 A82-3909

HARSHUFEK, E. L.
Calculation of the stability of crosswise-reinforced cylindrical shells
p0120 A82-1862

HARSHUFEK, I. A.
The maximum flying range problem for an aircraft
p0342 A82-3160

HARSHUFEK, I. A.
Acoustic fatigue endurance test of USB flap structure models at elevated temperature
[NAL-TE-683] p0269 A82-1957

HARSHUFEK, I. A.
The aircraft - Its application and promotional activity
p0173 A82-2055

HARSHUFEK, I. A.
Mythical reflection of a shock wave from an inclined
Smoke redaction in FJB-710 turbofan engines by an
On evaluating the influence of local disruptions
Flight experiments using the front-side control
Design criteria for flightpath and airspeed
On the Corrosion problems of the TAP F-5 aircraft
Current aerial cameras
Aerodynamic response of a blade in pitching
Visualization of laminar separation by oil film
Attribute requirements for a simulated flight
erformance of an air-cooled axial-flow turbine
Temperature fields in three-layer panels with a
honeycomb filler during unsteady heating
Temperature fields in three-layer panels with a
honeycomb filler during unsteady heating
Basic problem of aircraft gas turbine engine
analytic design. II
The formation of benzpyrene during the combustion
of aviation fuels
Methodology for determining fuel-combustion
efficiency and the toxicity of exhaust gases
Vignallisation of laminar separation by oil film
method
Soviet helicopter construction /2nd revised and
enlarged edition/
The Maneuverable Atmospheric Probe (MAP), a
remotely piloted vehicle
Analysis and environmental fate of Air Force
distillate and high density fuels
Evaluation of three percent Aqueous Film Forming
Foam (AFFF) concentrates as fire fighting agents
PERSONAL AUTHOR INDEX

JACOB, J. C.
Hypersonic interactions with surface mass transfer. 1 - Steady flow over a slender wedge wing
[AIAG PAPER 82-0587] p0374 882-31994

JACOB, L. C.
Superalloy powder engine components; controls employed to assure high quality hardware
[AD-A0211249] p0021 882-12499

JACOB, R.
Calculation of wing-body-susceptible interference in subsonic and transonic potential flow
[AD-AI1082575] p0097 882-13095

JACOBSON, R. E.
Helicopter reliability and maintainability trends during development and production
[AD-A1080595] p0098 882-13136

JACOB, J. C.
System of providing an integrated display of instantaneous information relative to aircraft attitude, heading, altitude, and horizontal situation
[NASA-CASE-FEC-11065-1] p0189 882-16075

JACOBSON, A.
Remarks on the calculation of transonic potential flow by a finite volume method
[AD-A1082575] p0082 882-15085

Viscous transonic airfoil flow simulation
[AD-A1100936] p0056 882-40897

JACOBSON, J. C.
Transport engine control design
[AIAG PAPER 82-1076] p0416 882-34996

JACOBSON, L.
Rationalization of the maintenance process for helicopter EA-26
[AD-A1105075] p0490 882-39246

JACOB, J. C.
Turbulence measurements in a confined jet using a 2D-orientation hot-wire probe technique
[AIAG PAPER 82-1262] p0439 882-37710

JACOB, J.
Experimental flight test programs for improving combat aircraft maneuverability by maneuver flaps and pylons split flaps
[AD-A11082575] p0347 882-22192

JACOB, J. D.
Importance of a tactical cargo aircraft in emergency relief
[AD-A11082575] p0243 882-25499

JACOB, J. E.
Optimization of blade pitch angle for higher harmonic rotor control
[AD-A11082575] p0441 882-37776

Optimal open-loop aircraft control for go-around maneuvers under wind shear influence
[AD-A11082575] p0510 882-40943

JACOB, J. F.
Experimental investigations of the separated flow around a rectangular wing
[AD-A11082575] p0025 882-10017

JACOB, J. F.
Experimental tris drag values for conventional and supercircular wings
[AD-A11082575] p0198 882-17126

JACOB, J. F.
Performance characteristics of a buoyant quad-rotor research aircraft
[AD-A11082575] p0513 882-40974

JACOB, J. G.
Corona and antenna effects on the EH-539 mine-sweeping helicopter and Bayhawk navigation set
[AD-A11082575] p0295 882-27946

JACOB, J. G.
Methodology for multi-aircraft minimum noise impact landing trajectories
[AD-A11082575] p0218 882-23037

Transportation systems evaluation methodology development and applications, phase 3
[AD-A11082575] p0085 882-12051

Identification of terms to define unconstrained air transportation demands
[AD-A11082575] p0568 882-31311

JACOBY, J. G.
REPT - Realistic not futuristic
[AD-A11082575] p0294 882-27887

JACOBSSON, R. J.
Performance evaluation of a kinesthetic-tactile display
[AD-A11082575] p0366 882-23221

JACKSON, B. B.
Design possibilities for improved fuel efficiency of civil transport aircraft
[AD-A11082575] p0169 882-20514

JACOB, J. S.
Separation monitoring with four types of predictors on a cockpit display of traffic information
[AD-A11082575] p0564 882-30860

JACKSON, B. B.
A giant step toward composite helicopters
[AD-A11082575] p0411 882-25402

JACKSON, B. B.
An analytical methodology to predict potential aircraft losses due to canopy birdstrikes
[AD-A11082575] p0227 882-24313

JACKSON, C. B.
Differential half-span model support system
[AD-A11082575] p0370 882-23254

JACKSON, D. L.
Operability of military aircraft - avionic design aspects
[AD-A11082575] p0174 882-20564

JACKSON, L. R.
Vortex lift augmentation by suction on a 60 deg swept Gothic wing
[AIAG PAPER 82-0231] p0117 882-17856

JACKSBETH, D. B.
The dynamic behaviour of propeller anemometers
[AD-A11082575] p0276 882-26184

JACKSBETH, D. B.
Target tracking using area correlation
[AD-A11082575] p0490 882-39194

JACKSBETH, D. B.
Quality, quantity, and technology - a perspective on fighter development
[AD-A11082575] p0232 882-24400

JACKSBETH, D. B.
Operation of a sensor system for the measurement of wind shear
[AD-A11082575] p0441 882-37776

JACKSBETH, D. B.
Optimal open-loop aircraft control for go-around maneuvers under wind shear influence
[AD-A11082575] p0510 882-40943

JACKSBETH, D. B.
Experimental investigations of the separated flow around a rectangular wing
[AD-A11082575] p0025 882-10017

JACKSBETH, D. B.
Experimental tris drag values for conventional and supercircular wings
[AD-A11082575] p0198 882-17126

JACKSBETH, D. B.
Performance characteristics of a buoyant quad-rotor research aircraft
[AD-A11082575] p0513 882-40974

JACKSBETH, D. B.
Corona and antenna effects on the EH-539 mine-sweeping helicopter and Bayhawk navigation set
[AD-A11082575] p0295 882-27946

JACKSBETH, D. B.
Methodology for multi-aircraft minimum noise impact landing trajectories
[AD-A11082575] p0218 882-23037

Transportation systems evaluation methodology development and applications, phase 3
[AD-A11082575] p0085 882-12051

Identification of terms to define unconstrained air transportation demands
[AD-A11082575] p0568 882-31311

JACKSBETH, J. G.
REPT - Realistic not futuristic
[AD-A11082575] p0294 882-27887

JACOBS, R. J.
Performance evaluation of a kinesthetic-tactile display
[AD-A11082575] p0366 882-23221

JACOBS, D. B.
Design possibilities for improved fuel efficiency of civil transport aircraft
[AD-A11082575] p0169 882-20514

JACOBS, L.
Plain-jet airblast atomization of alternative liquid petroleum fuels under high ambient air pressure conditions
[AD-A11082575] p0564 882-30860
Composite bonds improve thermal integrity

Effects of wing-leading-edge modifications on a
Development of the Lockheed SB-71 Blackbird

Influence of unsteady aerodynamics on hingeless
rotor ground resonance

Self-tuning regulators for multicyclic control of
helicopter vibration

Multi-parameter yield zone model for predicting
supersonic crack growth

Thrust reverser for a long duct fan engine

Advanced development and flight evaluation of
active controls concepts for supersonic transport
aircraft. Volume I: Load alleviation/extended
span development and flight tests

Accelerated development and flight evaluation of
active controls concepts for a turbomachine
aircraft

Growth of four flaw types in graphite/epoxy
composites due to fully reversed fatigue

Air Force Academy aeronautics digest: Spring/Summer 1981

Integrated control design techniques

Advanced stratified charge rotary aircraft engine
design study

A parametric study of dynamic response of a
discrete model of turbomachinery bladed disk
JOBS, B. E.
Fracture and fatigue characterization of aircraft structural materials under blast loading
[AD-A109054] p0269 B82-19587

JOBS, J. L.
Analysis of computing system configurations for highly integrated guidance and control systems
p0313 B82-23189

JOBS, J. L.
Aircraft excresence drag
[NASA-AD-264] p0025 B82-10020

JOBS, J. L.
Development and demonstration of manufacturing processes for fabricating graphite/epoxy 160 polyimide structural elements
[NASA-CR-165809] p0357 B82-22315

JOBS, J. S.
The general purpose research rotor - Design features and considerations
p0270 A82-26739

JOBS, J. S.
General purpose research rotor
[ANS PAPER 81-9] p0311 B82-37777

JOBS, J. S.
Determination of in-flight helicopter loads and vibration
[ANS PAPER 81-7] p0321 B82-37782

JOBS, J. S.
Experimental verification of force determination and ground flying on a full-scale helicopter
[OSA/PV/AD/OC-N-81-01-11] p0395 B82-24199

JOBS, J. S.
Distributed data processing modeling for future ATC systems
p0220 A82-23319

JOBS, K. L.
The outlook for advanced transport aircraft
p0181 A82-21370

JOBS, K. L.
The F22 BAE Bedford civil flight research programme
p0170 A82-20519

JOBS, K. L.
Reliability, Availability, Maintainability Data Tracking Plan improved GUARDIAN 5
[AD-A117933] p0608 B82-33378

JOBS, K. L.
Flow visualization in the Langley 0.3-meter Transonic Cryogenic Tunnel and preliminary plans for the National Transonic Facility
p0597 B82-32677

JOBS, T. G.
Analytical study of cockpit information requirements
[AD-A108524] p0256 B82-18218

JOBS, T. G.
The effect of temperature ratios on the film cooling process
[OSA/PV/AD/OC-22-305] p0430 B82-35470

JOBS, F. G., Jf.
Fatigue behavior of adhesively bonded joints
p0320 A82-29032

JOBS, G. E.
Two-frequency /Delta k/ microwave scatterometer measurements of ocean wave spectra from an aircraft
p0584 A82-47493

JOOS, E. M.
Extension of proportional navigation by the use of optimal filtering and control methods
p0253 B82-18199

JODERJSB, D. S.
Aerodynamics and performance of cruciform parasol canopies
[OSA/PV/AD/OC-91-1919] p0006 B82-10405

JODERJSB, P. L.
Future terminal area systems
p0403 A82-38462

JOH, A.
Practical application of a computerized flight by flight fatigue test system
p0400 A82-37768

JOSEPHSBE, A. L.
Combined multisensor displays
p0218 A82-22905

JOSHI, D. S.
Test demonstration of digital control of wing/store flutter
[OSA/PV/AD/OC-97-0645] p0337 A82-30141

JOSHI, P. N.
Design, fabrication and testing of an electrical analogue for heat transfer to coated turbine blade
p0362 A82-33520

JOSLIN, D. B.
Research on turbine rotor-stator aerodynamic interaction and rotor negative incidence stall
[AD-A110341] p0310 B82-21203

JOTA, B.
Singularity embedding method in potential flow calculations
p0566 B82-31300

JOTA, D. C.
Finite volume calculation of three-dimensional potential flow around a propeller
[OSA/PV/AD/OC-N-82-0957] p0374 B82-31933

JOYNOYTC, E.
A method to determine runway capacity
p0353 B82-40100

JOUNG-MIANG, H.
Initial experimental research into the response of turbojet engine compressors to distortion of intake pressure
p0302 B82-31106

JOYEB, J.
A preliminary experimental investigation of the response of a turbojet engine to intake pressure distortion
p0302 B82-31107

JOURNEE, L. J.
Air Force Academy aeronautics digest Fall/Summer 1980
[AD-A108338] p0301 B82-20139

JOURNEE, L. J.
Air Force Academy aeronautics digest: Spring/Summer 1981
[AD-A114212] p0462 B82-27216

JOURNEE, L. J.
Computer prediction of three-dimensional potential flow fields in which aircraft propellers operate
[OSA/PV/AD/OC-N-165317] p0585 B82-32212

JOURNEE, L. J.
Wing/ fuselage critical component development program
p0287 A82-27310

JOURNEE, L. J.
New processes and methods of technical diagnostics and prognostics in the case of the engine NK-8-4. II
p0335 B82-29925

JOURNEE, L. J.
Helicopter rotor downwash: Results of experimental research at the PFFB-rotor test stand and their comparison with theoretical results
p0249 B82-18158

K

KADOTA, T.
On the numerical analysis of stall flutter in turbine cascades
p0143 B82-15054

KABAB, B.
Modemizing the Egyptian A.T.C. system
p0125 A82-18273

KABAB, B.
The reliability and safety of small passenger aircraft
p0241 A82-24972

A method for observing the deterioration of aircraft life in operational conditions
p0436 A82-37123

KATAPOLODS, M.
Elevator unit for the Alpha-Jet, made from carbon-fibre reinforced plastic
p0325 B82-32849

A one-shot autoclave manufacturing process for carbon epoxy components
p0509 A82-40935

KALI, S.
Three-dimensional analysis of cascade flutter in parallel shear flow
p0144 B82-15062

KALABASS, S. C.
Evaluation of the effects of model scale and test technique on jet-induced effects
p0361 B82-23167

Study of TVOL in ground-effect flow field including turbulence effects
[NASA-CR-166268] p0600 B82-25170

KALLETH, J.
Evaluation of the helicopter low airspeed system
p0251 B82-18172
Damage tolerance and durability design of linear alpaa-ray altimeter

Use of rotary balance and forced oscillation test

Proposed multipurpose flying radio-physical laboratory using an IL-18 aircraft

The use of dynamometer readings for damping of the natural vibrations of twin-rotor gyrocompasses

Damping for turbulence blade variations in subsonic flow

Application of multivariable model following method to flight controller

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

Digital control for flexible aircraft using reduced order models

Steady and unsteady nonlinear hybrid vortex method for lifting surfaces at large angles of attack

A survey regarding the German-French development program Alpha Jet

Experimental study of subsonic and transonic flows past a wing

Aircraft parameter identification in the presence of atmospheric turbulence

Theory and applications of optimal control in aerospace systems

Effects of vane/blade ratio and spacing on fan noise

Benefit cos* analysis of the aircraft energy efficiency program

Predicting the application of variational liability to fixed base operators - Still guesswork after all these years

High-sensitivity holographic plates PL-136

A study of the vibration loading of the turbine blades of an aircraft gas-turbine engine with dry-friction dampers

Unsteady flow patterns associated with spoiler control devices

Results of experimental study of heat transfer to turbine blades with porous cooling

Results of a Differential Omega experiment

Aerodynamics of an airfoil with a jet issuing from its surface

The combustion of a fuel jet in a stream of lean gaseous fuel-air mixtures

Development of airframe-flap-spoiler systems

The annoyance of impulsive helicopter noise

The combustion of a jet in a stream of lean gaseous fuel-air mixtures

Results of experimental study of heat transfer to turbine blades with porous cooling

3D: Short range plan

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

The combustion of a fuel jet in a stream of lean gaseous fuel-air mixtures

The effect of inlet distortion on the performance of a turbojet engine

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

The combustion of a jet in a stream of lean gaseous fuel-air mixtures

The effect of erosion wear on the vibration characteristics of axial-turbine blades

Analysis of computing system configurations for highly integrated guidance and control systems

Flight trajectory control investigation

Moving target detector (Mod 2)

Design for active and passive flutter suppression and gust alleviation

The effect of erosion wash on the vibration characteristics of axial-turbine blades

The effect of inlet distortion on the performance characteristics of a centrifugal compressor

Damage tolerance and durability design of linear alpaa-ray altimeter
PERSONAL AUTHOR INDEX

[AD-A113532] p0473 $82-27318

KENSE, T. A.
The formation of benzpyrene during the combustion of aviation fuels
p0282 $82-26490

KE, Y.
Design of helicopter rotor blades for optimum dynamic characteristics
[NASA-CR-169352] p0607 $82-33379

KOBATAKE, M.
Responses of oscillating wings in weak shear flow
$82-18021

Airforce parameter identification in the presence of atmospheric turbulence
p0218 $82-23227

Unsteady response of rectangular wings in supersonic uniform shear flow
p0277 $82-26300

KOBATASHI, S.
Experimental methods for the prediction of the effect of viscosity on propeller performance
[AD-A109886] p0308 $82-20472

KOBATASHI, T.
Visualization of lamellar separation by oil film method
p0179 $82-20811

KOBAS, D. B.
A short takeoff performance computer program
[AD-A109861] p0304 $82-20179

KOCAL, W. L.
Allowing for the wall boundary layer in a stage of an axial compressor
[SR-PAPER 90-067] p0319 $82-21209

KOECH, J. M.
Airworthiness considerations in the design of commercial transport aircraft
[SR-PAPER 81-1039] p0232 $82-28396

KOECHENOPPER, R.
Sliced disc design - A composite conform concept for a turbo engine axial compressor
p0515 $82-40995

KOGIN, C. G.
Application of thrusting ejectors to tactical aircraft having vertical lift and short-field capability
[SR-PAPER 81-2629] p0156 $82-19211

KOGER, L.
The influence of wind shear and vertical winds on takeoffs and go-arounds
p0082 $82-15823

KORDES, H.
Recent airfoil developments at DFLR
p0514 $82-40986

Tendencies in the development of subsonic transport aircraft with special consideration of aerodynamics
[SRSA-TT-705] p0255 $82-18214

Wind tunnel investigations on thin supercritical airfoils in high subsonic flow
[DFLR-PB-FB-82-06] p0557 $82-30296

KOEST, D. L.
Aerobiology nondestructive evaluation by thermal field detection, phase 1: Fundamental information and basic technique development
[AD-A115728] p0595 $82-32425

KOPPERT, R. G.
Cold-air performance of a 15.4 cm-tip-diameter axial-flow power turbine with variable-area stator designed for a 75 kW automotive gas-turbine engine
[SRSA-TT-82664] p0316 $82-21193

KORDA, T.
Evaluation of CFRP prototype structures for aircraft
p0495 $82-39892

KOHLRAUS, R. L.
Introduction to V/STOL airplanes
p0122 $82-18117

Assessment of advanced technologies for high performance single-engine business airplanes
p0508 $82-40932

Icing tunnel tests of a composite porous leading edge for use with a liquid anti-ice system
[SRSA-CR-164966] p0035 $82-11052

KOHLER, L.
Experimental investigation of a helset mounted sight/display for helicopter
p0092 $82-13060

Experimental investigation of visual aids for helicopters: Low level flight at night and poor visibility
p0251 $82-18168

KOLLENBERG, L. L.
Direct digital drive actuation
[AIWA-81-2298] p0500 $82-13505

KOLLENBERG, M.
ACTIA: Investigation of new piloting and flight control technologies. Volume 1: Review; active wing
[SRSA-UN-05-81-VOL-1] p0369 $82-23252

ACTIA: Investigation of new piloting and flight control technologies. Volume 2: Aircraft with reduced lateral stability
[SRSA-UN-05-81-VOL-2] p0370 $82-23253

KOLB, E. W.
Development of a Structural Integrity Recording System (SIRS) for US Army AH-64 helicopters
[AD-A116027] p0591 $82-32364

KOLBO, L. E.
Mini-HPF propulsion
p0493 $82-39736

KOLKE, R. L.
Composite boards improve thermal integrity
p0335 $82-30004

KOLLODGE, R. L.
Integrated control design techniques
[AD-A108223] p0257 $82-18224

KOMAPS, R.
Acoustic fatigue endurance test of USB flap structure models at elelvated temperature
[SRSA-TB-683] p0269 $82-19570

KORSE, J.
Performance of highly integrated intake for supeersonic aircraft
p0093 $82-13066

KORDO, H.
Aerodynamic noise generated by jet wing/flap interactions of the external USB configuration of STOL aircraft. Part 2: Full scale model experiment using FJB710 turbofan engine
[SRSA-TB-8277-PT-2] p0270 $82-19945

Kordes, R.
Rough reflection of a shock wave from an inclined wall
p0391 $82-34748

KOBATAYEV, E. I.
Determination of vertical profiles of aerosol size spectra from aircraft radiative flux measurements. II - The effect of particle nonsphericity
p0202 $82-12419

KOFICE, T. A.
Stress measurements in a ribbon parachute canopy during inflation and at steady state
[SRSA-PAPER 81-1944] p0007 $82-10420

Stress measurements in bias constructed parachute canopies during inflation and at steady state
[SRSA-PAPER 81-1945] p0007 $82-10421

KOKIBE, T. L.
Effects of defects on tension coupon undergoing an accelerated environmental spectrum
p0290 $82-27168

KOPPSTUG, F. B.
Allowing for the wall boundary layer in a stage of an axial compressor
[PRE-90067] p0319 $82-21209

KORVALAINEN, J.
The Sortie-Generation Model system. Volume 2:
- Sortie-Generation Model user's guide
[AD-A110958] p0447 $82-26223

The Sortie-Generation Model system. Volume 4:
Sortie-Generation Model programmers manual
[AD-A1-0097] p0447 $82-26224

KOPPE, S.
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
[SRSA-CR-160035] p0662 $82-27086

KOOPRAHA, G. L.
Noise reduction in centrifugal fans by the use of lambda/4 resonators
[SRSA-TT-723] p0603 $82-33173

KOPPEL, S. L.
Air cooling of gas turbine blades
p0350 $82-39700

KORISIO, L. M.
Simulation of correlation-extremal receivers of
The conversion of centrifugal compressor performance. 

Fireworthiness of transport aircraft interior.

Fuel quality processing study. Volume 1: 

Test methodology for evaluation of fireworthy 

Fuel quality/processing study. Volume 2: 

Mathematical modeling of unsteady separated flow 

Integrated cockpit for A-129

Thermal stability analysis for conical shells with 

Determinant of load spectra and their 

Applications for keeping the operational life 

proof of sporting airplanes

The effect of coolant flow on the efficiency of a 

Transonic HP turbine profile suitable for a 

Small engine

Baseline monitoring using aircraft laser ranging

Advanced subsonic transport propulsion

Allowance for flow nonuniformity in the maximum 

section in the optimal contouring of the 

expanding part of a nozzle

Packaging the VSCF system for an aircraft engine 

Environment

Configuration management techniques for automatic 

Testing

Cascade converter of dc voltage to 

ac voltage of

past solid airfoil cascades

Correlation of predicted vibrations and test data 

for a wind tunnel helicopter model

Fuel quality processing study. Volume 1: 

Fuel quality/processing study. Volume 2: 

Appendix. Task 1 literature survey

Convection of centrifugal compressor performance 

curves considering non-similar flow conditions

Test methodology for evaluation of fireworthy 

Aircraft seat cushions

Fireworthiness of transport aircraft interior 

systems

The influence of wind shear and vertical winds on 

takeoffs and go-arounds

E. D. KOSKAN

KOSKAN, E. D.

Performance degradation of propeller/rotor systems 
due to ice accretion

Investigation of acoustic interactions in jet 

thrust augmenting ejectors

Design of helicopter rotor blades for optimum 
dynamic characteristics

On the use of carbon composites in 

electric and stabilizer construction

The use of Doppler spectroscopy to study the 

characteristics of the polydisperse 

elements of combustion water and solid 

microaggregates in aviation fuels

Accidents of surface effect ships and hydrofoil 
craft

The effect of journal misalignment on the oil-film 

forces generated in a squeeze-film damper

Determination of load spectra and their 

application for keeping the operational life 

proof of sporting airplanes

The effect of wind shear and vertical winds on 

the unsteady motion of a wing traveling at 

subsonic speed above a plane

The steady motion of a wing traveling at 

subsonic speed above a plane

KOSKAN, J.

KOSMAN, J.

KOSMAN, J.

KOSOBOROTOPOVA, B. F.

KOSOVKA, H. B.

KOZLOVA, F. B.

KOSYAT, A. B.

KOZLOV, D. B.

KOZLOV, B.

KOZLOV, I. F.

KOZLOV, D.

KOZLOV, I. B.

KOZLOV, I. B.

KOZLOVA, E. E.

KOZLOVA, B.

KOZLOVA, E. I.

KOZLOVA, I. B.

KOZLOVA, I. B.

KOZLOVA, E. I.

KOZLOVA, I. B.

KOZLOVA, I. B.

KOZLOVA, I. B.

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KOZLOVA, I. B.
<table>
<thead>
<tr>
<th>Author</th>
<th>Title</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>Wind determination and wind shear detection from flight test and airline flight data</td>
<td>p05579 882-45915</td>
</tr>
<tr>
<td>A.</td>
<td>Modelling of thermal effects when investigating the thermal fatigue life of the blades of a gas-turbine engine</td>
<td>p0583 882-46832</td>
</tr>
<tr>
<td>A.</td>
<td>Determination of the flammability characteristics of aerospace hydraulic fluids</td>
<td>p0106 882-16187</td>
</tr>
<tr>
<td>A.</td>
<td>Practical design and realization of a digital adaptive flight control system</td>
<td>p0039 882-11079</td>
</tr>
<tr>
<td>A.</td>
<td>Low cost programmable multisensor facility [AIAA 81-2227]</td>
<td>p0053 882-13534</td>
</tr>
<tr>
<td>A.</td>
<td>Justification for, and design of, an economical programmable multiple flight simulator</td>
<td>p0538 882-36969</td>
</tr>
<tr>
<td>A.</td>
<td>Turbulent points in minimum-fuel aircraft landing problems</td>
<td>p0043 882-13077</td>
</tr>
<tr>
<td>A.</td>
<td>Minimum fuel horizontal flight paths in the terminal area</td>
<td>p0556 882-44880</td>
</tr>
<tr>
<td>A.</td>
<td>Advanced component development design basis for next generation medium power helicopter engines</td>
<td>p0207 882-17209</td>
</tr>
<tr>
<td>A.</td>
<td>Component design and development for future helicopter engines</td>
<td>p0246 882-18134</td>
</tr>
<tr>
<td>A.</td>
<td>Aircraft surface coatings for drag reduction/erosion protection</td>
<td>p0232 882-24041</td>
</tr>
<tr>
<td>A.</td>
<td>Air-breathing engine test facilities register</td>
<td>p0630 882-10063</td>
</tr>
<tr>
<td>A.</td>
<td>Aerodynamic concepts for fuel-efficient transport aircraft</td>
<td>p0511 882-40957</td>
</tr>
<tr>
<td>A.</td>
<td>STOL capability impact on advanced tactical aircraft design</td>
<td>p0155 882-19206</td>
</tr>
<tr>
<td>A.</td>
<td>Mathematical model for the maintenance program of modern jet aircraft</td>
<td>p0285 882-10002</td>
</tr>
<tr>
<td>A.</td>
<td>Mathematical model for a maintenance program for modern jet aircraft</td>
<td>p0585 882-32308</td>
</tr>
<tr>
<td>A.</td>
<td>Jet fuel from carbon</td>
<td>p0018 882-12021</td>
</tr>
<tr>
<td>A.</td>
<td>Improvement of fuel economy by flying with maximum rearward center-of-gravity positioning</td>
<td>p0221 882-23470</td>
</tr>
<tr>
<td>A.</td>
<td>Technical/operational ATC scenarios for future TMA navigation</td>
<td>p0071 882-14774</td>
</tr>
<tr>
<td>A.</td>
<td>Atmospheric electricity hazards analytical model development and application, Volume 1: Lightning environment modeling</td>
<td>p0539 882-29800</td>
</tr>
<tr>
<td>A.</td>
<td>An aerodynamic and signature shaping technique for developing advanced supersonic missile concepts</td>
<td>p0120 882-17912</td>
</tr>
<tr>
<td>A.</td>
<td>Supersonic missile aerodynamic and performance relationships for low observables missile profiles</td>
<td>p0487 882-39085</td>
</tr>
<tr>
<td>A.</td>
<td>Control of vibration in aerospace applications research</td>
<td>p0163 882-15056</td>
</tr>
<tr>
<td>A.</td>
<td>Theoretical and experimental investigation of joint-structural damping interaction for airplane construction</td>
<td>p0385 882-33995</td>
</tr>
</tbody>
</table>

KUBA, G. J. | Study and design of high G augmentation devices for flight simulators | p0516 882-10113 |

KUBA, L. B. | Optimization of canard configurations — An integrated approach and practical drag estimation method | p0517 882-10423 |

KUBA, O. | Minim induced drag of canard configurations | p0518 882-81118 |

KUBE, R. A. | Oscillations and vibrations of aircraft on runways | p0241 882-26974 |

KUDEL, S. M. | Application of integration algorithms in a parallel processing environment for the simulation of jet engines | p0318 882-18689 |

KUENTZ, J. C. | General description | p0600 882-33020 |

KUHLMANN, R. A. | Factors influencing velocity distributions at inlet/outlet interfaces | p0321 882-31405 |

KUHLMANN, R. A. | Determination of the flammability characteristics of aerospace hydraulic fluids | p0518 882-46832 |

KUHN, E. A. | The network of civilian air rescue in Germany | p0152 882-19004 |

KUHLBRAUER, J. F. | Identification of terms to define unconstrained air transportation demands | p0568 882-31311 |

KUHLBRAUER, J. F. | Transport engine control design | p0416 882-34996 |

KUHLMANN, R. A. | Transportation system evaluation methodology development and applications, phase 3 | p0508 882-12051 |

KUHM, G. E. | The promise of laminated metals in aircraft design | p0506 882-40903 |

KUHN, G. E. | Natural flow and defect formation in forming an airfoil shape from metal-matrix composites | p0385 882-33995 |
The justification of the need for ILS by means of investigations of the tip clearance flow inside and three-dimensional mean velocity and turbulence characteristics in the annulus wall region of an axial flow compressor rotor passage

Pressure distributions on three-dimensional curved flow-tail control surfaces of a wingless missile at Mach 1.60, 2.36, and 3.70. Volume 1: Trapezoidal tail

Advanced composite integral structures meet the challenge of future aircraft systems

Integrated control of mechanical system for future combat aircraft

Impact resistance of graphite and hybrid composite fiber-reinforced panels, interior panel configurations, and the application of the tuned damper concept

Aircraft design for fuel efficiency
ecosynergy

LEE, R. C. S. p0169 882-20516

LEE, R. G. S. Experimental and analytical studies of advanced air cushion landing systems ([NASA-CS-3976]) p0087 882-12065

LEE, F. Land navigation with a low cost GPS receiver p0175 882-20656

LEE, F. C. Power system design optimization using Lagrange multiplier techniques p0176 882-20743


LEE, N. Experimental studies of advanced Doppler radar research and application to aviation ([AD-1070032]) p0190 882-16077

Leeff, J. Aircraft alerting systems standardization study ([AIM-81-2242]) p0046 882-13466

Leeff, J. F. The fourth dimension p0046 882-13466

Leeff, R. P. Aircraft alerting systems standardization study. Volume 2: Aircraft alerting system design guidelines ([AD-1070725]) p0046 882-27236

LEHR, J. A complete method for computation of blade mode characteristics and responses in forward flight p0245 882-18126

LEHR, J. A complete method for computation of blade mode characteristics and responses in forward flight ([SR15-821-210-101]) p0353 882-22254

LEHR, J. M. The evolution of display formats for advanced fighters using multiscope color CRT displays p0055 882-40888

LEGALL, G. A numerical method for studying fasceline-jet-airfoil interaction in inviscid three-dimensional flow p0096 882-13094

LEGGERE, E. Skin friction lines p0386 882-33629

LEGGETT, D. J. Generation of noise by turbulence ([OHEA-P-1981-3]) p0400 882-29496

LEGGETT, D. J. Preliminary investigation into the addition of auxiliary longitudinal thrust on helicopter agility p0249 882-18155

LEHMAN, L. L. Hybrid state vector methods for structural dynamic and aerelastic boundary value problems ([NASA-CS-3591]) p0567 882-31304

LEHMAN, L. C. Aircraft design for fuel efficiency p0512 882-40973

LEHMAN, L. C. Optimization of blade pitch angle for higher harmonic root control p0441 882-37776

LEHMAN, L. The role of modern control theory in the design of controls for aircraft turbine engines ([AIAA PAPER 82-0320]) p0282 882-26526

LEHMAN, L. The role of modern control theory in the design of controls for aircraft turbine engines ([NASA-TN-82815]) p0354 882-22262


LEHR, R. M. Similarity parameters for the geometric structure of a supersonic jet propagating in a channel and in a submerged space p0387 882-34132

LEHMAN, L. A. The use of flight simulators in the Army of the Air p0171 882-20656

LEHMAN, L. A CFRP taileron for the Tornado: Construction and production ([NHD-FT-212/N/PR/02/2]) p0027 882-10035

LEHMAN, L. A. CFRP taileron for the Tornado: Construction and production ([NHD-FT-212/N/PR/02/2]) p0027 882-10035
A multifrequency adaptive radar for detection and identification of objects - Results on preliminary experiments on aircraft against a seA-clutter background

LUND, J. A.

Hard limited approaches to correlation velocity sensing

LUNDBERG, R. D.

Field test of an in-stack diffusion classifier on an aircraft engine test cell

LUND, J. M.

Outsider's look at flight instrumentation

LUNDQUIST, M.

Transonic small disturbance code for body-vane configuration coupled with full potential code for wing alone

LOE, S.

Nonlinear prediction of subsonic aerodynamic loads on wings and bodies at high angles of attack

LUEPPOLD, R. M.

Reliability analysis of a dual-redundant engine controller

LUCAS, J. H.

Results of recent measurements on an oscillating aerofoil

LULLAC, J. F.

The Worldwide Navigational Warning Service

LUNGO, C. A.

A protective additive for jet fuels

LUMCH, P. E.

Anticorrosive properties of additives based on higher fatty acids

LUNGBY, P. L.

Commercial transports - Aerodynamic design for cruise performance efficiency

LUND, H. W.

Data acquisition system for NASA LeRC impact dynamics research facility

LUEMKE, E. H.

The Modular Automated Weather System (MAWS) concept

LYNHEN, R. E.

Helicopter propulsion systems - Past, present and future

LYNHEN, R. L.

Flight evaluation of LORAN-C as a helicopter navigation aid in the Baltimore Canyon oil exploration area

LUNN, D. C.

Effect of fuel-air-ratio nonuniformity on emissions of nitrogen oxides

LITTLE, C. A.

Evaluation of LORAN-C enroute navigation and non-precision approaches within the State of
B Provost AI Addi 112466] p0474 N82-27324

Baraboi, M.
A Microwave Ice Accretion Measurement Instrument
[AIAA PAPER 82-0285] p0116 A82-17875

Maglai, D. L.
We have just begun to create efficient transport
aircraft p0180 W82-21373

Magnusson, L.
Comparison of different fighter aircraft load
spectra [FFA-TR-1982-02] p0470 W82-27288

Harpur, P. L.
Scanning strategies for air traffic control radars
[AIAA PAPER 82-0161] p0115 A82-17814

Harkait, L. M.
Dynamic quality of twin fluid atomizers for gas
turbines [ASME PAPER 82-GT-61] p0422 W82-35314

Hardy, K. E.
Robust Kalman filter design for active flutter
suppression systems p0462 W82-38442

Integrated control design techniques p0257 W82-18224

Hambolt, E. M.
Superplastic aluminum evaluation
[AIAA-108223] p0210 W82-17338

Hallard, W. E.
Technology for quality and quantity in a new fighter
[SAP PAPER 81-1100] p0233 W82-24204

Hahne, K. E.
Selected stability and control derivatives from
the first space shuttle entry
[AIAA PAPER 81-2451] p0056 W82-13880

A marine NAVSTAR GPS receiver p0235 W82-28464

NASA Dryden's experience in parameter estimation
and its uses in flight test [AIAA PAPER 82-1273] p0489 W82-39313

Hains, R. D.
Hover tests of the YF-15 Tilt Rotor Research
[AIAA PAPER 81-2501] p0064 W82-14386

Haita, H.
Aerodynamic noise generated by jet wing/flap
interactions of the external USB configuration of
STOL aircraft. Part 2: Full scale model
experiment using F9710 turbofan engine
[BAL-TR-6837-PT-2] p0270 W82-19945

Aerodynamic characteristics of the external USB
powered lift system using side fences for
enhancement of Canad flow attachment
[BAL-TR-6866-PT] p0349 W82-22212

Aerodynamic noise generated by jet-wing/flip
interactions of the external USB configuration of
STOL aircraft. Part 1: Eight percent scale cold-flow model analysis
[BAL-TR-6857] p0359 W82-22953

Hajjord, M.
Mechanical property characterization and modeling of structural materials
[AD-1113841] p0478 W82-27784

Hakobyan, L. L.
Fundamentals of strength and aeroelasticity in
flight vehicles p0578 W82-45762

Kobayashi, K. M.
Damage of turbine blades due to interaction with
fuel recombination products p0127 A82-18479

The effect of temperature-time factors on the
metal damage and endurance characteristics of
gas-turbo-engine rotor blades p0295 A82-28019

Hakobyan, S. H.
Subsynchronous vibrations of rotor systems
p0596 W82-32528

Malcol, J. G.
Analysis of Built-In-Test (BIT) false alarm
conditions [AD-1089752] p0256 W82-18217

Hald, J. C.
An on board supervisory system for applications in
space missions [AD-1088-EP-3277] p0256 W82-18216

Hall, J. D.
Weather impact on low-altitude imaging infrared
sensors in Europe — An availability model
p0772 A82-14779

Hall, R. M.
Accurate numerical solution of compressible,
linear stability equations p0382 A82-33571

Hall, D. E.
Calculation of sensitivity derivatives in thermal
problems by finite differences p0181 A82-21391

Hall, R.
Computational treatment of transonic canard-wing
interactions [AIAA PAPER 82-0161] p0115 A82-17814

Hale, P. E.
Structural testing of composites with known defects
p0239 A82-24204

Hale, L. E.
Radar frequency radiation
[AD-451182] p0411 W82-25424

Hale, L. M.
To the root of the problem — Some helicopter
research topics p0296 W82-28275

Hale, L. M.
Repair and maintenance of buildings in civil
aviation p0544 W82-42059

Hale, L. C.
Sociate: Tt2 Trinidad given German debut
[BUSA-TR-76070] p0352 W82-22247

Kee aircraft construction: The G 110 files
[BUSA-TR-76970] p0558 W82-30303

Hale, L. J.
Pactical systems approach to interaction of 2nd
echelon moving targets using real time sensors
p0472 182-27306

Hale, J. A.
EGa computers in the flight testing of the Fokker
P29 aircraft p0138 W82-14839

Hale, G. L.
Air-to-air missile avoidance
[AIAA PAPER 82-1516] p0484 W82-38939

Hale, P.
Some aerodynamic/flightmechanic aspects for the
damage of future combat aircraft
p0504 W82-40880

Hale, P.
A numerical three-dimensional turbulent simulation of a subsonic VSTOL jet in a cross-flow using a
finite element algorithm
[AD-1045410] p0036 W82-11055

Hale, B. L.
Automated Paint and Process Lane
[AD-7053381] p0002 A82-10120

Hale, D.
Fiction mechanics based modelling of the
erosion fatigue process p0210 W82-17334

Hale, J.
Supercritical maneuvering fighter configuration.
Wind-tunnel investigation at Mach numbers of
0.60 to 0.95
[BUSA-TR-84513] p0567 W82-31303

Halle, C.
Survey of aeromedical evacuation in Italy
p0152 A82-19003

Hake, A.
Air-freight integrated environmental conditioning
system for trainer subsonic aircraft
[SAE PAPER 81-24644] p0472 1182-27306

Halsey, R. L.
Fundamental torsional frequency of a class of
solid wings p0380 W82-33119

On the torsional modes of a uniformly tapered
solid wing p0380 W82-34397

Hale, P. C.
Electronic Warfare Avionics Integration Support
Facility support processor
[AD-1116911] p0408 W82-25249

Hale, M.
Wind-tunnel investigation of the effects of blade
tip geometry on the interaction of transonal loads and performance for an articulated  
helicopter rotor  
[HAVA 74-9260]  p0097 NH2-13107

HARTLASS, D. A.  
Design of compensated flutter suppression systems  
p0056 A82-49094  
A general purpose program for rotor blade dynamics  
p0248 NH2-18151

HARTTH, J. B.  
Prediction of cruise missile inlet peak  
instantaneous distortion patterns from steady  
state and turbulence data using a statistical  
technique  
[ASBE PAPEB 82-1085]  p0438 A82-37685

HARTTH, J. T.  
Transportation noise, its impact, planning and  
regulation  
[5-258]  p0478 NH2-27984

HARTUG, B.  
Air transportation of handicapped persons  
p0020 NH2-24330

HARKE, E. L.  
The design of a wind tunnel VSTOL fighter model  
incorporating turbine powered engine simulators  
[ASBE PAPEB 82-2635]  p0242 A82-25154

HARKE, E. L.  
Toward all-composite helicopter fuselage  
p0401 A82-38223

HARKE, E. L.  
The design, construction, and performance of  
composite fuselage components for the Boeing 234  
helicopter  
p0292 A82-27424

HARKE, E. L.  
Speech Command Auditory Display System (SCADS)  
[AD-4117486]  p0609 NH2-33387

HARKE, E. L.  
Air-borne integrated environmental conditioning  
system for trainer subsonic aircraft  
[ASBE PAPEB 81-ENAS-33]  p0012 A82-10920

HARKE, E. L.  
Trailing edge flap influence on leading edge  
vortex flap aerodynamics  
[ASBE PAPEB 82-0288]  p0115 A82-17799  
Fuselage effects in leading edge vortex flap  
aerodynamics  
p0516 A82-41006

HARKE, E. L.  
Evaluating the effectiveness of hydrorefining of  
the low-stability component of T-I fuel  
p0344 A82-36673

HARKE, E. L.  
Computer simulation of an advanced aircraft  
electrical system  
p0073 A82-14821

HARKE, E. L.  
Experimental study of the effects of secondary air  
on the emissions and stability of a lean  
preamixed combustor  
[ASBE PAPEB 82-1072]  p0415 A82-34992

HARKE, E. L.  
Preliminary functional description of integrated  
flow management  
[AD-4109090]  p0313 NH2-21171

HARESCA, C.  
An experimental and numerical study of 3-D rotor  
states in hovering flight  
p0273 A82-13975

HARGIS, E. J.  
Jet/T/STOL wind-tunnel simulation and groundplane  
effects  
p0061 A82-40946  
Jet T/STOL wind-tunnel simulation and groundplane  
effects  
p0361 NH2-23165

HARGIS, E. J.  
A matter of seconds - A critical account of three  
noteable air disasters /5th Major Miller Memorial  
Lecture  
p0081 NH2-15597

HARGIS, E. L.  
Active fluid inertia - A new concept in  
vibration isolation  
[ATM SF-PRINTE 81-17]  p0462 A82-37789

HARGIS, E. L.  
Digital image processing for acquisition,  
tracking, hand off and ranging  
p0471 NH2-27303

HARKIS, J. L.  
The promise of laminated metals in aircraft design  
p0506 A82-49093

HARKIS, J. L.  
Wind-tunnel evaluation of an aeroclasticity  
comformable rotor  
[AD-A1145804]  p0521 NH2-28260

HARKIS, J. L.  
The dispersion of drop sizes in gas turbine fuel  
nozzle sprays  
p0019 NH2-12107

HARKIS, J. L.  
Impact of technology on aeronautics cost trends  
[AD-A1108848]  p0256 NH2-18219

HARKIS, J. L.  
Generic Test Bed (GTB) aircraft  
[AD-A1103353]  p0314 NH2-21176

HARENSKI, B.  
Ultrasound airplanes  
p0319 NH2-35233

HARES, E. L.  
A new approach to modeling the cost of ownership  
for aircraft systems  
[AD-A1040838]  p0102 NH2-13979

HARES, E. L.  
A CAD/CAM graphics system with relative datums  
and tolerances  
[SAE PAPEB 81-DE-108]  p0161 NH2-19333

HARES, E. L.  
Stress intensity factor measurements in composite  
aircraft sandwich structures  
p0113 NH2-17535

HARES, E. L.  
Optical tip clearance sensor for aircraft engine  
controls  
[ASBE PAPEB 82-1131]  p0438 A82-37691

HARES, E. L.  
Cross and cross-coupling derivative measurements  
on the standard dynamics model at AEDC  
[AD-82-0596]  p0237 A82-24670  
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]  p0865 NH2-12047

HARES, E. L.  
The use of 'water bomber' and chemical agents  
against forest fires, taking into account the  
employment of a first-attack system  
p0331 NH2-29562

HARES, E. L.  
Recommendations for field measurements of aircraft  
noise  
[HAVA-CR-3540]  p0359 NH2-22955

HARES, E. L.  
The contribution of thermal barrier coatings to  
impovements in the life and performance of gas  
turbine components  
[PMN-90076]  p0355 NH2-22271

HARES, E. L.  
Aircraft test bed a/cation  
[AD-A112581]  p0452 A82-26286

HARES, E. L.  
Terrain model animation  
[AD-A107911]  p0215 NH2-17087

HARES, E. L.  
G.S. Army remotely piloted vehicle program  
p0493 NH2-39732

HARES, E. L.  
NAVSTAR Global Positioning System  
p0112 NH2-17310

HARES, E. L.  
The TAH-64A composite flexbeam tail rotor  
p0278 A82-26386

HARES, E. L.  
The anatomy of a technology test bed - Integrated  
Flight/Fire Control-I /IFPC-I/  
[ASBE PAPEB 81-1026]  p0232 A82-24390

HARES, E. L.  
A discussion of the flying quality requirements of  
a basic training aircraft  
[AD-A1145805]  p0536 NH2-29310

HARES, E. L.  
Linear decentralized systems with special structure  
p0308 A82-38359  
Baseline monitoring using aircraft laser ranging  
[NASA-TM-73298]  p0525 NH2-28690
BARTHEL, C. S.
Cavitation inception in spool valves
p0105 A82-16428

BARTHEL, L.
Very high speed integrated circuits: Into the second generation. II - Entering Phase 1
p0182 A82-21848

BARTHEL, L. E.
System data communication structures for active-control transport aircraft, volume 1
(NASA-CR-165773-VOL-1) p0538 A82-29510
System data communication structures for active-control transport aircraft, volume 2
(NASA-CR-165776-VOL-2) p0539 A82-29511

BARTHEL, L. C.
Powered-lift takeoff performance characteristics determined from flight test of the Geant
Short-haul research aircraft (GSHA)
[IAIA PAPER 81-2409] p0053 A82-13652

BARTHEL, L. C.
A comparison of simulation, lab-based and naval trial results for the GSHA
[IAIA PAPER 81-2409] p0059 A82-13938

BARTHEL, L. C.
The effect of increasingly more complex aircraft and avionics on the method of system design
p0196 A82-17088

BARTHEL, P.
Multifunction multiband airborne radio architecture study
[AD-AI14427] p0520 A82-28523

BARTHEL, P. L.
Operating flight loads and their effect on engine performance
[IAIA PAPER B11071] p0233 A82-24605
B747/757 flight loads and their effect on engine running clearances and performance
determination: BEAC B110/1 and WA JT9D engine diagnostics programs
[IAIA PAPER 165753] p0525 A82-20896

BARTHEZ, A.
Aerodynamic theory for noncompact wing-gust interaction
[FDEN-61-7] p0038 A82-11071

BARTHEZ, A. D.
Analytical and experimental characterization of the JAU-14/A cartridge actuated initiator for use in aircrew escape system performance evaluation
p0080 A82-14985

BARTHEZ, J.
Three dimensional flow investigation with a method of characteristics in the inlet region and the blade-to-blade channels of supersonic axial compressors
[ES1-77-037] p0088 A82-12078

BARTHEZ, R. F.
A design for a 32-channel multiplexer
[BAP-TE-5AD-NAV-145] p0259 A82-18503

BARTHEZ, R. F.
Control law development for a close-coupled canard, relaxed static stability fighter
[IAIA PAPER 82-0380] p0164 A82-19784
Piloted simulator evaluation of a relaxed static stability fighter at high angle-of-attack
[IAIA PAPER 82-1295] p0066 A82-39082

BARTHEZ, J.
The aircraft manufacturer's needs as a simulator user
p0171 A82-20530

BARTHEZ, C. L.
Damage of turbine blades due to interaction with fuel reflashification products
p0127 A82-18479
The effect of temperature-time factors on the metal damage and endurance characteristics of gas-turbine-engine rotor blades
p0295 A82-28019

BARRE, S. J.
Helicopter propulsion systems. 1: Vibration protection systems on helicopters. 2: Problem of noise in the cabin
p0209 A82-17222

BARKSLEBO, R. O. L.
Recent developments in military telemetry
p0150 A82-18908

BASADA, L.
Development of the advanced composite ground spoiler for C-1 medium transport aircraft
p0495 A82-39895

BASFIELD, G.
Advanced technologies applied to reduce the operating costs of small commuter transport aircraft
p0508 A82-09915
Spin behaviour of the Pilatus PC-7 Turbo Trainer
p0513 A82-09979

BASKI, L.
On the performance prediction of a centrifugal compressor scaled up
[ADPE PAPER 82-02-112] p0242 A82-35395

BASKIN, L.
A surface singularity method for rotors in hover or climb
[AD-AI09687] p0304 A82-20178

BASLID, C. S.
A numerical method for solving boundary value problems for noncavitating and cavitating flow past wing profiles
p0463 A82-38722

BASLID, G. P.
An experimental study of the combustion of liquid hydrocarbon fuel sprayed into a diffusion hydrogen-air jet
p0104 A82-16267

BASKA, L. L.
The effects of absorbed moisture upon the physical properties of stretched acrylic materials
p0228 A82-23432

BASKIA, L. L.
Aerodynamics of tactical weapons to Mach number 0.8 and angle-of-attack of 180 deg
[IAIA PAPER 82-02-250] p0118 A82-17864

BASKIA, C. G.
Digital Avionics Information System (DAIS): Development and demonstration
[AD-AI07966] p0190 A82-16079

BASKIA, C. S.
Lasers communications via an atmospheric link
p0175 A82-20615

BASKIA, C. S.
Wing-canard aerodynamics at transonic speeds - Fundamental considerations on linear drag spanloads
[IAIA PAPER 82-0097] p0183 A82-22046

BASKIA, C. S.
A new approach to modeling the cost of ownership for aircraft systems
[AD-AI04484] p0102 A82-13979

BASKIA, C. S.
Calculations of lightning return stroke electric and magnetic fields above ground
p0114 A82-17714

BASKIA, J. R.
An analysis of civil aviation propeller-to-person accidents: 1965-1979
[AD-AI03565] p0086 A82-12053

BASKIA, J. R.
The effect of inlet distortion on the performance characteristics of a centrifugal compressor
[ADPE PAPER 82-02-92] p0242 A82-35395

BASKIA, T.
Flight characteristics design and development of the NASA/BN/5117 helicopter
p0248 A82-18150

BASKIA, T.
A complete method for computation of blade mode characteristics and responses in forward flight
p0285 A82-18126
A complete method for computation of blade mode characteristics and responses in forward flight
[CHIA-82-210-110] p0153 A82-22250

BASKIA, L. L.
Observability of the parameters of an inertial navigation system for a 360-deg coordinated turn
p0583 A82-47093

BASKIA, L. L.
A new approach to modeling the cost of ownership for aircraft systems
[AD-AI04484] p0102 A82-13979

BASKIA, C. S.
Lasers communications via an atmospheric link
p0175 A82-20615

BASKIA, C. S.
Wing-canard aerodynamics at transonic speeds - Fundamental considerations on linear drag spanloads
[IAIA PAPER 82-0097] p0183 A82-22046

BASKIA, C. S.
A new approach to modeling the cost of ownership for aircraft systems
[AD-AI04484] p0102 A82-13979

BASKIA, C. S.
Calculations of lightning return stroke electric and magnetic fields above ground
p0114 A82-17714

BASKIA, J. R.
An analysis of civil aviation propeller-to-person accidents: 1965-1979
[AD-AI03565] p0086 A82-12053

BASKIA, J. R.
The effect of inlet distortion on the performance characteristics of a centrifugal compressor
[ADPE PAPER 82-02-92] p0242 A82-35395

BASKIA, T.
Flight characteristics design and development of the NASA/BN/5117 helicopter
p0248 A82-18150

BASKIA, T.
A complete method for computation of blade mode characteristics and responses in forward flight
p0285 A82-18126
A complete method for computation of blade mode characteristics and responses in forward flight
[CHIA-82-210-110] p0153 A82-22250

BASKIA, L. L.
Observability of the parameters of an inertial navigation system for a 360-deg coordinated turn
p0583 A82-47093

BASKIA, L. L.
A new approach to modeling the cost of ownership for aircraft systems
[AD-AI04484] p0102 A82-13979
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

The effect of erosion wear on the vibration characteristics of axial-turbine blades

Requirements on modern mathematical models of gas turbine engines

Advanced fuel flowmeter for future naval aircraft

Aerodynamic noise generated by jet wing/flare interactions of the external USB configuration of STOL aircraft. Part 2: Full scale model experiment using FJ8710 turbofan engine

Reflection of a shock wave from an inclined wall

New holding method of three-dimensional hollow photoelastic material and centrifugal stress analysis of air cooled turbine blade model

Wind tunnel investigations for the flat area of slender bodies at high angles of attack

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 performance evaluation without burning

Increasing the lift:drag ratio of a flat delta wing

Head up displays

A reconfigurable change network for distributed process control

Calibration of seven-hole probes suitable for high angles in subsonic compressible flows

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 Radiosionavigation Plan

The Space Shuttle vehicle checkout involving flight avionics software

Fire extinguishant materials

Development and testing of dry chemicals in advanced extinguishing systems for jet engine nacelle fires

Personal Author Index

The balloon and the airship technological heritage

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 AM/APS-94 side-looking airborne radar systems in search and rescue

Preliminary assessment of US Coast Guard Short Range Recovery (SRR) Forward Looking Infrared (FLIR) system small target detection performance

An experimental study of dynamic stall on advanced airfoil sections. Volume I: Summary of the experiment

Application of numerical methods to the calculation of electrostatic fields in aircraft fuel tanks

A distributed planner for air fleet control

Aerostructure nondestructive evaluation by thermal field detection, phase I: Fundamental information and basic technique development

Airport related residential acoustical insulation demonstration project: Report 1720

Aerostructure nondestructive evaluation by thermal field detection, phase II: Fundamental information and basic technique development

Application of numerical methods to the calculation of electrostatic fields in aircraft fuel tanks

Aerostructure nondestructive evaluation by thermal field detection, phase III: Fundamental information and basic technique development

A reconfigurable change network for distributed process control

The Federal Radiosionavigation Plan

The Space Shuttle vehicle checkout involving flight avionics software

Fire extinguishant materials

Development and testing of dry chemicals in advanced extinguishing systems for jet engine nacelle fires

B-96
BCEBBI, B. A.

BCLACBLAB, B.

BCUI6HT, B. L.

BCEIBZIB. D, J., JB.

BCKIBBOB, 8.

HCKIMEI, L. «.

HCK1E. J.

HCK1EIZIE. A. B,

BCKEBB. B. G.

BCIBHBE, 8. L.

BCHOGH, F. J.

BC6BE60B, I.

HCGBESOE, I.

•CHILE, B. I.

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: Aeroaconstic performance of an externally blown Flight simulation consoles, aid or obstruction - Status of the national transonic facility Experimental study of the fIonfield of an airfoil Turbine blade nonlinear structural and life analysis Integrated aircraft avionics and powerplant control and management systems Experimental and theoretical studies of three-dimensional turbulent boundary layers on an empennage of a typical transport airplane A global atlas of GEOS-3 significant waveheight data and comparison of the data with national buoy data Project OK requirements and future developments Evaluation of a trajectory command concept for manual control of carrier approaches and landings General purpose real-time interaction panel for digital simulation Variable response load limiting device Tubing and cable cutting tool F/A-18A tactical airborne computational subsystem
Integration of multi-sensor navigation data using optimal estimation techniques

Bühl, G. L.

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

Bühl, G. L.

A recursive terrain height correlation system using multiple model estimation techniques

(AIAA 82-1513)

p0064 882-38937

Budan, E. T.

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

N42A-TR-78584

p0604 882-33340

Brodin, R. M.

Preliminary functional description of integrated flow management

AD-109909

p0313 882-21171

Burovli-Kitschagi, L. M.

Corrosion and antenna effects on the CR-530 manuevering helicopter and Baydist navigation set

p0295 882-27946

Budkin, E. C.

New trends and concerns in the airliner radio equipment market

882-17760

p0555 882-44238

Budin, L. M.

Cavitation inception in spur valves

p0105 882-16428

Buchan, W. C.

Large scale model measurements of airframe noise using cross-correlation techniques

p0286 882-26966

Buchanan, J. G.

Aeroscram from corner flow and flap flow

882-166396

p0574 882-32081

Budnik, J. N.

Corrosion inhibiting engine oils

AD-104127

p0135 882-14009

Buthman, G. W.

The gas turbine engine

p0325 882-28567

The contribution of thermal barrier coatings to improvements in the life and performance of gas turbine components

882-90076

p0355 882-22271

Buddel, L. M.

Wall power-by-wire replace power-by-hydraulics

p0067 882-14707

Advanced aircraft electrical system control technology demonstrator. Phase 1: Requirements analysis and conceptual design

AD-103922

p0331 882-10326

Advanced aircraft electrical system control technology demonstrator. Phase 1: Analysis and preliminary design

AD-113633

p0524 882-20284

Burrzba, E. C.

Multilevel optimum design of structures with fiber-composite stiffened-panel components

AIAA Papers 80-0723

p0113 882-17594

Burrzba, E. C.

Structural modeling of high Reynolds number wind tunnel models

882-90062

p0230 882-24674

Bux, C.

Response of nonlinear aircraft structural panels to high intensity noise

p0018 882-12041

Bux, G. L, A.

Experimental investigation of a transonic potential flow around a symmetric airfoil

882-76676

p0131 882-14057

Bye, J.

A European airline's future simulator requirements

p0171 882-20536

Büntzitch, L.

Feedback control of a cantilever wing in steady airflow

882-0729

p0340 882-30177

Büntzitch, L.

Advanced subsonic transport propulsion

AIAA Papers 81-0811

p0180 882-20874

Byrne, J.

What the operator wants

p0224 882-24008

Hill-Bright, G. &

Formal specification and mechanical verification of SIFT - A fault-tolerant flight control system

p036 882-37446

Hierarchical specification of the SIFT fault tolerant flight control system

p0197 882-17106

Hillers, L. H.

Numerical and experimental examination of a pre-vaporized/prevaporized combustor

AIAA Paper 82-1074

p0416 882-34994

Hillers, L. H.

A spark ignition model for liquid fuel sprays applied to gas turbine engines

882-37220

Performance of SBC II fuels in gas-turbine combustors. Alternative-fuels-utilization program

882-010471

p0595 882-32518

Hilberg, W. D.

Biology of multi-vehicle interactions

882-13056

Hilberg, W. D.

Modelling and analysis of multi-vehicle interactions

882-13056

p0819 882-18498

Hilberz, K. J.

Using voice control onboard combat aircraft

p0092 882-13056

Hilberz, K. J.

Modelling and analysis of multi-vehicle interactions

882-13056

p0819 882-18498

Hilberz, K. J.

Basic problem of aircraft gas-turbine engine design analysis. II

p0114 882-11463

Hillerg, P. L.

A documented example of strong wind shear

p0360 882-33274

Hillerg, J. B.

A CAD/CAB graphics system with relative datums and tolerances

882-12978

p0161 882-19333

Hillerg, D. M.

A on board supervisory system for applications in space missions

882-12978

p0256 882-18216

Hillerg, J. A.

Pave Hawk aided integrated strike avionics system

882-29298

Hillerg, J. A.

Adaptive-wall wind tunnel research at NASA-Ames Research Center

882-84236

p0397 882-24214

Hillerg, R. C.

Operational testing of the LB-33 inertial navigation system

p0384 882-33854

Hillerg, R. C.

Preliminary results on performance testing of a turbocharged rotary combustion engine

882-282772

p0316 882-21194

Hillerg, R. C.

A study of wing vortex patterns

882-244621

Hillerg, R. C.

Remote sensing of turbine engine gases

AD-115443

p0559 882-30310

Hillerg, R. C.

A reconfigurable change network for distributed process control

882-17108

Hillerg, R. C.

Transonic wind tunnel test of a supersonic nozzle installation

882-1045

p0437 882-37677

Hillerg, R. C.

Supercritical maneuvering fighter configuration. Wind-tunnel investigation at Mach numbers of 0.60 to 0.95

882-184513

p0567 882-31303

Hillerg, J. M.

Development of an efficient procedure for calculating the aerodynamic effects of planform variation

882-38497

p0137 882-14529

Hillerg, P. L.

Mechanical wear assessment of helicopter engines by ferrography

AD-110772

p0454 882-26305

Hillerg, D. M.

Joint Anglo-American experience of the analysis of helicopter rotor blade pressure distribution

882-37770

p0480 882-37770

Hillerg, V. E.

A translational velocity command system for VTO
low speed flight

[NASA-TP-04215] p0305 NASA-20186

HERBELL, W.
The role of modern control theory in the design of controls for aircraft turbine engines

[AIAA PAPER 82-0320] p0282 NASA-26256

Identification of multivariable high performance turbofan engine dynamics from closed loop data

[NASA-TP-05785] p0307 NASA-20339

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


HERBIEGE, L. J.
Air-Aviation P00-1036 environmental evaluation flight test

[AD-111918] p0318 NASA-21178

HERITTS, R. U.
Effects of approach lighting and variation in visible runway length on perception of approach angle in simulated night landings

[AD-1119762] p0533 NASA-29290

HERDT, J. W.
Progress in protective coatings for aircraft gas turbines: A review of NASA sponsored research

[NASA-TP-02740] p0090 NASA-12216

HERS. A.
Advanced compressor components. Phase 1: 1978 to 1979


HERSBERGER, R. L.
Advanced concepts for composite structure joints and attachment fittings. Volume 1: Design and evaluation

[AD-111012] p0321 NASA-21261

Advanced concepts for composite structure joints and attachment fittings. Volume 2: Design guide

[AD-111016] p0451 NASA-26290

HESSEL, L. W. Jr.
Welding for low-cost advanced titanium airframe structures

[PB22-08-23757] p0222 NASA-23757

HERSTALF, J. L.
Airborne weather radar and severe weather penetration

[p0003] NASA-10219

HERZCBABES, R. A.
Modelling solid-fuel ramjet combustion including radiation heat transfer to the fuel surface

[p0475] NASA-27436

HERTLE, B.
The combustion of a fuel jet in a stream of lean gaseous fuel-air mixtures

[p0326] NASA-28692

HETZER, R.
Computer generated images for aircraft pilot training

[BSO-01-06-08-02] p0321 NASA-21229

HERLMANS, B. M.
TV-15 Tilt Rotor fly-by-wire collective control demonstrator development specifications


HETZER, R. J.
User's manual for the ABSET flight path-trajectory simulation code

[SR82-007004] p0058 NASA-29343

HETZER, G.
The design of exact nonlinear model followers

[p004] NASA-13125

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

[AIRS 81-22236] p0007 NASA-13466

HAN - A fault tolerant distributed microcomputer structure for aircraft navigation and control

[p0293] NASA-27714

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

[p009] NASA-11063

Applications to aeronautics of the theory of transformations of nonlinear systems

[NASA-TP-04249] p0540 NASA-30013

HETZER, L. J.
Cooled variable-area radial turbine technology program


HETZER, R. E.
Techniques for modifying airfoils and fairings on aircraft using foam and fiberglass

[AIAA PAPER 81-2445] p0064 NASA-14383

HETZER, R. E., Jr.
A unique flight test facility- Description and results

[p0508] NASA-40925

HETZER, R. T.
Multibody aircraft study, volume 1


Multibody aircraft study, volume 2


HETZER, W.
Prediction of sound radiation from different practical jet engine inlets

[NASA-CH-165120] p0195 NASA-16810

Development of an analytical technique for the optimization of jet engine and duct acoustic liners

[NASA-CH-16502] p0409 NASA-25256

HETZER, W. W.
Estimation of the peak coat of actively controlled aircraft

[p0482] NASA-38447

Statistical analysis and time series modeling of air traffic operations data from flight service stations and terminal radar approach control facilities: Two case studies

[AD-1109873] p0304 NASA-20172

HETZER, W. W.
The Model 412 multi-bladed rotor system

[p0277] NASA-26376

HETZER, W. J.
Nonlinear structural and life analyses of a combustor liner


Fracture mechanics criteria for turbine engine hot section components


HETZER, W.
Exhaust emissions reduction for intermittent combustion aircraft engines


HETZER, L. G.
An algorithms, invariant relative to the initial data, for implementing the polynomial contouring method

[p0582] NASA-46628

HEGE, G. W.
The effect of barriers on wave propagation phenomena: With application for aircraft noise shielding

[NASA-CR-169128] p0530 NASA-29111

HEBOO, L.
Design of higher harmonic control for the ABC

[p0278] NASA-26380

HEBOO, L. G.
Aeroacoustic analysis of the elastic global rotor


HECHTEN, J.
BASF - Survival from crashed Navy helicopters

[p0079] NASA-14977

HECHT, C. J.
Energy efficient engine shroudless, hollow fan blade technology report


HECHT, L.
Prediction of flyover jet noise spectra from static tests

[NASA-TE-03219] p0139 NASA-14880

Prediction of flyover jet noise spectra from static tests

[p0359] NASA-22963

HECKERT, J.
Adaptation of a turbine test facility to high-temperature research


HECKERT, L.
Air-air collision avoidance systems

[p0491] NASA-39323

Air-air collision avoidance systems

[SRK PAPB0 166764] p0555 NASA-44235

HECKERT, W.
The effect of coolant flow on the efficiency of a transonic RP turbine profile suitable for a small engine

[SRB PAPER 82-05-63] p0422 NASA-35315

HECKERT, W.
Adaptation and first cryogenic operation of T2 OONBA/CERT wind tunnel
MILLS, E. J. NASA V/STOL Propulsion Control Analysis - Phase I and II program status [AIAA-PAPER 81-2623] p0108 A82-16908

MILLS, E. J. A portable, low-cost flight-data measurement and recording system [NASA-TP-84429] p0358 A82-22478

MILLS, R. B. Reduction of the acoustic environment in an F100-PW-100 engine test cell p0128 A82-10727

MILLS, R. B. Prediction of aircraft interior noise using the statistical energy analysis method [AIAA-PAPER 81-DSC-102] p0161 A82-19332

MILLS, R. B. Acoustic measurements of F100-PW-100 engine operating in hush house NBS 4920-02-070-2721 p0270 A82-19952

MILLS, R. B. Acoustic measurements of F-18 aircraft operating in hush house, NBS 4920-02-070-2721 p0309 A82-21041

MILLS, R. B. Acoustic measurements of F-15 aircraft operating in hush house, NBS 4920-02-070-2721 p0310 A82-21042

MILLS, R. B. Acoustic measurements of F-16 aircraft operating in hush house, NBS 4920-02-070-2721 p0310 A82-21043

MILLS, R. B. Large scale model measurements of airframe noise using cross-correlation techniques p0204 A82-26966

MILLS-GOODELL, R. D. Adaptive multifunction sensor concept for air-ground missions p0471 A82-27299

MILLS, J. E. Foreign object damage in naval aircraft engines [AD-A109828] p0135 A82-14098

MILLS, J. E. Digital avionics: Promise and practice - An airliner's experience in the field p0017 A82-11942

MILES, J. J. In-vision radiography of titanium spar tube welds p0501 A82-40538

MILES, J. J. Application of integration algorithms in a parallel processing environment for the simulation of jet engines [NASA-TP-82746] p0138 A82-14849

MILOT, A. B. A method for locating aircraft wing damage by nonlinear vibration analysis p0109 A82-17116

MISURA, F. An aerodynamic design and the overall stage performance of an air-cooled axial-flow turbine [AE-TR-3217] p0097 A82-13109

MISURA, L. Effect of mean blade loading on supersonic cascade flutter p0143 A82-15059

MIYAKE, T. Digital avionics - Advances in maintenance designs p0167 A82-20294

MIYAKE, T. Lifting surface theory for wings in low frequency small amplitude yawing and side slapping oscillating motions at low speeds p0131 A82-14061

MIYAKE, T. Doppler processing, waveform design and performance measurements for some pulsed Doppler and NTD-radar's II p0390 A82-34671

MIYAKE, T. Development of high loading, high efficiency axial flow turbine p0583 A82-47069

MIYAKE, T. Selection of telecommunication equipment - A new approach to the equivalent cost concept p0243 A82-25510

MIYAKE, T. Large-scale wind tunnel tests of a sting-supported V/STOL fighter model at high angles of attack [AIAA-PAPER 81-2621] p0156 A82-19208

MIYAKE, T. Study of the effects of maneuver compensation on beam pointing accuracy
<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Title</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOLOSIS, J. A.</td>
<td>Evaluation of CFPR prototype structures for aircraft</td>
<td>0260 AB2-26543</td>
</tr>
<tr>
<td>KOCHER, R. G.</td>
<td>Electric RCS</td>
<td>0261 AB2-19140</td>
</tr>
<tr>
<td>BODRE, D. B.</td>
<td>Piloted simulation of an on-board trajectory optimization algorithm</td>
<td>0267 AB2-20296</td>
</tr>
<tr>
<td>BOBLOI, J. C.</td>
<td>The combustion of a fuel jet in a stream of lean gaseous fuel-air mixtures</td>
<td>0267 AB2-39092</td>
</tr>
<tr>
<td>BOBLOI, J. C.</td>
<td>Evaluation of aircraft navigation system in terminal areas</td>
<td>0269 AB2-39093</td>
</tr>
<tr>
<td>BOBLOI, J. C.</td>
<td>Development of new landing gear door</td>
<td>0270 AB2-39094</td>
</tr>
<tr>
<td>BOBLOI, J. C.</td>
<td>Development of advanced composite ground spoiler for C1 medium transport aircraft</td>
<td>0271 AB2-39095</td>
</tr>
<tr>
<td>BOBLOI, J. C.</td>
<td>Fabrication of CFPR prototype structure for aircraft horizontal tail leading edge slat rail</td>
<td>0272 AB2-39096</td>
</tr>
<tr>
<td>BOBLOI, J. C.</td>
<td>The combustion of a fuel jet in a stream of lean gaseous fuel-air mixtures</td>
<td>0276 AB2-28692</td>
</tr>
<tr>
<td>BOBLOI, J. C.</td>
<td>Operational and functional requirements for the navigation system in terminal areas</td>
<td>0278 AB2-39093</td>
</tr>
<tr>
<td>BOBLOI, J. C.</td>
<td>Design, fabrication and qualification of the T2 composite rudder</td>
<td>0279 AB2-39094</td>
</tr>
<tr>
<td>BOBLOI, J. C.</td>
<td>Development of the advanced composite ground spoiler for C1 medium transport aircraft</td>
<td>0280 AB2-39095</td>
</tr>
<tr>
<td>BOBLOI, J. C.</td>
<td>Fabrication of CFPR prototype structure for aircraft horizontal tail leading edge slat rail</td>
<td>0281 AB2-39096</td>
</tr>
<tr>
<td>BOBLOI, J. C.</td>
<td>The combustion of a fuel jet in a stream of lean gaseous fuel-air mixtures</td>
<td>0286 AB2-28692</td>
</tr>
<tr>
<td>BOBLOI, J. C.</td>
<td>Operational and functional requirements for the navigation system in terminal areas</td>
<td>0288 AB2-39093</td>
</tr>
<tr>
<td>BOBLOI, J. C.</td>
<td>Design, fabrication and qualification of the T2 composite rudder</td>
<td>0289 AB2-39094</td>
</tr>
<tr>
<td>BOBLOI, J. C.</td>
<td>Development of the advanced composite ground spoiler for C1 medium transport aircraft</td>
<td>0290 AB2-39095</td>
</tr>
<tr>
<td>BOBLOI, J. C.</td>
<td>Fabrication of CFPR prototype structure for aircraft horizontal tail leading edge slat rail</td>
<td>0291 AB2-39096</td>
</tr>
<tr>
<td>BOBLOI, J. C.</td>
<td>The combustion of a fuel jet in a stream of lean gaseous fuel-air mixtures</td>
<td>0296 AB2-28692</td>
</tr>
<tr>
<td>BOBLOI, J. C.</td>
<td>Operational and functional requirements for the navigation system in terminal areas</td>
<td>0298 AB2-39093</td>
</tr>
<tr>
<td>BOBLOI, J. C.</td>
<td>Design, fabrication and qualification of the T2 composite rudder</td>
<td>0299 AB2-39094</td>
</tr>
<tr>
<td>BOBLOI, J. C.</td>
<td>Development of the advanced composite ground spoiler for C1 medium transport aircraft</td>
<td>0300 AB2-39095</td>
</tr>
<tr>
<td>BOBLOI, J. C.</td>
<td>Fabrication of CFPR prototype structure for aircraft horizontal tail leading edge slat rail</td>
<td>0301 AB2-39096</td>
</tr>
</tbody>
</table>
A contribution to the stabilization of flight

A laboratory evaluation of the suitability of a xenon flashtube signal as an aid-to-navigation

A contribution to the stabilization of flight
BIBBS, A. F.

BIBBIE, C. B.

BIEHS, L. P.

BIBBS, C.

BIBBIOFF, I.

BOSIOC, P.

BIBBS, I. T.

BOSGA, B. J.

BOBIBI, S. S.

BOBIBI, B. S.

BOBIBI, A. T.

BOBPHX, I. J.

BOBPHX, K. P.

BOBIBI.

HOBBIBI, S. I. B.

HDBBI, O. S.

HOBIBI, B. J.

HODDIBI, D. B.

BADKABII, A. A.

B1CBBOB, J. B.

BISIBG, J. O.

BIBABO, L. B.

BIBBB, S. B.

Improved methods in ground vibration testing

Error minimization in ground vibration testing

The Shock and Vibration Digest, volume 14, no. 3

The Shock and Vibration Digest, volume 13, no. 9

Comparison of different nozzle concepts for a reheate turbine engine

Investigation of passive shock wave-boundary layer control for transonic airfoil drag reduction

The stability of monocoque panels under bending

The influence of smart computers on the cockpit of the future

Performance characteristics of a buoyant quad-rotor research aircraft

The stabiity of monocoque panels under bending

The influence of smart computers on the cockpit of the future

Performance characteristics of a buoyant quad-rotor research aircraft

A review of the current state of the art in ground vibration testing

Error minimization in ground vibration testing

Structural system identification technology verification
Preliminary assessment of US Coast Guard Short Range Recovery (SRR) Forward Looking Infrared (FLIR) system small target detection performance

BAYF, R. A.
One 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

BAYZERRO, K. B.
Effect of the blading type on the aerodynamic damping of blade vibrations with allowance for the profile curvature

BAYZERRO, M. Y.
Damping for turboshaft blade variations in subsonic flow

BAYZERRO, R. N.
Computer aided coordinate measuring systems

BAZL, K. L.
An extension of the local momentum theory to the rotors operating in twisted flow field

BAYZERRO, B. M.
A GPS receiver design for general aviation navigation

BAYBAJAN, L.
Flight evaluation of Loran-C for general aviation area navigation

BAYBAJAN, L.
A research program to reduce interior noise in general aviation airplanes. Influence of depressurization and damping material on the noise radiation characteristics of flat and curved stiffened panels

BAYBAJAN, L.
Development of a computer based presentation of non-steady blade rotor flow

BAYBAJAN, L.
The testing of new technologies with the aid of the Alpha Jet aircraft

BAYBAJAN, L.
Opto-electronical push-broom scanners for navigation, reconnaissance and generation of digital data bases

BAYBAJAN, L.
Stability of boundary layer with porous suction strips: Experiment and theory

BAYBAJAN, L.
Microprocessor flight control application study

BAYBAJAN, L.
Effects of ultra-clean and centrifugal filtration on rolling-element bearing life

BEAHEL, J. M.
Piloted simulator evaluation of a relaxed static stability fighter at high angle-of-attack

BEHISI, K.
Hydrogen economy assessment for long-term energy systems in Japan

BEHR, L. G.
Comparison between the exact and an approximate feedback solution for medium range interception problems

BEHR, L. G.
Bar-to-air missile avoidance

BEHR, P. G.
Stability of boundary layer with porous suction strips: Experiment and theory

BEHR, P. G.
Microprocessor flight control application study

BEHR, P. G.
Effects of ultra-clean and centrifugal filtration on rolling-element bearing life

BEHR, P. G.
Piloted simulator evaluation of a relaxed static stability fighter at high angle-of-attack

BEHISI, K.
Hydrogen economy assessment for long-term energy systems in Japan

BEHR, L.
Comparison between the exact and an approximate feedback solution for medium range interception problems

BEHR, L.
Bar-to-air missile avoidance

BEHR, L.
Preliminary assessment of US Coast Guard Short Range Recovery (SRR) Forward Looking Infrared (FLIR) system small target detection performance

BEHR, L.
One 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

BEHR, L.
Effect of the blading type on the aerodynamic damping of blade vibrations with allowance for the profile curvature

BEHR, L.
Damping for turboshaft blade variations in subsonic flow

BEHR, L.
Computer aided coordinate measuring systems

BEHR, L.
An extension of the local momentum theory to the rotors operating in twisted flow field

BEHR, L.
A GPS receiver design for general aviation navigation

BEHR, L.
Flight evaluation of Loran-C for general aviation area navigation

BEHR, L.
A research program to reduce interior noise in general aviation airplanes. Influence of depressurization and damping material on the noise radiation characteristics of flat and curved stiffened panels

BEHR, L.
Development of a computer based presentation of non-steady blade rotor flow

BEHR, L.
The testing of new technologies with the aid of the Alpha Jet aircraft

BEHR, L.
Opto-electronical push-broom scanners for navigation, reconnaissance and generation of digital data bases

BEHR, L.
Stability of boundary layer with porous suction strips: Experiment and theory

BEHR, L.
Microprocessor flight control application study

BEHR, L.
Effects of ultra-clean and centrifugal filtration on rolling-element bearing life

BEHR, L.
Piloted simulator evaluation of a relaxed static stability fighter at high angle-of-attack

BEHISI, K.
Hydrogen economy assessment for long-term energy systems in Japan

BEHR, L.
Comparison between the exact and an approximate feedback solution for medium range interception problems

BEHR, L.
Bar-to-air missile avoidance

BEHR, L.
Preliminary assessment of US Coast Guard Short Range Recovery (SRR) Forward Looking Infrared (FLIR) system small target detection performance

BEHR, L.
One 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

BEHR, L.
Effect of the blading type on the aerodynamic damping of blade vibrations with allowance for the profile curvature

BEHR, L.
Damping for turboshaft blade variations in subsonic flow

BEHR, L.
Computer aided coordinate measuring systems

BEHR, L.
An extension of the local momentum theory to the rotors operating in twisted flow field

BEHR, L.
A GPS receiver design for general aviation navigation

BEHR, L.
Flight evaluation of Loran-C for general aviation area navigation

BEHR, L.
A research program to reduce interior noise in general aviation airplanes. Influence of depressurization and damping material on the noise radiation characteristics of flat and curved stiffened panels

BEHR, L.
Development of a computer based presentation of non-steady blade rotor flow

BEHR, L.
The testing of new technologies with the aid of the Alpha Jet aircraft

BEHR, L.
Opto-electronical push-broom scanners for navigation, reconnaissance and generation of digital data bases

BEHR, L.
Stability of boundary layer with porous suction strips: Experiment and theory

BEHR, L.
Microprocessor flight control application study

BEHR, L.
Effects of ultra-clean and centrifugal filtration on rolling-element bearing life

BEHR, L.
Piloted simulator evaluation of a relaxed static stability fighter at high angle-of-attack

BEHISI, K.
Hydrogen economy assessment for long-term energy systems in Japan

BEHR, L.
Comparison between the exact and an approximate feedback solution for medium range interception problems

BEHR, L.
Bar-to-air missile avoidance
Jet fuel from carbon Beat transfer optimised turbine rotor blades - An Formability of metallic materials - 2000 A.O.; Climatic laboratory evaluation ICB—47D helicopter Octave bandwidth dual polarized antenna Static investigation of the circulation control Design integration of CCt/OSB for a sea-based Development of the Circulation Control ling—Upper Integrity analyses of surface-flawed aircraft On unsteady aerodynamic forces and moments of the Performance estimation from non-steady manoeuvres Mechanism for the elimination of instability in a The technology of the assembly of engines for Application of multivariable model following Analytical control law for desirable aircraft lateral handling qualities Application of multivariable model following method to flight controller The technology of the assembly of engines for flight vehicles Mechanics for the elimination of instability in a shimmy problem Fault isolation methodology for the L-1011 digital avionic flight control system A velocity vector measuring system with 13 asymmetric wedge type yawmeters The determination of gust loads on nonlinear aircraft using a power spectral density approach A generalized Hill's method for the stability analysis of parametrically excited dynamic systems Developement of experimentally compatible subsystem methods for the analysis of aircraft structures Active flutter suppression on an F-4F aircraft Effects of dynamic stall on SWECs Active flutter suppression on an F-4F aircraft A summary of experimental data on wing characteristics at transonic speeds A family of airfoil shapes for rotating blades Performance calibration results for a Compact Multimission Aircraft Propulsion Simulator Advanced subsonic transport propulsion Effect of fuel injector type on performance and emissions of inverse-flow combustor Evaluation of CFPR prototype structures for aircraft
Acceptance testing of the Calpan variable
stability Learjet

The mechanical testing of compressors and turbines
for aircraft gas turbine engines

Contents multisenor displays

Algorithms development for infra-red air-to-air
guidance systems

Statistical analysis methods for characterizing
composite materials

NASA transfer measurements of a transonic nozzle
guidance

Scratch suppression in supersonic jets

Numerical and flight simulator test of the flight
deterioration concept

Advanced stratified charge rotary aircraft engine
design study

Manufacturing cost trade-studies in avionics

Optimizing aerospace structures for manufacturing
cost

Development of high loading, high efficiency axial
flow turbine

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

A unique integrated flight testing facility for
advanced control/display research

A prototype interface unit for microprocessor
based Loran-C receiver

A prototype interface unit for microprocessor-based Loran-C receiver

On the question of trailing airplane motion

Optimal target designation techniques

A mixed-flow cascade passage design procedure
based on a power series expansion

Development of low modulus material for use in
ceramic gas path seal applications

Low NOx heavy fuel combustor concept program

Determination of antioxidant content in aviation
oils using thin-layer chromatography

Optimization of requirements on the
putting-prevention properties of turbojet-engine
oils

A simplified wing procedure in connection with the
lifting line theory and the doublet-lattice method

Reliability centered maintenance

An experimental and numerical study of 3-D rotor
wakes in hovering flight

Developmental possibilities in civil aviation in
the Federal Republic of Germany

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

A prototype interface unit for microprocessor-based
Loran-C receiver

Tornado-avionic development testing

The effect of the shape of a body on the
efficiency of its utilization as a flap stabiliser

The Flight Service Automation System (FSAS) system
benchmark. Volume I: Summary, introduction and
concepts

Observations and implications of natural laminar
flow on practical airplane surfaces

The electromagnetic theta gun and tubular
projectiles

Tornado-avionic development testing

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

Theoretical investigations on the influence of
different strake, tail unit, and conventional
HLM arrangement as well as on CC7 on the
aerodynamic characteristics of fighter aircraft
configurations

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

Real-time simulation of helicopter IFB approaches
into major terminal areas using RRAV, R2S, and
CDTI

Advanced composites integral structures meet the
challenge of future aircraft systems

Determination of the trimmed drag of an aircraft

Technology overview for advanced aircraft armament
system program

Ageing of composite rotor blades

TF 102 in-due combustor noise measurements with a
turbine nozzle, volume 1

TF 102 in-due combustor noise measurements with a
turbine nozzle, volume 2

PERSONAL AUTHOR INDEX
OHEILL, P. J.

- Extension of FLO codes to transonic flow prediction for fighter configurations
- A hidden advantage of permanent magnet electrical generators
- F/A-18 weapons system support facilities
- Befining and upgrading of synfuels from coal and oil shales by advanced catalytic processes
- Fibrous composites in structural design
- Airborne Electronic Terrain Bap System
- Ability faels for the Navy
- & hidden advantage of permanent nagnet electrical generating systems
- Extension of FLO codes to transonic flow prediction for fighter configurations
- Investigation of the aerodynamic-contour method
- Flow field around an oscillating airfoil
- Application of head-up displays in commercial transport aircraft
- Design and fabrication of a composite rear fuselage for the OH-60 /Black Hawk/
- Development of hybrid gas turbine bucket technology
- Full scale test facilities for radomes and antenna windows
- High-frequency monitoring of surface layers of metals
- Aerodynamic aspects of aircraft dynamics at high angles of attack /AGARD Lecture/
- The outlook for advanced transport aircraft
- A study of wing vorticity patterns
- A method for locating aircraft wing damage by nonlinear vibration analysis

OISEK, J. C.

- Life and Utilization Criteria Identification In Design (LUCID), volume 1
- Life and Utilization Criteria Identification In Design (LUCID), volume 2
- Analysis of side-looking airborne radar /SLAR/ performance in the detection of search and rescue targets
- Speed and accuracy of search and rescue radar systems in search and rescue
- Preliinary compresssion of US Coast Guard Short Range Recovery (SRE) Forward Looking Infrared (FLIR) system small target detection performance
- full scale test facilities for radomes and antenna windows

OSTBERG, D. L.

- Extensive testing of hypersonic vehicles in the wind tunnel twin aerodynamic interference
- Application of modal control to wing-flutter suppression
- A method for locating aircraft wing damage by nonlinear vibration analysis

OSTEBERG, B. J.

- Full scale test facilities for radomes and antenna windows

OSTBPBAII, B.

- A numerical three-dimensional turbulent simulation of a subsonic FSTOL jet in a cross-flow using a finite element algorithm
- Investigation of heat transfer in the vicinity of the leading and trailing edges of a cooled nozzle blade of a low-consuming gas turbine

OSTEBERG, R. E.

- Terrain following/terrain avoidance system concept development
- A method for locating aircraft wing damage by nonlinear vibration analysis

OSTBAII, C.

- Full scale test facilities for radomes and antenna windows

OSTBAII, R. D.

- Development of hybrid gas turbine bucket technology
- Preliminary airworthiness evaluation of the OH-58 /Black Hawk/
- Design (LUCID), volume 2

OSTBAII, T. H.

- Operational suitability evaluation of aircraft training devices. Volume 1: Planning and management
- A study of wing vorticity patterns
Direct comparison of community response to road threat perception while viewing single intruder optical properties of airfield lighting fixtures

Separation monitoring with four types of solution to a bistable vibration problem using an experimental verification of an aerodynamic structural bonification to achieve antiresonance optical properties of airfield lighting fixtures

The effect of hybrid composite materials on the holding for low-cost advanced titanium airframe engine dynamic analysis with general nonlinear

Applications of system identification methods to the ease of adaptive control for helicopter dynamic analysis with general nonlinear

The coupling of electromagnetic interference into aircraft systems

The use of adaptive control for helicopter trajectories in search operations

Welding for low-cost advanced titanium airframe structures

A system design for a multispectral 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 antisensorance in helicopters

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

Solution to a bistable vibration problem using a plane, uncentralized squeeze-film damper bearing

Development of a nylon-feeder recovery system for the CL-289 /AB/OSD 502 surveillance drone

Terror perception while viewing single intruder conflicts on 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

TURBOBAS - A programming language for the performance estimation 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

Analysis of tapered-land hybrid aerostatic journal bearings

Numerical experiments on unsteady flows through macrosegregation 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

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

Control of electromechanical actuator elements for flight vehicles

Control of electromechanical actuator elements for flight vehicles

Future technology and requirements for helicopter engines

Aircraft aerodynamic noise during approach

Dynamic scheduling of runway operations

Practical application of a computerized flight by flight fatigue test system

Fuel efficiency engines for large transport aircraft

Cock 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. E.

Simulation report: Advanced display for complex flight trajectories
[AD-8111259] p0457 A82-26320

PARK, G. D.

Determination of hinge moments andenspanwise airflow parameters from flight data for Learjet airplanes
[CAIA PAPER 82-0483] p0116 A82-17827

PARK, J. L.

Investigation and evaluation of a computer program to minimize three-dimensional flight time tracks
[CAIA PAPER 82-0483] p0215 A82-17879

PARKER, E.

Digital simulation of aircraft electrical generating system by means of Spectre program
p0073 A82-14820

PARKER, G. L.

A unified approach to helicopter NASA\'S modeling
[ANS FREPRINT 81-22] p0043 A82-37793

PARKER, J. A.

Test methodology for evaluation of fireworthy aircraft seat cushions
p0332 A82-29596

Fireworthiness of transport aircraft interior systems
p0533 A82-29204

PARKER, L. C.

Inflight IFP procedures simulator
[NASA-CR-15218-1] p0537 A82-29331

PARKER, 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

PARKER, T. W.

Effect of tip vortices on the performance and flow field of a rotor in hover
p0498 A82-40511

PARKER, D. E.

An approach to software for high integrity applications
[ASAE PAPER 82-02-251] p0069 A82-13526

PARIS, S. L.

Toroidal vibrations of a wing carrying a concentrated load /asymptotic behavior/
[ASAE PAPER 82-18620] p0125 A82-18620

PARKERSON, B. W.

The application of NAVSTAR differential GPS in the civilian community
p0235 A82-24045

PARKERSON, C. H.

An operational model of specific range for microprocessor applications in piston-prop general aviation airplanes
[CAIA 81-2330] p0052 A82-13526

PARDOL, S.

Charting propulsion's future - The ATES results
[ASAE PAPER 82-1119] p0417 A82-35023

PARKS, D. L.

Advanced display-control concepts for power plant operation
p0275 A82-26121

PARKS, R. E.

Analysis of flight test measurements in ground effect
p0178 A82-20763

PARKS, J. L., JR.

Automated pilot Advisory System
[NASA-TP-73296] p0140 A82-15027

PARKS, P. C.

Applications of adaptive control systems
p0293 A82-27865

PARKS, B. M.

Testing of the Ranger Airborne Observatory 91-CH telescope
[NASA-CR-166381] p0400 A82-25040

PARKS, B. E.

A-7 software module guide
[AD-20108649] p0260 A82-18920

PARKS. L. E.

Pary spin evaluation of the A-7 airplane configured with automatic maneuvering flaps
p0076 A82-14933

PARSLEY, P. D.

Proceedings: Fifth Annual Workshop on Meteorological and Environmental inputs to Aviation Systems
[NASA-CP-21992] p0310 A82-21139

PARKS, W. L.

Aircraft/Airport compatibility - A constant challenge for aircraft designers
p0242 A82-25119

PARKSHEVA, G. V.

Determination of the glide path of an aircraft with power off
p0388 A82-34544

PASA, H. A.

Effects of higher order control systems on aircraft approach and landing longitudinal handling qualities
p0563 A82-30488

PASSMORE, H.

Advances in computer applications from weapon systems operational utility studies on manned air combat simulators
[ATA 81-2230] p0047 A82-13463

PARKS, S. F.

Long duct nacelle aerodynamic development for DC-10 derivatives
[NASA-CR-159271] p0586 A82-23215

Investigation of the interference effects of mixed flow long duct nacelles on a DC-10 wing
[NASA-CR-159202] p0586 A82-23219

PARKER, T. S.

Investigation on rotating alerons
p0413 A82-26162

PARKERSON, D.

High temperature, short term tensile strength of C6000/PHT-15 graphite polycide
[CAIA 82-0711] p0377 A82-30125

PARKERSON, J. H.

Aircraft escape system
[ACARD-AP-264] p0025 A82-10020

PARKS, G.

Impact of an omnidirectional traffic alert and collision avoidance system on the air traffic control radar beacon system and the discrete address beacon system
[AB-811617] p0587 A82-32336

PARKS, W. F.

Impedance modeling of acoustic absorbing materials for aircraft engine applications
p0622 A82-14043

PARKERSON, B. L.

Zone loading of flight-vehicle structures
p0320 A82-29383

PARKERSON, B. D.

Effects of moisture on the mechanical properties of glass/epoxy composites
p0339 A82-29036

PARKS, G. L.

Conductive prepreg for lightning strike protection on aircraft
p0170 A82-20523

PAUL, B. E.

A ballistic design model for initiators for aircraft personnel escape systems
p0080 A82-14984

PAUL, W.

Influence of casing treatment on the operating range of axial compressors
[ASAE PAPER 82-02-163] p0069 A82-35040

PAULOVICH, P. A.

Propeller flow visualization techniques
p0597 A82-32672

PAULSON, J. W.

Wind-tunnel investigation of the powered low-speed longitudinal aerodynamics of the Vectored-Engine-Over (VEO) wing fighter configuration
[NASA-TP-82-3263] p0369 A82-22207

PAULSON, W. R., JR.

Thrust-induced effects on low-speed aerodynamics of fighter aircraft
[ASAE PAPER 81-2612] p0205 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)

Thrust-induced effects on low-speed aerodynamics of fighter aircraft (NASA TN D2277)

PAUSDON, M. J.

Flight tests for the assessment of tank performance and control activity

PATEL, A. L.

Laser pointing in a turbulent atmosphere

PAVLEKO, L. J.

Labyrinth seal effects on rotor bearing system stability (AB-116794)

PAVLIK, C. J.

O'Bear International Airport - Implications to proposed state efforts to limit airport noise

PAVLIK, T. A.

Testing of the SUJ-SA ejection seat for the P/A-18 /NOHMET/ aircraft

PAVLOV, V. A.

Experimental study of engine mount-through vibrations

PAVEY, G. C.

Analysis of a multihinged engine mount for shear strain

PAVLOVSKY, Y. P.

One reason for the onset of high-frequency self-excited oscillations

PATE, P. M.

An experimental investigation of the influence of vertical wind shear on the aerodynamic characteristics of an airfoil (AAIA Paper 82-0214)

PATTERSON, C. C.

Computer technology for propulsion installation design - Forecast for the 80's (ASME Paper 82-GT-21)

PAYER, G. L.

Current status of inlet flow prediction methods (AD-A117884)

PRACK, D. L.

Real-time simulation of helicopter ZPR approaches into major terminal areas using RNAY, MLS, and CDPI

PRAEGER, R. E.

Real-time simulation of helicopter IFP approaches into major terminal areas using RNAY, MLS, and CDPI (AAIA Paper 82-0260)

PRAEGER, R. E.

NASA/FAA helicopter noise simulation investigation of RNAY/MLS instrument approaches

PRAEGER, R. E.

Qualification of equipment for gunfire induced vibration

PRAEGER, R. E.

The excitation of compressor/duct systems

PRAEGER, R. E.

Blade tip gap effects in turbochargers: A review (AD-A114852)

PRAEGER, R. E.

Three-dimensional separation and reattachment (NASA TN D4221)

PRAEGER, R. E.

Progress at Douglas on laminar flow control applied to commercial transport aircraft

PRAEGER, R. E.

Final regulatory evaluation: Metropolitan Washington Airports Policy (AD-A110503)

Praeger, C. D.

An effective algorithm for shock-free wing design (AD-A116265)

PRAEGER, C. D.

The testing and approval of aircraft engine mounted accessories (PHR-90051)

PRAEGER, J.

STOL aircraft structural vibration prediction from...
PEBALA, B. A.
Assessment methodology of the lightning threat to advanced aircraft
Electromagnetic interaction of lightning with aircraft
High speed microwave phase-locked loops

PEBOOB. B. B.

PBBDICHTZZI. i.

PBBDUI, L. F.

PBBFIBS, I. O.
PBBKIHS. P. J.

PBBIB, B.
PBBRIBB, P.

PBBBI, B.
PBBBI. B., Ill
PBBBI. X.
PBBBI. A. J.

PEBSOH, L. B.
PBBBI, B. S.

PBBBIHAI, 0. C.
PBBBI, B., Ill

PEBSOH, B. K.

PBBBI. A. J.

PBBBI. B. X.

PBBBI. A.

PBBBI. B.

PBBBI. A.

PBBBI. A.

PEBSOH, L. B.
PBBBI, B. S.

PBBBIHAI, 0. C.
PBBBI, B., Ill

PBBBI. A. J.

PBBBI. B. X.

PBBBI. A.

PBBBI. B.

PBBBI. A.

PBBBI. A.

PEBSOH, L. B.
PBBBI, B. S.

PBBBIHAI, 0. C.
PBBBI, B., Ill

PBBBI. A. J.

PBBBI. B. X.

PBBBI. A.

PBBBI. B.

PBBBI. A.

PBBBI. A.

PEBSOH, L. B.
PBBBI, B. S.

PBBBIHAI, 0. C.
PBBBI, B., Ill

PBBBI. A. J.

PBBBI. B. X.

PBBBI. A.

PBBBI. B.

PBBBI. A.

PBBBI. A.

PEBSOH, L. B.
PBBBI, B. S.

PBBBIHAI, 0. C.
PBBBI, B., Ill

PBBBI. A. J.

PBBBI. B. X.

PBBBI. A.

PBBBI. B.

PBBBI. A.

PBBBI. A.

PEBSOH, L. B.
PBBBI, B. S.

PBBBIHAI, 0. C.
PBBBI, B., Ill

PBBBI. A. J.

PBBBI. B. X.

PBBBI. A.

PBBBI. B.

PBBBI. A.

PBBBI. A.

PEBSOH, L. B.
PBBBI, B. S.

PBBBIHAI, 0. C.
PBBBI, B., Ill

PBBBI. A. J.

PBBBI. B. X.

PBBBI. A.

PBBBI. B.

PBBBI. A.

PBBBI. A.
PETTIT, R. F.  
D/A/C effects of commercial off-the-shelf equipment  
p0282 A82-26492

PETTIT, R. F., Jr.  
Chen-Brase affordable seal attachment to aircraft gas turbine compressor components  
[AD-A11692] p0342 B82-25521

PETKODY, L. E.  
Structural strength of materials and parts of gas turbine engines  
p0546 B82-42663

PFEPER, R.  
CFC drive shaft and GPC coupling for the tail rotor of the BO 105  
p0439 B82-37766

PFEPER, R.  
Airfield and airspace capacity/delay policy analysis  
[AD-A11077] p0450 B82-26326

PFEPER, R. L.  
Experimental and theoretical studies of three-dimensional turbulent boundary layers on an empenage of a typical transport airplane  
p0514 B82-40955

Analysis of jet transport wings with deflected control surfaces by using a combination of 2- and 3-D methods  
p0517 B82-41022

PFLOG, R. L.  
Notebook on electromagnetic properties of composite materials below 1 GHz  
[AD-A115132] p0559 B82-30340

PHARE, R. L.  
An investigation of automatic guidance concepts to steer a TVG aircraft to a small aviation facility in the vicinity of a typical transport airplane  
[NASA-CR-152070] p0191 B82-16087

PHARE, R.  
''Little people' problem /BA-2 torso harness/  
p0070 A82-16558

PHARES, R. L.  
In-service inspection methods for graphite-epoxy structures on commercial transport aircraft  
[NASA-CR-165766] p0089 B82-12142

PHARES, C. L.  
Helicopter rotor performance improvement by utilizing of swept-back parabolic blade tip  
p0276 A82-26298

An examination of helicopter blade profiles and tips  
[ONERA, TP NO. 1982-35] p0540 A82-42811

Helicopter rotor performance improvement by utilizing of swept-back parabolic blade tip  
p0343 B82-22151

PHARES, C. A.  
Evaluation of the design, construction and operation of a gas fueled engine driven heat pump  
[EHO-93-04] p0213 B82-17459

PHARES, C. A.  
Determination of wind tunnel constraint effects by a unified pressure signature method. Part 1: Applications to winged configurations  
[NASA-CR-166186] p0367 B82-22324

Determination of wind tunnel constraint effects by a unified pressure signature method. Part 2: Application to jet-in-crossflow  
[NASA-CR-166187] p0367 B82-22325

PHARES, C. F.  
Marine Air Traffic Control and Landing System (NATCALS Investigation), volume 1  
[AD-A110862] p0390 B82-29188

Marine Air Traffic Control and Landing System (NATCALS Investigation), volume 2  
[AD-A110863] p0390 B82-29189

Marine Air Traffic Control and Landing System (NATCALS Investigation)  
p0466 B82-27260

PHARES, M. A.  
The Model 412 multi-bladed rotor system  
p0277 A82-26376

PHARES, R. H.  
Some design considerations for solar-powered aircraft  
[NASA-TP-1675] p0589 B82-32350

PHARES, W. D.  
 HLS performance assessment, tank 4. Volume 1: Evaluation procedures and equipment design  
[AD-A105393] p0087 B82-12061

PHARES, W. I.  
The helicopter in rescue operations in high-mountain areas  
p0153 A82-19019

PHARES, R.  
Application of structural optimization technique to reduce the external vibrations of a gas-turbine engine  
[ASME PAPER 81-DST-143] p0162 A82-19351

PH, W. S.  
Test demonstration of digital control of wing/store flutter  
p0337 B82-30141

Application of optimal control techniques to aircraft flutter suppression and load alleviation  
[AIM 82-0724] p0340 B82-30173

PHICASIO, R.  
Preliminary airworthiness evaluation of the OH-18 with hot metal plus plume infrared suppressor and infrared jammer  
[AD-A110213] p0314 B82-21177

PHICASIO, R.  
The influence of protective treatment on the mechanical properties of superalloy parts  
p0346 B82-22180

PHICASIO, R.  
Helicopter vibration suppression using simple pendulum absorbers on the rotor blade  
p0290 A82-26620

Evaluation of an asymptotic method for helicopter rotor airloads  
p0498 B82-40509

Helicopter rotor loads using a matched asymptotic expansion technique  
[NASA-CR-165742] p0312 B82-21156

Helicopter vibration suppression using simple pendulum absorbers on the rotor blade  
[NASA-CR-16919] p0523 B82-28282

Helicopter vibration suppression using simple pendulum absorbers on the rotor blade  
[NASA-CR-3619] p0613 B82-33734

PHICASIO, R.  
Correcting for turbulence effects on average velocity measurements made using five hole spherical pitot tube probes  
p0470 B82-27290

PHICASIO, R.  
Towards minimum power for environmental control in transport aircraft  
[HASA-TP-1675] p0041 A82-10892

PHICASIO, R.  
Analytical prediction of aerospace vehicle vibration environments  
[ASME PAPER 81-DST-29] p0160 B82-19305

PHICASIO, R.  
Laser Doppler anemometry applied to the study of the airflow in the wake of an helicopter rotor  
[ONERA, TP NO. 1982-61] p0552 B82-43755

PHICASIO, R.  
Structural modification to achieve antiresonance in helicopters  
p0379 A82-32849

Limiting performance of nonlinear systems with applications to helicopter vibration control problems  
p0526 B82-28301

PHILDA, C. J.  
Titanium surface treatments for adhesive bonding  
p0560 B82-30378

PHILDA, C. C.  
Primary sewage treatment plant as a source of bird hazards at airport  
p0362 B82-33523

Primary sewage treatment plant as a source of bird hazards at airport  
p0413 B82-26184

PHILDA, C. P.  
Damage of turbine blades due to interaction with fuel reclamation products  
p0127 B82-18479

PHILDA, C. L.  
The design, construction, and performance of composite fuselage components for the Boeing 734 helicopter  
p0292 B82-27424

PHILDA, S.  
An influence coefficient method for the application of the modal technique to wing flutter suppression of the DAST AW-1 wing
POWELL, C. L.

Advanced turboprop testbed systems study. Volume 1: Testbed program objectives and priorities, drive systems and aircraft design studies, evaluation and recommendations and wind tunnel test plans [NASA-CR-167928-VOL-1] p0591 882-32370

POWELL, J. L.


POWELL, J. L.

High temperature electronic requirements in aeropropulsion systems [J-706] p0146 882-15313

POWERS, J. L.

Evaluation of a proposed modified F/FB-111 crew restraint system [ADB-110068] p0313 882-21167

PREDIKTION, E. L.

Stability and self-oscillations of coaxial rotors [AB-110067] p0522 882-28267

PREKASH, S.

Low-speed aerodynamic characteristics of wing with sweep discontinuities [ADB-110357] p0305 882-33997

PRESAD, D. S. S.

On computing Floquet transition matrices of rocofractort [ADB-110225] p0013 882-11225

PRESAD, G. R.

Ideal and simulated performance of an aircraft in the terrain following mission [ADB-110391] p0303 882-10004

PRAITT, J.

The challenge of standardizing fatigue methodology [PBB-11266] p0236 882-26703

PRAITT, S.

Low multivariable design tools [ADB-110400] p0200 882-26399

PRAITT, T. E.

Structural tailoring of engine blades (STABLE) [NASA-CR-167949] p0610 882-33391

PRAITT, W. A.

Advanced stratified charge rotary aircraft engine design study [NASA-CR-165398] p0478 882-27743

PRAGMATHORE, S. E.


PRESS, J.


PRESS, T. W. L.


PRIAKHIN, V. V.

The effect of corrosion wear on the vibration characteristics of axial-turbine blades [ADB-1104678] p0433 882-35874

PRICE, D. B.

Piloted simulation of an on-board trajectory optimization algorithms [ADB-110400] p0147 882-20296

PRICE, D. W.

Statistical analysis of piloted simulation of real time trajectory optimization algorithms [ADB-1104905] p0549 882-43261

PRICE, E. A.

A study of F-16 nozzle-afterbody forces at transonic Mach numbers with emphasis on model scale effects [ADB-1104905] p0091 882-12392

PRICE, J. W.


PRICE, J. D.

The NASA Langley laminar flow control airfoil experiment [AIAA PAPER 82-0567] p0301 882-33327

PERSONAL AUTHOR INDEX

NASA Langley laminar flow control airfoil experiment p0301 882-20150

PRIBRZEM-BROWN, D. C.

Conformal antenna array design handbook [AIAA-110091] p0322 882-21483

PRIEST, R. D.

Some F/D research on shielded and unshielded fuselage mounted air intakes at subsonic and supersonic speeds [AIAA PAPER 82-1249] p0157 882-19217

PRIESTLY, R. L.

Sea based support aircraft alternatives [AIAA PAPER 81-2649] p0070 882-13068

PRILLMAN, R. S.

Photointerpretation key for pine regeneration analysis using high-altitude color infrared panoramic photography [BASA-CB-167928-VOL-1] p0556 882-30606

PRINGEL, E. L.

Preliminary results on performance testing of a turbopowered rotary combustion engine [NASA-TB-82772] p0316 882-21194

PRINCE, E.

Mathematical model for the maintenance program of modern jet aircraft [BASA-CB-164450] p0352 882-10002

PRINCE, D. W.

Mathematical model for a maintenance program for modern jet aircraft [ASA-TT-72-729] p0585 882-32308

PRINCE, R. A.

Vibration levels in Army helicopters: Measurement recommendations and data [ADB-1108131] p0255 882-18209

PROCHASKA, E.

Oscillations and vibrations of aircraft on runways [AIAA PAPER 82-12399] p0260 882-26399

PROCTOR, G. W.

Numerical and experimental examination of a prevaporized/premixed combustor [AIAA PAPER 82-10749] p0416 882-24994

PROPIA, W. R.

Development of improved high temperature coatings for AR-792 + HP [NASA-165395] p0136 882-14333

PROUDT, E.

The YH-64 empennage and tail rotor - A technical history [ADB-1105028] p0260 882-24971

PROUTT, E. R.

Design optimization of rotor systems for tilt-rotor aircraft that fold for shipboard compatibility [AIAA PAPER 82-10777] p0430 882-27682

PSI, S. L.

Stress intensity factors for radial cracks at outer surface of a partially autofrettaged cylinder subjected to internal pressure [ADB-1104396] p0573 882-31714

PUCCI, S. L.


PUCHHOI, V. L.


PUTFORD, R. H.

Wind tunnel investigations on thin supercritical airfoils in high subsonic flow [BASA-CB-164450] p0557 882-30296

PUGH, G.

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-1104678] p0386 882-13068

PULLIAM, T. N.

Computation of the steady viscous flow over a...
tri-element 'augmentor wing' airfoil

POLKING, D. C.
Evaluation of the FAA/ERTES weather data device
[AD-1114466] p0562 H82-30800

PORK, S. M.
Design considerations for the direct digital control of dry-tuned gyroscop
p0017 A82-11933

PORPIOT, C. E., Jr.
Maintenance training simulator design and acquisition: ISO-derived training equipment design
[AD-1110871] p0047 H82-262211
Maintenance training simulator design and acquisition: Handbook of ISO procedures for design and documentation
[AD-1111030] p0057 H82-26321

PORTELL, J. B.
Light Airborne Multi-Purpose System
p0046 A82-13244

POTT, C. B.
Theoretical analysis of parachute inflation including fluid kinetics
[AD-AIAA PAPER 81-1925] p0006 A82-10410

A simulation language approach to structural interaction problems
p0614 H82-33758

POSSAS, E.
Automatic parachute releasers for premeditated parachuting
p0070 A82-14560

PUTT, C. W.
Application of computer generated color graphic techniques to the processing and display of three dimensional fluid dynamic data
p0328 A82-29008

PUTLAN, R.
From the A 300 to the A 310
p0382 A82-33542

PEN, C. R.
Detection and prevention of corrosion in Royal Air Force aircraft
p0211 H82-17351

Q

QUI-TOUR, L.
Initial experimental research into the response of turbojet engine compressors to distortion of intake pressure
p0032 H82-11006

A preliminary experimental investigation of the response of a turbojet engine to intake pressure distortion
p0032 H82-11007

QIAN, L.
Efficient optimum design of structures - Program M 008
p0481 A82-36146

QINGFENG, T.
The automatic matrix force method and techniques for handling more complex computations with given computer capacity
p0032 H82-10594

QIU, C.
An experimental investigation of leading-edge spanwise blowing
p0510 A82-60988

QIU, L.
Models for the motor state of VSCF aircraft electrical power system
p0513 A82-60982

QUACKENBUSH, L. R.
A simple system for helicopter individual-blade-control and its application to stall flutter suppression
p0439 A82-37765

A simple system for helicopter individual-blade-control and its application to stall-induced vibration alleviation
[AD-P-300-81-12] p0402 A82-37785

QUAIS, L. L.
p0504 A82-62035

QUASY, A.
Laminar airfoils for transport aircraft
[AD-AIAA PAPER 82-2612] p0252 H82-18190

Drag reduction using pneumatic turbulators
[FFL-81-33] p0350 H82-22223

QUED, J. F.
Optimal shape design of turbine blades
[AD-P-300-81-12] p0162 A82-19342

QUGERFELD, F.
A comparison of Seasat-derived wave height with surface data
p0504 A82-47946

QUREN, J.
Separated flow around helicopter bodies
p0250 H82-18163

QUICK, L. C.
Handling problems associated with jet aircraft fuels
p0112 A82-17280

QUILL, G. J.
Not shape components for small gas turbine engines
p0420 A82-35338

QUILLIAN, J. E.
Material and process developments on the Boeing 767
p0506 A82-40902

QUIN, B.
Aerospace tests on a Piper PA-32R tailplane before and after damage
[AD-A1062731] p0189 A82-16071

Thrust augmenting ejector: A review of the application of jet mechanics to V/STOL aircraft propulsion
p0361 H82-23169

QUINTO, F. P.
Thrust-induced effects on low-speed aerodynamics of fighter aircraft
[AD-AIAA PAPER 81-2612] p0155 A82-19203

Thrust-induced effects on low-speed aerodynamics of fighter aircraft
[NASA-TR-G-32771] p0405 A82-22518

QUANT, L. E.
Energy conservation through airport design and management
p0112 A82-17287

R

RABBE, F.
German-Argentine experiment: Vertical-rotor wind engine
p0091 H82-12646

RABBE, D. C.
Acquisition of F-100/3/ high pressure compressor entrance profiles
[AD-P-300-81-215] p0427 A82-35402

RABIMOTTE, R. D.
Experimental evaluation of squeeze film supported flexible rotors
[AD-P-300-81-233] p0428 A82-35415

RAHRSII, D. J.
Intake design with particular reference to ice protection and particle separators
p0206 H82-17218

RACKOVSKY, R.
Terrain following/terrain avoidance system concept development
[AD-P-300-81-1518] p0497 A82-40428

Terrain following/terrain avoidance system concept development
[AD-P-300-81-233] p0426 A82-35415

RACUS, L. E.
Electro-optical vector scoring system
[AD-P-300-21733] p0606 A82-33363

RACKETT, L. E.
A system safety program for aircraft production and deployment
p0080 A82-14983

RADDIE, J. R., Jr.
Evaluation of a proposed modified F/15/111 crew seat and restraint system
[AD-A110168] p0313 A82-21167

Comparative vertical impact testing of the F/15/111 crew restraint system and a proposed modification
[AD-A1103957] p0522 A82-20827

RADSPESHEL, R.
Wind tunnel investigations of sailplane fuselages with different lacing and wing settings
p0364 H82-23200

R-121
Composite use on helicopters

A review of Reynolds number studies conducted in the Langley 0.3-m Transonic Cryogenic Tunnel

A study of several configurations of jet crossing a cavity - Application to the CEPR 19 wind tunnel of CEPRA

A new safety harness for mobile aircraft

Analysis of very low frequency oscillations in a ramjet combustor by use of a sensitive time lag model

On-board computer progress in development of a 310 flight testing program

A vapour cycle cabin cooling system for the Sea King SH.50 helicopter

Hodel based study of various configurations of jet crossing a cavity - Application to the CEPR 19 wind tunnel of CEPRA

A preliminary design of an advanced composite rotor hub for the EH-60A Black Hawk

Theoretical performance of slender wings with separated flows

Numerical stability analysis of a compressor model

The vortex flow field generated by a hovering helicopter

Prediction of wing side-edge suction forces and maximum inviscid lift
BENDER, J. P.
Review of support interference in dynamic tests
(AIAA 82-0594) p0237 A82-24668
Analytic extrapolation to full scale aircraft
dynamics
(AIAA PAPER 82-1307) p0490 A82-39143
BENDER, K. L.
Parachute technology under pressure
p0024 A82-12804
BENDER, M. J.
EAGLE - An interactive engine aireframe life cycle
cost model
(AIAA PAPER 82-GN-56) p0422 A82-35311
BENDER, R. J.
Stability of boundary layers with porous suction
stripes: Experiment and theory
p0301 B82-20152
BENDER, L. L.
Voice Interactive Systems Technology (VISTA) Program
([AD-A172888]) p0608 B82-33383
BENDER, M.
The national dynamics 'observer' mini-ROPV for
revolutionary operation
p0993 A82-39730
BENDER, D. N.
Sensor sensing guidance system for high altitude
aircraft
([NASA-CASE-FG-11052-1]) p0367 B82-23251
BENDER, T. K.
Correlation of Preston-tube data with laminar skin
friction (Log No. J12984)
([NASA-TP-04027]) p0539 B82-29556
BENDER, M. E., XIII
Aeroelasticity matters - Some reflections on two
decades of testing in the NASA Langley Transonic
Dynamics Tunnel
p0601 A82-13969
Aeroelasticity matters: Some reflections on two
decades of testing in the NASA Langley transonic
dynamics tunnel
p0085 B82-12041
Decoupler pylons: wing/store flutter suppressor
([NASA-CASE-LAB-12660-1]) p0592 B82-32373
BENDER, R. M.
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
BECKLES, R.
Airbus Industrie - The year of progress
p0180 A82-21189
BEEZER, K. L.
Collection and tabulation of spatial infrared
signatures of military jet aircraft
([AIAA PAPER 81-2049]) p0056 A82-13921
BEHRENS, G.
A terrain following system, an algorithm and a
sensor
p0994 A82-39740
BEEFELD, M. W.
Continuous filament advanced composite isogrid - A
promising structural concept
p0280 A82-27130
BEHRENS, J. T.
Cockpit display of traffic information and the
measurement of pilot workload: An annotated
bibliography
([AD-A113637]) p0070 B82-27291
BEECHER, G.
Survey of active and passive means to reduce
rotorcraft vibrations
p0444 A82-37946
Helicopter vibration control: A survey
([ADB-03-302-80-0]) p0315 B82-21185
A helicopter tails rotor of fiber composite
construction and vibration isolator systems
([ADB-87-AY 10]) for helicopters
([ADB-03-311-80-0E]) p0316 B82-21187
BEID, C.
Management of powerplant maintenance and
restoration programs for fuel conservation
([SAR PAPER 811052]) p0231 A82-24394
BEID, D. W.
Simulation study of a hybrid strapdown attitude
and heading reference system
p0022 A82-12661
Integration of multi-sensor navigation data using
optimal estimation techniques
p0273 A82-25577
BEECHER, L. L.
Design aspects of non rigid airship envelopes
p0005 A82-10306
BEIB, 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-TG-1974]) p0266 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-TG-2001]) p0355 B82-22269
BEIB, L. D.
SAIL aircraft response to turbulence generated by
a tall upwind building
p0433 A82-35821
BEIB, R. E.
An exploratory research and equipment program
leading to specifications for aviation turbine
fuel from whole crude shale oil. Part 1: Preliminary
process analyses
([AD-A112681]) p0527 A82-28462
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-A112682]) 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 geolastics shale
oil
([AD-A117438]) p0612 B82-33551
BEIB, R. G.
Silicon liquid crystal light valve for flight
simulation applications
([AD-A119728]) p0413 A82-26005
BEIB, W. E.
Black Hawk rotor de-icing
p0280 A82-26398
BEIB, R. L.
New advances in signal processing technology for
integrated CFI avionics
p0074 A82-17462
Enhanced noise immunity and error control in a
fully integrated JTIDS/GPS receiver
([AD-A112683]) p0125 B82-18171
The influence of turbulence advances on integrated
CBI avionics
p0176 A82-20672
Modular multi-Function Multi-Band airborne Radio
System (RFABS). Volume 2: Detailed report
([AD-A106052]) p0136 B82-14424
BEIB, R. H.
A retirement-for-cause study of an engine turbine
disk
([AD-A109724]) p0305 B82-20184
BEIB, R. P.
Integrated cockpit for A-129
p0368 B82-23225
BEIB, R. W.
Advanced technologies applied to reduce the
operating costs of small commuter transport
aircraft
p0508 A82-40915
BEIB, R. H.
Computer flight planning for fuel efficiency
p0112 A82-17289
BEIB, R. J.
Selected bibliography of NASA/NASA aircraft icing
publications
([NASA-TR-811651]) p0035 B82-11053
Aircraft icing research at NASA
([NASA-TR-82919]) p0558 B82-30297
BEIB, J.
Fitts' principles still applicable - Computer
monitoring of fighter aircraft emergencies
p0561 A82-46254
BICKBITTS, B. B.

BICKGUD, B. B.

BICCBTTS, B. P.

BICHBBSOB, B. B.

BICBABDSOB, J. X.

BICHABDSOB, J. O.

BICH, B. J.

BIBI, F. J.

EIKDL, F. J.

BIDGEIT, D. B.

BICKLBI, B. J.

BICHABD, G.

BICH, S. B.

BICH, B. J.

BIDDIBBAOGH, S. B.

BICBABDSOI, D.

BICBAflDS, I. C.

BICH, B. J.

BIBI, F. J.

EIKDL, F. J.

BIDGEIT, D. B.

BICKLBI, B. J.

BICHABD, G.

BICH, S. B.

BICH, B. J.

BIDDIBBAOGH, S. B.

BICBABDSOI, D.

BICBAflDS, I. C.

BICH, B. J.

BIBI, F. J.

EIKDL, F. J.

BIDGEIT, D. B.

BICKLBI, B. J.

BICHABD, G.

BICH, S. B.

BICH, B. J.

BIDDIBBAOGH, S. B.

BICBABDSOI, D.

BICBAflDS, I. C.

BICH, B. J.

BIBI, F. J.

EIKDL, F. J.

BIDGEIT, D. B.

BICKLBI, B. J.

BICHABD, G.

BICH, S. B.

BICH, B. J.

BIDDIBBAOGH, S. B.

BICBABDSOI, D.

BICBAflDS, I. C.

BICH, B. J.

BIBI, F. J.

EIKDL, F. J.

BIDGEIT, D. B.

BICKLBI, B. J.

BICHABD, G.

BICH, S. B.

BICH, B. J.

BIDDIBBAOGH, S. B.

BICBABDSOI, D.

BICBAflDS, I. C.

BICH, B. J.
PERSONAL AUTHOR INDEX

corrections for three-dimensional models [AIAA 82-0588] p0237 A82-24663
Wind-tunnel wall interference corrections for
three-dimensional flows [AIAA 82-2847] p0379 A82-32847
Higher-order flow angle corrections for
three-dimensional wind tunnel wall interference [AIAA 82-4246] p0555 A82-42464

FRIE, R. L.
Prediction and performance of radome-covered
reflector antennas [AIAA 82-45111] p0080 A82-15311

ROBBINS, C.
Math modeling for helicopter simulation of low
speed, low altitude and steeply descending flight [NASA-CR-166385] p0592 B82-32374

ROBBINS, C. W.
Aircraft digital input controlled hydraulic
actuation and control system [AIAA 82-104826] p0038 B82-11072

ROBBINS, G. R.
Aircraft cabin air ozone contamination and
compliance with regulations [AIAA 82-31057] p0342 A82-31057

ROBINSON, L. B.
Aluminum and its alloys - Weldability [AIAA 82-23755] p0222 A82-23755

ROBINSON, L. C.
Structural modeling of high Reynolds number wind
tunnel models [AIAA 82-0602] p0238 A82-24670

ROBINSON, L. M.
Aircraft digital input controlled hydraulic
system (BFBABS)- Volume 2: Detailed report [AD-A120819] p0083 B82-10029

ROBINSON, L. M.
Aircraft cabin air ozone contamination and
compliance with regulations [AIAA 82-31057] p0342 A82-31057

ROBINSON, L. M.
Formability of 18450 alloy HA 956 - An oxide
dispersion strengthened sheet alloy [AIAA 82-33162] p0438 B82-33162

ROCK, E.
Prediction of cyclic growth of cracks and debonds
in alumina sheets reinforced with boron/epoxy
[AD-A106527] p0011 A82-10856

ROCTOR, J. H.
A Microwave Ice Accretion Measurement Instrument -
MIMI [AIAA 82-2085] p0116 B82-17075

ROODEBOOM, F. L.
Ceramic applications in turbomachinery [NASA-CR-165197] p0565 A82-31158

ROOBINSON, L. W.
Fluids for controlled terrain following flights
[AD-A111607] p0420 A82-35279

ROOD, R.
A new ADF for medium place aircraft environmental
control systems [NASA-PAPER B8-ENAS-1] p0010 A82-10869
The performance of centrifugal compressor channel
diffusers [NASA-PAPER B8-CT-10] p0240 A82-35279

ROOD, R.
Airfield and airspace capacity/delay policy analysis
[AD-A110777] p0548 B82-26226

ROOD, R.
Hydrodynamic interactions with surface mass
transfer. 1 - Steady flow over a slender wedge
wing [AIAA 82-0979] p0374 B82-31944

B-127
In the field of meteorology and aviation, researchers have explored various aspects to enhance safety and performance. For instance, BOB, G. B. has contributed to the development of instruments and installations for meteorological measurements at airports, emphasizing the importance of accurate data collection in aviation operations. Similarly, BOB, G. B. has delved into the behavior of composite thin-nailed structures, a critical aspect in the design of advanced aircraft components. Moreover, ROB, G. has innovated with advanced cockpit designs for tactical aircraft, aiming to improve pilot comfort and situational awareness. ROB, G. has also worked on flight data recovery under adverse conditions, a crucial area for ensuring uninterrupted operations in challenging environments. These contributions not only reflect the cutting-edge research in aerospace but also underscore the commitment to advancing safety and efficiency in aviation.
BOSHEIM, B. P.
Design considerations of DC-Link aircraft
generation systems
p0229 A82-24377

BOTH, S. F.
NASA V/STOL Propulsion Control Analysis - Phase I
and II program status
[AIAA PAPER 81-2632] p0108 A82-16508
A real time Pegasus propulsion system model for
VSTOL piloted simulation evaluation
[AIAA PAPER 82-2643] p0157 A82-19221
A real time Pegasus propulsion system model for
VSTOL piloted simulation evaluation
[AIAA-T-5-1978] p0100 A82-11304
A piecewise linear state variable technique for
real time propulsion system simulation
[AIAA-PK-82051] p0395 A82-24201

BOSHO, D.
The all digital military aircraft
p0017 A82-11937
A practical approach to the incorporation of
technical advances in avionics
p0504 A82-40866

BOSSO, L. L.
Acceleration response of fuselage sidewall panels
on a twin-engine, light aircraft
p0129 A82-18729

BOOTH, R. L.
An oxygen enriched air system for the AV-8A Harrier
(AD-A112340) p0644 A82-27239

BOYD, J. A.
Ideal ramjet - Optimum M sub infinity for fuel
limit and material limit
p0380 A82-33143

BOYD, B. H.
The outlook for advanced transport aircraft
p0181 A82-21374

BOYD, W. L.
Gas turbine airfoil control for optimum heat
recovery
[AIAA PAPER 82-GT-83] p0423 A82-35329

BOYD, S. A.
Electromechanical actuation development program
(EMAP) - Power control development
p0572 A82-21694

BOYD, E. A.
Electromechanical actuation development program
p0067 A82-14705

BOYD, P. H.
A comparative study on mechanical vibration and
noise during patient transportation
p0152 A82-19007

BRIDGE, J. E.
Study of advanced propulsion systems for Small
Transport Aircraft Technology (STAT) program
[AIAA-CR-15610] p0396 A82-24202

BRENN, S. D.
Future helicopter cockpit design
p0500 A82-40529

BROOK, L. B.
Distributed Time Division Multiple Access /DTDMA/ -
A distributed signalling technique for advanced
tactical communications
p0067 A82-16719
BECOMMENDED PRACTICE FOR A DEMONSTRATION OF

CONCEPTUAL DESIGN STUDY FOR AN ADVANCED CAB AND

DEVELOPMENT AND APPLICATION OF DABBER GAS TUNGSTEN

COMPRESSOR STALL INDUCING INSTALLATION EFFECTS OF

XB-59A ABC TECHNOLOGY DEMONSTRATOR ALTITUDE

ADVANCING BLADE CONCEPT /ABC/ DEVELOPMENT TEST

BODOLF, A.

DESIGN AND PERFORMANCE OF AIRBORNE RADOMES - A

REVIEW

BUDITSKI, D. E.

COMPRESSOR STALL INDUCING INSTALLATION EFFECTS OF

AN ENGINE CONTROL PARAMETER FOR THE CF-5 AIRCRAFT

BUDOLI, L.

THE RECOGNITION OF AIR WORTHINESS OF AIRCRAFT -

COMMENTS TO A REMARKABLE JUDICIAL DECISION

BUDOLF, T.

ELECTROMAGNETIC INTERACTION OF LIGHTNING WITH

AIRCRAFT

BUDOLF, T. R.

ATMOSPHERIC ELECTRICITY HAZARDS ANALYTICAL MODEL

DEVELOPMENT AND APPLICATION. VOLUME 3:

ELECTROMAGNETIC COUPLING MODELING OF THE LIGHTNING/AIRCRAFT INTERACTION EVENT

(AD-A110117)

BUDOT, J. F.

DEVELOPMENT AND APPLICATION OF DABBER GAS TUNGSTEN AR WELDING FOR REPAIR OF AIRCRAFT ENGINE, SEAL

TEETH

(AD-A985-07-55)

BUX, E. J.

CONCEPTUAL DESIGN STUDY FOR AN ADVANCED CAB AND

VITAL SYSTEM, VOLUME 1

[NASA-CR-166235]

CONCEPTUAL DESIGN STUDY FOR AN ADVANCED CAB AND

VITAL SYSTEM, VOLUME 2

[NASA-CR-166236]

BUFF, S.

DEVELOPMENT AND CONSTRUCTION OF PILOT ELECTOR

SEATS IN GERMANY FROM 1938-1945

[DYNIA-TP-61-04]

BUFF, L.

DESIGN CRITERIA FOR A MASS DISTANCE RADAR

[NASA-CR-166337]

BUGGHELLI, G.

SURVEY OF AEROSURVEY IN ITALY

[NASA-CR-166338]

BUKHIN, L. C.

EVALUATION OF FOUR SUBCRITICAL RESPONSE METHODS

FOR ON-LINE PREDICTION OF FLUTTER ONSET IN

WIND-TUNNEL TESTS

[61-0064]

TRANSVERSE FLUTTER STUDY OF A WIND-TUNNEL MODEL OF

A SUPERCRITICAL WING WITH/WITHOUT WINGLET

[61-0071]

TRANSVERSE FLUTTER STUDY OF A WIND-TUNNEL MODEL OF

A SUPERCRITICAL WING WITH/WITHOUT WINGLET

[NASA-TR-823679]

EVALUATION OF FOUR SUBCRITICAL RESPONSE METHODS

FOR ON-LINE PREDICTION FLUTTER ONSET IN

WIND-TUNNEL TESTS

[NASA-TR-823680]

SUBROK, H. E.

LONG-RANGE RADIO NAV.sav SIGNAL RELIABILITY

[61-0073]

SUKHATME, S. Y.

METHOD FOR ENGINE-AIRFRAME INTEGRATION USING A

HIGH-LEVEL COMPUTER-ASSISTED ENGINE DESIGN

SYSTEM OF THE APPARAT SERIES

[NASA-CR-166349]

SUKHIN, M. D.

RECOMMENDED PRACTICE FOR A DEMONSTRATION OF

NONDESTRUCTIVE EVALUATION /NDE/ RELIABILITY ON

AIRCRAFT PRODUCTION PARTS - INTRODUCTION TO THE

GUIDELINES

BUDUROV, D. L.

DEVELOPMENT OF A SIMPLE, SELF-CONTAINED FLIGHT

TEST DATA ACQUISITION SYSTEM

[NASA-CR-166350]

BUFF, L.

MATRIX ANALYSIS OF WINGS

BUFF, L.

SIMULATOR FOR AIR-TO-AIR COMBAT VERSUS REAL WORLD:

VISUAL CUE ANALYSIS FOR SIMULATED AIR-TO-AIR

COMBAT TRAINING

(AD-A110570)

BUFF, L.

PRODUCTION WELDING ON THE A-10 AIRCRAFT

[61-0074]

BUESSEL, L. L.

NUMERICAL METHODS FOR SOLVING BOUNDARY VALUE

PROBLEMS FOR NONCavitATING AND CAVITATING FLOW

PAST WING PROFILES

[NASA-CR-166351]

BUFF, G. F.

DIGITAL DETECTION AND PROCESSING OF LASER BEACON

SIGNALS FOR AIRCRAFT COLLISION HAZARD WARNING

[NASA-CR-166352]

BUFF, J. A.

DEVELOPMENT OF ACCELERATED FUEL-ENGINES

QUALIFICATION PROCEDURES METHODOLOGY, VOLUME 1

[AD-A113661]

DEVELOPMENT OF ACCELERATED FUEL-ENGINES

QUALIFICATION PROCEDURES METHODOLOGY, VOLUME 2:

APPENDIX

[AD-A113532]

BUFF, J. P.

B.E.C. ONE-ELEVEN FLIGHT DECK GLAZING PRODUCT

APPROVAL

BUFF, R. E.

AIRCRAFT NOISE REDUCTION

BUFF, R. E.

AIRCRAFT NOISE REDUCTION

BUFF, E.

THE DISTRESS REGIME ON THE BIMOTORED HELICOPTER

BUFF, F.

OCTAVE BANDWIDTH DUAL POLARIZED ANTENNAS

BUFFAUS, K. J.

EXPERIMENTAL AND ANALYTICAL STUDIES OF ADVANCED

AIR-CUSHION LANDING SYSTEMS

[NASA-CR-34776]

BUFFAUS, K. J.

A FINITE ELEMENT ANALYSIS OF COUPLED ROTOR

FUSELAGE VIBRATION

[AD-BF-PREPRINT 81-21]

BUFFINGTON, S.

AN ANALYSIS OF SELECTED ENHANCEMENTS TO THE EN

ROUTE CENTRAL COMPUTING COMPLEX

[NASA-CR-166357]

BUFFENCE, Y. F.

CALCULATION OF NONSTATIONARY AERODYNAMIC FORCE

ACTING ON A CASCADE OF OSCILLATING AIRFOILS IN

SUBSONIC FLOW

[AD-A115051]

BUFF, G. F.

CALCULATION OF NONSTATIONARY FORCE RATIOS ON

BLADES OF A ROTATING WING IN INCOMPRESSIBLE FLOW

[AD-A115051]

BYANS, R. W.

THRUST REVERSERS FOR A LONG DUCT FAN ENGINE

[NASA-CR-14-3891]

BYANS, R. W.

RECENT IMPROVEMENTS AT THE NAVAL AIR TEST CENTER

FOR INCREASED TEST SYSTEM FLEXIBILITY

[AD-A985-07-55]

BYANS, R. W.

AN ALGORITHM FOR CALCULATING THE COMPLIANCE

MATRICES OF AIRCRAFT STRUCTURES BY THE

SUBSTRUCTURE METHOD AS APPLIED TO AERODYNAMICITY

PROBLEMS

[AD-A115051]

BYANS, R. W.

THE MICRO REVOLUTION COMES TO CIVIL AIR TRANSPORT

[NASA-CR-166358]
PERSONAL AUTHOR INDEX

BYLOV, A. L.
The design of compact asymmetric maxims-thrust nozzles for high lift forces

BYSLKEI, G. L.
Analysis and optimization of control systems in piloted flight vehicles

BYRANKEI, R. G.
Flight control synthesis using robust output observers

BESCH, L.
Loco-C-HV in mountainous areas

SABA, C. S.
Research and development on wear metal analysis

SABA, C. S.
Evaluation of plasma source spectrometers for the Air Force Oil Analysis Program

SABBIINA, L. V.
Extracts from Problems of Air Law, a collection of works of the Section of Air Law of the Aramkh Society of the USSR

SACHS, G.
Flight mechanics - modern aircraft design and control concepts

SACKEL, L.
Effects of aerodynamic coupling on the dynamics of roll aircraft

SACKER, L.
Analysis and flight evaluation of a small, fast-wing aircraft equipped with hinged plate spoilers

SADLER, S. G.
Component coupling with time-invariant mass matrix for nonisotropic rotating and nonrotating systems

SADEKOV, L. E.
Optimization of dispatching discipline in queueing systems with limited queues

SAKAI, I.
Chem-Braze abradable seal attachment to aircraft gas turbine compressor components

SAKAWA, R.
Artificial and airspace capacity/delay policy analysis

SAFF, C. L.
Evaluation of crack growth gages for service life tracking

SAHLE, F. P.
An experimental and analytic study of mixing flow of turbine engine exhaust through circular and 2-dimensional mixer/nozzle

SAHLEEK, P. A.
'In situ' composites for jet propulsion and stationary gas turbine applications

SAIN, R.
Torsional vibrations of non-uniform rotating blades with attachment flexibility

SAKAI, E.
An approach to robust nonlinear control design

SAFEC.
An application of total synthesis to robust coupled design

SAITIO, L.
The possibility of using deformable rubber components in landing gear

SAINT CLEAVE, J. E.
Addition polyamide adhesives containing various end groups

SAINT CLEAVE, J. E.
Addition polyamide adhesives containing various end groups

SAINT SABRE, C. L.
Advanced fighter technology integration AFTT/7-16 test program overview

SAINTSBOURER, J. A.
The potential impact of future fuels on small gas turbine engines

SALTO, A.
Balancing of flexible rotors by the complex modal method

SALTO, A.
Hydrogen economy assessment for long-term energy systems in Japan

SALTO, C.
Factors influencing velocity distributions at inlet/combustor interfaces

SALUS, T.
On the performance prediction of a centrifugal compressor scaled up

SALUSABA, A.
A new method of estimating the lateral wall effect on the airflow incidence due to the suction at side walls

SALUKAT, L.
System study of transport aircraft incorporating advanced aluminum alloys

SALUKAT, E.
Transverse vibration of high speed lightweight rotor due to sudden imbalance

SALUKAT, T.
Developments on graphite/epoxy T-2 nose landing gear door

SALUSABA, A.
Open-cycle vapor compression heat pump

SALTRESS, J. L.
Steady of new perfluoroether elastomeric sealants

SALTSBAI, T.
A contribution to the stabilization of flight vehicle parachute systems

SALTSBAI, N.
Effect of mechanical surface and heat treatments on erosion resistance

SALTSBA, R.
A review of flight-to-wind tunnel drag correlation

SALTSWOI, J. T.
Rotor fragment protection program: Statistics on aircraft gas turbine engine rotor failures that occurred in U.S. commercial aviation during 1978

SALTSWOI, L.
The possibility of using deformable rubber components in landing gear
SALESBOE, E.

Material identification for the design of composite rotary wings

SALESBOE, E.

Fighting forest fires - A task for the Swiss air force

SAMBACH, M. E.

QCSRE under-the-wing engine acoustic data

[SAS-CB-166106]
p0267 N82-22323

SAMPSON, R. A.

The potential impact of future fuels on small gas turbine engines

[SAS-PAPER 82-GT-133]
p0425 A82-35362

SARPATH, M.

Determination of wind tunnel constraint effects by a unified pressure signature method. Part 1: Applications to winged configurations

[SAS-CB-166106]
p0267 N82-22323

SANDALLS, P. L.

Acoustic fatigue endurance test of DSB flap

[SAS-PAPER 82-GT-229]
p0428 A82-35411

SASAKI, A.

Future technology and requirements for helicopter engines

[SAS-PAPER 82-GT-17207]
p0207 N82-17207

SABOBI, B.

Minimum cost performance monitoring of turboshaft engines

[SAS-PAPER 82-GT-20544]
p0172 A82-20544

SARSTON, G. R.

Effects of wing-leading-edge modifications on a composite rudder

[SAS-PAPER 82-GT-19552]
p0172 A82-19552
PERSONAL AUTHOR INDEX

SATTY, H. Unsteady flow patterns associated with spoiler control devices [AIAA PAPER 82-02-127] p0115 B2-177998
SAUNDERS, L. An advanced helicopter engine control system [AIAA PAPER 82-02-250] p0068 B2-35429
SAVAGE, P. Experimental analysis of the effects of sweep and aspect ratio on incompressible flow about forward swept wings [AD-A111120] p0605 B2-25223
SAYEK, T. Concerning the calculation of the aerodynamic characteristics of mechanized wings [AD-A98-127] p0107 B2-18589
SAYVAR, E Development of an avionics installation interface standards [AD-A116405] p0068 B2-33304
SAWADA, H. A new method of estimating the lateral wall effect on the airflow incidence due to the section at side walls [PAL-TR-600] p0198 B2-17123
SAWICKI, J. B. Fatigue tests on the Navstar GPS X-set [AIAA PAPER 82-1030] p0835 B2-37039
SABA, G. V. Fatigue behavior of welded joints [AIAA PAPER 82-41115] p0518 B2-35429
SCAFFETTI, B. Octave bandwith dual polarized antenna [AIAA PAPER 82-18939] p0150 B2-28261
SCHACTER, B. J. Computer image generation for flight simulation [AIAA PAPER 82-15599] p0081 B2-15559
SCHAEFFER, B. D. High technology raises fighter force readiness [AIAA PAPER 82-33892] p0386 B2-28261
SCHAFFER, G. Dynamic energy transfer between wind and aircraft [AIAA PAPER 82-40939] p0509 B2-12100
SCHAFER, B. Quantification of the thermal environment for externally carried aircraft stores and ordnance [AIAA PAPER 82-12100] p0019 B2-35429
SCHAFER, B. An application of total synthesis to robust coupled design [AIAA PAPER 82-19061] p0154 B2-19061
SCHAFER, B. Study of the source function by the causality methods defined by Hildebrandt and Sadow [PB82-205170] p0615 B2-34196
SCHAFER, G. An accurate Doppler navigator with microwave simplicity [AIAA PAPER 82-37037] p0635 B2-37037
SCHAFER, D. Theoretical investigation of the influence of spoiler dynamics on the handling qualities of an aircraft with direct lift control [AIAA PAPER 82-691] p0027 B2-10036
SCHAFFER, B. C. A survey of melting layer research [AD-A115124] p0502 B2-38066
SCHAFER, R. New life for an old body - Vienna's master plan for revitalization. [AIAA PAPER 82-12100] p0166 B2-20172
SCHAEFERNST, R. B. Analysis of two-dimensional internal flows using a primitive-variable relaxation Navier-Stokes procedure [AIAA PAPER 82-10083] p0146 B2-34898
SCHAEHEL, P. D. Utilization of hybrid computational equipment for the simulation of parachute system flight [AIAA PAPER 82-26219] p0157 B2-19234
SCHAEFER, J. J. Sound transmission through ducts and aircraft noise prediction, volume 1 [AD-A115783] p0602 B2-33164
SCHAEFELBERGER, B. Applications of adaptive control systems [AIAA PAPER 82-27869] p0293 B2-27869
SCHAEFFER, R. A. The outlook for advanced transport aircraft [PB82-205170] p0615 B2-24050
SCHAEFFER, A. D. Carbon-fiber composites - A fiber composite material for highly stressed light-construction components [PB82-205170] p0166 B2-24050
SCHAEFFER, R. M. ATLAS/test data provision for the Tornado ATS - A challenging task [PB82-205170] p0615 B2-24050
SCHAEFFER, B. M. Acceptance testing of the Calspan variable stability Learjet [AIAA PAPER 82-14937] p0077 B2-14937
SCHAEFFER, B. Calculation of the stability and post-buckling behavior of thin shell underframes using the finite element method [PB82-205170] p0577 B2-65219
SCHAEFFER, R. D. Configuration management techniques for automatic testing [PB82-205170] p0295 B2-27893
SCHAEFFER, J. Application of a new hybrid material/AL/ in aircraft structures [PB82-205170] p0513 B2-40975
SCHILD, R. J. Jr. Investigation of the structural degradation and personal hazard resulting from helicopter composite structures exposed to fires and/or explosions [AD-A104757] p0086 B2-12057
SCHILBRAND, E. P. Design control of composite structures for small gas turbine engines [AIAA PAPER 82-02-96] p0240 B2-35338
SCHILL, L. Life enhancement of naval systems through advanced materials [AIAA PAPER 82-7322] p0560 B2-30404
SCHEID, E.

[AD-A1060552] p0136 882-14424

SCHELLE, R. G.

AIAA Conference 7303 Crusader
[AIAA PAPER 81-2490] p0055 882-123876

SCHELLE, R. G.

The FAA's proposed helicopter certification rules
p0466 882-13242

SCHELLE, R.

Airbus - Perspectives for the future
p0109 882-16972

SCHELLE, R. N.

Helicopter rotor trailing edge noise
[AIAA PAPER 81-2001] p0068 882-10455

Helicopter rotor trailing edge noise

SCHELLENBERG, W.

Theoretical investigations on the influence of different stroke, tail unit, and conventional tail arrangement as well as of CDT on the aerodynamic characteristics of lighter aircraft configurations

SCHEMANN, C.

Applications of adaptive control systems
p0293 882-27869

SCHEMMITY-BISCHENSHART, E. H.

Performance characteristics and employment profiles of the new helicopter HH-60
p0331 882-29506

SCHEM., D. K.

A modern approach to pilot/vehicle analysis and the real-life criteria
[AIAA PAPER 82-1357] p0489 882-39125

Interactive aircraft flight control and aerelastic stabilization
[NASA-CR-165036] p100 882-13150

Multivariable closed loop control analysis and synthesis for complex flight systems
p0347 882-22193

SCHEIDT, W.

Ultrasonic method for flow field measurement in wind tunnel tests
p0166 882-20054

SCHEIDT, E. P.

NAS system load - Utilization of the DAR system
p0219 882-23315

SCHEIDT, S. P.

An investigation of automatic guidance concepts to steer a VTOL aircraft to a small aviation facility ship

SCHEIDT, W.

Viscous transonic airflow simulation
p0506 882-40897

Aerodynamic computational procedures for subsonic and transonic aircraft
p0550 882-43330

SCHEIB, L. A.

Bi-level optimum design of structures with fiber-composite stiffened-panel components
[AIAA PAPER 80-0723] p0113 882-17590

SCHEIB, V.

Aerodynamics of a transport aircraft-type wing-fuselage assembly
[CNSA, TR NO. 1981-122] p0164 882-19738

Aerolegodynamics on a transport aircraft type
wing-body model

SCHEFFER, D. J.

On the aerodynamics of windblast
[AD-A110495] p0405 882-25221

SCHEFFER, H.

An exploratory research and development program leading to specifications for aviation turbine fuel from whole crude shale oil. Part 1: Preliminary process analyses
[AD-A112681] p0527 882-28462

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-A1112682] p0528 882-28463

An exploratory research and development program leading to specifications for a-rated turbine fuel from whole crude shale oil. Part 3:

Production of specification of JP-8 fuel from geokinetics shale oil
p0520 882-28464

The preparation and characterization of mixtures of polycyclopentadienes as solid rocket fuels
p0550 882-30814

An exploratory research and development program leading to specifications for aviation turbine fuel from whole crude shale oil. Part 5
[AD-A117438] p0612 882-33551

SCHEIBES, C. M.

Flight service evaluation of advanced structures
p0291 882-27402

SCHEIDER, J.

The load-carrying behavior of a trapezoidal aluminum-alloy supporting element, subjected to a compressive stress, in the postbuckling region
p0605 882-14410

SCHEIDER, H. M.

Thermal expansion accommodation in a jet engine frame
p0017 882-11599

SCHEIDER, R. W.

Effect of part-span variable inlet guide vane on T52 fan performance
p0086 882-12705

SCHEIDER, R. W.

The effect of radar scattering on ECM antenna patterns
[AD-A115517] p0561 882-30463

SCHEIDER, R. W.

Aerodynamic components for small turboshaft engines
p0207 882-17211

SCHELL, C. C.

Aerodynamic and non-aerodynamic exhaust jet induced effects on a VTOL vehicle design. Part 2: Analysis of results
[NASA-CR-166365] p0556 882-31301

Aerodynamic and non-aerodynamic exhaust jet induced effects on a VTOL vehicle design. Part 3: Experimental technique
[NASA-CR-166147] p0556 882-31302

SCHEI, R. J.

Preliminary results on performance testing of a turbocharged rotary combustion engine
[NASA-TN-62772] p0316 882-21194

SCHEI, R. J.

Airframe noise and flutter characteristics of a turboshaft engine: Static and wind-tunnel investigations
[NASA-TP-1576] p0309 882-21037

SCHEUSDUS, C. H.

Advanced technology and flighter cockpit design: Which drives which?
p0471 882-27302

SCHEUSDUS, C. H.

AES-3 structures
p0224 882-24011

SCHEUSDUS, R. E., Jr.

Recent advances in applying Free Vector Sheet theory to the estimation of vortex flow aerodynamics
[AIAA PAPER 82-0095] p0183 882-22045

Wind-tunnel investigation of vortex flaps on a highly swept interceptor configuration
p0516 882-41004

SCHEURER, G.

Static pressure in the slipstream of a propeller
p0225 882-24023

SCHEURER, L.

Engineering property comparisons of 7050-T7651, 7010-T7651 and 7010-T73651 aluminum alloy plate
[83-3-P-0047-0] p0257 882-22360

SCHEUSDUS, R. E.

Aerodynamic components for small turboshaft engines
p0207 882-17211

SCHEUSDUS, R. E.

Fundamentals of helicopter fatigue life determination
p0239 882-24714

Performance and aerodynamic tradeoffs on recent rotor blade designs
p0280 882-26396

SCHEUSDUS, R. E.

Review of helicopter fast mounted sight (RMS) base motion isolation and Line-of-Sight (LOS) stabilization concepts
p0239 882-24714
SCHOLTB, B. H.
Analysis of two air traffic samples in the
terminal area of Frankfurt/Main, August 4th, 1978
[ESA-TT-719] p0587 HS2-3238
Analysis of two traffic samples in the
terminal area of Frankfurt/Main, August 3rd, 1979
[ESA-TT-780] p0587 HS2-32339

SCHOLBAI, I. B.

SCBBABS. K. P.

SCOLABIS, B. J.

SCBOLTB. I. B.

SCLOBXS. a. J.

SCHOCBABW. J. B.

SCBBEIBB. J.

SCBIABZ. B. B.

SCBIABTZ. B. S.

SCHOLIZ. F. J.

Scholarly papers and technical reports
Analysis of two air traffic samples in the
Flight-by-flight corrosion fatigue tests
Automated radome performance evaluation in the
Aerodynamic performance of high turning core
turbine vanes in a two-dimensional cascade
Fuel efficient flight profiles in an AFC flow
management environment
Fuel efficient flight profiles in an AFC flow
management environment

SCHOLBAI, I. B.

SCBBABS. K. P.

SCOLABIS, B. J.

SCBOLTB. I. B.

SCLOBXS. a. J.

SCHOCBABW. J. B.

SCBBEIBB. J.

SCBIABZ. B. B.

SCBIABTZ. B. S.

SCHOLIZ. F. J.

Scholarly papers and technical reports
Analysis of two air traffic samples in the
Flight-by-flight corrosion fatigue tests
Automated radome performance evaluation in the
Aerodynamic performance of high turning core
turbine vanes in a two-dimensional cascade
Fuel efficient flight profiles in an AFC flow
management environment
Fuel efficient flight profiles in an AFC flow
management environment

SCHOLBAI, I. B.

SCBBABS. K. P.

SCOLABIS, B. J.

SCBOLTB. I. B.

SCLOBXS. a. J.

SCHOCBABW. J. B.

SCBBEIBB. J.

SCBIABZ. B. B.

SCBIABTZ. B. S.

SCHOLIZ. F. J.

Scholarly papers and technical reports
Analysis of two air traffic samples in the
Flight-by-flight corrosion fatigue tests
Automated radome performance evaluation in the
Aerodynamic performance of high turning core
turbine vanes in a two-dimensional cascade
Fuel efficient flight profiles in an AFC flow
management environment
Fuel efficient flight profiles in an AFC flow
management environment

SCHOLBAI, I. B.

SCBBABS. K. P.

SCOLABIS, B. J.

SCBOLTB. I. B.

SCLOBXS. a. J.

SCHOCBABW. J. B.

SCBBEIBB. J.

SCBIABZ. B. B.

SCBIABTZ. B. S.

SCHOLIZ. F. J.

Scholarly papers and technical reports
Analysis of two air traffic samples in the
Flight-by-flight corrosion fatigue tests
Automated radome performance evaluation in the
Aerodynamic performance of high turning core
turbine vanes in a two-dimensional cascade
Fuel efficient flight profiles in an AFC flow
management environment
Fuel efficient flight profiles in an AFC flow
management environment

SCHOLBAI, I. B.

SCBBABS. K. P.

SCOLABIS, B. J.

SCBOLTB. I. B.

SCLOBXS. a. J.

SCHOCBABW. J. B.

SCBBEIBB. J.

SCBIABZ. B. B.

SCBIABTZ. B. S.

SCHOLIZ. F. J.

Scholarly papers and technical reports
Analysis of two air traffic samples in the
Flight-by-flight corrosion fatigue tests
Automated radome performance evaluation in the
Aerodynamic performance of high turning core
turbine vanes in a two-dimensional cascade
Fuel efficient flight profiles in an AFC flow
management environment
Fuel efficient flight profiles in an AFC flow
management environment

SCHOLBAI, I. B.

SCBBABS. K. P.

SCOLABIS, B. J.

SCBOLTB. I. B.

SCLOBXS. a. J.

SCHOCBABW. J. B.

SCBBEIBB. J.

SCBIABZ. B. B.

SCBIABTZ. B. S.

SCHOLIZ. F. J.

Scholarly papers and technical reports
Analysis of two air traffic samples in the
Flight-by-flight corrosion fatigue tests
Automated radome performance evaluation in the
Aerodynamic performance of high turning core
turbine vanes in a two-dimensional cascade
Fuel efficient flight profiles in an AFC flow
management environment
Fuel efficient flight profiles in an AFC flow
management environment

SCHOLBAI, I. B.

SCBBABS. K. P.

SCOLABIS, B. J.

SCBOLTB. I. B.

SCLOBXS. a. J.

SCHOCBABW. J. B.

SCBBEIBB. J.

SCBIABZ. B. B.

SCBIABTZ. B. S.

SCHOLIZ. F. J.

Scholarly papers and technical reports
Analysis of two air traffic samples in the
Flight-by-flight corrosion fatigue tests
Automated radome performance evaluation in the
Aerodynamic performance of high turning core
turbine vanes in a two-dimensional cascade
Fuel efficient flight profiles in an AFC flow
management environment
Fuel efficient flight profiles in an AFC flow
management environment

SCHOLBAI, I. B.

SCBBABS. K. P.

SCOLABIS, B. J.

SCBOLTB. I. B.

SCLOBXS. a. J.

SCHOCBABW. J. B.

SCBBEIBB. J.

SCBIABZ. B. B.

SCBIABTZ. B. S.

SCHOLIZ. F. J.

Scholarly papers and technical reports
Analysis of two air traffic samples in the
Flight-by-flight corrosion fatigue tests
Automated radome performance evaluation in the
Aerodynamic performance of high turning core
turbine vanes in a two-dimensional cascade
Fuel efficient flight profiles in an AFC flow
management environment
Fuel efficient flight profiles in an AFC flow
management environment

SCHOLBAI, I. B.

SCBBABS. K. P.

SCOLABIS, B. J.

SCBOLTB. I. B.

SCLOBXS. a. J.

SCHOCBABW. J. B.

SCBBEIBB. J.

SCBIABZ. B. B.

SCBIABTZ. B. S.
PERSONAL AUTHOR INDEX

SEHLE, J. I., M.
Design and tests of airfoils for sailplanes with an application to the ASW-19B
[IEEE-LN-136] p0012 A82-00967

On the design of some airfoils for sailplane application
[IEEE-LN-136] p0265 A82-19213

SHELLEY, L. Y.
Assembly of aircraft instruments
p0430 A82-36950

SELFF, L. E.
Digital Avionics Information System (DAIS): Development and demonstration
[AD-A1077102] p0190 A82-16079

SELLARS, R. J.
Sophisticated aircraft structure developments - Combat aeroplanes
p0005 A82-10309

SELLERS, D. P.
Computer simulation of an advanced aircraft electrical system
p0073 A82-14821

SELLERS, R. B.
Control of gas turbine power transients for improved turbine airfoil durability
[IAEA PAPER-82-1872] p0418 A82-35047

SELLERS, R. L.
Applications of a laser velocimeter in the Langley 4-by 7-meter tunnel
p0590 A82-32693

SELLIER, R.
Laser Doppler anemometry applied to the study of the airflow in the wake of a helicopter rotor
[Ortho, TP No. 1982-61] p0552 A82-26755

SELKOP, S. R.
Simplified digital design tools
p0435 A82-37034

SEND, W.
An three-dimensional approach to lift and moment coefficients of rotating blades
p0245 A82-10125

SCHENK, K. L.
Sealed lead-acid batteries for aircraft applications
p0015 A82-11176

SCHENK, G. C.
Characterization of an Experimental reference, broadened specification (EBBS) aviation turbine fuel and EBBS fuel blends
[NASA-TN-82-82883] p0595 A82-32504

SCHERMER, H. M.
Source assessment system
[AD-A1112133] p0412 A82-25613

SCHERMER, R. M.
Recent results in main beam nulling
p0553 A82-43792

SCHERZIG, O.
A flutter suppression on a P-4F aircraft
[IAEA PAPER 82-0770] p0230 A82-28513

Chutes load alteration on Airbus A 300
p0504 A82-40881

SCHERF, R.
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

SCHERER, H. J.
Global Positioning System (GPS) geodetic receivers
[AD-A1110264] p0449 A82-26267

SCHULZ, R.
Application of numerical modeling to gas turbine combustor development problems
p0019 A82-12118

SCHAFER, L.
Detection and display of wind shear and turbulence
p0004 A82-10222

SCHAFER, J. G.
LV measurements with an advanced turboprop
p0599 A82-32690

SCHAUZER, H.
Induction driven transonic wind tunnel T2: Operation at room temperature and cryogenic adaptation
p0262 A82-19158

SCHWEBB, S.
System data communication structures for active-control transport aircraft
[NASA-CP-165737-VOL-1] p0530 A82-29510

System data communication structures for active-control transport aircraft, volume 2
[NASA-CP-165737-VOL-2] p0539 A82-29511

SEIDING, T. L.
Control of electromechanical actuator elements for flight vehicles
p0020 A82-12170

SEGERDA, B. E.
High-sensitivity holographic plates PL-38
p0519 A82-01575

SEGRE, D. J.
Monitoring engine wear by oil analysis
p0224 A82-28012

SEGRET, C.
Aerodynamics of advanced axial-flow turbomachinery
[AD-A1049111] p0537 A82-29228

SEGRETT, H.
Computer image generation: Advanced visual/sensor simulation
[AD-A1077102] p0479 A82-28016

SEIZER, J. M.
Assessment of stereographs for fire control and navigation in fighter aircraft
[AD-A115448] p0558 A82-30306

SEVSTER, J.
[ESA-TR-713] p0136 A82-14388

La Recherche aerospatiale, bi-monthly bulletin number 1981-5, September - October 1981
[ESA-TR-725] p0343 A82-22185

La Recherche aerospatiale, bi-monthly bulletin, number 1981-6, November-December 1981
[ESA-TR-741] p0014 A82-26185

SEWALL, A. C.
Application of a transonic similarity rule to correct the effects of sidewall boundary layers in two-dimensional transonic wind tunnels
[NASA-TN-88047] p0594 A82-32384

SEXTOR, G. H.
Applying advanced technology to flight station design
p0504 A82-40887

SEIFRIDE, L.
Analysis of two air traffic samples in the terminal area of Frankfurt/Main, August 4th 1978
[DFVLB-BlTT-81-12] p0329 A82-14073

Analysis of two air traffic samples in the terminal area of Frankfurt am Main, 4 August 1978
[DFVLR-BlTT-81-12] p0140 A82-15029

Analysis of two air traffic samples in the Frankfurt/Main airport terminal area, August 4, 1978
[ESA-TR-739] p0507 A82-32336

SELFRIDGE, R. H.
Method for engine-airframe integration using a high-level computer-assisted engine design system of the Apparatus series
p0282 A82-26487

SHE, S. C.
Comprehensive analysis of an axial compressor test with adjustable guide vane
[ASME PAPER 82-GT-74] p0423 A82-35323

SHAPIER, J. F.
Corona and antenna effects on the AH-53D minisensor flying helicopter and Raydiant navigation set
p0295 A82-27946

SHAPIER, R. F.
Flight-determined correction terms for angle of attack and sideslip
[IAEA PAPER 82-1374] p0497 A82-60290

SHAPIER, J. L.
Corrosion in naval aircraft electronic systems
p0212 A82-17363

SHAR, S. F.
Finite element analysis of some aerospace shell structures
p0382 A82-33515

SHAR, R. A.
Evaluation of advanced air-to-air quasquerry fire control systems
p0069 A82-14750

SHAW, R. H.
Vehicle test report: Batronic pickup truck
[NASA-CP-166637] p0260 A82-19205

SHAROTKE, R. G.
Observability of the parameters of an inertial navigation system for a 360-deg coordinated turn
p0583 A82-07093
The characteristics and detection of low level wind shear. II

SIGHEL, A. L.
The detection of low level wind shear. II
p0463 A82-38463

SILBER, J.
Engine industry cost considerations for emerging technologies
p0312 A82-21514

SILB, A. L.
Engine industry cost considerations for emerging technologies
p0292 A82-27429

SILBERG, C. D.
Digital active control system for load alleviation for the Lockheed L-1011
p0104 A82-16147

SILBERG, F. L.
Thermal-barrier-coated turbine blade study
[ NASA-CR-165351 ]
p0028 A82-10040

SILVA, A.
Airframe-propulsion system aerodynamic interference predictions at high transonic Mach numbers including off-design engine airflow
p0097 A82-13098

SILVA, A. A.
An iterative finite element-integral technique for predicting sound radiation from turbofan inlets in steady flight
[ AIAA PAPER 82-0124 ]
p0115 A82-17796

Acoustic properties of turbofan inlets
[ NASA-TN-169016 ]
p0462 A82-27090

SILVER, R. A.
High temperature composites. Status and future directions
[ NASA-TN-82929 ]
p0559 A82-30336

SILVA, J. C.
United States Air Force shale oil to fuels, phase 2
[ AD-A114531 ]
p0538 A82-29476

SILVA, R. A.
Subsonic aerodynamic and flutter characteristics of several wings calculated by the SOUSA PI.1 panel method
[ AIAA PAPER 82-0727 ]
p0341 A82-30193

Subsonic aerodynamic and flutter characteristics of several wings calculated by the SOUSA PI.1 panel method
[ NASA-TN-84485 ]
p0405 A82-25216

SILVA, J. P.
Feedback control of a cantilever wing in steady airflow
[ AIAA 02-0729 ]
p0350 A82-22225

SILVECO, P. L.
Wind tunnel test program
p0247 A82-18141

SILVERTHORN, J. L.
Design and analysis of a multivariable control system for a CCF-type fighter aircraft
[ AIAA PAPER 82-1350 ]
p0488 A82-39121

SILVERTHORN, J. L.
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 FAB-64 Advanced Attack Helicopter
p0498 AJ2-40513

SILVIOOS, C.
Fire strike protection
p0046 A82-13246

SIN, A. C.
AD-1 oblique wing aircraft program
[ AIAA PAPER 81-2354 ]
p0064 A82-14390

SIN, A. C.
Unique flight characteristics of the AD-1 oblique wing research airplane
[ AIAA PAPER 82-1329 ]
p0488 A82-39106

SINH, N.
Hurricane-induced wind loads
[ PHB-132267 ]
p0476 A82-27548

SINH, N.
An experimental study of steady and quasi-steady jet flaps
p0276 A82-26222

SINH, N. V., J.
Project Sea Hail: A report on prototype development and tests
[ AD-A109510 ]
p0302 A82-20160

SINH, N.
The characteristics and detection of low level wind shear in the critical phases of flight
p0297 A82-28249

SINH, R.
The behavior of composite thin-walled structures in dynamic buckling under impact
p0513 A82-40976

SINH, R.
A set of finite elements developed for the dynamic computation of composite helicopter blades
[ GOMMA, TP NO. 1961-87 ]
p0062 A82-13990

SINH, R.
A method for measuring takeoff and landing performance of aircraft, using an inertial sensing system
[ NLR-BP-80080 ]
p0133 A82-14084

SINH, R.
A method for applying linear optimal control theory to the design of a regulator for a flexible aircraft
[ NLR-TR-80032-U ]
p0265 A82-19212

SINH, R.
Multimission V/STOL with vectored thrust engines
[ PBH-90086 ]
p0356 A82-22278

SINH, R.
V/STOL Tandem Fan transition section model test
[ NASA-CR-165507 ]
p0312 A82-21158

SINH, R. L.
The structure of a separating turbulent boundary layer. I - Mean flow and Reynolds stresses. II - Higher-order turbulence results
p0129 A82-18776

SINH, R. L.
Unmanned aircraft in future combat
p0492 A82-39728

SINH, R. C.
Engine component retirement for cause
p0345 A82-22177

SINH, R. C.
Categorization of atmospheric turbulence in terms of aircraft response for use in turbulence reports and forecasts
[ AD-A109585 ]
p0306 A82-20190

SINH, R. C.
Comparison of wind tunnel and theoretical aerodynamic predictions with flight measured airloads for the B-1 aircraft
[ AIAA PAPER 81-2367 ]
p0065 A82-14393

SINNACCO, J. M.
Conceptual design study of a visual system for a rotorcraft simulator and some advances in platform motion utilization
[ NASA-CR-166322 ]
p0352 A82-22244

SINCLAIR, R.
An investigation of multi-axis isometric side-arm controllers in a variable stability helicopter
[ AD-A106759 ]
p0209 A82-17226

SINCLAIR, P. C.
Aircraft measurements and analysis of severe turbulence: 1976 field experiment
[ NASA-CR-160519 ]
p0259 A82-16803

SINCLAIR, E. M.
Evaluations of helicopter instrument-flight handling qualities
[ AD-A11400A ]
p0524 A82-28285

SINCLAIR, E.
A comparative study of narrowband vocoder algorithms in Air Force operational environments using the Diagnostic Rhyme Test
[ AD-A112053 ]
p0460 A82-26546

SINCLAIR, E.
The behavior of composite thin-walled structures in dynamic buckling under impact
p0513 A82-40976

SINCLAIR, R.
Aerospace research for the U.S. Army
[ LBS-6-220-6-203 ]
p0427 A82-35390

SINCLARY, R. L.
Test and evaluation of improved aircraft restraint systems
p0709 A82-14974

SINCLAIR, R.
Test and evaluation of improved aircraft restraint systems
[ AD-A107576 ]
p0188 A82-16056

SINCLAIR, R. L.
Preliminary functional description of integrated flow management
[ AD-A109909 ]
p0313 A82-21171

SINCLAIR, R. L.
An application of invariance principle to pilot model for 87-33 aircraft with variable
B-103
SPABIS, D. A.
Baseline data on utilisation of low-grade fuels in gas turbine applications. Volume 3: Emissions evaluation
(ENV-D-903764) p0031 882-10254

SOBER, R.
Structural program for analysis of helicopter vibrations
(AHS PEP/PRINT 81-24) p0463 882-37795
Correlation of predicted vibrations and test data for a wind tunnel helicopter model
88099 882-40515

SOBER, R.
Coupled rotor/airframe vibration analysis program manual. Volume 1: User's and program instructions
[NASA-CR-165891] p0573 882-31965
Coupled rotor/airframe vibration analysis program manual. Volume 2: Sample input and output listings

SORENSEN, L. E.
Forsakulation and characterization of polyimide resilient foams of various densities for aircraft seating applications
[NASA-CR-167421] p0090 882-12230

SOBERNSON, J. L.
Analysis of in-trail following dynamics of CDSI-equipped aircraft
[AIAA PAPER 82-1330] p0488 882-39107
An investigation of automatic guidance concepts to steer a VTOL aircraft to a small aviation facility ship

SOBERNSON, R. L.
Computation of the steady viscous flow over a tri-element 'augmentor wing' airfoil
[AIAA PAPER 82-0181] p0114 882-17735

SOBEROS, J. L.
A mathematical model of a subsonic transport aircraft
80127 882-10657

SOUDAK, L.
Bonded aluminum honeycomb—aircraft flight surface primary structure application
[AIAA 82-0676] p0338 882-30145

SPADACKI, R. J.
Deposit formation in hydrocarbon fuels
[AHS PAPER 82-GT-49] p0422 882-35307

SPARKS, C. R.
Damage tolerant design for cold-section turbine engine disk
[AD-A107863] p0204 882-17176

SPARKS, H. E.
Theoretical analysis of wake-induced parachute collapse
[AIAA PAPER 81-1922] p0061 882-13963

SPARKS, C. W.
Design considerations and experiences in the use of composite material for an aerelastic research wing
[AIAA 82-0678] p0338 882-30146
Design considerations and experiences in the use of composite material for an aerelastic research wing

SPARKLEH, J. W.
Digital image processing for acquisition, tracking, hand-off and ranging
80471 882-27303

SPARKLEH, G.
High-speed rotary printing device for air traffic control applications: A preliminary evaluation
[AD-A107323] p0466 882-27260

SPARKMEN, J.
Aircraft meteorological data relay/ARIDAB/
p0579 882-45822

SPARKS, D. A.
Study of controlled diffusion stator blading. I. Aerodynamic and mechanical design report
[NASA-CR-165500] p0190 882-16081

SPRAHS, J. C.
Data acquisition system for NASA LASC impact dynamics research facility

SPRILLEL, R. J.
Windshield system structural enhancement
80227 882-24312

SPENCE, R. M.
A practical approach to systems mode analysis
[AHS PAPER 81-DE7-130] p0162 882-19344

SPENCER, J. L.
On-board communication for active-control transport aircraft
[AIAA 81-2321] p0052 882-13520

SPERLING, B. M.
A Microwave Landing System simulation
80220 882-23323

SPERLE, J. L.
The Shiryayev sequential probability ratio test for redundancy management
[AIAA 82-1623] p0486 882-38999

SPERLE, B. S.
Noise measurements on the helicopter BK 117 design. Weighted noise levels and influence of airspeed
[DFVLR-MTT-81-18] p0270 882-19957

SPERLE, S. S.
LET—An advanced avionics system design
[AIAA 81-2249] p0040 882-13472

SPERLE, B. M.
Design and fabrication of cocured composite heat-stiffened panels
80513 882-40978

SPERLE, J. M.
Cloud top remote sensing by airborne lidar
80379 882-32920

SPERLE, W. M.
Aerostructure nondestructive evaluation by thermal field detection, phase I: Fundamental information and basic technique development
[AD-A1158746] p0191 882-32425

SPERTS, B. M.
Noise measurements on the helicopter BK 117 design. Weighted noise levels and influence of airspeed
[DFVLR-MTT-81-18] p0270 882-19957

SPOOR, C. H.
The Flight Service Automation System (FSAS) system benchmark. Volume 1: Summary, introduction and concepts
[FB82-143538] p0468 882-27277
The Flight Service Automation System (FSAS) system benchmark. Volume 2: The model of the application
[FB82-143546] p0468 882-27276
The Flight Service Automation System (FSAS) system benchmark. Volume 3: The vendor interface package
[FB82-143553] p0468 882-27279

SPRAGGLES, J.
A new class of routing protocols for a proposed computer network linking tactical radar sites
80553 882-43893

SPRAGUE, R. A.
Material and process impact on aircraft engine design of the 1990's
[AHS PAPER 82-GT-278] p0429 882-35453

SPREDBOROUGH, S. G.
The influence of sensor and actuator characteristics on overall helicopter APCS design
80251 882-18171

SPREADBERG, L. E.
Results of the AH-64 Structural Demonstration
80502 882-40551

SPRING, J.
Oscillations and vibrations of aircraft on runways
80241 882-24974

SPURGSON, B.
Mediating Mach's mechanics— Bombs away
80556 882-44467

SPICES, L. C.
Turbulent boundary-layer development on a free-streaming aeroflight with supersonic flow at low Reynolds number
80389 882-34398

PRESSURE, E. L.
Turbulent boundary-layer development on a two-dimensional aeroflight with supersonic flow at low Reynolds number
80389 882-34398

SPURGEON, R. L.
Investigation of correlation between full-scale
and fifth-scale wind tunnel tests of a Bell helicopter rotor system [BASA-CB-166362] p0315 A82-293115
SQUIRES, L. P. A., E. E. Subsonic ground and near supersonic flight speeds [AD-A1016062] p0185 A82-22096
STALLING, R., R. B. E. Subsonic ground and near supersonic flight speeds [AD-A1016062] p0185 A82-22096
SQUIRES, L. P. A., E. E. Subsonic ground and near supersonic flight speeds [AD-A1016062] p0185 A82-22096
SQUIRES, L. P. A., E. E. Subsonic ground and near supersonic flight speeds [AD-A1016062] p0185 A82-22096
SQUIRES, L. P. A., E. E. Subsonic ground and near supersonic flight speeds [AD-A1016062] p0185 A82-22096
SQUIRES, L. P. A., E. E. Subsonic ground and near supersonic flight speeds [AD-A1016062] p0185 A82-22096
SQUIRES, L. P. A., E. E. Subsonic ground and near supersonic flight speeds [AD-A1016062] p0185 A82-22096
SQUIRES, L. P. A., E. E. Subsonic ground and near supersonic flight speeds [AD-A1016062] p0185 A82-22096
SQUIRES, L. P. A., E. E. Subsonic ground and near supersonic flight speeds [AD-A1016062] p0185 A82-22096
SQUIRES, L. P. A., E. E. Subsonic ground and near supersonic flight speeds [AD-A1016062] p0185 A82-22096
SQUIRES, L. P. A., E. E. Subsonic ground and near supersonic flight speeds [AD-A1016062] p0185 A82-22096
SQUIRES, L. P. A., E. E. Subsonic ground and near supersonic flight speeds [AD-A1016062] p0185 A82-22096
SQUIRES, L. P. A., E. E. Subsonic ground and near supersonic flight speeds [AD-A1016062] p0185 A82-22096
SQUIRES, L. P. A., E. E. Subsonic ground and near supersonic flight speeds [AD-A1016062] p0185 A82-22096
SQUIRES, L. P. A., E. E. Subsonic ground and near supersonic flight speeds [AD-A1016062] p0185 A82-22096
SQUIRES, L. P. A., E. E. Subsonic ground and near supersonic flight speeds [AD-A1016062] p0185 A82-22096
SQUIRES, L. P. A., E. E. Subsonic ground and near supersonic flight speeds [AD-A1016062] p0185 A82-22096
SQUIRES, L. P. A., E. E. Subsonic ground and near supersonic flight speeds [AD-A1016062] p0185 A82-22096
SQUIRES, L. P. A., E. E. Subsonic ground and near supersonic flight speeds [AD-A1016062] p0185 A82-22096
SQUIRES, L. P. A., E. E. Subsonic ground and near supersonic flight speeds [AD-A1016062] p0185 A82-22096
SQUIRES, L. P. A., E. E. Subsonic ground and near supersonic flight speeds [AD-A1016062] p0185 A82-22096
SQUIRES, L. P. A., E. E. Subsonic ground and near supersonic flight speeds [AD-A1016062] p0185 A82-22096
SQUIRES, L. P. A., E. E. Subsonic ground and near supersonic flight speeds [AD-A1016062] p0185 A82-22096
SQUIRES, L. P. A., E. E. Subsonic ground and near supersonic flight speeds [AD-A1016062] p0185 A82-22096
SQUIRES, L. P. A., E. E. Subsonic ground and near supersonic flight speeds [AD-A1016062] p0185 A82-22096
SQUIRES, L. P. A., E. E. Subsonic ground and near supersonic flight speeds [AD-A1016062] p0185 A82-22096
SQUIRES, L. P. A., E. E. Subsonic ground and near supersonic flight speeds [AD-A1016062] p0185 A82-22096
SQUIRES, L. P. A., E. E. Subsonic ground and near supersonic flight speeds [AD-A1016062] p0185 A82-22096
SQUIRES, L. P. A., E. E. Subsonic ground and near supersonic flight speeds [AD-A1016062] p0185 A82-22096
SQUIRES, L. P. A., E. E. Subsonic ground and near supersonic flight speeds [AD-A1016062] p0185 A82-22096
SQUIRES, L. P. A., E. E. Subsonic ground and near supersonic flight speeds [AD-A1016062] p0185 A82-22096
SQUIRES, L. P. A., E. E. Subsonic ground and near supersonic flight speeds [AD-A1016062] p0185 A82-22096
SQUIRES, L. P. A., E. E. Subsonic ground and near supersonic flight speeds [AD-A1016062] p0185 A82-22096
SQUIRES, L. P. A., E. E. Subsonic ground and near supersonic flight speeds [AD-A1016062] p0185 A82-22096
SQUIRES, L. P. A., E. E. Subsonic ground and near supersonic flight speeds [AD-A1016062] p0185 A82-22096
SQUIRES, L. P. A., E. E. Subsonic ground and near supersonic flight speeds [AD-A1016062] p0185 A82-22096
SQUIRES, L. P. A., E. E. Subsonic ground and near supersonic flight speeds [AD-A1016062] p0185 A82-22096
SQUIRES, L. P. A., E. E. Subsonic ground and near supersonic flight speeds [AD-A1016062] p0185 A82-22096
SQUIRES, L. P. A., E. E. Subsonic ground and near supersonic flight speeds [AD-A1016062] p0185 A82-22096
A unified and generalized definition of static longitudinal stability in aircraft: p0377 A82-32135

Fluctuating forces and rotor noise due to distorted inflow: p0510 A82-40965
STEPPERS, J. L
Digital Acoustic Information System (DAIS): Development and demonstration [AD-A107906].


STREBEKOV, V. G
Control of electromechanical actuator elements for flight vehicles: p0020 A82-12170

STECK, K. M.
Calculation of level flow using radial grating: p0404 A82-38922

STECKE, V. J.
The avionics route forecast /ABF/ program: an interactive system for pilot briefing: p0553 A82-34821
The avionics route forecast /ABF/ program: an interactive system for Pilot Self-briefing: p0590 A82-95330

STEBB, B. Distributed intelligence for air fleet control [AD-A100611].

SCENE, G. C.
Simulation of the interaction between airdrop platforms and aircraft rollers [AD-A116370].

STEFK, G. L.
Propeller flow visualization techniques: p0597 A82-32672

STEBB, R. Computation of wing-vortex interaction in transonic flow using implicit finite difference algorithms [NASA-CR-166251].

STEBB, R.

STEEN, M. Self-tuning regulator design for adaptive control of aircraft wing/store flutter: p0570 A82-45538

LGQ-based multivariable design: Frequency domain interpretation: p0029 A82-10053

LGQ multivariable design tools: p0030 A82-10054

STEEN, W. Experimental investigation of a helmet mounted night/display for helicopter: p0922 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 Evulator: p0101 A82-21500

STEINBERG, L. P.
Low-frequency eddy current inspection of aircraft structure: p0103 A82-21900

STEINBERG, D. B.
Distributed array airborne array concepts: p0342 A82-31669

STEINBERG, D. B.
The NASA ARPT program: Developing new concepts for accurate flight planning [AIAA Paper 82-0340].

STEBBE, J. B.
Nondestructive testing in aircraft construction using holographic methods: p0513 A82-40977

STEINBERG, W. J.
The outlook for advanced transport aircraft [AIAA Paper 82-21374].

STEINBERG, W. J.
Commercial transport developments for the 1980's: p0386 A82-38109

STEINBERG, W. E.
Vibration qualification of external aircraft stores and equipment [NASA TP-2620].

STEINBERG, W. E., J.
The effect of ejector augmentation on test-section axial flow compressor performance by a meanline stage stacking method: p0408 A82-25250

STEINBERG, W. E., J.
Tunnel-to-tunnel correlation: p0408 A82-25250
Correlation of Preston-tube data with laminar skin friction (Log No. A12081): p0539 A82-29556

STEINBERG, W. E.
Travel data acquisition and interpretation: p0239 A82-24707

STEINBERG, W. E.
Have we overlooked the pilot's role in an automated flight deck? [AIAA 81-2262].
The integration of control and display concepts for improved pilot situational awareness: p0061 A82-13972

STRACHAN, R. L.
The effect of hybrid composite materials on the dynamic characteristics of helicopter rotor blades: p0941 A82-39263

STEINBERG, W. E.
Preparing for turbine blade variations in subsonic flow: p0142 A82-15048

STEBB, L. F.
A possible way of specifically correcting location and navigational errors caused by reflection and other propagation anomalies: [NASA-TN-667].

STEINBERG, E. L.
Development of accelerated fuel-engines qualification procedures methodology, Volume I: [AD-A1135461].
Development of accelerated fuel-engines qualification procedures methodology, Volume 2: Appendices: [AD-A113532].

STEBB, L. F.
Develop, demonstrate, and verify large area composite structural bonding with polylime adhesives [NASA-CR-165839].

STEBB, L. F.
A microprocessor-based data acquisition system for stall/spin research: [AIAA 81-2377].
Design and flight test of a lateral-directional command augmentation system: [AIAA 81-2351].
Design and flight testing of digital direct side-force control laws: [AIAA 82-1521].
Investigation of air transportation technology at Princeton University, 1981: p0464 A82-26212
Pilot opinions of sampling effects in lateral directional control: p0557 A82-38049

STEBB, L. F.
Improving the accuracy of the estimates of surfactant content in jet fuels: p0210 A82-23250

STEBB, L. F.
Computer aided investigation of turbine aerodynamics and aeroelasticity: p0215 A82-23250
STOLPBSTAD, J. B.

STOLPBSTAD, J. B.

STOLLBBBI, J. I.

STOLESB. L.

STOBE. D. B.

STOBE. C. B.

STOBBI. J. L.

STORB. B. B.

STOHHEB. B. 6.. J. B.

STOTB. J. B.

SZOHB, J.

STODDEB. O. J.

STOHEMAH, S. 1. T.

STOTT, G. I.

STOBBI. B. F. B.

STOBACE. A. F.

Icing analysis of an unprotected aircraft radome

Robust Kalman filter design for active flutter

Increasing the lift:drag ratio of a flat delta wing

Evaluation of superplastic forging and co-diffusion bonding of Ti-6Al-4V titanium alloy expanded sandwich structures

StoBE. D. B.

STOR, C. B.

Robust Kalman filter design for active flutter

suppression systems

STOR, D. E. B.

Non-destructive inspection and the implementation of a damage tolerant design philosophy

STOR, J. R.

NASA research in supersonic propulsion - A decade of progress

NASA research in supersonic propulsion: A decade of progress

STOR, R. L.

Air-to-ground MTI radar using a displaced phase center, phased array

STOR, R. G., Jr.

Turboprop cargo aircraft systems study

STOR, R. H.

Seven years experience with Kevelar-49 in the Lockheed L-1011 TriStar

Flight service evaluation of Kevelar-49 epoxy composite panels in wide-bodied commercial transport aircraft

STORER, R. L.

The effect of induced sound on the flow around a rectangular body in a wind tunnel

STORPEL, J.

Investigations of helicopter structural dynamics and a comparison with ground vibration tests

Approach in dynamic qualification of light helicopter stores and equipment

STORRACE, R. F.

Blade loss transient dynamic analysis of turbomachinery

Foreign object impact design criteria, volume 2

Foreign object impact design criteria, volume 3

STORR, R. R.

Simulation of turboshaft engine models in the Heybridge low speed wind tunnel

STORY, G. F.

A laser-interferometer method for determining the forces on a freely-flying model in a shock tunnel

STOYER, H. J.

An advanced facility for processing aircraft dynamic test data

STOZ, B. M.

Stereographic projection in the National Airspace System

Design and implementation of efficient algorithms for automatic determination of corrected slant range

PERSONAL AUTHOR INDEX

STOR, R. J.

Service sensitivity of polysulfide sealants

STRA, G. W.

Electronic Warfare Avionics Integration Support Facility support processor

STRA, R. G.

Propulsion opportunity for future commuter aircraft

Future propulsion opportunities for commuter airplanes

Propulsion opportunities for future commuter aircraft

STRAJN, J. A.

A technical assessment of aeronautical engineering in Israel

STRAULD, G. L.

General turret system model determination and controller performance testing

STRALE, D. L.

Performance of a 2D-CD nonaxisymmetric exhaust nozzle on a turboset engine at altitude

STRAUGHS, B. A.

Energy environment study

STRAUS, F.

Advanced compressor components. Phase I: 1978 to 1979

Stress-diffusion bonding of H-6Al-4V titaniua alloy

Technology (ST&1)

STREACH, J. E.

Aircraft noise reduction

STREETER, H.

Study of noise reduction characteristics of composite fabric-reinforced panels, interior panel configurations, and the application of the tuned damper concept

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

STRECHBAUB, J. B.

Aircraft noise reduction

STRECKER, B. C.

Aircraft noise reduction

STREDDER, R.

Survey of active and passive means to reduce rotorcraft vibrations

STREIER, R.

Standard tests of a research model rotor in a wind tunnel, including model similarity

STREICH, J. A.

User's manual for the vertical axis wind turbine code VABT2

STRIKLAND, J. B.

Calibration and performance of the NADC/YF tunnel C, Mach number 4, aerothermal wind tunnel

STROCK, J.

Telemetry Computer System at Wallops Flight Center
PERSONAL AUTHOR INDEX

STROJNEK, L.
Development of a homebuilt powered sailplane
[PO330 882-29416]

STROBACH, J. F.
Maintenance experience with civil aero engines
[p007 882-22176]

STROUH, R. L.
Performance improvements with the free-tip rotor
[PO279 882-26387]

StROI, M. L.
An analytical investigation of the free-tip rotor
[PO298 882-12967]

STRUC, R.
Calculation of wing-body-nacelle interference in
subsonic and transonic potential flow
[p007 882-13095]

STURB, S. R.
Dynamics of aircraft anti-skid braking systems
[PO254 882-18204]

Tire tread temperatures during anti-skid braking
and cornering on a dry runway
[PO202 882-24193]

STURCH, L. J.
Exhaust emissions reduction for intermittent
boostercombustion engine aircraft
[PO610 882-33922]

STURCHBAUER, R.
An observer approach to the identification and
isolation of sensor failures in flight control
systems
[PO145 882-15078]

STUDWELL, R. L.
User's manual for the Automated Paneling Technique
(APP) and the Wing Body Aerodynamic Technique
(WABT) programs
[PO566 882-12197]

User's manual for the coupled rotor/airframe
vibration analysis graphics package
[PO566 882-12199]

STUGER, T. E.
Public service helicopters - Is the grass greener
on the other side of the fence
[p0054 882-12328]

STURDO, P. H.
Anisometric approach and landing thrust reverser
impacts on usage and LCC
[p0050 882-08992]

STUPPER, R. G.
Wind-tunnel investigation of the powered low-speed
longitudinal aerodynamics of the
Vectorized-Engine-Over (VEO) wing fighter
configuration
[PO349 882-22207]

STURGE, G. L.
Application of numerical modeling to gas turbine
combustor development problems
[PO201 882-12110]

Validation studies of turbulence and combustion
models for aircraft gas turbine combustors
[p0020 882-12267]

Widely-spaced co-axial jet, diffusor-flame
combustor - Isothermal flow calculations using
the two-equation turbulence model
[AIAM PAPER 82-0113]

Advanced Low-Swirlings Catalytic-Combustor
Program, phase I
[PO115 882-17791]

STURM, M.
Control law development for a close-coupled
canard, relaxed static stability fighter
[PO354 882-22265]

STUTZ, E. L.
Antenna theory and design
[p0020 882-12323]

SU, C. W.
Hydrocarbon fuel chemistry: Sediment water
interaction
[AD-A117928]

SU, J.
Applications to aeronautics of the theory of
transformations of nonlinear systems
[PO540 882-30013]

SU, A.
An experimental investigation of leading-edge
sawanee blowing
[p0514 882-04988]

SUH, J.
Fabrication and test of integrally stiffened
graphite/epoxy composite panels
[PO248 882-26528]
TAKATA, K.

Notating stall in blade rows operating in shear flow [AIAA PAPER 82-22209] p0166 828-22209

Three-dimensional analysis of cascade flutter in parallel shear flow [AIAA PAPER 82-15062] p0164 828-15062

TAKEDA, K.


TAKEDA, K.

Lineup of the X-series aircraft-derivative gas turbines [AIAA PAPER 82-22206] p0099 828-22206

TAKEDA, K.

Development of high loading, high efficiency axis flow turbine [AIAA PAPER 82-27069] p0063 828-47069

TALISOV, L. V.

The effect of the shape of a body on the efficacy of its utilization as a flame stabilizer [KUP 82-26483] p0261 828-26483

TALAY, T. L.

Solar-powered airplane design for low-endurance, high-altitude flight [AIAA PAPER 82-0811] p0376 828-31984

TALBIO, V.

Terminal air traffic control with surveillance data from the node 5 systems: Results of system demonstrations to field controllers [AD-1112622] p0047 828-27268

TALKIN, W. L.

Basic problem of aircraft gas turbine engine analytic design. II [AD-11463] p0014 828-11463

TAN, C. K. H.


TAVULGOS, K. L.

The Shock and Vibration Digest, volume 14, no. 7 [NASA CR-82-32301] p0056 828-32301

The Shock and Vibration Digest, volume 14, no. 3 [NASA CR-82-32525] p0056 828-32525

TAR, C. P.

Wind tunnel tests on airfoils in tandem cascade [NASA CR-82-10987] p0012 828-10987

TAR, C. E.


TARAI, H.

Aerodynamic response of a blade in pitching oscillation with partial and full separation [NASA CR-82-15047] p0142 828-15047

TARALD, D. A.

Rotor technology for electric Remotely Piloted Vehicle (RPV) [NASA CR-82-33651] p0062 828-33651

TARK, H.

Application of multiple model estimation techniques to a recursive terrain height correlation system [NASA CR-82-14768] p0070 828-14768

A recursive terrain height correlation system using multiple model estimation techniques [NASA CR-82-1513] p0070 828-1513

TAKIBOTO, L. Y.

A study of the effects of long-term exposure to fuels and fluids on the behavior of advanced composite materials [NASA CR-82-16576] p0057 828-16576

TAKU, C.


TAKU, K. G.

The airplane manufacturer and meteorology [NASA CR-82-45821] p0079 828-45821

TAKU, K. M.


TARK, H.

Development and operating characteristics of an advanced two-stage combustor [AIAA PAPER 82-0991] p0116 828-17833

TAPAVCESK, M.

Mechanical properties of hot isotropically pressed Ni-Tin alloys for helicopter components [AIAA CR-82-25383] p0041 828-25383

TASHBERDO, Y. N.

Problems in the simulation of correlation-extremal navigation systems [NASA CR-82-29603] p0049 828-29603

TASHBERDO, Y. N.

Wind tunnel modeling of rotor vibratory loads [NASA CR-82-40516] p0049 828-40516

TAY, K. L.

A new angular deviation measurement device for aircraft transparencies [NASA CR-82-24300] p0026 828-24300

Portable transparency optical test system \& TOTS/ [NASA CR-82-24309] p0026 828-24309

TAYLOR, L. L.

The Maneuverable Atmospheric Probe (MIP), a remotely piloted vehicle [NASA CR-82-11148] p0056 828-31148

TAYLOR, L. L.

Aerodynamics of an airfoil with a jet issuing from its surface [NASA CR-82-84265] p0053 828-29265

TAYLOR, C. C.

An engine data subsystem maintenance information [NASA CR-82-14017] p0073 828-14017

TAYLOR, L. L.

A new angular deviation measurement device for aircraft transparencies [NASA CR-82-32347] p0058 828-32347

TAYLOR, L. L.

Vortex lift augmentation by suction on a 60 deg swept Gothic wing [NASA CR-82-2231] p0117 828-17856

TAYLOR, M.

Management of a large avionics project [NASA CR-82-16557] p0105 828-16557

TAYLOR, M. L.


TAYLOR, M. L.

Maximizing South Carolina's aviation resources: Identifying potentially profitable commuter airline routes, volume 2 [NASA CR-82-13053] p0052 828-29277

TAYLOR, M. L.


TAYLOR, M. R.

Delta electrical load analysis C-141B JACC/CP aircraft [NASA CR-82-28825] p0054 828-28825

TAYLOR, L. H.

An analytical technique for the analysis of airplane spin entry and recovery [NASA CR-82-20423] p0164 828-19786

An estimation of aerodynamic forces and moments on an airplane model under steady state spin conditions [NASA CR-82-1311] p0047 828-35902

TAYLOR, L. L.

Source assessment system [NASA CR-82-12123] p0042 828-25613

TAYLOR, P.

Helicopter design synthesis [NASA CR-82-37772] p0040 828-37772

Preliminary investigation into the addition of auxiliary longitudinal thrust on helicopter agility [NASA CR-82-18155] p0249 828-18155
<table>
<thead>
<tr>
<th>Author</th>
<th>Title</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>TiLLer</td>
<td>An investigation of the effects of smoke suppressant fuel additives on engine and test cell exhaust gas opacities</td>
<td>AD-A1161711</td>
</tr>
<tr>
<td>TiLhER</td>
<td>Distributed intelligence for air fleet control</td>
<td>AD-A1086111</td>
</tr>
<tr>
<td>AuToPoLT</td>
<td>A distributed planner for air fleet control</td>
<td>AD-A107139</td>
</tr>
<tr>
<td>ThROGHTON</td>
<td>Finite element thermal analysis of convectively-cooled aircraft structures</td>
<td>P0035 A82-28565</td>
</tr>
<tr>
<td>ThROGHTON</td>
<td>Laboratory-scale simulation of underground coal gasification: Experiment and theory</td>
<td>DE82-0010635</td>
</tr>
<tr>
<td>THRIFT</td>
<td>The impact of increasing energy costs upon the design philosophy of aviation fuel systems</td>
<td>P0058 A82-28470</td>
</tr>
<tr>
<td>ThROGHTON</td>
<td>Combat survivability in the advanced Technology Engine Study [AIAA Paper 82-1207]</td>
<td>P0019 A82-35101</td>
</tr>
<tr>
<td>TROLLEN</td>
<td>Advanced weapon systems - Integration technology</td>
<td>P0053 A82-13533</td>
</tr>
<tr>
<td>ThROBBI</td>
<td>An analysis of selected enhancements to the air traffic control computing complex</td>
<td>AD-A113575</td>
</tr>
<tr>
<td>ThROBBI</td>
<td>Energy efficient engine: Turbine transition duct model technology report</td>
<td>P0030 A82-33394</td>
</tr>
<tr>
<td>ThIGAN</td>
<td>Aircraft radio communications equipment: Design and use</td>
<td>P0044 A82-42067</td>
</tr>
<tr>
<td>TSHATU</td>
<td>Structural analysis of fuselages with cutouts by finite element method</td>
<td>P0032 A82-10955</td>
</tr>
<tr>
<td>TFAF</td>
<td>Performance analysis of the test results on a two-stage transonic fan</td>
<td>ASRE PAPER 82-07-233</td>
</tr>
<tr>
<td>TIBBETTS</td>
<td>A computer program for the prediction of near field noise of aircraft in cruising flight: User's guide</td>
<td>P0060 A82-33140</td>
</tr>
<tr>
<td>TiFFAT1</td>
<td>Control law design to meet constraints using CPRAC-4 microprocessor package for active controls</td>
<td>NASA-CR-83266</td>
</tr>
<tr>
<td>TIGGHAAR</td>
<td>Calculation of the contributions of air traffic and road traffic to air pollution in the region of Schiphol airport in 1974</td>
<td>NL-A-78-77100-9</td>
</tr>
<tr>
<td>TiJDBARD</td>
<td>Theory and experiment in unsteady aerodynamics</td>
<td>P0046 A82-17126</td>
</tr>
<tr>
<td>TiJTHoER</td>
<td>On the use of carbon composites in slat and stabilizer construction</td>
<td>P0015 A82-11668</td>
</tr>
<tr>
<td>TiLL</td>
<td>Instrumentation to determine the suitability of EHM systems for helicopter navigation in the national airspace system</td>
<td>AIAA PAPER 83-2514</td>
</tr>
<tr>
<td>TiLLER</td>
<td>The helicopter Waystar GPS test program</td>
<td>P0057 A82-13911</td>
</tr>
<tr>
<td>TiLLES</td>
<td>Air service, airport access and future technology</td>
<td>P0192 A82-16100</td>
</tr>
<tr>
<td>TiLLlAER</td>
<td>Allowance for flow nonuniformity in the annulus section is the optimal contouring of the expanding part of a nozzle</td>
<td>P0270 A82-25798</td>
</tr>
</tbody>
</table>

**PERSONAL AUTHOR INDEX**

<table>
<thead>
<tr>
<th>Author</th>
<th>Title</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>TiLLlOTSON</td>
<td>Analysis and wind tunnel tests of a probe used to sense altitude through measurement of static pressure</td>
<td>AIAA PAPER 82-1361</td>
</tr>
<tr>
<td>TiNARDO, M. J.</td>
<td>Development of accelerated fuel-engines qualification procedures methodology, Volume 1</td>
<td>AD-A13661</td>
</tr>
<tr>
<td>TiNARDO, M. J.</td>
<td>Development of accelerated fuel-engines qualification procedures methodology, Volume 1: Appendices</td>
<td>P0073 A82-27317</td>
</tr>
<tr>
<td>TiNARDO, M. J.</td>
<td>Test Facility and data handling system for the development of aerial compressors</td>
<td>AIAA PAPER 82-07-73</td>
</tr>
<tr>
<td>TiNORM</td>
<td>The F-16/79 test program</td>
<td>P0052 A82-13855</td>
</tr>
<tr>
<td>TiNOD</td>
<td>F-14 inlet development experience</td>
<td>P0049 A82-35278</td>
</tr>
<tr>
<td>TiNG</td>
<td>Effects of elastomeric additives on the mechanical properties of epoxy resin and composite systems</td>
<td>AIAA P82-17538</td>
</tr>
<tr>
<td>TiNODA</td>
<td>Subsonic balance and pressure investigation of a 60-deg delta wing with leading-edge devices (data report)</td>
<td>NASA-CR-165006</td>
</tr>
<tr>
<td>TiSCHE, M. A.</td>
<td>The effects of atmospheric turbulence on a quadrotor heavy lift aircraft</td>
<td>AIAA P82-15014</td>
</tr>
<tr>
<td>TiSCHMID</td>
<td>Handling qualification criteria for flight path control of V/STOL aircraft</td>
<td>AIAA PAPER 82-1292</td>
</tr>
<tr>
<td>TiSCHMID</td>
<td>The outlook for advanced transport aircraft</td>
<td>A82-21374</td>
</tr>
<tr>
<td>TiTSOI</td>
<td>Game-theoretical method for the synthesis of aircraft control during landing approach</td>
<td>A82-18584</td>
</tr>
<tr>
<td>TiOHER</td>
<td>Propulsion systems control and simulation</td>
<td>A82-2209</td>
</tr>
<tr>
<td>TiAKA</td>
<td>F/A-18 roll rate improvement program</td>
<td>P0077 A82-14939</td>
</tr>
<tr>
<td>TiAKA</td>
<td>F/A-18 weapon system development</td>
<td>P0022 A82-23774</td>
</tr>
<tr>
<td>TiBAK</td>
<td>Bifurcation analysis of nonlinear stability of aircraft at high angles of attack</td>
<td>AIAA PAPER 82-0244</td>
</tr>
<tr>
<td>TiBAK</td>
<td>Three-dimensional separation and reattachment</td>
<td>P0393 A82-24167</td>
</tr>
<tr>
<td>TiBAK</td>
<td>Real-time simulation of helicopter IFR approaches into major terminal areas using RNAV, MLS, and CDTI</td>
<td>AIAA PAPER 82-02607</td>
</tr>
<tr>
<td>TiBAK</td>
<td>NASA/PAA Helicopter IFR simulation investigation of RNAV/MLS instrument approaches</td>
<td>AIAA PAPER 82-02607</td>
</tr>
<tr>
<td>TiBAK</td>
<td>Configuration management techniques for automatic testing</td>
<td>P0051 A82-00535</td>
</tr>
<tr>
<td>TiBAK</td>
<td>NASA research programs responding to workshop recommedations</td>
<td>P0295 A82-27893</td>
</tr>
<tr>
<td>TiBAK</td>
<td>Research on the behavior of a turbojet engine during internal and external disturbances with respect to early recognition of damage</td>
<td>P0503 A82-00561</td>
</tr>
<tr>
<td>TiBAK</td>
<td>Radiofrequency Activity/Air Traffic Control (EVA/ATC) test report</td>
<td>NASA-CR-167650</td>
</tr>
<tr>
<td>TiBAK</td>
<td>Digital detection and processing of laser beacon signals for aircraft collision hazard warning</td>
<td>AIAA 81-2238</td>
</tr>
<tr>
<td>TiBAK</td>
<td>A82-13525</td>
<td></td>
</tr>
<tr>
<td>Author</td>
<td>Title</td>
<td>Journal/Conference</td>
</tr>
<tr>
<td>--------</td>
<td>-----------------------------------------------------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>TROMMER, J. A.</td>
<td>Application of the OBBB dynamic stall model to a helicopter blade in forward flight</td>
<td>[AIAA PAPER 82-0262]</td>
</tr>
<tr>
<td>TROUBLE, J. L.</td>
<td>Correlation of non-linear aerodynamic models with on-board electrostatic sensors</td>
<td>[AD-A105511]</td>
</tr>
<tr>
<td>TROUBLE, J. L.</td>
<td>System identification of nonlinear aerodynamic models</td>
<td>[AD-A105511]</td>
</tr>
<tr>
<td>TROUBLESOS, E.</td>
<td>Parallel computation for developing nonlinear control procedures</td>
<td>[AD-A107918]</td>
</tr>
<tr>
<td>TUSTOM, H. J.</td>
<td>Testing of the 1st Annual Workshop on Aviation Related Electricity Hazards Associated with Atmospheric Phenomena and Aircraft Generated Inputs</td>
<td>[AD-A107326]</td>
</tr>
<tr>
<td>TROZET, E. M.</td>
<td>Marine Air Traffic Control and Landing System (METCAL) Investigation</td>
<td>[AD-A113047]</td>
</tr>
<tr>
<td>TROMBETTA, M.</td>
<td>On-site vibration measurement, dynamic tracking and balancing</td>
<td>[AD-A105511]</td>
</tr>
<tr>
<td>TROMBETTA, M.</td>
<td>Combined multisensor displays</td>
<td>[AD-A105511]</td>
</tr>
<tr>
<td>TROTTER, S.</td>
<td>Concept studies of an advanced composite helicopter fin (SWAS-821-210-106)</td>
<td>[AIAA PAPER 82-2255]</td>
</tr>
<tr>
<td>TROW, W.</td>
<td>Dynamic stability of a buoyant quad-rotor aircraft</td>
<td>[AIAA PAPER 82-2255]</td>
</tr>
<tr>
<td>TROW, W.</td>
<td>Impact of technology on avionics cost trends</td>
<td>[AD-A105511]</td>
</tr>
<tr>
<td>TROW, W.</td>
<td>IROSD 1558B - aircraft environmental susceptibility effects</td>
<td>[AIAA PAPER 82-19203]</td>
</tr>
<tr>
<td>TROeLLE, E. G.</td>
<td>Quantitative interpretation of recirculated flow visualization by the analysis of video pictures</td>
<td>[AIAA PAPER 82-24357]</td>
</tr>
<tr>
<td>TROHANN, B.</td>
<td>Study of acoustic resonance of cascades</td>
<td>[AIAA PAPER 82-15066]</td>
</tr>
<tr>
<td>TOLKISSON, J. H.</td>
<td>Fuselage structure using advanced technology fiber reinforced composites (NASA-CASP-LAR-1688-1)</td>
<td>[AIAA PAPER 82-26384]</td>
</tr>
<tr>
<td>TOLKISSON, J. P.</td>
<td>Dynamic stability of a buoyant quad-rotor aircraft</td>
<td>[AIAA PAPER 82-26384]</td>
</tr>
<tr>
<td>TOLKISSON, J. P.</td>
<td>Testing of trimm-powered runway distance and taxiway markers</td>
<td>[AD-A115558]</td>
</tr>
<tr>
<td>TOLNAY, J. L.</td>
<td>SH-60B Seahawk automatic blade fold system</td>
<td>[AIAA PAPER 82-26391]</td>
</tr>
<tr>
<td>TOBIUS, E. J.</td>
<td>Development of high loading, high efficiency axial flow turbine</td>
<td>[AIAA PAPER 82-12297]</td>
</tr>
<tr>
<td>TOOM, W. S.</td>
<td>Automatic air-traffic control</td>
<td>[AIAA PAPER 82-26511]</td>
</tr>
<tr>
<td>TOURELL, G.</td>
<td>Turboprop and jet turbine optimization</td>
<td>[AIAA PAPER 82-23174]</td>
</tr>
<tr>
<td>TOUELLE, T.</td>
<td>Aerodynamic noise generated by jet wing/flare interactions of the external US_Z configuration of STOL aircraft</td>
<td>[AIAA PAPER 82-23174]</td>
</tr>
<tr>
<td>TOUREKIL, E. L.</td>
<td>Development and laboratory test of an integrated sensor system /ISS/ for advanced aircraft</td>
<td>[AIAA PAPER 82-12297]</td>
</tr>
<tr>
<td>TOUREKIL, E. L.</td>
<td>Terminal information display system benefits and costs</td>
<td>[AD-A115937]</td>
</tr>
<tr>
<td>TOTTMAN, D.</td>
<td>Development and laboratory testing of a thermal sensor system /ISS/ for advanced aircraft</td>
<td>[AIAA PAPER 82-12297]</td>
</tr>
<tr>
<td>TOALO, E. L.</td>
<td>Investigation of the unstable airloads on a helicopter blade in forward flight</td>
<td>[AIAA PAPER 82-12297]</td>
</tr>
<tr>
<td>TOBER, G.</td>
<td>Determination of the flameability characteristics of aerospace hydraulic fluids</td>
<td>[AIAA PAPER 82-16187]</td>
</tr>
<tr>
<td>TUBING, E.</td>
<td>Evaluation of CFFP prototype structures for aircraft</td>
<td>[AIAA PAPER 82-39892]</td>
</tr>
<tr>
<td>TUBBS, S.</td>
<td>P-3A Advanced Airplane Flight Test</td>
<td>[AIAA PAPER 82-2464]</td>
</tr>
<tr>
<td>TUBBS, S.</td>
<td>Evaluation of methods for characterizing surface topography of models for high Reynolds number wind-tunnels</td>
<td>[AIAA PAPER 82-0603]</td>
</tr>
<tr>
<td>TIBBACH, G.</td>
<td>Application of the OBBB dynamic stall model to a helicopter blade in forward flight</td>
<td>[AIAA PAPER 82-13293]</td>
</tr>
<tr>
<td>TIBBACH, G.</td>
<td>Application of the OBBB dynamic stall model to a helicopter blade in forward flight</td>
<td>[AIAA PAPER 82-13293]</td>
</tr>
<tr>
<td>TIBBACH, G.</td>
<td>Helicopter model studies for on-board electrostatic sensors</td>
<td>[AIAA PAPER 82-13293]</td>
</tr>
</tbody>
</table>
TPORPETTE, P.
Optimal shape design of turbine blades
[ASME PAPER 81-DST-128] p0162 A82-19342

TPSCHEBEKO, Ya. T.
The effect of temperature-time factors on the metal damage and endurance characteristics of gas-turbine-engine rotor blades
p0295 A82-28019

TPOR, D. L.
Low NOx heavy fuel combustor concept program
[NASA-CR-165367] p0413 A82-25635

TPOR, B. L.
Evaluation of a meteorological airborne pulse Doppler radar
[FP82-156860] p0562 A82-30820

TREI, R. C.
Wind tunnel and temperature database for flight planning
[SAE PAPER 81068] p0231 A82-26385

TSAI, R. S.
Node scatterer design for fan noise suppression in two-dimensional ducts
p0551 A82-43402

TSAR, N. P.
A color video display technique for flow field surveys
p0596 A82-32669

TSOGABAB, C. E.
The TADS/FWIS 'eyes' for the A-64 attack helicopter
p0045 A82-12329

TSUCHIYA, T.
Water injection into jet engine axial compressors
[AAIA PAPER 82-02196] p0117 A82-17836

Water injection into axial flow compressors. Part 3: Experimental results and discussion
[AD-A114830] p0537 A82-29326

Effect of water on axial flow compressors. Part 2: Computational program
[AD-A114831] p0537 A82-29327

TSAI, J.
Tangential sensitivity of EW receivers
p0012 A82-11020

TSAI, L. L.
Empirical stability analysis of a compressor model
[AD-A116780] p0610 A82-33396

TSUJIIWA, G. S.
Closed loop environmental control systems for fighter aircraft
[ASABE PAPER 81-CERAS-2] p0011 A82-10690

TSH, T. C.
The principles and methods for shaping the wing root regions of a wing-body combination at transonic and lower supersonic speeds
p0033 A82-11016

TSYFARZEE, C. L.
A method for locating aircraft wing damage by nonlinear vibration analysis
p109 A82-17116

TUCKER, J. R.
Exhaust emissions reduction for intermittent combustion aircraft engines
[NASA-CR-167914] p0610 A82-33392

TUCKER, R. M.
Advanced medium scale real-time system
p0290 A82-27187

TUGARAKOV, R. T.
Calculation of the unsteady loads on the surface of a moving wedge with an incident shock wave
p0128 A82-16590

TULAPURKAR, R. G.
Downwash behind a wing with spanwise blowing
p0382 A82-35314

TULLOCK, E. L.
The use of metal finishing in aircraft fuel systems
p0088 A82-12077

TURAKOV, R. P.
Requirements on modern mathematical models of gas turbine engines. I
p0282 A82-26486

TUNG, C.
Experimental and analytical studies of a model helicopter rotor in hover
[NASA-TM-81232] p0085 A82-12042

Finite difference modeling of rotor flows
including wake effects
[NASA-TM-84280] p0604 A82-33345

TUGOF, R. C.

PERSONAL AUTHOR INDEX

TOPOLNY, A. M.
The technological aspects of titanium application in the TU-144 aircraft structure
p0492 A82-39718

TOSAVU, S.
The velocity potential for the harmonically oscillating, rectangular wing with semi-infinite span in nonlinear theory
p0154 A82-19198

The rectangular wing with semi-infinite span in nonlinear theory
p0491 A82-39359

TSCHURKHANOIV, G. L.
Instability effects on pylon and engine loading in an aircraft with high-aspect-ratio wings
p0388 A82-34163

TREHARD, J.
Steady and unsteady nonlinear hybrid vortex method for lifting surfaces at large angles of attack
[AAIA PAPER 82-0351] p0185 A82-22094

TREZ, P.
Advanced technologies applied to reduce the operating costs of small commuter transport aircraft
p0509 A82-40015

TREZ, R.
Experimental investigations of the separated flow around a rectangular wing
[DFVLR-FB-81-12] p0025 A82-10017

TREZ, R. M.
Simulation of shock excitation due to hazardous wind shear
[AAIA PAPER 82-0215] p0117 A82-17004

TREZ, R. M.
Simulation of the fluctuating field of a forced jet
p0615 A82-34191

TREZ, N.
Poron annihilation
p0322 A82-21600

TREZ, C. E.
Wing/control surface flutter analysis using experimentally corrected aerodynamic surveys
p0283 A82-26569

TREZ, T. M.
Air bag impact attenuation system for the AFB-34B remote piloted vehicle
[AAIA PAPER 81-1917] p0006 A82-10403

TREZ, J. A.
Experimental investigation of turbine endwall heat transfer. Volume 1: Description of experimental hardware and test conditions
[AD-A110332] p0317 A82-21199

Experimental investigation of turbine endwall heat transfer. Volume 2: Linear and annular cascade summary data sets
[AD-A110333] p0317 A82-21200

Experimental investigation of turbine endwall heat transfer. Volume 3: Data base system
[AD-A110334] p0317 A82-21201

TREZ, J. A.
Categorization of atmospheric turbulence in terms of aircraft response for use in turbulence reports and forecasts
[AD-A109585] p0306 A82-20190

TREZ, R. B.
Applications of a multiplexed GPS user set
p0380 A82-33050

TREZ, R. G.
Powder metallurgical innovations for improved hot section alloys in aero-engine applications
[PB-90072] p0357 A82-22350

TREZ, R. M.
Assessment of stereographies for fire control and navigation in fighter aircraft
[AD-A115414] p0558 A82-30306

TREZ, R. C.
Composite materials
p0325 A82-28590

TREZ, C. E.
Comparison of two parallel/series flow turbofan propulsion concepts for supersonic V/STOL
[AAIA PAPER 81-2637] p0156 A82-19214

TREZ, J. B.
The evolution of display formats for advanced fighters using multimode color CRT displays
p0505 A82-40088

TREZ, B. E.
Laminar flow control, 1976 - 1982: A selected

Towy, R. A.

TOTOY, A. E.

TTDD, R. G.

TIBBB, B.

OBBAB, B.

TOBB, B.

Credit: V. A.


Ubbings, D. J.

A planning system for P-16 air-to-surface missions. p0471 882-27297

Uekhart, R.

Limiting payload deceleration during ground impact. [AIAA PAPER 81-1040] p0006 882-10404

Uebel, H.

Survey of sting interference effects for cone, missile, and aircraft configurations as determined by dynamic and static measurements. [AIAA PAPER 82-1366] p0497 882-00395

Underwood, R. L.

Aerodynamic design and the overall stage performance of an air-cooled axial-flow turbine. p0057 882-13109

Ugh, B.

Airborne lidar measurements of smoke plume distribution, vertical transmission, and particle size p0181 882-21386

V.

Vaie, J. T.

Aerodynamic aspects of a high bypass ratio engine installation on a fuselage afterbody. p0096 882-13093

Valstra, H.

On the vortex flow over delta and double-delta wings. [AIAA PAPER 82-0949] p0037 882-37466

Vad, N.

A grid interfacing zonal algorithm for three-dimensional transonic flows about aircraft configurations. [AIAA PAPER 82-1017] p0437 882-37477

Vahl, N. K.

Experimental determination of flow-interference effects of wing-mounted, two-dimensional, full-capture propulsion nacelles in close proximity to a vehicle body at a Mach number of 6. [NASA-TN-83287] p0405 882-25217

Vandie, F. W.

New concepts in multifunctional corrosion for aircraft and other systems p0212 882-17362

Valkitis, K.


Validation, P. N.

Evaluation of an asymptotic method for helicopter rotor airloads p0498 882-60509

Helicopter rotor loads using a matched asymptotic expansion technique. [NASA-CR-165742] p0312 882-21156

Vail, L.

Wing-tip jet aerodynamic performance. p0514 882-60587

Valdivia, F.

Rounded table discussion on the transfer of results from the project "lids to navigation and control..."
of air traffic

VALLEZIA, R.

SST-3 overview p0224 882-26044

VALLENNE, E.

Military requirements: Too little or too much p0247 882-18138

VALLEZIA, R.


VALLEZIA, E.

Development of counter-rotating intershaft support bearing technology for aircraft gas turbine engines [AIAA PAPER 82-1058] p0437 882-37679

VALLEZIA, R. L.

Impact study of synthetic and alternative fuel usage in army aircraft propulsion systems [AD-A110104] p0398 882-24355

VALLEZIA, E.

An alternate test procedure to qualify future fuels for navy aircraft [AIAA PAPER 82-1233] p0434 882-36175

VALLEZIA, J. R.

Development of the automated APFPL engine recalculating test for lubricant evaluation [AD-A106128] p0192 882-16093

VALLEZIA, J.

Assessment of burning characteristics of aircraft interior materials [NASA CR-166390] p0599 882-32899

VALLEZIA, C. P.

The design integration of wingtip devices for light general aviation aircraft p0508 882-40933

VALLEZIA, J. T.

A system for the numerical simulation of sub- and transonic viscous attached flows around wing-body configurations [AIAA PAPER 82-0935] p0373 882-31922

VALLEZIA, J. R.

A system for the numerical simulation of sub- and transonic viscous attached flows around wing-body configurations [AIAA PAPER 82-0935] p0373 882-31922

VALLEZIA, A. L.

Annual review of fluid mechanics. Volume 14 p0234 882-26416

VALLEZIA, E.

Comparison of low-speed handling qualities in ground-based and in-flight simulator tests [AIAA PAP ERS 81-2470] p0059 882-13936

VALLEZIA, N. L.

Gas turbine airflow control for optimising heat recovery [ASNE PAPER 82-GT-63] p0423 882-35329

VALLEZIA, E.

Experimental study of the flowfield of an airfoil with deflected spoiler [AIAA PAPER 82-0126] p0266 882-27006

VALLEZIA, C. P.

Planning for noise impact around airports p0561 882-45807

VALLEZIA, L. G.

Flight test concept evaluation [AIAA PAPER 81-2375] p0059 882-13944

VALLEZIA, L. J.

The investigation of aircraft accidents and incidents - Some recent national and international developments p0329 882-29275

VALLEZIA, E.

Aerodynamics of a high-bypass ratio engine installation on a fuselage afterbody p0506 882-40933

VARLEZIA, E.


VARLEZIA, E.


VARLEZIA, E.

State of the art and recent perspectives on the study of the loss of control and spin p0307 882-22197

VARLEZIA, E.

Variable speed constant frequency VSC/ electrical system cuts cost of ownership p0016 882-11719

VARLEZIA, E.

Cost of ownership advantages with a shared oil system p0230 882-24378

VARLEZIA, E.

Orienting description of air traffic control in the Netherlands [WTV-LR-285] p0087 882-12063

VARLEZIA, E.


VARLEZIA, E.

Engine component retirement for cause p0345 882-22177

VARLEZIA, E.

Linear alpha-ray altimeter p0218 882-23225

VARLEZIA, E.

Hypersonic interactions with surface mass transfer. I - Steady flow over a slender wedge wing [AIAA PAPER 82-0979] p0374 882-31944

VARLEZIA, E.

Analytical and experimental characterization of the JHA-15/14 cartridge-actuated initiator for use in aircrew escape system performance evaluation p0080 882-14905

VARLEZIA, E.

Data processing at the Global Positioning System master control station [AD-A110553] p0450 882-26270

B-158
VERBAAG, D. G.
On the vortex flow over delta and double-delta wings
[AIAA PAPER 82-0949] p0437 A82-37466

VERBOOI, A.
The equivalent simple body /BSB/ method for transonic wing analysis
[AIAA PAPER 82-0926] p0374 A82-31923

VERBOGT, E.
Extension of FLO codes to transonic flow prediction for fighter configurations
p0431 A82-35564

VETSCH, J. A.
Finite element approach to the calculation of unsteady aerodynamic influence coefficients in dynamic aerelastic analysis
p0581 A82-45949

VETSCHER, H. F.
Acoustic control of dilution-air mixing in a gas turbine combustor
[AESA PAPER 82-09-35] p0421 A82-35296

VINTZER, E. J.
Design and maintenance against corrosion of aircraft structures
p0211 A82-17356

VINTZER, E. J.
Design and maintenance against corrosion of aircraft structures
p0211 A82-17356

VITTL, M.
Pollution of the soil by aviation gasoline
[FER-1979-45] p0147 H82-15596

VOLKART, B. H.
[AIASA-82-644A] p0448 A82-26236

VOS, J. E.
Problems with the use of percentages in the analysis of ANG data
p0556 A82-44929

VODON, G. R.
Navigational aids on board the Concorde
p0255 A82-24066

VODEB, J. A.
Characterization of a Paris-New York flight on board the Concorde
p0543 A82-41700

VOOD, G. R.
Community rotorcraft air transportation benefits and opportunities
[NASR-166266] p0147 H82-16008

VON DER, C. J.
Air traffic control problems and solutions
p0211 A82-17283

VORNE, C. E.
Investigation of acoustic interactions in jet thrust augmenting ejection
[AD-A100833] p0101 A82-13035

WANTERS, J. L.
Thrust augmenting ejection
p0362 A82-23171

WHITING, C. A.
The technological aspects of titanium applications in the TU-144 aircraft structure
p0492 A82-39718

WHITING, L.
Finite difference computation of the conical flow field over a delta wing
[FER-140] p0199 A82-17135

WILSON, C. R.
An experimental analysis of the shape of a rotor wake
p0265 A82-18122

WILLY, J.
Test plan for SSB
[AD-A109503] p0307 A82-20392

WILSON, K. F.
Optimization of requirements on the pitting-prevention properties of turbojet-engine oils
p0008 A82-15723

Determination of antioxidant content in aviation oils using thin-layer chromatography
p0546 A82-28924
VOGEL, H.
The DAS-based Azimuth System /DAS/
p0123 182-1846

VOGEL, S.
A comprehensive flight test flyover noise program
p0178 182-20785

VOGEL, S.
Estimation methods for the determination of
dynamic responses of elastic aircraft
p0144 182-15037

VOLKER, J.
A method of characteristics solution for a finite
oscillating supersonic cascade with thickness
effects
p0144 182-15060

VOLKERS, L.
Application of a new hybrid material /ABALL/ in
aircraft structures
p0513 182-40975

VOLZI, A.
The low temperature properties of aviation fuels
[ADAA 82-06-68]
p0422 182-35306

VOIT, V.
Improvement of the first-ply-failure strength in
laminates by using softening strips
p0104 182-16174

VOLOG, L.
Control of the operations of a flight complex
p0177 182-4521

VOLIN, M.
Computer aided investigation of turbomachine
aerodynamics and aerelasticity
p0143 182-15053

VOLGOLO, T.
Safety of helicopters in flight
p0577 182-14946

The operation of aircraft and helicopters in
difficult meteorological and environmental
conditions
p0491 182-39295

VOLKHOV, V.
Assembly of aircraft instruments
p0434 182-36950

VOLPE, L.
Effects of lighting and nuclear electromagnetic
pulse on an advanced composites aircraft
p0288 182-21714

VON ALTEN, G.
Numerical calculation of the flow in compressor
and turbine cascades
p0578 182-45222

VON ENZER, M.
Methodology in flight tests
p0551 182-43400

VON SCHILLERBELL, R.
Operational air traffic in the Federal Republic of
Germany
p0220 182-23318

VON KOREN, A.
Data communications within the Air Navigation
Services system
p0125 182-18272

VON REDDA, A.
Exit mounted visual aids
p0251 182-18167

VON SCHELLENBURG, H.
Controls and displays for all-weather operation of
helicopters
[ABH-UD-319-01-0]
p0354 182-22260

VONSTETT, H.
Advanced aerodynamic wing design for commercial
transports - Review of a technology program in
the Netherlands
p0514 182-4585

Aerodynamic aspects of a high bypass ratio engine
installation on a fuselage afterbody
p0096 182-13093

VONSTET, H.
Speech Command Auditory Display System (SCADS)
[AB-A117466]
p0609 182-33387

VONSTET, H.
Evaluation of methods for characterizing surface
topography of models for high Reynolds number
wind-tunnels
[ADAA 82-06031]
p0238 182-24675

VONSTET, H.
Aerodynamic characteristics of wave riders at
subsonic flight speeds
p0165 182-19810

B-160
PERSONAL AUTHOR INDEX

VÖGE, C.
Official recognition and the significance of simulators for safe flight operations
[DG18 PAPER 81-094] p0159 A82-19271

VÖGELE, R. F.
Composite aircraft structures
p0287 A82-27127

VÖGELE, R. S.
Periodic boundary value problem for the equations of the harmonic oscillation of a rotor blade about the axis of a flapping hinge
p0387 A82-34127

VÖLLE, L.
Helicopter air inlets
p0208 B82-17217

Aerospacial survey of wind tunnel testing of small and large scale rotors
[81-158-82-210-107] p0350 B82-22225

VÖLLEKOV, B.
Design of a catadioptric VCGS helmet-mounted display
[40-109031] p0305 B82-20181

VÖSTRUP, K.
Aviation gear drives and reducers: Handbook
p0341 A82-30675

VÖSTAVEL, E.
Proposed multipurpose flying radio-physical laboratory using an I-11 aircraft
p0550 A82-43278

W

W TAYLOR, L., Jr.
Applications of parameter estimation in the study of spinning airplanes
[81-IAIA PAPER 82-1309] p0487 A82-35090

WACHTER, J.
Investigation of vibration of shrouded turbine blades
[213-AR-81-DJR-129] p0162 A82-19343

Measurement of the influence of flow distortions on the blade vibration amplitude in an air turbine
[81-IAIA PAPER 82-135] p0162 A82-19348

WADDOES, R. B.
Statistical analysis methods for characterizing composite materials
p0290 A82-27162

Integration of avionics and advanced control technology
p0347 B82-22194

WAGG, N. C.
A binary matrix technique for aircraft collision threat recognition and avoidance
[81-IAIA PAPER 82-1084] p0116 A82-17828

An MLS with computer aided landing approach
[81-IAIA PAPER 82-1352] p0489 A82-39122

WAGGNER, R.
Performance calibration results for a Compact Multisensor Aircraft Propulsion Simulator
[81-IAIA PAPER 82-2540] p0110 A82-17866

An improved propulsion system simulation technique for scaled wind tunnel model testing of advanced fighters
p0517 A82-61019

WAGGNER, R.
Transonic three-dimension viscous-inviscid interaction for wing-body configuration analysis
[81-IAIA PAPER 82-0163] p0116 A82-17816

Estimation of simulation errors in the European Transonic Wind Tunnel /ETW/
p0510 A82-60950

WAGGNER, R. B.
Jet generation turboprop gearboxes
[81-AR-82-02-236] p0428 A82-35418

WAGGNER, R. C.
Low maintenance hydraulic accumulator
[AD-A103947] p0227 A82-10034

WAGGNER, R. B.
Research on turbine rotor-stator aerodynamic interaction and rotor negative incidence stall
[AD-A110341] p0318 A82-21203

WAGGNER, R. P.
A propulsion view of the all-electric airplane
p0261 B82-19136

WAGGNER, R. A.
Spanwise distribution of vortex drag and leading-edge suction in subsonic flow
p0516 A82-61005

WAGNER, W. J.
Ultrasonic method for flow field measurement in wind tunnel tests
p0166 A82-20050

WAL, G. C.
Transonic perturbation analysis of wing-fuselage-nacelle-pylon configurations with powered jet exhausts
[81-1AIA PAPER 82-255] p0109 A82-22077

Transonic perturbation analysis of wing-fuselage-nacelle-pylon configurations with powered jet exhausts
[75-1AIAA-C-165852] p0262 B82-19167

WALDHOER, E. M.
Aircraft for secondary long range emergency ambulance flight
p0154 A82-19021

WALDHOER, J.
SFF of high strength aluminum structures
p0328 B82-20897

WALDON, B.
A generalized escape system simulation computer program: A user's manual
[AD-A106152] p0187 B82-16055

WALKER, C. J.
A concept for a fuel efficient flight planning aid for general aviation
[81-1AIAA-C-3533] p0266 B82-19217

WALKER, L. S.
The pressure signature method for blockage corrections, and its applications to the industrial wind tunnel
[81-1B] p0267 B82-19231

WALKER, L. E.
Component research for future propulsion systems
p0209 B82-17228

WALKER, L. J.
Enhanced piloting control through cockpit facilities and I.C.T.

WALKER, L. D.
Propeller flow visualization techniques
p0597 B82-32672

WALKER, G. F.
A sonic automatic map reader suitable for use in helicopters
p0441 A82-37775

WALKER, L. H.
An axial wing
[81-1AIAA-C-9007-2] p0451 B82-26277

Design study report for General Aviation Toren-C receiver
[81-1AIAA-C-921] p0087 B82-12062

WALKER, L. C.
Comparing the relationships between noise level and annoyance in different surveys - A railway noise vs. aircraft and road traffic comparison
p0329 A82-29165

WALKER, L. A.
Research and development program for non-linear structural modeling with advanced time-temperature dependent constitutive relationships
[81-1AIAA-C-3533] p0190 B82-16080

WALKER, L. R.
Windshield system structural enhancement
p0227 A82-26312

WALKER, R. E.
A study of flight control requirements for advanced, winged, earth-to-orbit vehicles with far-aft center-of-gravity locations
[81-1AIAA-C-3491] p0267 B82-19226

WALKER, L. R.
Support of the RHE-65A - The impact of advanced technology of VTOL systems upon existing product support
p0501 A82-40541

WALLACE, L. M.
Advanced噪音 integration for air combat fighter application
[81-1AIAA PAPER 82-1135] p0439 A82-37694

WALLACE, L. A.
A new approach to the problem of stresses corrosion cracking in 7075-T6 aluminum
p0222 A82-23772

WALLenberg, R.
Inverse SAR and its application to aircraft classification

B-161
implementation of a VTOL control system during hover [AIAA 82-1611] p0485 A82-38990
An analysis of a nonlinear instability in the implementation of a VTOL control system [NASA-TM-84220] p0356 B82-22281
Results of NASA/FAA ground and flight simulation experiments concerning helicopter SPH airworthiness criteria [AIAA 82-14771] p0366 B82-23219
WEBER, J. E.
Airborne Electronic Terrain Map System [AIAA 82-14771] p0371 A82-14771
Corros and antenna effects on the HH-53 minerseeping helicopter and Baydalist navigation set [AIAA 82-27946] p0295 A82-27946
WEBER, G.
Midair and near midair collisions on two- and three-dimensional curvilinear flight paths [NASA-TM-685] p0253 B82-16200
A theoretical study of the impact of aircraft wake vortices on roofs in the final approach area of Dusseldorf airport [DFVLR-EITG-82-01] p0371 B82-23560
WEBER, R. M.
Consequences of American airline deregulation - Legislative theory in a concrete example [AIAA 82-19947] p0165 A82-19947
WEBER, R. J.
NASA research activities in aeropropulsion [NASA-TM-82788] p0150 B82-16004
WEBER, T.
The effects of flexibility on the steady-state performance of small ribbon parachute models [AIAA PAPER 81-1923] p0006 A82-10408
WEBER, E. H.
Radiation aerodynamic heating effects on boresight error [AIAA 82-26465] p0281 A82-26465
WEDKIND, G.
Tail versus canard configuration - An aerodynamic comparison with regard to the suitability for future tactical combat aircraft [AIAA 82-60901] p0506 A82-60901
WEBEKLAUER, R.
Measurements of velocity distributions in the leading edge vortex of a delta wing by the laser-Doppler procedure [AIAA 82-38786] p0483 A82-38786
WEBER, R. A.
Component research for future propulsion systems [AIAA 82-17224] p0209 B82-17224
WEBER, R. E.
Coatings in the super gas turbine [AIAA 82-2104] p0318 B82-2104
WEBER, R. L.
WEBER, J.
Fracture mechanics based modelling of the corrosion fatigue process [AIAA 82-17344] p0210 B82-17344
WEBRE, R. L.
Avionics systems simulation for the Northrop P-3/6SL aircraft [AIAA 82-2276] p0069 A82-13468
WERHANEY, J. L.
Annual review of fluid mechanics. Volume 10 [AIAA 82-24416] p0234 A82-24416
WERNER, G.
WEI-HAO, G.
A new method of cooling turbine vanes [AIAA 82-11027] p0034 B82-11027
WELDE, L.
An experimental investigation of the rotating stall, surge and wake behind the rotor for a single stage axial compressor [AIAA 82-11008] p0033 B82-11008
WIX, V. L.
Beyond the horizon coverage for air navigation/traffic control [AIAA 82-24647] p0235 A82-24647
WEILLARD, E.
Design requirements for modern rescue helicopters [AIAA 82-19020] p0153 A82-19020
The armed helicopter in air to air missions [NAA-DOD-J17-81-0] p0201 B82-17158
WEISER, E.
Advanced compressor components. Phase 1: 1978 to 1979 [AIAA PAPER-F-8-B-01-025] p0144 B82-15073
WEISS, F.
Functional versus communication structures in modern atomic systems [AIAA 82-17092] p0196 B82-17092
WEISGARTEN, E. C.
Comparison of low-speed handling qualities in ground-based and in-flight simulator tests [AIAA PAPER 81-2478] p0059 B82-13936
In-flight investigation of large airplane flying qualities for approach and landing [AIAA PAPER 82-1256] p0466 B82-39083
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 B82-15074
WEISER, E. A.
New developments in the field of ramjet missile propulsion [NASA-FP-516-81-0] p0409 B82-25260
WEISS, P.
WEISS, D. A.
Aircraft fuel saving through JT9D engine refurbishment [AIAA PAPER 811051] p0232 A82-24395
WEISS, P.
Gust load alleviation on Airbus A 300 [AIAA PAPER-82-40881] p0504 A82-40881
Active gust and maneuver load control concepts with the example of the Airbus A300. Part 2: In-flight investigation of the effects of a regular in the time zone of wind gust load decrease and examination of its effectiveness in stochastic gusts [NASA-FP-172-G/3R-PF-1] p0267 B82-19228
WEISS, J.
Composite repair system with long term latency [AIAA-161472] p0594 B82-32424
WEISS, A.
A solution to the static geometry problem for JT9D relative navigation [AIAA-161472] p0594 B82-12630
WEISSBRUGGER, J. M.
Airport related residential acaconical/insulation demonstration project: Report 1720 [AIAA-161472] p0268 B82-19399
WEISBRAND, T.
On the track of practical forward-swept wings [NASA-PH-1007] p0154 B82-19071
Flutter of forward swept wings, analyses and tests [AIAA 82-0466] p0337 A82-3014
Dynamics of flexible forward swept wing aircraft [NASA-Paper 82-1325] p0488 A82-3910,
Interactive aircraft flight control and aeroelastic stabilization [NASA-CR-165036] p0100 B82-13154
WEISBRAUN, T.
Two-frequency /Delta k/ microwave scatterometer demonstration project: Beport 1720 [AIAA 82-16144] p0100 B82-13154
WEISSBERGER, T.
Ultrasonic method for flow field measurement in wind tunnel tests [AIAA-161472] p0584 B82-4749.
WEITZ, P. C.
Commercial aircraft airframe fuel systems surveys [AD-A112441] p0166 B82-2005
Commercial aircraft airframe fuel systems survey and analysis [DOT/FAA/CT-82/80] p0589 B82-3235
B-165

PERSONAL AUTHOR INDEX

WEFFER, B.
Investigation of the application of a cryogenic blending process to produce antimisting diesel fuels [AIAA-110917] p0011 082-25399

WEILCH, B. E.
Determination of vertical profiles of aerosol size spectra from aircraft radiative flux measurements. II - The effect of particle nonsphericity p0020 082-12149

WELLS, J. E.
Aerodynamic development of laminar flow control on swept wings using distributed suction through porous surfaces p0050 082-00994

WELL, J. E.
Prop-fan integration at cruise speeds p0097 082-13997

WELLS, R. E.
Comparison between the exact and an approximate feedback solution for medium range interception problems p0094 082-13106

WELLS, R. R.
Correlation of measured and predicted inplane stability characteristics for an advanced bearingless rotor [NASA-CR-166280] p0201 082-17154

WELLS, J. V.
Value of survivability and recoverability of flight data recorders p0402 082-25188

WELLX, L.
aved and weapon system simulation with reference to the increased $HBk$ maritime crew trainer p0711 082-20531

WELLX, R. J.
Wind tunnel tests on airfoils in tandem cascade p0012 082-10987

WELLX, R. L.
Use of optimization to predict the effect of selected parameters on csmeter aircraft performance [NASA-CR-169039] p0201 082-17151

WELLX, R. D.
Use of optimization to predict the effect of selected parameters on csmeter aircraft performance [NASA-CR-169027] p0451 082-26279

WELLS, J. D.
Value of survivability and recoverability of flight data recorders p0402 082-25188

WELLS, R. R.
Parameter estimation applied to general aviation aircraft - A case study [AIAA PAPER 82-1211] p0487 082-39094

WELLX, V. S.
Analysis of flight data in the frequency domain p0543 082-41796

WELBER, V. A.
The TADS/PVS 'eyes' for the AH-64 attack helicopter p0045 082-12329

WELX, B. L.
Pressure measurements on a wing oscillating in supercritical flow [NASA-TM-29074] p0313 082-21163

WELCH, R. C.
The effect of induced sound on the flow around a rectangular body in a wind tunnel p0276 082-26194

WELX, J.
JTIDS distributed TMA /PDM/ terminal development results with emphasis on relative navigation performance p0123 082-18152

WELLS, B.
Wing design for light transport aircraft with improved fuel economy p0065 082-14416

WELLS, R. L.
Processes and procedural approaches in the aerodynamic design of the Alpha Jet aircraft p0550 082-63328

WELX, L.
Experimental flight test programs for improving combat aircraft, maneuverability by maneuver flaps and pylons' split flaps p0347 082-22192

WEB-LIU, L.
Initial experimental research into the response of turbojet engine compressors to distortion of intake pressure p0032 082-11006

WEB, G.
Numerical computation of unsteady subsonic aerodynamic forces on wing-body-tail exposed to travelling gust p0185 082-22112

WEHMT, G.
Report covering experience obtained at the German Luftwaffe with respect to training involving the use of flight simulators p0160 082-19274

WEST, D. A.
FOX formation in flat, laminar, opposed jet methane diffusion flames p0326 082-20660

WESING, G. J.

WESTZ, E. M., J.
The use of small strakes to reduce interference drag of a low wing, twin engine airplane p0487 082-22900

WEST, R. L.
Computational and experimental studies of light twin aerodynamic interference p0500 082-40930

WEESTEL, R.
Carbon fiber reinforced composite structures protected with metal surfaces against lightning strike damage [AFOSR-UD-340-82-04] p0527 082-28364

WESSX, J. M.
Analytical investigation of nonrecoverable stall [NASA-PB-82792] p0317 082-21195

WEIGHT, C.
Rangefinder system for slant range visibility p0309 082-20746

WESSELL, R. G.
Simulation of modern radar installations in full-motion flight and tactics simulators [DGLR PAPER 81-103] p0160 082-19272

WESLON, R.
Scenarios for evolution of air traffic control [AD-1115266] p0467 082-27770

WESLER, J. E.
Meteorological impact on aviation fuel efficiency p0310 082-21190

WESSX, R.
Sensor footprints and hoing range of terminal guidance missile [BMW-FMBT-81-5] p0146 082-15111

WESSX, R.
Scenarios for evolution of air traffic control [AD-1112456] p0467 082-27770

WESSX, R.
Distributed intelligence for air fleet control [AD-1108611] p0253 082-18195

WEST, R. S.
The role of finite element analysis in the design of birdstrike resistant transparents p0227 082-23414

THE effects of bird orientation on load profile and damage level p0227 082-23416

WESTERMANN, R. P.
Parallel processing applied to digital flight control systems - Some perspectives p0073 082-14794

WESTPOLDER, J. C.
Effects of surface pressures of trapezoidal holes in a T-38 stabilator p0113 082-17602

WEST, J. L.
Thrust management - Current achievements and future developments p0170 082-20520

WEST, R. F.
Approximate boundary condition procedure for the two-dimensional numerical solution of vortex wakes [AIAA PAPER 82-0951] p0437 082-37467

B-165
Westphal, G.

Flight simulators

Weston, R. W.

Combustion behavior of solid fuel ramsjets. Volume 1: Correlation of reacting and non-reacting flow characteristics

[AD-A106061] p0136 A82-14316

Weinert, R. L.

The effect of visual information on manual approach and landing

[HLP-80-0019-0] p0087 A82-12064

Weir, J. L.

A modular automated approach to airfield weather systems

The Modular Automated Weather System (MAWS) concept

p0579 A82-65813

Weir, W. L.

Fixed pattern noise correction for staring arrays in guidance systems

p0490 A82-39190

Weipline, D. L.

Development of a laser velocimeter for a large transonic wind tunnel

p0598 A82-32688

Weinkle, B. F.

Current perspectives on emergency spin-recovery systems

p0549 A82-43264

Weinkle, R. L.

The marketing, organisation and financing of aeromedical evacuation by a motorcycling organisation

p0151 A82-19002

Weinkle, T. D.

Lear Fan - The plastic aeroplane arrives

p0126 A82-10348

ALF502 - Plugging the turbofan gap

p0180 A82-21243

Westback, B. F.

Optimal terrain-following feedback control for advanced cruise missiles

[AD-A10286] p0314 A82-21179

White, A. J.

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

Measurements of heat transfer coefficients on gas turbine components. II - Applications of the technique described in part 1 and comparisons with results from a conventional measuring technique and predictions

[ASME PAPER 82-GT-175] p0426 A8-35388

White, R. L.

Navy spin evaluation of the A-7 airframe configured with automatic maneuvering flaps

p0076 A82-14933

White, R. L.

Advanced crash survivable flight data recorder and Accident Information Retrieval System (AIRS)

[AD-A105510] p0132 A82-14072

White, R. R.

Analysis of transient data from aircraft gas turbine engines using AIDS

p0403 A82-25189

White, P.

Math modeling for helicopter simulation of low speed, low altitude and steeply descending flight

[NASA CR-166835] p0592 A82-32374

White, R. V.

An evaluation of helicopter autorotation assist concepts

p0500 A82-40528

White, R. V.

Software features applicable to inertial measurement unit self alignment

[AD-A108511] p0253 A82-18196

White, J. R.

The Shiryayev sequential probability ratio test for redundancy management

[AI AA 82-1623] p0486 A82-38998

White, M.

Composite main rotor tubular braided

p0009 A82-10547

White, L. L.

Design of a composite main rotor blade spar for fabrication by tubular braiding

p0279 A82-26389

Development of manufacturing technology for fabrication of a composite helicopter main rotor spar by tubular braiding

[AD-A109377] p0265 A82-19209

White, R. J. D.

Wind-tunnel evaluation of an aerodynamically conformable rotor

[AD-A114364] p0521 A82-28260

White, P.

VOR waveforms synthesis and calibration

p0106 A82-16553

Aircraft alerting systems standardization study. Volume 1: Candidate system validation and time-critical display evaluation

p0463 A82-27236

White, L. E.

Measured pavement response to transient aircraft loadings

p0101 A82-13442

White, L.

Spin-tunnel investigation of a 1/3-scale model of the NASA AD-1 oblique-wing research aircraft

[NASA-TR-03266] p0252 A82-18183

Whitefield, A. J.

Overview of flight and ground testing with emphasis on the wind tunnel

[AIAA PAPER 81-2074] p0500 A82-13280

Whitehurst, R. M., Jr.

Maximizing South Carolina's aviation resources: Identifying potentially profitable coastair airline routes, volume 2

p0532 A82-29277

Whitehouse, R.

V/STOL tilt rotor research aircraft. Volume 1: General information, revision C

[NASA CR-166347] p0395 A82-24194

Whitlock, B. E.

Air services, airport access and future technology

p0192 A82-16100

Whitson, J. R., Jr.

NASA research in supersonic propulsion - A decade of progress

[AIAA PAPER 82-1048] p0497 A82-40417

NASA research in supersonic propulsion - A decade of progress

[NASA-TR-28662] p0454 A82-26300

Whitson, R. M.

Application of a transonic potential flow code to the static aeroelastic analysis of three-dimensional wings

[AIAA 82-0689] p0339 A82-30156

Application of a transonic potential flow code to the static aeroelastic analysis of three-dimensional wings

[NASA-TR-03296] p0363 A82-23193

Time-marching transonic flutter solutions including angle-of-attack effects

p0363 A82-23196

Whitman, G. F.

Development of a backpack survival kit for ejection seats

[AD-A11353] p0464 A82-27242

Whitman, R. D.

Application of thrust vectoring for STOL

[AI AA PAPER 81-2616] p0175 A82-19205

Wind-tunnel investigation of the powered low-speed longitudinal aerodynamics of the Vectored-Engine-Over (VEO) wing fighter configuration

[NASA-TR-03263] p0349 A82-22207

Whittle, F.

Gas turbine air-oil-thermodynamics with special reference to aircraft propulsion

p0383 A82-33650

Whittle, R.

Numerical applications of the physical optics approach for the calculation of radar cross sections of convex perfect scatterers

[BAE-RMS-261] p0596 A82-32600

Whitton, L. D.

An integrated control panel utilizing a programmable variator-multiplexed dichroic
patrol applications

WILLIAMS, R. R., Diffusing by a finite strip p0173 882-20556

WILLIAMS, R. N., Sea King flight tests pitot-static probe and directional vane instrumentation [AD-1109427] p0308 882-20176

WILLIAMS, B. N., Room probe position error corrections for Sea King Mk 50 flight tests [AD-1109428] p0304 882-20177

WILLIAMS, R. N., Results from tests of three prototype general aviation seat [NASA-TM-84533] p0613 882-33733

WILLIAMS, R. N., SPF/DB titanium LPC porous panel concept p0302 882-20155

Laminar flow control SPF/DB feasibility demonstration [NASA-CR-165018] p0322 882-21532

WILLIAMS, R. C., Low speed testing of the inlets designed for a tansfan Y/STOL accele [AILA PAPER 81-2627] p0156 882-19210

WILLIAMS, R. J., Low speed testing of the inlets designed for a tandemfan Y/STOL accele [NASA-TM-82728] p003a 882-11042

WILLIAMS, R. N., X-wing and the Navy Y/STOL initiative p0385 882-33915

WILLIAMS, R. L., Airframe effects on top-mounted inlet systems for YSTOL fighter aircraft p0156 882-19212


WILLIAMS, R. M., Diffusion bonding in superplastic forming/diffusion bonding p0222 882-23754

WILLIS, R. M., Development and validation of preliminary analytical models for aircraft interior noise prediction p0044 882-38077


WILLIS, R. L., Programs for the transonic wind tunnel data processing installation. Part 9: Pressure measurements updated [AD-1106271] p0192 882-16095

WILLIS, R. L., Current pressure measuring system in the transonic wind tunnel [AD-1106272] p0192 882-16096

WILLIS, R. L., Design basis for a new transonic wind tunnel [AD-1112899] p0527 882-28311

WILLIS, J. P., Development of a preloaded hybrid advanced composite wing pivot fairing p0287 882-27131

WILLIS, R. J., Sanctuary radar p0150 882-18906

WILLIS, R. S., A methodology for planning a cost effective engine development [AILA PAPER 82-1140] p0352 882-35024

WILLIE, R. C., Effects of intake geometry on circular pitot intake performance at zero and low forward speeds p0093 882-13070

WILKIN, R. R., The low temperature properties of aviation fuels [AILA PAPER 82-07-88] p0422 882-35306

WILLIAMS, R. S., YS and YPWL noise duration coefficients for the 747 and T-38 aircraft [NASA-TM-83214] p0042 882-11860

WILLIAMS, R. M., Control optimization, stabilization and computer algorithms for aircraft applications [NASA-CR-169015] p0461 882-21609

WILLOWS, R. G., Aerodynamic interactions with turbulent jet exhaust plumes p0381 882-33325

Coaptation of high Reynolds number internal/external flows [NASA-TM-84049] p0305 882-11046

WILLS, K., Novel metal-ceramic-composite sealing coatings in aircraft engines p0240 882-24803


Mechanical and metallurgical considerations in extending the life of turbine blades p0394 882-33855


WILSON, J. S., A computerized system for the application of fracture tracking data to aircraft management for the C-5A military airlift transport [NASA-82-0760] p0336 882-30119


WILSON, R. C., Fuel-rich plume combustion [AD-1068136] p0258 882-18349


Terrain model animation [AD-107911] p0215 882-17087

WILSON, E. J., Flight test experience with high-alpha control system techniques on the F-14 airplane [AILA PAPER 81-2505] p0057 882-13906

WILSON, R. M., Analysis of selected TTO loading concepts for civil transportation mission [AILA PAPER 81-2655] p0157 882-19220

WILSON, R. C., Design analysis of high temperature transparent windshields for high performance aircraft [AILA PAPER 81-1803] p0011 882-10993

WILLIS, D. R., Development of Aray high-energy fuel diesel/turbine-powered surface equipment, phase 2 p0302 882-20154
PERSONAL AUTHOR INDEX

WINTER, J. R.
Ceramic component development for limited-life propulsion engines
[AIAA PAPER 82-1050] p0415 A82-34979

WINTER, J. C.
Aircraft R&D in Europe - A perspective view
[AIAA PAPER 82-1055] p0546 A82-82544
Aerospace research and development in Europe - Perspectives
p0552 A82-43588

WINTER, J. E.
Business jets to agricultural aircraft - An overview of general aviation
p0387 A82-34123

WINDLE, J.
Active beacon collision avoidance logic evaluation. Volume 2: Collision avoidance (ECAS) threat phase
[AD-1070805] p0200 B82-17148

WINDER, D. M.
Wind and temperature database for flight planning
[SAA PAPER 811006] p0231 A82-24685
Meteorological impact on aviation fuel efficiency
p0310 B82-21140

WING, E. G.
The protection of gas turbine blades - A platinum aluminide diffusion coating
p0063 A82-14364

WINGOY, R. C.
Analysis of flight test measurements in ground effect
p0178 A82-20763
Analysis of general aviation accidents using ATC radar records
[AIAA PAPER 82-1310] p0487 A82-39091

WILES, R. N.
Community rotorcraft air transportation benefits and opportunities
[ASAP-CASE-16266] p0147 B82-16008

WILEY, R. M.
An experimental study of separated flow on a finite wing
[AIAA PAPER 81-1862] p0167 B82-20293
A color video display technique for flow field surveys
p0596 B82-32669

WILLIAMS, R. R.
Characterization of the Airbus horizontal stabilizers of CRF production and structural analysis with the finite element method
[WER-0711-1141-0] p0255 B82-18213

WILEY, R. M.
Local precise position location - The VIEW-NAY system
p0235 A82-24648

WINE, C. H.
Study of the global positioning system for maritime concepts/applications: Study of the feasibility of replacing maritime navigation systems with NAVSTAR [NASA-CASE-169031] p0499 B82-26263

WINTERBOTTOM, L. A.
Development of a convoluted intake seal for model 686
[SAA A80-163] p0370 B82-23255

WINTERBOTTOM, C. A.
The design of a jet catcher
[BAB-TR-AB00-109] p0135 B82-14102

WISSE, R. A.
The pressure signature method for blockage corrections, and its applications to the industrial wind tunnel [B0-263] p0267 B82-19231

WISSE, C. L.
Fuel-efficient windshields for transport, commuter and business aircraft
p0226 B82-24304

WISSE, D. C.
Core compressor exit stage study, volume 6
[CSSA-CASE-165551] p0472 B82-27310

WISSE, D. L.
A terminal guidance simulator for evaluation of all-weather wave seekers
p0151 A82-18937

WITTE, D. J.
A terminal guidance simulator for evaluation of all-weather wave seekers
p0151 A82-18937

WITTEBORN, J.
Justification for, and design of, an economic programmable multiple flight simulator
p0434 A82-36969

WITTEBORN, B.
Prediction of off-design performance of turbo-shaft engines a simplified method
p0246 B82-18132

WITZIG, L. M.
Scaling effects on leakage loss in labyrinth seals
[ASAE PAPER 82-07-157] p0426 A82-35580

WITTING, L.
Analysis of aircraft dynamic behavior in a crash environment
[AIAA PAPER 82-0696] p0339 B82-30161
Transport aircraft crash dynamics
[NASA-CR-165551] p0394 B82-24186

WINTERFELD, M.
Parameter identification for structures with neighboring natural frequencies especially for the case of flight resonance tests
p0377 B82-23136

WITTMANN, H.
Spin behaviour of the Pilatus PC-7 Turbo Trainer
p0513 A82-40979

WILMANS, R. G.
Adaptive multifunction sensor concept for air-ground missions
p0471 B82-27299

WINDLEY, R.
Calculation of the cross section properties and the shear stresses of composite rotor blades
p0463 A82-34875
Calculation of the cross section properties and the shear stresses of composite rotor blades
[BHE-DD-334-81-0] p0410 B82-25334

WILDE, C. J.
Diffuser/ejector system for a very high vacuum environment
[NASA-CASE-81951-1] p0163 B82-33712

WOLI, S. M.
An experimental investigation of interfacial temperatures in blade-seal material rubbing of aircraft compressors
[AIAA PAPER 82-0890] p0373 B82-31891

WOLF, G. F.
Theoretical analysis of wake-induced parachute collapse
[AIAA PAPER 81-1922] p0061 B82-13963

WOLF, C. L.
Control software for two dimensional airfoil tests using a self-streamlining flexible walled transonic test section
[NASA-CR-165941] p0559 B82-30314

WOLF, K. A.
Experience with flight test trajectory guidance
[AIAA PAPER 81-2504] p0563 A82-14379

WOLF, F. R.
Durability evaluation of highly stressed wing box structure
p0290 B82-27163

WOLF, G.
Influence of strakes on coefficients of longitudinal stability
[BAB-TR-122/S/007/22] p0319 B82-21215

WOLF, B.
Investigation of vibration of shrouded turbine blades
[AIAA PAPER 81-05Y-129] p0152 B82-19343

WOLLGICHT, A.
Optimal terrain-following feedback control for advanced cruise missiles
[AD-110286] p0314 B82-21179

WOLL, R.
Aircraft design for fuel efficiency
p0512 A82-40973

WOLCO, L.
Life enhancement of Naval systems through advanced materials
[AD-1114722] p0550 B82-30404

WOLF, R. B.
Learning and costs in airframe production, part 1
[AD-112908] p0479 B82-28210

WONG, B. C.
Integrated structural analysis and design support for advanced launch vehicles
[AIAA PAPER 82-0675] p0330 A82-30144

WONG, L. T.
Digital detection and processing of laser beacon
application to guidance simulation

WOOLEY, P. T.
Tail configurations for highly maneuverable combat aircraft
p0348 A82-22201

WOOLEST, R. R.
Thrust modulation methods for a subsonic V/STOL aircraft
[AIAA PAPER 81-2631] p0156 A82-19213
Thrust modulation methods for a subsonic V/STOL aircraft
[AIAA-TR-82-7847] p0098 A82-13112

WORKSHEK, B.
Airworthiness and flight characteristics test of an OA-5BC configured to a Light Combat Helicopter (LCH)
[AD-A112501] p0452 A82-26286
HISS calibration, ice phobias and FAA R/D evaluations
[AD-A114435] p0524 A82-28289

WORRENFORD, D. M.
EMC clearance of modern military aircraft
p0229 A82-24359

WORSHALL, R. L.
Problems associated with the quality assurance of stretched acrylic sheet
p0228 A82-24319

WORSTELL, J. R.
Deposit formation in liquid fuels. II - The effect of selected compounds on the storage stability of Jet A turbine fuel
p0166 A82-22240
Deposit formation in liquid fuels. I - Effect of coal-derived Lewis bases on storage stability of Jet A turbine fuel
p0186 A82-22241

WORTH, R. J.
Aeromedical evacuation in New Zealand
p0153 A82-19011

WORTHEN, J.
Repair and regeneration of turbine blades, vanes and discs
p0346 A82-22185

WRAW, G. L.
An investigation of ring laser gyroscope random walk experiments
p0564 A82-47157

WRIGHT, D. E., Jr.
Bonding procedure for Teflon seals
p0547 A82-42792

WRIGHT, R. E.
Replacement of aboard naval aircraft
[AD-A115762] p0590 A82-33256

WRIGHT, G.
Technology overview for advanced aircraft armament system program
[AD-A107660] p0201 A82-17155

WRIGHT, K.
The multi mode matrix flat panel display: Technology and applications
p0251 A82-18169

WRIGHT, R. W.
The development of high strength light-weight windshields for the new generation of Boeing 757 and 767 airliners
p0228 A82-24323

WROBELSKI, J. A., Jr.
The lateral response of an airlship to turbulence
[AD-A115197] p0559 A82-30312

WU, C.
Calculation of the lift distribution and aerodynamic derivatives of quasi-static elastic aircraft
p0390 A82-34639

WU, C. M.
Unconventional internal cracks. II - Method of generating simple cracks
p0391 A82-34861
[NASA-CP-165538] p0136 A82-14447

WU, J. E.
Three-dimensional flow studies on a slotted transonic wind tunnel wall
[AIAA PAPER 82-0230] p0117 A82-17855
Wing-tip jets aerodynamic performance
p0514 A82-40987
Initial experimental research into the response of a turbojet engine compressors to distortion of intake pressure

Measured and calculated effects of angle of attack on a sharp cone at Mach 3

A preliminary experimental investigation of the response of a turbojet engine to inlet pressure distortion

An experimental investigation of leading-edge spanwise blowing

A one-shot autoclave manufacturing process for aircraft components

A role of simulation in the design process

Computer architecture study for VTX1S simulators

Overview of Honeywell electromagnetic actuation programs

Distributed airborne array concepts

Sea based support aircraft alternatives

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

Aerodynamic derivatives for a helicopter

Evaluation of inlet flow fields in the vicinity of generalized forebodies
The determination of the duration of an exposure to airborne noise

Economic considerations for real-time naval aircraft/avionics computer control systems

Experimental study on discharge and loss coefficients of combustor swirlers

An analogy method for crack initiation life prediction

Hysteresis of the normal force of a wing of complex planform under unsteady motion

Failure analysis of variable reluctance stepper motor

The future of helicopter flight control technology

Development of a preloaded hybrid advanced composite wing pivot fairing

Advanced general aviation engine/airframe project

Outline of a multiple-access communication network based on adaptive arrays

Initial experimental research into the response of turbine engine compressors to distortion of intake pressure

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

Advanced general aviation engine/airframe integration study

Outline of a multiple-access communication network based on adaptive arrays

A microwave landing system simulation

A theoretical analysis of the stream surface of revolution with supersonic inlet flow in a transonic axial compressor

Propulsion study for Small Transport Aircraft

A preliminary experimental investigation of the response of a turbojet engine to inlet pressure distortion

Measuring LF and AM antenna radiation patterns by means of a helicopter

Wind tunnel calculation of lift, moment coefficient in analogy method for crack initiation life prediction

Development of a backpack survival kit for aircraft turbine engines

Initial experimental research into the response of the rotating stall, surge and wake behind the cotor for a single stage axial compressor

Development of a spinning wave heat engine

Development of an analytical technique for the prediction of sound radiation from different practical jet engine inlets

Classical calculation of lift, moment coefficient in analogy method for crack initiation life prediction

Development of a preloaded hybrid advanced composite wing pivot fairing

An iterative finite element-integral technique for predicting sound radiation from turbofan inlets in steady flight

Development of a spinning wave heat engine

Short-term experimental research into the response of the rotating stall, surge and wake behind the rotor for a single stage axial compressor

Active control of aeroelastic divergence

A theoretical analysis of the stream surface of revolution with supersonic inlet flow in a transonic axial compressor

Initial experimental research into the response of the rotating stall, surge and wake behind the cotor for a single stage axial compressor

Loss of elevator control with supersonic inlet flow in a transonic axial compressor

A theoretical analysis of the stream surface of revolution with supersonic inlet flow in a transonic axial compressor

Development of a spinning wave heat engine

Theoretical investigations and experimental researches for higher subsonic two-dimensional compressor cascade

A theoretical analysis of the stream surface of revolution with supersonic inlet flow in a transonic axial compressor

Outline of a multiple-access communication network based on adaptive arrays

A microwave landing system simulation

Initial experimental research into the response of the rotating stall, surge and wake behind the cotor for a single stage axial compressor

A theoretical analysis of the stream surface of revolution with supersonic inlet flow in a transonic axial compressor

An experimental investigation of leading-edge spanwise blowing

Nonlinear prediction of supersonic aerodynamic loads on wings and bodies at high angles of attack

An experimental investigation of leading-edge spanwise blowing

A theoretical analysis of the stream surface of revolution with supersonic inlet flow in a transonic axial compressor

Initial experimental research into the response of the rotating stall, surge and wake behind the cotor for a single stage axial compressor

An experimental investigation of the rotating stall, surge and wake behind the cotor for a single stage axial compressor
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

Aircraft noise prediction program theoretical manual, part 1

Aircraft noise prediction program theoretical manual, part 2

Suppression of self-oscillations in open wind tunnels

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 BEIRAD to detect convective phenomena hazardous to terminal air navigation, part 1

It's too logical - It'll never work

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 transonic axial compressor

Status of the COSPAS-SARSAT 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 transonic flow
<table>
<thead>
<tr>
<th>CORPORATE SOURCE</th>
<th>TITLE</th>
<th>REPORT NUMBER</th>
<th>PAGE NUMBER</th>
<th>ACCESSION NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AAA CORP., COCKEYSVILLE, MD.</td>
<td>Minutes of physical configuration audit for the F-15 Electronic Warfare Training Device</td>
<td>[AGABD-AG-175] p0206 882-17199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABDEEMER UNIV. (SCOTLAND).</td>
<td>Application of numerical methods to the calculation of electrostatic fields in aircraft fuel tanks</td>
<td>[AD-A110321] p0320 B82-21222</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADVISORY GROUP FOR AEROSPACE RESEARCH AND DEVELOPMENT, EPRIA-SUB-SERIES (FRANCE).</td>
<td>Aircraft excrescence drag</td>
<td>[AGABD-AG-164] p0025 B82-10020</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Multi-variable analysis and design techniques</td>
<td>[AGABD-LS-117] p0029 B82-10048</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Air-breathing engine test facilities register</td>
<td>[AGABD-AG-269] p0030 B82-10063</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rotorcraft icing: Status and prospects</td>
<td>[AGABD-AR-166] p0036 882-11056</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Operational environment, meteorological conditions and weather forecasting</td>
<td>p0036 882-11057</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Technology base for icing instrumentation and mathematical modeling</td>
<td>p0036 882-11058</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Facilities for development and clearance</td>
<td>p0036 882-11059</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ice protection system technology</td>
<td>p0036 882-11060</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Proposed standard requirements and procedures for icing clearance</td>
<td>p0036 882-11061</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Theory and applications of optimal control in aerospace systems</td>
<td>[AGABD-AG-251] p0038 882-11073</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The impact of new guidance and control systems on military aircraft cockpit design</td>
<td>[AGABD-CP-312] p0091 882-13048</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aerodynamics of Power Plant Installation</td>
<td>[AGABD-AG-236] p0093 882-13065</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Practical aspects of instrumentation system installation, volume 13</td>
<td>[ASA-P-80607] p0099 B82-13160</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tactical Airborne Distributed Computing and Networking</td>
<td>[AGABD-CP-303] p0195 882-17086</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Design Manual for impact damage tolerant aircraft structure</td>
<td></td>
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<td><strong>C</strong></td>
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<tr>
<td>[ASABD-CP-303] p0195 B82-17086</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Description of projectile threats</td>
<td>p0202 882-17160</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Analysis methods for predicting structural response to projectile impact</td>
<td>p0202 882-17161</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Analysis methods for ballistic damage size and type</td>
<td>p0202 882-17162</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Damage from high explosive (HE) projectiles</td>
<td>p0202 882-17163</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Damage from engine debris projectiles</td>
<td>p0202 882-17164</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hydrodynamic ram damage</td>
<td>p0202 882-17165</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Effects of cyclic loading on projectile impact damage</td>
<td>p0202 882-17166</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stiffness degradation of impact damaged structure</td>
<td>p0202 882-17167</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Strength degradation of impact damaged structure</td>
<td>p0203 882-17168</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Analysis of multiple load path panels containing impact damage</td>
<td>p0203 882-17169</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Through flow calculations in axial turbomachines</td>
<td>p0204 882-17170</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Influence of correlations and computational methods on the prediction of overall efficiency</td>
<td>p0204 882-17171</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The two stage aero engine turbine</td>
<td>p0204 882-17172</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Survey on diffusion factors and profile losses</td>
<td>p0204 882-17173</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>End-wall boundary layer calculations methods</td>
<td>p0204 882-17174</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Correlation for secondary flows and clearance effects</td>
<td>p0204 882-17175</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Effects of Reynolds number and turbulence level on axial cascade performance</td>
<td>p0205 882-17176</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Survey on the effect of blade surface roughness on compressor performance</td>
<td>p0205 882-17177</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Part span damper loss prediction for transonic axial fan rotors</td>
<td>p0205 882-17178</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Deviation/turning angle correlations</td>
<td>p0205 882-17179</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Axial compressor stall and surge</td>
<td>p0205 882-17180</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Summary of answers to the questionnaire</td>
<td>p0205 882-17181</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Single stage transonic compressor and equivalent plane cascade</td>
<td>p0206 882-17182</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BBC/Sulzer. 4 stage transonic compressor</td>
<td>p0206 882-17183</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Results of calculations</td>
<td>p0206 882-17184</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The through flow calculations</td>
<td>p0206 882-17185</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Evaluation of profile loss predictions based on diffusion factors</td>
<td>p0206 882-17186</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Axial-flow turbomachine through flow calculation methods</td>
<td>p0206 882-17187</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Blade-to-blade computations and boundary layer corrections in axial compressors and turbines</td>
<td>p0206 882-17188</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Helicopter Propulsion Systems</td>
<td>[AGABD-AG-236] p0206 882-17203</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
C-2

CORPORATE SOURCE INDEX

[AIRBORNE RESEARCH LABS., MELBOURNE (AUSTRALIA)]

Flight trials of the Aircraft Fatigue Data Analysis System (AFDAS) No. 2 prototype
[AD-A1052657] p0087 882-12086
A vapour cycle cabin cooling system for the Sea King Mk-50 helicopter
[AD-A1052611] p0088 882-12091
Vibration test procedures for accessory angle drive gearboxes on ktr 90C engines
[AD-A1052629] p0088 882-12076
Resonance tests on a Piper PA-32R tailplane before and after damage
[AD-A1062737] p0189 882-16071
Ground calibration of a strain-gauged CT-4 aircraft (1979)
[AD-A1078077] p0189 882-16070

Programs for the transonic wind tunnel data processing installation. Part 9: Pressure
measurements updated
[AD-A1062711] p0192 882-16095

Current pressure measuring system in the transonic wind tunnel
[AD-A1062712] p0192 882-16096

A versatile data acquisition system for a low speed wind tunnel
[AD-A1062697] p0192 882-16097

Aeronautical Research Laboratories Structures Division

[AD-A1090468] p0262 882-19161

Disengagement of safety harness buckles - CT4
[AD-A1090469] p0263 882-19199

Sea King flight tests pilot-static probe and directional vane instrumentation
[AD-A109427] p0304 882-20176

Bose probe position error corrections for Sea King Mk 50 flight tests
[AD-A1094208] p0304 882-20177

The stability of portable bridges carried on slings beneath helicopters
[AD-AERO-KEPT-154] p0319 882-21213

A Strain gauge aircraft load instrumentation: An algorithm for attitude and navigation
computations
[AD-A1109279] p0351 882-22241

A numerical investigation of two-dimensional, subsonic, linear, wind tunnel interference
theory
[AD-AERO-NOTE-403] p0354 882-23197

A study of wind shear effects on aircraft operations and safety in Australia
[AD-ST5-KEPT-29] p0522 882-28265

Programs for the transonic wind tunnel data processing installation. Part 8: Programs for
processing data on the central site computer
[AD-A112900] p0527 882-28310

Design basis for a new transonic wind tunnel
[AD-A112099] p0527 882-28311

A discussion of the flying qualities requirements of a basic training aircraft
[AD-A116005] p0536 882-29318

Results of the engine performance monitoring trial in a Hercules aircraft, February - July 1977
[AD-HSCH-B-BEG-TECH-AERO-403] p0536 882-29322

Data reduction procedures for Sea King helicopter flight trials
[AD-A117049] p0538 882-32359

AERONAUTICAL SYSTEMS DIV., WRIGHT-PATTERSON AFB, OHIO.

Color CRT displays for the cockpit
[PO92] p0382 882-13051

A digital simulation program describing the motion of an aircraft undergoing engine
failure during its takeoff ground roll
[AD-A108420] p0255 882-16210

Generic Test Bed (GTB) aircraft
[AD-A110335] p0314 882-21176

Production Verification Testing (PVT) of guidance and control systems for high
reliability
[AD-A106270] p0365 882-23187

Impact of advanced avionics and munitions technology on ground attack weapons systems
in night and adverse weather conditions
[AD-A106270] p0470 882-27294
AER NAVIGATION SERVICES, INC., WESTERGREN (WEST GERMANY).
Aeronautical Information Data Subsystem (AIDS):
A ground-based component of air navigation services systems.
[AD-A011627] p0021 N82-17150

AEROSRACH FORG. CO., PHOENIX, AZ.
Pollution reduction technology program small jet aircraft engines, phase 3
[NASA-CR-163806] p0134 N82-14095
ERS fuel additive: Pollution reduction technology program small jet aircraft engines, phase 3
[NASA-CR-163807] p0134 N82-14096

AEROSRACH FORG. CO., TORRENCE, CALIF.
Electric ECS
[AD-A011626] p0572 N82-31694

AKADEMISCHE FLIEGERGRUPPE BRUDENBURG (WEST GERMANY).
Wind tunnel investigations of sailplane fuselages with different inlets and wing settings
[AD-A011627] p0364 N82-23200

AKADEMITIA HAYK SSR, NOVOOSIBIÓSK.
Calculation of quasi-stationary aerodynamic force acting on a cascade of oscillating airfoils in subsonic flow
[AD-A011628] p0142 N82-15051
Calculation of nonstationary force ratios on blades of a rotating wing in incompressible flow
[AD-A011629] p0144 N82-15061

AKRON UNIV., OHIO.
Engine dynamic analysis with general nonlinear finite element codes. II - Bearing element implementation, overall numerical characteristics and benchmarking.
[AD-A011630] p0930 N82-35462
Engine dynamic analysis with general nonlinear finite element codes. Part 2: Bearing element implementation overall numerical characteristics and benchmarking
[AD-A011631] p0609 N82-33390

ALABAMA UNIV., HUNTSVILLE.
Recent development in hygrothermoelastic analysis of composites
[AD-A011632] p0529 N82-28676

ALFA ROMEO S.P.A., NAPLES (ITALY).
Turbojet and turboshaft engine optimisation
[AD-A011633] p0362 N82-23174

AMERICAN AERIATICS, INC., FT. WORTH, TEX.
The outlook for advanced transport aircraft
[AD-A011634] p0181 N82-21374

APPLIED RESEARCH, INC.
Wide-angle, multitarget, infinity display system
[AD-A011635] p0571 N82-31336

AMERICAN INST. OF AERONAUTICS AND ASTRONAUTICS, NEW YORK.
Review of defense-related vertical and short takeoff and landing (V/STOL) aircraft programs
[AD-A011636] p0256 N82-16205

ANCOIL CO., FARMVILLE, ILL.
Evaluation of hypereckering catalysts for conversion of shale oil into high yields of jet fuels
[AD-A011637] p0476 N82-27523

ANALYSIS AND TECHNOLOGY, INC., NORTH STORERINGTON, CONN.
Utilization of AK/AEG'S side-looking airborne radar systems in search and rescue
[AD-A011638] p0561 N82-30437
Preliminary assessment of US Coast Guard Short Range Recovery (SSR) Forward Looking Infrared (FLIR) system small target detection performance
[AD-A011639] p0615 N82-38230

ANALITICAL MECHANICS ASSOCIATES, INC., HAMPTON, VA.
An influence coefficient method for the application of the modal technique to wing flutter suppression of the DAST AH-1 Vang
[AD-A011640] p0530 N82-11070

AIR FORCE ENGINEER, NEW YORK.
Terminal area automatic navigation, guidance, and control research using the Microwave Landing System (MLS). Part 2: Transition problems for aircraft
[AD-A011641] p0188 N82-16060

AIR FORCE ENGINEER, NEW YORK.
Terminal area automatic navigation, guidance, and control research using the Microwave Landing System (MLS). Part 3: A comparison of waypoint guidance algorithms for B747/ALS transition
[AD-A011642] p0552 N82-28269

ANALITICAL MECHANICS ASSOCIATES, INC., MOUNTAIN VIEW, CALIF.
Analysis of in-trail following dynamics of CDTI-equipped aircraft
[AD-A011643] p0408 N82-39107
An investigation of automatic guidance concepts to steer a V/STOL aircraft to a small aviation facility ship
[AD-A011644] p0191 N82-16087

ANALITICAL METHODS, INC., RENO, NEV.
A surface singularity method for rotors in hover or climb
[AD-A011645] p0304 N82-20178
Flows over wings with leading-edge vortex separation
[AD-A011646] p0304 N82-20178

AOA APPARATUS GMBH (WEST GERMANY).
Torsional stiffness element based on cobalt-samarium magnets
[AD-A011647] p0615 N82-26238

APPLIED GEOPHYSICS, INC., SALT LAKE CITY, UTAH.
Geophysical flight line flying and flight path recovery utilizing the Littion LTS-76 inertial navigation system
[AD-A011648] p0534 N82-29292

APPLIED PHYSICS LAB., JOHN HOPKINS UNIV., BALTIMORE, Md.
Numerical investigation of supersonic base flow with parallel injection
[AD-A011649] p0375 N82-31960
The statistical theory of radio direction finding
[AD-A011650] p0456 N82-10227
Approximate method for predicting supersonic nearfield force coefficient very-low-aspect-ratio lifting surfaces
[AD-A011651] p0364 N82-23199
Influence of meteorological processes on the verticality of electric fields
[AD-A011652] p0613 N82-33698

C-5
Maintenance training simulator design and acquisition; 1SD-derived training equipment design

Heavy-duty engines analysis, study 4: A preclinical market analysis for gas-turbine applications in the far market

The use of flight management computers in air carrier operations in the 1980s

Impact of technology on avionics cost trends

Improvement program for the C-141 Navigation Selector Panel

Electronic warfare avionics integration support

Life-cycle-cost analysis of the microwave landing system ground and airborne systems

Cost analysis of the discrete Address Beacon System for the low-performance general aviation aircraft community

Reliability, Availability, Maintainability Data

Development of avionics installation interface standards

Technology overview for advanced aircraft armament systems program

Standard data study for advanced aircraft armament systems program

Wind tunnel measurements of three-dimensional wakes of buildings

Analysis of flight test measurements in ground effect

Subcritical and supercritical airfoils for given pressure distribution

Design of a catalytic optical VASS helmet-mounted display

Testing of the Kupier Airborne Observatory 91-CH telescope

Surface generation for aerodynamic applications

An effective algorithm for shock-free wing design

Vibration levels in Army helicopters: Measurement recommendations and data

Human response to fire

Universal turret system model determination and controller performance testing

C-5A operational utility evaluation soil tests and analysis

Stress intensity factors for radial cracks at outer surface of a partially autofrettaged cylinder subjected to internal pressure

Ice phobic blade tracking and comparison of vibration analysis techniques

Helicopter icing spray system (BISS) nozzle improvement evaluation

Preliminary airworthiness evaluation of the OH-16 with hot metal plus plume infrared suppressor and infrared jammer

Airworthiness and flight characteristics test of an OH-5C configured to a Light Combat Helicopter

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

An experimental study of dynamic stall on advanced airflow sections. Volume 1: Summary of the experiment

Computer program for aerodynamic and blade design of multistage axial-flow compressors

Aircraft turbine engine development: Current practices and new priorities

Review of helicopter East Mounted Sight (HMS) base motion isolation and Line-of-Sight (LOS) stabilization concepts

Integration of controls and displays in U.S. Army helicopter cockpits

The structural dynamic interface required for developing helicopter target acquisition systems

National transonic facility (NTF) prototype fan blade fatigue test

System of an integrated cockpit management system

Voice interactive system technology avionics (VISTA) Program

Cold regions testing of an air transportable
CORPORATE SOURCES INDEX

AEROSPACE SYSTEMS DIV., BOULDER, CO:

- Ball Aerospace Systems Div., Boulder, Colo.
  - Advanced microstrip antenna developments.
  - Barine Air Traffic Control and Landing System.
- Boab crater repair techniques for permanent subgrade soils.
- Safety (aviation material).
- Safety (aviation material).
- Aviation material Combat In-Country (ABCBIC).
- Advanced microstrip antenna developments.

BELL AEROSPACE SYSTEMS DIV., BOULDER, CO:

- Speech Command Auditory Display System (SCADS).
- Pressurization and environmental control, Fort Huachuca, Ariz.
- Safety (aviation material).
- Safety (aviation material).
- Safety (aviation material).
- Safety (aviation material).
- Safety (aviation material).

BELL SYSTEMS CORP., ALEXANDRIA, VA:

- Aircraft noise tests: A comparison of experimental and analytic predictions.
- Aircraft noise tests: A comparison of experimental and analytic predictions.
- Aircraft noise tests: A comparison of experimental and analytic predictions.
- Aircraft noise tests: A comparison of experimental and analytic predictions.
- Aircraft noise tests: A comparison of experimental and analytic predictions.
- Aircraft noise tests: A comparison of experimental and analytic predictions.
- Aircraft noise tests: A comparison of experimental and analytic predictions.

BELL TELEPHONE LABS, INC., MURFREESBORO, TN:

- Advanced microstrip antenna developments.
- Barine Air Traffic Control and Landing System.
- Barine Air Traffic Control and Landing System.
- Barine Air Traffic Control and Landing System.
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- Barine Air Traffic Control and Landing System.
- Barine Air Traffic Control and Landing System.
- Barine Air Traffic Control and Landing System.
In-service inspection methods for graphite-epoxy structures on commercial transport aircraft

Civil helicopter propulsion system reliability and engine monitoring technology assessments

Investigation of correlation between full-scale and fifth-scale wind tunnel tests of a Bell helicopter Texton Model 222

Methodology for measurement of fault latency in a digital avionic microprocessor

SIFT: An ultra-reliable avionic computing system

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

P-15 rotary balance data for an angle-of-attack range of 8 deg to 90 deg

Rotary balance data for an F-15 model with conformal fuel tanks for an angle-of-attack range of 8 deg to 90 deg

A redundancy concept for a digital CSAS

A system safety model for developmental aircraft program

A study of flight control requirements for advanced, large, earth-to-orbit vehicles with far aft center-of-gravity locations

Feasibility study of a 270V dc flat cable aircraft electrical power distributed system

The outlook for advanced transport aircraft

Transonic perturbation analysis of wing-fuselage-nacelle-pylon configurations with powered jet exhausts

Selected advanced aerodynamic and active control concepts development

Surface flow visualization requirements for testing in NTF

Transonic applications of the NASA Imaging System

The aircraft surface coatings for drag reduction/erosion protection

A large-scale investigation of engine influence on inlet performance at angle-of-attack

Transonic wind tunnel test of a supersonic nozzle installation

In-service inspection methods for graphite-epoxy structures on commercial transport aircraft

Airframe-propulsion system aerodynamic interference predictions at high transonic Mach numbers including off-design engine airflow effects

Airborne data analysis/monitor system

AICAS executive and operating systems

High lift selected concepts

Natural laminar flow airfoil analysis and trade studies

Development of Integrated Programs for Aerospace-Vehicule Design (IPAD) - IPAD user requirements

Aircraft alerting systems standardization study. Volume 2: Aircraft alerting system design guidelines

Environmental exposure effects on composite materials for commercial aircraft

A study of the effects of long-term exposure to fuels and fluids on the behavior of advanced composite materials

Electric flight systems

Aerodynamic analysis of VTOL inlets and definition of a short, blowing-lip inlet

The 737 graphite composite flight spoiler flight service evaluation

Commercial jet transport crashworthiness

Aircraft alerting systems standardization study. Volume 1: Candidate system validation and time-critical display evaluation

Fuselage structure using advanced technology fiber reinforced composites

Aircraft alerting systems standardization study. Volume 1: Candidate system validation and time-critical display evaluation

Integrated application of active controls technology concepts development on a derivative B-747

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

The B-767 flight control system maintenance and reliability data base for cost effectiveness

Kinematic investigation Hughes Helicopter 7.62mm chain gun

A large-scale investigation of engine influence on inlet performance at angle-of-attack

Transonic wind tunnel test of a supersonic nozzle installation

In-service inspection methods for graphite-epoxy structures on commercial transport aircraft
Some potential novel approaches to the automatic airborne detection and identification of ground targets

**BRITISH AEROSPACE AIRCRAFT GROUP.**

- The study of combat aircraft maneuverability by numerical applications of the physical optics
- In-flight investigation of the effects of pilot flying qualities for approach and landing
- Developments of new control systems for fighter cockpit design
- Simulation of turbofan engine models in the transonic wind tunnel
- Development of a convoluted intake seal for future combat aircraft
- Integrated control of mechanical systems for future combat aircraft
- The ultrasonic inspection of C.R.C. (BRM-0465)
- Calibration and performance of the AEOC/VKF lag model
- Laboratory-scale measurements of airframe noise
- Application of the finite element method to the calculation of radar cross section of compact structures
- Numerical applications of the physical optics approach for the calculation of radar cross sections of convex perfect scatterers
- Characteristics and principal gains and phases of the Seal-Smith criterion
- Application of the finite element method to the calculation of radar cross section of compact structures
- Numerical applications of the physical optics approach for the calculation of radar cross sections of convex perfect scatterers
- Characteristics and principal gains and phases of the Seal-Smith criterion
- Application of the finite element method to the calculation of radar cross section of compact structures
- Numerical applications of the physical optics approach for the calculation of radar cross sections of convex perfect scatterers
- Characteristics and principal gains and phases of the Seal-Smith criterion
Investigation and evaluation of a computer program to minimize three-dimensional flight time for a cruise mission

[HASA-CB-168419] p0215 882-17879

CENTER FOR NAVAL ANALYSIS, ALEXANDRIA, VA.

Mobility training for the Navy

[AD-A112151] p0459 882-26485

A result in the theory of spiral search

[AD-A112481] p0466 882-27262

CENTER D’ETUDES ET DE RECHERCHES, TOULOUSE (FRANCE).

Theoretical optimization and experimental verification of an injector

p0361 882-23170

CHESAPEAKE AIRCRAFT CO., VANDALIA, OHIO.

Impact of advanced propeller technology on aircraft/milair characteristics of several general aviation aircraft

[HASA-CB-166760] p0604 882-33347

CHESAPEAKE AIRCRAFT CO., WICHITA, KANS.

Advanced general aviation cooperative small airplane design study

[HASA-CB-165564] p0354 882-22263

CHRYSON RESEARCH CO., RICHARDON, CALIF.

Refining and upgrading of synfuels from coal and oil shales by advanced catalytic processes

[HA-AD-751112] p0213 882-17901

CHICAGO UNIT, ILL.

Downwash and macrowash - an aviation hazard

p0003 882-10210

CIDA-GEIGY CORP., ABBOTSFORD, B.C.

Composite repair system with long term latency

[AD-A110451] p0036 882-11055

CINDRES AND CONSULTANCY PRIVATE LTD., BANGALORE (INDIA).

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

p0413 882-26184

CINCINNATI UNIV., OHIO.

Flag-lead-torsional dynamics or extensional and inextensional rotor blades in hover and in forward flight

[HASA-CB-165078] p0139 882-15013

Flag-lead-torsional dynamics of extensional and inextensional rotor blades in hover and in forward flight

[HASA-CB-169195] p0535 882-29312

CITGO RESEARCH FOUNDATION, NEW YORK.

Experimetal study of turbulence in blade and wall corner region

[HASA-CB-169283] p0572 882-31639

CLEMSON UNIV., S.C.

Specification and estimation of dynamic cost functions for airplane production airframes

[AD-A1113147] p0463 882-27221

Learning costs in airplane production, part 1

[AD-A1112948] p0479 882-28210

Maximizing South Carolina's aviation resources: Identifying potentially profitable comestive airplane routes, volume 2

[PB82-129353] p0532 882-29277

Integrated airplane propulsion control

[HASA-CB-3606] p0593 882-32382

CLEMSON POLYTECHNICAL CO. OF MICHIGAN, DETROIT.

Carburized high temperature steels

[AD-A116559] p0595 882-32467

COAST GUARD RESEARCH AND DEVELOPMENT CENTER, SHOMTO, CORP.

Preliminary assessment of US Coast Guard Short Range Recovery (SHR) planning and infrared (PIR) system small target detection performance

[AD-A117916] p0615 882-34230

COLLINS RADIO CO. CEDAR FALLS, IOWA

A standard control display unit for multi-aircraft application

p0092 882-13054

COLORADO SCHOOL OF MINES, GOLDEN.

Deposit formation in liquid fuels. II - The effect of selected compounds on the storage stability of Jet A turbine fuel

p0186 882-22240

Deposit formation in liquid fuels. II - The effect of coal-derived Lewis bases on storage stability of Jet A turbine fuel

p0186 882-22241

COLORADO STATE UNIV., FORT COLLINS.

Aircraft measurements and analysis of severe storms: 1976 field experiment

[HASA-CB-168519] p0259 882-18803

Study of the global positioning system for maritime concepts/applications: Study of the feasibility of replacing maritime chipboard navigation systems with NAVSTAR

[HASA-CB-169031] p0449 882-26263

CORPORATION ON AIRCRAFT (G. S. ROSS). A review of defense-related vertical and short takeoff and landing (V/STOL) aircraft programs

[PB-55-270] p0256 882-18205

CORPORATION ON BUSINESS, SCIENCE, AND TRANSPORTATION (G. S. ROSS).

Role of impact on communities from aircraft

[GO-80-617] p0215 882-17655

Future of general and commuter aviation technology and trade

[GO-85-322] p0302 882-20159

CORPORATION SCIENCE AND TECHNOLOGY (G. S. ROSS).

Spas recovery training

[GO-66-020] p0025 882-10022

Airport and Airway Improvement Act of 1981, part 1

[GO-76-241-PP-1] p0030 882-10062

NASA Authorization, 1982: Index

[GO-84-713] p0301 882-10959

Air traffic collision avoidance system

[PB-79-431] p0264 882-19201

Air traffic control on route computer system

[GO-89-008] p0264 882-19202

Air traffic control on route computer modernization

[GO-82-773] p0303 882-20167

FAA air traffic control computer modernization

[GO-82-375] p0303 882-20168

Air traffic collision avoidance and air traffic safety

[GO-88-545] p0303 882-20169

The 1983 NASA Authorization, Volume 1

[GO-91-988-VOL-1] p0360 882-23068

The First in NASA

[GO-89-876] p0410 882-25271

CONTROLLED GENERAL OF THE UNITED STATES, WASHINGTON, D.C.

Evaluation of the Federal Aviation Administration's plan for the National Airspace System

[AFPD-02-66] p0611 882-33003

COMPUTATIONAL AERODYNAMICS RESEARCH, ERBESVILLE, PA.

A numerical three-dimensional turbulent simulation of a subsonic V/STOL jet in a cross-flow using a finite element algorithm

[AD-A1104514] p0036 882-11055

COMPUTER SCIENCE CORP., MOUNTAIN VIEW, CALIF.

Simulator certification methods and the vertical motion simulator

[HASA-CB-166252] p0089 882-12082

CORPORATE DATA CO., OTTAWA (ONTARIO).

Optimization of thrust algorithsm validation for Coating System (TCS) for Thrust the NASA Highly Maneuverable Aircraft Technology (HINT) vehicle's propulsion system

[HASA-CB-165312] p0317 882-21198

COOPER STATE COLLE, BALTIMORE, MD. Ten antenna techniques: Application to the design of a flight simulator

[AD-A1103729] p0257 882-18227

CORNELL UNIV.,ITHACA, N. Y.

The sixmen to forty microm spectroscopy from the NASA Lear jet

[HASA-CB-168668] p0310 882-23054

COSTELLOONI AERONAUTICI GIOVANNI AGOSTA S.P.A., SALLARESE (ITALY).

Design Criteria of the A 129 helicopter drive system

p0209 882-17215

COSTELLOONI AERONAUTICI GIOVANNI AGOSTA S.P.A., SNAVARE (ITALY).

Integrated cockpit for A-129

p0366 882-22225

CROSST AEROSPACE AND SYSTEMS, VALENCE (FRANCE).

Using voice control onboard combat aircraft

p0092 882-13056

CURTIS-WRIGHT CORP., WOOD-RIDGE, N.J.

Advanced stratified charged rocket aircraft engine design study

[HASA-CB-165398] p0478 882-27743
DEUTSCHE FORSCHUNGSGEMEINSCHAFT FUR LUFT- 
UND RAHMFAHRT, EBERBACH (WEST GERMANY). 
Prediction of flyover jet noise spectra from 
static tests p0039 N02-22963

DEUTSCHE FORSCHUNGSGEMEINSCHAFT FUR LUFT- 
UND RAHMFAHRT, BONN (WEST GERMANY). 
Development and construction of pilot ejector 
seats in Germany from 1938-1945 
[DFVLR-FB-81-10026] p0026 N02-10026

DEUTSCHE FORSCHUNGSGEMEINSCHAFT FUR LUFT- 
UND RAHMFAHRT, BONN (WEST GERMANY). 
Mathematical model for the maintenance program 
of modern jet aircraft 
[DFVLR-FB-81-10026] p0026 N02-10026

Control law design for transport aircraft flight 
tasks p0039 N02-11080

Experimental investigation of a helmet mounted 
sight/display for helicopter 
[DFVLR-FB-81-10026] p0026 N02-11080

Analysis of two air traffic samples in the 
terminal area of Frankfurt/Main, August 4th 1978 
[DFVLR-BTT-81-12] p0132 N02-16073

Analysis of two air traffic samples in the 
terminal area of Frankfurt am Main, 3 August 
1979 
[DFVLR-BTT-81-17] p0140 N02-15028

Analysis of two air traffic samples in the 
terminal area of Frankfurt am Main, 4 August 
1979 
[DFVLR-BTT-81-12] p0140 N02-15028

Integration of a digital air data computer into 
the test aircraft BFB-230 
[DFVLR-FB-81-10026] p0026 N02-15028

An observer approach to the identification and 
(isolation of sensor failures in flight control 
systems 
[DFVLR-FB-81-26] p0145 N02-15078

Experimental investigation of visual aids for 
helicopters: Low level flight at night and 
poor visibility p0251 N02-18168

Noise measurements on the helicopter BK 117 
design. Weighted noise levels and influence 
of airspeed 
[DFVLR-BTT-81-12] p0140 N02-15028

Collection and evaluation of propeller aircraft 
noise certification data 
[DFVLR-BTT-81-20] p0270 N02-19958

Drum reduction using pneumatic turbines 
[DFVLR-FB-81-13] p0350 N02-22223

Ground reflection effects in measuring propeller 
aircraft flyover noise 
[DFVLR-FB-81-28] p0359 N02-22990

Flight tests for the assessment of task 
performance and control activity 
[DFVLR-FB-81-28] p0359 N02-22990

A theoretical study of the impact of aircraft 
avoiding measures on the final approach 
area of Luxembourg airport 
[DFVLR-BTT-82-01] p0371 N02-23560

Proceedings of the 1st symposium on aircraft 
integrated data systems 
[DFVLR-BTT-82-02] p0401 N02-25171

The DFVLR Digital Flight Data Record and 
Processing Station and its Utility 
[DFVLR-FB-82-06] p0402 N02-25180

Wind tunnel investigations on tran supercritical 
airfoils in high subsonic flow 
[DFVLR-FB-82-06] p0557 N02-30296

DEUTSCHE FORSCHUNGSGEMEINSCHAFT FUR LUFT- 
UND RAHMFAHRT, COLOGNE (WEST GERMANY). 
Scientific report of the Fluid Mechanics 
Research Department 
[DFVLR-FB-82-06] p0213 N02-17669

Developmental possibilities and restrictions in 
air transport 
[DFVLR-BTT-81-9] p0350 N02-22229

Developmental possibilities in civil aviation in 
the Federal Republic of Germany 
[DFVLR-BTT-81-9] p0350 N02-22230

Aircraft post-crash fire fighting/escue 
[DFVLR-FB-82-06] p0557 N02-29287

DEUTSCHE FORSCHUNGSGEMEINSCHAFT FUR LUFT- 
UND RAHMFAHRT, GONTINGEN (WEST GERMANY). 
Experimental investigations of the separated 
flow around a rectangular wing 
[DFVLR-FB-81-12] p0026 N02-10017

C-12
A method for determination of the aerelastic behavior of aircraft with active control system [DPVL-NL-84-01-07] p0029 H82-10047
Calculation of natural modes of vibration for rotor blades by the finite element method [DPVL-82-81-07] p0031 H82-10452
A three-dimensional approach to lift and moment coefficients of rotating blades p0245 H82-18125
Modal characteristics of rotor blades: Finite element approach and measurement by ground vibration test p0245 H82-18127
Application of modal systems techniques for the dynamic qualification of wings with stores p0345 H82-22160
Experiments on propeller noise p0359 H82-22978
DEUTSCHE FORSCHUNGS- UND VERSUCHSANSTALT FUR LUFTH- UND RAUMFAHRT, OBERRAPPARTHEIM (WEST GERMANY).
Rangerfinder system for short range visibility p0309 H82-20746
Unsteady pressure measurements at stall and buffet [DPVL-NL-79-09] p0366 H82-23198
DEUTSCHE FORSCHUNGS- UND VERSUCHSANSTALT FUR LUFTH- UND RAUMFAHRT, STUTTGART (WEST GERMANY).
Service life investigation of a mainplane wing of CFRP construction p0357 H82-22324
Report from the Working Party on New Fiber Materials p0399 H82-24512
DEUTSCHE FORSCHUNGS- UND VERSUCHSANSTALT FUR LUFTH- UND RAUMFAHRT, WESSELING (WEST GERMANY).
The optical recognition of sea targets as a function of surrounding and observation parameters in air to water observations [BMFT-FBN-81-10] p0167 H82-15930
DEUTSCHE FORSCHUNGS- UND VERSUCHSANSTALT FUR LUFTH- UND RAUMFAHRT, COLOGNE (WEST GERMANY).
Seventh European Rotorcraft and Powered Lift Aircraft Focus p0245 H82-18119
DORNIER-WERKE G.M.B.H., FRIEDRICHSHAFEN (WEST GERMANY).
Structural dynamics: Modified calculations [BMFT-FBN-81-1] p0101 H82-13857
Tethered rotorcrafts and their mission potential p0248 H82-18145
Experimental flight test programs for improving combat aircraft maneuverability by maneuver flags and pylons split flaps p0347 H82-22192
DOUGLAS AIRCRAFT CO., INC., LONG BEACH, CALIF.
The outlook for advanced transport aircraft [AD-A108274] p0252 H82-18193
Keuror/PW-15 polyamide matrix composite for a complex shaped DC-9 drag reduction fairing [AD-A10497] p0437 H82-37678
Prop-fan integration at cruise speeds [AD-A100274] p0097 H82-13097
Aircrew restraint and mobility test fixture [NASA-CR-165188] p0322 H82-21532
Transport aircraft accident dynamics [NASA-CR-165805] p0350 H82-22227
Airport noise p0568 H82-31071
Long duct nacelle aerodynamic development for DC-10 derivatives [NASA-CR-159252] p0586 H82-32735
Investigation of the interference effects of mixed flow long duct nacelles on a DC-10 wing [NASA-CR-159202] p0586 H82-32739
Selected winglet and mixed flow long duct nacelle development for DC-10 derivative aircraft [NASA-CR-3296] p0589 H82-32347
Application of an optimized winglet configuration to an advanced commercial transport [NASA-CR-159156] p0589 H82-32348
Development of a low risk augmentation system for an energy efficient transport having relaxed static stability [NASA-CR-159316] p0592 H82-32377
Advanced turboprop testbed systems study [NASA-CR-167895] p0607 H82-33375
DRAPE & CHARLES STARK. LAB., INC., CAMBRIDGE, MASS.
On-board communication for active-control transport aircraft [AIAA-1-232] p0052 H82-13520
Reliability analysis of the F-6 digital fly-by-wire system [NASA-CR-163110] p0089 H82-12079
System data communication structures for active-control transport aircraft, volume 1 [NASA-CR-165773-VOL-1] p0538 H82-28510
DRIESEL UNIV., PHILADELPHIA, PA.
On-line optimization of aircraft altitude and flight path angle dynamics p0044 H82-13107
Piloted simulation of an on-board trajectory optimisation algorithm p0167 H82-20296
Stochastic perturbation techniques for real time aircraft trajectory optimisation and control [NASA-CR-3597] p0570 H82-31330
DYNAVIC C.O.P.R.E.S, INC., DATTOR, OHIO.
Flight tests of a CF and DCI direct drive fly by wire flight control system [AD-A117268] p0611 H82-33401
DYNAVIC SCIENCE, PHOENIX, ARIZ.
Advanced recorder design and development [PB81-244105] p0193 H82-16385
DYNAVIC TECHNOLOGY, INC., TORRANCE, CALIF.
Turbulence measurements in a confined jet using a six-probe hot-wire probe technique [AIAA-82-1562] p0439 H82-37710
DYTEC ENGINEERING, INC., LONG BEACH, CALIF.
Recommendations for field measurements of aircraft noise [NASA-CR-3540] p0359 H82-22955
EAGLE TECHNOLOGY, INC., ARLINGTON, VA.
Reliability and maintainability analysis of fluidic back-up flight control system and components [AD-A110496] p0474 H82-27320
ECOLE POLYTECHNIQUE FEDERALE DE LAUSANNE (SWITZERLAND).
Aerelasticity in turbomachines [BPL-ITA-10] p0162 H82-15042
Design for turbomachine blade variations in subsonic flow [NASA-CR-165498] p0162 H82-15048
Numerical experiments on unsteady flows through vibrating cascades [NASA-CR-165052] p0162 H82-15054
Computer aided investigation of turbomachine aerodynamics and aerelasticity [NASA-CR-165053] p0162 H82-15054
Practical experience with a noncontact blade vibration measuring system in industrial turbocompressors [NASA-CR-164065] p0404 H82-15065
EDINGTON, GEBRINGSHAUSEN AND GIELE, INC., AUSQUEBROOK, N. DAK.
System safety program plan [AD-A100577] p0041 H82-11354
EC AND G HESS PROFESSIONAL SERVICES CENTER, INC., POCOMOK CITY, ND.
A global atlas of GEOS-1 significant waveheight data and comparison of the data with national buoy data [NASA-CR-156462] p0166 H82-15498
ELECTRO MAGNETIC APPLICATIONS, INC., DERBY, CONN.
Atmospheric electricity hazards analytical model development and applications, volume 1: Lightning environment modeling [AD-A114015] p0539 H82-29800
Piloted simulator evaluation of a relaxed static stability fighter at high angle-of-attack (NASA CR-166246) p0164 A82-19780

Aerodynamic characteristics of a large-scale, twin tilt-nacelle V/STOL model (NASA CR-166105) p0340 A82-30171

An investigation of scale model testing of VTOL aircraft in hover (NASA CR-1295) p0486 A82-39082

Study of fiber optics to enhance an environmental lighting laboratory (AD-A106117) p0135 N82-14104

Numerical aircraft design using 3-D transonic analysis with optimization, volume 2: Part 1: Transport design (AD-A110231) p0315 N82-21181

Numerical aircraft design using 3-D transonic analysis with optimization, volume 2: Part 2: Fighter design (AD-A110236) p0315 N82-21182

Numerical aircraft design using 3-D transonic analysis with optimization, volume 3: User's guide to transport design computer programs (AD-A110232) p0315 N82-21183

Numerical aircraft design using 3-D transonic analysis with optimization, volume 3: User's guide to fighter design computer programs (AD-A110377) p0315 N82-21184

Development of a taped random vibration technique for acceptance testing (NASA CR-166258) p0400 N82-25170

The assessment of aircraft combat effectiveness using a new computational method (NASA CR-166258) p0400 N82-22171

Evaluation of the effects of model scale and test technique on jet-induced effects (NASA CR-166258) p0361 N82-23167

Influence of maneuverability on helicopter combat effectiveness (NASA CR-166258) p0365 N82-23212

Transonic flutter study of a wind-tunnel model of a supercritical wing with/without winglet (NASA-TR-83279) p0368 N82-23239

Study of VTOL in ground-effect flow field including temperature effect (NASA CR-166258) p0400 N82-25170

X-29A forward-swept-wing demonstrator airplane (NASA CR-166258) p0404 N82-25209

Hydraulic Universal Display Processor System (HUDDS) (AD-A114426) p0525 N82-28294

Axisymmetric and non-axisymmetric exhaust jet induced effects on a V/STOL vehicle design. Part 2: Analysis of results (NASA CR-166365) p0566 N82-31301

Axisymmetric and non-axisymmetric exhaust jet induced effects on a V/STOL vehicle design. Part 3: Experimental technique (NASA CR-166497) p0566 N82-31302

HAROLD ZAHN, WINDSOR LOCKS, CONN.
Advanced crash survivable flight data recorder and Accident Information Retrieval System (AIRS) (AD-A105510) p0132 N82-14072

Environmental Control Systems p0261 N82-19141

Solid state crash survivable flight data recorders for airship investigation (AD-A108223) p0041 N82-25173

HARPTON, VA.
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-166497) p0399 N82-20997

Cost and fuel consumption per nautical mile for two engine jet transports using OPTIE and TRAGEN (NASA CR-166497) p0407 N82-25239

HELICOPTER ASSOCIATION OF AMERICA, WASHINGTON, D. C.
Community rotorcraft air transportation benefits and opportunities (NASA CR-166497) p0187 N82-16008

HILARIX UNIV. OF TECHNOLOGY, OTANIEMI (FINLAND)
Transient simulation of gas turbines including the effects of heat capacity of the solid parts (ISTAN-95-752-436-1) p0453 N82-26296

HILTON, VA.
(high life helicopters, inc., pottsville, wash.) Geophysical flight line flying and flight path recovery utilizing the Linton LTN-76 inertial navigation system (NASA CR-166497) p0534 N82-29292

HIGH TECHNOLOGY CORP., HUNTSVILLE, AL.
Accurate numerical solution of compressible, linear stability equations (NASA CR-166497) p0382 N82-33571

HILCHENBE ERHARD, HUNGLIC, (WEST GERMANY)
Effects of aerodynamic coupling on the dynamics of roll aircraft (NASA CR-166497) p0068 N82-12070

Optimal dolphin hang glider flight (NASA CR-166497) p0201 N82-17157

Optimal periodic Dolphin gliding flight (NASA CR-166497) p0559 N82-30313

HOPE STAFFORD, HOPESTAFF, N. Y.
Two-frequency /Delta k/ microwave scatterometer measurements of ocean wave spectra from an aircraft (NASA CR-166497) p0504 N82-47993

HOBREWELL, INC., CLEARWATER, FLA.
The residue-measure criteria for model reduction in the analysis of the NASA Space Shuttle's digital flight control system (NASA CR-166497) p0120 N82-17909

OVERVIEW OF HONEYWELL ELECTROMECHANICAL ACTUATION PROGRAMS (NASA CR-166497) p0261 N82-19142

HOBREWELL, INC., MINNEAPOLIS, MINN.
The need for multivariable design and analysis techniques (NASA CR-166497) p0029 N82-10049

Limitations on achievable performance of multivariable feedback systems (NASA CR-166497) p0029 N82-10052

LQG-based multivariable design: Frequency domain interpretation (NASA CR-166497) p0029 N82-10053

LQG multivariable design tools (NASA CR-166497) p0300 N82-10054

Assessment of stereographies for fire control and navigation in fighter aircraft (NASA CR-166497) p0558 N82-30306

HOBREWELL SYSTEMS AND RESEARCH CENTER, MINNEAPOLIS, MINN.
Robust Kalman filter design for active flutter suppression systems (NASA CR-166497) p0482 N82-33442

Self-tuning regulator design for adaptive control of aircraft wing/store flutter (NASA CR-166497) p0578 N82-45538

Multivariable design techniques based on singular value generalizations of classical control (NASA CR-166497) p0029 N82-10051

Design techniques for multivariable flight control systems (NASA CR-166497) p0039 N82-11078

Integrated control design techniques (NASA CR-166497) p0257 N82-18224

Computer image generation: Advanced visual/sensor simulation (NASA CR-166497) p0479 N82-28016

HOPE ASSOCIATES, INC., WASHINGTON, D.C.
A comprehensive bibliography of literature on helicopter noise technology (NASA CR-166497) p0031 N82-10812

EUDORD UNIV., WASHINGTON, D.C.
Closed-form solutions of supersonic wing-body interference (NASA CR-166497) p0380 N82-33120

HIC INDUSTRIES, INC., DUNLAP, CALIF.
Test and evaluation of UV fiber optics for
application for aircraft fire detector systems
Hughes Aircraft Co., Carlsbad, Calif.
Analysis of Built-In-Test (BIT) false alarm conditions
[AD-A106129] p0195 HB2-16850
Hughes Aircraft Co., Carlsbad, Calif.
Advanced concepts for corporate structure joints and attachment fittings. Volume 1: Design and evaluation
[AD-A110212] p0321 HB2-21261
Studies of new perfluorocarbon elastomeric seals
[ASA-CR-166377] p0560 HB2-30400
Hughes Aircraft Co., El Segundo, Calif.
Study and development of an integrated head-up display
[AD-A104337] p0037 HB2-11662
Fave Rover aided integrated strike avionics system
[AD-A111145] p0671 HB2-27290
Hughes Aircraft Co., Fullerton, Calif.
Next generation military aircraft will require hierarchical/multilevel information transfer systems
[HB2-17114] p0197 HB2-17114
Hughes Aircraft Co., Torrance, Calif.
Design, fabrication and test of liquid metal heat-pipe sandwich panels
[AIAS Paper 82-0503] p0373 HB2-31898
Hughes Helicopters, Culver City, Calif.
Performance characteristics of a buoyant quad-rotor research aircraft
[AD-A111265] p0513 HB2-40974
Pre-design study for a modern four-bladed rotor for the Rotor System Research Aircraft (RSRA)
[ASA-CR-166156] p0187 HB2-16043
Blade platform for a quart helicopter
[ASA-CR-166256] p0198 HB2-17121
Design philosophy of the Hughes model 600 helicopter
[AD-A104687] p0247 HB2-18140
Advanced concepts for corporate structure joints and attachment fittings. Volume 2: Design guide
[AD-A111064] p0451 HB2-24208
Hughes Research Labs., Malibu, Calif.
Silicon liquid crystal light valve for flight simulation applications
[AD-A110928] p0813 HB2-26005
Hydraulic Research, Valencia, Calif.
An electronic control for an electrohydraulic active control landing gear for the F-4 aircraft
[ASA-CR-3552] p0353 HB2-22252

I.I.T Research Inst., Annapolis, Md.
Impact of a multidirectional traffic alert and collision avoidance system on the air traffic control radar beacon system and the discrete address beacon system
[AD-A116170] p0587 HB2-32336
Iconas Graphics Systems, Inc., Raleigh, N. C.
An advanced programmable/configurable color graphics display system for crew station technology research
[AIAS 81-2316] p0051 HB2-13516
Illinois Inst. of Tech., Chicago.
Calculation of sensitivity derivatives in thermal problems by finite differences
[AD-A112127] p0181 HB2-21309
Illinois Inst., Chicago.
Mathematical models for the synthesis and optimization of spiral bevel gear tooth surfaces
[ASA-CR-3553] p0112 HB2-25516
Illinois Inst., Urbana-Champaign.
Multilevel semantic analysis and problem-solving in the flight domain
[ASA-CR-166282] p0573 HB2-31967
Imperial Coll. of Science and Technology, London (England).
A method for force determination from vibration response measurements
[AD-A112120] p0183 HB2-15055
The effect of aspect ratio on the unsteady aerodynamic forces induced by vibration of a cascade blade
[AD-A112120] p0144 HB2-15063
Inco Inc., Inc., Westlake Village, Calif.
Low cost development of IRS sensors for expendable BPR control and navigation
[AD-A112129] p0525 HB2-26291
Indian Inst. of Tech., Bombay.
Investigation on rotating allumirons
[AD-A112130] p0113 HB2-26162
Industrial Afflraungen-Besprechungskoll.- M.-L. och Hamburg-West (Germany).
Flight-by-flight corrosion fatigue tests
[AD-A112140] p0210 HB2-17348
Acoustic noise test as part of the dynamic quality program in aerospace
[AD-A112141] p0340 HB2-22162
Infomatics, Inc., Palo Alto, Calif.
Comparison between computations and experimental data in unsteady three-dimensional transonic aerodynamics, including aerelastic applications
[AIAS-CR-82-0690] p0339 HB2-10157
Development of a digital integrated automatic landing system /DIAL/ for steep approach and landing
[AD-A112145] p0168 HB2-2097
Optical properties of airfield lighting fixtures
[AIAS-CR-165939] p0592 HB2-32375
Institut De Recherche Des Fluido De L'air (France).
Transonic flows in an air inlet with large incidence and the effect of a blowing trap
[AD-A112150] p0099 HB2-13071
State of the art and recent perspectives on the study of the loss of control and spin
[AD-A112152] p0187 HB2-21917
Application of Kalman filtering to the kinematic reconstruction of free flight of catapulted aircraft models in the laboratory
[AIAS 80-28] p0253 HB2-22259
Institut Francais de Recherches, St. Louis (France).
Study of the source function by the causality methods defined by Biber and Siddon
[PPBB-205170] p0015 HB2-31896
Institut fuer Flugmechanik, Delft (Netherlands).
Helicopter rotor dynamics: Review of theoretical research at the DPLY-rotor test stand and their comparison with theoretical results
[AIAS-CR-165877] p0396 HB2-18158
Evaluation of the helicopter low airspeed system LASSIE
[AD-A112164] p0251 HB2-18172
Institut fuer Theoretische Strömungsmechanik, Göttingen (Germany).
A computational design method for transonic turbomachinery cascades
[AIAS Paper 82-05117] p0425 HB2-35388
Helicopter reliability and maintainability trends during development and production
[AIAS-CR-355716] p0098 HB2-13136
Built-in-test Equipment Requirements Workshop.
Workshop presentation
[AIAS-CR-165882] p0195 HB2-17065
C-5A aerostatic airfield operational utility evaluation. Phase 2: Operation on unpaved soil surfaces following rainfall
[AD-A108257] p0255 HB2-18208
Assessment of Avionic Equipment Field Reliability and Maintainability as Functions of Unit Cost
[AD-A108377] p0266 HB2-19218
Institute for Perception AVO-TRIO, Soesterberg (Netherlands).
Optical properties of airfield lighting fixtures of the Royal Netherlands Airforce. Part 1: Color measurements
[AIAS-CR-165850] p0145 HB2-15081
Optical properties of airfield lighting fixtures of the Royal Netherlands Airforce. Part 2: Intensity measurements
[AIAS-CR-165877] p0146 HB2-15082
The Link-Hales driver training simulator for tracked vehicles: The effect of method and
The vibratory behavior of a rotating propeller shaft. Part 4: Vibration tests of a rotating propeller shaft in a rubber stern tube bearing.

INTEGRATED SYSTEMS, INC., PALO ALTO, CALIF.

Design and evaluation of a state-feedback vibration controller.

INTERNETICS, INC., HUNTINGTON BEACH, CALIF.

The application of NAVSTAR differential GPS in the civilian community.

INTERNATIONAL HARVESTER CO., SAN DIEGO, CALIF.

Parameterization and characterization of polysulfone resilient foams of various densities for aircraft seating applications.

IONA STATE UNIV. OF SCIENCE AND TECHNOLOGY, AMEL.

Numerical solution of Space Shuttle orbiter flow field.

ITALIAN AIR FORCE PRATICA DI HAB, ROME

Parametric criteria and impact on design trends.

ITALIAN ARMY GENERAL STAFF, ROME

Military requirements: Too little or too much.

ITT AERONICS, BUFFALO, N.Y.


JAMES AND ASSOCIATES, LANCASHIRE, CALIF.

System for providing an integrated display of instantaneous information relative to aircraft attitude, heading, altitude, and horizontal situation.

JET PROPULSION LAB., CALIFORNIA INST. OF TECH., PASADENA

Biological behavior of progressively shear-thickening solutions.

JET PROPULSION LAB., CALIFORNIA INST. OF TECH., PASADENA

Vehicle test report: Betatron pickup truck.

K DESCRIPTION INDEX

p0264 N82-19205

Global positioning system timing receivers in the DOD

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.

JUMBO CONSTRUCTORS, DELFT (NETHERLANDS).

Investigation into the utility of some quick setting cements for runway repair.

KAMAEROBSPACB CORP., BLOOMFIELD, CONN.

General purpose research rotor.

KAMAEROBSPACB CORP., WINDSOR, CONN.

Experimental verification of force determination and ground flying on a full-scale helicopter model configuration, and the application of structural system identification technology.

KANSAS UNIV., LAWRENCE.

Development of a simple, self-contained flight test data acquisition system.

KANSAS UNIV. CENTER FOR RESEARCH, INC., LAWRENCE.

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

KANSAS UNIV. CENTER FOR RESEARCH, INC., LAWRENCE.

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

Vehicle test report: Betatron pickup truck.
AD-1 oblique wing aircraft program
[AIAA PAPER 81-2546] p0056 A82-13079
Comparison of wind tunnel and theoretical
aerocoustic predictions with flight measured
airloads for the D-1 aircraft
[AIAA PAPER 81-2397] p0065 A82-13433
Folding qualities — A costly lapse in
flight-control design
p0296 A82-28280
Unique flight characteristics of the AD-1
oblique-wing research airplane
[AIAA PAPER 82-1320] p0488 a2-39106
NASA Dryden's experience in parameter estimation
and its uses in flight test
[AIAA PAPER 82-1372] p0489 a2-39135
Flight-determinant correction terms for angle of
attack and sideslip
[AIAA PAPER 82-1374] p0497 a2-40290
Flight experience with a backup flight-control
system for the NASA research vehicle
[AIAA PAPER 82-1541] p0497 a2-40429
A unique flight test facility — Description and
results
p0508 a2-40925
Aspects of clear air turbulence severity
forecasting and detection
p0579 a2-45023
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.
GODDARD SPACE FLIGHT CENTER, GREENBELT, MD.
Structure and Variability of the Alboran Sea
frontal system
p0168 a2-20447
Cloud top remote sensing by airborne lidar
p0379 a2-39290
Scanner imaging system, aircraft
p0529 a2-28715
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.
LYNDON B. JOHNSON SPACE CENTER, HOUSTON, TEX.
Selected stability and control derivatives from
the first Space Shuttle entry
[AIAA PAPER 81-2457] p0056 a2-13880
Electromechanical actuators
p0261 a2-19148
Full-scale flightability test data for validation
of aircraft fire mathematical models
[NASA-TN-56246] p0313 a2-21166
Research and Technology Annual report FY-1981
[NASA-TN-88199] p0371 a2-24137
Spiral slotted phased antenna array
[AIAA PAPER 82-1532-1] p0276 a2-27558
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.
JOHN F. KENNEDY SPACE CENTER, COCOA BEACH, FLA.
Lightning detection and ranging
p0277 a2-26367
Method for refurbishing and processing parachutes
[AIAA-Advisory-AC-1042-1] p0537 a2-29330
In-flight IFB procedures simulator
[NASA-CSEQ-1213-1] p0537 a2-29331
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.
LANGLEY RESEARCH CENTER, HAMPTON, VA.
Design predictions for noise control in the
cryogenic National Transonic Facility
p0016 a2-12025
A decoupled control system for improved flight
performance in wind shear
p0043 a2-13079
On matching the system identification technique
to the particular application
p0064 a2-13119
Have we overlooked the pilot's role in an
automated flight deck
[AIAA 81-2262] p0048 a2-13481
An advanced programmable/reconfigurable color
graphics display system for crew station
technology research
[AIAA 81-2516] p0051 a2-13516
On-board communication for active-control
transport aircraft
[AIAA 81-2321] p0052 a2-13520
Thunderstorm hazards flight research — Program
overview
[AIAA PAPER 81-242] p0053 a2-13583
Flight test experience with high-alpha control
system techniques on the F-14 airplane
[AIAA PAPER 81-2505] p0057 a2-13906
Direct strike lightning measurement system
[AIAA PAPER 81-2513] p0057 a2-13910
A unique integrated flight testing facility for
advanced control/display research
[AIAA PAPER 81-2170-1] p0058 a2-13919
Aerocautieity effects — Some reflections on two
decades of testing in the NASA Langley
Transonic Dynamic Tunnel
p0061 a2-13965
The development of cryogenic wind tunnels and
their application to maneuvering aircraft
technology
p0061 a2-13971
The integration of control and display concepts
for improved pilot situational awareness
p0061 a2-13972
Jet V/STOL wind-tunnel simulation and
groundplane effects
p0061 a2-13973
Progress in aerodynamical research and technology
applicable to civil air transports
p0061 a2-13974
Emergency-in-flight egress for general aviation
aircraft
p0077 a2-14953
Operational evaluation of thunderstorms
penetration test flights during project Storm
Hazards '80
p0078 a2-14954
Experimental evaluation of a perspective tunnel
display for three-dimensional helicopter
approaches
p0083 a2-15847
Thrust reversing effects on twin-engine aircraft
having nonaxisymmetric nozzles
[AIAA PAPER 81-2439] p0108 a2-16611
Screech suppression in supersonic jets
[AIAA Paper 82-0950] p0114 a2-17753
Vortex lift augmentation by suction on a 60 deg
swept Gothic wing
[AIAA PAPER 82-0231] p0117 a2-17856
Recent sidewall boundary-layer investigations
with suction in the Langley 0.3-a Transonic
Cryogenic Tunnel
[AIAA PAPER 82-0236] p0117 a2-17858
Evaluation of Local-C enroute navigation and
collision-avoidance precision within the State of
Vermont
p0128 a2-18160
Acceleration response of fuselage sidewall
panels on a twin-engine, light aircraft
p0129 a2-18732
On the track of practical forward-swept wing
p0156 a2-19071
Thrust-induced effects on low-speed aerodynamics
of fighter aircraft
[AIAA Paper 81-2612] p0155 a2-19203
An analytical technique for the analysis of
airplane spin stabilization and recovery
[AIAA Paper 82-0243] p0164 a2-19786
Piloted simulation of an on-board trajectory
optimization algorithm
p0167 a2-20296
Development of a digital, integrated automatic
landing system /ITALY/ for steep approach and
landing
p0168 a2-20297
A crack-closure model for predicting fatigue
crack growth under aircraft spectrum loading
p0168 a2-20509
Multi-parameter yield zone model for predicting
spectra crack growth
p0168 a2-20510
We have just begun to create efficient transport
aircraft
p0180 a2-21373
CAD/CAM approach to improving industry
productivity gathers momentum
p0181 a2-21375
Recent advances in applying Free Vortex Sheet
theory to the estimation of vortex flow
Aerodynamics
[AIAA Paper 82-0995] p0183 a2-22045
High angle-of-attack characteristics of
three-surface fighter aircraft
[AIAA Paper 82-0245] p0184 a2-22074
Transonic perturbation analysis of
wing-fuselage-nacelle-pylon configurations with
powered jet exhausts
p0184 a2-22075
C-29
Comparing the relationships between noise level and annoyance in different surveys - A railway noise study.

Evaluation of methods for characterizing surface roughness of composite material for an aeroelastic wing/wing-tip geometries using the elliptic curvelet transform.

Increased capabilities of the Langley 0.3-a Transonic Cryogenic Tunnel for use in cryogenic and other temperatures.

Development and validation of preliminary analytical models for aircraft interior noise prediction.

Evaluation of methods for characterizing surface roughness of composite material for an aeroelastic wing/wing-tip geometries using the elliptic curvelet transform.

Increased capabilities of the Langley 0.3-a Transonic Cryogenic Tunnel for use in cryogenic and other temperatures.

Development and validation of preliminary analytical models for aircraft interior noise prediction.

Robust Kalman filter design for active flutter suppression systems.

Piloted simulator evaluation of a relaxed static stability fighter at high angle-of-attack.

Applications of parameter estimation in the study of spanning airplances.

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

High angle-of-attack characteristics of a forward-swept wing fighter configuration.

The use of linearized aerodynamics and vortex-flow methods in aircraft design.

The prediction of helicopter rotor discrete frequency noise.

Observations and implications of natural laminar flow on practical airplane surfaces.

NASA research on viscometric drag reduction.

Design and flight testing of a digital optimal control general aviation autopilot.
Determination of airplane aerodynamic parameters from flight data at high angles of attack
Assessment of advanced technologies for high performance single-engine business aircrafts
The design integration of wingtip devices for light general aviation aircraft
Analytical study of vortex flows on highly swept delta wings
Wind-tunnel investigation of vortex flows on a highly swept interceptor configuration
An initial look at the supersonic aerodynamics of twin-fuselage aircraft concepts
Wind-tunnel investigation of a full-scale canard-configured general aviation aircraft
A miniature electro-optical air flow sensor
Bonding procedure for Teflon seals
Statistical analysis of piloted simulation of real time trajectory optimization algorithms
Current perspectives on emergency spin-recovery systems
Two-frequency /Omega k/ microwave scatterometer measurements of ocean wave spectra from an aircraft
Determination of airplane model structure from flight data by using modified stepwise regression
Estimation of airplane stability and control derivatives from large amplitude longitudinal maneuvers
Effects of vortex flows on the low-speed aerodynamic characteristics of an arrow wing
Wind-tunnel results for a modified 17-percent-thick low-speed airfoil section
Computation of high Reynolds number internal/external flows
Parametric study of microwave-powered high-altitude airplane platforms designed for linear flight
Management of redundancy in flight control systems using optimal decision theory
General aviation aircraft antennas for the global positioning system
Amplified crossflow disturbances in the laminar boundary layer on swept wings with suction
SEL and EPLF noise duration coefficients for the 747 and T-38 aircraft
Aeroelasticity matters: Some reflections on two decades of testing in the NASA Langley transonic dynamics tunnel
Investigation of severe lightning strike incidents to two USAF F-106A aircraft
A look inside the Langley 16-foot transonic tunnel: User's guide
Research and Technology
Force and moment, flow-visualization, and boundary-layer tests on a miniature orbital model at Mach 6
Wind-tunnel investigation of the effects of blade tip geometry on the interaction of torsional loads and performance for an articulated helicopter rotor

Pressure distributions on three different cruciform aft-tail control surfaces of a canard-wing missile at Mach 1.69, 2.36, and 3.70. Volume I: Traversable tail (NASA-TM-80097)
Numerical analysis of the overflying voltage flow field by using two-dimensional Navier-Stokes equations (NASA-TM-80040)
Limited evaluation of an F-14A airplane utilizing an aileron-rudder interconnect control system in the landing configuration (NASA-TM-80172)
Optimization and performance calculation of dual-rotation propellers (NASA-TP-1946)
Comparison of experimental and theoretical turbulence reduction characteristics for screens, honeycomb, and honeycomb-screen combinations (NASA-TM-1958)
A flight investigation of blade-section aerodynamics for a helicopter main rotor having 10-64C airfoil sections (NASA-TM-83226)
Design and implementation of a telecommunication interface for the TAFL/TCV real-time experiment (NASA-TM-83231)
A general aviation simulator evaluation of a rate-enhanced instrument landing system display (NASA-TP-1960)
Description of a dual fail operational redundant strapdown inertial measurement unit for integrated avionics systems research (NASA-TM-1948)
Prediction of flyover jet noise spectra from static tests (NASA-TM-83219)
Longitudinal 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-1360)
Relations for the thermodynamic and transport properties in the testing environment of the Langley hypersonic CF4 tunnel (NASA-TM-83220)
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION, CONTD

Turbine blade nonlinear structural and life analysis
[AIAA PAPER 82-1056] p0415 A82-34991

Experimental study of the effects of oxygen air on the emissions and stability of a lean premixed combustor
[AIAA PAPER 82-1072] p0415 A82-34992

Advancements in real-time engine simulation technology
[AIAA PAPER 82-1075] p0416 A82-34995

NASA Broad Specification Fuels Combustion Technology program - Pratt and Whitney Aircraft Phase I results and status
[AIAA PAPER 82-1088] p0416 A82-34999

NASA/General Electric broad specification fuels combustion technology program - Phase II results and status
[AIAA PAPER 82-1089] p0416 A82-35000

In-flight acoustic results from an advanced-design propeller at Mach numbers to 0.8
[AIAA PAPER 82-1120] p0416 A82-35017

Evaluation of fuel injection configurations to control carbon and soot formation in small GT combustors
[AIAA PAPER 82-1175] p0417 A82-35041

A computational design method for transonic turbomachinery cascades
[AIAA PAPER 82-0717] p0425 A82-35348

The use of optimization techniques to design controlled diffusion compression blading
[AIAA PAPER 82-0717] p0426 A82-35373

NASA research in aircraft propulsion - Phase II
[AIAA PAPER 82-0717] p0426 A82-35389

The effect of rotor blade thickness and surface finish on the performance of a small axial flow turbine
[AIAA PAPER 82-0722] p0428 A82-35390

Structural dynamics of slender, hollow, fan blades with composite inlays
[AIAA PAPER 82-0724] p0430 A82-35456

Composite containment systems for jet engines
[ASBE PAPEB 82-3541] p0435 A82-37062

Kevlar/T300-15 polyimide matrix composite for a complex shaped V/STOL nacelle
[AIAA PAPER 82-1098] p0437 A82-37608

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 82-1208] p0439 A82-37716

Performance of PTFE-lined composite journal bearings
[AIAA PAPER 82-1209] p0439 A82-37716
COLOMBIAL AEROBATIC FLYING, BOBBAB. IOLLA.

A finite difference method for the calculation of transonic flow around a wing, based on small perturbation theory

Improved 2D thin wing antenna systems for use on helicopters

The determination of gust loads on nonlinear aeroelastic models with sweptback and tapered tips

Instrumented aircraft verification of clear-air radar detection of low-level wind shear

Simulation of phased excitation due to hazardous wind shear

An evaluation of the Rosemount ice detector for cloud water content measurements

Optimum performance and wake geometry of co-axial rotor in hover

NATIONAL DEFENCE HEADQUARTERS, OTTAWA (ONTARIO).

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

NATIONAL GAS TURBINE ESTABLISHMENT, PERTH.

Application and measurement of time-variant, three-dimensional flows in military aircraft intakes

NATIONAL INST. FOR AERONAUTICS AND SYSTEMS

Use of composite materials for helicopter rotor blades

NATIONAL OCEAN SURVEY, ROCKFORD, IL.

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

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, BOULDER, COLO.

Optimum performance and wake geometry of co-axial rotor in hover

NATIONAL RESEARCH COUNCIL OF CANADA, OTTAWA (ONTARIO).

Some piloting experiences with multifunction isometric side-arm controllers in a helicopter

Evaluations of helicopter instrument-flight handling qualities

NATIONAL SECURITY STORES, NORFOLK, VA.

An airport wind shear detection and warning system using Doppler radar

NATIONAL TRANSPORTATION SAFETY BOARD, WASHINGTON, D. C.

Special investigation report. Search and rescue procedures and arming of emergency locator transmitters: Aircraft accident near Michigan City, Indiana, 7 December, 1980

Aircraft accident report - Universal Airlines, Inc., Beech 65-1880/Excaliber Conversion,
Dilution of Precision (DOP) concept for selecting navigation measurements

[AD-100670] p0253 H82-18197

NETWORK ANALYSIS CORP., VIENNA, VA.
National Airspace Data Interchange Network (NADIN) support of Remote Maintenance Monitoring System (RMMM)
[AD-1109125] p0262 H82-19160

NORTHWEST UNIV., CHICAGO.
Demonstration of radar reflector detection and ground clutter suppression using airborne weather and mapping radar
p0500 A82-40532

NEW JERSEY INST. OF TECH., NEWARK.
Predictive model for jet engine test cell opacity
[AD-1107550] p0610 H82-33397

NEW MEXICO UNIV., ALBUQUERQUE.
Design of airport pavements for expansive soils
[AD-1106660] p0041 H82-11313

NEW SOUTH WALES UNIV., KENSINGTON (AUSTRALIA).
Stability analysis of the twin mode model of coupled flexural/torsional vibrations in turboshafts
p0143 H82-15057

NEW SOUTH WALES UNIV., SYDNEY (AUSTRALIA).
Acoustic emission from free jets
p0359 H82-22962

NEW YORK UNIV., NEW YORK.
Design of supercritical swept wings
p0223 A82-32826

NEW YORK (LOUIS) LTd., CROYDON (ENGLAND).
The influence of sensor and actuator characteristics on overall helicopter RCS design
p0251 H82-18171

NIELSEN ENGINEERING AND RESEARCH, INC., MOUNTAIN VIEW, CALIF.
Integration of a code for aeroelastic design of conventional and composite wings into ASCET, an aircraft synthesis program
[ASA-CH-137005] p0189 H82-16069

NORTH CAROLINA AGRICULTURAL AND TECHNICAL STATE UNIV., GREENSBORO.
Impact-initiated damage thresholds in composites
p0018 A82-12028

NORTH CAROLINA STATE UNIV., RALEIGH.
Aircraft wing trailing-edge noise
[ASA-CH-160052] p0034 H82-11039

Automated design of minimum drag light aircraft fuselages and nacelles
[ASA-CH-160913] p0368 H82-23238

NORTH CAROLINA UNIV., RALEIGH.
An advanced programmable/reconfigurable color graphics display system for crew station technology research
[AAIA-81-314] p0051 A82-13516

NORTHEASTERN UNIV., BOSTON, MASS.
Engine dynamic analysis with general nonlinear finite element codes. II - Bearing element implementation, overall aeroelastic characteristics and benchmarking [NASA-PAPER 82-02-252] p0630 A82-35462

Control electronics for air-borne quadrupole ion mass spectrometer
[AD-115309] p0560 H82-30356

NORTHERN CORP., HANOVER, CALIF.
Vortex flow correlation
[AD-1108725] p0307 H82-21576

Tail configurations for highly maneuverable combat aircraft
p0268 H82-22201

Water tunnel flow visualization and wind tunnel data analysis of the F/A-18 [NASA-CH-165059] p0404 H82-25215

NOTRE DAME UNIV., IND.
Experimental studies of the Eppler 61 airfoil at low Reynolds numbers [AAIA PAPER 82-0305] p0164 A82-19796

Stability and flutter analysis of turbine blades at low speed
p0142 H82-18801

Alternatives for jet engine control
[ASA-CH-160896] p0269 H82-23247

OAK RIDGE NATIONAL LAB., TENN.
Testing of critical powered runway distance and taxiway markers [AD-A114555] p0612 H82-33408

OFFICE NATIONAL D'ETUDES ET DE RECHERCHES AEROSPATIALES, PARIS (FRANCE).
Application of the OH2/3 dynamic stall model to a helicopter blade in forward flight
p0250 H82-18161

OFFICE NATIONAL D'ETUDES ET DE RECHERCHES AEROSPATIALES, PARIS (FRANCE).
Wind tunnel tests of powered models: A comparison of two methods of simulating the jets of jet engines
p0095 H82-13007

Studies of air inlets at Reynolds numbers comparable to flight in OH2/3 F1 and SIA wind tunnels
p0096 H82-13001

[ASA-TT-713] p0343 H82-21589

Research on an induction driven cryogenic wind tunnel
p136 H82-14038

Multivariable aircraft control by maneuver commands: An application to air to surface missile technology
p0262 H82-19154

Electrical ground testing of aircraft antistatic protection
p0262 H82-19156

Induction driven transonic wind tunnel test: Operation at room temperature and cryogenic adaptation
p0262 H82-15195

La Recherche Aérospatiale, bi-monthly Bulletin number 1981-1, September - October 1981
[ASA-TT-725] p0343 H82-22145

Helicopter rotor performance improvement by utilization of swept-back parabolic blade tip
p0262 H82-22151

Real time digital filtering test in the S1 continuous wind tunnel at Bodane
p0363 H82-22152

The influence of protective treatment on the mechanical properties of superalloy parts
p0262 H82-22180

Application of the theory of bifurcations to the study of the loss of control in combat aircraft
p0367 H82-22190

Generation of noise by turbulence [OH2/3-1981-1] p0367 H82-22190

La Recherche Aérospatiale, bi-monthly bulletin, number 1981-6, November-December 1981
[ASA-TT-761] p0367 H82-22185

Aeroelasticy of compressor blades: Subsonic stall flutter
p0414 H82-26189

Wind tunnel studies of store separation with load factor. Frewdrops and captive trajectories [OH2/3-1981-2] p0367 H82-22186

Computation of three dimensional unsteady nonuniform flow in the blade-free annular channel of a turbomachine [OMMRA-WT-1982-2] p0592 H82-32372

OFFICE OF NAVAL RESEARCH, LONDON (ENGLAND).
A technical assessment of aeronautical engineering in Israel [AD-A106900] p0462 H82-27218

OHIO STATE UNIV., CLEVELAND.
Effect of tip vane nose on the performance and flow field of a rotor in hover
p0498 A82-40551

OHIO STATE UNIV., COLUMBUS.
Improving the MLS through enhanced cockpit displays
p009 A82-10669

Aerodynamic characteristics of airfoils with ice accretions [AAIA PAPER 82-0262] p0104 A82-22001

Development of a computer based presentation of non-steady helicopter rotor flows [AD-A105807] p0199 H82-17113

Rotor flow research in low speed helicopter flight [AD-A107873] p0199 H82-17132

Non-steady velocity measurement of the wake of a helicopter rotor at low advance ratio [AD-A1107722] p0199 H82-17133

Terrain model animation [AD-A110791] p0215 H82-18087

Hover tests of a model H-force rotor
p0250 H82-18159

C-40
Aeroelastic characteristics of a mistuned bladed-disc assembly

A tactical display aid for primary flight training

GTD analysis of airborne antennas radiating in the presence of nearby dielectric layers

Performance evaluation of a kinesthetic-tactile display

Finite 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

Evaluation of the design, construction and operation of a gas fueled engine driven heat pump

Fuel quality processing study, volume 1

Aerodynamic performance of slender wings with separated flows

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

Evaluation of the design, construction and operation of a gas fueled engine driven heat pump
Performance of SBC II in gas-turbine combustors: Alternative-fuel-utilization program  
[DBS-2-01047] p0559 B82-32518

RADIO TECHNICAL COMMISSION FOR AERONAUTICS, WASHINGTON, D.C.
Software considerations in airborne systems and equipment certification  
[STCA/DO-176] p0720 B82-16759
PB broadcast interference related to airborne ILS, VOR and VHF communications  
[STCA/DO-176] p0260 B82-19419
Investigation of technical requirements  
[STCA/DO-176] p0260 B82-19420
Investigation of airborne VHF communication and navigation equipment  
[STCA/DO-176] p0260 B82-19421
Investigation of the effects of airborne installation factors on receiver interference  
[STCA/DO-176] p0260 B82-19422
FAA/FCC coordination procedures for PB broadcast station AI  
[STCA/DO-176] p0260 B82-19423
Minimum operational performance standards for automatic direction finding (ADP) equipment  
[STCA/DO-176] p0523 B82-28270

BAND CORP., SAN ANTONIO, CALIF.
An approach to modeling the cost of ownership for aircraft systems  
[AD-A110083] p0102 B82-13979
Distributed intelligence for air fleet control  
[AD-A106611] p0253 B82-18195
Proportional, part improvement and adaptive modification strategies: Lessons from past aircraft modification projects  
[AD-A111595] p0463 B82-27220
AUTOPILOT: A distributed planner for air fleet control  
[AD-A1107139] p0467 B82-27269
Scenarios for evolution of air traffic control  
[AD-A112566] p0467 B82-27270
Reflections on an F-43 in flight emergency  
[AD-A116873] p0605 B82-33358
Pal's theorems for nonstationary processes  
[AD-A117089] p0615 B82-34135

REINSEL POLYTECHNIC INST., THIR, N.Y.
Determination and analysis of jet and missile fuel deposits  
[AD-A10558] p0900 B82-12248
Composite structural materials  
[NASA-CE-15121] p0193 B82-16182
Parallel computation for developing nonlinear control procedures  
[AD-A1007914] p0209 B82-17227
Resistance of corrosion fatigue  
[NASA-CE-168804] 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 B82-26318

RESEARCH INST. OF NATIONAL DEFENCE, LONDON (SWEDEN)
Detection of obstacles by low flying aircraft  
[FOA-C-30277-21] p0140 B82-15026
Transient measurements under electric pulse excitation in 37 Viggen aircraft  
[FOA-C-30263-41] p0370 B82-23049

RESEARCH INST. OF NATIONAL DEFENCE, STOCKHOLM (SWEDEN)
Lighting effects on aircraft and components. Literature study on lightning strikes and protection  
[FOA-C-20380-09] p0026 B82-10024
RESEARCH INST. OF NATIONAL DEFENCE, BADA (SWEBAD), Radiometer for aircraft instruments  
[AD-A10136-11] p0356 B82-22286
RESEARCH TRUST, RESEARCH TRUST, R.C.  An advanced programmable/reconfigurable color graphics display system for crew station technology research  
[AD-A1 81-2314] p0551 B82-13516
Developments to improve the noise and combustion emissions on the Fokker F28 aircraft and its Rolls-royce RB193-555 engines. Section 1:
Development of the new internal 10-die mixer

[PHB-90061] p031b H82-21207

Engines for air transport

[PHB-90062] p0318 H82-21208

Allowing for the wall boundary layer in a stage of an axial compressor

[PHB-90067] p0319 H82-21209

The Rolls Royce role in aircraft noise reduction

[PHB-90069] p0319 H82-21210

The mechanical testing of compressors and turbines for aircraft gas turbine engines

[PHB-90070] p0319 H82-21211

Test methodology in aerospace engine development

[PHB-90055] p0321 H82-21247

Noise certification

[PHB-90053] p0322 H82-21780

Standards in aircraft noise certification

[PHB-90052] p0322 H82-22005

The benefits of data exchange

[PHB-90048] p0223 H82-22095

Defects and their effect on the behavior of gas turbine discs

[PHB-90071] p0346 H82-22178

88211 powerplant deterioration: Review of current situation and lessons learned

[PHB-90073] p0355 H82-22270

The contribution of thermal barrier coatings to improvements in the life and performance of gas turbine components

[PHB-90076] p0355 H82-22271

Development of a correlated finite element dynamic model of a complete engine

[PHB-90081] p0355 H82-22272

Encounters with surge: Some experiences of development of axial compressors for gas turbine engines

[PHB-90071] p0355 H82-22274

Deformable power

[PHB-90078] p0355 H82-22275

Fuel efficiency engines for large transport aircraft

[PHB-90082] p0355 H82-22276

Collaborative development of aero-engines

[PHB-90083] p0355 H82-22277

Multi-mission V/STOL with vectored thrust engines

[PHB-90084] p0356 H82-22278

Directional solidification: Project 82

[PHB-90086] p0359 H82-22279

Powder metallurgical innovations for hot section alloys in aero-engine applications

[PHB-90072] p0357 H82-22358

Rolls-Royce Ltd., LONDON (ENGLAND).

Mechanical advances in the design of small turbocharger engines

[PHB-90071] p0207 H82-17208

An alternative approach to engineering structures using monitoring systems

[PHB-90071] p0209 H82-17223

Rolls-Royce Ltd., LONDON (ENGLAND).

The outlook for advanced transport aircraft

[PHB-90071] p0209 H82-11274

Rolls-Royce Ltd., WATFORD (ENGLAND).

Measurement techniques used to assess the installed power of a helicopter engine

[PHB-90071] p0246 H82-18133

Bosch Air Development Center, GRIFFISS AFB, N.Y.

Forward polarization ratios in a sample of 30 KHz sftics received at altitudes from 0 to 70 km

[AD-A119012] p0258 H82-10644

Narrow frequency radiation

[AD-A119022] p0414 H82-25424

Tactical systems approach to interference of 2nd echelon moving targets using real time sensors

[PHB-90072] p0272 H82-27306

Bosch Engineering and Research, Inc., ELKINS, VILLAGE, W.V.

The effect of ejector augmentation on test-section flow quality in the Calypso P-57 transonic wind tunnel

[AD-A119074] p0236 H82-24658

Narrow field aerodynamics and optical propagation characteristics of a large-scale turret model

[AD-A119190] p0529 H82-20624

Royal Air Force, DERBY (ENGLAND).

Detection and prevention of corrosion is Royal Air Force aircraft

[PHB-90071] p0311 H82-17351

Bosch Aircraft Establishment, RONDON (ENGLAND).

Adaptation of a turbine test facility to high-temperature research

[PHB-90071] p0404 H82-11089

Some R & D research on shielded and unshielded fuselage mounted air intakes at subsonic and supersonic speeds

[PHB-90071] p0093 H82-13068

Bosch Aircraft Establishment, FAIRBURN (ENGLAND).

Design considerations for optimal flight control systems

[PHB-90071] p0395 H82-11077

Use of a helmet-mounted matrix display for presenting energy-manoeuverability information during simulated closed combat

[PHB-90071] p0192 H82-13061

A true air speed sensor for miniature unmanned aircraft

[PHB-90071] p0133 H82-14086

The design of a jet catcher

[PHB-90071] p0135 H82-14102

An afterbody drag balance

[PHB-90071] p0135 H82-14103

Integrated control of mechanical systems for future combat aircraft

[PHB-90071] p0197 H82-17117

Corrosion control measures for military aircraft: Present UK requirements and future developments

[PHB-90071] p0212 H82-17358

The measurement of the mobility of structures at acoustic frequencies

[PHB-90071] p0248 H82-18149

Preliminary investigation into the addition of auxiliary longitudinal thrust on helicopter agility

[PHB-90071] p0269 H82-18155

Some unsteady aerodynamic effects on helicopter rotors

[PHB-90071] p0250 H82-18162

New developments in cockpit-human interfaces

[PHB-90071] p0255 H82-18215

A design for a 32-channel multiplexer

[PHB-90071] p0259 H82-18503

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

[PHB-90071] p0267 H82-19223

A summary of experimental data on wing characteristics at transonic speeds

[PHB-90071] p0328 H82-21155

Low-speed measurements of the static pressure distribution and overall forces on a cambered and a symmetrical airdo ght wing of aspect ratio 1.4

[PHB-90071] p0321 H82-22144

Pressure measurements on a wing oscillating in supersonic flow

[PHB-90071] p0312 H82-22161

Pressure distributions on some delta wings at M = a

[PHB-90071] p0313 H82-22163

Reduction of structural vibration by a dynamic absorber

[PHB-90071] p0316 H82-21190

Some remarks on buffeting

[PHB-90071] p0319 H82-21216

The application of subsonic theoretical aerodynamics to active controls

[PHB-90071] p0320 H82-21217

Non-destructive inspection and the implementation of a damage tolerant design philosophy

[PHB-90071] p0322 H82-21601

Some applications of Hartmann-type sources in aircraft noise research

[PHB-90071] p0322 H82-22007

The Royal Aircraft Establishment: 10 years of research

[PHB-90071] p0343 H82-22195

Gunfire blast pressure predictions

[PHB-90071] p0345 H82-22170

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

[PHB-90071] p347 H82-22195

Airfield visual aids research at the Royal Aircraft Establishment

[PHB-90071] p351 H82-22242

C-49

CORPORATE SOURCE INDEX
Dynamic analysis of a rotor blade with flap and
The effect of barriers on wave propagation
Use of optimization to predict the effect of
Design for active and passive flutter
An overview of optimal control in aerospace systems

Experimental modal analysis of the fuselage
Hybrid state vector methods for structural
Aeroelastic stability of rotor blades using

The annoyance of impulsive helicopter noise
Past applications and future potential of
Financial analysis for bearingless rotor blade aeroelasticity

The development and its investigation
The 400-Hertz constant-speed electrical generation system
New techniques in data retrieval and display
A new all-purpose digital flight data recorder

The effect of lag freedom and flap-pitch coupling
The motion of spinning blades
Selected parameters on commuter aircraft

The influence of Coriolis forces on gyroscopic motion of spinning blades

Static and dynamic investigations for the model of a wind rotor
Loading cycles and material data for the layout of a wind turbine of special hub concept
The development of a rotorcraft propulsion system

Analysis and environmental fate of Air Force distillate and high density fuels

Analysis and computational methods

Analysis and computational methods

The preparation and characterization of mixtures of polycyclopentadienes as solid ramjet fuels
An exploratory research and development program leading to specifications for aviation turbine fuel from whole crude shale oil, Part 5: Production of specifications of JP-8 fuel from geopetroleum shale oil

Sensor failure detection system
Development of low-order model of an 1-wing aircraft by system identification

Some aspects of jet dynamics and their implications for VTOL research
Dynamics interface analysis, volume 1
Dynamics interface analysis, volume 2

Development of a rotorcraft propulsion system

Development of a rotorcraft propulsion system
TACTICAL AIR WARFARE CENTER, MELB AFB, FLA.

Global and regional weather prediction models applied to alternate airport criteria on a quadruplet heavy lift airship [NASA-CR-165528] p0152 882-21222

TECHNICAL UNIVERSITY, BRUSSELS (WEST GERMANY).

A method of characteristics solution for the prediction of acoustic source strength and spectral content of aeroacoustic noise for a finite oscillating supersonic cascade with thickness effects [NASA-CR-165397] p0036 882-21217

TENNESSEE UNIV., KNOXVILLE.

Prediction of aerodynamic loads on aircraft with external stores at supersonic speed [NASA-CR-165397] p0343 882-21222

TENNESSEE UNIV., SPACE INST., TULLAHOMA.

Simulation of propulsive excitation due to hazardous wind shear [NASA-CR-165397] p0177 882-21222

TENNESSEE UNIV., COLLEGE STATION.

Summary of theoretical considerations and wind tunnel tests of an aerodynamic spoiler for stall proofing a general aviation airplane

[HASA-CR-165100] p0187 B82-16006

Analytical study of twin-jet shielding

[HASA-CR-165102] p0193 B82-16801

Analytical study of twin-jet shielding

[HASA-CR-165103] p0196 B82-16802

Analytical study of twin-jet shielding

[HASA-CR-165105] p0198 B82-16804

Analytical study of twin-jet shielding

[HASA-CR-165106] p0196 B82-16805

The role of coherent structures in the generation of noise for subsonic jets

[HASA-CR-166764] p0350 B82-22947

Development of experimentally compatible subsystems methods for the analysis of aircraft structures:

[AD-A112202] p0395 B82-24198

TTRONIC HELICOPTER, FORT WORTH, TX.

Investigation of the structural degradation and personnel hazards resulting from helicopter composite structures exposed to fires and/or explosions

[AD-A104975] p0086 B82-12057

For the helicopter cockpit designer uses digital avionics

p0091 B82-13049

Helicopter landing gear design and test criteria

p0101 B82-15035

Correlating measured and predicted inplane stability characteristics for an advanced bearingless rotor

[HASA-CR-166260] p0204 B82-17154

Helicopter propulsion systems: Past, present and future

p0206 B82-17204

Rotorcraft flight simulation computer program C8I with DATAMAP interface. Volume 2: Programmer’s manual

[AD-A108290] p0258 B82-18231

Rotorcraft flight simulation computer program C8I with DATAMAP interface. Volume 1: User’s manual

[AD-A108290] p0258 B82-18231

F/STOL tilt rotor research aircraft. Volume 1: General information, revision C

[HASA-CR-166347] p0395 B82-24194

F/STOL tilt rotor research aircraft. Volume 2: Ship 1 instrumentation

[HASA-CR-166348] p0395 B82-24195

F/STOL tilt rotor research aircraft. Volume 3: Ship 2 instrumentation

[HASA-CR-166349] p0395 B82-24196

F/STOL tilt rotor research aircraft. Volume 4: CFS technical data

[HASA-CR-166350] p0395 B82-24197

Crashworthy airplane design concepts: Fabrication and testing

[HASA-CR-3603] p0613 B82-33735

THERO ELECTRON CORP.. WALTHAM, MASS.

Open-cycle vapor compression heat pump

[PB82-110503] p0259 B82-16553

TBOICOS-COMP. PARIS). (FRANCE).

HEAD up displays

p0092 B82-13052

TOKIO UNIV., JAPAN.

Aerodynamic response of a blade in pitching oscillation with partial and full separation

p0142 B82-15047

Three-dimensional analysis of cascade flow in parallel shear flow

p0144 B82-15062

An extension of the local momentum theory to the rotors operating in twisted flow fields

p0245 B82-18123

A numerical approach to co-axial rotor aerodynamics

p0249 B82-18157

TOLERO UNIV., OHIO.

Aerelastic characteristics of a cascade of mistuned blades in subsonic and supersonic flow

p0092 B82-13052

A geometric approach to multivariable control system synthesis

p0030 B82-10056

Fracture mechanics based modeling of the corrosion fatigue process

p0210 B82-17344

TOKYO RESEARCH AND DEVELOPMENT CENTER, KAWASAKI (JAPAN).

Self excited flow oscillation in the low pressure steam turbine cascade

p0162 B82-15049

TRANSPORTATION RESEARCH BOARD, WASHINGTON, D.C.

Air service, airport access and future technology

[PB82-105584] p0192 B82-16100

Pavement management and rehabilitation of Portland cement concrete pavements

[PB82-131304] p0357 B82-22392

TRANSPORTATION SYSTEMS CENTER, CARNEGIE, BASS.

Evaluation of tropo-C enroute navigation and non-precision approaches within the State of Vermont

p0124 B82-18160

Chicago monostatic acoustic vortex sensing system. Volume 2: Decay of B-707 and DC-8 vortices

[AD-A105918] p0302 B82-20157

Statistical analysis and time series modeling of air traffic operations data from service stations and terminal radar approach control facilities: Two case studies

[AD-A108973] p0304 B82-20172

Test plan for SSR

[AD-A109503] p0307 B82-20392

B-747 vortex alleviation flight tests: Ground-based sensor measurements

p0669 B82-27287

An analysis of selected enhancements to the en route central computing complex

[AD-A113575] p0679 B82-28044

TRIDENT BRASSER CO., CLEVELAND, OHIO.

Effects of ultra-clean and centrifugal filtration on rolling-element bearing life

[AD-A107906] p0190 B82-16079

Multifunction multiband airborne radio architecture study

[AD-A114627] p0528 B82-20523

TRW, INC., CLEVELAND, OHIO.

Fabrication of boron/aluminum fan blades for SCB engines

[HASA-CR-165298] p0192 B82-16176

TUFTS UNIV., REEDFORD, BASS.

Low cost programmable multimsulator facility

[AD-A114627] p0528 B82-20523

Justification for, and design of, an economical programmable multimsulator flight simulator

p024 A82-36969

TUSKER BIS.

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

[AIWA PAPER 82-1264] p019 A82-35091

UNITED TECHNOLOGIES CORP., EAST HARTFORD, CONN.

Development and operating characteristics of an advanced two-stage combustor

[AIWA PAPER 82-0191] p0116 B82-17833

The outlook for advanced transport aircraft

[HASA-CR-165298] p0192 B82-16176

Bass Broad Specification Fuels Combustion Technology program - Pratt and Whitney Aircraft Phase I results and status

[AIWA PAPER 82-1089] p0146 A82-34999

Interim review of the Energy Efficient Engine /83/ Program

[ASSE PAPER 82-GT-271] p0282 A82-35488

Bass SCI programs - Benefits to Pratt and Whitney engines

[ASSE PAPER 82-GT-272] p0282 A82-35488

SB-600 test program

p0247 B82-18141
The role of voice technology in advanced helicopter cockpits

Fracture mechanics criteria for turbine engine hot section components

Hot isostatically pressed manufacture of high strength 76 disk and seal shapes

UNITED TECHNOLOGIES CORP., STRATFORD, CONN.

Turbine technology demonstrator altitude expansion and operational tests

UNITED TECHNOLOGIES CORP., GUILFORD, CT.

Aeroelastic analysis for helicopter rotors with blade appendage

Aerodynamic analysis for helicopter rotors with blade appendage, Pennsylvania Aeronautical University, Pennsylvania

C-50
Bifurcation analysis of nonlinear stability of clustering of vield turbines with blade cyclic-pitch optimization of auto-pilot equations for rapid design of helicopter rotor blades for optimum identification of terms to define unconstrained Stability of boundary layers with porous suction impact landing trajectories

Transportation systems evaluation methodology development and applications, phase 3 Optimal aircraft landing patterns for manual noise impact The Schladitz fuel injector: An initial performance evaluation without burning Limiting performance of nonlinear systems with applications to helicopter vibration control problems Identification of terms to define unconstrained air transportation demands Flap difference computation of the conical flow field over a delta wing

Transonic three-dimensional viscous-inviscid interaction for wing-body configuration analysis Large-scale wind tunnel tests of a sting-supported V/STOL lighter model at high angles of attack Low speed test data of the inlet designed for a tandem-fan V/STOL helicirle Prediction of aerodynamic characteristics of highly maneuverable configurations

An experimental investigation of interfacial temperatures in blade-seal material rubbing of aircraft compressors Application of singular perturbation theory

Optimization of auto-pilot equations for rapid estimation of helicopter control settings Design of helicopter rotor blades for optimum dynamic characteristics

<table>
<thead>
<tr>
<th>CONTRACT NUMBER INDEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>534-02-13-21</td>
</tr>
<tr>
<td>504-04 882-25214</td>
</tr>
<tr>
<td>50526 882-20299</td>
</tr>
<tr>
<td>534-03-13-01</td>
</tr>
<tr>
<td>50397 882-24301</td>
</tr>
<tr>
<td>534-04-13-56</td>
</tr>
<tr>
<td>50351 882-22239</td>
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<tr>
<td>534-04-13-55</td>
</tr>
<tr>
<td>50406 882-25235</td>
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<tr>
<td>534-04-13-64</td>
</tr>
<tr>
<td>50301 882-20145</td>
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<tr>
<td>534-04-13-60</td>
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<tr>
<td>50266 882-19217</td>
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<tr>
<td>534-05-00-01-72</td>
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<tr>
<td>50313 882-21166</td>
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<tr>
<td>535-03-11</td>
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<tr>
<td>50531 882-29271</td>
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<td>535-03-12</td>
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<td>50194 882-16808</td>
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<td>50467 882-26219</td>
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<td>50531 882-29268</td>
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<td>50101 882-13908</td>
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<td>50036 882-21193</td>
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<td>778-36-05</td>
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<tr>
<td>50264 882-19205</td>
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<tr>
<td>922-21-01</td>
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<tr>
<td>50085 882-12042</td>
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<tr>
<td>992-16-05-03</td>
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<td>50132 882-14075</td>
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<td>992-21-01</td>
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<tr>
<td>50535 882-29271</td>
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<td>516-53-03-12</td>
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<td>530-04-13-02</td>
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<td>50035 882-11050</td>
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<td>530-03-13-07</td>
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<tr>
<td>50463 882-27233</td>
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<td>530-14-13-01</td>
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<td>50131 882-14058</td>
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<td>533-01-11</td>
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<td>50560 882-30400</td>
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<td>533-01-32</td>
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<td>533-01-43-08</td>
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<td>50535 882-29313</td>
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<td>533-01-43-10</td>
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<td>50572 882-31685</td>
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<td>50404 882-11391</td>
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<td>534-02-13-01</td>
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<tr>
<td>50260 882-19134</td>
</tr>
</tbody>
</table>
### Typical Report/Accession Number Index Listing

<table>
<thead>
<tr>
<th>Report Number</th>
<th>Page Number</th>
<th>Accession Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>A7744</td>
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<td>A8720</td>
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AERONAUTICAL ENGINEERING
A CONTINUING BIBLIOGRAPHY

Abstracts
January — December 1982

TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>SP-7037 Supplement</th>
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<tbody>
<tr>
<td>145</td>
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