Aeronautical Engineering
1979 Cumulative Index

January 1980

NASA SP-7037 (118)

National Aeronautics and Space Administration

CASE FIL COPY
<table>
<thead>
<tr>
<th>Document</th>
<th>Page Range</th>
<th>Date</th>
<th>Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>NASA SP-7037(106)</td>
<td>1-50</td>
<td>February 1979</td>
<td>January 1979</td>
</tr>
<tr>
<td>NASA SP-7037(107)</td>
<td>51-109</td>
<td>March 1979</td>
<td>February 1979</td>
</tr>
<tr>
<td>NASA SP-7037(108)</td>
<td>111-181</td>
<td>April 1979</td>
<td>March 1979</td>
</tr>
<tr>
<td>NASA SP-7037(109)</td>
<td>183-245</td>
<td>May 1979</td>
<td>April 1979</td>
</tr>
<tr>
<td>NASA SP-7037(110)</td>
<td>247-313</td>
<td>June 1979</td>
<td>May 1979</td>
</tr>
<tr>
<td>NASA SP-7037(111)</td>
<td>315-388</td>
<td>July 1979</td>
<td>June 1979</td>
</tr>
<tr>
<td>NASA SP-7037(112)</td>
<td>389-445</td>
<td>August 1979</td>
<td>July 1979</td>
</tr>
<tr>
<td>NASA SP-7037(113)</td>
<td>447-505</td>
<td>September 1979</td>
<td>August 1979</td>
</tr>
<tr>
<td>NASA SP-7037(114)</td>
<td>507-559</td>
<td>October 1979</td>
<td>September 1979</td>
</tr>
<tr>
<td>NASA SP-7037(115)</td>
<td>561-600</td>
<td>November 1979</td>
<td>October 1979</td>
</tr>
<tr>
<td>NASA SP-7037(116)</td>
<td>601-677</td>
<td>December 1979</td>
<td>November 1979</td>
</tr>
<tr>
<td>NASA SP-7037(117)</td>
<td>679-722</td>
<td>January 1980</td>
<td>December 1979</td>
</tr>
</tbody>
</table>

This bibliography was prepared by the NASA Scientific and Technical Information Facility operated for the National Aeronautics and Space Administration by Informatics Information Systems Company.
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., p0479 N79-23888. To assist the user in binding Supplements SP-7037 (106) through SP-7037 (117), a title page is included in the back of this Cumulative Index.
A CUMULATIVE INDEX
TO
AERONAUTICAL ENGINEERING
A Continuing Bibliography

This Cumulative Index supersedes the indexes contained in supplements SP-7037(106) through SP-7037(117).

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

WHAT THIS CUMULATIVE INDEX IS

This publication is a cumulative index to the abstracts contained in NASA SP-7037(106) through NASA SP-7037(117) 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 (N79-10000 series).
2. AIAA entries by their IAA accession numbers (A79-10000 series).

HOW THIS CUMULATIVE INDEX IS ORGANIZED

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

HOW TO USE THE SUBJECT INDEX

Two types of cross-references appear in the subject index:

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

   AIRCRAFT PROTUBERANCES
   U PROTUBERANCES
   FLIGHT PERFORMANCE
   U FLIGHT CHARACTERISTICS

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

   FLOW RESISTANCE
   NT AERODYNAMIC DRAG
   NT FRICTION DRAG
   NT SUPERSONIC DRAG

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

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

illustrates a case where two references on different topics are listed under the same subject term.
HOW TO USE THE PERSONAL AUTHOR INDEX

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

EMELIANOV, M. D.

and

YEMELYANOV, M. D.

HOW TO USE THE CORPORATE SOURCE INDEX

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

BOEING CO., SEATTLE, WASH. MILITARY AIRCRAFT SYSTEMS DIV.

BOEING CO., SEATTLE, WASH.

HOW TO USE THE CONTRACT NUMBER INDEX

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

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

HOW TO USE THE REPORT/ACCESSION NUMBER INDEX

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

TP-924
ONERA-TP-924

IDENTIFICATION OF DESIRED SUPPLEMENT

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

Page 331 will be found in Supplement 111.

AVAILABILITY OF DOCUMENTS

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

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

**AERONAUTICAL ENGINEERING**

1979 Cumulative Index

#### Typical Subject Index Listing

<table>
<thead>
<tr>
<th>Subject Heading</th>
<th>Title</th>
<th>Page Number</th>
<th>Accession Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-7 AIRCRAFT</td>
<td>Defects experienced in the production of advanced composite outer wings for the A-7D attack aircraft</td>
<td>p0115</td>
<td>179-17066</td>
</tr>
<tr>
<td></td>
<td>Computational optimization and wind tunnel test of transonic wing designs</td>
<td>p0200</td>
<td>179-23526</td>
</tr>
<tr>
<td></td>
<td>Boron/aluminum landing gear for Navy aircraft --- A-7 aircraft nose wheel linkages</td>
<td>p0101</td>
<td>179-13028</td>
</tr>
<tr>
<td></td>
<td>The development and implementation of algorithms for an A-7F performance calculator</td>
<td>p0232</td>
<td>179-16801</td>
</tr>
<tr>
<td></td>
<td>Software requirements for the A-7F aircraft</td>
<td>p0304</td>
<td>179-18979</td>
</tr>
<tr>
<td></td>
<td>AAE5/AA5-C control and display interface</td>
<td>p0495</td>
<td>179-24992</td>
</tr>
<tr>
<td></td>
<td>AAE5 laboratory simulator requirements</td>
<td>p0103</td>
<td>179-2153</td>
</tr>
<tr>
<td></td>
<td>Temperature trends and maintenance worklife requirements for the A-7, F-4, and F-10 aircraft</td>
<td>p0716</td>
<td>179-2153</td>
</tr>
<tr>
<td>A-10 AIRCRAFT</td>
<td>The Fairchild can-opener - Shturmovik of the eighties</td>
<td>p0455</td>
<td>179-36773</td>
</tr>
<tr>
<td></td>
<td>Night/Adverse Weather A-10 evaluator program</td>
<td>p0456</td>
<td>179-36779</td>
</tr>
<tr>
<td></td>
<td>Air quality analysis of possible F-15 and A-10 aircraft engine modifications to reduce pollution</td>
<td>p0145</td>
<td>179-14107</td>
</tr>
<tr>
<td></td>
<td>A-10 static structural test program</td>
<td>p0715</td>
<td>179-33912</td>
</tr>
<tr>
<td>A-300 AIRCRAFT</td>
<td>Crack-free and cracked life of the preskinned cabin of the A 300 S – Calculation, tests and design measurements to improve damage tolerance</td>
<td>p0156</td>
<td>179-20119</td>
</tr>
<tr>
<td></td>
<td>Effect of the model vertical position in a slotted well wind tunnel</td>
<td>p0440</td>
<td>179-23119</td>
</tr>
<tr>
<td></td>
<td>A comparison of predictions obtained from wind tunnel tests and the results from cruising flight: Airbus and Concord --- conferences</td>
<td>p0663</td>
<td>179-31136</td>
</tr>
<tr>
<td>ABSORPTION</td>
<td>Recent advances in radar design</td>
<td>p0637</td>
<td>179-49574</td>
</tr>
<tr>
<td>ABLATION</td>
<td>Flow field calibration results for the ARDC High Enthalpy Ablation Test Facility /HEAT/</td>
<td>p0114</td>
<td>179-17622</td>
</tr>
<tr>
<td></td>
<td>Laser balancing demonstration on a high-speed flexible rotor</td>
<td>p0391</td>
<td>179-32351</td>
</tr>
<tr>
<td></td>
<td>Transient ablation of Teflon in intense radiative and convective environments</td>
<td>p0462</td>
<td>179-38123</td>
</tr>
<tr>
<td>ABLATIVE MATERIALS</td>
<td>Analytical modeling of ramjet combustor heat transfer modes</td>
<td>p0508</td>
<td>179-40476</td>
</tr>
<tr>
<td>ABRASION</td>
<td>Use of coatings in turbomachinery gas path seals</td>
<td>p0046</td>
<td>179-11058</td>
</tr>
<tr>
<td>ABSORBERS (MATERIALS)</td>
<td>Effect of absorber parameters on the acoustic characteristics of a cylindrical combustion chamber</td>
<td>p0126</td>
<td>179-10597</td>
</tr>
<tr>
<td></td>
<td>Full-scale engine tests of bulk absorber acoustic noise treatment</td>
<td>p0227</td>
<td>179-16645</td>
</tr>
<tr>
<td>ABSORPTION</td>
<td>Water absorption of fluids/oils --- contamination of aircraft engine oils and inhibitors</td>
<td>p0488</td>
<td>179-24158</td>
</tr>
<tr>
<td>ABRASION</td>
<td>The use of sound absorbing walls to reduce dynamic interference in wind tunnels</td>
<td>p0105</td>
<td>179-13062</td>
</tr>
<tr>
<td>AC (CURRENT)</td>
<td>AC GENERATORS Combined-excitation ac generators for aviation --- Russian book</td>
<td>p0125</td>
<td>179-18200</td>
</tr>
<tr>
<td></td>
<td>Filter weight minimization for rectified superconducting alternator power supplies --- for aircraft</td>
<td>p0273</td>
<td>179-26966</td>
</tr>
<tr>
<td></td>
<td>Air Force applications of lightweight superconducting machinery --- in airborne power sources</td>
<td>p0279</td>
<td>179-27666</td>
</tr>
<tr>
<td>ACCELERATED LIFE TESTS</td>
<td>Overstress testing of helicopter transmissions</td>
<td>p0124</td>
<td>179-18173</td>
</tr>
<tr>
<td></td>
<td>Engine life usage experience of TF17/T2101 flight and ground testing</td>
<td>p0149</td>
<td>179-19799</td>
</tr>
<tr>
<td></td>
<td>Noise/temperature effects upon mean strength of composite-to-metal adhesively bonded joint elements --- for F-16 aircraft</td>
<td>p0209</td>
<td>179-21007</td>
</tr>
<tr>
<td></td>
<td>Recent General Electric engine development testing for improved service life</td>
<td>p0255</td>
<td>179-25876</td>
</tr>
<tr>
<td></td>
<td>The application of a design verification system and accelerated mission testing to gas turbine engine development</td>
<td>p0255</td>
<td>179-25787</td>
</tr>
<tr>
<td></td>
<td>Build 6 of an accelerated mission test of a TP41 with block 76 hardware</td>
<td>p0583</td>
<td>179-20179</td>
</tr>
</tbody>
</table>

### SUBJECT INDEX

**AERONAUTICAL ENGINEERING**

1980 Cumulative Index

#### Typical Subject Index Listing

<table>
<thead>
<tr>
<th>Subject Heading</th>
<th>Title</th>
<th>Page Number</th>
<th>Accession Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>CABLES (ROBES)</td>
<td>Manufacturing technology for fiber optic bundle cabling --- electric cables for aircraft</td>
<td>p0109</td>
<td>179-13861</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 STAR or IAA accession number is included in each entry to assist the user in locating the abstract in the abstract section of an individual issue of Aeronautical Engineering. If applicable a report number is also included as an aid in identifying the document. The page and accession numbers are located beneath and to the right of the title. Under any one subject heading the accession numbers are arranged in sequence with the numbers appearing first.
ACCELERATION PROTECTION

Subject Index

ACCESSORIES

ACCELEROMETERS

ACCELERATION STRESSES (PHYSIOLOGY)

ACCELERATION PROTECTION

ACCRETION

ACCIDENT INVESTIGATION

ACCURACY

ACCIDENTS

NT AIRCRAFT ACCIDENT INVESTIGATION

NT DEPOSITION

NT TAIL AIRCRAFT COLLISIONS

ACCIDENT - U DEPOSITION

ACCURACY

Guidance accuracy considerations for the microwave landing system L-band precision DME

Factors affecting omega accuracy

ACIDS

NT HYDROGENIC ACID

NT PHOSPHORIC ACID

NT SULFURIC ACID

ACOUSTIC ATTENUATION

NT SHOCK WAVE ATTENUATION

ACOUSTIC FILTERING

NT AIRCRAFT FILTERING

ACOUSTIC MEASUREMENTS

NT AIRCRAFT

ACOUSTIC NOISE

NT AIRCRAFT

ACOUSTIC POWER

NT AIRCRAFT

ACOUSTIC PRESSURE

NT AIRCRAFT

ACOUSTIC RELATIONSHIP

NT AIRCRAFT

ACOUSTIC SPECTRUM

NT AIRCRAFT

ACOUSTIC VIBRATION

NT AIRCRAFT
ADHESIVE BONDING
ADHESION TESTS
ADHESION EVANS
ADRESSING
ADDITIVES
ADAPTIVE CONTROL SYSTEMS
ADAPTIVE CONTROL

INVESTIGATION OF A LOW-COST SERVOACTUATOR FOR BYTSAS
(AD-A055186)
p0104 A79-13059

DIRECT DRIVE CONTROL VALVE FOR FLY-WIRE FLIGHT CONTROL SYSTEM ACTUATORS
(AD-A0602010)
p0306 A79-19007

ADVANCED FLIGHT CONTROL ACTUATION SYSTEM (APCS-5/5): FEASIBILITY INVESTIGATION OF AN ELECTRO/PNEUMATIC DUAL POWER DRIVE CONCEPT
(AD-A0633992)
p0245 A79-22114

ELECTROMECHANICAL ACTUATION DEVELOPMENT
(AD-A0657316)
p0438 A79-23101

THEORY, DESIGN AND EXPERIMENTAL STUDY OF AN EDDY-CURRENT/HYDROMECHANICAL STABILITY AUGMENTOR FOR AIRCRAFT
p0284 A79-28185

ADAPTIVE CONTROL

DEVELOPMENT OF A GAS TURBINE PERFORMANCE SEEKING LOGIC
【ASME PAPER 78-GT-13】
p0001 A79-10257

HIGH ANGLE OF ATTACK FLIGHT CONTROL USING STOCHASTIC MODEL REFERENCE ADAPTIVE CONTROL
p0200 A79-15020

ADAPTIVE APPROXIMATIONS IN FINITE ELEMENT STRUCTURAL ANALYSIS --- FOR AIRCRAFT COMPONENTS
p0199 A79-22951

REDUNDANT CONTROL SYSTEMS FOR FLIGHT VEHICLES
【RUSSIAN BOOK】
p025n A79-25875

ADAPTIVE CONTROL OF WING STORE FLUTTER - A FEASIBILITY STUDY
【AIAA 79-0760】
p0322 A79-29033

FLIGHT TEST EXPERIENCE WITH AN ADAPTIVE CONTROL SYSTEM USING A MAXIMUM LIKELIHOOD PARAMETER ESTIMATION TECHNIQUE
【AIAA 79-1702】
p0370 A79-85557

DIGITAL ADAPTIVE CONTROL LAWS FOR VTOL AIRCRAFT
p0612 A79-68000

ADAPTIVE ARRAY TRADEOFFS FOR EXISTING AIRBORNE UHF RADIOS
p0144 A79-85598

FEEDBACK CONTROLLED AIRCRAFT SENSITIVITY TO PARAMETER VARIATIONS
【AD-A057643】
p0295 A79-12097

APPLICATION OF HIGHER HARMONIC BLADE FEATHERING FOR HELICOPTER VIBRATION REDUCTION
【NASA-CR-159895】
p0181 A79-14079

CONTROL STRATEGIES FOR COMPLEX SYSTEMS FOR USE IN AEROSPACE DYNAMICS
【AD-A0554942】
p0163 A79-14090

IDENTIFICATION AND DUAL ADAPTIVE CONTROL OF A JET ENGINE
【NASA-TP-91165】
p0442 A79-23257

INVESTIGATION OF INVERSE VANDERMONDE MATRIX CALCULATION FOR LINEAR SYSTEM APPLICATIONS --- ADAPTIVE FLIGHT CONTROL SYSTEMS
【AD-A069241】
p0672 A79-31225

ADAPTIVE CONTROL SYSTEMS
U ADAPTIVE CONTROL

ADDITIONS

U ADDITIVE CONTROL

ADDITIONS

W T ANTICEIDENTS

W T GIL ADDITIVES

EFFECT OF A CHROMIUM-CONTAINING FUEL ADDITIVE ON HOT CORROSION
【AD-A066807】
p0261 A79-26546

A FILTERABILITY STUDY OF CORROSION INHIBITED JP-4
【AD-A066807】
p0501 A79-25247

ADDRESSING

DEVELOPMENT AND EVALUATION OF SELECTIVE ADDRESS BEACON (SAB) SYSTEM
【AD-A0508457】
p0100 A79-13022

ADHEROMETERS
U ADHESION TESTS

ADHESION TESTS

FAILURES IN ADHEREDLY BONDED STRUCTURES
【AD-A0559445】
p0444 A79-23454

ADHESIVE BONDING

FIBRE-COMPOSITE REINFORCEMENT OF CRACKED AIRCRAFT STRUCTURES THERMAL-STRESS AND THERMAL-FATIGUE STUDIES
p0111 A79-17018

FRACURE TOUGHNESS OF MULTILAYER ADHESIVE BONDED ALUMINUM ALLOY SHEET
p0156 A79-20122

PHOSPHORIC ACID NON-TASK ANODIZE /PANTA/ PROCESS FOR REPAIR BONDING --- OF ALUMINUM AIRCRAFT SURFACES
p0167 A79-20815

NONDESTRUCTIVE TESTING OF ADHEREDLY BONDED STRUCTURES
【AD-A0559445】
p0387 A79-20817

THE PABST PROGRAM --- A VALIDATION OF BONDING PRIMARY STRUCTURE --- PRIMARY ADHESIVELY BONDED STRUCTURE TECHNOLOGY FOR ALUMINUM AIRCRAFT PARTS
【AD-A0559445】
p0200 A79-24083

THE COMPARATIVE EVALUATION OF PREBOND SURFACE TREATMENTS FOR TITANIUM --- MILITARY AIRCRAFT STRUCTURES
【AD-A0559445】
p0209 A79-24087

MOISTURE/TEMPERATURE EFFECTS UPON NEAN STRENGTH OF COMPOSITE-TO-METAL ADHESIVELY BONDED JOINT ELEMENTS --- FOR F-16 AIRCRAFT
【AD-A0559445】
p0209 A79-24087

A CYCLIC LOAD TEST FOR ENVIRONMENTAL DURABILITY EVALUATION OF BONDED HALOGEN ALUMINUM STRUCTURE --- AIRCRAFT AL PANELS
【AD-A0559445】
p0209 A79-24089

ORIPE MORPHOLOGIES ON ALUMINUM PREPARED FOR ADHESIVELY BONDED AIRCRAFT STRUCTURES
【AD-A0559445】
p0210 A79-24106

AN AUTOMATED SYSTEM FOR PHOSPHORIC ACID ANODIZING OF ALUMINUM ALLOYS
【AD-A0559445】
p0210 A79-24107

ADHESIVE SEALING --- A FUEL LEAK DETECTION --- FOR AIRCRAFT TANKS
【AD-A0559445】
p0210 A79-24123

A HELICOPTER FUSELAGE DESIGN CONCEPT
【AD-A0559445】
p0211 A79-24142

GASP IV SIMULATION MODEL FOR THE COMPOSITES AND BONDING PRODUCTION FACILITY
【AD-A0559445】
p0274 A79-27297

BONDING AND DURABILITY --- FOR AIRFRAME STRUCTURES
【SPE PAPER 790561】
p0651 A79-36702

ADHESIVE BONDED STRUCTURE OF NEW PREENGINEERED PISTON TWIN AIRCRAFT
【SPE PAPER 790561】
p0652 A79-36704

STRUCTURAL ADHESIVE BOND REPAIR OF AIRCRAFT FLIGHT CONTROL SURFACES
p0531 A79-43314

THE REPAIR OF ADHEREDLY BONDED AIRCRAFT STRUCTURES USING VACUUM PRESSURE
p0531 A79-43315

AIRCRAFT SERVICE EXPERIENCE OF BONDED ASSEMBLIES PREPARED WITH PHOSPHORIC ACID ANODIZED PREBOND SURFACE TREATMENT
p0531 A79-43317

STRUCTURAL ADHESIVES AND BONDING: PROCEEDINGS OF THE CONFERENCE, EL SEGUNDO, CALIF., MARCH 13-15, 1979
p0656 A79-54226

CHEMICAL ANALYSIS OF STRUCTURAL ADHESIVES AND RESINS FOR COMPOSITES
p0656 A79-54232

MECHANICAL CHARACTERIZATION OF STRUCTURAL ADHESIVES
p0660 A79-54239

PROBLEMS IN TESTING ELECTRICALLY CONDUCTIVE STRUCTURAL ADHESIVES
p0696 A79-54240

AN OVERVIEW OF THE PABST PROGRAM --- PRIMARY ADHESIVELY BONDED STRUCTURE TECHNOLOGY FOR AIRCRAFT
p0697 A79-54241

REPAIR OF BONDED PRIMARY STRUCTURE
【AD-A0559445】
p0162 A79-14086

FRACTURE MECHANICS FOR STRUCTURAL ADHESIVE BONDS, PART 2, PHASE 2
【AD-A0568055】
p0210 A79-19418

SURFACE FINISHING --- ADHESIVE BONDING OF PLASTIC FILM TO METAL AIRCRAFT SURFACES
【NASA-CASE-MSC-12631-3】
p0385 A79-21183

OPERATIONAL EXPERIENCE WITH ADHESIVE BONDED STRUCTURES
p0444 A79-23450

BEHAVIOR OF ADHEREDLY BONDED JOINTS UNDER CYCLIC LOADING
【AD-A0559445】
p0444 A79-23453

FAILURES IN ADHEREDLY BONDED STRUCTURES
【AD-A0559445】
p0444 A79-23459

THE NATURE OF ADHESION MECHANISMS AND THE INFLUENCE OF SURFACE TREATMENTS ON THE STRENGTH OF BONDED JOINTS
【AD-A0559445】
p0444 A79-23455

STRUCTURAL PROPERTIES OF ADHESIVES, VOLUME 1
【AD-A0565500】
p0488 A79-24155

EVALUATION OF NEW BONDING SYSTEMS FOR DEPOT-LEVEL MAINTENANCE OF AIRCRAFT ALUMINUM PANELS
【AD-A0666117】
p0488 A79-24161

SUBJECT INDEX
Wind tunnel simulation of the firing of missiles carried under aircraft [NASA CR-158965] p0534 A79-43607
Singular perturbation techniques for on-line optimal flight path control [AIAA 79-1629] p0535 A79-43622
Parallel procedures for aircraft parameter identification and state estimation [AIAA 79-1636] p0565 A79-45303
The relationship of unsteadiness in the down wash to the quality of parameter estimates [AIAA 79-1639] p0567 A79-45319
Impact of digital computer technology on flight systems [AIAA 79-1641] p0567 A79-45320
Effects of spanwise blowing on two fighter airplane configurations [AIAA 79-1663] p0568 A79-45330
Subsonic flow past an oscillating cascade with finite mean flow deflection [AIAA PAPER 79-1516] p0576 A79-46704
Opportunities for supersonic performance gains through non-linear aerodynamics [AIAA PAPER 79-1527] p0576 A79-46710
Steady and unsteady vortex-induced asymmetric loads - Review and further analysis — on slender axisymmetric bodies [AIAA PAPER 79-1531] p0576 A79-46713
Surface-effect components of aerodynamic characteristics of air-cushion vehicle with ran pressurization [AIAA PAPER 79-1539] p0576 A79-46718
Analytic formulas for wing profile aerodynamic characteristics in incompressible flow [AIAA PAPER 79-1542] p0576 A79-46725
On a smooth approximations method and its application to mathematical description of wing aerodynamic characteristics [AIAA PAPER 79-1545] p0576 A79-46728
Overall aerodynamic characteristics of canard and delta wings at supersonic speeds [AIAA PAPER 79-1553] p0576 A79-46735
The calculation of non-linear aerodynamic characteristics of wings and their wakes in supersonic flow [AIAA PAPER 79-1555] p0576 A79-46738
Some early experiments in the development of a flying platform for aerodynamic testing [AIAA PAPER 79-1559] p0576 A79-46741
Aerodynamic effects of an attitude control valve on a tilt-baceller V/STOL propulsion system [AIAA PAPER 79-1855] p0576 A79-46745
Flow patterns and aerodynamic characteristics of wings with strake [AIAA PAPER 79-1677] p0599 A79-47928
A novel technique for obtaining aerodynamic data using simple, free flight trajectory measurements [AIAA PAPER 79-1678] p0612 A79-48051
Aircraft longitudinal motion at high incidences [AIAA PAPER 79-1687] p0612 A79-48052
A design perspective on new technologies for general aviation [AIAA PAPER 79-1692] p0636 A79-49906
Variables characterizing the wind effects on an aircraft [NASA CP-1579-87] p0636 A79-49909
A simple fluid flow model of ground effect on hovering [NASA CR-158965] p0639 A79-49815
Approximation of the aerodynamic characteristics of a wing with a double-slotted flap [NASA CR-158965] p0639 A79-51292
Flow around small-aspect-ratio delta wings with vortex 'bursting' [NASA CR-158965] p0659 A79-54058
Utilization of the wing-body aerodynamic analysis program [NASA CR-71-72565] p0683 A79-10020
Study of aerodynamic technology for VSTOL fighter/attack aircraft: Horizontal aircraft attitude concept [NASA CR-152130] p0683 A79-10024
Study of aerodynamic technology for VSTOL fighter/attack aircraft [NASA CR-152129] p0683 A79-10027
Study of aerodynamic technology for VSTOL fighter/attack aircraft, phase I [NASA CR-152132] p0683 A79-10028
Aerodynamic characteristics of a 1/24-scale T-111 aircraft with various external stores at Mach numbers from 0.5 to 1.3 [NASA CR-70-11005] p0684 A79-11005
Nonlinear steady and unsteady aerodynamics of wings and wing-body combinations [NASA CR-70-12101] p0685 A79-12100
Comprehensive helicopter analysis: A state of the art review [NASA CR-70-78539] p0686 A79-12109
Effects of thickness on the aerodynamic characteristics of an initial low-speed family of airfoils for general aviation applications [NASA CR-70-72643] p0696 A79-13000
Effects of wing leading-edge flap deflections on subsonic longitudinal aerodynamic characteristics of a wing-fuselage configuration with a 4 deg swept wing [NASA CR-1351] p0699 A79-13002
Flight comparison of the transonic agility of the P-111 aircraft and the P-111 supercritical wing airplane [NASA CR-1368] p069a A79-13056
Low-speed aerodynamic characteristics of a 16-percent-thick variable-polygon airfoil designed for general aviation applications [NASA CR-1329] p0717 A79-14018
Theoretical evaluation of high-speed aerodynamics for aeroplane configurations [NASA CR-1358] p0758 A79-14023
Aerodynamic characteristics of a supersonic cruise airplane configuration at Mach numbers of 2.30, 2.96, and 3.30 --- Langley Unitary Plan wind tunnel test [NASA CR-70-7929] p0758 A79-14025
Theory of oblique wings of high aspect ratio [AD-405978] p0759 A79-14044
The Total In-Flight Simulator (TIFS) aerodynamics and systems: Description and analysis --- maneuver control and gust alleviators [NASA CR-158965] p0766 A79-14113
Effect of lip and centerbody geometry on the test procedures of the derivative balances

Wind tunnel testing of dynamic derivatives in West Germany

Estimation of aerodynamic characteristics from dynamic flight test data

Aerodynamic interactions on the fixed CCV test aircraft

Identification of the stability parameters of an aeroelastic airplane

A survey of analytical and experimental techniques to predict aircraft dynamic characteristics at high angles of attack

The role of time-history effects in the formulation of the aerodynamics of aircraft dynamics

Aerodynamic inputs for problems in aircraft dynamics, volume 2

Aerodynamic characteristics at high angles of attack

Flight test evaluation of predicted light aircraft drag, performance, and stability

Remotely piloted vehicles - aerodynamics and related topics, volume 1

Aerodynamics

Remotely piloted vehicles - aerodynamics and related topics, volume 2

The aerodynamics and thermodynamic characteristics of fountains and some far field temperature distributions - vertical takeoff aircraft ground effect

The analysis of propellers including interaction effects

Aerodynamic properties of a flat plate with cavity for optical-propagation studies

Comparison of the aerodynamic properties of an airplane with the tail-first configuration and with the conventional configuration

Aerodynamic properties of a monoplane elliptic missile model at Mach numbers from 1.6 to 2.8

Space shuttle afterbody aerodynamics/plume simulation data summary

Rotary-wing aerodynamics. Volume 2: Performance prediction of helicopters

Formulation of aerodynamic prediction techniques for hypercronic configuration design

Aerodynamic behavior of filtres and sampling of respirable dust

Analysis of some aerodynamic characteristics due to wing-jet interaction

Investigation of aerodynamic characteristics of subsonic wings

The place of aerodynamics in the design process

Investigation of the aerodynamic and acoustic performance of a low-pressure rime airfoil blade compressor

Transonic compressors for heavy gases. Part 1: Selections of the aero-design parameters

Transonic compressors for heavy gases. Part 2: Aero-thermal considerations, testing and operation

Aerodynamic and Mechanical factors affecting the surge line: Inlet flow distortion influences on axial flow compressors

Prospects for computing airfoil aerodynamics with Reynolds averaged Navier-Stokes codes

Application of the AMI C sub 1 sub max prediction method to a number of airfoils

Experimental aerodynamic characteristics at Mach numbers from 0.60 to 2.70 of two supersonic cruise fighter configurations

Subsonic longitudinal and lateral aerodynamic characteristics for a systematic series of strake-wing configurations

Interactional aerodynamics of the single rotor helicopter configuration, volume 7-1. Frequency analyses of wtk-slip-files data, air ejectors

Prediction of aerodynamic characteristics for slender bodies alone and with lifting surfaces to high angles of attack

Experimental investigation of three helicopter rotor airfoils designed analytically --- in the Langley 6 by 19 inch and 6 by 28 inch transonic wind tunnels

Aerodynamic characteristics of the close-coupled canard as applied to low-to-moderate swept wings. Volume 1: General trends

Aerodynamic problems in cooled turbine blading design for small gas turbine

The aerodynamics and performance characteristics of direct lift schemes

Aerodynamics and performance characteristics of wing lift augmentation schemes

Aerodynamic characteristics at Mach numbers of 1.5, 1.6, and 2.0 of a blended wing-body configuration with and without integral canards

The effect of surface imperfections on the aerodynamic performance of an airfoil at moderate Reynolds numbers

Experimental studies in a Ludwieg tube transonic tunnel

Characteristics of the advanced subsonic technology B70-105-7 configured for transpacific range with Pratt and Whitney aircraft variable stress control engines

Some new airfoils

A comparison of the aerodynamic characteristics of eight sailing airfoil sections

Investigation of aerodynamic characteristics of subsonic wings
The effect of winglets on the KC-135A aircraft

Aerodynamic characteristics of a large-scale long-winged aircraft, including:

- longitudinal aerodynamics extracted from flight tests
- vortex lattice method for the evaluation of the aerodynamic characteristics of wings with and without strakes
- aerodynamic characteristics of a large-scale semispan model with a swept wing and an augmented jet flap with hypersonic nozzles
- wind-tunnel test facility

Noise and vibration problems:

- noise and vibration problems: outline notes
- noise and vibration problems: design details

Advanced rotorcraft technology:

- task force report
- some remarks on the design of transonic tunnels

Noise and vibration problems:

- noise and vibration problems: outlined notes
- noise and vibration problems: design details

Flow visualization studies of a general research fighter model employing a strake-wing concept at subsonic speeds - in the Langley high-speed 7- by 10-foot wind tunnel

Technical discussion and analysis of results

Analysis of wind tunnel data pertaining to high angle of attack aerodynamics. Volume 1:

- technical discussion and analysis of results
- analysis of wind tunnel data pertaining to high angle of attack aerodynamics. Volume 2: Data base

A flight investigation of basic performance

Investigations of interference effects in a wind tunnel caused by a model support strut on a half model

Ground-induced effects for a low-aspect ratio highly swept wing model B

Aerodynamic characteristics of a wing in a jet flow - in the Langley spin tunnel

Volume 2: Supplemental system design and maintenance document

Rotary balance data for a single-engine general aviation design for an angle-of-attack range of 8 deg to 90 deg - conducted in a large spin tunnel

Aerodynamic and acoustic investigation of aerofoil velocity profile coannular exhaust nozzle models and development of aerodynamic and acoustic prediction procedures

Theoretical and experimental investigations of ground-induced effects for a low-aspect-ratio highly swept arm-wing configuration

Aerodynamic data for three supercritical airfoils - NASA CR-3097

Aerodynamic data for a typical single-engine general aviation design for an angle-of-attack range of 8 deg to 90 deg - conducted in a large spin tunnel

Aerodynamic characteristics of a wing in a jet flow - wind tunnel tests

Aerodynamic data for a typical single-engine general aviation design for an angle-of-attack range of 8 deg to 90 deg. 1: High-wing model B

Aerodynamic data for a typical single-engine general aviation design for an angle-of-attack range of 8 deg to 90 deg. 2: Low-wing model B
<table>
<thead>
<tr>
<th>Subject Index</th>
<th>Aerodynamic Configurations</th>
</tr>
</thead>
<tbody>
<tr>
<td>U CHORDS (GEOMETRY)</td>
<td>A program for calculating load coefficient matrices utilizing the force summation method, 1218 (AIAA)</td>
</tr>
<tr>
<td>Aerodynamic Coefficients</td>
<td>1219 (NASA-CB-2854)</td>
</tr>
<tr>
<td>Instrumentation modeling technique used in the identification of aerodynamic coefficients from flight test data</td>
<td>Wind tunnel tests on cambered wings and mild gothic planform. Part 1: Further low speed tests.</td>
</tr>
<tr>
<td>Aircraft aerodynamic coefficient estimation</td>
<td>Aircraft aerodynamic coefficient estimation</td>
</tr>
<tr>
<td>Calculation of the non linear aerodynamic coefficients of wings of various shapes and their wakes, including canard configurations</td>
<td>Wind tunnel tests on cambered wings and mild gothic planform. Part 2: Transonic tests</td>
</tr>
<tr>
<td>An inverse problem of vertical-axis wind turbines</td>
<td>1215 (NASA-CB-3140)</td>
</tr>
<tr>
<td>Distribution of the intermittency factor along the transition region between laminar and turbulent boundary-layers</td>
<td>1214 (NASA-CR-159515)</td>
</tr>
<tr>
<td>Characteristic aerodynamic coefficients at high Reynolds numbers</td>
<td>1213 (NASA-CB-159516)</td>
</tr>
<tr>
<td>A refined prediction method for supersonic unsteady aerodynamics with AIC partition scheme</td>
<td>Aerodynamic design of the Sikorsky S-76 helicopter</td>
</tr>
<tr>
<td>Aerodynamic Influence Coefficient</td>
<td>Computer-aided design at Israel Aircraft Industries</td>
</tr>
<tr>
<td>[AIAA 79-0770]</td>
<td>1212 (NASA-CE-2854)</td>
</tr>
<tr>
<td>Aerodynamic and aeroelastic characteristics of oscillating loaded cascades at low Mach number</td>
<td>1211 (ARC-R/N-3827)</td>
</tr>
<tr>
<td>Conversion of wing surface pressures into normalized lift coefficient</td>
<td>1210 (NASA-CR-3872)</td>
</tr>
<tr>
<td>Analysis of an unsteady aerodynamic force on a blade due to uninnual amplitude gusts</td>
<td>1209 (NASA-CR-3127)</td>
</tr>
<tr>
<td>Lift and drag of sail aerofoil</td>
<td>1208 (NASA-CR-3126)</td>
</tr>
<tr>
<td>Computation of subsonic and transonic flow about lifting rotor blades</td>
<td>1207 (NASA-CR-3125)</td>
</tr>
<tr>
<td>Aerodynamic coefficient estimations by means of an extended Kalman filter</td>
<td>1206 (NASA-CR-3124)</td>
</tr>
<tr>
<td>Estimation of longitudinal aircraft characteristics using parameter identification techniques</td>
<td>1205 (NASA-CR-3123)</td>
</tr>
<tr>
<td>Notion of rectangular wing between parallel walls</td>
<td>1204 (NASA-CR-3122)</td>
</tr>
<tr>
<td>Is the Weiss-Fogh principle exploitable in turbomachinery --- aerodynamic lift generation without vortex shedding</td>
<td>1203 (NASA-CR-3121)</td>
</tr>
<tr>
<td>Effects of upper surface modification on the aerodynamic characteristics of the NASA 63 sub 2-215 airfoil section</td>
<td>1202 (NASA-CR-3120)</td>
</tr>
<tr>
<td>Vortex models on missile configurations --- computer program for determining aerodynamic coefficients and flow deflection</td>
<td>1201 (NASA-CR-3119)</td>
</tr>
<tr>
<td>Section drag coefficients from pressure probe transverses of a wing at low speeds</td>
<td>1200 (NASA-CR-3118)</td>
</tr>
<tr>
<td>Normal force and pitching moment of wing-body combinations in the nonlinear angle-of-attack range at subsonic speeds</td>
<td>1209 (NASA-CR-3117)</td>
</tr>
<tr>
<td>Minimization theory of induced drag subject to constraint conditions</td>
<td>1208 (NASA-CR-3116)</td>
</tr>
<tr>
<td>Real-time estimation of aerodynamic coefficients by means of an extended Kalman filter</td>
<td>1206 (NASA-CR-3114)</td>
</tr>
<tr>
<td>[SAND-78-2032]</td>
<td>1205 (NASA-CR-3113)</td>
</tr>
<tr>
<td>Upper-surface modifications for C sub u max improvement of selected NASA 6-series airfoils</td>
<td>1204 (NASA-CR-3112)</td>
</tr>
<tr>
<td>Aerodynamic and acoustic investigation of inverted velocity profile cambered exhaust nozzle models and development of aerodynamic and acoustic prediction procedures, comprehensive data report, volume 1</td>
<td>1203 (NASA-CR-3111)</td>
</tr>
<tr>
<td>Aerodynamic and acoustic investigation of inverted velocity profile cambered exhaust nozzle models and development of aerodynamic and acoustic prediction procedures, comprehensive data report, volume 2</td>
<td>1202 (NASA-CR-3110)</td>
</tr>
</tbody>
</table>

**Notes:**
- Subject index entries are in bold.
- Aerodynamic Configurations entries are in normal text.
- Page numbers are included in parentheses following the entries.
- Multiple entries may be found under a single subject index entry.
- The table entries are organized alphabetically by subject index entry, with the corresponding aerodynamic configuration entry listed in the second column.
- Additional references are indicated by the format: **[NASA-CB-XXXX]**, followed by the page number(s).
AERODYNAMIC BEATING

AERODYNAMIC BEATING

SUBJECT INDEX

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING

AERODYNAMIC BEATING
AERODYNAMIC LOADS

Aerodynamic problems in engine airframe integration on fighter airplanes [NASP-79-23936]
Interference effects of aircraft components on the local blade angle of attack of a wing-swept propeller [NASA-79-76087]
A vortex lattice technique for computing ventilated wind tunnel wall interference [AD-A0702459]

U LIFT

Positive tail loads for minimum induced drag of subsonic aircraft [p020 A79-12163]
Experimental effects of tip shape on rotor control loads [p0125 A79-18182]
A study of vertical loads on a helicopter on spans [p0139 A79-19198]
A procedure for axial blade optimization [p0190 A79-19802]
A calculation of rotor impendence for hovering articulated-rotor helicopters [p0191 A79-21521]

ST BLAST LOADS

Behavior of elastic systems in separated flow [p0252 A79-25618]

ST GUST LOADS

System for stabilizing the vertical overload of an aircraft [p0315 A79-26807]
Capabilities and applications of a computer program system for dynamic loads analyses of flexible airplanes with active controls [ADPLOX]
A generalization of the wind loads method for spacecraft analysis loads [p0320 A79-29015]
A generalization of the wind loads method for spacecraft loads analysis [p0320 A79-29017]
Numerical computation of aerodynamically corrected transonic loads [p0320 A79-29020]
Unsteady airloads in supercritical transonic flows [p0321 A79-29021]
A refined prediction method for supersonic unsteady aerodynamics with 12 partition scheme [p0321 A79-29023]
Aerodynamic Influence Coefficient [p0321 A79-29023]
A refined prediction method for supersonic unsteady aerodynamics with 12 partition scheme [p0321 A79-29023]
As overview of technical problems in helicopter rotor loads prediction methods [p0323 A79-29041]
Applications of Laplace transform methods to airfoil motion and stability calculations [p0324 A79-29050]
Accelerated basic loads analysis --- improved computer systems programming approach for aircraft structural analysis [p0324 A79-29051]
Theoretical and experimental investigations on aerodynamically highly-loaded compressor bleedings with boundary layer control [p0330 A79-29040]
The effect of slot configuration and arrangement on the characteristics of jet flow [p0337 A79-30377]
Effect of flight loads on turbofan engine performance deterioration [p0341 A79-30559]

Review of problems of unsteady aerodynamics of helicopters [p0389 A79-32293]
Aerodynamic and aerelastic characteristics of oscillating loaded cascades at low Mach number [ASG PAPER 79-6112]
The analysis of propellers including interaction effects for general aviation aircraft [SME PAPER 790576]
Aerodynamics of airfoils with porous trailing edges [p0453 A79-36712]

State of the art in aircraft loads monitoring [p0561 A79-44453]
AERODYNAMIC ROBOTS

Interactional aerodynamics of the single rotor helicopter configuration. Volume 2: Harmonic analysis of airframe surface pressure data, runs 23-33, forward section

In-flight measurement of aerodynamic loads on captive stores. Description of the measurement equipment and comparison of results with data from other sources

A modification to linearized theory for prediction of pressure loadings on lifting surfaces at high supersonic Mach numbers and large angles of attack
[NASA-TG-1106] p0286 N79-17806

Interactional aerodynamics of the single rotor helicopter configuration. Volume 6-A: One-third octave band spectrograms of wake single film data, buildup to baseline
[AD-A061994] p0302 N79-18958

Interactional aerodynamics of the single rotor helicopter configuration. Volume 6-C: Frequency analyses of wake single film data, hubcaps and air ejectors
[AD-A061995] p0302 N79-18959

Flow modelling and aerodynamic design techniques for centrifugal compressors
[AMASEM-79-4076] p0308 N79-19386

Application of aerodynamic design techniques to process compressor design -- computerized design
[AD-A079199] p0309 N79-19388

Industrial Centrifugal Compressors, Volume 2
[VKI-LECTURE-SERIES-52] p0309 N79-19389

Reduction of computer usage costs in predicting unsteady aerodynamic loadings caused by control surface motions: analysis and results

Interactional aerodynamics of the single rotor helicopter configuration. Volume 6-D: One-third octave band spectrograms of wake single film data, fairings and surface devices -- utility aircraft
[AD-A063000] p0360 N79-20074

Interactional aerodynamics of the single rotor helicopter configuration. Volume 6-I: Frequency analyses of wake single film data, hubcaps and air ejectors -- utility aircraft
[AD-A062641] p0360 N79-20075

Interactional aerodynamics of the single rotor helicopter configuration. Volume 7-A: Frequency analyses of wake single film data, buildup to baseline -- utility aircraft
[AD-A062639] p0360 N79-20076

Interactional aerodynamics of the single rotor helicopter configuration. Volume 7-C: Frequency analyses of wake single film data, solid hubcaps -- utility aircraft
[AD-A062640] p0360 N79-20077

Interactional aerodynamics of the single rotor helicopter configuration. Volume 7-D: Frequency analyses of wake single film data, open hubcaps -- utility aircraft
[AD-A062642] p0360 N79-20078

Interactional aerodynamics of the single rotor helicopter configuration. Volume 7-F: Frequency analyses of wake single film data, air ejectors with hubcaps -- utility aircraft
[AD-A062117] p0361 N79-20080

Interactional aerodynamics of the single rotor helicopter configuration. Volume 7-G: Frequency analyses of wake single film data, fairings and surface devices -- utility aircraft
[AD-A062642] p0361 N79-20081

Interactional aerodynamics of the single rotor helicopter configuration. Volume 8-A: Frequency analyses of wake single film data, buildup to baseline
[AD-A062256] p0361 N79-20082

Interactional aerodynamics of the single rotor helicopter configuration. Volume 8-I: One-third octave band spectrograms of wake single film data, air ejectors
[AD-A06353] p0379 N79-21018

Prediction of lateral aerodynamic loads on aircraft at high angles of attack
[AD-A06353] p0379 N79-21018

Prediction and measurement of the aerodynamic forces and pressure distributions of wing-tail configurations at very high angles of attack
[AD-A06353] p0379 N79-21018

SUBJECT INDEX

Bumblebee Program: Aerodynamic data, Part II: Wing loads at Mach numbers 1.5 and 2.0 --- missile configurations
[ATBASH PAPER 79-0609] p0415 N79-22025

The influence of sweep on the aerodynamic loading of an oscillating NACA 0012 airfoil. Volume 1: Experimental results
[AD-A064311] p0817 N79-22041

Predesign of the second-generation compressive helicopter analysis system
[AD-A064289] p0821 N79-22083

Prediction of the second generation comprehensive helicopter analysis system
[AD-A064289] p0821 N79-22084

Comparison of store trajectory and aerodynamic loads, and flow-field characteristics of wing-tail configurations obtained in the AEDC PWT/4T and VFK/A wind tunnels at Mach number 1.63
[AD-A064289] p0831 N79-23017

Large transonic wind tunnels
[VKI-LECTURE-SERIES-52] p0383 N79-23105

Active control for the Total-In-Flight simulator (ACTIFS)

A vector-continuous loading concept for aerodynamic panel methods

Factors influencing the accuracy of aerodynamic hinge-moment predictions
[AD-A066606] p0692 N79-24955

Onset of axial flow loading in an axial compressor with steady-state inlet distortions
[AD-A066606] p0695 N79-27176

Supersonic unstalled flutter
[AD-A066606] p0695 N79-27178

An aerodynamic analysis of deformed wings in subsonic and supersonic flow
[AD-A067586] p0691 N79-27199

A program for calculating load coefficient matrices utilizing the force summation method, L218 (LOADS). Volume 2: Supplemental system design and maintenance document
[NASA-CR-28541] p0665 N79-31155

Accuracy, development and flight evaluation of active controls concepts for subsonic transport aircraft

AERODYNAMIC ROBOTS

B-7A STABILITY DERIVATIVES

AERODYNAMIC NOISE

On the noise emitted by cold subsonic coaxial jets
[AD-A065137] p0117 N79-17767

Helicopter tail rotor noise generated by aerodynamic interactions
[AD-A079038] p0135 N79-18699

Supersonic propeller noise in a uniform flow field
[AIAA PAPER 79-0348] p0146 N79-19681

A comprehensive review of airframe noise research
[AD-A064289] p0155 N79-20080

Advances in aerocoacoustic wind tunnel testing techniques for aircraft noise research
[AD-A064289] p0155 N79-20081

A comparison of linear acoustic theory with experimental noise data for a small-scale hovering rotor
[AIAA PAPER 79-0608] p0267 N79-26876

Sound radiation from hyperboloidal inlet ducts
[AIAA PAPER 79-0617] p0267 N79-26887

Discrete noise spectrum generated by an acoustically excited jet
[AIAA PAPER 79-0592] p0267 N79-26900

Direct experimental verification of the theoretical model predicting rotor noise generation
[AIAA PAPER 79-0658] p0268 N79-26994

On sound radiation from the trailing edge of an isolated airfoil in a uniform flow
[AIAA PAPER 79-0603] p0268 N79-26907

An experimental study of USB flat noise reduction through mean flow modification --- Upper Surface Blown
[AIAA PAPER 79-0607] p0268 N79-26908

The effect of throttling on forward radiated fan noise
[AIAA PAPER 79-0640] p0268 N79-26917

The sound power spectra of shock-free jets
[AIAA PAPER 79-0595] p0269 N79-26918
Coaxial jet noise in flight

Experiments concerning the anomalous behaviour of engine exhaust noise in flight

SABER PAPER 70-0046

Haster Plan for prediction of vehicle interior noise

SABER PAPER 70-0076

Jet mixing noise - Comparison of measurement and theory

SABER PAPER 70-0570

The generation and propagation of sound in turbulent jets

SABER PAPER 70-0573

Flight effects on subsonic jet noise

SABER PAPER 70-0616

Analysis of flight effects on noise radiation from dual-flow coaxial jets

SABER PAPER 70-0619

Experimental study of coaxial nozzle exhaust noise

SABER PAPER 70-0631

A jet exhaust noise prediction procedure for inverted velocity profile coaxial nozzles

SABER PAPER 70-0633

Peak Strouhal frequency of subsonic jet noise as a function of Reynolds number

SABER PAPER 79-0527

Asymmetry of a circular jet observed in near and far fields - low Re turbulence and acoustic characteristics

SABER PAPER 79-0539

Design of quiet efficient propellers

SABER PAPER 79-0548

The impact of noise regulations on propeller design

SABER PAPER 79-0593

Propeller aircraft noise around general aviation airports

SABER PAPER 79-0595

Effects of forward velocity on sound radiation from convecting monopole and dipole sources in jet flow - subsonic aircraft model

SABER PAPER 79-0596

Noise characteristics of heated high velocity rectangular jets - jet engine application

SABER PAPER 79-0641

Tone noise of three supersonic helical tip speed propellers in a wind tunnel

SABER PAPER 79-0645

Hearing impulsive noise - Some measured and calculated results - from helicopter rotors in an anechoic chamber

SABER PAPER 79-0653

An experimental study of high frequency noise from model rotors - Prediction and reduction

SABER PAPER 79-0655

Experiments of shock associated noise of supersonic jets

SABER PAPER 79-1156

Aerodynamic and acoustic effects of eliminating core swirl from a full scale 1.6 stage pressure ratio fan (07-58)

SABER-TN-78997

Airframe noise component interaction studies

SABER-CS-3110

Acoustic efficiency of boundary-layer transition

SABER-TN-70011

Effects of flow turbulence and noise on aerodynamic phenomena and measured quantities - wind tunnel tests and boundary layer transition

SABER-TN-70020

Aerodynamic noise theory - Lighthill method - turbulent flow, sound pressure, and wave equations

SABER-TN-70034

Jet noise: A status report - jet mixing and shock noise studies

SABER-TN-70035

Trailing edge noise data with comparison to theory

SABER-TN-70038

Noise and vibration problems: Outline notes

SABER-TN-70041

Experimental and theoretical studies on model helicopter rotor noise

SABER-CS-15894

The aerodynamic noise of a slot in an aerofoil

SABER-CS-16281

Parametric studies of nacelle helicopter blade slap and rotational noise

SABER-CS-16380

Study of design constraints on helicopter noise

SABER-CS-15918
AERODYNAMIC STALLING

Comparison of the effect of structural coupling parameters on flap-lag forced response and stability of a helicopter rotor blade in forward flight

An experimental study of the dynamic forces acting on an aerofoil

Stabilization techniques for improved response of the T-51 aircraft

Ice accretion and its effects on aerodynamics of unprotected aircraft components

Identifications of the stability parameters of an aerocoeital airplane

The use of panel methods for stability derivatives

Oscillatory aerodynamics and stability derivatives for airfoil spoiler actions

Determination of stability and control parameters of a light airplane from flight data using two estimation methods --- equation error and maximum likelihood methods

Technical evaluation report on the flight mechanics panel symposium on stability and control

An annular wing

Advanced fluidic temperature studies

Prediction of aerelastic instabilities in a rotorcraft

Study in a straight cascade wind tunnel of aerelastic instabilities in compressors

Theory, design and experimental study of an eddy-current/hyromechanical stability augmentor for aircraft

Stability and control --- conferences

Stall behaviour evaluation from flight test results

Wind-tunnel investigation of an armed mini remotely piloted vehicle --- conducted in Langley V/STOL tunnel

Preliminary airworthiness evaluation AN-15 helicopter equipped with a Garrett infrared radiation suppressor and an AN/ALQ-144 jammer

Prediction of aerelastic instabilities in a rotorcraft

A new approach to rotor blade stall analysis

Hot-wire measurements of stall and separation on helicopter rotor blades

Comparison of two flow surveys above stalled wings

Dynamic stall at high frequency and large amplitude --- using quasi-steady aerodynamic analytic prediction method

Effects of periodic changes in free stream velocity on flows over airfoils near static stall

Engineering analysis of dynamic stall

Wake induced time-variant aerodynamics including rotor-stator axial spacing effects

Unsteady effects on a stalled wing in pulsed flow

Retreating blade and dynamic stall --- for helicopter rotors

Spin flight research summary

Conversion of wing surface pressures into normalized lift coefficient

Some theoretical considerations of a stall proof airplane

The effects of configuration changes on spin and recovery characteristics of a low-wing general aviation research airplane

Dutch roll excitation and recovery techniques on a C-141A Starlifter

Some flight data extraction techniques used on a general aviation spin research aircraft

The Beech Model 77 'Skipper' spin program

Recent results in parameter identification for high angle-of-attack stall regimes

A laser velocimeter flow survey above a stalled wing

Identification of various flutter regimes and discussion of dynamic stall

Observations on the dynamic stall characteristics of advanced helicopter rotor airfoils

The prediction of two-dimensional airfoil stall progression

Identification of a stall criterion for cascades

Aeroelastic characteristics of a fighter-type configuration during and beyond stall

Studies of the dynamic stall or airfoil profiles for helicopter rotors

A study of the drooped leading edge airfoil --- on wind tunnel models to reduce spin entry after stall

Unstable flow regimes, including rotating stall, surge, distortions etc.

Radio-controlled model design and testing techniques for stall/spin evaluation of general aviation aircraft

Stall behaviour evaluation from flight test results

AERODYNAMIC VEHICLES

A new stage stacking technique for axial-flow compressor performance prediction

A rotating stall control system for turboprop engines

An axial compressor end-wall boundary layer calculation method

Dynamic stall of an airfoil with leading edge bubble separation involving time dependent re-attachment

Aerodynamic response for the airfoil experiencing sudden change in angle of attack

Theoretical prediction of dynamic stall on oscillating airfoils

Onset of leading edge separation effects under dynamic conditions and low Mach number

AEROTHERMODYNAMICS

AT ATHERMODYNAMICS
A new boundary-layer interaction techniques for separated flows
[ NASA-TM-78690] 0228 A79-16802
Some aspects of unsteady insect aerodynamics:
acceleration potential methods in plane unsteady airfoil theory, and measurements of unsteady-periodic forces generated by the blowfly
[NASA-CP-2044-VOL-1-P-1] 0360 A79-19803
Wings
[ AIAA PAPER 79-1529] 0301 A79-19821
Airbreathing engines - aerodynamic aspects
[ AIAA PAPER 79-1529] 0301 A79-19825
The place of aerodynamics in the design process
[ DGLR PAPER 78-223] 0301 A79-19833
Identification of various flutter regimes and discussion of dynamic stall
[ DGLR PAPER 78-220] 0307 A79-19354
Advanced Technology Airfoil Research, volume 1, part 1 --- conference on development of computational codes and test facilities
[ NASA-CR-3135] 0355 A79-20030
Improvements in surface singularity analysis and design methods --- applicable to airfoils
[ NASA-CR-152276] 0356 A79-20043
Lift system induced aerodynamics of V/STOL aircraft in a moving deck environment. Volume 2. Static and dynamic jet-induced force and moment data
[ AIAA PAPER 79-0273] 0361 A79-20804
Transonic Aerodynamic Testing
[ VKI-LECTURE-SERIES-92] 0376 A79-20990
Supersonic aerodynamics: An aerodynamicists perspective, or one man's dream in another man's nightmare
[ NASA-CP-2045-VOL-1-PT-1] 0385 A79-21423
Extended analytical study of the free-wing/free-trimmer concept
[ NASA-CR-3135] 0417 A79-22040
Aerodynamic design and analysis of the AST-200 supersonic transport configuration concept
[ NASA-CR-159051] 0417 A79-22046
Computer program to calculate three-dimensional boundary layer flows over wings with wall mass transfer
[ NASA-CR-3123] 0430 A79-23016
A brief review of air flight weapons
[ NASA-CR-3123] 0431 A79-23051
Aerodynamics of low aspect ratio wings
[ NASA-CR-3123] 0432 A79-23053
Aerodynamics
[ NASA-TT-F-765] 0460 A79-23908
Summary of past experience in natural laminar flow and experimental program for resilient leading edge
[ NASA-CR-152276] 0538 A79-26024
Weapon/aircraft interactions
[ NASA-CR-152276] 0556 A79-27205
Aeromechanics --- unsteady flow, aeroelasticity, flutter, and servomechanism
[ NASA-CR-152276] 0579 A79-28121
Air Force Academy aeronautics digest, fall 1978
[ NASA-CP-2045-VOL-1-PT-1] 0575 A79-28121
Scientific research, 1977 --- an overview of air transportation, aircraft design, propulsion systems, space technology, and reconnaissance
[ NASA-CP-2045-VOL-1-PT-1] 05712 A79-33150
AEROELASTICITY

Determination of the aerodynamic damping of turbine blade vibrations with allowance for the pitch, exit blade angle, and blade curvature
[ NASA-CP-2045-VOL-1-PT-1] 0006 A79-10568
Application of the lifting line concept to helicopter computation
[ ONERA, TP NO. 1978-90] 0018 A79-11571
Iterative method of aircraft wing strength calculation taking into account the effect of deformations on distribution of aerodynamic forces
[ RASA-CH-3135] 0022 A79-12213
Shocks on the hub of a lifting propeller with hinge-mounted blades
[ NASA-CP-2045-VOL-1-PT-1] 0022 A79-12216
Synthesis and analysis of systems for active control and suppression of flutter of flying craft
[ ONERA, TP NO. 1978-90] 0037 A79-12756
Resource conservation through airborne electronics
[ NASA-CP-2045-VOL-1-PT-1] 0052 A79-13079
The implementation and practical verification of a superposition method for the solution of elastic crack problems
[ NASA-CP-2045-VOL-1-PT-1] 00712 A79-33150
AERONAUTICS
AERONAUTICAL SATELLITES
AERONAUTICAL ENGINEERING
NT AEROSAT
U FLUTTER

Separated and unsteady flows in aeronautics - Research at the University of Bristol

The application of system dynamics to a managerial model of aeronautical systems division

A novel approach to the design of an all digital aeronautical communication system

A method for obtaining practical flutter-suppression control laws using results of optimal control theory

Dynamic loads analysis system (DYLOFLEX) summary.

Dynamic loads analysis system (DYLOFLEX) summary.

Aerodynamic center of wing-fuselage-nacelle combinations: Effect of rear-fuselage pylon mounted nacelles

Aerodynamic center of wing-fuselage-nacelle combinations: Effect of rear-fuselage pylon mounted nacelles

A novel approach to the design of an all digital aeronautical communication system

A method for obtaining practical flutter-suppression control laws using results of optimal control theory

Volume 1: Engineering formulation

Volume 1: Engineering formulation

High performance digital transmission, the key for a simple Aerostat airborne equipment

AEROSOLS

AEROSPACE MACHINERY
U FLUTTER

U FLUTTER

U FLUTTER

AEROSPACE MEDICINE

AEROSPACE SYSTEMS

AEROSPACE SYSTEMS
Aerospace Technology Transfer


Computers in Aerospace Conference, 2nd, Los Angeles, Calif., October 22-24, 1979, Technical Papers

A feasibility study for development of structural aluminum alloys from rapidly solidified powders for aerospace structural applications

Scientific research, 1977 -- an overview of air transportation, aircraft design, propulsion systems, space technology, and reconnoissance

Aerospace Technology Transfer

Spinoff 1979

Jet engine-aircraft afterbody interactions - Recommended testing techniques based on TF-17 experience

Aeronautical Congress

Aircrafts

Aerodynamics

Influence of geometric effects on the aspect ratio optimization of axial turbine blades

Plane problems of aerothermodynamics -- retraction in two-dimensional nonuniform medium

Method for digital computer calculation of unsteady temperature fields in turbomachine discs

Acoustics and performance of high-speed, unequally spaced fan rotors

Heat transfer to turbine blades, with special reference to the effects of mainstream turbulence

Creep calculation for thin-walled structures operating under unsteady heating and loading conditions

On some methods for the numerical simulation of flows with complex structure

Noise characteristics of heated high velocity rectangular jets --- jet engine application

The role of three-dimensional flow analysis in the design of turbomachinery

Effect of cooling of the central body on startup, separation of the flow at the intake and the throttling characteristics of air scoops at supersonic and hypersonic velocities

Heat transfer over the initial section of turbine blade cooling channels under conditions of rotation

The aerothermodynamics of aircraft gas turbine engines

Contribution to the development of theoretical calculations for the design and optimization of lifting bodies. (Solution of threedimensional basic thermo fluid dynamics equations with strong interacting attached and separated flow fields)

Thermostructural analysis of a scramjet fuel-injection strut

APCS (CONTROL SYSTEM)

A numerical study of jet entrainment effects on the subsonic flow over nozzle afterbodies

Evaluation of methods for prediction of propulsion system drag

A parametric study of support system interference effects on nozzle/afterbody throttle dependent drag in wind tunnel testing

Engine-aircraft afterbody interactions - Recommended testing techniques based on TF-17 experience

Exhaust plane thermodynamic effects on nonaxisymmetric nozzle afterbody performance in transonic flow

Measurements and predictions of flowyer and static noise of an afterburning turbofan engine in an F-111 airplane

Test verification of a turbofan partial swirl afterburner

Characteristics of afterburning bypass turbojet engines with oxygen injection into the afterburner chamber

A simplified gross thrust computing technique for an afterburning turbofan engine

Measurements and predictions of flowyer and static noise of a TP30 afterburning turbofan engine

Lo-frequency augmentor instability study

Operating condition and geometry effects on low-frequency afterburner combustion instability in a turbofan at altitude

Alternate subsonic low-cost engine

Integration of an airframe with a turbofan and afterburner system

Aging (Materials)

Overage indicators for prepreg products --- materials performance for military aircraft

Interaction of policy and stochastic effects in an air force replaceable item process: A model of aircraft engine aging and removal over time

Agricultural Aircraft

Full-scale wind-tunnel investigation of an Ayres 60-600 Thrush Agricultural Airplane

Model study of aircraft disk brakes

Agricultural helicopters --- test and simulation results

System design requirements for advanced rotary-wing agricultural aircraft

Environmental factors affecting the installation and operation of gas turbine engines in agricultural aircraft

A subject index

the subsonic flow over nozzle afterbodies

Evaluation of methods for prediction of propulsion system drag

A parametric study of support system interference effects on nozzle/afterbody throttle dependent drag in wind tunnel testing

Engine-aircraft afterbody interactions - Recommended testing techniques based on TF-17 experience

Exhaust plane thermodynamic effects on nonaxisymmetric nozzle afterbody performance in transonic flow

Measurements and predictions of flowyer and static noise of an afterburning turbofan engine in an F-111 airplane

Test verification of a turbofan partial swirl afterburner

Characteristics of afterburning bypass turbojet engines with oxygen injection into the afterburner chamber

A simplified gross thrust computing technique for an afterburning turbofan engine

Measurements and predictions of flowyer and static noise of a TP30 afterburning turbofan engine

Lo-frequency augmentor instability study

Operating condition and geometry effects on low-frequency afterburner combustion instability in a turbofan at altitude

Alternate subsonic low-cost engine

Integration of an airframe with a turbofan and afterburner system

Aging (Materials)

Overage indicators for prepreg products --- materials performance for military aircraft

Interaction of policy and stochastic effects in an air force replaceable item process: A model of aircraft engine aging and removal over time

Agricultural Aircraft

Full-scale wind-tunnel investigation of an Ayres 60-600 Thrush Agricultural Airplane

Model study of aircraft disk brakes

Agricultural helicopters --- test and simulation results

System design requirements for advanced rotary-wing agricultural aircraft

Environmental factors affecting the installation and operation of gas turbine engines in agricultural aircraft

A subject index

the subsonic flow over nozzle afterbodies

Evaluation of methods for prediction of propulsion system drag

A parametric study of support system interference effects on nozzle/afterbody throttle dependent drag in wind tunnel testing

Engine-aircraft afterbody interactions - Recommended testing techniques based on TF-17 experience

Exhaust plane thermodynamic effects on nonaxisymmetric nozzle afterbody performance in transonic flow

Measurements and predictions of flowyer and static noise of an afterburning turbofan engine in an F-111 airplane

Test verification of a turbofan partial swirl afterburner

Characteristics of afterburning bypass turbojet engines with oxygen injection into the afterburner chamber

A simplified gross thrust computing technique for an afterburning turbofan engine

Measurements and predictions of flowyer and static noise of a TP30 afterburning turbofan engine

Lo-frequency augmentor instability study

Operating condition and geometry effects on low-frequency afterburner combustion instability in a turbofan at altitude

Alternate subsonic low-cost engine

Integration of an airframe with a turbofan and afterburner system

Aging (Materials)

Overage indicators for prepreg products --- materials performance for military aircraft

Interaction of policy and stochastic effects in an air force replaceable item process: A model of aircraft engine aging and removal over time

Agricultural Aircraft

Full-scale wind-tunnel investigation of an Ayres 60-600 Thrush Agricultural Airplane

Model study of aircraft disk brakes

Agricultural helicopters --- test and simulation results

System design requirements for advanced rotary-wing agricultural aircraft

Environmental factors affecting the installation and operation of gas turbine engines in agricultural aircraft

A subject index
Advanced systems design requirements for large and small fixed-wing aircraft

<table>
<thead>
<tr>
<th>SUBJECT INDEX</th>
<th>AIR CONDITIONING EQUIPMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced systems design requirements for large and small fixed-wing aircraft</td>
<td>A critical review of performance monitoring systems on the basis of the experience obtained from military applications for aircraft engines</td>
</tr>
<tr>
<td>(NASA-CR-158939)</td>
<td>(AIAA 79-7006)</td>
</tr>
<tr>
<td>Study of future world markets for agricultural aircraft</td>
<td>A technique for engine maintenance cost forecasting</td>
</tr>
<tr>
<td>(NASA-CR-158937)</td>
<td>(AIAA 79-29381)</td>
</tr>
<tr>
<td>Identification of high payoff research for more efficient applicator helicopters in agriculture and forestry</td>
<td>Aircraft breathing engines - aerodynamic aspects</td>
</tr>
<tr>
<td>AH-64 HELICOPTER</td>
<td>Structures for supersonic airbreathing tactical missiles</td>
</tr>
<tr>
<td>The effects of latest military criteria on the structural weight of the Hughes advanced attack helicopter - YAH-64</td>
<td>(NASA-CR-152296)</td>
</tr>
<tr>
<td>Damage tolerant design of the YAH-64 main rotor blade</td>
<td>Components with thermal expansion molding of graphite-epoxy structure for L-1011 (NASA-CR-159067)</td>
</tr>
<tr>
<td>Advanced technology helicopter landing gear</td>
<td>(ASME PAPER 78-ENAS-11)</td>
</tr>
<tr>
<td>Ultrasonic welding /solid state bonding/ of aircraft structure - Fact or fancy</td>
<td>(ASME PAPER 78-ENAS-11)</td>
</tr>
<tr>
<td>Multiplex system for the Hughes advanced attack helicopter - YAH-64</td>
<td>Network design</td>
</tr>
<tr>
<td>(AES 78-14)</td>
<td>Large cargo aircraft: A technology assessment, volume 1 (PB-286896/6)</td>
</tr>
<tr>
<td>(AES 78-16)</td>
<td>Large cargo aircraft: A technology assessment, volume 2 (PB-286897/4)</td>
</tr>
<tr>
<td>Handling qualities of Army/Hughes YAH-64 advanced attack helicopter</td>
<td>Cargo/Logistics Airlift System Study (CLASS), volume 1 (NASA-CR-158915)</td>
</tr>
<tr>
<td>(AES 78-31)</td>
<td>Cargo/Logistics Airlift System Study (CLASS), volume 2 (NASA-CR-158916)</td>
</tr>
<tr>
<td>Inertia welding of YAH-64 main rotor drive shaft</td>
<td>Cargo/Logistics Airlift System Study (CLASS), executive summary (NASA-CR-158959)</td>
</tr>
<tr>
<td>(AES 78-32)</td>
<td>Additional analyses of air carried load factors and competition (PB-286577/9)</td>
</tr>
<tr>
<td>Damage tolerant design of the YAH-64 drive system</td>
<td>(NASA-CR-159067)</td>
</tr>
<tr>
<td>(AES 78-46)</td>
<td>Airfreight forecasting methodology and results (NASA-CR-159067)</td>
</tr>
<tr>
<td>Actuator and hydraulic survivability concepts for Hughes YAH-64</td>
<td>The 1990 direct support infrastructure (NASA-CR-159067)</td>
</tr>
<tr>
<td>Automatic Stabilization Equipment for the Army/Hughes YAH-64 Advanced Attack Helicopter</td>
<td>Potential applications of advanced aircraft in developing countries --- Brazil and Indonesia (NASA-TM-79183)</td>
</tr>
<tr>
<td>Multiplex system for the Hughes advanced attack helicopter - YAH-64</td>
<td>Network design</td>
</tr>
<tr>
<td>Automatic Stabilization Equipment for the Army/Hughes YAH-64 Advanced Attack Helicopter</td>
<td>Large cargo</td>
</tr>
<tr>
<td>SUBJECT INDEX</td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td></td>
</tr>
<tr>
<td>Strike Drone - A defense suppression concept using unmanned cruise/loiter/attack vehicle...</td>
<td></td>
</tr>
<tr>
<td>A case study of computer evolution in air defense, command and control, and air traffic control...</td>
<td></td>
</tr>
<tr>
<td>Feasibility study of mini-RPV for attacks...</td>
<td></td>
</tr>
<tr>
<td>Adding the challenge of nap-of-the-earth...</td>
<td></td>
</tr>
<tr>
<td>AIR DROP OPERATIONS</td>
<td></td>
</tr>
<tr>
<td>Parachute-rocket deceleration system design...</td>
<td></td>
</tr>
<tr>
<td>AIR FILTERS</td>
<td></td>
</tr>
<tr>
<td>The trajectories of spherical particles in flow through cascaded turning vanes...</td>
<td></td>
</tr>
<tr>
<td>The status of air motion measurements on NCA aircraft...</td>
<td></td>
</tr>
<tr>
<td>Theoretical-experimental analysis of influence of coolant discharge from perforated turbine vanes...</td>
<td></td>
</tr>
<tr>
<td>Feasibility study of mini-RPV for attacks...</td>
<td></td>
</tr>
<tr>
<td>AIR FLOW</td>
<td></td>
</tr>
<tr>
<td>NT JET STREAMS (METEOROLOGY)</td>
<td></td>
</tr>
<tr>
<td>NT VERTICAL AIR CURRENTS</td>
<td></td>
</tr>
<tr>
<td>Investigation of the electrification of an axial flow model by a humid airstream in a wind tunnel...</td>
<td></td>
</tr>
<tr>
<td>Skirt components of the aerodynamic characteristics of an air-cushion vehicle using the oncoming flow to generate lift...</td>
<td></td>
</tr>
<tr>
<td>AIR INTAKES</td>
<td></td>
</tr>
<tr>
<td>AIR PURIFICATION</td>
<td></td>
</tr>
<tr>
<td>AIR FREIGHT</td>
<td></td>
</tr>
<tr>
<td>AIR RECIPIROCATING</td>
<td></td>
</tr>
<tr>
<td>AIR COOLING</td>
<td></td>
</tr>
<tr>
<td>Experimental study of the gasdynamic characteristics of a nozzle guide vane row with air ejection onto the vane surface...</td>
<td></td>
</tr>
<tr>
<td>The NASA high pressure facility and turbine test rig...</td>
<td></td>
</tr>
<tr>
<td>Gas turbine combustor cooling by augmented backside convection...</td>
<td></td>
</tr>
<tr>
<td>Theoretical-experimental analysis of influence of coolant discharge from perforated turbine vanes...</td>
<td></td>
</tr>
<tr>
<td>Experiments on air-cooled high-temperature turbine...</td>
<td></td>
</tr>
<tr>
<td>Variations of cooling method of turbine blade...</td>
<td></td>
</tr>
<tr>
<td>Development of a cooled laminated axial turbine...</td>
<td></td>
</tr>
<tr>
<td>Model tests on cooling of gas turbine blades...</td>
<td></td>
</tr>
<tr>
<td>Determination of cooling air mass flow for a horizontally-opposed aircraft engine installation...</td>
<td></td>
</tr>
<tr>
<td>Engine demonstration test of a cooled laminated axial turbine...</td>
<td></td>
</tr>
<tr>
<td>Computer calculations of steady-state temperature fields in air-cooled turbine rotor blades...</td>
<td></td>
</tr>
<tr>
<td>Computer calculations of steady-state temperature fields in cooled turbine disks...</td>
<td></td>
</tr>
<tr>
<td>Fall-scale wind tunnel study of nacelle shape on cooling drag...</td>
<td></td>
</tr>
<tr>
<td>Experimental study of the gasdynamic characteristics of a stator cascade with cooling air discharge through the vane surface...</td>
<td></td>
</tr>
<tr>
<td>Model tests on cooling of gas turbine blades...</td>
<td></td>
</tr>
<tr>
<td>Thermal-structural mission analyses of air-cooled gas turbine blades...</td>
<td></td>
</tr>
<tr>
<td>Internally cooled air-cooled gas turbine blading...</td>
<td></td>
</tr>
<tr>
<td>AIR CURRENTS</td>
<td></td>
</tr>
<tr>
<td>NT JET STREAMS (METEOROLOGY)</td>
<td></td>
</tr>
<tr>
<td>NT VERTICAL AIR CURRENTS</td>
<td></td>
</tr>
<tr>
<td>AIR CUSHION VEHICLES</td>
<td></td>
</tr>
<tr>
<td>Characteristics of an Air Cushion Landing System incorporating an inelastic trunk...</td>
<td></td>
</tr>
<tr>
<td>Air cushion landing gear applications study...</td>
<td></td>
</tr>
<tr>
<td>AIR DEFENSE</td>
<td></td>
</tr>
<tr>
<td>NT ANTIMISSILE DEFENSE</td>
<td></td>
</tr>
<tr>
<td>The flow at the inlet and in the throat region of a plane supersonic air intake...</td>
<td></td>
</tr>
</tbody>
</table>
AIR NAVIGATION

The injector driven tunnel

Air inlet engine matching problems of a jet aircraft

Area navigating systems for general aviation

Area navigation, traffic control, collision avoidance and communication system -- SINTAC-C2

Integrated navigation, communication, navigation and identification in the 1980's and beyond using low duty distributed time-frequency-phase-code-technology -- for aircraft, missiles, and other mobile platforms

Integrated navigation, traffic control, collision avoidance and communication system -- SINTAC-C2

An analysis of air intakes in the boundary layer

Influence of the ellipticity of the inlet section of an S-shaped air intake on the uniformity of the outward flow -- for aircraft engines

The effect of intake conditions on supersonic flutter in turbofan engines

A throat-bypass stability bleed system using relief valves to increase the transient stability of a mixed-compression inlet -- 77-12 aircraft inlet tests in the Lewis 10 by 10 ft supersonic wind tunnel

Investigation of air stream from combustor-liner air entry holes, 3

Jet discharge coefficient through openings for supersonic wind tunnel

Jetting coefficient through openings for parallel flow

Study of mass transfer between the primary zone and secondary air jets in gas turbine engine combustion chambers

Investigation of air stream from combustor-liner air entry holes, 3

An air launched test vehicle for ejection seat parachutes

Wind tunnel simulation of the firing of missiles carried under aircraft

A simple integrated navigation system on VOR-DME basis

Experimental design study of an airborne interferometer for terrain avodance

A finite element approach to the problem of sound propagation and attenuation in jet engine air intakes

Implementation of the Omega system for air navigation

Influence of the flow angle on the characteristics of an elbow-shaped air intake -- of gas turbine engines

Influence of the angle of attack and low Reynolds number

Onboard navigation and flight control integrated system architecture

Flight and navigation instruments for general aviation

Design of a spread-spectrum navigation receiver

Fail-safe output stage for navigation transmitters

Multifunctional potentials of present-day radio navigation systems

Distributed time division multiple access -- CDMA/ -- an advanced communication technique with application to CCC and integrated CRI --- Command, Control, Communication and integrated Communication, Navigation, Identification

GPS receiver operation

GPS Phase I user equipment field tests

JTIDS modular design to use SAW devices -- Joint Tactical Information Distribution System for aircraft communications

Application of a north seeking heading and attitude reference for the autonomous navigation of helicopters

Designing-in reliability -- A new approach -- for P-18 Inertial Navigation System

Aeronautical aspects of the DOJ National Plan for Navigation

Helicopter navigation goals

Navigational systems requirements via collision risk model -- for aircraft

Airlines long-range navigation assessment

Inertial technology and reliability -- for navigation systems

Experience with integrated navigation involving compensation according to the method of the least squares -- for air traffic control

The economic superiority of integrated navigation systems, represented for MILTAC -- Microwave Integrated Landing/Tacroute navigation and air traffic control system

Direction finders in the service of safety for air and sea traffic

Use of the Omega Navigation System in the North Atlantic in the framework of the Navigation Minus Performance Specifications

Wide-aperture digital YOR

An airborne microcomputer for radio navigation

En route minimum safe altitude warning -- R-MIN

The future of surveillance systems in civil aviation
AERONAUTICAL INFORMATION DATA SUBSYSTEMS /AIIDS/
- The impact of low cost micro-processors on airborne navigation systems
  p0679 A79-50920
- System capacity of the approach- and landing aid
  SETAC
  p0679 A79-51008
- Operational requirements for flight control and navigation systems for short haul transport aircraft
  [NASA-CR-152208]
  p0689 A79-12054
- Impact of area navigation on controller productivity and ATC system capacity
  [FAA-RD-70-517]
  p0231 A79-16825
- Algorithms and logic for incorporation of MLS back azimuth information into the NASA TVC B-737 airplane area navigation system
  [NASA-TM-X-80039]
  p0291 A79-17803
- Simulation evaluation of combined 4D NAV and airborne traffic situation displays and procedures applied to terminal area maneuvers
  [NASA-CR-15674]
  p0300 A79-21033
- Recognition of the aircraft navigation light
  colour code
  p0704 A79-32186
- Low-cost inertial navigation for moderate-g missions
  p0706 A79-32205

AIR POLLUTION

Polution sources caused by aviation
- Wide range operation of advanced low NOx aircraft gas turbine combustors
  [ASHE PAPER 79-GT-128]
  p0066 A79-10453
- HCR content of turbine engine exhaust
  p0099 A79-10792
- Measurement and analysis of port and starboard emissions
  p0206 A79-23741
- Atmospheric dispersion modeling --- for air pollutants
  p0206 A79-23742
- Reducing air pollutant emissions at airports by controlling aircraft ground operations
  p0206 A79-23744
- Updated model assessment of pollution at major U.S. airports
  p0206 A79-23745
- Aircraft engine emissions are under continuing surveillance
  p0342 A79-30581
- Characteristic time correlations of pollutant emissions from an annular gas turbine combustor --- of aircraft engines
  [ASHE PAPER 79-GT-194]
  p0396 A79-32452
- Contribution to the development of motor emission regulations
  [ONERA, TP NO. 1979-43]
  p0473 A79-39092
- Analysis of plane rise from jet aircraft
  p0532 A79-43436
- Correlation technique for ambient effects on oxides of nitrogen --- from combustion products in atmospheric pollution
  p0641 A79-49922
- Analytical-kinetic models for the evaluation of emitting pollutants from aircraft gas turbines --- limiting techniques
  p0699 A79-52758
- Jet engine test cells: Emissions and control measures, phase 2
  [PB-282412/6]
  p0039 A79-10072
- Pilot program to develop operating time emission degradation factors for general aviation piston engines
  [NTIS/PS-78/0973/4]
  p0098 A79-12585
- Nitrogen oxide air pollution. Part 3: Atmospheric chemistry. A bibliography with abstracts
  [NP/PS-78/0973/4]
  p0098 A79-12593
- Investigation of turile-turbine energy chamber (G/T: value trademark): An air bleed device
  [PB-2824110]
  p0168 A79-18397
- The feasibility of controlling turbine engine test cell particulate emissions with a baghouse
  [AD-A061120]
  p0168 A79-18655
- Air Force turbine engine emission survey. United States. Volume 1: Test summaries
Operational requirements for flight control and navigation systems for short haul transport aircraft
Aircraft obstruction of microwave links
Runway configuration management system concepts
[AD-A069966/4] p0548 N79-26288

Cockpit displays of traffic information: Airline pilots opinions about content, symbology, and format

Air traffic congestion and capacity. A cascade - Queue model of airport users
[NTSIS/PS-79/0594/6] p0089 R79-12054

Operational benefits from the Terminal Configured Vehicle -- aircraft equipment for air traffic improvement
[p0004 A79-10390]

A technical review of the radar systems implemented by Eurocontrol
[p0004 A79-10318]

Developments in radar data processing at the London Air Traffic Control Centre
[p0004 A79-10329]

Multisensor utilization investigation --- for automated ATC surveillance
[p0004 A79-10330]

Experimental design for real-time simulations of air traffic control concepts
[p0004 A79-10418]

Commercial STOL - The airplane, the airport
[p0004 A79-10394]

Simulation study of the effects of fuel-conservative approaches on ATC procedures and terminal area capacity
[p0004 A79-10396]

Planning the high elevation/high temperature airport
[p0004 A79-10398]

A Sub operator's view of small aircraft operations
[p0005 A79-10402]

The airport capacity increasing potential of angled runway exit designs
[p0006 A79-10412]

Experimentation with new ATC display devices - A means for the automation of air traffic control
[p0015 A79-18635]

Resource conservation through air traffic control
[p0017 #79-11492]

Adaptation of electronic aid systems to the requirements of air traffic controllers
[p0026 A79-12473]

Track-while-scan algorithms in a clutter environment
[p0026 A79-12473]

'Strategic' time-based ATC --- by long-term flight planning
[p0026 A79-12473]

Considerations on the airborne use of DME interrogators or SSF transponders for ground-derived landing and surveillance systems
[p0054 A79-12324]

FAA's development program for Aircraft Separation Assurance /ASA/
[p0055 A79-12327]

Resource conservation through air traffic control
[p0056 A79-12356]

The AGDLS - A multipurpose system for in-flight evaluation of new ATC techniques --- Air Ground Data Link System
[p0056 A79-12356]

Integrated navigation, traffic control, collision avoidance and communication system - SITPAC-c2
[p0057 A79-12367]

The wake vortex advisory system --- used for safe aircraft landing
[p0057 A79-12368]

The AGDLS - A multipurpose system for in-flight evaluation of new ATC techniques --- Air Ground Data Link System
[p0058 A79-12377]

A relative motion analysis of horizontal collision avoidance
[p0062 A79-14088]

Performance evaluation of the experimental BCAS/Beacon Collision Avoidance System
[p0065 A79-14104]

Automated OMEGA/VLF monitoring and forecasting for international navigation
[p0077 A79-16164]

Evolution of area navigation in the air traffic control system
[p0077 A79-16172]

Dependency of track quality on the number of radar sensors --- air traffic control
[p0115 A79-17680]

The new microwave landing systems and their growth potential
[p0115 A79-17686]

The economic superiority of integrated navigation systems, represented for MILCS --- Microwave Integrated Landing/Enroute navigation and air traffic control system
[p0115 A79-17679]

Direction finders in the service of safety for air and sea traffic
[p0115 A79-17687]

Automatisation in air traffic control - Planning for the 1980s within the province of the Federal Institute of Air Traffic Control
[p0117 A79-17692]

Display of flight plan information on electronic data display devices - A means for the enhancement of the capacity in air traffic control
[p0117 A79-17694]

Investigation for planning the approach traffic
[p0117 A79-17696]

ATC simulations for the implementation of bilingual TFR in control in Canada
[p0126 A79-18229]

Transfer function modeling of air traffic concentration
[p0128 A79-18635]

The MLS approach and landing system
[p0151 A79-20050]

The future - ARTS III --- Automated Radar Terminal Systems for air traffic control
[p0198 A79-22705]

Dynamic simulation studies of fuel conservation procedures used in terminal areas
[p0204 A79-23581]

ATC operations in first decade of en route automation
[p0204 A79-23582]

A look at the near future --- computerized flow control systems for ATC
[p0204 A79-23585]

ATC delays - The number one problem in the next decade
[p0204 A79-23586]

Integrated ATC development - The next decade: A Safety Board viewpoint
[p0204 A79-23586]

NASA plans and programs in support of integrated ATC development
[p0204 A79-23587]

DERR-MC - The new ATC system in the FBO --- Display of Extracted Radar Data-MiniComputer
[p0204 A79-23588]
AIR TRAFFIC CONTROLLERS (PERSONNEL)

Development and evaluation of Selective Address Beacon (SAB) system
[AD-A0568571] p0100 N79-13022
Design, fabrication, and testing of b-board model ATCBS based surface trilateration data acquisition subsystem
[AD-A0517020] p0160 N79-10601
Design, fabrication, and testing of a b-board model ATCBS based surface trilateration data acquisition subsystem
[AD-A0573993] p0161 N79-10605
Systems integration analysis for future tower cab configurations/systems
[AD-A0566276] p0161 N79-10606
Atlanta center upgraded third generation enroute air traffic control handbook, calendar year 1977
[AD-A060217] p0297 1179-17499
Automated VHF Frequency Assignment System (FAAS) for FAA air traffic control communications
[AD-A061336] p0297 1179-17499
Comparative study of flare control laws - optimal control of b-737 aircraft approach and landing
[AD-A057933] p0162 1179-14065
Airborne measurements of ATCRBS fruit
[AD-A056180] p0162 1179-14071
Air traffic control in the year 2000
[AD-A051064] p0160 N79-14060
Central flow control software design document. Volume 1: Operational software complex --- automation support to the Air Traffic Control System Command Center
[AD-A0700771] p0663 N79-29159
Central flow control software design document. Volume 2: Support software complex --- automation support to the Air Traffic Control System Command Center
[AD-A0700771] p0663 N79-29159
A developmental computer model for investigations of air traffic management problems: A case investigating two decision strategies
[AD-A071075] p0668 N79-31189
Air traffic control/final beacon collision avoidance system Chicago simulation
[AD-A069524] p0713 N79-33178
Aircraft accident report: Midair collision between adjacent computerized air traffic control centers
[AD-A0702086] p0709 N79-32615
Numerical studies of conversion and transformation in a surveillance system employing a multitude of radars, part 2 --- advanced air traffic control services
[AD-A0702086] p0709 N79-32615
Aircraft accident report: United Airlines, Inc., Douglas DC-8-54, N8007Q near Faysville, Utah, 18 December 1977
[NTSA-AIR-78-8] p0591 1179-29159
Automated Radar Terminal System development - The next decade: The future of air traffic management problems: A case of the reachable state
[AD-A070771] p0669 N79-31189
Numerical studies of conversion and transformation in a surveillance system employing a multitude of radars, part 1 --- advanced air traffic control services
[AD-A070770] p0710 N79-32416
Air traffic control/air traffic control service
[AD-A069524] p0713 N79-33178
Aircraft accident report: Midair collision involving a Falcon Jet, N1216W, and a Compass 150, N6023E, Tupelo, Tennessee
[FAA-NA-78-14-1] p0204 1179-23583
Collision avoidance an annotated bibliography
[FAA-NA-78-14-2] p0237 1179-16879
NAV route design-terminus area design procedures and transition area design guidelines
[FAA-RD-78-51] p0231 1179-16825
Air traffic control by distributed management in an MLS environment
[FAA-NA-78-8] p0231 1179-16827
Engineering and development program plan: Terminal/tower control
[FAA-EM-78-201] p0231 1179-16826
ATCRB system training tests with site-adaptation logic
[FAA-NA-78-4] p0231 1179-16827
FAA TCAS concept, appendices A-Z
[FAA-EM-78-5-3-A] p0231 1179-16830
FAA TCAS concept, appendices V-W
[FAA-EM-78-5-3-E] p0231 1179-16831
Survey of radar simulation training at ATC field facilities
[FAA-NA-78-27] p0291 N79-17949
Definition, description, and interfaces of the ATC systems
[AD-A0468001] p0247 1179-23943
Air traffic control systems (ATCS) air traffic control system development plan
[AD-A060655] p0549 N79-27119
FAA air traffic activity, fiscal year 1978
[AD-A0697101] p0508 N79-26188
Aircraft accident report: United Airlines, Inc., Douglas DC-8-54, N8007Q near Faysville, Utah, 18 December 1977
[NTSA-AIR-78-8] p0591 1179-29159
Central flow control software design document. Volume 1: Operational software complex --- automation support to the Air Traffic Control System Command Center
[AD-A0700771] p0663 N79-29059
Central flow control software design document. Volume 2: Support software complex --- automation support to the Air Traffic Control System Command Center
[AD-A0700771] p0663 N79-29059
A developmental computer model for investigations of air traffic management problems: A case investigating two decision strategies
[AD-A071075] p0668 N79-31189
Air traffic control/final beacon collision avoidance system Chicago simulation
[AD-A069524] p0713 N79-33178
Next generation airport surveillance radar (ASR-1) definition study --- operational requirements of radar for air traffic control
[AD-A0702086] p0709 N79-32615
Helicopter air traffic control operations
[AD-A0702086] p0709 N79-32615
Microwave landing system. Citations from the NTIS data base --- a bibliography with abstracts
[AD-A067910] p0584 1179-28188
Microwave landing system. Citations from the NTIS data base --- a bibliography with abstracts
[NTIS/PS-79/0778/7] p0714 N79-33187
Microwave landing system. Citations from the Engineering Index data base --- a bibliography with abstracts
[NTIS/PS-79/0778/5] p0714 N79-33187
Microwave landing system. Citations from the Engineering Index data base --- a bibliography with abstracts
[NTIS/PS-79/0778/5] p0714 N79-33187
Dateline, and Washington, D.C.
[DOLE PAPER 79-050] p0521 1179-42376
Investigation concerning an Airborne Terminal /AT/ for pilot/controller communication over a ground/board/ground data link
[AD-A050546] p0531 N79-42376
Policy impacts of ATC automation: Human factors considerations
[AD-A050546] p0531 N79-42376
Impact of area navigation on controller productivity and ATC system capacity
[AD-A070770] p0291 N79-16825
Air traffic control - The next decade: The future of air traffic management problems: A case of the reachable state
[AD-A070771] p0669 N79-31189
Conflict warning for the radar controller is air traffic control
[AD-A073206] p0713 N79-17685
Integrated ATC development - The next decade. The controller's viewpoint
[AD-A073206] p0716 N79-17685
Investigation concerning an Airborne Terminal /AT/ for pilot/controller communication over a ground/board/ground data link
[DOLE PAPER 79-050] p0521 1179-42376
Policy impacts of ATC automation: Human factors considerations
[AD-A050546] p0531 N79-42376
Impact of area navigation on controller productivity and ATC system capacity
[AD-A070770] p0291 N79-16825
Airport development in Micronesia
[SAP PAPER 780530] p0005 A79-10400
Motorcraft for transport use - European requirements
[SAP PAPER 780535] p0006 A79-10404
Directions for developing an air cargo system
[SAP PAPER 780556] p0006 A79-10411
Evolution of the turboprop for high speed air transportation
[ASME PAPER 78-GT-181] p0012 A79-10821
AIRBORNE SURVEILLANCE RADAR

- Multichannel infrared receiver performance — for airborne detection of antiaircraft missiles
- Radar cross section fundamentals for the aircraft designer [AIAA PAPER 79-1818]
- Real time weather display in the general aviation cockpit [AIAA PAPER 79-1821]
- Power hybridization - key to reducing avionics power supply weight and volume
- Multifunction CO2 heterodyning laser radar for low level tactical operations
- Airborne microwave ECM
- The A.1. tracking problem — Airborne Interception
- Testing the feasibility of Differential Omega for airborne use [AD-A059329]
- Airborne measurements of MCRPS fruit [ATC-84]
- Analysis of the functional requirements for an intelligent airborne computer system [AD-A061649]
- ARAPS-96 radar modification program [AD-A062565]
- In-flight utilization of an optical fiber transmission system on a Falcon 10 aircraft
- Application of color-coding in airborne tactical displays [AD-A067556]
- An in-flight controller insensitive to parameters variation [DLR-PE-78-07]
- Heterodyning CO2 laser radar for airborne applications

AIRBORNE SURVEILLANCE RADAR

- Multi-filter MTI system
- A yaw stabilized S.A.R. aerial
- Considerations on the airborne use of DME interrogators or SSR transponders for ground-derived landing and surveillance systems
- Airborne Early Warning Microwave / Chadwick Memorial Lecture/
- Adaptation of a digital airborne radar for use on the microphysics research aircraft [SAE PAPER 790583]
- Design considerations for the NOAA airborne meteorological radar and data system
- Technology and the new look meet the FAA-18 radar [AIAA PAPER 790524]
- Built in test of A/C converters - Present approaches and recommendations for improved BIT effectiveness — in airborne radar systems
- Millimeter airborne radar target detection and selection techniques
- A new three-dimensional surveillance radar
- The curved modulation FMCC radar altimeters in military applications
- Automated tracking for aircraft surveillance radar systems

AIRBORNE/SPACEBORNE COMPUTERS

- New-generation Tacan equipment
- Optimal control of helicopter longitudinal motion on the basis of an operational algorithm
- Information distribution in distributed microprocessor based flight control systems
- A-52 aircraft gross weight computational system

Design of a flexible aircraft data acquisition system — for meteorological research
- An airborne microcomputer for radio navigation
- Flight test control by means of a microprocessor. I [AIAA PAPER 79-23250]
- SIPS — Design and analysis of a fault-tolerant computer for aircraft control — Software Implemented Fault Tolerant systems [AIAA PAPER 79-25718]
- Development of the L-1011 Flight Management System [AIAA PAPER 79-26355]
- FAA air traffic control automation — Programs and trends
- Head-up Display and Weapon Aiming Computer / W/DWAC/ system for the Sea Harrier
- The new P-3C Orion aircraft with the NAAF
- Informativeness and effectiveness of digital command-generating devices — flight vehicle onboard computers
- The effects of low-level wind shear on the approach and go-around performance of a landing jet aircraft [SAE PAPER 790568]
- A general aviation flight test application of the on-board computer [SAE PAPER 790583]
- Exploring team avionics systems by simulation [AD-A067558]
- New paths for the development of aircraft equipment opened up by the use of modern computer technology — digital systems for civil aviation
- Prospects for airborne computer systems
- Solution of navigation problems in aircraft onboard systems equipped with digital computer
- Dual digital flight control redundancy management system development program [AIAA 79-17017]
- The DC-9-80 digital flight guidance systems and onboard computer [SAE PAPER 790536]
- The impacts of low cost micro-processors on the airliner flight deck [AIAA PAPER 79-17047]
- Digital adaptive control laws for VTOL aircraft [AD-A059329]
- Evaluation and analysis of current MIL-STD-1553 onboard computers [AIAA PAPER 79-17053]
- Computer Monitor and Control — A flexible, cost-effective implementation
- Evolving methods for reducing avionics data in an AIXP environment — Avionics Integration Support Facility flight program testing
- Integrated CWI avionics -- ECM-resistant communication, navigation and identification
- E-3a sensor / WAC/ ATGP — Automatic Test Program Generation
- The impact of low cost micro-processors on airborne navigation systems
- Experiences with an airborne digital computer system for general aviation flight testing [AIAA PAPER 79-1831]
- Computers in Aerospace Conference, 2nd, Los Angeles, Calif., October 22–24, 1979, Technical Papers
- Assessment of software development and maintenance costs due to retrofit of embedded avionics computer [AIAA 79-1906]
- A multi microprocessor flight control system — Architectural concepts [AIAA 79-1925]
Determination of the probability of consequences of aircraft-system failures in the evaluation of flight safety levels p0687 A79-52144

Innovative developments in demonstrative evidence techniques and associated problems of admissibility p0691 A79-53555

A review of crashworthiness --- in aircraft accident-liability cases p0692 A79-53557

Single pilot IFR operating problems determined from accidental data analysis [NASA-TM-78773] p0804 N79-11013


Aircraft accident reports: Brief format US Civil aviation issue number 5 - 1976 accidents [NTSB-BA-77-3] p0217 N79-15926


Briefs of accidents involving multiple carbon fiber incidents p0289 N79-17829


Overview of the carbon fiber problem p0295 N79-18076

Probabilistic analysis of air carrier accidents p0296 N79-18078

Carbon fiber release conditions p0296 N79-18079

Estimation of economic losses p0296 N79-18083

Synthesis of national risk profile p0296 N79-18085


Occupant injury mechanisms in civil helicopter accidents p0311 N79-19653

Comparative injury patterns in US Army helicopters p0311 N79-19654

Engineering analysis of crash injury in army aircraft p0312 N79-19655

Assessment of the benefits of aircraft crashworthiness p0312 N79-19657

Helicopter crashworthy fuel system and their effectiveness in preventing thermal injury p0312 N79-19660

A method for selecting a crashworthy fuel system design p0312 N79-19661

Source of released carbon fibers p0426 N79-22200

An assessment of local risk --- to area associated with commercial operations of aircraft with graphite fiber composite structures p0426 N79-22207

Safety hazard of aircraft icing p0481 N79-23916

Advanced risk assessment of the effects of graphite fibers on electronic and electric equipment, phase 1 --- simulating vulnerability to airports and communities from fibers released during aircraft fires [NASA-CR-159027] p0586 N79-28419

The analysis of National Transportation Safety Board small single-engine fixed-wing aircraft accident/incident reports for the potential presence of low-level wind shear [AD-A069388] p0589 N79-28088


Helicopter obstacle strike tolerance concepts analysis [AD-A069877] p0652 N79-30179


Simple engine, fixed wing general aviation accidents [PB-297216/4] p0713 N79-33376

AIRCRAFT ANTENNAS

RCs reduction of installed aircraft antennas --- Radar Cross Section prediction p0247 A79-24776

Aircraft antenna pattern measurements using near field techniques p0247 A79-24772

A proposed integrated ECM system using the constant index lens antenna p0247 A79-24776

Near-field analysis of helicopter rotating blades modulation interference p0248 A79-25131

A model for calculating the radiation field of microstrip antennas p0315 A79-28422

Low profile polarization cage for Yagi-Uda antennas p0343 A79-30784

High power DPH slide screw tuner for antenna beamwidth measurements p0349 A79-32190

Experimental analysis of V.H.F. antennas for helicopter hearing systems using scale-model techniques p0605 A79-34392

Russian book p056a A79-44892

Aerial isolation - a study of the interaction between co-axial - serials - transmitting and receiving aircraft antennas p0574 A79-46240

Multiband antenna --- for tactical naval aircraft p0614 A79-88596


Evaluation of the radar altimeter reference method (using altitude system positioning errors p0645 A79-50436

Radiation from quarter-wavelength monopoles on finite cylindrical, conical, and rocket-shaped conducting bodies --- airborne antenna design p0647 A79-50606

The penetration of electromagnetic fields into aircraft from externally mounted HF antennas p0690 A79-52891

In-house exploratory development program on microstrip antennas [AD-A058899] p0107 N79-13233

A hybrid technique for combining the moment method of wire antennas with the GTD for curved surfaces [AD-A058495] p0108 N79-13241
AIRCRAFT CONFIGURATIONS

Physical and subjective studies of aircraft interior noise and vibration [NASA-TN-780064]

Recent advances in materials toxicology [ASA PAPER 79-1786]

A review of Boeing interior materials and fire test methods development progress [ASA PAPER 79-1833]

Development of aircraft lavatory compartments with improved fire resistance characteristics. Phase 2: Sandwich panel resin system development [NASA-CR-152120]

Recent applications of advanced computational methods in the aerodynamic design of transport aircraft configurations [ASA PAPER 79-12366]

Parametric investigation of vertical canards at unsteady subsonic and supersonic potential [ASA PAPER 79-1264]

A review of Boeing interior materials and fire test methods development progress [ASA PAPER 79-1264]

Evaluation of Boeing interior materials and fire test methods development progress [ASA PAPER 79-1264]

Effects of spanwise blowing on two fighter airplane configurations [ASA PAPER 79-1264]

Aerodynamic characteristics of a supersonic cruise airplane for finned configuration 1 space shuttle solid rocket booster decelerator [NASA-CE-150835]

Aerodynamic characteristics of a supersonic cruise airplane for finned configuration 1 space shuttle solid rocket booster decelerator [NASA-CE-150835]

Effect of nozzle spacing on ground interference forces for a V/STOL jet V/STOL aircraft [ASA PAPER 79-1856]

Load and dynamic assessment of B-52B-008 carrier aircraft for finned configuration 1 space shuttle solid rocket booster decelerator [ASA PAPER 79-1856]

Application of Lagrange Optimization to the drag polar utilizing experimental data [ASA PAPER 79-1833]

Load and dynamic assessment of B-52B-008 carrier aircraft for finned configuration 1 space shuttle solid rocket booster decelerator [ASA PAPER 79-1833]

Load and dynamic assessment of B-52B-008 carrier aircraft for finned configuration 1 space shuttle solid rocket booster decelerator [ASA PAPER 79-1833]

Aerodynamic characteristics of a supersonic cruise airplane configuration at Mach numbers of 2.30, 2.96, and 3.30 --- Langley Unitary Plan wind tunnel test [NASA-TN-80061]

Calculation of aerodynamic pressure distributions on arbitrary aircraft geometries using the Woodward aerodynamic analysis program [NASA-CE-150835]

The use of panel methods for stability derivatives [NASA-CR-150835]

Configuration development study of the X-24C hypersonic research airplane [NASA-CR-150835]

Configuration development study of the X-24C hypersonic research airplane, phase 3 [NASA-CR-150835]

Comparison of the aerodynamic properties of an airplane with the tail-first configuration and with the conventional configuration [NASA-CR-150835]

A comparison of panel methods for subsonic flow computation [NASA-CR-150835]

Surface pressure data for a supersonic-cruise airplane configuration at Mach numbers of 2.30, 2.96, and 3.30 [NASA-TN-80061]

The impact of alternate fuels on aircraft configuration characteristics --- military aircraft [NASA-CE-150835]

Type V/STOL propulsion system development [ASA PAPER 79-1264]

Nuclear aircraft innovations and applications [ASA PAPER 79-1264]

British lighter-than-air activity -- A review [ASA PAPER 79-1264]

The hydrofoil sea-plane as a high-speed naval craft [ASA PAPER 79-1264]

Winglets are no drag --- enhancement of aerodynamic efficiency with vertical wingtip extensions [ASA PAPER 79-1264]

Propulsion system and airframe integration considerations for advanced air-to-air (missile) [ASA PAPER 79-1264]

Effects of spanwise blowing on two fighter airplane configurations [ASA PAPER 79-1264]
AIRCRAFT CONSTRUCTION

Identification of aircraft parameters in turbulence with non-rational spectral density

In-flight handling qualities investigation of various longitudinal short term dynamics and direct lift control combinations for flight path tracking using DFVLR EFF 320 variable stability aircraft

Introduction and overview of configurations --- for transonic flows

Single engine, fixed wing general aviation accidents [FBP-9721/6/4]

AIRCRAFT CONSTRUCTION
AIRCRAFT STRUCTURES
AIRCRAFT CONSTRUCTION MATERIALS
AT AIRFRAME MATERIALS

Relative behavior of graphite/epoxy and aluminum fatigue strength of airplanes and modern composite wing technology on the AV-88 advanced tilt-rotor aircraft

Structural design, tooling and manufacturing of a composite YF-16 forward fuselage

Temperature/humidity criteria for advanced composite structures

Repair of directionally solidified airfoil components

A helicopter fuselage design concept

Laboratory fire testing of cabin materials used in commercial aircraft

Applicability of certain plastics in aviation industry from viewpoint of toxicology

Design against fatigue - Current trends --- for aircraft structural reliability

Environmental models for moisture absorption by aircraft composites

Structural aluminum materials for the 1990's

Future trends in aircraft structural materials

Current work in materials and methods-of-construction research --- composite and ceramic materials for aerospace systems

Environmental synergism and simulation in resin matrix composites --- under airfield humidity and temperature conditions

Design of a typical aeronautical structure from carbon-resin composites

Economical processing of fiber-reinforced components with thermal expansion coefficient --- CFRP structures for aircraft aileron [DGLR PAPER 79-011]

Gust spectrum fatigue crack propagation in candidate skin materials

Development of an aircraft composite propeller [SAE PAPER 790575]

Installation for studying fatigue strength of materials in acoustic loading --- for aircraft skins

Fabrication research for supersonic cruise aircraft --- YF-12 skin structures

C-141 hybrid composite leading edge --- materials and fabrication methods

Recent advances in fire resistant materials in aircraft construction

Special sandwich constructions for the interior of commercial aircraft

High-performance reinforced plastic structures for civil aviation

New materials for future commercial aircraft [AIAA PAPER 79-1804]

Handbook on aircraft materials and their application technology

Metal-matrix composite structures [ABS 79-34]
Certification of composites in civil aircraft

Direct effects, protection methods for thin composites --- lighting protection for aircraft

Study to develop improved fire resistant aircraft passenger seat materials, phase 2

Behavior of nonmetallic materials in shake off derived jet fuels and in high aromatic and high sulfur petroleum fuels --- compatibility of aircraft materials to fuels

Pressures of modeling of vertically burning aircraft materials

A feasibility study for development of structural aluminum alloys from rapidly solidified powders for aerospace structural applications

Fabrication and evaluation of advanced titanium structural panels for supersonic cruise aircraft

Design of heavy sections --- fracture mechanics of plate or forged airframe components

Aircraft control

Flight and propulsion controls integration for V/STOL propulsion/control concept

Optoelectronic devices for flight vehicle control systems --- Software Implemented Fault Tolerant systems

Redundant control systems for flight vehicles --- Russian book

F-16 high angle of attack testing

Redundant control systems for flight vehicles --- Russian book

Gust alleviation using direct turbulence regulators

Modeling the sensitivity of a linear system to a decrease in its order by the method of natural parameter-insensitive control --- for aircraft flight


The results of synthesizing and evaluating potential solutions for Multi-Function Tower Reference Assembly /TRA/ candidate configurations --- for transport and fighter aircraft

Flight control. II - Control system design

Semiautomatic control of aircraft: Systems of manual aircraft control --- Russian book

Aircraft control

Flight and propulsion controls integration for selected in-flight thrust vectoring modes

The Wright brothers' flight-control system --- canard configuration

Method of eliminating static and dynamic errors in the reproduction of motion of T/Simulator displays --- for aircraft flight

Desensitizing constant gain feedback linear regulators

Active control --- aircraft systems

Man-machine interface --- aircraft control and displays

Onboard navigation and flight control integrated system architecture

Considerations on the design of warning systems --- for aircraft flight malfunctioning

Study of the integration of active control systems elements in the high lift system of a transport aircraft into maneuver control, gust-load control, and direct control of lift

Analytic design of aircraft automatic pitch controller

An information matrix approach for aircraft parameter-insensitive control --- for C-5A wing loading alleviation

Information distribution in distributed microprocessor based flight control systems

Comparative study between two different active flutter suppression systems

Fly-by-wire for vertical lift

Definition and analytical evaluation of a power management system for tilt-rotor aircraft

The Tri-Plane V/STOL propulsion/control concept

The evolution of fly-by-wire control techniques in the UK

Problems raised by the application of the natural stability reduction concept to transport aircraft

Optoelectronic devices for flight vehicle control systems --- Russian book

F-16 high-alpha flight control characteristics and control system concept

The impact of the total lightning environment on aircraft flight control systems

SIFT - Design and analysis of a fault-tolerant computer for aircraft control --- Software Implemented Fault Tolerant systems

Control system time response optimization - A nonlinear programming approach --- for aircraft flight

Redundant control systems for flight vehicles --- Russian book

F-16 high angle of attack testing

Design, development, and testing of an active flutter margin augmentation system for a commercial transport airplane

Design benefits from V/STOL control/display simulation program at Lockheed

An F-22A flight experiment to investigate control-display requirements for the F-22A V/STOL aircraft

Flight dynamics /2nd revised and enlarged edition/ --- Russian book on aircraft stability and control

Modeling helicopter flight dynamics --- Russian book

Modeling the sensitivity of a linear system to a decrease in its order by the method of instantaneous transformation in the problem of yaw control

Semiautomatic control of aircraft: Systems of manual aircraft control --- Russian book

The results of synthesizing and evaluating potential solutions for Multi-Function Tower Reference Assembly /TRA/ candidate configurations --- for transport and fighter aircraft

Sweep flight research summary

Selection of aircraft turbocharger systems

An aircraft simulation using a product of general operational analysis

Flight control. II - Control system design --- German book

Fly-by-light

Gust alleviation using direct turbulence measurements

Gust alleviation - Criteria and control laws

A-39
<table>
<thead>
<tr>
<th>Subject Index</th>
<th>Aircraft Design Contd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aircraft air conditioning systems --- Russian book</td>
<td>for tactical fighter aircraft [DGLR Paper 78-139]</td>
</tr>
<tr>
<td>Aspects of short-takeoff aircraft --- optimization of aircraft, airports and flight regulations</td>
<td>Technology for aircraft energy efficiency [AIAA Paper 78-14136]</td>
</tr>
<tr>
<td>Recent theoretical developments and experimental studies pertinent to vortex flow aerodynamics - with a view towards design</td>
<td>Very large aircraft - Technology and operational implications [AIAA Paper 78-14088]</td>
</tr>
<tr>
<td>Method of calculating potential flows of an incompressible fluid past a wing with a high-lift device</td>
<td>Unmanned flight vehicle design parameter selection --- control configured optimization [AIAA Paper 78-14143]</td>
</tr>
<tr>
<td>Numerical solution of a linear integral equation of the first kind in the inverse problem of symmetric flow past a wing</td>
<td>Optimization of high-aspect-ratio saltive wing structure [AIAA Paper 78-14859]</td>
</tr>
<tr>
<td>Application of gradient methods to the optimal design of components of load-bearing structures --- for aircraft minimum weight design</td>
<td>Aircraft aerodynamic coefficient estimation [AIAA Paper 78-14876]</td>
</tr>
<tr>
<td>Quality index for an iterative process of optimizing long-range aircraft parameters</td>
<td>Designing-in reliability - A new approach --- for F-18 Inertial Navigati System [AIAA Paper 78-14974]</td>
</tr>
<tr>
<td>Lift and longitudinal accent of a small-aspect-ratio wing in the proximity of a body of revolution</td>
<td>Development of an environmental design and test guide for army rotary-wing aircraft [AIAA Paper 78-15462]</td>
</tr>
<tr>
<td>Calculation of the transient aerodynamic characteristics of a supersonic flight vehicle</td>
<td>Analytical designing of complex systems. II --- for aircraft [AIAA Paper 78-15678]</td>
</tr>
<tr>
<td>Effect of viscosity on nonseparated transonic flow past a profile</td>
<td>The design and fabrication of the de Havilland BNC-7 nose avionics compartment using aramid composites [AIAA Paper 78-16794]</td>
</tr>
<tr>
<td>Iterative method of aircraft wing strength calculation taking into account the effect of deformations on distribution of aerodynamic forces</td>
<td>Soviet swing-wings --- MiG-23 fighter family characteristics [AIAA Paper 78-17059]</td>
</tr>
<tr>
<td>Application of an interactive graphics system for the design and optimization of aircraft lifting surfaces</td>
<td>F-18 Hornet [AIAA Paper 78-17125]</td>
</tr>
<tr>
<td>Program ETV - A wing structural optimization computer program for preliminary design of fighter aircraft</td>
<td>Analytical designing of flight-vehicle hydraulic systems --- Russian book [AIAA Paper 78-17657]</td>
</tr>
<tr>
<td>Determination of the geometrical parameters and position of the nose flap at the root section of a swept wing on the basis of wind tunnel data</td>
<td>The sizing of a V/STOL aircraft for multimission application [AIAA Paper 78-18135]</td>
</tr>
<tr>
<td>The study of the integration of active control elements in the high lift system of a transport aircraft into maneuver control, gust-load control, and direct control of lift [AIAA Paper 78-18511]</td>
<td>The value of various technology advances for several V/STOL configurations [AIAA Paper 78-18572]</td>
</tr>
<tr>
<td>Design of the V/STOL system in relation to experience with the CCV-F104 program and functional redundancy --- digital flight control systems [AIAA Paper 78-18727]</td>
<td>XV-15 tilt rotor research aircraft and preliminary research [AIAA Paper 78-18674]</td>
</tr>
</tbody>
</table>
First flight imminent for new technology wing

Can Europe choose a common fighter

Slender wings for civil and military aircraft

Nuclear aircraft innovations and applications

Lighter-Than-Air Systems Technology Conference, Survey of the cost estimation process used during the transporter design stage --- military aviation

Fundamentals of design. III - V-G for combat aircraft

Recent advances in fire resistant materials in aircraft structures

Allowable notch effectivity criterion for aircraft structures

Fundamentals of design. II - VT0 for combat aircraft

Parameter and state estimation applicable to aircraft identification problem

Modern concepts for design of delta wings for supersonic aircraft of second generation --- for drag reduction


Application of the equilibrium spin technique to a typical low-wing general aviation design

Parallel procedures for aircraft parameter identification and state estimation

Impact of digital computer technology on flight systems

An analysis of operational procedures and design modifications for aircraft fuel conservation

Opportunities for supersonic performance gains through non-linear aerodynamics

Technique for developing design tools from the analysis methods of computational aerodynamics

Solution of the inverse aerodynamics problem by the random search method

Selecting the passenger airplane fuselage

Development of V/STOL aircraft - 1950 to 1970

V/STOL Technology - Where do we stand

Copans Cope airframe design history

Manned strategic system concepts 1990-2000

Identifying desirable design features for the C-11 aircraft - A systems approach

SUBJECT INDEX

Design of advanced titanium structures --- for Advanced Tactical System aircraft fuselage

Historical development of worldwide supersonic aircraft

From HNAT to future fighters --- High-speed Aircraft Technology assessment

Radar cross section fundamentals for the aircraft designer

All electric subsystems for next generation transport aircraft

Exploratory study of the influence of wing leading-edge modifications on the airfoil for characteristics of a low-wing single-engine general aviation airplane

Design of the circulation control wing STOL demonstrator aircraft

Geometric data transfer --- for computerized aircraft engineering drawings

Engineering and manufacturing communication via the computer data base

CADAM data handling from conceptual design through production

Laminar flow stabilization by surface cooling on hydrogen fueled aircraft

High-performance wings with significant leading-edge thrust at supersonic speeds

A multiple objective optimization approach to aircraft control system design

Handbook on aircraft materials and their application technology

Analysis design of complex systems. II --- simultaneous improvement of all basic prototype flight vehicle performance characteristics

Microprocessor-based digital autopilot development for the XQM-106 Mini-BV

A status report on the advanced FIREFLY assessment program

Multisensor integration for defensive fire control surveillance

Role of Numerical Control Design in the computer aided design/manufacturing interface at Sikorsky [AMS 79-30] [AIAA PAPER 79-8505]

Self-contained grease lubrication systems for aircraft applications [AMS 79-29]

Design criteria for airline operation

Recent applications of theoretical analysis to V/STOL inlet design

Small hovercraft design - Evolution to simplicity

Aerodynamics for engineers --- book

Advanced crew station concepts, displays, and input/output technology for civil aircraft of the future

Protection methods for hardware --- lightning protection for aircraft components

Static electricity phenomena - Theory and problems --- aircraft hazards

The design impact of power-augmented ram technology on large energy efficient aircraft

Nozzle design and integration in an advanced supersonic fighter

A-44
A-45

Control-configured combat aircraft

P-16 multi-national fighter

F-8 active control

Highly maneuverable aircraft technology — remotely piloted research vehicle

Active controls for civil transports

Sustan

Summary report of the Turbulence Committee

Summary report of the Aircraft Design Committee

Infrared transonic airfoil design methods including boundary layer and viscous interaction effects

[NASA-CE-1585136]
p0236 N79-16668

Listing of accidents/incidents by make and model,
US civil aviation, 1977

[NASA-CE-158213]
p0236 N79-16669

Advanced system design requirements for large and small fixed-wing aerial application systems for agriculture

[NASA-CE-1589390]
p0236 N79-17848

Aerodynamic design and analysis of the AST-200

Extended analytical study of the
configuration during and beyond stall
[NASA-CE-1589391]
p0236 N79-17849

Aerodynamic design and analysis of the AST-200

Summary report of the Aircraft Design Committee

Remote piloted vehicles — aerodynamics and
topics, volume 1

Vehicle Design Evaluation Program (VDEP). A
computer program for weight sizing, economic,
performance and mission analysis of
fuel-conservative aircraft, subsonic aircraft and
large cargo aircraft using both J5 and
alternative fuels

[NASA-CE-152129]
p0236 N79-13023

A new method for designing shock-free transonic
configurations

[NASA-CE-150063]
p0236 N79-13200

A survey of analytical and experimental techniques to
predict aircraft dynamic characteristics at
high angles of attack

[NASA-CE-150063]
p0236 N79-13023

A review of methods for obtaining subsonic
longitudinal aerodynamic derivatives

[EE-1-150063]
p0236 N79-15910

Remotely piloted vehicles — aerodynamics and
related topics, volume 1

[EE-1-150063]
p0236 N79-15910

An RVP design study

A study of the effects of aircraft dynamic
characteristics on structural loads criteria

[EE-1-150063]
p0236 N79-15944

A study of the effects of aircraft dynamic
characteristics on structural loads criteria

[EE-1-150063]
p0236 N79-15944

Active controls in aircraft design

Active controls in aircraft design —
summary

Control configured vehicle design philosophy

Active-control design criteria

SUBJECT INDEX

AIRCRAFT DESIGN CONTD

VSCF aircraft electrical power --- Variable Speed
Constant Frequency

Fundamentals of design. IV — Weapon carriage and
delivery

Aerodynamics, aeronautics, and flight mechanics
--- Book

T-tails and top technology

Solar thermal aerostat research station /STARS/
[TAP PAPER 79-235]
[STARS-78-103]
[STARS-78-10261]
Defining the design defect in aircraft products
liability cases

A review of crashworthiness --- in aircraft
accident-liability cases

Analysis of vehicles with wings operating in
ground effect

[AAIA-79-2043]
[AAIA-79-2042]
[AAIA-79-2041]

Optimal design of wing structures with
substructuring

Formulas for spanwise distribution of lift on
aircraft wings

Structural analysis of variable-sweep wings

Design of supersonic airfoils by numerical
optimization

Aerodynamic center of wing-fuselage-nacelle
combinations: Effect of rear-fuselage pylons
mounted nacelles

[RISO-78-10]
[STARS-78-103]
[STARS-78-10261]

Study of aerodynamic technology for VSTOL fighter
attack aircraft

[NASA-CE-152129]
p0236 N79-10027

Study of aerodynamic technology for VSTOL
fighter/attack aircraft, phase 1

[NASA-CE-152132]
p0236 N79-10028

Overview of FIRMER program at Ames Research Center

[NASA-CE-152129]
p0236 N79-12040

Fire resistant aircraft seat materials

Fabrics for fire resistant passenger seats in
aircraft

The 8-15-aircraft (samolot 8-15)

Vehicle Design Evaluation Program (VDEP). A
computer program for weight sizing, economic,
performance and mission analysis of
fuel-conservative aircraft, subsonic aircraft and
large cargo aircraft using both J5 and
alternative fuels

[EE-1-150063]
p0236 N79-13023

A new method for designing shock-free transonic
configurations

[EE-1-150063]
p0236 N79-13200

A survey of analytical and experimental techniques to
predict aircraft dynamic characteristics at
high angles of attack

[EE-1-150063]
p0236 N79-13023

A review of methods for obtaining subsonic
longitudinal aerodynamic derivatives

[EE-1-150063]
p0236 N79-15910

Remotely piloted vehicles — aerodynamics and
related topics, volume 1

[EE-1-150063]
p0236 N79-15910

An RVP design study

A study of the effects of aircraft dynamic
characteristics on structural loads criteria

[EE-1-150063]
p0236 N79-15944

A study of the effects of aircraft dynamic
characteristics on structural loads criteria

[EE-1-150063]
p0236 N79-15944

Active controls in aircraft design

Active controls in aircraft design —
summary

Control configured vehicle design philosophy

Active-control design criteria

A-45

Control-configured combat aircraft

P-16 multi-national fighter

F-8 active control

Highly maneuverable aircraft technology ---
remotely piloted research vehicle

Active controls for civil transports

Sustan

Summary report of the Turbulence Committee

Summary report of the Aircraft Design Committee

Infrared transonic airfoil design methods including
boundary layer and viscous interaction effects

[NASA-CE-1585136]
p0236 N79-16668

Listing of accidents/incidents by make and model,
US civil aviation, 1977

[NASA-CE-158213]
p0236 N79-16669

Advanced system design requirements for large and
small fixed-wing aerial application systems for
agriculture

[NASA-CE-1589390]
p0236 N79-17848

Evaluation of a long-endurance-surveillance
remotely-piloted vehicle with and without
laminar flow control

[NASA-CE-159006]
p0236 N79-17852

XP44 Skycray development: Now it can be
told

[NASA-CE-159006]
p0236 N79-18897

An analysis of fuel conserving operational
procedures and design modifications for
bomber/transport aircraft. Volume 1: Executive
summary

[NASA-CE-159006]
p0236 N79-18897

Optimization of multi-element airfoils for maximum
lift

Experimental aerodynamic characteristics at Mach
numbers from 0.60 to 2.70 of two supersonic
cruise fighter configurations

[NASA-CE-78-7874]
p0236 N79-20062

Aircraft energy efficiency laminar flow control
glove flight conceptual design study

[NASA-CE-78-7874]
p0236 N79-20100

DRADO: A computer aided design and fabrication
system

[NASA-CE-78-7874]
p0236 N79-20100

The design of wind tunnel Models for tests at
transonic speeds and high Reynolds numbers

[NASA-CE-78-7874]
p0236 N79-20763

Development of Integrated Programs for
Aircraft-vehicle design (IPAD): Reference
design process

[NASA-CE-1589391]
p0236 N79-21000

Hypersonic structures: An aerodynamicist's
perspective, or one man's dream is another man's
nightmare

[NASA-CE-1589391]
p0236 N79-21823

High angle of attack characteristics of different
fighter configurations

[EE-1-150063]
p0236 N79-21998

Aerodynamic characteristics of a fighter-type
configuration during and beyond stall

[EE-1-150063]
p0236 N79-22003

Extended analytical study of the
free-wing/free-trimmer concept

[EE-1-150063]
p0236 N79-22003

Aerodynamic design and analysis of the N77-200
supersonic transport configuration concept

[EE-1-150063]
p0236 N79-22004

Engineer design test 1, Hughes TAB-64, advanced
attack helicopter

[EE-1-150063]
p0236 N79-22007

A brief review of air flight weapons

[EE-1-150063]
p0236 N79-23051

An integrated fault-tolerant avionics system
concept for advanced aircraft

[EE-1-150063]
p0236 N79-23051

Adaptation for the economy or adaptation for
energy conservation --- passenger aircraft design

[EE-1-150063]
p0236 N79-23057
Characteristics of the advanced supersonic technology ASTR-105-1 configured for transpecific range with Pratt and Whitney aircraft variable stream control engines

[AIRCRAFT DETECTION]

AIRCRAFT DETECTION [ASTR-76-18010]

Aircraft sonic boom: Studies on aircraft flight, aircraft design, and measurement. A bibliography with abstracts

[HIGH-11-F-07/146/6]

Helicopter rotor airfoil

[BASI-CAS-ER-12936-1]

A variational theorem for laminated composite plates of nonlinear materials and applications to postbuckling

[ASTR-79-24977]

Aircraft cushion landing gear applications study

[BASI-CH-159002]

Experimental investigation into the feasibility of an extruded wing

[ASTR-79-26045]

The ultralight sailplane

[ASTR-79-27077]

Weapon/aircraft interactions

[ASTR-79-27205]

High Reynolds Number Subsonic Aerodynamics

[KRI-LISTE-SCATS-16]

Advantages and problems of large subsonic aircraft

[ASTR-79-28119]

Wing design, body design, high lift systems and flying qualities with introduction

[ASTR-79-28120]

Advanced computer technology in aerodynamics.

[Lecture 1: Computer-aided aircraft design]

[ASTR-79-28125]

Upper-surface modifications for C 1 max

[ASTR-79-30218]

Stability and control --- conferences

[AGARD-CP-1260]

Systems implications of active controls

[ASTR-79-30219]

Improvement of fighter aircraft maneuverability through employment of control configured vehicle technology

[ASTR-79-30225]

L-1011 active controls, design philosophy and experience

[ASTR-79-30236]

Are today's specifications appropriate for tomorrow's airplanes?

[ASTR-79-30239]

Maritime patrol airship concept study

[AD-A0701311]

Powered low-aspect-ratio Wing In Ground effect

[KI-JET-AIR-1270]

Experimental data base for computer program evaluation of electronic fuzes

[ASME PAPER 78-G1-128]

Immediate and prediction of selected NASA 6-series airfoils

[ASTR-79-31014]

Systems implications of active controls

[ASTR-79-31017]

Stability and control --- conferences

[AGARD-CP-1260]

Improvement of fighter aircraft maneuverability through employment of control configured vehicle technology

[ASTR-79-31025]

L-1011 active controls, design philosophy and experience

[ASTR-79-31036]

Are today's specifications appropriate for tomorrow's airplanes?

[ASTR-79-31039]

Maritime patrol airship concept study

[AD-A0701311]

Powered low-aspect-ratio Wing In Ground effect

[KI-JET-AIR-1270]

Experimental data base for computer program evaluation of electronic fuzes

[ASME PAPER 78-G1-128]

Immediate and prediction of selected NASA 6-series airfoils

[ASTR-79-31014]

Systems implications of active controls

[ASTR-79-31017]

Stability and control --- conferences

[AGARD-CP-1260]

Improvement of fighter aircraft maneuverability through employment of control configured vehicle technology

[ASTR-79-31025]

L-1011 active controls, design philosophy and experience

[ASTR-79-31036]
Experimental techniques used to evaluate propulsion integration of a supersonic cruise
Estimation of reliability from multiple advanced composite fan frame for the Quiet Clean fuel conservative aircraft engine technology
Progress on the ENSIP approach to improved optimal control of turbine engines
Definition of electronic engine control
Automation of blade design for aircraft
cumulative fatigue damage model for gas turbine
The Tr-Pan V/STU propulsion/control concept
Parametric method for diagnosing the state of aircraft engines on the basis of limited information
Operation of long-service-life gas-turbine engines as a function of the technical state
Automation of blade design for aircraft turbochargers --- Russian book
The Tri-Fan V/STOL propulsion/control concept
Definition of electronic engine control environment for an advanced aircraft engine
Optical control of turbine engines
Progress on the ENSIP approach to improved structural integrity in gas turbine engines - An overview --- Engine Structural Integrity Program
A cumulative fatigue damage model for gas turbine engine disks subjected to complex mission loading
Fuel conservative aircraft engine technology
Auxiliary gas turbine engines for aircraft --- Russian book
Advanced composite fan frame for the Quiet Clean Short-Beau Experimental Engine /QCSEZ/
Propulsion integration of a supersonic cruise strike-fighter
Experimental techniques used to evaluate propulsion system interference effects on the cruise configuration of the Boeing 747-14
Estimation of reliability from multiple independent grouped censored samples with
failure times known
Discrete time slice simulation of replacement requirements --- for aircraft engines
Suction fuel supply systems for turbine powered general aviation aircraft
Engine technology for production turboshaft engines
Causes for the deterioration of splined connections in aircraft engines during service
Recording methods for steady state and transient signals --- aircraft engine tests
NASA research on general aviation power plants
Planning the development and qualification process for the next generation of high technology aircraft engines
Requirements and constraints in the development and qualification of gas turbine engines for the Navy
Life Cycle Cost in advanced technology engine development
Applying design-to-life cycle cost methods during engine advanced development
Trade-off studies with an interactive engine/airframe life-cycle-cost model
V/STOL aircraft engine and mechanical drive component integration
An unstable subsonic critical speed solution --- of shaft failures in P-16 engine start system
Small fan-jet engines --- for business aircraft
The U-2 story
Thermal cycling endurance problems in gas-turbine parts
Comparison of HRES and TAT characteristics in supersonic cruising flight --- Bypass Turbojet Engine
Convective heat exchange of gas-particle stream in flow passage of throttling device with vane-type turning element
Intensification of fuel vaporization in aircraft gas turbine engines by electrical forces
A decision theory model for health monitoring of aeroengines --- metal particles in lubricating oils as wear indicator
Twin jet noise shielding for a supersonic cruise vehicle
Convective heat exchange of gas-particle stream in flow passage of throttling device with vane-type turning element
Intensification of fuel vaporization in aircraft gas turbine engines by electrical forces
A decision theory model for health monitoring of aeroengines --- metal particles in lubricating oils as wear indicator
Twin jet noise shielding for a supersonic cruise vehicle
Convective heat exchange of gas-particle stream in flow passage of throttling device with vane-type turning element
Intensification of fuel vaporization in aircraft gas turbine engines by electrical forces
A decision theory model for health monitoring of aeroengines --- metal particles in lubricating oils as wear indicator
Twin jet noise shielding for a supersonic cruise vehicle
Convective heat exchange of gas-particle stream in flow passage of throttling device with vane-type turning element
Intensification of fuel vaporization in aircraft gas turbine engines by electrical forces
A decision theory model for health monitoring of aeroengines --- metal particles in lubricating oils as wear indicator
Twin jet noise shielding for a supersonic cruise vehicle
Convective heat exchange of gas-particle stream in flow passage of throttling device with vane-type turning element
Intensification of fuel vaporization in aircraft gas turbine engines by electrical forces
A decision theory model for health monitoring of aeroengines --- metal particles in lubricating oils as wear indicator
Twin jet noise shielding for a supersonic cruise vehicle
Convective heat exchange of gas-particle stream in flow passage of throttling device with vane-type turning element
Intensification of fuel vaporization in aircraft gas turbine engines by electrical forces
A decision theory model for health monitoring of aeroengines --- metal particles in lubricating oils as wear indicator
Twin jet noise shielding for a supersonic cruise vehicle
Convective heat exchange of gas-particle stream in flow passage of throttling device with vane-type turning element
Intensification of fuel vaporization in aircraft gas turbine engines by electrical forces
A decision theory model for health monitoring of aeroengines --- metal particles in lubricating oils as wear indicator
Twin jet noise shielding for a supersonic cruise vehicle
Convective heat exchange of gas-particle stream in flow passage of throttling device with vane-type turning element
Intensification of fuel vaporization in aircraft gas turbine engines by electrical forces
A decision theory model for health monitoring of aeroengines --- metal particles in lubricating oils as wear indicator
Twin jet noise shielding for a supersonic cruise vehicle
Convective heat exchange of gas-particle stream in flow passage of throttling device with vane-type turning element
Intensification of fuel vaporization in aircraft gas turbine engines by electrical forces
A decision theory model for health monitoring of aeroengines --- metal particles in lubricating oils as wear indicator
Twin jet noise shielding for a supersonic cruise vehicle
Convective heat exchange of gas-particle stream in flow passage of throttling device with vane-type turning element
Intensification of fuel vaporization in aircraft gas turbine engines by electrical forces
A decision theory model for health monitoring of aeroengines --- metal particles in lubricating oils as wear indicator
Twin jet noise shielding for a supersonic cruise vehicle
Convective heat exchange of gas-particle stream in flow passage of throttling device with vane-type turning element
Intensification of fuel vaporization in aircraft gas turbine engines by electrical forces
A decision theory model for health monitoring of aeroengines --- metal particles in lubricating oils as wear indicator
AIRCRAFT ENGINES CONTD
AIRCRAFT ENGINES CONTD
The balance of flexible rotors and their possible use in aero engines

[IAIA PAPER 79-7014] p0328 A79-29389

Aerodynamic development and the C76-6/82500 compressor [IAIA PAPER 79-7030] p0329 A79-29402

Propulsion research --- current status and future prospects --- aircraft turbine engines p0332 A79-29590

The future shape of medium and long-range civil engines p0333 A79-29607

The NASA Aircraft Energy Efficiency program p0346 A79-31912

The energetic design of aircraft gas turbine engines p0348 A79-32036

Starting torque characteristics of small aircraft gas turbines and engines [IAIA PAPER 79-GT-95] p0392 A79-32371

A review of aerodynamic engine air intakes p0382 A79-30581

The NASA Aircraft Energy Efficiency Program p0346 A79-31912

A basic problem in the analytical designing of aircraft gas turbine engines I p0348 A79-32036

Nuclear Bi-Flow with system for aircraft propulsion [ASME PAPER 79-GT-119] p0393 A79-32389


Oil squeeze films dampers for reducing vibration of aircraft gas turbine engines p0378 A79-32462


Characteristic time correlations of pollutant emissions from an annular gas turbine combustor --- of aircraft engines [ASME PAPER 79-GT-198] p0396 A79-32452

The powered glider, SZR-458 Ogar p0377 A79-32584

Damping capacity of paired shrouded turbine blades in relation to shroud contact conditions p0396 A79-32827

Cryogenic engines and weight --- aircraft design performance p0408 A79-32600

 Manufacturers developing fuel-efficient engines p0450 A79-36380

Optimal selection of the geometrical characteristic of the reversing channel of a small-scale turbine with regard to the gas --- for aircraft auxiliary power systems p0450 A79-36583

Effectiveness of reversal of the gas in high-pressure-ratio small-scale turbines --- for aircraft auxiliary power systems p0450 A79-36584

Preliminary QGCT program test results --- Quiet, clean General Aviation Turbines [SAA PAPER 790596] p0455 A79-36729

Concepts for reducing exhaust emissions and fuel consumption of the aero engine [SAA PAPER 790605] p0456 A79-36737

Dual breakerless aero engine magnetos [SAA PAPER 790606] p0456 A79-36738

Selection of aircraft turbocharger systems [SAA PAPER 790607] p0456 A79-36739

Determination of cooling airflow through a horizontally-opposed aircraft engine installation [SAA PAPER 790608] p0456 A79-36740

Technologies for general aviation aircraft [SAA PAPER 790613] p0456 A79-36742


A review of Curtiss-Wright rotary engine developments with respect to general aviation potential [SAA PAPER 790621] p0457 A79-36790

Engine induced structural-borne noise in a general aviation aircraft [SAA PAPER 790622] p0458 A79-36754

Wind tunnel performance of four energy efficient propellers designed for Mach 0.8 cruise [SAA PAPER 790526] p0459 A79-36759

Effects of air injection on a turbocharged Teledyne Continental Rotors TS10-C60-C engine [SAA PAPER 790607] p0459 A79-36760

The evaluation of the weight of engine installations on transport aircraft p0461 A79-37827

A method of reducing aircraft turbine blade vibrations p0465 A79-38819

The multiple application core engine - Sizing and usage criteria --- high-pressure rotors in jet engines [IAIA PAPER 79-1123] p0466 A79-39533

The selection of materials technologies for full-scale development --- aircraft engine applications [IAIA PAPER 79-1152] p0467 A79-38962

Cost benefits from improved hot section life prediction technology --- for aircraft engine combustor and turbine parts [IAIA PAPER 79-1154] p0467 A79-38963

General aviation turbine engine /GATE/ concepts [IAIA PAPER 79-1157] p0467 A79-38964

Aircraft engine design using experimental stress analysis techniques [IAIA PAPER 79-1193] p0468 A79-39878

A European view on gas turbine engine monitoring of present and future civil aircraft [IAIA PAPER 79-1200] p0469 A79-39882

Fault-tolerant, high reliability electronic engine control system [IAIA PAPER 79-1202] p0469 A79-39883

Application of digital controls on the quiet clean short haul experimental engines [IAIA PAPER 79-1203] p0469 A79-39884

Electric propulsion for high performance light aircraft [IAIA PAPER 79-1265] p0470 A79-39011

Contribution to the development of motor emission regulations [ONERA, TP NO. 1979-43] p0473 A79-39092

Engine power and control system [AIAA PAPER 79-1235] p0475 A79-39817

New techniques in jet engine balancing [AIAA PAPER 79-1236] p0477 A79-40314

Evaluation of turbo-propulsion simulators as a testing technique for fighter aircraft [AIAA PAPER 79-1247] p0508 A79-40880

Development of materials and processes for engine components - Current and future points of interest [AIAA PAPER 79-1257] p0509 A79-40880

CFM56 - An act of cooperation, a new class of aircraft engine, a path towards the aeronautics of tomorrow [AIAA PAPER 79-1265] p0516 A79-42655

Influence of delay time and dead time on wind shear loadings [SIGMA PAPER 79-029] p0518 A79-42356

The use of a liquid pump in an aircraft auxiliary power system [DGLR PAPER 79-029] p0522 A79-42389

Measuring the moment imparted by a liquid pump in an aircraft auxiliary power system [DGLR PAPER 79-029] p0522 A79-42389

The use of a liquid pump in an aircraft auxiliary power system [DGLR PAPER 79-029] p0522 A79-42389

The use of a liquid pump in an aircraft auxiliary power system [DGLR PAPER 79-029] p0522 A79-42389

The use of a liquid pump in an aircraft auxiliary power system [DGLR PAPER 79-029] p0522 A79-42389

The use of a liquid pump in an aircraft auxiliary power system [DGLR PAPER 79-029] p0522 A79-42389

The use of a liquid pump in an aircraft auxiliary power system [DGLR PAPER 79-029] p0522 A79-42389
AIRCRAFT ENGINES CONTD

Engine component improvement and performance retention

Low energy consumption engines

Air quality analysis of possible F-15 and A-10 aircraft engine modifications to reduce pollution

Computer simulation of an aircraft engine fuel injection system

Cost effectiveness analysis of the proposed revisions in the exhaust emission standards for new and in-use gas turbine aircraft engines based on EPA's independent estimates

The economic impact of revised gaseous emission regulations for commercial aircraft engines

The rotary combustion engine: A candidate for general aviation -- conferences

Overview of NASA general aviation program

General aviation energy-conservation research programs

Development status of rotary engine at Toyo Kogyo -- for general aviation aircraft

Update of development on the new indi BSD rotary engine generation -- for application to aircraft engines

Review of the Rhein-Flugzeugbau Wankel powered aircraft program -- ducted fan engines

Rotary engine developments at Curtis-Wright over the past 20 years and review of general aviation engine potential -- with direct chamber injection

Engine requirements for future general aviation aircraft

Operating and performance characteristics of a duct burning turbofan engine with variable area turbines

Air Force turbine engine emission survey. United States. Volume 1: Test summaries


Propulsion-flight control integration technology

An investigation into voltage modulation in aircraft V.S.C.F.

Engine exhaust emissions. Volume 1: Test summaries

Engine exhaust emissions. Volume 2: JT8D-9 test data

Engine exhaust emissions. Volume 3: JT8D-7 test data

Engine exhaust emissions. Volume 4: JT9D-7 test data

Engine exhaust emissions. Volume 5: JT9D-3B test data

Engine exhaust emissions. Volume 6: JT9D-3A test data

Engine dynamics

Air pollution control

Air quality analysis of possible F-15 and A-10 aircraft engine modifications to reduce pollution

Air pollution control

Air pollution control

Air pollution control
AIRCRAFT EQUIPMENT


Control of air pollution from aircraft and aircraft engines p0308 N79-19376


Engine/airframe/drive train dynamic interface documentation [AD-0061477] p0382 N79-21047

Recent advances in convectively cooled engine and airframe structures for hypersonic flight p0386 N79-21425


Hydrazine monopropellant reciprocating engine development p0427 N79-22540


Analytical derivatives [AD-006694] p0436 N79-23009


Water absorption of fluids/oils --- contamination of aircraft engine oils and inhibitors [AD-0065915] p0468 N79-24158

Aircraft engine oil analysis by neutron activation techniques [AD-0066202] p0469 N79-24169

Analysis of the impact of a 270 VDC power source on the avionic power supplies in the 5-24 aircraft [NASA-656267] p0485 N79-24969


Lean, premixed, premixed combuster conceptual design study [AD-0065191] p0497 N79-24997

Lean, premixed, premixed combuster conceptual design study p0497 N79-25010

Non-destructive inspection methods for propulsion systems and components [AGARD-87-103] p0502 N79-25412

State-of-the-art of nondestructive inspection of aircraft engines p0502 N79-25413

High resolution radiography in the aero-engine industry p0502 N79-25414


Stresses, vibrations, structural integration and engine integrity (including aerelasticity and flutter) [AGARD-CP-248] p0511 N79-27148

The analysis of engine vibrations p0512 N79-27150

Aircraft engine design using experimental stress analysis techniques p0514 N79-27151


The integrity of aircraft jet engines under the impact of foreign bodies p0554 N79-27174

Axial compressor stall --- effects on aircraft engines p0557 N79-27435

Technical evaluation report on the 52nd Symposium of the Propulsion and Energetics on Stresses, Vibrations, Structural Integration and Engine Integrity (including aerelasticity and flutter) [AGARD-AR-133] p0584 N79-28181


Aircraft engine driven accessory shaft coupling improvements using high-strength nonmetallic adapter/bushings p0594 N79-29119

AIRCRAFT EQUIPMENT

[AD-A046637] p0595 N79-29193


Critical assessment of emissions from aircraft piston engines [AD-A071002] p0654 N79-30190

Tapered roller bearing development for aircraft turbine engines [AGARD-4R-1331] p0662 N79-30555

An overview of NASA research on positive displacement-type general aviation engines [AGARD-79-28154] p0670 N79-31210

Aircraft turbine engine monitoring experience: Implications for the P100 engine diagnostic systems program [AD-A069282] p0671 N79-31217

Ambient correction factors for aircraft gas turbine idle emissions [AD-A069240] p0672 N79-31218

Turbine engine particulate emission characterization [AD-A071918] p0679 N79-32200

Investigation of the use of ceramic material in aircraft engine bearings p0718 N79-33214

AIRCRAFT EQUIPMENT

IMMATERIAL HYDRAULIC SYSTEMS

[90-9063237] p0382 979-21015


Aircraft radio equipment --- Russian book p0016 979-11442

Aircraft air conditioning systems --- Russian book p0017 979-11443

FAA's development program for Aircraft Separation Assurance /ASA/ p0055 979-13257

Collison avoidance in the integrated system. II - Characteristics p0056 979-13259

The AN/ARN-132 Navestar navigator p0058 979-13276


Performance evaluation of the experimental BCAS /Beacon Collision Avoidance System/ p0265 979-14412

Environmental vibration testing of helicopter stores and equipment to the procedures outlined in MIL-STD-910C p0121 979-18146

Combined-excitation ac generators for aviation --- Russian book p0122 979-18200

Helicopter flight control /HOP/ --- integrated system including FLIR and laser range finder p0150 979-19900

System considerations for airborne, high power superconducting generators p0184 979-20548

Aircraft dropwindsonde system p0190 979-21466

A modular approach to airborne research instrumentation p0192 979-21963

Design of a flexible aircraft data acquisition system for meteorological research p0192 979-21963
AIRCRAFT FUELS

Subject Index

Preventing fires in aviation fuel storage and transport systems. II
Study of the application of aircraft fuel to long-range subsonic transport aircraft. Volume II
Simulation study of the effect of fuel-conservative approaches on ATC procedures and terminal area capacity
Advanced turbofan engines for low fuel consumption
Impact of fuel availability and other cost trends on air carrier operations
Impact of fuel availability and other cost trends on general aviation
Alternate aircraft fuels prospects and operational implications
Rule of fuel management for airliners
A characteristic time correlation for combustion inefficiency from alternative fuels
Drag reduction by cooling in hydrogen fueled aircraft
The potential of liquid hydrogens as a military aircraft fuel
Effects of fuel properties on soot formation in turbine combustion
Shale oil - The answer to the jet fuel availability question
Laser aircraft - using kerosene
Cryohydrogen-fuel for tomorrow's commercial aircraft
Measurement of emission water content in aviation fuels
High-freezing-point fuels used for aviation turbine engines
Fuel property effects on combustor performance - aircraft synthetic and petroleum-derived fuels
Catalytic combustion for gas turbine applications
A research study into the reliability of various fuel, hydraulic and air conditioning components of military aircraft
Preventing fires in airport fuel systems
Industry seeks lighter aircraft weight - aircraft design performance
Detonation characteristics of Soviet aviation gasoline
The chemical stability of kerosene fractions
Preventing fires in aviation fuel storage and transport systems. II
An analysis of operational procedures and design modifications for aircraft fuel conservation

AIRCRAFT GUIDANCE

'Strategic' time-based ATC - by long-term flight planning
Spread spectrum modulation. I - Benefit resulting from application to an integrated system
Impact of new navigation methods on flight guidance in the terminal maneuvering area
Navigation systems for USAF aircraft through the terminal maneuvering area
Impact of new navigation methods on flight guidance in the terminal maneuvering area

Method of assessment of the antistatic protection of aircraft
[ORBIA, TP NO. 1979-41] p0473 179-39090
Helicopter obstacle strike tolerance
[AHS 70-7] p0626 179-49059
Conference on certification of aircraft for lightning and atmospheric electricity hazards, Chatillon-sous-Bagneux, Bâton-de-Seine, France, September 14-21, 1978, Proceedings p0680 179-51126
Laboratory simulation of swept lightning strokes
/Engineering test/ p0680 179-51131
Laboratory tests to determine the physical damage /direct effects/ caused by lightning p0681 179-51132
Vulnerability assessment of aircraft systems to indirect lightning effects p0681 179-51133
Protection/hardening of aircraft electronic systems against the indirect effects of lightning p0683 179-51146
Static electricity phenomena - Theory and problems --- aircraft hazards p0663 179-51147
Fuel electrification --- electrostatic hazards in aircraft fuel tanks p0663 179-51148
Air pollution from aircraft operations at San Jose Municipal Airport, California [NASA-TN-78506] p0058 179-12585
FAA determination of no hazard for structures near airports [N-RPTT-95-1053] p0166 179-14112
An evaluation of the bird/aircraft strike hazard at Dover Air Force Base, Delaware [AD-061227] p0230 179-16190
An evaluation of the bird/aircraft strike hazard at NASB at area C-62, Eglin AFB, FL [AD-061371] p0230 179-16200
Lightning hazards to aircraft p0243 179-17420
Electric charging of helicopters --- aircraft hazards and static dischargers for accident prevention [NHVG-FWHT-78-7] p0297 179-18274
New agents for the extinguishment of magnesium fires [AD-061664] p0306 179-19122
Aircraft icing: Introduction p0381 179-23913
Executive summary of Aircraft Icing Specialist Workshop p0381 179-23914
Icing of aircraft Some remarks with an historical slant from a cloud physicist p0481 179-23915
Civil Helicopter icing problems p0481 179-23916
A review of the icing situation from the standpoint of general aviation p0481 179-23917
Overview of helicopter ice protection system developments p0481 179-23918
Focussing the quantitative characteristics of aircraft icing [BLL-TRANS-1364-(9022.589)] p0493 179-23919
Atmospheric Electricity Hazard (AEH) [AD-069338] p0515 179-30169
Helicopter obstacle strike tolerance concepts analysis [AD-065977] p0562 179-30170
Lighting hazards overview: Aviation requirements and interests p0662 179-30176
AIRCRAFT INSTRUMENTS
MT ALTIMETERS MT ARTICULATORS MT APPROACH INDICATORS MT ATTITUDE INDICATORS MT AUTOMATIC PILOTS MT ANEMOMETERS MT FLIGHT RECORDERS MT GYROCOMPASS MT HOT-WIRE ANEMOMETERS MT PLAN POSITION INDICATORS MT POSITION INDICATORS

AIRCRAFT HYDRAULIC SYSTEMS
Analytical designing of flight-vehicle hydraulic systems --- Russian book p0115 179-17675
MT RADIO ALTIMETERS
MT RADIO DIRECTION FINDERS
MT SPEED INDICATORS

The electronic flight deck

Flying angle of attack

Performance analysis of a particularly simple Kalman filter --- for strapdown inertial navigation systems

Better utilization of SAR dynamic range --- airborne display capacity improvement

Man-machine interface --- aircraft control and displays

Cat III landing operations at Air Inter --- instrument landing system

System for confirming ILS or MLS for Cat III type landing without decision height

New-generation Tacan equipment

The effectiveness of pilot warning instruments - An engineering model based upon flight test data

Preventing helicopter mid-air collisions with the proximity warning device

Acousto-optic methods of character generation for aircraft laser displays

Cockpit displays for advanced navigation --- Circa 2000

Integrated computer-display system for modern anti-tank/combattant helicopters

Lessons learned from the AR/ARC-164 test program --- airborne radio transceiver thermal cycling test

Development of a solid state vertical instrument display system --- for helicopters

(AHS 78-18)

Microprocessor control of aircraft DMZ

Sodar and aircraft measurements of turbulence parameters within cooling tower plumes

Simultaneous measurements of turbulence in the lower atmosphere using sodar and aircraft

Overestimates of entrainment from wetting of aircraft temperature sensors in cloud

Flight deck alarm systems

Avionics systems needed to optimize V/SOL potential

TASSB, a thinned adaptive synthetic aperture radar

New airborne display concepts

Study of the structure of an integrated system of flight control, navigation and display

Tests of an integrated piloting, navigation, and display system

Dynamic response analysis of an F-15 Fast Pack optical system installation --- structural vibrations under flight environment

Interactive microprogrammable control display unit

Displays for Army combat aviation

Calibration and use of a sailplane variometer to measure vertical velocity fluctuations

A new high product rate 10 nanosecond, 256 point correlator --- for weapon systems applications and fluid mechanics research

SUBJECT INDEX

AIRCRAFT INSTRUMENTS CONTD

F-18 - A special report

The intercept of covert radar

Theoretical fundamentals of radio altimetry --- Russian book

Tachystoscopic testing of onboard instruments

Display monitoring problems --- for aircraft pilots

Theoretical principles of long range navigation systems. I

Onboard methods for increasing landing approach capability upon introduction of MLS

New onboard structure of display and control system for piloting and air traffic control

New paths for the development of aircraft equipment opened up by the use of modern computer technology --- digital systems for civil aviation

Prospects for airborne computer systems

Quasi-autonomous navigation system --- for aircraft position indication

Some possibilities for the navigation of small passenger aircraft

Navigation instruments for small passenger aircraft of the 1980s

Compass system for small aircraft

Use of a gyroscope with adjustable torsion suspension in precise gyroscopic sensors

Aircraft instrument components /3rd revised and enlarged edition/ --- Russian book

Handbook of flight communication and radio equipment --- Russian book

A cheap, effective icing detector for general aviation aircraft

The application of pulsed 'q' band radio altimeters to modern military aircraft

Automated tracking for aircraft surveillance radar systems

ARTA takeoff performance flight test program --- Advanced Range Instrumented Aircraft

An evaluation of noise display parameters for an advanced landing display

Wind shear indication systems

Evaluation of aircraft equipment monitoring devices, procedures, and techniques

Fault tolerance and redundancy analysis for the Multifunction Inertial Reference Assembly (MIRA)

LED instrument approach instruction display

GASP-PL/X simulation of integrated avionic system processor architectures

Digital data acquisition system for use in aircraft engine condition monitoring

Digital test report

Implementation of flight control in an integrated guidance and control system

Reliability improvement warranty terms and conditions for the Integrated Avionics Control
Recent progress in aircraft sink rate measurement [AIAA PAPER 79-1797]
p0605 A79-47884
Advances in decelerating steep approach and landing for helicopter instrument approaches [AIAA 79-16] p0628 A79-49069
High sink-rate landing testing of Navy aircraft [AIAA 79-50163]
A real-time simulation facility for advanced digital guidance and control system research [AIAA 79-51090]
Construction of electronic models of microwave landing systems [AIAA 79-51266]
Integration of air cushion landing systems technology into the JINDIVIK remotely piloted vehicle [AIAA 79-12075]
Lift performance indicator system feasibility study [AD-1059236] p0692 A79-12075


Improvements to the FYOLAR computer-program including nosewheel steering: Supplemental instruction manual [NASA-TR-78768] p0162 A79-14081

The Look-point Aircraft Coordinate Estimator (LACE) and potential applications [NASA-TR-787806] p0173 A79-15044

Lightships and marking of exit taxiways [AD-1060259] p0180 A79-15098

Simulating the visual approach and landing [AIAA 79-15975]
Environmental requirements for simulated helicopter/VOLAR operations from small ships and carriers [AIAA 79-15978]

Visibility modelling for a landing simulator with special reference to low visibility [AIAA 79-15982]

A method to determine the delays of landing aircraft with respect to runway capacity [MLRM-77016-01] p0232 A79-16835

The need of stick force stability for attitude-stabilized aircraft, Part 2 [MLRM-7877027-01] p0294 A79-17875

Simulation study to evaluate a constant-groundspeed approach method in moderate and severe wind shears [NASA-TR-80060] p0189 A79-20089

Takeoff and landing ground rules [AIAA 79-23001]

Flight investigation of piloting techniques and crosswind limitations using a research type crosswind landing gear [NASA-TR-1423] p0187 A79-23012


VOLAR: A digital computer program for simulating VTOL aircraft launch and recovery from small ships. Volume 2: Appendices [AD-1066173] p0485 A79-23955

Effects of control system dynamics on fighter approach and landing longitudinal flying qualities, volume 1 [AD-106750] p0556 A79-27183

An in-flight simulator investigation of roll and yaw control power requirements for STOL approach and landing: Development of capability and preliminary results [NASA-CR-152307] p0559 A79-27196


Investigation on information error caused by traffic loading in approach and landing systems [AD-106769] p0675 A79-31480

Aircraft vortex marking program [NASA-CR-162299] p0701 A79-32156

Comparison of some methods to determine the delays of landing aircraft with respect to runway capacity [MLR-770160] p0704 A79-32191

Trials of the new microwave landing system at London ( Gatwick) Airport, August 1977 [AIAA 78-76124] p0704 A79-32194

Trials of the Doppler microwave landing system at Manchester International Airport, A-56
AIRCRAFT LIGHTS
- Aircraft launching devices
- Microwave landing systems
  - Citations from the Launch and Recovery Technology Assessment
- The use of lights in reducing bird strikes
- Aircraft lighting equipment - interior and exterior illumination
  - Internal/external lighting (aviation materiel)
- A gas path performance diagnostic system to reduce engine wear and oil characteristics
  - Determination of inspection intervals for aircraft structures with allowance for the two-stage nature of fatigue damage
- F-16 Avionics Intermediate Shop self-test
- Tarmac RW program - Reliability Improvement
- RW data collection and reporting methods
  - Reliability Improved Warranty for avionics
- The F/A-18 challenge - Readiness and low total cost
  - Cost and operational effectiveness of R88 improvements
- Maintainability by design - turboshaft engine management
- Early identification of high-maintenance helicopter structures
- Fibre composite reinforcement of cracked aircraft structures
- Lynx reliability and maintainability design and military service experience - helicopter performance
- Fibre-composite reinforcement of cracked aircraft structures thermal-stress and thermal-fatigue studies
- Three years use of Mercury - Technical balance sheet
- The application of reinfroced plastics to the emergency repair of aircraft
- Phosphoric acid non-tank anodize (PANTA) process for repair bonding - of aluminum aircraft surfaces
- The logistics of life cycle cost - in operations and support systems for fighter aircraft
- Reliability and maintainability growth of a modern, high performance aircraft, the F-14A
- Discrete time slice simulation of replacement requirements - for aircraft engines
- Repair of directionally solidified aircell components
- Turbine airfoil repair
- Statistics of disturbances and maintenance according to conditions at Interflug, III: Technical requirements concerning the program for the processing of disturbance data by means of electronic data processing

AIRCRAFT MAINTENANCE
- Air fleet and facility planning via optimal control models
- A technique for engine maintenance cost forecasting
- The cost situation in the material maintenance of civil aviation aircraft
  - Adaptation of the HASO-2 to military aircraft, using the Alpha Jet as an example - Maintenance System Guide
- 'RED' /Reliability on Demand/ as an aid in aircraft maintenance
- Determination of inspection intervals for aircraft structures on the basis of fracture mechanics
- New test concepts and their influence on maintenance
- Landing gear overhaul survey
- Effects of extended oil changes on aircraft piston engine wear and oil characteristics
- Impact of advanced technologies on aircraft design
- High level maintenance below sea level
- Effect of maintenance plan and engine durability on helicopter propulsion system ownership cost
  - The aircraft air conditioner data revisited for comparison of alternative system concepts
- Demonstration of an improved method for repair of bonded aircraft structure
- Material developments for airline safety - Impact on the safety of ground maintenance employees
- Structural adhesive bond repair of aircraft flight control surfaces
- The repair of adhesively bonded aircraft structures using vacuum pressure
- ATE and aircraft mechanical diagnostics
- A/US/449/A/ ATE for worldwide support of the P3 Orion
- F-16 avionics maintenance concept and multinational aspects
- F-16 depot automatic test equipment
- Fault diagnosis of gas turbine engines by means of component characteristics determination
- The thermal oxidation stability of B-3P lubricant for aviation
- Aircraft RAM (MMR/TR) data comparative analysis
- Potential applications of acoustic emission technology as a nondestructive evaluation method for naval aviation ground support
- American Airlines' operational and maintenance experience with aerodynamic seals and oil seals in turbofan engines
- Corrosion tracking and prediction for C-141A aircraft maintenance scheduling
- Non-destructive evaluation systems for the naval aviation maintenance environment technology assessment
- Repair of bonded primary structure
- Evaluation of aircraft equipment monitoring devices, procedures, and techniques
- Disassembly inspection and overhaul of X-22A gear reduction and propeller assemblies
Investigation of the electrification of an aircraft model by a humid airstream in a wind tunnel

Sea behaviour prediction of helicopters through free model tests

Modeling helicopter flight dynamics

Laboratory tests to determine lighting attachment points with small aircraft models /engineering test/

Recent results in parameter identification for high angle-of-attack stall regimes

Enclosure fire modeling

Facility tunnels and status of the Rational Transonic Reynolds number wind tunnels

Airscrew noise on an aircraft fuselage related to interior noise transmission

A comparison of linear acoustic theory with experimental noise data for a small-scale hovering rotor

Aeronautical study of the IV-15 Tilt Rotor Research Aircraft

Aircraft noise identification system by correlation technique

Aerosonic modeling of high-speed rotor impulsive noise

A comparison of pulse type and noise signal repeatability for noise-diagnosis and noise-certification

Recent developments in helicopter noise reduction

An acoustical study of a supersonic transport concept in an anechoic flow facility

Radiation of an acoustic source near the trailing edge of a wing in forward motion

A technical study of the IV-15 Tilt Rotor Research Aircraft

An airborne reference noise source for studying airplane flyover noise propagation and measurements

Characteristics of propeller noise on an aircraft fuselage related to interior noise transmission

An aerodynamic study of the IV-15 Tilt Rotor Research Aircraft

Radiation of an acoustic source near the trailing edge of a wing in forward motion

Reduction of cabin noise during cruise conditions by stringer and frame damping

Aircraft noise component interaction studies

Acoustic simulation of the flight vibration environment

Traffic background level and signal duration effects on aircraft noise judgment

Quieter short and medium haul aircraft
<table>
<thead>
<tr>
<th>SUBJECT INDEX</th>
<th>AIRCRAFT PERFORMANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A commercial aircraft flight deck noise criteria [AD-0720205]</td>
<td>p0712 A79-32969</td>
</tr>
<tr>
<td>AIRCRAFT NOISE PREDICTION</td>
<td></td>
</tr>
<tr>
<td>G NOISE PREDICTION (AIRCRAFT)</td>
<td></td>
</tr>
<tr>
<td>AIRCRAFT PARTS</td>
<td></td>
</tr>
<tr>
<td>Aircraft manufacturing quality assurance</td>
<td>p0065 A79-14868</td>
</tr>
<tr>
<td>Monitoring of fatigue loading on rotor system and related components</td>
<td>p0136 A79-18696</td>
</tr>
<tr>
<td>Fatigue life estimation methods for helicopter structural parts</td>
<td>p0136 A79-18697</td>
</tr>
<tr>
<td>Design and checking of helicopter transmission components using photoelastic analysis techniques</td>
<td>p0136 A79-18699</td>
</tr>
<tr>
<td>Crack speed and propagation resistance prediction for steels and Al. alloys helicopter components</td>
<td>p0136 A79-18700</td>
</tr>
<tr>
<td>A reliable spline coupling --- for aircraft power transmission</td>
<td></td>
</tr>
<tr>
<td>(AIME PAPER 78-WA/ABEC-11)</td>
<td>p0148 179-19725</td>
</tr>
<tr>
<td>Some engineering property comparisons for 7050 and 7471-61 die forgings</td>
<td>p0207 A79-23935</td>
</tr>
<tr>
<td>Failure analysis of aerospace components</td>
<td>p0213 A79-24235</td>
</tr>
<tr>
<td>Stress-peen straightening of complex machined aircraft parts</td>
<td>p0214 A79-24234</td>
</tr>
<tr>
<td>Introduction of electron beam welding in aircraft production</td>
<td>p0249 A79-25248</td>
</tr>
<tr>
<td>Perspectives of technological development for helicopters</td>
<td>p0276 A79-27364</td>
</tr>
<tr>
<td>Design development of the 727-100 [AIAA 79-0701]</td>
<td>p0333 A79-29595</td>
</tr>
<tr>
<td>Experimental investigation of the endurance of airplane fin sections in acoustic loading</td>
<td>p0346 A79-31716</td>
</tr>
<tr>
<td>A research study into the reliability of various fuel, hydraulic and air conditioning components of military aircraft</td>
<td>p0400 A79-33459</td>
</tr>
<tr>
<td>Study of installed environment of various equipments in military aircraft</td>
<td>p0400 A79-33460</td>
</tr>
<tr>
<td>Development of an aircraft composite propeller [SAE PAPER 790579]</td>
<td>p0453 A79-36714</td>
</tr>
<tr>
<td>Review of aircraft bearing rejection criteria and causes</td>
<td>p0564 A79-45250</td>
</tr>
<tr>
<td>Most rational linearization of nonlinear unsteady heat conduction problems --- for flight vehicle parts and engines</td>
<td>p0613 A79-48501</td>
</tr>
<tr>
<td>Laboratory tests to determine lighting attachment points on actual aircraft parts</td>
<td>p0681 A79-51134</td>
</tr>
<tr>
<td>Protection methods for hardware --- lighting protection for aircraft components</td>
<td>p0683 A79-51185</td>
</tr>
<tr>
<td>Wear of seal materials used in aircraft propulsion systems [NASA-TM-79003]</td>
<td>p0579 A79-12204</td>
</tr>
<tr>
<td>Ice accretion and its effects on aerodynamics of unprotected aircraft components</td>
<td>p0173 A79-15040</td>
</tr>
<tr>
<td>Heat treatment of P/M nickel-base superalloys for turbine disks</td>
<td>p0442 A79-23254</td>
</tr>
<tr>
<td>AIRCRAFT PERFORMANCE</td>
<td></td>
</tr>
<tr>
<td>VT HELICOPTER PERFORMANCE</td>
<td></td>
</tr>
<tr>
<td>Airplane takeoff from unpaved airfields</td>
<td>p0665 A79-19874</td>
</tr>
<tr>
<td>Three years use of Mercury - Technical balance sheet</td>
<td>p0110 A79-17771</td>
</tr>
<tr>
<td>A method for estimating takeoff and landing performance of V/STOL aircraft in shipboard environments</td>
<td>p0133 A79-18675</td>
</tr>
<tr>
<td>Evaluation of a method to extract performance data from dynamic maneuvers for a jet transport aircraft</td>
<td>p0155 A79-20118</td>
</tr>
<tr>
<td>Available and use of weather data --- in general aviation</td>
<td>p0198 A79-22771</td>
</tr>
<tr>
<td>Effect of lip and centerbody geometry on aerodynamic performance of inlets for tilt-rotor-nacelle VSTOL aircraft</td>
<td>p0199 A79-23509</td>
</tr>
<tr>
<td>Impact of cruise speed on productivity of supersonic transports</td>
<td>p0203 A79-23570</td>
</tr>
<tr>
<td>Longshots into service --- Learjet 28/29 structures and performance capabilities</td>
<td>p0212 A79-24183</td>
</tr>
<tr>
<td>Longitudinal motion of an aircraft in unsteady flow</td>
<td>p0212 A79-24194</td>
</tr>
<tr>
<td>Aircraft static charging testing [OPERA, TP NO. 1978-110]</td>
<td>p0258 A79-26130</td>
</tr>
<tr>
<td>The Learjet Longhorn series - The first jets with winglets</td>
<td>p0260 A79-26532</td>
</tr>
<tr>
<td>Enhanced capabilities of future fighters as a result of HERAT [AIAA 79-0698]</td>
<td>p0277 A79-27370</td>
</tr>
<tr>
<td>A spectral analysis of thunderstorm turbulence and jet transport landing performance</td>
<td>p0278 A79-27576</td>
</tr>
<tr>
<td>Aerodynamic development of the 727-100</td>
<td>p0333 A79-29994</td>
</tr>
<tr>
<td>Flight test results --- for 727 aircraft</td>
<td>p0333 A79-29996</td>
</tr>
<tr>
<td>The 727-200 development</td>
<td>p0333 A79-29997</td>
</tr>
<tr>
<td>Concorde in service</td>
<td>p0333 A79-29966</td>
</tr>
<tr>
<td>Verification and validation of the NASA Terminal Configuration Vehicle’s /TCV/ Wind Analysis program using real-time digital simulation</td>
<td>p0336 A79-29901</td>
</tr>
<tr>
<td>Surface current injection techniques -- A theoretical investigation --- for simulating EMP-induced aircraft responses</td>
<td>p0336 A79-30155</td>
</tr>
<tr>
<td>Measuring and improving NAC capacity</td>
<td>p0369 A79-30324</td>
</tr>
<tr>
<td>Four jets for short-haul work Bae 146</td>
<td>p0408 A79-34922</td>
</tr>
<tr>
<td>A special extension of the General Point Performance Equation --- for flight paths</td>
<td>p0412 A79-35926</td>
</tr>
<tr>
<td>The effects of low-level wind shear on the approach and go-around performance of a landing jet aircraft [SAE PAPER 790568]</td>
<td>p0452 A79-36708</td>
</tr>
<tr>
<td>Design description of a four-place business jet using two in-19 engines [SAE PAPER 790580]</td>
<td>p0453 A79-36715</td>
</tr>
<tr>
<td>Improving business jet performance - The Hawk Five Sabreliner [SAE PAPER 790582]</td>
<td>p0453 A79-36717</td>
</tr>
<tr>
<td>Selection of aircraft turbocharger systems [SAE PAPER 790608]</td>
<td>p0456 A79-36739</td>
</tr>
<tr>
<td>New technologies for general aviation aircraft [SAE PAPER 790613]</td>
<td>p0456 A79-36742</td>
</tr>
<tr>
<td>In Soviet service. V - Backfire</td>
<td>p0459 A79-36775</td>
</tr>
<tr>
<td>Dassault-Breguet - The Mirage 2000</td>
<td>p0459 A79-36794</td>
</tr>
<tr>
<td>Changing requirements in aircraft design</td>
<td>p0460 A79-37044</td>
</tr>
<tr>
<td>Design, meet production --- aircraft cost and performance tradeoff considerations</td>
<td>p0460 A79-37048</td>
</tr>
<tr>
<td>Electric propulsion for high performance light aircraft [AIAA PAPER 79-1265]</td>
<td>p0470 A79-39011</td>
</tr>
<tr>
<td>Tri-rotor Coast Guard airship [AIAA 79-1573]</td>
<td>p0521 A79-62380</td>
</tr>
<tr>
<td>Opportunities for supersonic performance gains through non-linear aerodynamics [AIAA PAPER 79-1527]</td>
<td>p0576 A79-66710</td>
</tr>
<tr>
<td>AFFTC parameter identification experience --- for aircraft flight characteristics</td>
<td>p0681 A79-25016</td>
</tr>
</tbody>
</table>
AIRCRAFT PILOTS

Performance evaluation of an air vehicle utilizing non-symmetric nozzles [AIAA PAPER 79-1811] p0606 A79-47888

Analysis design of complex systems. II --- for simultaneous improvement of all basic prototype flight vehicle performance characteristics [AIAA PAPER 79-1811] p0613 A79-48050

Blown wings from Kiev --- short takeoff and landing through wing-overblowing [AIAA PAPER 79-1803] p0630 A79-49232

Variables characterizing the wind effects on an aircraft [AIAA PAPER 79-1803] p0639 A79-49007

Performance modelling methods --- in flight test programs [AIAA PAPER 79-1791] p0662 A79-50167

A computer system for identifying aircraft characteristics [AIAA PAPER 79-1791] p0662 A79-50168

Evaluation of selected class III requirements of MIL-P-87558 ASG/ "Flying qualities of Piloted Airplanes" [AIAA PAPER 79-1803] p0636 A79-50599


Technical problems encountered with the LAL-1 flying laboratory [NASA-TP-75505] p0500 A79-12052

Crew escape concepts for advanced high performance aircraft [AD-1060519] p0571 A79-15016

Mathematical models of aircraft dynamics for extreme flight conditions (theory and experiment) [NASA TM-80120] p0589 A79-29141

The development and implementation of algorithms for an A-7E performance calculator [AD-1063348] p0322 A79-16681

Optimum cruise performance (AD-1062607) p0364 A79-20107

Introduction to equations of motion for performance study [AD-87-70838] p0378 A79-21002

Preliminary noise tradeoff study of a Mach 2.7 cruise aircraft [NASA-TH-78323] p0388 A79-21868

Noise and performance calibration study of a Mach 2.2 supersonic cruise aircraft [NASA-TH-80063] p0388 A79-21869

Regression simulation of turbine engine performance/aircraft regression model [AD-1063975] p0424 A79-22106


The aerodynamics and performance characteristics of direct lift schemes [NASA TM-15007] p0429 A79-23004

An evaluation of turn anticipation techniques and offset flying procedures using a single-vaporjet RHEE system [AD-1066555] p0493 A79-24974

The calculation of optimal aircraft trajectories [NPL-DNACS-11/78] p0541 A79-26051

Engine performance considerations for the large submarine transport [NASA TM-15007] p0551 A79-27139

Jet noise and performance comparison study of a Mach 2.55 supercruise aircraft [NASA-TH-80094] p0559 A79-28982

A computer program for detailed analysis of the takeoff and approach performance capabilities of transport category aircraft [NASA-TH-80120] p0559 A79-29141


Performance evaluation method for dissimilar aircraft designs --- using the square of the wing span for nondimensional comparisons of aerodynamic characteristics [NASA-TP-1042] p0649 A79-30139

A summary of AERAD RFP meeting on dynamic stability parameters --- advanced aircraft performance at high angle of attack [NASA-TP-1042] p0658 A79-30220


AIRCRAFT PILOTS


Filament wound main rotor blade - The Army's new production blade for the AH-1 [NASA TM-15007] p0579 A79-15016

The 214 fiberglass blade - Design for inspectability [NASA TM-15007] p0579 A79-15016

Reliability based quality control technique for evaluating the degradation of reliability during manufacturing --- for army helicopter systems and components [NASA TM-78601] p0703 A79-32185

CP-140 aircraft reliability program - A "tailored" management approach [NASA TM-15007] p0205 A79-23631

Composite wing/fuselage integral concept [NASA TM-15007] p0206 A79-23632

Advanced composite cover to substructure -- attachment technology --- for aircraft wing skins [NASA TM-15007] p0207 A79-24078


The NASA C-141B reliability and maintainability program [NASA TM-78601] p0208 A79-24080

Cast aluminum structures technology --- for large primary aircraft [NASA TM-78601] p0208 A79-24083

Tooling and assembly procedures, serviceability program elements --- for aircraft composite structures [NASA TM-78601] p0209 A79-24090


GASP IV simulation model for the composites and bonding production facility [NASA TM-78601] p0274 A79-25288

The quiet revolution in airframe construction --- fabrication techniques and construction materials [NASA TM-78601] p0318 A79-25976

Some TIG-welding applications in the aerospace industry [NASA TM-78601] p0319 A79-26048

Cost-effective production of flight vehicle shells by the pressure and flow-pressure processes [NASA TM-78601] p0342 A79-26049
AIRCRAFT RELIABILITY

Airworthiness of helicopters /Cierva Memorial Lecture/

ICE protection systems of the Puma --- helicopter operations

Determination of the fatigue strength of heavily stressed components of the Alpha-Jet

An analysis of the new construction regulations for military and civil aircraft construction with respect to the demonstration of serviceability

Reliability and maintainability growth of a modern, high performance aircraft, the F-14A

Reliability based quality /RQA/ technique for evaluating the degradation of reliability during manufacturing --- for armey helicopter systems and components

CP-100 aircraft reliability program - a 'tailored' management approach

Recognition of damage-tolerance in civil airworthiness standards

The analysis and identification of flux-induced voltage transients on low-loss transmission lines with application to the Lightning-Transient-Analysis /LTA/ problem

Crasworthiness tests on model aircraft fuselage structures

A new standard for lightning qualification testing

What the FAA would like in airworthiness standards

A status report on the advanced FIREFLY assessment program

Terrain-following radar - Key to low-altitude flight

Development of a 'no adjustment' turboshaft engine

Development of in-flight steady-state failure rates

British civil airworthiness requirements for airships

Analytic redundancy for flight control sensors on the Lockheed L-1011 aircraft

Failure detection in signal processing and sensing in flight control systems

A status report on the advanced FIREFLY assessment program

Background/foreground radar --- Key to low-altitude flight

A new standard for lighting qualification testing of aircraft technical overview, definitions and basic waveforms

Influence of fuels on the reliability of jet engines and jet aircraft: Reliability with respect to fuel and lubricants --- Russian book
AIRCRAFT SAFETY

Vulnerability assessment of aircraft systems to indirect lightning effects

Determination of the probability of consequences of aircraft-system malfunctions in the evaluation of flight safety levels

Flight controls/avionics research — Impact on future civil helicopter operating efficiency and mission reliability

Preliminary airworthiness evaluation EH-18 helicopter quick fix, phase 1A

[AD-A056785]

Dynamics of complex structures-analysis and experiment: Damaged aircraft stabilators

[AD-A066981]

Fatigue crack growth — aircraft reliability

STOL technology, volume 1

[VERE-LECTURE-SESSION-60+VCL-1]

Airworthiness and certification aspects of civil aircraft for STOL

Fatigue of helicopters: Service life evaluation method

Preliminary airworthiness evaluation AB-12 helicopter equipped with a Garrett infrared radiation suppessor and an AN/ALQ-144 jammer

[AD-A067757]

Review of airworthiness standards for certification of helicopters for instrument flight rules (IFR) operation

[AD-A068837]

Preliminary airworthiness evaluation B-211 H quadruhel V aircraft

[AD-A066987]

Airworthiness and flight characteristics test, OF-1C takeoff performance

[AD-A0669827]

Preliminary airworthiness evaluation CH-47C with fiberglass rotor blades with T55-L-712 engines

[AD-A069991]

AIRCRAFT SAFETY

PAA's development program for Aircraft Separation Assurance /ASA/

Collision avoidance in the integrated system. II — Characteristics

Lightning protection from aircraft

[AD-A0621405]

SAFE Association, Annual Symposium, 15th, Las Vegas, Nev., December 5-8, 1977, Proceedings

A systemized approach to helicopter safety

[AD-A0679001]

A system for survival — passenger aircraft escape systems utilizing pyrotechnics

[AD-A0669981]

Clear air turbulence accidents

[AD-A0679043]

Analysis of the economic benefits of helicopter safety design features

[AD-A0679049]

Economics of commercial aviation safety

[AD-A0701537]

Time-dependent failure rates for jet aircraft

[AD-A0701538]

Improvement of safety for helicopter crews

[AD-A0701539]

Reliability of aircraft structures

[AD-A0801568]

Comparison of safety principles in aviation and in track-guided traffic

[AD-A0701569]

Damage tolerant design of the YAH-64 (H8S 78-461)

[AD-A0701570]

800 shaft horsepower advanced technology demonstrator engine — turboshift for military helicopters

[AD-A0701571]

Separation and collision risk in air traffic control

[AD-A0701580]

Lighting protection with segmented dividers — for aircraft radomes and dielectric structures

[AD-A0701581]

SUBJECT INDEX

Safety of air transport

Recognition of damage-tolerance in civil airworthiness standards

[SAE PAPER 781019]

Steady boundary layer wind shear model for civil aircraft flight hazard definition

[SAE PAPER 781028]

NASA/FAA general aviation crash dynamics program — a status report

[AD-A0702002]

Bird strikes — an increasingly important problem in aviation safety

[AD-A0702004]

USAF bird impact resistant windshield technology program

Wake turbulence and the jumbo jets — whose responsibility, pilot or controller

[AD-A0702007]

Conflict alert for the air traffic control system

[AD-A0702008]

Preliminary airworthiness evaluation RB-111 Bird strikes — an increasingly important problem in aviation safety

[AD-A0702010]

Fatigue crack growth — aircraft reliability

[AD-A0702012]

...
AIRCRAFT STRUCTURES

SUBJECT INDEX

Flight-determined stability and control
Utilization of the wing-body aerodynamic analysis
Three basics of design for civil certification
Comment on 'Flight test of stick force stability
Aerodynamic development of a small horizontal tail
Selected problems concerning unstable operation of
Control of the location of the center of gravity
Flap-lag-torsion aeroelastic stability of
Automatic Stabilization Equipment for the
Estimation of longitudinal aircraft
Nonlinear decoupled control synthesis for
Folded shear plane control apparatus for aircraft
A review of helicopter control-display
Alleviation of stability and control difficulties of a V/STOL Type E aircraft
Application of bifurcation analysis and catastrophe theory methodology /BACTB/ to
A summary of AGARD FDP meeting on dynamic stability parameters --- advanced aircraft performance at high angle of attack
Wind shear during approach: An investigation into the influence of a tower measured wind environment on the symmetric notions of a simulated aircraft during an automatic approach --- DC 9 aircraft
Aerodynamic inputs for problems in aircraft
Transonic/supersonic lateral aerodynamic derivatives --- prediction methods in aircraft design
Lateral-longitudinal cross-coupling effects --- on aircraft stability
Transonic/supersonic lateral aerodynamic derivatives --- stability and control estimates for aircraft design
Aerodynamic inputs for problems in aircraft
dynamics, volume 2

AIRCRAFT STRESSES

NT AFTERTBODIES
NT AIRFRAMES
NT CENTERBODIES
NT FOREBODIES
NT FUSELAGES
NT NOSES (FOREBODIES)
NT PLASTIC AIRCRAFT STRUCTURES
NT AIRCRAFT STRUCTURES

Impact of operational issues on design of advanced composite structures for Army helicopters
A glance at Soviet helicopter design, philosophy
Ultrasonic welding /solid-state bonding/ of aircraft structure - Fact or fancy
Nondestructive inspection of aircraft structures and materials via acoustic emission
Cyclic linkage of finite elements with application --- to aircraft structural analysis
Thermal stability of ribbed sheet systems
Decreasing stress concentrations in structures made of high-strength materials
Time-frequency method of solving large problems in the dynamics of elastic structures with local

Robotics: system identification techniques for handling qualities and stability and control evaluation
Handling qualities of Army/Hughes YAH-64 advanced attack helicopter
Flap-lag-torsion aeroelastic stability of circulation-controlled rotors in hover
Problems raised by the application of the natural stability reduction concept to transport aircraft
Control of the location of the center of gravity of loaded aircraft
Dynamics of controlled longitudinal motion of an airplane with a variable-geometry wing
System for stabilizing the vertical overload of an aircraft
Flight dynamics /2nd revised and enlarged edition/
Selected problems concerning unstable operation of aircraft turbine engine compressors
A wind shear/downdraft drift angle warning system
Flight dynamics analyses and simulation of heavy Lift aircraft
A model for unsteady effects in lateral dynamics for use in parameter estimation --- aircraft stability
The relationship of unsteadiness in downwash to the quality of parameter estimates
Aerodynamic development of a small horizontal tail for an active control relaxed stability transport application
Folded shear plane control apparatus for aircraft steering and stabilization
A review of helicopter control-display requirements for decelerating instrument approach
Allleviation of stability and control difficulties of a V/STOL Type E aircraft
Application of bifurcation analysis and catastrophe theory methodology /BACTB/ to aircraft stability problems at high angles-of-attack
Nonlinear decoupled control synthesis for maneuvering aircraft
The enhancement of aircraft parameter identification using linear transformations --- for stability
Analytical and experimental investigation of V-type empennage contribution to directional control in hover and forward flight
Comment on 'Flight test of stick force stability in attitude-stabilized aircraft'
Estimation of longitudinal aircraft characteristics using parameter identification techniques
APTC parameter identification experience --- Air Force flight test center aircraft flight testing
Three basics of design for civil certification
Automatic Stabilization Equipment for the Army/Hughes YAH-64 Advanced Attack Helicopter
Utilization of the wing-body aerodynamic analysis program
Flight-determined stability and control derivatives for the F-111 Tact research aircraft

[ NASA-TP-1350] p0038 879-10068
An analysis of the stability of an aircraft equipped with an air cushion recovery system
[ NASA-905783] p0095 879-12098
Sensitivity of aircraft spinning motion to dynamic cross-coupling and acceleration derivatives
[ NASA-806016] p0095 879-15060
Aircraft stability characteristics at high angles of attack
[ NASA-799-15003] p0097 879-15009
The estimation of lateral-directional aerodynamic derivatives at subsonic speeds
[ NASA-799-15009] p0097 879-15009
Transonic/supersonic longitudinal aerodynamic derivatives --- prediction methods in aircraft design
[ NASA-799-15011] p0097 879-15011
Lateral-longitudinal cross-coupling effects --- on aircraft stability
[ NASA-799-15012] p0097 879-15012
Transonic/supersonic lateral aerodynamic derivatives --- stability and control estimates for aircraft design
[ NASA-799-15013] p0097 879-15013
Aerodynamic inputs for problems in aircraft
dynamics, volume 2
The use of panel methods with a view to problems in aircraft dynamics
[ NASA-MF-77009-0] p0097 879-15016
The response of aircraft to discrete ramp gusts
[ NASA-TP-77165] p0097 879-15071
The need of stick force stability for attitude-stabilized aircraft, Part 2
[ NASA-TP-77027-8] p0097 879-17875
A velocity vector control system augmented with direct lift control --- stability augmentation using manual control
An in-flight controller insensitive to parameters variation
[ DLR-TB-78-07] p0097 879-30197
A wind shear during approach: An investigation into the influence of a tower measured wind environment on the symmetric notions of a simulated aircraft during an automatic approach --- DC 9 aircraft
[ NASA-TP-77078-7] p0097 879-32192
A power-lift aircraft handling qualities in the presence of naturally-occurring and computer-generated atmospheric disturbances
[ NASA-TP-77051] p0097 879-32198
AIRCRAFT STRESSES

NT AFTERTBODIES
NT AIRFRAMES
NT CENTERBODIES
NT FOREBODIES
NT FUSELAGES
NT NOSES (FOREBODIES)
NT PLASTIC AIRCRAFT STRUCTURES

SUBJECT INDEX

AIRCRAFT STRUCTURES CO1TO

nolinearities --- for aircraft structures p0204 A79-24084
Approximate solution of some boundary value problems on aircraft structural integrity p0202 A79-12155
Fibre composite reinforcement of cracked aircraft structures p0202 A79-12234
Finite element analysis of fatigue crack growth in aircraft components p0204 A79-15540
Reliability of aircraft structures p0204 A79-15794
Defects experienced in the production of advanced composite outer wings for the A-7D attack aircraft p0204 A79-17066
Finite element analysis of the shear-lag problem p0204 A79-18550
Integration of nondestructive testing into design for structural integrity assurance p0204 A79-18694
Experimetal investigation of the buckling characteristics of a bonded skin panel for a hypersonic aircraft -- Including comparisons with finite element and classical analyses [AERQ PAPER 78-RA/AERC-3] p0204 A79-19717
Determination of the fatigue strength of heavily stressed components of the Alpha-Jet [DGLP PAPER 78-179] p0204 A79-20019
Effect of CFRP technology on structural design and fatigue behavior of modern fighter aircraft [DGLP PAPER 78-179] p0204 A79-20020
Research conducted by ONERA on the relationship between the behavior and cumulative damage of materials and structures [ONERA, TP NO. 1978-55] p0204 A79-20121
Composite components under impact load and effects of defects on the loading capacity [DGLP PAPER 78-179] p0204 A79-20491
An analysis of the new construction regulations for military and civil aircraft construction with respect to the demonstration of serviceability [DGLP PAPER 78-193] p0204 A79-20494
Analytical life estimation for helicopter rotor components [DGLP PAPER 78-195] p0204 A79-20495
Estimation of the useful life of the lower chord of the girder of the EC-7 'Turbo-Trainer' [DGLP PAPER 78-198] p0204 A79-20498
The role of metallurgy in aircraft accident investigation and litigation p0204 A79-22710
Vibration and flutter investigations of aircraft with special nonlinear structural properties p0204 A79-23007
The effects of lightning and nuclear electromagnetic pulse on the composite aircraft p0204 A79-23073
Composite wing/fuselage integral concept p0204 A79-24077
Advanced composite cover to substructure attachment technology -- for aircraft wing skin p0204 A79-24078
Present and future developments in aerospace materials and structures p0204 A79-24079
Superplastic forming/diffusion bonding technology in the USAF/McDonnell DIATS program --- Built-up low-cost Advanced Titanium Structures for T-15 p0204 A79-24081
The FABST program -- a validation of bonding primary structure -- Primary Adhesively Bonded Structure Technology for aluminum aircraft p0204 A79-24082
Cast aluminum structures technology -- for large primary aircraft p0204 A79-24083
Lowercost structure by substituting AF410 steel for titanium -- in airframes p0204 A79-24084
The comparative evaluation of prebond surface treatments for titanium -- military aircraft structures p0204 A79-24085
Moisture/temperature effects upon mean strength of composite-to-metal adhesively bonded joint elements -- for T-16 aircraft p0204 A79-24086
Tooling and assembly procedures, serviceability program elements -- for aircraft composite structures p0204 A79-24087
Fatigue damage/fabrication criteria for supersonic SS aircraft -- EP-111 p0204 A79-24090
Experience with net-shape processes for titanium alloys p0204 A79-24091
Oxide morphologies on aluminum prepared for adhesive bonded aircraft structures p0204 A79-24106
FRP coupling to a composite aircraft p0204 A79-25321
The prediction of fatigue crack growth under flight-by-flight loading p0204 A79-25482
Analysis of longitudinal natural vibrations of deformable aircraft by the finite-element method p0204 A79-25505
Damage-tolerance practices applied to transport aircraft structures [SAT PAPER 781027] p0204 A79-25511
Aircraft static charging testing [ONERA, TP NO. 1978-110] p0204 A79-26130
Crashworthiness tests on model aircraft fuselage structures [AIAA 79-0686] p0204 A79-27354
Statistical estimation of economic life for aircraft structures [AIAA 79-0761] p0204 A79-28275
Factors affecting residual strength prediction of a cracked aircraft structure p0204 A79-2830
Capabilities and applications of a computer program system for dynamic loads analyses of flexible airplanes with active controls /PILGREF/ [AIAA 79-0782] p0204 A79-29015
Hypersonic pressure loading in soft body impacts -- of aircraft [AIAA 79-0782] p0204 A79-29026
Design of a typical aeronautical structure from carbon-resin composites p0204 A79-30174
Creep calculation for thin-walled structures operating under unsteady heating and loading conditions p0204 A79-32046
Dynamic identifcation of light aircraft structures and flutter certification [ONERA, TP NO. 1979-31] p0204 A79-32302
Cost-effective production of flight vehicle shells by the pressure and flow-pressure processes [DGLP PAPER 79-060] p0204 A79-32305
Numerical representation of aircraft geometry p0204 A79-32588
Composite tooling speeds fabrication -- Energy, labor cost cut sharply p0204 A79-33588
Copter windshields made tougher -- Special coating extends life, adds safety p0204 A79-33589
Economical processing for the fabrication of CFRP components [DGLP PAPER 79-067] p0204 A79-33600
Airframe glassmaker --- windshield supply for Boeing 767 and 747 aircraft p0204 A79-3470
Adhesive bonded structure of new pressurized piston twin aircraft [SAT PAPER 790563] p0204 A79-34705
Composite applications at Bell Helicopter [SAT PAPER 790570] p0204 A79-36713
Nonlinear structural crash dynamics analysis [SPE PAPER 790585] p0204 A79-36722
Aluminium electrically heated acrylic -- for ice formation prevention on aircraft transparencies [SPE PAPER 790600] p0204 A79-36732
A new light twin using bonded metal construction [SPE PAPER 790603] p0204 A79-36735
Fretting fatigue, with reference to aircraft structures [SPE PAPER 790612] p0204 A79-36741
Development of the Beechcraft Model 77 [SPE PAPER 790617] p0204 A79-36745
Aircraft design and strength /2nd revised and enlarged edition/ -- Russian book

A-67
Analysis of aircraft structure using applied fracture mechanics p0373 N79-20419
Correlation of predicted and measured thermal stresses on an advanced aircraft structure with similar materials [NASA-TM-87622] p0376 N79-20989
Hypersonic structures: An aerodynamicist's perspective, or one man's dream is another man's nightmare p0385 N79-21423
Design and fabrication of a skin stringer discrete tube actively cycled structural panel p0386 N79-21930
Design and analysis of a plate-fin sandwich actively cooled honeycomb sandwich panel p0387 N79-21933
Design and fabrication of a radiatively actively cooled honeycomb sandwich panel p0387 N79-21933
Radiative, actively cooled panel tests results: of B-1 components p0442 N79-23251
Operational experience with adhesive bonded structures p0444 N79-23950
Substructuring methods for design sensitivity analysis and structural optimization [AD-A065925] p0448 N79-23949
NOVA-25, a stiffened panel extension of the NOVA-2 computer program [AD-A066038] p0448 N79-23951
Prediction of the angular response power spectral density of aircraft structures [AD-A066181] p0465 N79-23956
Research and development activities in Italy in the field of aerospace structures and materials [AGARD-8-675] p0489 N79-24202
Composite forward fuselage systems integration, volume 2 --- effects of lightning [AD-A0665660] p0494 N79-24949
Non-destructive methods for the early detection of fatigue damage in aircraft components p0502 N79-25417
Broad-band transducers for nondestructive inspection of aeronautical components p0503 N79-25419
Correlation of predicted and measured thermal stresses on an advanced aircraft structure with similar materials --- hypersonic heating simulation [NASA-TM-72685] p0546 N79-27088
Hypersonic airframe structures: Technology needs and flight test requirements [NASA-CR-31301] p0562 N79-28168
Predicted crack repair costs for aircraft structures [AD-A0665695] p0569 N79-29138
Aircraft transparency failure and logistical cost analysis. Volume 3: Transparency analysis
AIRCRAFT TIRES


Helicopter obstacle strike tolerance [ANH 79-7] p0626 1979-49059

A review of crashworthiness --- in aircraft accident-liability cases p0652 1979-53557

Naval architectural considerations in the design of a helicopter [AIAN 79-2013] p0652 1979-53622

General aviation airplane structural crash survivability progress summary [FAA-RD-78-120] p0228 1979-16814

Total environment survivability methodology [AD-A061888] p0303 1979-18971

Crash survivability of the UH-60A helicopter [NASA-TP-80102] p0312 1979-19663

Comparative analysis of P3-31-350 Chieftrain (NAVY) accident and NASA crash test data [NASA-TP-80474] p0713 1979-33172

AIRCRAFT WAKES

Airplane dynamic wheel loads during ground maneuvering --- computer program for L-1011 aircraft [AIAN 79-0739] p0319 1979-29011

Propeller airplane tire size selection — optimum performance with minimum maintenance [SPEP PAPER 791056] p0655 1979-36730

A tire runway interface friction prediction model concept [AD-A06513] p0863 1979-38137

Improvement of overload capability of air carrier aircraft tires [FAPA-PH-78-133] p0241 1979-17229

Feasibility and cost effectiveness of airborne tire pressure indicating systems [AD-A065513] p0494 1979-24981

AIRCRAFT WAKES ON HELICOPTER WAKES

MT PROPELLER SLIPSTREAMS

MT SLIPSTREAMS

Approximate calculation of the velocity field and the motion of vortices in the wake of a low-flying airplane p0221 1979-12198

The wake Vortex Advisory System --- used for safe aircraft landing p0057 1979-12368

The use of wing tip-sails to reduce wing drag p0110 1979-18001

Calculation of the non linear aerodynamic coefficients of wings of various shapes and their wakes, including camber configurations p0154 1979-20106


Airframe wake flow effect and horizontal tail buffet --- pressure distribution and responses of fighter aircraft in transonic maneuvers p0338 1979-30482

Wake turbulence and the jumbo jete — whose responsibility, pilot or controller p0343 1979-30943

Turbulent wake measurements with a laser velocimeter [AIAA PAPER 79-1087] p0642 1979-30858

Vortex-induced oscillations - A selective review p0474 1979-39751

The calculation of non-linear aerodynamic characteristics of wings and their wakes in subsonic flow p0602 1979-47099

Measurement of aircraft wakes at 250-500 feet altitude with a 10.6-micron CW laser Doppler velocimeter p0661 1979-53517


Airframe vortex characteristics from data measured on John F. Kennedy International Airport [AD-A055059] p0158 1979-14026


SUBJECT INDEX

Laser Doppler velocimeter measurements of B-747 wake vortex characteristics [AD-A048275] p0159 1979-14038


Section drag coefficients from pressure probe transverse of a wing at low angles of attack p0352 1979-20000

In-flight three-dimensional boundary layer and wake measurements from a swept supercritical wing p0352 1979-20002


Ground-based measurements of the wake vortex characteristics of a B-747 aircraft in various configurations [NASA-TM-80474] p0537 1979-26016

AIRCRAFT U PLIGHT CREWS

AIRDROPS

Hardware options for gliding airdrop guidance systems [AIAN 79-0471] p0264 1979-26671

AIRFIELD SURFACE REQUIREMENTS

Issues in the design and analysis of airport ground transport systems [SPEP PAPER 78051] p0004 1979-10395

Reducing air pollutant emissions at airports by controlling aircraft ground operations [NASA-TM-80474] p0206 1979-23784

A simulator study of aircraft ground-run handling in the Foulis Research Simulator - Some results and experiences p0259 1979-26498

Airplane dynamic wheel loads during ground maneuvering --- computer program for L-1011 aircraft [AIAN 79-0739] p0319 1979-29011

The influence of the Terminal Control Area on airline operations [DGCR PAPER 79-024] p0517 1979-42352

Air traffic control requirements from the viewpoint of the airport [DGCR PAPER 79-025] p0518 1979-42353

Factors influencing runway capacity as typified by the Munich-Bih airport [DGCR PAPER 79-030] p0518 1979-42357

Development of specifications for taxing and control systems [DGCR PAPER 79-034] p0518 1979-42361

Design, fabrication, and testing of a brassboard model ATCRBS based surface trilateration data acquisition subsystem [AD-A051144] p0160 1979-14061

Design, fabrication, and testing of a brassboard model ATCRBS based surface trilateration data acquisition subsystem [AD-A057933] p0161 1979-14065

A study of aircraft towing as proposed for Boston-Logan International Airport --- airfield surface movements [FAA-AR-77-75] p0237 1979-16881


AIRCRAFT U AIRFOILS

AIRFOIL CHARACTERISTICS

U AIRFOILS

AIRFOIL PROFILES

U AIRPORTS

AIRFIELDS
Repair of directionally solidified airfoil components  
Turbine airfoil repair  
Effects of periodic changes in free stream velocity on flows over airfoils near static stall  
Heat transfer investigation of laminated turbine airfoils  
Numerical study of unsteady flows of viscous incompressible fluids about airfoils by a combined method of order O(k2) and O(k4)  
A visual investigation of the separation and subsequent transition near the leading edge of airfoils  
Experimental and theoretical results on unsteady flows of viscous incompressible fluids about airfoils by a combined method of order O(k2) and O(k4)  
On sound radiation from the trailing edge of an isolated airfoil in a uniform flow  
Experiments in unsteady transonic flow  
Applications of Laplace transform methods to airfoil motion and stability calculations  
The effect of chordwise flexibility on the lift of a rapidly accelerated airfoil  
A NASA initiative for general aviation -- The general aviation airfoil design and analysis service  
Some experimental results connected with the transonic instabilities on an airfoil  
Analysis of an unsteady aerodynamic force on a blade due to ununiform amplitude gusts  
Lift and drag of wall jet  
Split-filament measurements on an airfoil with turbulent separated flow  
Modeling of turbulent wakes in ideal fluids  
High tip speed/POD resistant boron-aluminum fan blades  
Effect of viscosity on wind-tunnel wall interference for airfoils at high lift  
The prediction of the turbulent flow field about an isolated airfoil  
Results of an improved version of LTEAD for computing unsteady airloads on airfoils oscillating in transonic flow  
Fully conservative numerical solutions for unsteady irrotational transonic flow about airfoils  
Experimental measurements of shock/boundary-layer interaction of a supercritical airfoil  
Aerodynamics for engineers --- Book  
Flying hot-wire study of two-dimensional turbulent separation tests on an NACA 4412 airfoil at maximum lift  
Wind tunnel tests of the G(N)-2 airfoil with 20% silicon, 25% slotted flap, 30% Fowler flap and 10% slot-lip spoiler  
Velocity measurement about a NACA 0012 airfoil with a laser velocimeter  
Direct numerical aleviation of the transonic separation integral equation for lifting and nonlifting airfoils  
The aerodynamic analysis of a two-dimensional short airfoil in transonic flow  
Computer-aided analysis and design of the shape rolling process for producing turbine engine airfoils  
Effects of thickness on the aerodynamic characteristics of an initial low-speed family of airfoils for general aviation applications  
Analysis of a theoretically optimized transonic airfoil  
A new method for designing shock-free transonic configurations  
A study of turbulent flows about oscillating airfoils  
Calculation of the planar supercritical flow over a NASA supercritical profile  
The influence of sweep on the aerodynamic loading of an oscillating NACA0012 airfoil. Volume 2: Data report  
Structural analysis of hollow blades: Torsional stress analysis of hollow fan blades for aircraft jet engines  
Inviscid transonic airfoil design methods including boundary layer and viscous interaction effects  
Alternative turbine cooling technology  
Evaluation of interference in the 098 in. by 22 in. transonic airfoil tunnel  
Visualization of the separation and subsequent transition near the leading edge of airfoils  
Application of the laser velocimeter to airfoil research  
Holography and LDV techniques, their status and use in airfoil research  
Flight test techniques for low speed airfoil evaluation  
A procedure for analyzing transonic flow over harmonically oscillating airfoils  
Some calculations of transonic potential flow for the NACA 64A006 airfoil with oscillating flap  
Observations on the dynamic stall characteristics of advanced helicopter rotor airfoils  
Advanced Technology Airfoil Research, Volume 1, part 1 -- conference on development of computational codes and test facilities  
NASA research objectives and roles  
Langley airfoil-research program  
Overview of two-dimensional airfoil research at Ames Research Center  
Transonic airfoil codes  
Application of direct-inverse techniques to airfoil research and design  
Low speed airfoil design and analysis  
Prospects for computing, airfoil aerodynamics with Reynolds averaged Navier-Stokes codes  
An evaluation of four single element airfoil analysis methods  
Upgraded viscous flow analysis of multi-element airfoils  
Numerical solution of the Navier-Stokes equations for arbitrary two-dimensional multi-element airfoils
The analysis and design of transonic two-element airfoil systems

Improvements in surface singularity analysis and design methods -- applicable to airfoils

Optimization of multi-element airfoils for maximum lift

Wake curvature and trailing edge interaction effects in viscous flow over airfoils

Developments in testing airfoil techniques at University of Southampton

A new airfoil research capability

Design and calibration of slotted walls for transonic airfoil wind tunnels

Some steady and oscillating airfoil test results

Including the effects of sweep, from the tunnel spanning wing

Numerical design of shockless airfoils

Airfoil cooling, hole plugging by combustion gas

Laminarities of the type found in coal derived fuels

Scale effects at transonic speeds basic considerations

Structure of the turbulent separated flow around a stalled airfoil

Generalization of analytical tools for helicopter-rotor airfoils

[NASA-CH-158480]

Extensions to the tested range of a cascade flow calculation method

Wind tunnel

Surface finishing -- adhesive bonding of plastic film to metal airfoil surfaces

Effects of turbulence on laminar separation on aerodynamic surfaces such as airfoils and compressor blading

Frost formation on an airfoil: A mathematical model 1

Low-speed single-element airfoil synthesis

An exploratory investigation of the effect of plastic coating on the profile drag of a practical-metal-construction sailplane airfoil

Some new airfoils

An annular wing

Low-speed wind tunnel results for a modified 15-percent-thick airfoil

Theoretical analysis of transonic flow past unsagged oscillating cascades

A viscous/potential flow interaction analysis for circulation-controlled airfoils

An exploratory investigation of the effect of a plastic coating on the profile drag of a practical-metal-construction sailplane airfoil

Leading-edge slot optimization for maximum lift

Supersonic unstalled flutter

Unsteady small-gap ground effects

The aerodynamic noise of a slot in an aerofoil

Flutter analysis of two-dimensional and two-degree-of-freedom airfoils in small-disturbance, unsteady transonic flow

Wind tunnels with adapted walls for reducing wall interference

Multi-element airfoil viscous-inviscid interactions

Finite element analysis of fatigue crack growth in aircraft components

Defects experienced in the production of advanced composite outer wings for the F-7D attack aircraft

Effect of CPPF technology on structural design and fatigue behavior of modern fighter aircraft

Present and future developments in aerospace materials and structures

Cast aluminum structures technology --- for large primary aircraft

Lowercost structure by substituting AF140 steel for titanium --- in airframes

Structural design, tooling and manufacturing of a composite YF-16 forward fuselage

A helicopter fuselage design concept

Design and fabrication of advanced titanium structures

Fatigue crack propagation rate at low delta-K of two aluminum sheet alloys, 2024-T3 and 7075-T6

The guilt revolution in airframe construction --- fabrication techniques and construction materials

Advanced technology applied to the UH-60A and S-76 helicopters

New materials for future commercial aircraft

Superplastic forming diffusion bonding of titanium helicopter airframe components

Thermomechanical treatment of aluminum alloys --- airframe materials

A second series of exploratory acoustic fatigue tests using a shaker

The effect of sheet edge working on the fatigue life under flight-simulation loading

Correlation of predicted and measured thermal stresses on an advanced aircraft structure with dissimilar materials --- hypersonic heating simulation

Collected engineering data sheets, Air Force data sheet program --- airframe materials

Residual strength properties of carbon/epoxy composite materials --- airframe materials

Aluminum alloys for advanced structural applications in transport aircraft

Cost spectrum fatigue crack propagation in candidate skin materials

Application of gradient methods to the optimal design of components of load-bearing structures --- for aircraft minus weight design

Investigation of the crash impact characteristics of composite airframe structures

Recent advances in convectively cooled engine and airframe structures for hypersonic flight

Preliminary flight and wind tunnel comparisons of the inlet/airframe interaction of the F-15 airplane
AERIAL AIRPLANE OPERATIONS

[AD-A065585]

AIRLINE OPERATIONS

Planning the passenger terminal
[SAA PAPER 780517]
p070  A79-32441

Overview of the small package air carrier industry
A study of the operations in Federal Express
[SAA PAPER 780540]
p005  A79-10406

The need and impact of long-term advances in
aircraft technology - the airlines' point of view
[SAA PAPER 780554]
p005  A79-10410

Directions for developing an air cargo system
planning model
[SAA PAPER 780556]
p006  A79-10411

A Hub operator's view of small aircraft operations
[SAA PAPER 780562]
p006  A79-10412

Economy in flight operations
p025  A79-12383

Impact of fuel availability and other cost trends
on air carrier operations
p005  A79-13077

Resource conservation through air traffic control
p005  A79-13080

New technologies for transport aircraft -
Expectations and hopes of the air transportation industry
[DGLR PAPER 78-099]
p000  A79-14061

Meeting airport ground access demands for the
1980's at Los Angeles International Airport
p063  A79-14139

New aircraft technology and its impact on the
airport - An airline viewpoint
p063  A79-14143

Econometrics of commercial aviation safety
p072  A79-15374

GPS for civil aviation - A new approach to
improved civil aviation operations -- Global
Positioning System
p077  A79-16166

Airline long-range navigation assessment
p078  A79-16176

Authorization in air traffic control - Planning for the 1980's within the province of the Federal
Institute of Air Traffic Control
p117  A79-17933

Investigation for planning the approach traffic
p117  A79-17996

Use of the Omega Navigation System in the North
Atlantic in the framework of the Navigation
Minima Performance Specifications (NPS)
[p127  A79-18157

Rule of fuel management --- for airlines
p127  A79-18152

Designing airport terminals for transfer passengers
p128  A79-18173

Impact of cruise speed on productivity of
supersonic transports
[ATAA PAPER 79-0231]
p203  A79-23570

Dynamic simulation studies of fuel conservation
procedures used in terminal areas
p204  A79-23581

A look at the near future --- computerized flow
control systems for ATC
p204  A79-23585

ATC delays - The number one problem in the next
decade
p204  A79-23586

Objectives related to an enhancement of the
effectivity of NALFY. I --- civil aircraft
utilization in Hungary
p250  A79-25368

Statistics of disturbances and maintenance
according to conditions at Interflug, III -
Technical requirements concerning the problem for the processing of disturbance data by means
of electronic data processing
p025  A79-25371

Airline approach to CAT III
p026  A79-25333

Why doesn't aircraft accident investigation
present now?
[p275  A79-27319

US computer operations climate changing
[p319  A79-28979

Analysis of bird strikes reported by European
airlines 1972 to 1975
p325  A79-29352

Access, fares, frequency - Effects on airport
traffic
p336  A79-29353

Information systems in civil aviation
Tokyo's new Narita airport - An illusion
Considerations in local administration of airports
in Canada
The cost situation in the material maintenance of
civil aviation aircraft
Landing gear overhaul survey
Air France's Paris-Tokyo transpolar flight in 1978
Airline productivity redefined - An analysis of
U.S. and European carriers
New air service and deregulation - A study in
transition
Problems of increasing the efficiency of Malev. II
--- airline operations
The influence of the Terminal Control area on airline operations
Introduction of Category IIIA at Deutsche
Lufthansa AG --- for all-weather landing
Simulation study of the operational effects of
cost-conservative approaches
Liquid hydrogen fueled commercial aircraft
p057  A79-42800

The aerial relay system - An energy-efficient
solution to the airport congestion problem ---
using cruise liner aircraft for in-air passenger transfer
[ATAA PAPER 79-1865]
p0610  A79-47921

Design criteria for airline operation
[ATAA PAPER 79-1849]
p0634  A79-49337

Risk - Taken or controlled --- airline operations
p0679  A79-51049

A graph-theoretic method to quantify the airline
route authority
p0697  A79-54280

American Airlines' operational and maintenance
experience with aerodynamic seals and oil seals in
turbofan engines
p007  A79-11061

Aircraft cabin ozone measurements on F747-100 and
F747-200 aircraft: Correlations with atmospheric
ozone and ozone encounter statistics
[NASA-TM-79060]
p170  A79-15013

Corporate aviation in the 1980's
p299  A79-18992

Additional analyses of air carried load factors
and competition
[PB-285757/9]
p390  A79-21032

An analysis of long and medium haul air passenger
demand, volume 1
[NASA-CR-152156]
p018  A79-22052

An analysis of short haul air passenger demand,
volume 2
[NASA-CR-152157]
p018  A79-22063

An economic model of the manufacturers' aircraft
production and airline earnings potential,
volume 3
[NASA-CR-152158]
p018  A79-22064

The airport performance model. Volume I:
Extensions, validations, and applications
[AD-A062863]
p500  A79-25040

Aircraft accident report: Las Vegas Airlines,
Piper PA-31-350, N444L, Las Vegas, Nevada,
August 30, 1978
[NTSB-AR-79-8]
p539  A79-26034

Airfreight forecasting methodology and results
p548  A79-27114

The 1990 direct support infrastructure
p549  A79-27115

AIRPLANE PRODUCTION COSTS

Introducing cost effectiveness into the tactical
airplane design cycle in a cost effective manner
[ATAA PAPER 79-0235]
p203  A79-23568

Composite wing/fuselage integral concept
p207  A79-24078

Life Cycle Cost in advanced technology engine
development
[SAA PAPER 780109]
p257  A79-25901
Life cycle cost in preliminary engine design --- for P-15
[SAE PAPER 781032] p0257 A79-25004
Trade-off studies with an interactive engine/airframe life-cycle-cost model
[SAE PAPER 781033] p0257 A79-25005
Design-to-cost and Aerospatiale's Aircraft Division
p0342 A79-30553
Ultrasonic bonding arrives - 75% cost savings seen
p0800 A79-33586
Composites tooling speeds fabrication - Energy, labor cost cut sharply
p0400 A79-33597
Fewer controls, easier inspection - Diffusion bonding costs show advantages
p0800 A79-33591
Economical processing for the fabrication of CFRP components
[SGLP PAPER 79-009] p0401 A79-33600
Design, meet production --- aircraft cost and performance tradeoff considerations
p0680 A79-37048
Survey of the cost estimation process used during the transporter design stage --- military aviation
[SGLP PAPER 79-054] p0517 A79-42349
Testability, the key to economical and operationally effective avionic test software
p0625 A79-48690
An economical model of the manufacturers' aircraft production and airline earnings potential, volume 3
p0818 A79-22064
Financing the capital requirements of the US airline industry in the 1980's
p0651 A79-30564
AIRPORT BEACONS
MT DISCRETE ADDRESS BEACON SYSTEM
The ATCIRK beacon interrogator --- Air Traffic Control Beacon Interrogator
p0621 A79-48693
AIRPORT LIGHTS
MT RUNWAY LIGHTS
Approach light aiming criteria
[NARCO-911] p0237 A79-16880
AIRPORT PLANNING
Planning, the passenger terminal
[SAE PAPER 780517] p0004 A79-10393
Cascade - Queue model of airport users
[SAE PAPER 780518] p0004 A79-10394
Issues in the design and analysis of airport ground transport systems
[SAE PAPER 780519] p0004 A79-10395
Commercial SIGM - the airplane, the airport
[SAE PAPER 780520] p0004 A79-10396
A method for assessing turbine engine run-up noise impact on airport neighbors
[SAE PAPER 780522] p0004 A79-10397
Simulation study of the effect of fuel-conservative approaches on ATC procedures and terminal area capacity
[SAE PAPER 780523] p0004 A79-10398
Airport development in Micronesia
[SAE PAPER 780530] p0005 A79-10400
Planning, design and construction of the Queen Ali International Airport
p0005 A79-10401
Planning the high elevation/high temperature airport
[SAE PAPER 780532] p0005 A79-10402
A Hub operator's view of small aircraft operating
[SAE PAPER 780562] p0006 A79-10412
The airport capacity increasing potential of angled runway exit designs
[SAE PAPER 780567] p0006 A79-10414
Possible near-term solutions to the wind shear hazard
[SAE PAPER 780572] p0006 A79-10416
Pollution sources caused by aviation
[SAE PAPER 780573] p0006 A79-10453
Aspects of short-toeoff aircraft --- optimization of aircraft, airports and flight regimes
p0017 A79-11444
Meeting airport ground access demands for the 1980's at Los Angeles International Airport
p0063 A79-14139
An overview of airfield pavement design
p0663 A79-14140
The integration of airport planning and environmental assessment - A focus on air quality analysis

Designing airport terminals for transfer passengers
p0075 A79-16092
Surface deformations as a runway design criterion
p0128 A79-18573
The IIS glidepath - New designs for severe sites
p0156 A79-20232
The Dallas Airport pressure-sensor array for gust-front detection - System design and preliminary results
p0192 A79-21919
AV-DACS and AUTOCS - An update --- Aviation Automated Weather Observation System and Automated Observation Systems
p0192 A79-21920
Measurement and analysis of airport emissions
p0206 A79-23745
Updated model assessment of pollution at major US airports
p0206 A79-23745
Aviation obstructions and the particular conditions for construction projects in the vicinity of airports
p0251 A79-25372
Siting criteria for MLS stations. II
p0281 A79-28184
An offshore airport that works - Nagasaki
p0281 A79-28185
Some behavioural aspects of airfield bird control
p0325 A79-29355
Ecological interpretation of bird-aircraft collisions on the Nice Cote d'Azur Airfield
p0325 A79-29356
Airport project Munich II - Aspects on the economic utilization of the airport area under consideration of the bird strike problem
p0325 A79-29357
Planning and control of bird hazard reduction at airports in the Transport Canada system
p0325 A79-29358
The use of falcons to disperse nuisance birds at Canadian airports - An update
p0325 A79-29359
Equipment and methods for dispersing birds used on French airfields
p0325 A79-29360
Accidents, fares, frequency - Effects on airport traffic
p0336 A79-29395
Environmental synergism and simulation in resin matrix composites --- under airfield humidity and temperature conditions
p0336 A79-30011
Tokyo's new Marita airport - An Illusion
p0343 A79-30932
Considerations in local administration of airports in Canada
p0343 A79-30941
Automating prevailing visibility --- airport videograph sensor assessments
p0386 A79-31888
The principle and practice of 'clutch' radar operation
p0399 A79-33025
Conflict alert for the air traffic control system
p0401 A79-33562
CFP Vehicle design and performance objectives --- Crash Fire Rescue
p0401 A79-33562
Perspectives on airport environmental compatibility; Proceedings of the Economic/Environmental Specialty Conference, Miami, Fla., March 2, 3, 1978
p0409 A79-34971
Airport noise control and land use compatibility study
p0409 A79-34972
A comparison of costs associated with local actions to reduce aircraft noise impacts
p0409 A79-34973
Off-airport land use compatibility - The Maryland approach and experience
p0409 A79-34974
Airport engineering --- Book
p0507 A79-40139
Air traffic control requirements from the viewpoint of the airport
[SGLP PAPER 79-025] p0518 A79-42353

SUBJECT INDEX
AIRPORT PLANNING
AIRPORT SURFACE DETECTION EQUIPMENT

Sharjah – An airport out of Arabian Nights --- innovative airport design

Sombasa – Welcome to a new airport --- planning and construction

Airport power supply --- Russian book

Airport plan based on the FIPPE concept proposal for a remodelled Catania-Fontanarossa

LAX airport/land use planning study. Phase 1 report: Short term noise abatement

Planning for airport access: An analysis of the San Francisco Bay area

National airport system plan 1978 - 1987

Components of the airport access system

Planning for airport access: An analysis of the San Francisco Bay area

Planning for airport access: Technological options

Planning for airport access: An analysis of the San Francisco Bay area. Three subsystem designs

National airport system plan 1978 - 1987

Developing a national airport system: Additional congressional guidance needed

Potential closure of airports

Advisory circular. The planning grant program for airports

Air traffic congestion and capacity. A bibliography with abstracts

AIRPORT SURFACE DETECTION EQUIPMENT

Next generation airport surveillance radar (ASR-4) definition study --- operational requirements of radar for air traffic control

AIRPORT TOWERS

System integration analysis for future tower cab configurations/systems

Tower airport statistics handbook, calendar year 1977

Engineering and development program plan: Terminal/tower control

FAA air traffic activity, fiscal year 1978

An investigation into the noise interference problems at Logan Airport, Boston

AIRPORTS

New aircraft technology and its impact on the airport – an airborne viewpoint

California airport monitor noise data

Investigation for planning the approach traffic

Role of helicopters in airport access

Evolution of a TRACON --- terminal guidance system for New York area airports

Reducing air pollutant emissions at airports by controlling aircraft ground operations

The Bullen International Airport wind-electric detection system Statistical results

The incidence of bird strikes at airports

SUBJECT INDEX

Bird control – The experience of one aerosonde

Determination of the suitability of soils for the construction of dirt runways

Problems of airports in the vicinity of foreign states

Aviation safety – Facts and fiction

FAA proposes that the standard noise model be TRACON

CSK – Taiwan’s 21st century airport

The influence of the Terminal Control Area on airline operations

Potential closure of airports

Air traffic congestion and capacity. A review of certificated airport crash fire rescue service criteria

FAA determination of no hazard for structures near airports

Community noise exposure resulting from aircraft operations. Volume 6: Acoustic data on Navy aircraft

Airport improvement task force delay study: Data collection, reduction and analysis

Air pollution from aircraft operations at San Jose Municipal Airport, California

Aircraft wake vortex characteristics from data measured at John F. Kennedy International Airport

Atlanta center upgraded third generation enroute ATC system operations: A case study

FAA determination of no hazard for structures near airports

The FAA’s airport landside model: Analytical approach for delay analysis

A review of certificated airport crash fire rescue service criteria

Characterizing expansive soils for airport pavement design

Lighting and marking of exit taxiways

Aircraft/airport noise control

Terminal area delay and fuel consumption analysis

Evaluation of threshold and prethreshold lights for medium intensity approach lighting systems

A study of aircraft towing as proposed for Boston-Logan International Airport --- airfield surface movements

Echo interpretation of severe storms on airport surveillance radars

Measurement and analysis of airport emission

Airport vicinity air pollution model. Abbreviated version user’s guide

A commercial airport noise environment: Measurement, prediction and control

Computer–aided collection of demoscopic data within day-night level contours: Two test cases

A commercial airport noise environment: Measurement, prediction and control

Evaluation of emission control strategies for airfield operations at the Los Angeles and San Francisco International Airports

An assessment of local risk to area associated with commercial operations of aircraft with graphite fiber composite structures
AIRODYNAMICS

STABILITY, CONTROL, AND DYNAMICS OF AIRCRAFT

Airfoil theory and design

- Airfoil shaping for maximum lift and minimum drag

- Effectiveness of airfoil design on aerodynamic performance

- Optimization of airfoil geometry for specific flight conditions

- Analysis of airfoil behavior in high-speed flight regimes

- Aerodynamic load calculations for airfoil performance

- Airfoil design for various flight settings and conditions

FLIGHT MECHANICS

- Flight path analysis

- Aircraft stability and control issues

- Aircraft maneuverability and performance

- Flight dynamics simulation for various flight scenarios

- Effect of aerodynamic forces on aircraft

- Aerodynamic analysis for flight control

AERODYNAMIC WAVE PROBLEMS

- Aerodynamic wave behavior

- Influence of wave patterns on aircraft performance

- Aerodynamic wave interference in high-speed flight

- Wave drag and its impact on aircraft efficiency

- Aerodynamic wave analysis for aircraft design

STABILITY AND CONTROL

- Aircraft stability and control principles

- Control surface design

- Control surface effectiveness

- Aircraft control system design

- Aircraft stability and control enhancement

AERODYNAMIC WAVE PROBLEMS

- Aerodynamic wave behavior

- Influence of wave patterns on aircraft performance

- Aerodynamic wave interference in high-speed flight

- Wave drag and its impact on aircraft efficiency

- Aerodynamic wave analysis for aircraft design

FLIGHT MECHANICS

- Flight path analysis

- Aircraft stability and control issues

- Aircraft maneuverability and performance

- Flight dynamics simulation for various flight scenarios

- Effect of aerodynamic forces on aircraft

- Aerodynamic analysis for flight control

AERODYNAMIC WAVE PROBLEMS

- Aerodynamic wave behavior

- Influence of wave patterns on aircraft performance

- Aerodynamic wave interference in high-speed flight

- Wave drag and its impact on aircraft efficiency

- Aerodynamic wave analysis for aircraft design

FLIGHT MECHANICS

- Flight path analysis

- Aircraft stability and control issues

- Aircraft maneuverability and performance

- Flight dynamics simulation for various flight scenarios

- Effect of aerodynamic forces on aircraft

- Aerodynamic analysis for flight control
Subject Index

Aluminum Alloys

Crash simulation of composite and aluminum helicopter fuselages using a finite-element program [AIAA 79-0781]

Aluminum Alloys

Fracture toughness of multiply layer adhesive bonded aluminum alloy sheet

Some engineering property comparisons for 7050 and AZ 74.61 die forgings

An automated system for phosphoric acid anodizing of aluminum alloys

Stress-peen straightening of complex machined aircraft parts

Structural aluminum materials for the 1980s

Fatigue crack propagation rate at low delta-K of two aluminum sheet alloys, 2024-T3 and 7075-T6

Future trends in aircraft structural materials

Estimation of fatigue life of Al-alloy used for compressor disc of jet engine

Residual strength of a cracked lug — stress corrosion cracking of aluminum alloy legs

Cast aluminum structures technology, phase 3 (CAST)

Influence of thermomechanical treatment on microstructure and mechanical properties of high strength aluminum alloys

Comparison of engineering properties of 7050-7175 and 7075-76511 extrusions for potential P-3 applications

Boron/aluminum landing gear for Navy aircraft

A-7 aircraft nose wheel linkages

A feasibility study for development of structural aluminum alloys from rapidly solidified powders for aerospace structural applications

Heat treatment studies of aluminum alloy forgings of the AZ 74.61 type. Fatigue crack propagation performance under maneuver spectrum loading

Residual strength of the aluminum alloy 7475-T6 at low temperatures

Thermomechanical treatment of aluminum alloys — airframe materials

Some engineering property comparisons for 7050 and AZ 74.61 die forgings

Influence of corrosion damage on fatigue crack initiation

Review of aeronautical fatigue investigations in the Netherlands during the period March 1977 — February 1979

The effect of sheet edge working on the fatigue life under flight-simulation loading

Definition and non-destructive detection of critical adhesive bond-line flaws

Investigation of stress-strain history modeling at stress risers, phase 2

Fatigue properties of adhesive-bonded laminated sheet material of aluminum alloys

The effects of gust alleviation on fatigue in 2024-T3 Alclad

Collected engineering data sheets, Air Force data sheet program — airframe materials

Aluminum alloys for advanced structural applications in transport aircraft

Fatigue properties of adhesive-bonded metallic structures

Primary Adhesively Bonded Structure Technology for aluminum aircraft parts

Cast aluminum structures technology — for large primary aircraft

A cyclic load test for environmental durability evaluation of bonded honeycomb structures — aircraft fin panels

Relative behavior of graphite/epoxy and aluminum in a lightning environment — aircraft safety considerations

The FAST program — a validation of bonding primary structure — Primary Adhesively Bonded Structure Technology for aluminum aircraft parts

Cast aluminum structures technology — for large primary aircraft

A cyclic load test for environmental durability evaluation of bonded honeycomb structure — aircraft fin panels

Aluminum Alloys

Phosphoric acid non-task anodize/PAITA/ process for repair bonding — of aluminum aircraft surfaces

Relative behavior of graphite/epoxy and aluminum in a lightning environment — aircraft safety considerations

The FAST program — a validation of bonding primary structure — Primary Adhesively Bonded Structure Technology for aluminum aircraft parts

Cast aluminum structures technology — for large primary aircraft

A cyclic load test for environmental durability evaluation of bonded honeycomb structure — aircraft fin panels

Subject Index

ALUMINUM ALLOYS

Phosphoric acid non-task anodize/PAITA/ process for repair bonding — of aluminum aircraft surfaces

Relative behavior of graphite/epoxy and aluminum in a lightning environment — aircraft safety considerations

The FAST program — a validation of bonding primary structure — Primary Adhesively Bonded Structure Technology for aluminum aircraft parts

Cast aluminum structures technology — for large primary aircraft

A cyclic load test for environmental durability evaluation of bonded honeycomb structure — aircraft fin panels

Aluminum Alloys
ALUMINUM BORON COMPOSITES

Advanced weldbonding process establishment for aluminum [AD-A071016] p0721 N79-33480
Environment load interaction effects on crack growth [AD-A071660] p0721 N79-33504

ALUMINUM BORON COMPOSITES

Applications of metal-matrix composites, the emerging structural materials p0532 297-43320
High tip speed/FOD resistant boron-aluminum fan blades p0532 297-43332

ALUMINUM COATINGS

Research on the creep-rupture strength of aluminum and nonaluminized jet-engine turbine blades prepared from KСОСО 2967 297-32586

ALUMINUM GRAPHITE COMPOSITES

Applications of metal-matrix composites, the emerging structural materials p0532 297-43317
Hybrid Wing Box structure p0532 297-43320

ALUMINUM OXIDES

Oxide morphologies on aluminum prepared for adhesive bonded aircraft structures p0210 297-24106
Metal-matrix composite structures [AHS 79-34] p0630 297-49086

AMPHIBIANS

Casualty evacuation by helicopter p0312 297-18669
Casualty evacuation by helicopter p0310 297-19165

AMMONIUM COMPOUNDS

AMMONIUM NITRATES

Some recent developments in solid propellant gas generator technology [AIAA PAPER 79-1237] p0511 297-40761

AMPERAGE

U ELECTRIC CURRENT

AMPERIOUS AIRCRAFT

Concept for a large multi-mission amphibian aircraft [AIAA 79-0069] p0405 297-33322
Air cushioning and landing gear applications study [NASA-CR-159002] p0540 297-26045

AMPERIOUS VEHICLES

AMPHIBIUS VEHICLES

The principles of hovercraft, powering and propulsion p0604 297-7444

ACT cushion comparison tests: Preliminary review and definition of model and tests [AD-A080660] p0586 297-28374

AMPLIFICATION

AMPLIFIERS

AMPLIFIERS

AMPLIFIERS

Model study of transient processes in a hydraulic power amplifier p0865 297-38814

AMPLITUDE MODULATION

An investigation into voltage modulation in aircraft W.S.C.P. systems p0240 297-17158

ANALOG CIRCUITS

A Navy plan for the development of a practical computer-aided programming /CAP/ system for analog circuit test design p0623 297-48870

ANALOG SIMULATION

Analog simulation and its defining similarity criteria in the analysis of supersonic flows past wings p0399 297-32032
Analog modeling in studying supersonic flow around a wing and its governing analog-criteria p0555 297-54036
An investigation into the transient aerodynamics associated with a spoiler emerging into a uniform airstream [NLR-TR-77078-U] p0704 297-32192
Wind shear during approach: An investigation into the influence of a tower measured wind environment on the dynamic motions of a simulated aircraft during an automatic approach --- DC 9 aircraft [NASA-CR-159002] p0540 297-47844

ANALOG TO DIGITAL CONVERTERS

Built in test of A/D converters - Present approaches and recommendations for improved BIT effectiveness --- in airborne radar systems p0566 297-48621
The impact of software in automatic test equipment --- for evaluation of radar analog to digital converter p0620 297-48691

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES

ANALOGIES
An experimental study of high frequency noise from model rotors - Prediction and reduction

Anemometers

NT HOT-WIRE ANEMOMETERS

NT HOT-WIRE ANEMOMETERS

NT LIGHT-Emitting ANEMOMETERS

Response and other characteristics of a flat bladed, dual pitch propeller anemometer

Feasibility study of transit photon correlation anemometer for Ames Research Center unitary wind tunnel

[NASA-CP-152238] p0367 N79-20140

Two dimensional anemometric probe - two dimensional flow. Wind tunnel tests

[AAAP-RT-78-06] p0400 N79-23116

Optical flow measurements: Applications to wind tunnels of motor bench tests

[AAAP-RT-78-07] p0400 N79-23117

Anemometry & Velocity Measurement

Angle of attack

Aerodynamic response for the airfoil experiencing sudden change in angle of attack

Vortex system at the nose part of a fuselage model at supercritical angles of attack and different Reynolds numbers

Flying angle of attack

Aerodynamic characteristics of combat aircraft at large angles of attack

[DOLE PAPER 78-113] p0061 N79-14071

High angle of attack flight control using stochastic model reference adaptive control

Unsteady calculation of vortex sheets emitted by highly inclined lifting surfaces

[OTTSA, TP NO. 978-63] p0127 N79-18551

Vortex pattern at the upper surface of a swept wing at a high angle of attack

[OTTSA, TP NO. 978-120] p0128 N79-18554

Effect of spanwise blowing in the angle-of-attack regime alpha equals 0 plus 90 deg

[OPEA, TP NO. 978-86] p0152 N79-20083

Aerodynamics of slender bodies at high angles of attack

Coaptation of supersonic viscous flows over ogive-cylinders at angle of attack

[ALAA PAPER 79-0131] p0200 N79-23517

F-16 high-alpha flight control characteristics and control system concept

[ALAA PAPER 79-0403] p0203 N79-23577

Aerodynamics and heat transfer of transonic turbine blades at off-design angles of incidence

[ALAA PAPER 79-2629] p0214 N79-24295

F-16 high angle of attack testing

Parabolized Navier-Stokes solutions for hypersonic viscous flows over blunt cones at large angles of attack

Hypersonic viscous shock layer on infinite-span arrow wings at angle of attack

Control considerations for CCT fighters at high angles of attack

Transonic flow past a symmetrical airfoil at high angle of attack

[ALAA PAPER 79-1500] p0303 N79-29806

Application of bifurcation analysis and catastrophe theory methodology to aircraft stability problems at high angles of attack

An investigation of the rolling stability derivatives of a T-tail fighter configuration at high angles-of-attack

The evolution of the high-angle-of-attack features of the F-16 flight control system

Recent results in parameter identification for high angle-of-attack stall regimes

[ALAA PAPER 79-1640] p0688 N79-52548

The influence of aerodynamic interference on high angle of attack wind tunnel testing

[AD-A055045] p0063 N79-11002

Canard-body-tail missile test at angles of attack to 50 deg in the Ames 11-foot transonic wind tunnel

[NASA-ER-78041] p0086 N79-12021

Vortex effects for canard-wing configurations at high angles of attack in subsonic flow

[NASA-CP-780543] p0158 N79-14022

Experiments on cross-coupling and translational acceleration derivatives

A survey of analytical and experimental techniques to predict aircraft dynamic characteristics at high angles of attack

N79-15068

An analytic theory of supersonic/hypersonic stability at high angles of attack

N79-15082

Aircraft stability characteristics at high angles of attack

N79-15089

Results of piloted simulator studies of fighter aircraft at high angles of attack

N79-15093

Sensitivity of aircraft motion to aerodynamic cross-coupling at high angles of attack

N79-15094

Identification of key maneuver-limiting factors in high-angle-of-attack flight

N79-15096

Aerodynamic characteristics at high angles of attack

N79-15097

Aerodynamic side-force elevator means

[NASA-CASL-13236-1] p0287 N79-17813

P-16 high angle of attack testing

N79-18886

Vortex pattern developent on the upper surface of a swept wing at high angle of attack

N79-18914

Design, calibration, and application of a sensor for measuring time dependent angle of attack of helicopter blades

N79-18968

High angle of attack aerodynamics

N79-29806

Effect of high angles of attack on dynamic stability parameters

N79-21997

High angle of attack characteristics of different fighter configurations

N79-21998

Some US research studies of the use of wing-body strakes on combat aircraft configurations at high angles of attack

N79-21999

The application of spanwise blowing for high angle of attack spin recovery

N79-22004

Behavior of a transport aircraft with a high aspect ratio wing at a high angle of incidence

N79-22005

Vortex pattern developing on the upper surface of a swept wing at high angle of attack

N79-22007

Normal force and pitching moment of wing-body combinations in the nonlinear angle-of-attack range at subsonic speeds

N79-22022

Prediction of aerodynamic characteristics for slender bodies alone and with lifting surfaces

N79-22023

Prediction of lateral aerodynamic loads on aircraft at high angles of attack

N79-22024

Prediction and measurement of the aerodynamic forces and pressure distributions of wing-tail configurations at very high angles of attack

N79-22025

High angle of incidence implications upon air intake design and location for supersonic cruise aircraft and highly maneuverable transonic aircraft

N79-22026

Intake design and intake/airframe integration for a post-stall fighter aircraft concept

N79-22027

A-83
Design of VHF and UHF communications air/ground antennas
(FAA-RC-79-7)
ANTENNA PENDIX
U ANTENNA RADIATION PATTERNS
ANTENNA RADIATION PATTERNS
ANTENNA RADIATION PATTERNS
NT SIDELOBES
Some novel techniques for avoiding antenna obstructions and T.C.C. effects
Modeling the X-band radar augmentation system of a high altitude supersonic target
An YPP antenna with superior sidelobe and backward suppression characteristics
Air craft antenna pattern measurements using near field techniques
A model for calculating the radiation field of microstrip antennas
Radiation field of a conformal phased array of finite cylindrical, conical, and rocket-shaped conducting bodies --- airborne antenna design
Computation of the radiation characteristic of antennas on complicated structures in the high frequency case. Principle of the geometrical theory of diffraction
Study of V&IC newport antennas test range: Methods of reflection reductions and increased frequency coverage
High frequency near field scattering by an elliptic disk
Fuselage-mounted antenna code: User's manual
Wing-mounted antenna code: User's manual
An iterative approach for computing an antenna aperture distribution from given radiation pattern data
The selection of glide slope antenna patterns for use in the frequency assignment process
ANTENNAS
NT AIRCRAFT ANTENNAS
NT CILIENOIDICAL ANTENNAS
NT DIRECTIONAL ANTENNAS
NT LENS ANTENNAS
NT MICROVAY ANTENNAS
NT MISSLE ANTENNAS
NT MONOPULSE ANTENNAS
NT MONOTUBE ANTENNAS
NT RADAR ANTENNAS
NT RADIO ANTENNAS
NT SLOT ANTENNAS
NT SPACECRAFT ANTENNAS
NT SPHERICAL ANTENNAS
NT STEERING ANTENNAS
An investigation into the noise interference problems at Logan Airport, Boston
ANTHROPOMETRY
Wind tunnel test of ACES 2 ejection seat with anthropometric dummy in asymmetric configurations
ANTIFRICTION BEARINGS
NT BALL BEARINGS
NT ROLLER BEARINGS
Self-contained grease lubrication systems for aircraft applications
NT ROLLER BEARINGS
The Sikorsky elastomeric rotor --- helicopter rotor bearings
ANTIPRICKLE BEARINGS
NT ROLLER BEARINGS
NT BALL BEARINGS
NT SPHERICAL ANTENNAS
NT RADAR ANTENNAS
NT DIRECTIONAL ANTENNAS
NT MICROWAVE ANTENNAS
NT CYLINDRICAL ANTENNAS
NT AIRCRAFT ANTENNAS
NT MONOPULSE ANTENNAS
NT SIDELOBES
ANTITANK MISSILES
Why the AAI chose the 'Gazelle/Hot' as an antitank helicopter
APPLICATIONS
U UTILIZATION
APPLICATIONS PROGRAMS (COMPUTERS)
The application of microprocessor technology to in-flight computation
Implementation and testing of numerical analysis techniques in avionics applications
APPROACH
NT DELAYED FLAP APPROACH
NT INSTRUMENT APPROACH
Minimum landing-approach distance for a sailplane
On the limits of steep helicopter approaches
Methods for the validation of synthesized images in visual flight simulation --- space perception during landing approach
Simulation study to evaluate a constant-groundspeed approach method in moderate and severe wind shears
Simulation evaluation of combined 4D PRAy and airborne traffic situation displays and procedures applied to terminal airport facilities
Effects of control system dynamics on fighter approach and landing longitudinal flying qualities, volume 1
A computer program for detailed analysis of the take-off and approach performance capabilities of transport category aircraft
Flight experience with advanced controls and displays during piloted curved decelerating approaches in a powered-lift STOL aircraft
APPROACH CONTROL
NT RADAR APPROACH CONTROL
'Strategic' time-based ATC --- by long-term flight planning
Procedure for flight guidance in the terminal maneuvering area for an experimental program employing a flying test device
Investigation for planning the approach traffic
The MLS approach and landing system
Sea Harrier night and low visibility approach development
SUBJECT INDEX

APPROACH INDICATORS

approaches
(AD-1073193]
p0719 N79-33182
APPROPRIATIONS
NASA authorization, 1980, volume 1, part 2
[GPC46134]
p0589 N79-29105
APPROXIMATION
NT FINITE DIFFERENCE, THEORY
NT FINITE ELEMENT METHOD
NT LEAST SQUARES METHOD
NI NEWTON-RAPHSON METHOD
The smooth approximation method and its
application to the mathematical description of
the aerodynamic characteristics of a wing
p0028 179-12955
Second approximation in theory of a finite-span
thin wing in a hypersonic gas flow
P O447 A79-35927
Construction of an initial approximation for the
solution of the integral equation of a lifting
surface
p0447 179-35928
On a smooth approximation method and its
application to mathematical description of wing
aerodynamic characteristics
p0601 179-47001
APPROXIMATION METHODS
U APPROXIMATION
AQUEOUS SOLUTIONS
Comparative nozzle study for applying aqueous film
forming foam on large-scale fires
[10-1058562]
p0105 N79-13064
ABC WELDING
NT GAS TUNGSTEN ARC WELDING
ARCHITECTURE
Designing airport terminals for transfer passengers
p0128 179-18573
Sharjah - An airport out of Arabian Nights
innovative airport design
p0536 179-43732
ARCHITECTURE (CONPUTRRS)
The !A-6H weapon Systems trainer
p0350 A79-32246
Digital flight control reliability - Effects of
redundancy level, architecture and redundancy
management technique
p0573 179-45418
[AIAA 79-1893]
Analysis and evaluation of current !IL-STD-1553
digital avionics architecture as the basis for
advanced architecturfs using MIL-STD-15530
p0616 A79-48629
Radar signal processing development for
application of VESI
p0618 A79-48664
A case study of computer evolution in air defense,
command and control, and air traffic control
'
p0698 179-54389
[lIlA 79-1914]
A multi microprocessor flight control system Architectural concepts
p0698 179-54392
[AIlA 79-1925]
The impact of parallel computers on the design of
nonlinear flight controllers
p0698 179-54414
(AIAA 79-1966)
Architecture of an intelligent cockpit monitoring
system - SECURE
[AIAA 79-1961]
p0699 179-54437
GASP-PL/I simulation of integrated avionic system
processor architectures
(RASA-CR-158244]
p0303 N79-18973
A reliable and survivable data transmission system
for avionics processing
p0354 N79-20025
ARCTIC ENVIRONMENTS
U ICE ENVIRONMENTS
AREA NAVIGATION
Can low-cost VON and Omega receivers suffice for
BNAV - A new computer-based navigation technique
p0077 A79-16165
Evolution of area navigation in the air traffic
control system
p0077 A79-16172
Investigation of different system configurations
for a TNA navigation system taking special
account of traffic load and channel requirements
[OGLE PAPER 79-0391
p0519 179-42365
Fundamentals of navigation in the terminal
maneuvering area
p0521 179-42377
Impact of area navigation on controller
productivity and RTC system capacity

Measuring and improving ATC capacity
p0399 979-33024
The principle and practice of 'clutch' radar
operation
p0399 179-33025
Advanced application of the ADG? approach aid
offshore
p0399 179-33457
New technology S61N simulator
p0399 179-33458
Air traffic control requirements from the
viewpoint of the airpert
p0518 179-42353
GLR PAPER 79-025)
Missed approach of commercial aircraft regarding
wind shear in the ground boundary layer
p0518 179-92355
(DGLE PAPER 79-028)
Decelerated approach - Ccmpariscn of different
procedures
p0520 979-42371
[DOLE PAPER 79-045]
Onboard methods for increasing landing approach
capacity upon introduction of HIS
p0520 A79-42373
(DOLE PAPER '9-047]
Decoupled longitudinal controls for shea;
penetration in the terminal area environment
during approach and landing engine jet transport
p0568 179-45341
(lIlA 79-1678)
A simulator investigation of roll response
requirements for aircraft with
rate-command/attitude-hold flight control
systems in the landing approach and touchdown
p0569 079-45342
(AIAA 79-1679)
A review of helicopter control-display
requirements for decelarating instrument approach
p0569 079-95345
(lilA 79-16831
Development of the Navy H-Dot Automatic Carrier
Landing System designed to give improved
approach control in air turbulence
p0572 179-45901
(1111 79-1772]
4-D helical approach of a transport aircraft in an
RTC environment
p0572 179-45404
[lilA 79-1776]
Advances in decelerating steep approach and
landing for helicopter instrument approaches
p0628 079-49069
(IRS 79-161
System capacity of the approach- and landing aid
SE T AC
p0699 979-53855
Plight experience with advanced controls and
displays during piloted curved decelerating
approaches in a powered-lift STOL aircraft
(NASAT M 785271
p0036 N79-10054
Ccmparative study of flare control laws
optimal control of b-737 aircraft approach and
landing
p0230 N79-16822
(PASA-CP-158114)
Two-segment approach investigation on a
moving-base piloted flight simulator
p0295 N79-17880
(VTH-LE-250)
An in-flight simulator investigation of roll and
yaw control power requirements for STOL approach
and landing: Development of capability and
preliminary results
(NASA-CR-152307)
1)0595 N79-29196
Project NAVTCLAND (Navy vertical takeoff and
landing capability development)
p0657 N79-30212
Wind shear during approach: An investigation into
the influence of a tower measured wind
environment on the symmetric motions of a
simulated aircraft during an automatic approach
DC 9 aircraft
(NLR-TR-77078-U)
p0704 N79-32192
APPROACH INDICATORS
Development of a control wheel steering mode and
suitable displays that reduce pilot workload and
improve efficiency and safety of operation in
the terminal area and in windshear
(lilA 79-1867]
p0573 979-45414
Flight experience with advanced controls and
displays during piloted curved decelerating
approaches in a powered-lift STOL aircraft
(NASA-TN-78527)
p0036 N79-10054
Description and preliminary studies of a computer
drawn instrument landing approach display
p0C45 N79-11039
[NASA-TM-76771)
Approach light aiming criteria
p0237 N79-16880
(NAEC-911]
Airborne determination of ground speed: A
feasibility study --- instrument landing system
1-86


Theoretical evaluation of high-speed aerodynamics for arrow-wing configurations

Effects of wing leading-edge deflection on low-speed aerodynamic characteristics of a low-aspect-ratio highly swept arrow-wing configuration --- wind tunnel tests

Effect of optimized leading-edge deflection and geometric anhedral on the low-speed aerodynamic characteristics of a low-aspect-ratio highly swept arrow-wing configuration --- Langley 7 by 7 foot tunnel

Theoretical and experimental investigation of ground-induced effects for a low-aspect-ratio highly swept arrow-wing configuration

Effects of outboard vertical-fin position and orientation on the low-speed aerodynamic performance of highly swept wings --- supersonic cruise aircraft research

ARROW Wings

Numerical solution of a linear integral equation of the first kind in the inverse problem of symmetric flow past a wing

Influence of geometric effects on the aspect ratio optimization of axial turbine bladeings

The calculation of non-linear aerodynamic characteristics of wings and their wakes in subsonic flow

Influence of diffusion factor, aspect ratio and solidity on overall performance of a compressor midspan stator --- the effects of varying both diffusion through the rotor and compressor blades and blade aspect ratio

Theoretical evaluation of high-speed aerodynamics for arrow-wing configurations

Effects of wing leading-edge deflection on low-speed aerodynamic characteristics of a low-aspect-ratio highly swept arrow-wing configuration --- wind tunnel tests

Effect of optimized leading-edge deflection and geometric anhedral on the low-speed aerodynamic characteristics of a low-aspect-ratio highly swept arrow-wing configuration --- Langley 7 by 7 foot tunnel

Theoretical and experimental investigation of ground-induced effects for a low-aspect-ratio highly swept arrow-wing configuration

Effects of outboard vertical-fin position and orientation on the low-speed aerodynamic performance of highly swept wings --- supersonic cruise aircraft research

An asymptotic result for the scattering of a plane wave by a smooth convex cylinder.

The ATMOSAT Program-1975-78 --- manned superpressure balloon flights for atmospheric monitoring.

A comparison of theoretical predicted longitudinal aerodynamic characteristics with full-scale wind tunnel data on the AVII aircraft.

Thermospheric propagation of sonic booms from the Concorde supersonic transport.

Lightning hazards overview: Aviation requirements to assure a symmetrical lifting parachute.

A comparison of theoretical predicted longitudinal aerodynamic characteristics with full-scale wind tunnel data on the AVII aircraft.

An asymptotic result for the scattering of a plane wave by a smooth convex cylinder.

Thermospheric propagation of sonic booms from the Concorde supersonic transport.

Atmospheric dispersion modeling --- for air pollutants.

Lightning hazards overview: Aviation requirements to assure a symmetrical lifting parachute.

A comparison of theoretical predicted longitudinal aerodynamic characteristics with full-scale wind tunnel data on the AVII aircraft.

Thermospheric propagation of sonic booms from the Concorde supersonic transport.

Atmospheric dispersion modeling --- for air pollutants.
and landing: Development of capability and preliminary results

[NASA-TN-152307] p0355 A79-29196

ATTITUDE GYROS

Low-cost inertial navigation for moderate-g missions


ATTITUDE INDICATORS

Application of a north seeking heading and attitude reference for the autonomous navigation of helicopters

Reconstructed flight control sensor signals via Lisemberger observers

[FA-18 Hornet display system] p0617 A79-48630

ATTITUDE STABILITY

MT DIRECTIONAL STABILITY
MT HORIZONTAL STABILITY
MT LATERAL STABILITY
MT LONGITUDINAL STABILITY

Comment on "Flight test of stick force stability in attitude-stabilized aircraft"

The need of stick force stability for attitude-stabilized aircraft, Part 2

[A-90] p0245 879-17658

AUDIO EQUIPMENT

MT MICROPHONES

AUDIO VISUAL EQUIPMENT

U SOUND PRODUCTIONS

AUDITORY DEFECTS

Audio analysis of noise in 05 army aircraft

Auditory analysis of noise --- auditory perception

[STIAS-236] p0245 A79-17658

AUGMENTATION

MT STABILITY AUGMENTATION
MT THRUST AUGMENTATION

An experimental investigation of turbojet test cell augmentors

A pilot simulator study on augmentation systems to improve helicopter flying qualities in terrain flight


AUTOMATION THEORY

Analytic design of airframe automatic pitch controller

[AUTOMATIC CONTROL] p0069 A79-14863

AUTOMATIC CONTROL

MT ADAPTIVE CONTROL
MT AUTOMATIC FLIGHT CONTROL
MT AUTOMATIC LANDING CONTROL
MT CASCADE CONTROL
MT CYCLIC CONTROL
MT FEEDBACK CONTROL
MT NUMERICAL CONTROL
MT OPTIMAL CONTROL
MT PROPRIETARY CONTROL
MT SELF ALIGNMENT
MT SEQUENTIAL CONTROL
MT TEAM OPTIMAL CONTROL

Multisensor utilization investigation for automated ATC surveillance

Optimal control of helicopter longitudinal motion on the basis of an operational algorithm

General principles of automatic video trackers. II - Area trackers

Automated Omega/ILY monitoring and forecasting for air traffic safety enhancement - A progress report

The future - APTS III - Automated Radar Terminal Systems for air traffic control

Development and initial test results of parachutes with automatic inflation modulation /AIR/

Development and initial test results of parachutes with Automatic Inflation Modulation /AIR/

Advanced braking controls for business aircraft

[SP ARS PAPER 790595] p0455 A79-36731

A-90

SUBJECT INDEX

Technical calculation methods for automatic collision recognition and avoidance in air traffic

[DGIR PAPER 79-035] p0519 A79-42362

Automated tracking for aircraft surveillance radar systems

Modern systems for air traffic control

Automated VHF Frequency Assignment System (PAS) for FAA air traffic control communications

[AD-A061336] p0225 A79-16172

ATS/ATC simulation tests with site-adaptation logic

[FAA-MT-78-42] p0237 A79-16879

The Impact of Integrated Guidance and Control Technology on Weapons Systems Design

[AGARD-CP-257] p0353 A79-20009

A reliable and survivable data transmission system for avionics processing

[A-90] p0638 A79-20025

Structural aspects of active controls

[Dynaic wind tunnel simulation of active control systems]

Central flow control software design document

Volume 1: Operational software complex - automation support to the Air Traffic Control System Command Center

[AD-A070973] p0663 A79-30959

Central flow control software design document

Volume 2: Support software complex - automation support to the Air Traffic Control System Command Center

[A-90] p0663 A79-30960

AUTOMATIC CONTROL VALVES

MT PRESSURE REGULATORS

MT RELIEF VALVES

Dynamic behaviour and control of single-shaft closed-cycle gas turbines

[A-90] p0422 A79-22095

AUTOMATIC DATA PROCESSING

U DATA PROCESSING

AUTOMATIC FLIGHT CONTROL

MT AUTOMATIC LANDING CONTROL

Autonomous stabilization of helicopters --- Russian book

[A-90] p067 A79-14550

Analytic design of airplane automatic pitch controller

Simulation of automatic flight control system failures

[AHS 76-28] p0122 A79-18159

The impact of the total lighting environment on aircraft flight control systems

[253079] p0245 A79-25319

Reducant control systems for flight vehicles --- Russian book

[A-90] p0256 A79-25875

Strike Drone - A defense suppression concept using unmanned cruise/loiter/attack vehicle

[SAP PAPER 78017] p0256 A79-25894

Development of the L-1011 Flight Management System

[A-90] p0260 A79-26555

Advanced en route air traffic control automation

[27129] p0274 A79-27129

System for stabilizing the vertical overload of an aircraft

[A-90] p0315 A79-26607

Semiautomatic control of aircraft: Systems of manual aircraft control --- Russian book

[A-90] p0406 A79-34504

Drone formation control system /DFCS/ - A new generation test range system

[A-90] p0406 A79-34504

Westland unveils WG30 transport helicopter

[A-90] p0462 A79-38092

Digital flight control research using microprocessor technology

[A-90] p0647 A79-38533

Flight control. II - Control system design

German book

[A-90] p0507 A79-40155

Simulation of distributed microprocessor-based flight control systems

[A-90] p0507 A79-40155

Increasing guidance accuracy through use of an integrated digital piloting system

[A-90] p0507 A79-40668
**SUBJECT INDEX**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTOMATIC TEST EQUIPMENT</td>
<td>p0079-16432</td>
</tr>
<tr>
<td>modern control techniques</td>
<td>p0230 T99-16824</td>
</tr>
<tr>
<td>VIOL controls for shipboard landing</td>
<td>p065A T99-30193</td>
</tr>
<tr>
<td>[NASA-CA-30714]</td>
<td></td>
</tr>
<tr>
<td>Wind shear during approach: An investigation into the influence of a tower measured wind environment on the symmetric motions of a simulated aircraft during an automatic approach --- DC-9 aircraft [NLR-TR-77078-0]</td>
<td>p0704 T99-32192</td>
</tr>
<tr>
<td>AUTOMATIC PATTERN RECOGNITION</td>
<td>p0079-16431</td>
</tr>
<tr>
<td>VERTICAL-SEEKING AUTOPILOT DESIGN --- OF THREAT VECTOR CONTROLLED EJECTION SEAT [AGARE-CP-260]</td>
<td>p0079-16431</td>
</tr>
<tr>
<td>The influence of the amount of automation in a flight path guidance system on flight path deviation and pilot work load [NASA-CA-79-006]</td>
<td>p0520 T99-42370</td>
</tr>
<tr>
<td>Minimum expected cost control of linear systems with uncertain parameters - Applications to remotely piloted vehicle flight control systems [NASA-CA-79-1765]</td>
<td>p0571 T99-45387</td>
</tr>
<tr>
<td>An improved method for load survey flight testing --- of military cargo aircraft [AIAA PAPER 79-17999]</td>
<td>p0606 T99-47885</td>
</tr>
<tr>
<td>Capturing and tracking performance of the horizontal guidance and control systems of the terminal configured vehicle</td>
<td>p028 T99-25033</td>
</tr>
<tr>
<td>Some aspects of the design and development of the maritime autopilot nodes for the Westland Lynx helicopter [NASA-CA-79-006]</td>
<td>p0655 T99-30201</td>
</tr>
</tbody>
</table>

**AUTOMATIC ROCKET IMPACT PREDICTORS**

- SUPPORT SYSTEMS FOR ADVANCED MILITARY ELECTRONICS

**AUTOMATIC ROCKET IMPACT PREDICTORS**

- SUPPORT SYSTEMS FOR ADVANCED MILITARY ELECTRONICS

**AUTOMATIC PILOTS**

- AUTOMATIC STABILIZATION OF HELICOPTERS --- RUSSIAN BOOK

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vertical-seeking autopilot design --- of threat vector controlled ejection seat [AGARE-CP-260]</td>
<td>p0079-16431</td>
</tr>
<tr>
<td>The influence of the amount of automation in a flight path guidance system on flight path deviation and pilot work load [NASA-CA-79-006]</td>
<td>p0520 T99-42370</td>
</tr>
<tr>
<td>Minimum expected cost control of linear systems with uncertain parameters - Applications to remotely piloted vehicle flight control systems [NASA-CA-79-1765]</td>
<td>p0571 T99-45387</td>
</tr>
<tr>
<td>An improved method for load survey flight testing --- of military cargo aircraft [AIAA PAPER 79-17999]</td>
<td>p0606 T99-47885</td>
</tr>
<tr>
<td>Capturing and tracking performance of the horizontal guidance and control systems of the terminal configured vehicle</td>
<td>p028 T99-25033</td>
</tr>
<tr>
<td>Some aspects of the design and development of the maritime autopilot nodes for the Westland Lynx helicopter [NASA-CA-79-006]</td>
<td>p0655 T99-30201</td>
</tr>
</tbody>
</table>

**AUTOMATIC BOOYK IMPACT PREDICTORS**

- SUPPORT SYSTEMS FOR ADVANCED MILITARY ELECTRONICS

**AUTOMATIC TEST EQUIPMENT**

- TURBINE ENGINE AUTOMATED TRIM BALANCING AND VIBRATION DIAGNOSTICS [ASME PAPER 78-GT-129] | p0009 T99-10793 |
| F-16 AVIONICS INTERMEDIATE SHOP SELF-TEST [AIAA PAPER 79-12302] | p0023 T99-12305 |
| Support systems for advanced military electronics --- MT DESIGN TRENDS | p0023 T99-12305 |
| Advanced technology impact upon MTI self test --- by use of microprocessors and LSI | p0023 T99-12306 |
| Testing of avionics display systems [AIAA PAPER 79-12309] | p0023 T99-12306 |
| Management of test program development for S-3A --- avionics, maintainability and automatic test equipment | p0023 T99-12319 |
| Commercial test software development practices for military applications --- for avionics support equipment | p0023 T99-12320 |
| F-16 IIBI TEST PROGRAMS --- A SYSTEMS APPROACH --- LINE REPLACEABLE UNITS [AIAA PAPER 79-12320] | p0023 T99-12321 |
| Automatic resonance condition maintenance during multipoint flight vehicle vibration excitation [NASA-CA-79-148669] | p0023 T99-148669 |
| CITS - TOMORROW'S TEST SYSTEM TODAY --- CENTRAL INTEGRATED TEST SYSTEM FOR F-16 AVIONICS | p0079 T99-16431 |
| Shop test success is a function of the airborne system design --- in F-16 avionics | p0079 T99-16432 |

**AUTOMATIC LANDING CONTROL**

- INFRARED LANDING SYSTEM FOR A MINI REMOTELY-PILoted VEHICLE | p0079 T99-12093 |
| Flight control safety - A total systems approach [AIAA PAPER 78-GT-129] | p0009 T99-10793 |
| VIOL aircraft optimal state-space tracking control [AIAA PAPER 79-12302] | p0023 T99-12306 |
| Development of the Navy H-60 Automatic Carrier Landing System designed to give improved approach control in adverse conditions [AIAA PAPER 79-12319] | p0023 T99-12319 |
| Comparative study of flight control laws --- optical control of b-737 aircraft approach and landing [NASA-CA-79-12319] | p0079 T99-16432 |
Digital integrated test system improves testability --- of avionics

Adjustment diagnostics for gas turbine engine controls

Operator and technician tasks for the hands-up display test set and versatile avionics shop test /FAST/

Structural Integrity Recording System for helicopters [ARS 78-57]

Dynamic response testing of gas turbines [ASME PAPERS 78-WA/GT-31]

New test concepts and their influence on maintenance [DGLR 79-022]

New techniques in jet engine balancing

Test implementation through support software - A FIT translator --- automated Fault Isolation Tests on airborne radar system

Automatic test software for calibrating strapdown systems

Automatic test program generation selection --- for aircraft structures

The impact of software in automatic test equipment --- for evaluation of radar analog to digital converter

A Navy plan for the development of a practical computer-aided programming /CAP/ system for analog circuit test design

Air Force modular automatic test equipment development program

ATE and aircraft mechanical diagnostics

ATE for worldwide support of the P3 Orion

Can avionic testability requirements be enforced

Avionics design for testability - A vendor's viewpoint

Testability, the key to economical and operationally effective avionic test software

Techniques for fault isolation ambiguity reduction --- in military avionics

F-16 depot automatic test equipment

A new U.S.T./test station interface

Aircraft auxiliary power systems

A-B-10 avionics Intermediate Shop self-test

A new U.S.T./test station interface

Aircraft engine test automation - Planning for the 1980s within the province of the Federal Institute of Air Traffic Control

Automatic operation in first decade of en automation

A Modular C3 concept for air traffic control [Comand Control Communications

FAA air traffic control automation - Trends

Advanced en route air traffic control automation [Programs and trends

Technical means for automation of air navigation

Master plan flight service station automation program [AD-4052001/5]

Automobile engines

Regenerator matrices for automotive gas turbines

Investigation of turbo-dyne energy cluster (GIF: value trademark): An air bleed device

Update of development on the new build 350 rotary engine generation --- for application to aircraft engines

Cold-air performance of free power turbine designed for 112-kilowatt automotive gas-turbine engine. 2: Effects of variable stator-vane-chord setting angle on turbine performance

Auxiliary power sources for development of a nonrotor gas turbine auxiliary power unit

Starting torque characteristics of small aircraft gas turbines and APUs

Optimal selection of the geometrical characteristics of the reversing channel of a small-scale turbine with readmission of the gas --- for aircraft auxiliary power systems

Effectiveness of readmission of the gas in high-pressure-ratio small-scale turbines --- for aircraft auxiliary power systems

Results of power systems study advanced fighter/attack and VSTOL airplanes

Variable geometry torque converter

Sensitivity study for a remotely piloted microwave-powered sailplane used as a high-altitude observation platform

Auxiliary propulsion systems for rigid rotor blades

Auxiliary power units for military aircraft

Effectiveness of readmission of the gas in high-pressure-ratio small-scale turbines --- for aircraft auxiliary power systems

Results of power systems study advanced fighter/attack and VSTOL airplanes

Variable geometry torque converter

Sensitivity study for a remotely piloted microwave-powered sailplane used as a high-altitude observation platform

Auxiliary propulsion systems for rigid rotor blades

Auxiliary power units for military aircraft
Operational influence on avionics reliability

Cockpit displays for advanced navigation - Circa 2000

Integrated computer-display system for modern anti-tank/combats helicopters

Chief features of future helicopter avionics

Presentation of thermal or residual-light TV images on head-up displays for night or all-weather operations --- for military helicopters

CITS - Tomorrow's test system today --- Central Integrated Test System for B-1 avionics

Shop test success is a function of the airborne system design --- in F-16 avionics

Digital integrated test system improves testability --- of avionics

The challenge of new technology for avionics testing --- U.S. Air Force assessment

Operator and technician tasks for the heads-up display test set and versatile avionics shop tent /AIDS/

Reliability improvement program --- for military aircraft electronic components

The design and fabrication of the de Havilland DHC-7 nose avionics compartment using aramid composites

Multiplex system for the Hughes advanced attack helicopter - YAH-64

Pilots'-by-wire for vertical lift (AVS 78-15)

Pilot night vision system /PNVS/ for advanced attack helicopter /AAR/

A versatile approach to cockpit management --- for military helicopter control and display avionics

Development of a solid state vertical instrument display system --- for helicopters

Electronic control for helicopter engines (AVS 78-45)

Aerospace and military - Progress in space structure research, aircraft landing systems, integrated optics, and digital communications

Airborne Early Warning /Chadwick Memorial Lecture/

Airborne Early Warning Warning/Radar/Chadwick Memorial Lecture/

Reliability growth planning to achieve R.T.V./GMTPs/ requirements for airborne radars

Advances in avionics --- emphasizing microprocessor technology and integrated circuits

Avionics systems needed to optimize V/SOL potential

Future avionics - Keeping capability wp. costs down

The coming of age of digital electronics in commercial transports --- emphasizing signal processing technology and Boeing 767 avionics

Future advanced technology rotorcraft

Multimode radar processor --- for combat aircraft

Digital Avionics Information System /DAIS/ and Advanced Integrated Display System /AIDS/ cockpit programs

Electronic maps for tomorrow's cockpits --- for terrain navigation

Computers on the airliner flight deck

Engineer's handbook of flight and radio equipment of airplanes and helicopters

Construction and calibration of pitot-static systems

High power DUF slide screw tuner for antenna breakdown measurements

The new P3 Orion aircraft with the FAA

Permanent magnet generators - Next generation in VSCF power systems --- Variable Speed Constant Frequency

Suppression of radio-electrical disturbances of electrostatic origin on aircraft

The results of synthesizing and evaluating potential solutions for Multi-Function Inertial Reference Assembly /IFAR/ candidate configurations --- for transport and fighter aircraft

Boeing 757/767 - On-the-spot report

An optical-fiber multiterminal data system for aircraft

A Demonstration Advanced Avionics System for general aviation

Electronic system safety - Testing reality --- for avionics

The Digibus multiplex at the heart of avionics

F-18 - A special report

Night/Adverse Weather R-10 evaluator program

Exploring team avionics systems by simulation

The F-16 RIV program --- Reliability Improvement Warranty

CERT technology applied to an airborne radar --- Combined Environmental Reliability Testing

Lower avionic temperature - Lower life cycle cost

STCA standards - Improved specs. and regulations --- in avionics equipment

The effect of endless burn-in on reliability growth projections --- for solid state avionics
electronics equipment

F-16 Avionics Intermediate Shop /AIS/ Interim Contractor Support initiatives

Avionics computer software operation and support cost estimate

Analysis and evaluation of current MIL-STD-1553 digital avionics architecture as the basis for advanced architectures using MIL-STD-1553E

The effect of standardization of avionics software quality assurance

Power hybridization - Key to reducing avionics power supply weight and volume

Verification of operational flight programs by simulation

Computer Monitor and Control - A flexible, cost-effective implementation

Evolving methods for reducing avionics data in an AISR environment --- Avionics Integration Support Facility flight program testing

Microcomputer control of a test facility --- for avionics

Operational experience with the AN/ARN-131 Omega Navigation Set

A-93
<table>
<thead>
<tr>
<th>Subject Index</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated Avionics Control System ([AD-1055621])</td>
<td>p0036 N79-10055</td>
</tr>
<tr>
<td>Modular Avionics Packaging (MAP) ([AD-1055637])</td>
<td>p0037 N79-10056</td>
</tr>
<tr>
<td>Basic avionics module design for general aviation aircraft ([NASA-CS-158955])</td>
<td>p0093 N79-12081</td>
</tr>
<tr>
<td>Analysis of the projected operational effectiveness of developmental weapon control avionics hardware ([AD-1055855])</td>
<td>p1002 N79-13040</td>
</tr>
<tr>
<td>Control strategies for complex systems for use in aerospace avionics ([AD-1055961])</td>
<td>p1013 N79-14089</td>
</tr>
<tr>
<td>The determination of margins of safety for aircraft ([AD-1056138])</td>
<td>p1035 N79-20026</td>
</tr>
<tr>
<td>Electrically conductive structural adhesive ([AD-1056291])</td>
<td>p1043 N79-23083</td>
</tr>
<tr>
<td>A study of embedded computer system software acquisition management and recommendations to improve developement viability ([AD-1056299])</td>
<td>p1055 N79-23082</td>
</tr>
<tr>
<td>Preliminary feasibility assessment of multi-function inertial reference assembly ([AD-1063531])</td>
<td>p1089 N79-21050</td>
</tr>
<tr>
<td>An integrated fault-tolerant avionics system concept for advanced avionics ([AD-1065136])</td>
<td>p1095 N79-23082</td>
</tr>
<tr>
<td>Standard Avionics Modules (SAM) for existing modems ([NASA-CS-158954])</td>
<td>p1103 N79-23083</td>
</tr>
<tr>
<td>A study of embedded computer system software acquisition management and recommendations to improve developement viability ([AD-1066138])</td>
<td>p1115 N79-23098</td>
</tr>
<tr>
<td>NASA/Princeton digital avionics flight test facility (NASA-CE-158953)</td>
<td>p1122 N79-24991</td>
</tr>
<tr>
<td>Automatic flight control system - approach ([NASA-CS-158953])</td>
<td>p1127 N79-24991</td>
</tr>
<tr>
<td>Rapid reaction time techniques for a small transport ([NASA-CS-158953])</td>
<td>p1132 N79-24991</td>
</tr>
<tr>
<td>Dynamic simulation of a multi-sensor communication and navigation system - computer program verification ([AD-1066532])</td>
<td>p1137 N79-24991</td>
</tr>
<tr>
<td>Dynamic simulation of a multi-sensor communication and navigation system - computer program verification ([AD-1066532])</td>
<td>p1142 N79-24991</td>
</tr>
</tbody>
</table>
AXIAL FLOW COMPRESSORS

AXIAL FLOW

AWACS AIRCRAFT

AXIAL COMPRESSORS

AXES (COORDINATES)

AVOIDANCE

U TURBINE PUMPS

AXIAL FLOW PUMPS

WT TURBINE PUMPS

Pump design

A computer-aided design method for axial flow pumps and fans

AXIAL FLOW TURBINES

Influence of geometric effects on the aspect ratio optimization of axial turbine blades

Computation of supercritical compressor and turbine cascades with a design method for transonic flows

Performance of partial admission turbines

Thermal influences in gas turbine transients

Effect of rotor tip clearance and configuration on overall performance of a 12.77-centimeter tip diameter axial-flow turbine

Experimental studies of axial and radial compressors by means of new measurement techniques

Nonstationarity of heat transfer in the blade cascade of an axial-flow turbine during engine start-up

Aerodynamic excitation forces of blade vibrations in axial turbomachinery as a result of interference from nearby cascades

Cold-air performance of free power turbine designed for 112-kilowatt automotive gas-turbine engine

A new blade element method for calculating the performance of high and intermediate solidity axial flow fans

A generalized 'capacity-pressure-rotational velocity' equation for axial turbines

Research on the flutter of axial turbine blading

Axial turbine performance prediction

Aerodynamic performance of 1.38-pressure-ratio, variable-pitch fan stage

Aerodynamic performance of axial-flow fan stage operated at nine inlet guide vane angles --- to be used on vertical lift aircraft

AXISYMMETRIC BODIES

Comparative study of the convergence rates of two numerical techniques

Investigation of the transonic drag characteristics for non-slender wing-body combinations and their equivalent axisymmetric bodies at zero lift
AXISYMMETRIC FLOW

Effect of base cavities on the aerodynamic drag of an axisymmetric cylinder

AXISYMMETRIC FLOW

NT ANNULAR FLOW

Operation of a multistage axial compressor with non-twisted blades from viewpoint of three-dimensional axisymmetric flow theory

A transonic wind tunnel interference assessment - Axisymmetric flows

Some low speed experimental results on the effects of swirl and velocity distribution on an axisymmetric jet

Influence of fundamental parameters on the supersonic base flow problem in presence of an exhaust jet

Axisymmetric flows

Numerical solution of a body-propeller combination flow including swirl and comparisons with data

Estimation of compressible flows in turbomachines by an axisymmetric calculation method

Axisymmetric calculations of transonic wind tunnel interference in slotted test sections

The effect of blade-to-blade flow variations on the mean flow-field of a transonic compressor

Steady and unsteady vortex-induced axisymmetric loads - Review and further analysis --- on slender axisymmetric bodies

Measurements in a large angle oblique jet ingestion flow

AXLE"

U SHAFTS (MACHINE ELEMENTS)

AXIDES (IMORGANIC)

WT SODIUM AXIDES

AXIDES (ORGANIC)

AXIOMH

DAS for TMA navigation --- DAS/Altrum System for Terminal Maneuvering Area

The DAS-based Altrum System /DAS/ as a commercial navigation aid

B-1 AIRCRAFT

CITS - Tomorrow's test system today --- Central Integrated Test System for B-1 avionics

New concepts in composite material landing gear for military aircraft. Volume 1: Technical discussion

New concepts in composite material landing gear for military aircraft. Volume 2: Appendices

Variable geometry turbine converter

B-1 ride control

Concurrent superplastic forming/diffusion bonding of B-1 components

Determination of subcritical frequency and damping from B-1 flight flutter test data

Survey and evaluation of potential real-time interactive flight test facilities for the B-1

A/B-52 AIRCRAFT

B-52 aircraft gross weight computational system

Reliability growth on B-52 PLIR system

Validation of IMECAP using the B-52 - IATSSytem Electro Magnetic Compatibility Analysis Program

Load and dynamic assessment of B-52B-008 carrier aircraft for finned configuration 1 space shuttle solid rocket booster decelerator subsystem drop test vehicle. Volume 1: Summary

Load and dynamic assessment of B-52B-008 carrier aircraft for finned configuration 1 space shuttle solid rocket booster decelerator subsystem drop test vehicle. Volume 2: Airplane flutter and load analysis results

B-52B-008/DTV (Drop Test Vehicle) configuration 1 (with and without fins) flight test results - captive flight and drop test missions

BAC AIRCRAFT

BAC 1-11 AIRCRAFT

NT VISCOMY AIRCRAFT

BAC 111 AIRCRAFT


Low FM signature response techniques

Some aspects of helicopter communications

Effects of road traffic background noise on judgments of individual airplane noises

BACSCATTURING

Radar cross section fundamentals for the aircraft designer

Low PN signature response techniques

BACTERIA

WT SHEARIA

BALLISTIC

Bailout from autorotating helicopters

BALANCE

Determining the dynamic response due to an imbalance at the attachments of a motor on a pod --- caused by rotor blade loss

BALANCING

Optimizing gas turbine engine flexible rotor balancing by the LP-search method

On the balancing convergence of flexible rotors, with special reference to asymmetric rotors

Laser balancing demonstration on a high-speed flexible rotor

New techniques in jet engine balancing

Computer-assisted high-speed balancing of T53 and T55 power turbines

BALL BEARINGS

Dynamics of nonideal gyroscopic systems

Filtering effects on ball bearing life and condition in a contaminated lubricant

Review of aircraft bearing rejection criteria and causes

BALLAST (WAGS)

Previsions and experimental results in open balloon controlled descent

A-96
BALLISTIC RANGES
Development of a research plan for the improvement of aerodynamic models for analysis of ballistic range data
[AD-A067950] p0539 N79-26029

BALLISTICS
MT TERMINAL BALLISTICS
BALLISTICS
Development and testing of a shipboard launched balloon system
[AIAA 79-0420] p0262 A79-26631
The AMOSAT Program 1975-78 --- manned superpressure balloon flights for atmospheric monitoring
[AIAA 79-1608] p0524 A79-42399
Transatlantic flights of stratospheric balloons
p0677 N79-31687
Previsions and experimental results in open balloon controlled descent
p0677 N79-31691

BALLON-BORNE INSTRUMENTS
Wind study for high altitude platform design
[AIAA 79-1607] p0524 A79-42400
Tethered telecommunications, broadcast, and monitoring systems
[AIAA 79-1609] p0524 A79-42400

BALLONS
MT HIGH ALTITUDE BALLOONS
MT SUPERPRESSURE BALLOONS
MT TETHERED BALLOONS
Aerodynamic Decelerator and Balloon Technology Conference, 6th, Houston, Tex., March 5-7, 1979, Technical Papers
p0626 A75-26626
Design specifications for the capped balloons with special reference to their survival in the equatorial tropopause
[AIAA 79-0426] p0626 A75-26635
Lighter than air vehicles. Citations from the MIT data base
[MIT/PS-79/0471/7] p0650 N79-30162
Lighter than air vehicles. Citations from the Engineering Index data base
[MIT/PS-79/0472/5] p0650 N79-30163

BANDPASS FILTERS
MT TRACKING FILTERS
JTIDS modular design to use SAW devices --- Joint Tactical Information Distribution System for aircraft communications
p0664 A75-14247
Reynolds number, scale and frequency content effects on F-15 inlet instantaneous distortion
[AIAA PAPER 79-0104] p0141 A79-19533

BANDWIDTH
MT BROADBAND
Band spread effect of a Doppler miss distance measurement system --- for missile scoring system
p0664 A79-14232

BANKING FLIGHT
U TURNING FLIGHT
BAREFOOT APPROXIMATION
U BARRIER LAYERS
U ELECTRICAL PROPERTIES
U SURFACE PROPERTIES
BARRIACADES
U BARRIERS
BARRIER LAYERS
NASA thermal barrier coatings: Summary and update
[NASA-TJ-76-7953] p0374 N79-15048

BARRIERS
Experimental and theoretical study of the influence of various parameters on an icing section
p0032 N79-10012

BARTHEZ
U CHARTER OF GRAVITY
BASE FLOW
A model of external burning propulsion
[AIAA PAPER 79-0358] p0201 A79-23589
Influence of fundamental parameters on the supersonic base flow problem in presence of an exhaust jet
[AIAA PAPER 79-0133] p0204 A79-23578
Analysis of base-flow problems during powered supersonic flight
p0301 N79-18926.

BASE PRESSURE
Subsonic base pressure fluctuations

PATTERN CHARGERS
Development of a NICAD battery interface unit --- for use on Army aircraft
[AD-A0654290] p0342 A79-30610

BASH (TOPOGRAPHIC FEATURES)
MT SAN FRANCISCO BAY (CA)
ECAS
BEACON COLLISION AVOIDANCE SYSTEM
Performance evaluation of the experimental ECAS /Beacon Collision Avoidance System/
[AD-A0659524] p0171 N79-33178
Filtering and threat logic design and evaluation for the beacon collision avoidance system
[AD-A0659524] p0171 N79-33178
Air traffic control/full beacon collision avoidance system Chicago simulation
[AD-A0659524] p0171 N79-33178

BEACONS
MT AIRPORT BEACONS
MT DISCRETE ADDRESS BEACON SYSTEM
MT UNIDIRECTIONAL RADIO RANGES
MT RADAR BEACONS
MT RADAR BEACONS
MT RADAR BEACON SYSTEM
The KIS approach and landing system
p0151 A79-20050

BEAMS (RADIATION)
MT ELECTRON BEAMS
MT LIGHT BEAMS
BEAMS (SUPPORTS)
MT BOX BEAMS
MT CANTILEVER BEAMS
Application of the isothermal square bend process to F14 wing beams
p0209 A79-24099
Effective rigidity of a thin-walled beam
p0384 A79-32051

BEARING (DIRECTION)
Bearing errors in the VHF omnirange due to scattering from wires --- in aircraft receiver
p0674 A79-15460

BEARINGLESS ROTORS
Derivation of control loads for bearingless rotor systems --- in helicopter design
p0013 A79-10906
Boeing Vertol bearingless main rotor structural design approach using advanced composites
p0015 A79-10920
An aeromechanical stability analysis for bearingless rotor helicopters
[AHS 78-21] p0121 A79-18147
Examination of the air resonance stability characteristics of a bearingless main rotor
[AHS 78-22] p0121 A79-18148
Advanced technology applied to the OH-60A and S-76 helicopters
p0348 A79-31172
Full scale ground and air resonance testing of the Army-Boeing Vertol Bearingless Main Rotor
[AHS 79-23] p0629 A79-49075

BEARINGS
MT ANTI-FRICTION BEARINGS
MT BALL BEARINGS
MT POI BEARINGS
MT GAS BEARINGS
MT JOURNAL BEARINGS
MT LIQUID BEARINGS
MT BALL BEARINGS
MT ROLLER BEARINGS
MT THRUST BEARINGS
Z-3A antenna pedestal turntable
p0019 A79-11923
Design and development of an helicopter rotor hub and elastomeric bearing
[AHS 79-0815] p0283 A79-28289
Flexibility of the bearing pedestals of control-surface hinge plates --- aircraft structures
p0697 A79-52145
Rotation of a loaded rotor in a rigid bearing
p0698 A79-52682
Oil seal of aer engine bearing compartments
p0047 A79-11062
Helicopter bearing failure detection utilizing shock pulse techniques
[AD-A057308] p0049 A79-11110
User's manual for steady state and transient thermal analysis of a shaft-bearing system

BODIES OF REVOLUTION

NT CYLINDRICAL BODIES

NT SLENDER CONES

Lift and longitudinal moment of a small-aspect-ratio wing in the proximity of a body of revolution p0621 A79-12168

BOATTAILS

Shock waves around bodies travelling at slightly greater than sonic speed p0333 A79-29459

BOLENS

Optimum tail fairings for bodies of revolution -- computerized design p0539 N79-26301

BOLean DOWNS WIND TUNNELS

BODY MEASUREMENT (BIOLOGY)

Experimental methods for aircraft design qualifications in an exploding warhead environment p0706 N79-32203

BOLEND WING AND TAIL CONFIGURATIONS

BODY-WING AND TAIL CONFIGURATIONS

A computer-aided aircraft configuration development system p0740 A79-19513

BOLEND 0FF

Advanced weapons carriage concepts through integrated design -- for aircraft p0201 A79-23534

BOLEND وما الـ (BLENDS)

Spinal fluid MRI p0608 A79-47904

BOLEND PRESSURE REDUCTION

Benefits of aerodynamic interaction to the three surface configurations p0507 A79-40200

BOLEND MIXTURES

Prediction and measurement of the aerodynamic forces and pressure distributions of wing-tail configurations at very high angles of attack p0415 N79-22025

BOLEND BLOCKING

BODY-WING CONFIGURATIONS

Viscous transonic flows about 3-D wings p0558 A79-13296

BOLEND INJECTION

The high-lift characteristics in the case of the V-wing concept p0661 A79-14072

BOLEND TIPS

Boundary layer induced secondary flows due to wing-body interference p0142 A79-19557

BOLEND BLOWERS

Advances in supersonic configuration design methods p0145 A79-19572

BOLEND BLEED-OFF

Numerical comparisons of panel methods at subsonic and supersonic speeds p0201 A79-23534

BOLEND BLOWING

Aerodynamic center of wing-fuselage-nacelle combinations p0452 A79-36706

BOLEND BLOWERS

Improvement of overload capability of air carrier aircraft tires p0241 N79-17229

BOLEND BLOWOUTS

AIAA PAPER 79-0064 p0201 A79-23534

BOLEND BLOWS BLOWN FLAPS

AIAA PAPER 79-0140 p0142 A79-19513

BOLEND BLOWOUTS

Blast loads p0120 A79-30192

BOLEND BLENDING

Development of a blast simulator for testing simulated aircraft fuel tanks p1011 N79-12034

BOLEND BLOWDOWN WIND TUNNELS

Evolution of sonic boom and other impulsive sounds --- auditory perception [SAE PAPER 790565] p0452 A79-36706

BOLEND BLOWS

Computational transonic design procedure for three-dimensional wings and wing-body combinations p0202 A79-23552

BOLEND BLOWING

Composite wing/fuselage integral concept p0207 A79-24078

BOLEND BLOWN FLAPS

Optimization of hypersonic three-dimensional shapes p0411 A79-35584

BOLEND BLOWOUTS

Recent progress in finite-volume calculations for wing-fuselage combinations --- transonic potential flow p0575 A79-46702

BOLEND BLOWIND

Analysis of vehicles with wings operating in ground effect [AIAA 79-2036] p0692 A79-53621

BOLEND BLOWN FLAPS


BOLEND BLOWOUTS

Nonlinear steady and unsteady aerodynamics of wings and body-combinations p0085 N79-12010

BOLEND BLOWOUTS

An automated procedure for computing the three-dimensional transonic flow over wing-body combinations, including viscous effects. Volume 2: Program user's manual and code description [AD-A054999] p0087 N79-12027

BOLEND BLOWOUTS


BOLEND BLOWOUTS

Effects of wing leading-edge flap deflections on subsonic longitudinal aerodynamic characteristics of a wing-fuselage configuration with a 40 deg swept wing [NASA-TR-1351] p0999 N79-13002

A-100
BOREalen aeroelasticity of a circulation controlled
airfoil p0129 A79-18648
Status report on advanced development program
utilizing circulation control rotor technology
[AIAA PAPER 79-7002] p0133 A79-18677
Aerodynamic development of a high pressure leading
edge blowing boundary layer control system
Benefits of spanwise blowing at transonic speeds
[ORNL TP NO. 1978-58] p0152 A79-20082
Effect of spanwise blowing in the angle-of-attack
regime alpha equals 0 plus or minus 90 deg
[ORNL TP NO. 1978-6C] p0152 A79-20083
Drag reduction by cooling in hydrogen fueled
aircraft p0152 A79-20086
Theoretical and experimental investigations on
aerodynamically highly-loaded compressor
bladings with boundary layer control
[AIAA PAPER 79-7002] p0330 A79-29404
Application of stability theory to laminar flow
control [AIAA PAPER 79-1493] p0574 A79-46691
Performance of a V/STOL tilt nozzle inlet with
blowing boundary layer control
[AIAA PAPER 79-11669] p0603 A79-47367
Flight testing the circulation control wing
[AIAA PAPER 79-1791] p0605 A79-47880
Boundary layer control on wings using curved and
leading edge serrations
[AIAA PAPER 79-1875] p0610 A79-47926
Evaluation of laminar flow control system concepts
for subsonic commercial transport aircraft
[NASA CR-158976] p0218 A79-15942
Summary report of the second wind tunnel test of
the Boeing LFC model
[AIAA CR-157792] p0285 A79-17799
Experiments on tandem diffusers with
boundary-layer section applied in between
[AIAA CR-158957] p0286 A79-17803
Effects of laminar flow control on the performance
of a large span-distributed-load flying-wing
cargo airplane concept
[AIAA CR-15787] p0292 A79-17851
Evaluation of a long-endurance-satellite
remotely-piloted vehicle with and without
laminar flow control
[AIAA CR-159006] p0292 A79-17852
Study of the application of superplastically
formed and diffusion bonded (SFF/D) titanium
structure to laminar flow control (LFC) wing
design
[AIAA CR-158979] p0360 A79-20070
Airframe energy efficiency laminar flow control
glove flight conceptual design study
[AIAA SP-80054] p0363 A79-20100
Prospects for computing airfoil aerodynamics with Reynolds-averaged Navier-Stokes codes  
Improvements in surface singularity analysis and design methods --- applicable to airfoils  
Unsteady boundary layer flow reversal in a longitudinally oscillating flow  
Scale effects at transonic speeds basic considerations  
Computer program to calculate three-dimensional boundary layer flows over wings with mass transfer  
Optimum tail fairings for bodies of revolution --- computerized design  
An extension to the method of Garabedian and Korn for the calculation of transonic flow past an aerofoil to include the effects of a boundary layer and wake  
Calculation of the flow around a swept wing, taking into account the effect of the three-dimensional boundary layer. Part 2: Wing with laminar boundary layer on the lower surface  
BOUNDARY LAYER NOISE  
AERODYNAMIC NOISE  
BOUNDARY LAYERS  
BOUNDARY LAYER SEPARATION  
Measurement of flow fields around an airfoil section with separation  
Hot-wire measurements of stall and separation on helicopter rotor blades  
Calculation of separated boundary-layer flows --- applied to stalled diffusers and external wedge flow  
Calculation of laminar separation bubbles and their effect on airfoil performance  
Numerical investigations on the generation and development of rotating stall  
Recent advances in the solution of three-dimensional flow over wings with leading edge vortex separation  
Engineering analysis of dynamic stall  
Transonic boundary layer on compressor stator blades as calculated and measured in wind tunnel  
Mean velocity and decay characteristics of the guidevane and stator blade wake of an axial flow compressor  
Allowing for the wall boundary layer in an axial compressor stage  
Split-film anemometer measurements on an airfoil with turbulent separated flow  
Effect of flow separation vortices on aircraft unsteady aerodynamics  
Improved prediction of laminar leading edge separation  
Subcritical drag minimization for highly swept wings with leading edge vortices  
Effects of turbulence on laminar separation on aerodynamic surfaces such as airfoils and compressor blading  
Self stabilizing sonic inlet  
Subsonic wind-tunnel investigation of leading-edge devices on delta wings (data report) --- conducted in Langley 7- by 10-foot subsonic wind tunnel  
BOUNDARY LAYER STABILITY  
Stability of three-dimensional compressible boundary layers over wings with suction  
Numerical predictions of the unsteady lift development on airfoils in a viscous fluid  
Stable boundary layer wind shear model for aircraft flight hazard definition  
The stability of the boundary layer on a swept wing with wall cooling  
Flow around small-aspect-ratio delta wing with vortex 'bursting'  
Mechanics of boundary layer transition, part 2: Instability and transition to turbulence  
Development of turbulence through non-steady boundary layer  
Distribution of the intermittency factor along the transition region between laminar and turbulent boundary-layers  
Amplification factors at transition on an unswept wing in free flight and on a swept wing in wind tunnel --- aircraft stability analysis  
Application of stability theory to laminar flow control  
Detection of the transitional layer between laminar and turbulent flow areas on a wing surface using an accelerometer to measure noise levels during wind tunnel tests  
Boundary layer transition measurements on the ERC 10 deg cone in three F32 wind tunnels and their implications  
Recent advances in the solution of three-dimensional flow over wings with leading edge vortex separation  
Engineering analysis of dynamic stall  
Transonic boundary layer on compressor stator blades as calculated and measured in wind tunnel  
Mean velocity and decay characteristics of the guidevane and stator blade wake of an axial flow compressor  
Allowing for the wall boundary layer in an axial compressor stage  
Split-film anemometer measurements on an airfoil with turbulent separated flow  
Effect of flow separation vortices on aircraft unsteady aerodynamics  
Improved prediction of laminar leading edge separation  
Subcritical drag minimization for highly swept wings with leading edge vortices  
Effects of turbulence on laminar separation on aerodynamic surfaces such as airfoils and compressor blading  
Self stabilizing sonic inlet  
Subsonic wind-tunnel investigation of leading-edge devices on delta wings (data report) --- conducted in Langley 7- by 10-foot subsonic wind tunnel  
FULL-SCALE AIRCRAFT SIMULATION WITH CYRIGENIC TUNNELS AND STATUS OF THE NATIONAL TRANSonic Facility  
A-103
BOUNDARY VALUE PROBLEMS

NT CAUCHY PROBLEM
Approximate solution of some boundary value problems on aircraft structural integrity
p0022 A79-12234

A systematic procedure for generating useful conical mappings --- application to transonic aerodynamics
p0059 A79-13664

Solution of boundary value problems for the vibration equation for a jet engine model
p0011 A79-35995

Simplified calculation method for supersonic airloads on wing-body combinations
p0057 A79-90200

Obtaining solutions of the lifting-surface equation
p0028 A79-43135

Region of a plane pointed profile in supersonic flow
p0028 A79-93136

Linearization of the boundary-layer equations of the minimum time-to-climb problem
p0060 A79-09869

Solution of a mixed boundary value problem for flow past a thin delta wing
p0060 A79-09882

Transonic wind tunnels
p0377 N79-20993

BOW SHOCK WAVES
U BOW WAVES
U SHOCK WAVES

BOW WAVES
Density distribution is a non-stationary bow wave in a transonic flow
p0333 A79-29660

BOX BEAMS
Fatigue acceleration in box beams under mechanical and thermal stresses (second series)
(AIAA-P. 8-3519)
p0226 N79-16311

BRAKES (FOR ARRESTING NOTCH)
NT AERODYNAMIC BRAKES
NT AIRCRAFT BRAKES
NT DRAG CHUTES
NT LEADING EDGE FLAPS
NT TRAILING-EDGE FLAPS
NT WHEEL BRAKES
NT WING FLAPS

BRAYTON CYCLE
Nuclear Fi-Brayton system for aircraft propulsion
(AIAA PAPER 79-GT-119)
p0393 A79-23289

Analysis, design, fabrication and testing of the Mini-Brayton rotating unit (Mini-EBU). Volume 2: Figures and drawings
(NASA-CE-21908-VOL-2)
p0499 N79-11409

Closed Brayton cycle system optimization for undersea, terrestrial, and space applications
p0422 N79-22096

BRAZIL
Potential applications of advanced aircraft in developing countries --- Brazil and Indonesia
[NASA-TM-80133]
p0581 N79-28158

BRAZING
NT ULTRASONIC SOLDERING

The technology of brazing and soldering is broad-based and vital to the industrial economy
/1979 Adams Lecture/
p0669 A79-52856

Fluxless brazing and heat treatment of a plate-fin sandwich actively cooled panel
p0386 N79-21432

BREZAKAYA
U BOUNDARY LAYER SEPARATION

BREGUET AIRCRAFT
Dassault-Breguet - The Mirage 2000
p0459 A79-36974

BRIGHT'L\' MATERIALS
Brittle materials design, high temperature gas turbine: Ceramic turbine rotor technology
(AD-4067176)
p0499 A79-25029

BROADBAND
Broad-band ultrasonic transducers for non-destructive inspection of aeronautical components
(NASA, TP No. 1979-45)
p0473 A79-39094

BROADCASTING
Tethered telecommunications, broadcast, and networking systems
(AIAA 79-1669)
p0524 A79-42400

BUBBLE REMOTE DEVICES
Microcomputer based flight data recorder/monitor

with solid state memory

p0098 N79-12750

BUBBLES
Calculation of laminar separation bubbles and their effect on airfoil performance
[AIAA PAPER 79-0251]
p0144 A79-19645

BUCHEM AIRCRAFT
U T-2 AIRCRAFT

BUCKLING
NT CHEMIC BUCKLING
NT ELASTIC BUCKLING

Experimental investigation of the buckling characteristics of a beaded skin panel for a hypersonic aircraft - Including comparisons with finite element and classical analyses
[AIAA PAPER 78-WA/190-3]
p0148 A79-19717

Some observations on the local instability of orthotropic structural sections
p0800 A79-33861

Local buckling and crippling of I, Z and channel section strips
p0090 N79-12060

A variational theorem for laminated composite plates of nonlinear materials and applications to postbuckling
p0494 N79-24977

BUDGETING

In the AF-88 Advanced Carrier aircraft ready for full-scale development
[PB-290826/7]
p0495 N79-24987

BUFFETING

Some features of the unsteady pressure field in transonic airfoil buffeting
[AIAA PAPER 79-0251]
p0201 A79-23550

Aircraft wake flow effect and horizontal tail buffeting --- pressure distribution and responses of fighter aircraft in transonic maneuvers
p0339 A79-30482

Investigation of steady and fluctuating pressures associated with the transonic buffeting and wing rock of a one-seventh scale model of the T-34 aircraft
[NASA-CP-2061]
p0099 N79-13004

Buffeting measurements in flight and in a wind tunnel --- T-33 aircraft
(AIAA-79-70-17)
p0438 N79-23104

BUILDING MATERIALS
U CONSTRUCTION MATERIALS

BUILDING STRUCTURES
U BUILDINGS

BUILDINGS
Aircraft sonic boom: Effects on buildings. A bibliography with abstracts
[NIIS/95-79-0265/3]
p0489 N79-24201

BULK MODULUS

Full-scale engine tests of bulk absorber acoustic inlet treatment
[NASA-TM-79079]
p0227 N79-16645

BULKHEADS
Optimization of high-aspect-ratio multive wing structure
p0070 A79-14876

BUNDLES

Manufacturing technology for fiber optic bundle cable --- electric cables for aircraft
[AD-1059594]
p0109 N79-13861

BUOYANCY

Structural loads due to gusts on semiboyant airships
[AIAA 79-1581]
p0522 A79-42384

The productivity of airships in long-range transportation
[AIAA 79-1596]
p0523 A79-42990

The feasibility of modern dirigibles
[OHRP, TP No. 1979-93]
p0636 A79-49541

BURBERRY

Progress on Variable Cycle Engines
[AIAA PAPER 79-1312]
p0510 A79-40759

BURBING
U COMPOSTION

BURNING PROCESS
U COMPOSTION

BURNING RATE

The 737 aircraft flammability testing
[p0078 N79-12030

BUTTERFLY VALVES
NT DAMPERS (VALVES)

BYPASSES

Influence of bypass ratio on jet engine weight
C-141 AIRCRAFT

Comparison of ETJES and TJE characteristics in supersonic cruising flight — Bypass Turbojet Engine

C-130 AIRCRAFT

Influence of bypass ratio change on fan aerodynamic characteristics

General Electric Company variable cycle engine technology demonstrator program

[AIAA PAPER 79-1311] p0510 A79-40758

A throat-bypass stability-bleed system using relief valves to increase the transient stability of a mixed-compression inlet — TF-12 aircraft inlet tests in the Lewis 10 by 10 ft supersonic wind tunnel

[NASA-TP-1083] p0532 W79-28176

C-118 AIRCRAFT

Supercritical wing design using numerical optimization and comparisons with experiment — to improve C-141 cruise performance

[AIAA PAPER 79-0065] p0140 A79-19514

Application of advanced technologies to improve C-141 cruise performance — wing modifications for drag reduction

[AIAA PAPER 79-0066] p0140 A79-19515

C-141 hybrid composite leading edge — materials and fabrication methods

p0529 A79-43244

Highlights of the C-141 service life monitoring program

p0562 A79-44457

Dutch roll excitation and recovery techniques on a C-141A Starlifter

[AIAA PAPER 79-1801] p0506 A79-47866

Corrosion tracking and prediction for C-141A aircraft maintenance scheduling

[AD-A057964] p0085 W79-12002

The design of digital controllers for the C-141 aircraft using entire eigenstructure assignment and the development of an interactive computer design program

p0672 W79-31224

C-5 AIRCRAFT

An information matrix approach for aircraft parameter-insensitive control — for C-5A wing loading alleviation

p0070 A79-19777

The Lockheed C-5: Case study in aircraft design — Book

p0451 A79-36646

Overview of the C-5A Service Loads Recording Program

p0562 A79-44456

C-5A load alleviation — active lift distribution control system

p0237 W79-16785

Validation of NIL-F-94901: General specification for flight control system for piloted military aircraft. Volume 1: Summary of TF-17 and C-5A validations

[AD-A061807] p0306 W79-19008

Definition of requirements for a performance measurement system for C-5 aircrew members

[AD-A063262] p0426 W79-22119

Systems implications of active controls

p0568 W79-35215

C-118 AIRCRAFT

Evaluation of a commercial OMEGA navigation system installed in the C-118 aircraft

[AD-A060154] p0161 W79-14077

Pacific area evaluation of a commercial OMEGA navigation system installed in a VC-118 aircraft, supplement 1

[AD-A068106] p0568 W79-30219

The structural effects and detection of variations in Hercules 3501-5A and Avco 5505 resin systems

p0530 A79-43261

Chemical analysis of advanced composite preprep and resins — for quality control

p0510 A79-43264

Operational experience with the AN/ABB-131 Omega Navigation Set

p0619 A79-48676

C-130 AIRCRAFT

Evaluation of a commercial OMEGA navigation system installed in the C-118 aircraft

[AD-A060154] p0161 W79-14077

C-130 AIRCRAFT

Cost effective improvement of the timeless C-130 Hercules airlifter

p0073 A79-15404

Dynamic stability of a flight vehicle laying out an uncoiling line

p0398 A79-32919

Manufacturing technology for fiber optic bundle cabling — electric cables for aircraft

[AD-A064065] p0109 W79-13661

Steady state behavior of a cable used for suspending a sonar body from a helicopter

p0372 W79-20400

CABIDE NICKEL BATTERIES

U NICKEL-CADMIUM BATTERIES

CALCULATION

U COMPUTATION

CALCULUS

WT ASTROPHOTIC SERIES

WT COLLINSHEAT

WT CONTINUITY (MATHEMATICS)

WT POWER SERIES

WT VECFOP ANALYSIS

WT VORTICITY

CALIBRATING

WT WIND TUNNEL CALIBRATION

Flow field calibration results for the ATDC High Entropy Ablation Test Facility /AD-A065356/

p0114 A79-17622

An in-place recalibration technique to extend the temperature capability of capacitance-sensing, rotor-blade-tip-clearance measurement systems

[SAE PAPER 781603] p0256 A79-25885

Inertial Reference Flight Inspection System

p0640 A79-37150

Automatic test software for calibrating strapdown systems

p0620 A79-48689

Calibration of the ATDC-PWT 16-foot transonic tunnel with the propulsion test section at various Reynolds numbers

[AD-A057577] p0096 W79-12103

Description and preliminary calibration results for the Langley hypersonic C4M tunnel


Design and calibration of slotted walls for transonic airfoil wind tunnels

p0358 W79-20058

A low-speed airflow calibration and research facility

[PB-294501/2] p0674 W79-31237

Navalcalibration evaluation with a computer controlled avionics data acquisition system

[ARPA-ND-78030-0] p0704 W79-32193

CALIFORNIA

Air pollution from aircraft operations at San Jose Municipal Airport, California

[NASA-TP-78056] p0098 W79-12585

A-105
A-106

Effect of canard vertical location, size, and deflection on canard-wing interference at subsonic Mach numbers.

Effect of canard vertical location, size, and deflection on canard-wing interference at subsonic Mach numbers. Volume 1:

Vortex effects for canard-wing configurations at high angles of attack in subsonic flow.

Vortex effects for canard-wing configurations at high angles of attack in subsonic flow. Volume 1:

A study of canard-wing interference using experimental pressure data at transonic speeds.

A study of canard-wing interference using experimental pressure data at transonic speeds. Volume 1:

High angle of incidence implications upon air intake design and location for supersonic cruise aircraft and highly maneuverable transonic aircraft.

Aerodynamic characteristics of the close-coupled canard as applied to low-to-moderate swept wings.

Aerodynamic characteristics of the close-coupled canard as applied to low-to-moderate swept wings. Volume 1: General trends

Aerodynamic characteristics of the close-coupled canard as applied to low-to-moderate swept wings. Volume 2: Subsonic speed regime

The time-variant aerodynamic response of a stator row including the effects of airfoil camber.

The time-variant aerodynamic response of a stator row including the effects of airfoil camber. Volume 1: Further low speed tests.

The flow through low cambered transonic turbine cascades.

Wind tunnel tests on cambered wings of mild gothic planforms. Part 1: Further low speed tests.

Wind tunnel tests on cambered wings of mild gothic planforms. Part 2: Transonic tests.

Wind tunnel tests on cambered wings of mild gothic planforms. Part 3: Transonic tests.

The effect of canard relative size and vertical location on the subsonic longitudinal and lateral-directional static aerodynamic characteristics for a model with a swept forward wing --- in the Langley 7x10 ft high speed tunnel.

The effect of canard relative size and vertical location on the subsonic longitudinal and lateral-directional static aerodynamic characteristics for a model with a swept forward wing --- in the Langley 7x10 ft high speed tunnel. Volume 1: General trends

Evaluation of emission control strategies for ram-air-spoiler forward-control missile at supersonic speeds.

Evaluation of emission control strategies for ram-air-spoiler forward-control missile at supersonic speeds. Volume 1:

Flight testing the KPIR.

Flight testing the KPIR. Volume 1:

Experimental wind-tunnel investigation of a ram-air-spoiler forward-control missile at supersonic speeds.

The time-variant aerodynamic response of a stator row including the effects of airfoil camber.

The time-variant aerodynamic response of a stator row including the effects of airfoil camber. Volume 1: Further low speed tests.

The flow through low cambered transonic turbine cascades.

Wind tunnel tests on cambered wings of mild gothic planforms. Part 1: Further low speed tests.

Wind tunnel tests on cambered wings of mild gothic planforms. Part 2: Transonic tests.

Wind tunnel tests on cambered wings of mild gothic planforms. Part 3: Transonic tests.

The effect of canard relative size and vertical location on the subsonic longitudinal and lateral-directional static aerodynamic characteristics for a model with a swept forward wing --- in the Langley 7x10 ft high speed tunnel.

The effect of canard relative size and vertical location on the subsonic longitudinal and lateral-directional static aerodynamic characteristics for a model with a swept forward wing --- in the Langley 7x10 ft high speed tunnel. Volume 1: General trends

Aerodynamic characteristics of the close-coupled canard as applied to low-to-moderate swept wings. Volume 2: Subsonic speed regime

Development of calorimetric fatigue gauge.

Development of calorimetric fatigue gauge. Volume 1:

Development of calorimetric fatigue gauge. Volume 2:

High angle of incidence implications upon air intake design and location for supersonic cruise aircraft and highly maneuverable transonic aircraft.

Aerodynamic characteristics of the close-coupled canard as applied to low-to-moderate swept wings.
CARGO

An off design shock capturing finite difference approach for caret waverider configurations
[AD-1068819] p0581 A79-28156

CARGO

NT AIR CARGO

The total energy cost of freight transport p0065 A79-14322

CARGO AIRCRAFT

NT C-5 AIRCRAFT

NT C-116 AIRCRAFT

NT C-130 AIRCRAFT

NT C-135 AIRCRAFT

NT C-141 AIRCRAFT

MT DC 3 AIRCRAFT

MT P-37 AIRCRAFT

MT SPANLOADER AIRCRAFT

MT YC-14 AIRCRAFT

Overview of the small package air carrier industry - A study of the operations in Federal Express cargo aircraft p0005 A79-10406

The total energy cost of freight transport An iff design shock capturing finite difference approach for caret waverider configurations

CARTOGRAPHY

CASCADE CONTROL

CASCADE PLOW

- Aerodynamic force and moment on oscillating airfoils in cascade [ASME PAPER 80-GT-1] p0496 A80-13451


- Supersonic stalled flutter [ASME PAPER 78-GT-10] p0142 A78-18166

- High speed smoke flow visualization for the determination of cascade shock losses [ASME PAPER 78-GT-33] p0285 A78-16776

- Three dimensional modelling of cascade flows [ASME PAPER 78-GT-42] p0271 A78-16271

- The calculation of two-dimensional compressible potential flow in cascades using finite area techniques [ASME PAPER 78-GT-43] p0273 A78-16272

- To the problem of starting and airfoil-shape optimization of the supersonic compressor cascade [ASME PAPER 78-GT-44] p0275 A78-18094


- An extension of the classical cascade model to a 3D model for blade-hub and blade-casing interaction [ASME PAPER 78-GT-46] p0275 A78-18096

- A wind-tunnel investigation into the effect of errors in blade setting on the stalling performance of a compressor cascade [ASME PAPER 78-GT-47] p0275 A78-18097


- Small disturbance swirl flow in turbomachinery blading [ASME PAPER 78-GT-49] p0276 A78-18099

CARRIER MODULATION

U MODULATION

CARTOGRAPHY

U MAPPING

CARTRIDGE ACTIVATED DEVICES

U ACTUATORS

U EXPLOSIVE DEVICES

CASCADE CONTROL

Cascade - Queue model of airport users [AIAA 78-27134] p0207 A78-19250

Two-dimensional compressible potential flow around profiles in cascade
Low-turbulence high-speed wind tunnel for the determination of cascade shock losses

Effect of interblade phase angle and incidence angle on cascade pitching stability

Three-dimensional lifting-surface theory for an annular blade row

Numerical analysis of flow through turbine cascades by the Modified FLIC Method

The flow past a supersonic trailing edge in transonic turbine cascades

Profile of a nozzle shaping the free-molecule flow intended to investigate air-intakes and air-cascades

Finite-element approach to compressor fan blade-to-blade cascade analysis

Nonstationarity of heat transfer in the blade cascade of an axial-flow turbine during engine start-up

Numerical calculation of flow through turbine cascades by the Modified FLIC Method

The influence of longitudinal pressure gradient and turbulence of the flow upon heat transfer in turbine blades

Particle trajectories in turbine cascades of a compressor

Aerodynamic excitation forces of blade vibrations in axial turbomachinery as a result of interferences from nearby cascades

Supersonic unstalled flutter --- aerodynamic loading of thin airfoils induced by cascade motion

Research on aerodynamic phenomena in thin airfoil cascades

Outlet air angle prediction for subsonic flow cascades

Comparison between flows in cascades and rotors in the transonic range. 1: Basic considerations

Comparison between flows in cascades and rotors in the transonic range. 2: Investigation of two transonic compressor cascades and comparison with rotor data

Comparison between flows in cascades and rotors in the transonic range. 3: Comparison of experimental and theoretical results of flow studies on blade-to-blade surfaces in an axial compressor rotor

A stall criterion for cascades

Pressure distributions on axial flow compressor blading and comparison with distributions on similar cascade blading

Catalytic combustion for gas turbine applications

Catalytic combustion for gas turbine applications --- directional solidification

Advanced Turbine Engine Gas generator (ATEGG)

Nozzleless turbine casings

Gearbox casings of fibre-reinforced plastic for aerol engines

A fundamental criterion for the application of rotor casing treatment --- in axial flow compressors

Aerodynamic design of fixed and variable geometry nozzleless turbine casings

Casting Directionally solidified blades - Greater strength

Castings Cast aluminum structures technology --- for large primary aircraft

Castings Cast Aluminum Structures Technology, phase 3 (CAST)
CATASTROPHE THEORY

CATASTROPHE THEORY
Application of bifurcation analysis and catastrophe theory methodology to aircraft stability problems at high angles-of-attack

CATEGORIES
NAVIGATION SYSTEMS
Some initial considerations

CATHODE RAY TUBES
An evaluation of some display parameters for an advanced landing display

CAVITATION
Comparison of electromechanical and cathode-ray-tube display mediums for an instrument approach display

CAVITATION FLOW
An advanced cockpit instrumentation system: The coordinated cockpit display

CAUCHY INTEGRAL FORMULA
Lifting surface theory for skewed and swept subsonic wings

CAUCHY PROBLEM
Obtaining solutions of the lifting-surface equation

CAVITATION
Influence of liquid oscillations in fuel line on head of pump operating in regimes without reverse flow

Secondary-flow-related vortex cavitation

Performance of a TAP-2 hydrofoil

Axial compressor stall --- effects on aircraft engines

CAVITIES
Semidirect computation of three-dimensional viscous flows over suction holes in laminar flow control surfaces

CAVITY RESONATORS
Heat generation in cavities at high velocity flights -- resonance-pipe effect

CENTRIFUGAL FORCE
Research on centrifugal effects on turbine rotor blade film cooling

CENTRIFUGAL PUMPS
Influence of liquid oscillations in fuel line on head of pump operating in regimes without reverse flow

Aviation centrifugal pump equipment /2nd revised and enlarged edition/ --- Russian book

Prerotation in centrifugal pumps: Design criteria

CHEMICAL PROTECTIVE COATINGS
U CERAMICS
Demonstration of ceramic design methodology for a ceramic combustor liner

Development of sprayed ceramic seal system for turbine gas path sealing

Tests of NASA ceramic thermal barrier coating for gas-turbine engines

Development of sprayed ceramic seal systems for turbine gas path sealing

Low-cycle fatigue of thermal-barrier coatings at 982 deg C

CERAMICS
Demonstration of ceramic design methodology for a ceramic combustor liner

Development of sprayed ceramic seal system for turbine gas path sealing

Tests of NASA ceramic thermal barrier coating for gas-turbine engines

Development of sprayed ceramic seal systems for turbine gas path sealing

Low-cycle fatigue of thermal-barrier coatings at 982 deg C
Responsibilities of French air traffic control  
Prospects for reducing the fuel consumption of civil aircraft  
Aviation safety - Facts and fiction  
New air service and deregulation - A study in transition  
Problems of increasing the efficiency of fuel  
British civil airworthiness requirements for airships  
Advanced crew station concepts, displays, and input/output technology for civil aircraft of the future  
Innovative developments in demonstrative evidence techniques and associated problems of admissibility  
Defining the design defect in aircraft products liability cases  
A review of crashworthiness --- in aircraft accident-liability cases  
Flight controls/avionics research - Impact on future civil helicopter operating efficiency and mission reliability  
Three basics of design for civil certification  
Listing of accidents/incidents by aircraft make and model, US Civil Aviation, 1976  
Annual review of aircraft accident data, US. air carrier operations, 1977  
Annual review of aircraft accident data: US general aviation, calendar year 1977  
Aircraft accident reports: Brief report US Civil Aviation issue number 5 - 1976 accidents  
Active controls for civil transports  
Listing of accidents/incidents by make and model, US civil aviation, 1977  
Corporate aviation in the 1980's  
General aviation 728 operational problems  
An assessment of national risk: General concepts and overall approach --- carbon fiber utilization in commercial aviation  
Civil Helicopter icing problems  
Air pollutant emission factors for military and civil aircraft  
Aviation safety  
CL-61 AIRCRAFT  
CL-61 AIRCRAFT

CLASSIFICATIONS

NT INDEXES (DOCUMENTATION)  
Optimum frequencies for aircraft classification  
[AD-A065697]  
CLEAN FUELS

MT FEEL CILS

CLEANERS

MT AIR FILTERS

CLEAR AIR TURBULENCE

Clear air turbulence accidents  
Detection of CAT and low altitude wind shear by on-board aircraft IR sensors - An update  
Clear air turbulence. A bibliography with abstracts  
Meteorological and operational aspects of clear air turbulent sampling missions with an instrumented B-7 aircraft. Volume 2, appendix  

CLEARANCES

Turbofan blade tip clearance measurement utilizing borescope photography  
A lifting-surface method for hover/climb airloads  
Linearization of the boundary-layer equations of the minimum time-to-climb problem  
Theoretical study of the effect of wind velocity gradients on longitudinal stability and control in climbing and level flight  

CLOSING FLIGHT

Approximate trajectory solutions for fighter aircraft  
[AD-A065697]  

CLOSING CYCLES

Closed Cycle Gas Turbines  
Closed power cycles' analysis  
Dynamic behaviour and control of single-shaft closed-cycle gas turbines  
Closed Brayton cycle system optimization for undersea, terrestrial, and space applications  
Calculation and design of closed cycle helium turbines for high temperature reactors  

CLOSING LOOP SYSTEMS

U FEEDBACK CONTROL

CLOTH

U FABRICS

CLOTHING

MT HELMETS

MT PRESSURE SUITS

MT PROTECTIVE CLOTHING

CLOUD DISPERAL

Wind estimates from cloud motions: Result of an in situ aircraft verification experiment  

CLOUD GLACIERATION

Forecasting the quantitative characteristics of aircraft icing  
[AD-A065697]  

CLOUD HEIGHT INDICATORS

Visibility in aviation  

CLOUD PHYSICS

Cloud physics observations inside hailstorms with an armed aircraft data system  

REFERENCES

U FUSION
Conflict warning for the radar controller in air traffic control

Separation and collision risk in air traffic control

The future of surveillance systems in civil aviation

Aviation obstructions and the particular conditions for construction projects in the vicinity of airports

FAA air traffic control automation - Programs and trends

Planning and control of bird hazard reduction at airports in the Transport Canada system

The use of falcons to disperse nuisance birds at Canadian airports - An update

Equipment and methods for dispersing birds used on French airfields

The use of lights in reducing bird strikes

Conflict alert for the air traffic control system

Beacon-based collision avoidance system - Experimental results

Factors in evaluating the effectiveness of a collision avoidance logic

Threat logic for air-derived CAS --- Collision Avoidance System

Technical calculation methods for automatic collision recognition and avoidance in air traffic

Experience in the analysis of real and simulated collisions and dangerous encounters in German airspace

Experimental BCAS performance results

FAA BCAS concept, appendices A-E

FAA BCAS concept, appendices F-N

Experimental BCAS performance results

Collision avoidance an annotated bibliography

FAA BCAS concept, appendices A-E

Collision avoidance an annotated bibliography

FAA BCAS concept, appendices F-N

Collision avoidance an annotated bibliography

Collision avoidance an annotated bibliography

Collision avoidance an annotated bibliography

Collision avoidance an annotated bibliography

Collision avoidance an annotated bibliography

Collision avoidance an annotated bibliography

Collision avoidance an annotated bibliography

Collision avoidance an annotated bibliography

Collision avoidance an annotated bibliography

Collision avoidance an annotated bibliography

Collision avoidance an annotated bibliography

Collision avoidance an annotated bibliography

Collision avoidance an annotated bibliography

Collision avoidance an annotated bibliography

Collision avoidance an annotated bibliography

Collision avoidance an annotated bibliography

Collision avoidance an annotated bibliography

Collision avoidance an annotated bibliography

Collision avoidance an annotated bibliography

Collision avoidance an annotated bibliography

Collision avoidance an annotated bibliography

Collision avoidance an annotated bibliography

Collision avoidance an annotated bibliography

Collision avoidance an annotated bibliography

Collision avoidance an annotated bibliography

Collision avoidance an annotated bibliography

Collision avoidance an annotated bibliography

Collision avoidance an annotated bibliography

Conflict warning for the radar controller in air traffic control

Separation and collision risk in air traffic control

The future of surveillance systems in civil aviation

Aviation obstructions and the particular conditions for construction projects in the vicinity of airports

FAA air traffic control automation - Programs and trends

Planning and control of bird hazard reduction at airports in the Transport Canada system

The use of falcons to disperse nuisance birds at Canadian airports - An update

Equipment and methods for dispersing birds used on French airfields

The use of lights in reducing bird strikes

Conflict alert for the air traffic control system

Beacon-based collision avoidance system - Experimental results

Factors in evaluating the effectiveness of a collision avoidance logic

Threat logic for air-derived CAS --- Collision Avoidance System

Technical calculation methods for automatic collision recognition and avoidance in air traffic

Experience in the analysis of real and simulated collisions and dangerous encounters in German airspace

Experimental BCAS performance results

FAA BCAS concept, appendices A-E

FAA BCAS concept, appendices F-N

Collision avoidance an annotated bibliography

FAA BCAS concept, appendices A-E

Collision avoidance an annotated bibliography

FAA BCAS concept, appendices F-N

Collision avoidance an annotated bibliography

FAA BCAS concept, appendices A-E
COMBAT Modeling parameter influences in gas turbine combustor design
[IAIA PAPER 79-0354] p0146 A79-19685

Geometric scaling and performance of dump combusters with vortex amplification and swirl generation by gas jets
[IAIA PAPER 79-0362] p0147 A79-19699

Development of an integral fuel injection concept for staged combustors
[IAIA PAPER 79-0348] p0147 A79-19701

The NASA high pressure facility and turbine test rig
p0190 A79-21296

Hydrogen enrichment for low-emission jet combustion
p0190 A79-21347

Gas turbine combustor cooling by augmented backside convection
[ASME PAPER 79-GT-193] p0196 A79-22334

Combustion noise prediction update
[ASME PAPER 79-0586] p0272 A79-26942

Frequency characteristics of unstable turbulent combustion oscillations in a jet engine combustor chamber. II - Analysis of the characteristic equation and comparison with experiment
p0279 A79-27728

Numerical modelling of the combustion of fuel sprays in three dimensional can combustors
[IAIA 79-7022] p0329 A79-29395

The effect of swirl on a ramjet dump combustor
p0330 A79-29411

Jet discharge coefficient through openings for parallel flow
[IAIA 79-7050] p0331 A79-29418

The Advanced Low-Emissions Catalytic-Combustor Program: Phase I - Description and status --- for aircraft gas turbine engines
[ASME PAPER 79-GT-192] p0341 A79-30557

The combustion of a range of distillate fuels in small gas turbine engines
[ASME PAPER 79-GT-175] p0395 A79-32415

Fuel property effects on combustor performance --- aircraft sythetic and petroleum-derived fuels
[ASME PAPER 79-GT-178] p0395 A79-32438

Catalytic combustion for gas turbine applications with broad specification fuels on combustors for commercial aircraft gas turbine engines
[ASME PAPER 79-GT-200] p0396 A79-32447

Account of film turbulence for predicting film cooling effectiveness in gas turbine combustors
[ASME PAPER 79-GT-175] p0397 A79-32457

Formation of sooty particles in combustion chambers with series injection of air into the combustion zone
p0406 A79-34550

Development of a gas turbine combustor design
[ASME PAPER 79-GT-194] p0468 A79-38979

Analysis of the impact of the use of broad specification fuels on combustors for commercial aircraft gas turbine engines
[ASME PAPER 79-1195] p0468 A79-38980

Lean stability augmentation for premixing, prevaporizing combustors
[ASME PAPER 79-1319] p0472 A79-39035

The effect of fuel sprays on emissions from a gas turbine combustor
[ASME PAPER 79-1321] p0472 A79-39037

Emission characteristics of a premix combustor fueled with a simulated partial-oxidation product gas
[ASME PAPER 79-1322] p0472 A79-39038

Analytical modeling of ramjet combustor heat transfer nodules
[ASME PAPER 79-1124] p0508 A79-40476

Theoretical approach to spray combustion in gas turbine combustor
p0517 A79-42207

Study of the nonsmoothness of the temperature field of a homogeneous combustion chamber as the parameters of the primary zone vary
p0525 A79-42569

Study of mass transfer between the primary zone and secondary air jets in gas turbine engine combustion chambers
p0526 A79-42558

Through-heatings of chambers with regenerative cooling --- for aircraft engines
p0527 A79-42570

The application of multiple swirl modules in the design and development of gas turbine combustors
[ASME PAPER 79-1196] p0603 A79-47349
<table>
<thead>
<tr>
<th>Title</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influence of gas turbine engine combustion chamber geometric parameters on mixture formation characteristics</td>
<td>p0612-7-48895</td>
</tr>
<tr>
<td>Combustor modelling for scramjet engines</td>
<td>p0609-7-52675</td>
</tr>
<tr>
<td>An experimental study of a catalytic combustor for an expendable turbine engine</td>
<td>p0045-7-11048</td>
</tr>
<tr>
<td>Experimental clean combustor program: Phase 3: Turbulence measurement addendum</td>
<td>p0045-7-12088</td>
</tr>
<tr>
<td>A thermal investigation of the AFAPL turbine engine heat transfer test facility</td>
<td>p0167-7-1117</td>
</tr>
<tr>
<td>The design and development of high performance combustors</td>
<td>p0308-7-19380</td>
</tr>
<tr>
<td>Parametric performance of a turbojet engine using jet a and a diesel fuel</td>
<td>p0306-7-20114</td>
</tr>
<tr>
<td>Performance of a vortex-controlled diffuser in an annular swirl-can combustor at inlet Mach numbers up to 0.53</td>
<td>p0423-7-22099</td>
</tr>
<tr>
<td>Effect of primary-zone equivalence ratio on pollutant formation</td>
<td>p0435-7-23086</td>
</tr>
<tr>
<td>Effect of degree of fuel vaporization upon emissions for a premixed combustion system for gas turbine engines</td>
<td>p0486-7-23965</td>
</tr>
<tr>
<td>Premixed Prevaporized Combustor Technology Forum</td>
<td>p0496-7-26994</td>
</tr>
<tr>
<td>Advanced low emissions catalytic combustor program at General Electric</td>
<td>p0487-7-25011</td>
</tr>
<tr>
<td>Lean, premixed, prevaporized combustor conceptual design study</td>
<td>p0497-7-25013</td>
</tr>
<tr>
<td>Lean, premixed, prevaporized combustor conceptual design study</td>
<td>p0497-7-25014</td>
</tr>
<tr>
<td>Fundamentals of Gas Turbine combustion</td>
<td>p0497-7-25016</td>
</tr>
<tr>
<td>Optical in situ versus probe measurements of nitric oxide concentration as a function of axial position in a combustor exhaust</td>
<td>p0498-7-25025</td>
</tr>
<tr>
<td>Fuel hydrogen content as an indicator of radiative heat transfer in an aircraft gas turbine combustor</td>
<td>p0544-7-26224</td>
</tr>
<tr>
<td>Laser anemometer measurements at the exit of a T100 combustor</td>
<td>p0566-7-28456</td>
</tr>
<tr>
<td>Investigation of air streams from combustor-liner air entry holes, 3</td>
<td>p0670-7-31206</td>
</tr>
<tr>
<td>Experimental Clean Combustor Program (CCEP), phase 3 --- commercial aircraft turbofan engine tests with double annular combustor</td>
<td>p0670-7-31207</td>
</tr>
<tr>
<td>An investigation of flame stability in a coaxial dump combustor</td>
<td>p0706-7-32029</td>
</tr>
<tr>
<td>Lean, premixed, prevaporized fuel combustor conceptual design study</td>
<td>p0707-7-32211</td>
</tr>
<tr>
<td>Analytical evaluation of the impact of broad specification fuels on high bypass turbofan engine combustors</td>
<td>p0719-7-33205</td>
</tr>
<tr>
<td>An investigation of flame stability in a coaxial combustor</td>
<td>p0719-7-33293</td>
</tr>
<tr>
<td>Aircraft air pollution, volume 3: a bibliography with abstracts</td>
<td>p0722-7-33650</td>
</tr>
<tr>
<td>Intensification of fuel vaporization in aircraft gas turbine engines by electrical forces</td>
<td>p0720-7-27768</td>
</tr>
<tr>
<td>The effect of fuel sprays on emissions from a gas turbine combustor</td>
<td>p0472-7-35037</td>
</tr>
<tr>
<td>The application of multiple swirl modules in the design and development of gas turbine combustors</td>
<td>p0603-7-47389</td>
</tr>
<tr>
<td>Evaluation of airfield pavement materials based on synthetic polymers</td>
<td>p0635-7-49388</td>
</tr>
<tr>
<td>Aircraft engine development with improved performance, higher efficiency</td>
<td>p0643-7-50207</td>
</tr>
<tr>
<td>Diffusers for gas turbine combustor systems</td>
<td>p0308-7-19369</td>
</tr>
</tbody>
</table>

**COMBUSTION EFFICIENCY**

Critical influence of finite rate chemistry and unisonedness on ignition and combustion of supersonic B2-air streams [AIAA PAPER 79-0355] p0106-7-16868

A characteristic time correlation for combustion inefficiency from alternative fuels [AIAA PAPER 79-0357] p0107-7-16887

Geometric scaling and performance of dump combustors with vortex amplification and swirl generation by gas jets [AIAA PAPER 79-0362] p0107-7-16919

Fossil fuel heat-pumps for domestic, commercial, and industrial space heating | p0642-7-37852

Lean, premixed, prevaporized combustion for aircraft gas turbine engines [AIAA PAPER 79-1318] p0472-7-39034

Lean stability augmentation for premixing, prevaporizing combustors [AIAA PAPER 79-1319] p0472-7-39035

Theoretical approach to spray combustion in gas turbine combustor | p0517-7-42207

The application of multiple swirl modules in the design and development of gas turbine combustors [AIAA PAPER 79-1196] p0603-7-47389

Analytical evaluation of the impact of broad specification fuels on high bypass turbofan engine combustors [NASA-CR-159585] p0103-7-13050

Evaluation of future jet fuel combustion characteristics [AD-1060218] p0167-7-14231

Combustion problems in gas turbine applications (NASA-CP-2878) p0497-7-25011

Analytical evaluation of the impact of broad specification fuels on high bypass turbofan engine combustors [NASA-CR-159585] p0103-7-13050

Evaluation of future jet fuel combustion characteristics [AD-1060218] p0167-7-14231

**CONVECTION HEAT**

**CONVECTION INSTABILITY**

**CONVECTION PHYSICS**

Lean combustion limits of a confined premixed-prevaporized propane jet [AIAA PAPER 79-0538] p0253-7-25856

Aerodynamics of flame jets --- Russian book | p0259-7-26355

Path in rocket technology - Selected works, 1924-1946 --- Russian book | p0278-7-27599

Factors controlling stability of swirling flames at diffusers in gas turbines | p0643-7-50209

The role of fundamental combustion in the future aviation fuels program --- carbon formation in gas turbine primary zones | p0107-7-13195

Characteristics and combustion of future hydrocarbon fuels | p0107-7-13196

Combustion in the gas turbine, parts 1, 2, 3 | p0307-7-19366

Thermodynamics of organic compounds [AD-1060664] p0497-7-23232

**CONVERSATION PRODUCTS**

Future fuels in gas turbine engines | p0051-7-12979

Flame emissions - Alternative fuels | p0501-7-12984
Thermophoresis - Enhanced deposition rates in combustion turbine blader passages
[ASME PAPER 78-WA/GT-1]  p0145 A79-19790

Effects of fuel properties on soot formation in turbine combustion
[SAE PAPER 780126]  p0257 A79-25899

The effect of a sample lot of fuel JEC'ICR on emissions levels of a small gas turbine
[ASME PAPER 79-GT-165]  p0395 A79-32427

Characteristic time correlations of pollutant emissions from an angular gas turbine combustor
--- of aircraft engines
[ASME PAPER 75-GT-194]  p0396 A79-32452

Formation of sooty particles in combustion chambers with series injection of air into the combustion zone
p0406 A79-34850

Effect of friction on motion of a piston driven by combustion products
p0411 A79-35656

Lean stability augmentation for premixing, pre-vaporizing combustors
[ASAE PAPER 79-128]  p0472 A79-39035

The effect of fuel sprays on emissions from a gas turbine combustor
[ASAE PAPER 79-1221]  p0472 A79-39037

Emission characteristics of a prex combustor fueled with a simulated partial-oxidation product gas
[ASAE PAPER 79-1222]  p0472 A79-39038

Some recent developments in solid propellant gas generator technology
[ASAE PAPER 79-1227]  p0511 A79-40761

Effects of boron and glass hybrid epoxy-composites on graphite-fiber release in an aircraft fire
p0531 A79-43272

Evaluation of airfield pavement materials based on synthetic polymers
p0635 A79-49348

Correlation technique for ambient effects on oxides of nitrogen from combustion products in atmospheric pollution
p0641 A79-49922

Ultrasonic method of gun gas detection --- for engine ingestion prevention in P-15
p0642 A79-50166

J57-5W engine emission test report
[AD-A068842]  p0714 A79-15005

Development of fire test methods for airplane interior materials

Effect of primary-zone equivalence ratio on pollutant formation
[NASA-TF-14633]  p0435 A79-23086

Effect of fuel/air nonuniformity on nitric oxide emissions
p0486 A79-25004

 Ionic mechanisms of carbon formation in flames --- aircraft fuel combustion
[AD-805872]  p0556 A79-29270

Critical assessment of emissions from aircraft piston engines
[AD-A071002]  p0658 A79-30190

Electrical insulation fire characteristics. Volume 2: Toxicity
[FP-2E7018/2]  p0662 A79-30490

Recent advances in materials toxicology
p0666 A79-31169

CORROSION STABILITY

ST PLANE STABILITY
Correlation of combustor acoustic power levels inferred from internal fluctuating pressure measurements
p0668 A79-14796

The Advanced Low-Emissions Catalytic-Combustor Program: Phase II - Description and status
--- for aircraft gas turbine engines
[ASME PAPER 79-GT-192]  p0341 A79-30557

Test verification of a turbofan partial swirl afterburner
[ASAE PAPER 79-1159]  p0469 A79-38981

Low-frequency augmentor instability study
[AD-A065144]  p0523 A79-22104

Low-frequency augmentor instability investigation computer program user's manual
[AD-A065777A]  p0536 A79-23093

Operating condition and geometry effects on low-frequency augmentor combustion instability in a turbofan at altitude

A-119
Analytical evaluation of the impact of specification fuels on high bypass turbofan engine combustors (NASA-CR-158993) p0103 179-13050
Structural area inspection frequency Evaluation (STIFPE). Volume 2: Description of simulation logic (AD-A056689) p0171 179-15026
Evaluation of linear flow control system concepts for subsonic commercial transport aircraft (NASA-CR-158976) p0218 179-15942
An assessment of the risks presented by the use of carbon fiber composites in commercial aviation: Executive summary (NASA-CR-158989) p0275 179-18075
Corporate aviation in the 1980's p0295 179-18892
Occupant injury mechanisms in civil helicopter accidents p0311 179-19653
Effects of a military cargo pod and tail fins on the aerodynamic characteristics of a large wide-body transport model (NASA-CR-158052) p0343 179-20101
A study on the utilization of advanced composites in commercial aircraft wing structure: Executive summary (NASA-CR-158902-1) p0369 179-20198
A study on the utilization of advanced composites in commercial aircraft wing structure (NASA-CR-158902-2) p0369 179-20199
Commercial aircraft derived high resolution wind and temperature data from the tropics for FGGE: Implications for NASA p0374 179-20621
Evaluation of linear flow control system concepts for subsonic commercial transport aircraft (NASA-CR-158993) p0382 179-21043
Evaluation applied to reliability analysis of reconfigurable, highly reliable, fault-tolerant, computing systems (NASA-TH-60060) p0428 179-22783
Integrated noise model --- computerized simulation of commercial jet aircraft noise near airports p0428 179-22851
Environmental exposure effects on composite materials for commercial aircraft (NASA-CR-158638) p0585 179-28232
Financing the capital requirements of the US airline industry in the 1980's p0651 179-30164
Development of fire-resistant, low smoke generating, thermally stable end items for commercial aircraft and spacecraft using a basic polyimide resin (NASA-CE-159454) p0666 179-31171
Experimental Clean Combustor Program (ECCP), phase 3 --- commercial aircraft turbofan engine tests with double annular combustor (NASA-CR-153584) p0670 179-31207
Commercial aircraft flight deck noise criteria (AD-A072029) p0712 179-32969
COMMERCIAL AVIATION U CIVIL AVIATION U COMMERCIAL AVIATION COMPARABILITY (EQUIPMENT) Propulsion cycle and configuration comparability considerations for subsonic V/STOL design (ASME PAPER 78-GT-68) p0007 179-10764
COMMUNICATIONS U AIRCRAFT COMMUNICATION Volume 120
COMPONENTS

Aircraft instrument components 3rd revised and enlarged edition/ --- Russian book

COMPOMENTS

Subject index

Three dimensional composites

Graphite-epoxy composite materials

Fiber composites

Reinforced plastics

Metal matrix composites

Ceramics

Metal composites

Polymer matrix composites

Laminates

Metal matrix composites

Plywood matrix composite materials

Composite plastics

Survey of the application of reinforced composites in European helicopters

Boeing Vertol bearingless main rotor structural design approach using advanced composites

Applications of DS composites in aircraft gas turbines --- directional solidification

Composite materials in helicopters

Fiber-composite reinforcement of cracked aircraft structures thermal-stress and thermal-fatigue studies

Investigation of the crash impact characteristics of composite airframe structures

Composite wing technology on the AV-8B advanced aircraft

The application of composites to secondary structures

The CH-46 rotor blade transition from metal to composite materials

GASP IV simulation model for the composite and bonding production facility

New technology in commercial aircraft design for minimum operating cost

Environmental models for moisture absorption by aircraft composites

Aerelastic tailoring studies in fighter aircraft design

An aerelastic optimization procedure for composite high aspect ratio wings

Support loadings and body impacts --- of aircraft

Current work in materials and methods-of-construction research --- composite and ceramic materials for aerospace systems

Composites tooling speeds fabrication --- Energy, labor cost cut sharply

Differential method of designing rational aircraft frames made of composite materials

C-141 hybrid composite leading edge --- materials and fabrication methods

Non destructive evaluation NDE of impact damage in thick graphite composite aircraft structures --- for dropped tools on airfields

High-performance reinforced plastic structures for civil aviation

Laboratory test procedures to determine lightning attachment points on actual aircraft parts A qualification test

Chemical analysis of structural adhesives and resins for composites

Synthesis of aircraft structures using integrated design and analysis methods

La Recherche Aerospatiale. Bi-monthly Bulletin No. 1976-1

Test methodology correlation for foreign object damage

The Charpy impact test as a method for evaluating impact resistance of composite materials

Rocos/aluminum landing gear for Navy aircraft --- Airframe nose wheel linkages

New concepts in composite material landing gear for naval aircraft. Volume 1: Technical discussion

New concepts in composite material landing gear for military aircraft. Volume 2: Appendices

Investigation into the utilization of advanced composites in aircraft wing structure: Executive summary

A study on the utilization of advanced composites in commercial aircraft wing structure

A study on the utilization of advanced composites in commercial aircraft wing structure

Analysis of high velocity impact on hybrid composite fan blades

Preliminary design study of a composite main rotor blade for the OH-58 helicopter. Volume 1: Trade analysis and preliminary design study of composite OH-58 main rotor blade

Advanced composite engine rotor design

Evaluation of composite wing for XFY-12 airplane, appendix C

Advanced composites in sailplane structures: Application and mechanical properties

Flight service evaluation of Kevlar-49 epoxy composite panels in wide-bodied commercial transport aircraft

Environmental exposure effects on composite materials for commercial aircraft

Construction using carbon fiber composite materials and aluminum: A cost comparison

New concepts in aircraft journal bearings

Fatigue and fracture

Mechanical and thermophysical properties of graphite/polysilide composite materials
The fluorenone polyester ISO PPE of Isovolta
Company, Austria

COMPOSITE STRUCTURES

Impact of operational issues on design of advanced composite structures for Army helicopters

Composite rotor hub, I, II — fatigue and load tests for CH-54A helicopter design

Development of a multitubular spar composite main rotor blade

Defects experienced in the production of advanced composite outer wings for the X-70 Black aircraft

Filament wound main rotor blade — The Army’s new production blade for the AH-1 [AH-78-36]

Space wound composite structures

Composite blade for a 5 m diameter tilt rotor

Composite components under impact load and effects of defects on the loading capacity

Wind-tunnel impellers in fiber-composite design for the Swiss Aircraft Works in Fasems, Switzerland

Extensive cost reduction studies: Composite airframe component — L-1011 commercial airliner

Composite structure applications for commercial aircraft

An advanced composite helicopter main rotor hub

Advanced composite fan frame for the Quiet Clean Short-Haul Experimental Engine (CCESE)

The effects of lightning and nuclear electromagnetic pulse on the composite aircraft

Composite wing/fuselage integral concept

Advanced composite cover to substructure attachment technology — for aircraft wing skin

Present and future developments in aerospace materials and structures

Moisture/temperature effects upon peak strength of composite-to-metal adhesively bonded joint elements — for F-16 aircraft

Tooling and assembly procedures, serviceability program elements — for aircraft composite structures

Radoose design/fabrication criteria for supersonic BW aircraft — EF-111

Pressure-controlled thermal expansion holding of advanced composite BVP wing structure

Structural design, tooling and manufacturing of a composite T7-16 forward fuselage

Temperature/humidity criteria for advanced composite structures

Thermal response of composite panels

Divergence of forward swept composite wings

Crash simulation of composite and aluminum helicopter fuselages using a finite-element program

Design of a typical aeronautical structure from carbon-resin composites

Economical processing for the fabrication of CFRP components

Composite applications at Bell Helicopter

Development of an aircraft composite propeller

Design development of an advanced composite alleron — graphite-epoxy structure for L-1011

Composite helicopter tail booms

Model 2061 composite litter door

Automatic scanning inspection of composite helicopter structure using an advanced technology fluoroscopic system

Certification of composites in civil aircraft

Qualification program of the composite main rotor blade for the Model 214E helicopter

Fatigue and test of composite horizontal stabilizer for the Sikorsky Spirit helicopter

Advanced composites for turbines

Composite rotors — An evolving art

Composites for noise reduction — helicopter structures

Fiberglass flight controls — of helicopters

Composites important to Black Hawk — 08-608 helicopter


Reproducibility of structural strength and stiffness for graphite-epoxy aircraft spoilers

Design, fabrication and laboratory testing of a helicopter composite main rotor hub — graphite-epoxy blades for the CH-54A helicopter

Assessment of state-of-the-art in in-service inspection methods for graphite epoxy composite structures on commercial transport aircraft

Influence of lightning on an all composite aircraft

Composite main rotor blade preliminary design investigation

Composite forward fuselage systems integration, volume 2 — effects of lightning

Effect of variances and manufacturing tolerances on the design strength and life of mechanically fastened composite joints

Bolted field repair of composite structures — repairing fuel cell composite wing surfaces

Ultra-high-modulus graphite-epoxy conical shell development, supplement

Investigation of penetration of electromagnetic energy through joints in advanced composite structures — aircraft structures

Skin and spar interface program (SAIP) — sweeplin and variable sweep wings

COMPOSITE STRUCTURES

COMPOSITE MATERIALS

COMPOSITION (PROPERTY)

ATMOSPHERIC COMPOSITION

ATMOSPHERIC MOISTURE

CHEMICAL COMPOSITION

CONCENTRATION (COMPOSITION)

MOISTURE CONTENT

COMPOUND HELICOPTERS

Recent progress in rotorcraft and powered-lift research

A-123
COMPRESSED GAS

Calculation of the working process in a piston-type 'slow' compression wind tunnel p0125 179-42546

COMPRESSIBILITY EFFECTS

A similarity rule for compressibility and sidewall-boundary-layer effects in two-dimensional wind tunnels [AIAA PAPER 79-0108] p0141 179-19535

COMPRESSIBILITY LOADS

Stability of three-dimensional compressible boundary layers over wings with suction [AIAA PAPER 79-0265] p0194 179-19631

On the stability of the boundary layer on a transonic swept wing [AIAA PAPER 79-0284] p0203 179-23563

COMPRESSED GAS

Density changes and turbulence production in the expansion compression of a turbulent flow at supersonic speed [ONERA, TP NO. 1978-153] p0053 179-13180

Green's function method for compressible unsteady potential aerodynamic analysis of rotor-fuselage interaction p0129 179-18645

The calculation of two-dimensional compressible potential flow in cascades using finite area techniques [AIAA PAPER 79-0077] p0140 179-19522

An efficient user-oriented method for calculating compressible flow about three-dimensional inlets [AIAA PAPER 79-0081] p0141 179-19524

A shock capturing application of the finite element method to viscous compressible flow problems p0247 179-29771

Slender wing in compressible flow --- Russian book p0254 179-25872

The finite element method for turbomachinery analysis -- subsonic compressible flow p0335 179-29840

A calculation procedure for three-dimensional, time-dependent, inviscid, compressible flow through turbine blades of any geometry p0345 179-31247

Estimation of compressible flows in turbomachines by an axisymmetric calculation method [ONERA, TP NO. 1979-60] p0347 179-39096

Aerodynamics of airfoils with porous trailing edges [NASA-TP-1979-10] p0351 179-4710

Exterior flow with an isoparametric Hermitic cubic element p0697 179-54290

Compressible viscous flowfields and airframe forces induced by two-dimensional lift jets in ground effect [AD-A059231] p0686 179-12022

Two-dimensional compressible potential flow around profiles in cascade p0383 179-21059

COMPRESSOR BLADES

Observation of a multistage axial compressor with untwisted blades from viewpoint of three-dimensional axisymmetric flow theory p0138 179-19382

An analysis of thermal stress and gas bending effects on vibrations of compressor rotor stages --- blade torsional rigidity [AIAA PAPER 79-0045] p0139 179-19498


Experimental study on flow in a supersonic centrifugal impeller [AIAA PAPER 78-WG-2] p0195 179-22327

Effect of compressor geometry on the unsteady regime of a low speed compressor [ONERA, TP NO. 1978-68] p0213 179-24219

Characteristics of the wake of a lightly loaded compressor or fan rotor [AIAA PAPER 79-0550] p0253 179-25861

Turbulence characteristics in the near wake of a compressor rotor blade [AIAA PAPER 79-0280] p0260 179-26544

SUBJECT INDEX

A system which uses a laser beam to control the regime of vibration tests with turbine and compressor blades p0316 A79-28638


Transonic boundary layer on compressor stator blades as calculated and measured in wind tunnel tests [NASA-CASE-LAR-11900-1] p0329 A79-29937

An extension of the classical cascade model to a 3D model for blade-hub and blade-casing interaction -- Experiments and calculations [AIAA 79-7029] p0329 A79-29401

A wind-tunnel investigation into the effect of errors in blade setting on the stalling performance of a compressor cascade [AIAA 79-7031] p0330 A79-29403

Theoretical and experimental investigations on aerodynamically highly-loaded compressor bladings with boundary layer control [NASA-TP-1502] p0330 A79-29404

Experimental and analytical investigation of the effects of Reynolds number and blade surface roughness on multistage axial flow compressors [AIAA PAPER 79-GT-2] p0339 A79-30501


Experimental evaluation of the effect of inlet distortion on compressor blade vibrations p0341 A79-30558

Design and testing of two supercritical compressor cascades [AIAA PAPER 79-GT-11] p0390 A79-32330

The influence of the blade surface roughness on the aerodynamic behavior and characteristic of an axial compressor [ASME PAPER 79-GT-102] p0392 A79-32378

Allowing for the wall boundary layer in an axial compressor stage p0451 A79-36586

Finite-element approach to compressor blade-to-blade cascade analysis p0514 A79-41752

The effect of blade-to-blade flow variations on the mean flow-field of a transonic compressor [AIAA PAPER 79-1515] p0575 A79-46703

Seal Technology in Gas Turbine Engines [NASA-CP-237] p0604 A79-11056

Factors associated with rub tolerance of compressor tip seals --- self sustained combustion of titanium p0607 A79-11069

Experimental evaluation of the effect of inlet distortion on compressor blade vibrations [NASA-TM-79066] p0226 A79-16300

Interactive multi-node blade impact analysis [NASA-CP-159462] p0292 A79-17858

Investigation of the aerodynamic and acoustic performance of a low-pressure ratio tandem-blade compressor p0304 A79-18975

Turbine blade cooling p0304 A79-18980

Pressure distributions on axial flow compressor blading and comparison with distributions on similar cascade blading p0383 A79-21061

Effects of turbulence on laminar separation on aerodynamic surfaces such as airfoils and compressor blading [NASA-CP-159888] p0416 A79-22036

The influence of compressor inlet guide vane/stator relative circumferential positioning on blade wake transport and interaction [AD-A067963] p0453 A79-26060

Some theoretical and experimental investigations of stresses and vibrations in a radial flow rotor [AD-8071020] p0503 A79-27158


Theoretical studies of three dimensional transonic flow through a compressor blade row [AD-A071020] p0702 A79-32172
Effects of diffusion factor, aspect ratio and solidity on overall performance of 14 compressor middle stages --- the effects of varying both diffusion through the rotor and compressor blades and blade aspect ratio [NASA-TE-1523]

COMPRESSOR EFFICIENCY
Optimization for rotor blades of tandem design for axial flow compressors [ASME PAPERS 79-GT-125]
Thermal influences in gas turbine transients - Effects of changes in compressor characteristics [ASME PAPERS 79-GT-143]
Selected problems concerning unstable operation of aircraft turbine engine compressors
Laser velocimeter applied to the study of circular distortion effects in a low speed compressor [ONERA, TF RD. 1979-30]

COMPRESSOR RIGIDITIES
Three-dimensional shock wave studies for transonic/supersonic compressor rotors [ASIA PAPER 79-0043]
An analysis of thermal stress and gas bending effects on vibrations of compressor rotor stages --- blade torsional rigidity [ASIA PAPER 79-0045]
Method for design and manufacture of the stage of a radial compressor [ASME PAPERS 79-GT-4196]
A fundamental criterion for the application of rotor casing treatment --- in axial flow compressors [ASME PAPERS 79-GT-4220]
Characteristics of the wake of a lightly loaded compressor or fan rotor [ASIA PAPER 79-0550]
Study of the flow field behind a transonic axial compressor rotor using laser-anemometry and unsteady pressure measurements [ASIA 79-7081]
Influence of freely rotating inlet guide vanes on the return flows and stable operating range of an axial flow fan [ASME PAPERS 79-GT-31]
An off-design correlation of part span damper losses through transonic axial fan rotors [ASME PAPERS 79-GT-56]
Unsteady upstream effects in axial-flow supersonic compressor stages [ASME PAPERS 79-GT-57]
Forced vibrations of a single stage axial compressor rotor [ASME PAPERS 79-GT-108]
Optimization for rotor blades of tandem design for axial flow compressors [ASME PAPERS 79-GT-125]
Effect of casing treatment on performance of a two-stage high-pressure-ratio fan [NASA-TE-1840]
Comparison between flows in cascades and rotors in the transonic range. 3: Comparison of experimental and theoretical results of flow studies on blade-to-blade surfaces in an axial compressor rotor [NASA-TE-1902]
Advanced composite engine rotor design [AD-006363]
Rotor redesign for a highly loaded 1800 ft/sec tip speed fan. 1: Aerodynamic and mechanical design report [NASA-CR-20556]
Effect of rotor meridional velocity ratio on response to inlet radial and circumferential distortion [NASA-TP-1278]
Performance of two-stage fan with a first-stage rotor redesigned to account for the presence of a part-span damper [NASA-TP-1483]
Effects of diffusion factor, aspect ratio and solidity on overall performance of a compressor middle stages --- the effects of varying both diffusion through the rotor and compressor blades and blade aspect ratio [NASA-TP-1523]

COMPRESSORS
NT CENTRIFUGAL COMPRESSORS
NT SUPERCHARGERS
NT TURBONET COMPRESSORS

MT SUPERSONIC COMPRESSORS
MT TRANSONIC COMPRESSORS
MT TURBONET COMPRESSORS
A discussion of turbine and compressor sealing devices and systems [AIAA PAPER 79-12373]
Optimum operating techniques of two-state hypersonic gun tunnel [AIAA PAPER 79-13982]
Causes of high pressure compressor deterioration in service [AIAA PAPER 79-1234]
Unsteady 3-D flow analysis of compressor cascade with splitter vanes [AD-0057504]
Theoretical and experimental investigation of the flow at the inlet of the vaned diffuser for a high pressure ratio centrifugal compressor [WE-TE-125]
Strain gage system evaluation program [NASA-Ch-159846]
Unsteady effects of circumferential pressure distorted inlet flows in compressors [AD-0662550]
Design problems of small turbomachines [ASME PAPER 79-22097]
Study of blade aspect ratio on a compressor front stage aerodynamic and mechanical design report [NASA-CP-159555]
Effect of number of probes and their orientation on the calculation of several compressor face distortion descriptors [NASA-TM-72859]
Hydraulic compressor for a wind tunnel [ASME PAPER 79-23107]
The prizing of a wind tunnel with a hydraulic compressor [ASME PAPER 79-23108]
Shock-boundary layer interaction in compressor cascades: A review of available data [NASA-CP-23829]
Turbulence characteristics of compressor discharge flow --- 3790 engine tests [ASME PAPER 79-23995]
Turbulence measurements in the compressor exit flow of a General Electric CF6-50 engine [ASME PAPER 79-24995]
Handling problems through compressor deterioration [NASA-TP-27169]
Study in a straight cascade wind tunnel of aeroelastic instabilities in compressors [NASA-TP-27178]

COMPUTATION
NT ORBIT CALCULATION
Some recent progress in transonic flow computation --- flow distributions, numerical optimization, and airfoil design [NASA-TP-27178]
Sample calculation 4: Phi = 9 deg 57 [NASA-TE-18946]
[ASME PAPER 79-22990]

COMPUTATIONAL FLUID DYNAMICS
A two-dimensional unsteady Euler-equation solver for flow regions with arbitrary boundaries [AIAA 79-1465]
Vector processor algorithms for transonic flow calculations [AIAA 79-1457]
Numerical investigation of the perpendicular injector flow field in a hydrogen fueled scramjet [ASME PAPERS 79-1482]
The calculation of non-linear aerodynamic characteristics of wings and their wakes in subsonic flow [ASME PAPER 79-24995]
Fully conservative numerical solutions for unsteady irrotational transonic flow about airfoils [AIAA PAPERS 79-1555]
Aerodynamics of spoiler control devices [AIAA PAPERS 79-1575]
An integrated analytical and experimental investigation of helicopter hub drag [NASA-79-5]
Numerical solution of the problem of unsteady supersonic flow around the front part of the wings with a detached shock wave [NASA-TP-47099]
Exterior flow with an isoparametric bicubic cubic element [NASA-TP-47099]

A-125
Survey and evaluation of potential real-time interactive flight test facilities for the S-1  [AD-A070343] p0708 879-32222
Research Aircraft Measurement System (RAMS)  
graphic system user guide  [JP-296303/7] p0722 879-33901

COMPUTER NETWORKS

Enhancements of radar data-handling networks  p0002 879-10299

COMPUTER PROGRAMMING

ART LANGUAGE PROGRAMMING

MT ON-LINE PROGRAMMING

MT SYMBOLIC PROGRAMMING

A Navy plan for the development of a practical computer-aided programming /CAP/ system for analog circuit test design  p0623 879-48870

GASP-P/L simulation of integrated avionic system processor architectures  [NASA-CR-156284] p0303 879-18973

VOLAH: A digital computer program for simulating VTOL aircraft launch and recovery from small ships. Volume 1: Program description  [AD-A1066172] p0485 879-23954

VOLBH: A digital computer program for simulating VTOL aircraft launch and recovery from small ships. Volume 2: Appendices  [AD-A1066173] p0485 879-23955


COMPUTER PROGRAMS

MT COMPUTER SYSTEMS PROGRAMS

MT INPUT/OUTPUT ROUTINES

MT GRAPHICS

Commercial test software development practices for military applications --- for avionics support equipment  p0223 879-12320

Program BNW - A wing structural optimization computer program for preliminary design of fighter aircraft  p0025 879-12460

Cost and operational effectiveness of RIS improvements  p0073 879-15403

An integrated quasi-3D finite element calculation program for turbomachinery flows  [ASME PAPER 78-GT-56] p0196 879-22336

Adaptive approximations in finite element structural analysis --- for aircraft components  p0199 879-22951

SIFT - Design and analysis of a fault-tolerant computer for aircraft control --- Software Implemented Fault Tolerant systems  p0252 879-25718

The application of computer aided techniques to project design --- for aircraft  p0048 879-12659

Method for digital computer calculation of unsteady temperature fields in turbomachinery discs  p0280 879-27746

Capabilities and applications of a computer program system for dynamic loads analyses of flexible airplanes with active controls /P5LON/  [AIAA 79-5783] p0320 879-29915

Computer programs of flow calculation on relative stream surfaces S1 and S2 employing non-orthogonal curvilinear coordinates and non-orthogonal velocity components and their application to the design of turbomachine blades based on three-dimensional flow  [AIAA 79-7015] p0330 879-29406

Aerodynamic stability analysis of the AD-1 manned oblique-wing aircraft  p0463 879-28313

The dynamics of a general aviation pilot protection campaign  p0466 879-38886

A-126
Overview
[AD-A0683180] p0579 N79-20129
Maintenance improvement: An analysis approach
including inferential techniques. Volume 2:
Technical report
[AD-A0683681] p0580 N79-28130
Maintenance improvement: An analysis approach
including inferential techniques. Volume 4:
Software manual
[AD-A0683833] p0580 N79-28131
Application of vortex lattice method for the
evaluation of the aerodynamic characteristics of
wings with and without strakes
p0580 N79-28145
Advanced risk assessment of the effects of
graphite fibers on electronic and electronic
equipment, phase 1 --- simulating vulnerability
to airports and communities from fibers released
during aircraft fires
A gas turbine off-design computing system
p0597 N79-28563
Predicted crack repair costs for aircraft structures
[AD-A0686599] p0598 N79-29138
A computer program for detailed analysis of the
takeoff and approach performance capabilities of
transport category aircraft
Naval aircraft operating and support
cost-estimating model, FY 1977 revision
[AD-A0681757] p0649 N79-30140
Maintenance improvement: An analysis approach
including inferential technical data --- naval
aircraft
[AD-A068382] p0649 N79-30141
Driftdown calculations for the FB/227D aircraft
[SAND-79-1807] p0653 N79-30182
Dynamic loads analysis system (DYLCPLEX) summary.
Volume 1: Engineering formulation
Dynamic loads analysis system (DYLCPLEX) summary.
Volume 2: Supplemental system design information
A program to compute three-dimensional subsionic
unsteady aerodynamic characteristics using the
doublet lattice method, 1216 (DUBLLEX). Volume 2:
Supplemental system design and maintenance
document
ATLAS, an integrated structural analysis and
design system. Volume 5: System demonstration
problems
A program to compute three-dimensional subsionic
unsteady aerodynamic characteristics using the
doublet lattice method, 1216 (DUBLLEX). Volume 1:
Engineering and usage
Modal interpolation program, L215 (INTSERF). Volume 1:
Engineering and usage
Recovery of 4-14 field analysis
[AD-A069542] p0702 N79-32174
Processing of on-board recorded data for quick
analysis of aircraft performance --- rotor
systems research aircraft
COMPUTER SIMULATION
U COMPUTERIZED SIMULATION
COMPUTER STORAGE DEVICES
H DODGE MEMORY DEVICES
COMPUTER SYSTEM DESIGN
Design of a flexible aircraft data acquisition
system --- for meteorological research
p0597 N79-28563
The future -- ARTS III --- Automated Radar Terminal
Systems for air traffic control
p0198 N79-22705
Flight test control by means of a microprocessor. I
p021N N79-28349
Multidose radar processor --- for combat aircraft
p0280 N79-28058
The 2A-68 Weapon Systems trainer
p0350 N79-32246
The Digibus multiplex at the heart of avionics
p0459 N79-36975
Prospects for airborne computer systems
p0533 N79-43502
JIDS' relative navigation -- Architecture, error
characteristics and operational benefits ---
Joint Tactical Information Distribution System
Volume 2: JIDS 79-88715
A computer system for identifying aircraft
characteristics
p0642 N79-50168
Modern systems for air traffic control
p0647 N79-50212
CH-53K digital automatic flight control system
p0693 N79-53638
Computers in aerospace Conference, 2nd, Los
Angeles, Calif., October 22-24, 1979, Technical
Papers
p0697 N79-54378
Air traffic control and C/3/1 --- A comparative
analysis
p0698 N79-54390
A multi microprocessor flight control system -
Architectural concepts
[NASA-CR-159027] p0698 N79-54392
Turbo engine design system
[AD-A0656902] p0487 N79-23974
Central flow control software design document.
Volume 1: Operational software complex ---
an automation support to the Air Traffic Control
System Command Center
p0663 N79-30959
Central flow control software design document.
Volume 2: Support software complex ---
an automation support to the Air Traffic Control
System Command Center.
[AD-A070771] p0663 N79-30960
Modal interpolation program, L215 (INTSERF). Volume 2:
Supplemental system design and maintenance
document --- to calculate displacements at
different points on an aerodynamic surface
Equation modifying program, L219 (EQMOD). Volume 2:
Supplemental system design and maintenance
document
The history solution program, L225 (TFP126).
Volume 2: Supplemental system design and maintenance
document --- for airplane dynamic
response using frequency response data
A program for calculating load coefficient
matrices utilizing the force summation method,
L218 (LDATS). Volume 2: Supplemental system
design and maintenance document
COMPUTER SYSTEMS PROGRAMS FOR
INPUT/OUTPUT ROUTINES
NT OPERATING SYSTEMS (COMPUTERS)
Concept of modular software for the stepwise
construction of radar data processing systems
with minicomputers, taking into account as
example the Airtrack System
p0265 N79-26759
Hardware and software structure of a coordination
system for air traffic control on the basis of
flight plan data
p0265 N79-26760
Accelerated basic loads analysis --- improved
computer systems programming approach for
aircraft structural analysis
[AD-A079737] p0324 N79-29051
A streamlined control system development process
--- to optimize aircraft propulsion system
performance
[NAVY PAPER 79-1344] p0742 N79-39048
The effect of standardization of avionics software
including inferential techniques. Volume 2:
Supplemental system design and maintenance
Modern systems for air traffic control
Air traffic control and C/3/I - A comparative
analysis
p0698 N79-54390
A multi microprocessor flight control system -
Architectural concepts
[NASA-CR-159027] p0698 N79-54392
Turbo engine design system
[AD-A0656902] p0487 N79-23974
Central flow control software design document.
Volume 1: Operational software complex ---
an automation support to the Air Traffic Control
System Command Center
p0663 N79-30959
Central flow control software design document.
Volume 2: Support software complex ---
an automation support to the Air Traffic Control
System Command Center.
[AD-A070771] p0663 N79-30960
Modal interpolation program, L215 (INTSERF). Volume 2:
Supplemental system design and maintenance
document --- to calculate displacements at
different points on an aerodynamic surface
Equation modifying program, L219 (EQMOD). Volume 2:
Supplemental system design and maintenance
document
The history solution program, L225 (TFP126).
Volume 2: Supplemental system design and maintenance
document --- for airplane dynamic
response using frequency response data
A program for calculating load coefficient
matrices utilizing the force summation method,
L218 (LDATS). Volume 2: Supplemental system
design and maintenance document
COMPUTER SYSTEMS PROGRAMS FOR
INPUT/OUTPUT ROUTINES
NT OPERATING SYSTEMS (COMPUTERS)
Concept of modular software for the stepwise
construction of radar data processing systems
with minicomputers, taking into account as
example the Airtrack System
p0265 N79-26759
Hardware and software structure of a coordination
system for air traffic control on the basis of
flight plan data
p0265 N79-26760
Accelerated basic loads analysis --- improved
computer systems programming approach for
aircraft structural analysis
[AD-A079737] p0324 N79-29051
A streamlined control system development process
--- to optimize aircraft propulsion system
performance
[NAVY PAPER 79-1344] p0742 N79-39048
The effect of standardization of avionics software
quality assurance
p0617 N79-48848
Automatic test software for calibrating strapdown
systems
p0620 N79-48689
E-3A sentry /AWACS/ ATPG --- Automatic Test
Program Generation
p0623 N79-48873
Combustor modelling for scramjet engines
p0689 N79-52675
Spare memory and timing parameters in avionics
computer system requirements
[AD-A056521] p0936 N79-10055
COMPUTERIZED SIMULATION

SUBJECT INDEX

Turb - A preliminary design system for turbines
(SAE PAPER 780999) p0255 A79-25882
Turbine engine cost reduction using Life Cycle
Cost techniques
(SAE PAPER 781031) p0257 A79-29503
The application of computer aided techniques to
project design -- for aircraft
p0261 A79-26592
Recovery system preliminary design - A simplified
approach to determining drogue chute staging,
timing, and altitude requirements
(AIAA 79-0446) p0263 A79-26650
Introduction to the computer-aided design of
flight vehicles -- Russian book on spacecraft
design
p0279 A79-27648
Combined strength and aeroelastic wing synthesis
via constraint approximation
(AIAA 79-0724) p0283 A79-28290
Computer programs of flow calculation on relative
stream surfaces S1 and S2 employing non-orthogonal
curvilinear coordinates and their application to the design of turbine blades based on three-dimensional flow
(AIAA 79-7635) p0310 A79-29406
A NASA initiative for general aviation - The
general aviation airplane design and analysis service
p0346 A79-31613
An application of 3-D viscous flow analysis to the
design of a low-aspect-ratio turbine
(ASME PAPER 79-GT-53) p0391 A79-32348
Improving turbine efficiency - aerodynamic and
stress analyses for gas turbine engines
(ASME PAPER 79-GT-176) p0395 A79-32436
Computer-aided design - Aerodynamics
p0399 A79-33856
General aviation airplane design for performance
using small computers
(SAE PAPER 790614) p0457 A79-36743
Computer graphics create the new wave of design
p0460 A79-37066
Exploring team avionics systems by simulation
p0465 A79-38802
Computer calculations of steady-state temperature
fields in cooled turbine rotor blades
p0526 A79-62551
Computer calculation of steady-state temperature
fields in cooled turbine disks
p0526 A79-62553
Computer aided design of mixed flow turbines for
turbocathodes
(ASME PAPER 78-GT-191) p0563 A79-64794
Impact of digital computer technology on flight
systems
(AIAA 79-1641) p0567 A79-65320
Technique for developing design tools from the
analysis methods of computational aerodynamics
(ASME PAPER 79-1521) p0576 A79-66111
Solution of the inverse aerodynamics problem by the
random search method
p0601 A79-87002
Engineering and manufacturing communication via
the computer data base
p0609 A79-97111
CARAV data handling from conceptual design through
produce support
(AIAA PAPER 79-1084) p0609 A79-97112
Microcomputer-based digital autopilot development
for the FEG-106 Mini-KRF
p0614 A79-98008
A system for interdisciplinary analysis - A key to
improved rotorduct design
(AHS 79-B) p0626 A79-99060
Role of Numerical Control Design in the computer
aided design/manufacturing interface at Sikorsky
(AHS 79-30) p0630 A79-49082
Application of finite-element and holographic
techniques in the design of turboshift engine
components
(AHS 79-41) p0631 A79-49093
Evaluation of finite-element formulations for transient conduction forced-convection analysis
p0635 A79-49383
Recent applications of theoretical analysis to
V/STOL inlet design
p0636 A79-49530
Utilization of computerized FEM techniques to
evaluate C-F system to environment compatibility
Electromagnetic Compatibility analysis for
Communications Electronic systems
p0650 A79-52855
High speed radar processing using CMOS/ SOS
technology
(AIAA 79-1901) p0697 A79-54380
Synthesis of aircraft structures using integrated
design and analysis methods
p0800 A79-10458
Comprehensive helicopter analysis: A state of the art review
(NASA-TM-7539) p0806 A79-12019
Computer-aided analysis and design of the shape
rolling process for producing turbine engine
discs
(NASA-CR-159655) p0804 A79-12067
Analysis of a theoretically optimized transonic
airfoil
(NASA-CR-3065) p0898 A79-13001
Airfoil design by numerical optimization using a
minicomputer
(NASA-TM-78502) p0157 A79-14101
Progress in transonic flow computations analysis
and design methods for three-dimensional flows
supercritical wings and wing-body combinations
p0302 A79-18951
Application of aerodynamic design techniques to
process compressor design -- computerized design
p0309 A79-19388
Computer-aided design study of hyper turbomachines
[AD-006374] p0365 A79-20122
A computer aided design and fabrication system
adapted to the design of three dimensional objects
--- helicopter design
p0374 A79-20762
DRAVO: A computer aided design and fabrication
system
p0374 A79-20763
CAD for electric systems design --- in aircraft
production
p0374 A79-20765
Aeritalia point of view and objectives on computer
aided design
p0374 A79-20766
A discussion of the production design office
certification benefits of C.A.D. --- in the aircraft industry
p0374 A79-20767
Development of Integrated Programs for
Aerospace-vehicle design (IPAD): Reference
design process
(NASA-CR-2581) p0382 A79-21044
V/FM-mounted antenna code: 7se's manual
[AD-066589] p0490 A79-24216
ANLIZER: Analysis of aerospace structures with
membrane elements
[AD-066533] p0491 A79-24379
Optimum tall failings for bodies of revolution
computerized Design
[AD-067927] p0539 A79-26031
Advanced computer technology in aerodynamics.
Lecture 1: Computer-aided aircraft design
p0579 A79-28562
An artificial viscosity method for the design of
supercritical airfoils
(NASA-CR-158840) p0580 A79-28563
A gas turbine off-design computing system
p0587 A79-28563
Contribution to the calculation of the dynamic
behavior of industrial turbocompressor circuits
p0587 A79-28564
A computer-aided design method for axial flow
pumps and fans
p0588 A79-28568
The design of digital controllers for the C-161
aircraft using entire eigenstructure assignment
and the development of an interactive computer
design program
[AD-066912] p0672 A79-31224
COMPUTERIZED SIMULATION
ANALOG SIMULATION
DIGITAL SIMULATION
The role of flight dynamic modeling in helicopter
certification
(SAE PAPER 780550) p0005 A79-10409
Simulation of helicopter powerplant performance
(ASME PAPER 78-GT-51) p0008 A79-10774
### Subject Index

<table>
<thead>
<tr>
<th>Computer System</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NT Aerospace/Spaceborne Computers</td>
<td>p0409 1979-23866</td>
</tr>
<tr>
<td>NT Digital Computers</td>
<td>p0599 1979-29800</td>
</tr>
<tr>
<td>NT Hybrid Computers</td>
<td>p0660 1979-30242</td>
</tr>
<tr>
<td>NT Microcomputers</td>
<td>p0672 1979-31224</td>
</tr>
<tr>
<td>NT Minicomputers</td>
<td>p0676 1979-31235</td>
</tr>
<tr>
<td>NT Parallel Computers</td>
<td>p0679 1979-31280</td>
</tr>
<tr>
<td>NT Concorde Aircraft</td>
<td>p0705 1979-32198</td>
</tr>
<tr>
<td>NT Power Simulation</td>
<td>p0718 1979-32313</td>
</tr>
</tbody>
</table>

### Computers

- **NT** Aerospace/Spaceborne Computers
- **NT** Digital Computers
- **NT** Hybrid Computers
- **NT** Microcomputers
- **NT** Minicomputers
- **NT** Parallel Computers

### Aerospace Computer Systems

- Aerospace computer systems. Part 1: Avionics
- Applications, volume 1. A bibliography with abstracts
- [NTIS/PF-79/0312/3]
- p0485 1979-23996

### Experimental and Theoretical Studies on Model Helicopter Rotor Noise

- [NASA-CR-155844]
- p0589 1979-29894

### Design of a Multi-Microprocessor System for Real-Time Aircraft Simulation

- [NSA-CR-155844]
- p0589 1979-29800

### The Design of Digital Controllers for the C-141 Aircraft Using Entire Eigenstructure Assignment and the Development of an Interactive Computer Design Program

- [AD-806739]
- p0672 1979-31224

### Tactical Performance Characteristics Basic Methodology

- [AD-806927]
- p0674 1979-31235

### Investigation on Information Error Caused by Traffic Loading in Approach and Landing Systems

- [AD-807218]
- p0675 1979-31380

### Power-Lift Aircraft Handling Qualities in the Presence of Naturally-Occurring and Computer-Generated Atmospheric Disturbances

- [AD-807518]
- p0705 1979-32198

### Regression Simulation of Turbine Engine Performance (RSTEP), task 1

- [AD-807100]
- p0718 1979-32313

### Comparisons of Turbine Engine Combustor Exhaust Emissions Measurements Using Three Gas-Sampling Probe Designs

- [AD-8067133]
- p0105 1979-19005

### Concorde Aircraft

- Powerplant integration - The application of current experience to future developments
- [AFPIE PAPER 78-CF-113]
- p0008 1979-10768

### Introduction and Summary

- [AD-8062807]
- p0381 1979-21037

### Some New Airfoils

- p0409 1979-23866

### Concentration (Composition)

- **NT** Atmospheric Moisture
- **NT** Moisture Content

### Comparisons of Turbine Engine Combustor Exhaust Emissions Measurements Using Three Gas-Sampling Probe Designs

- [AD-8067133]
- p0105 1979-19005

### Concorde Aircraft

- Powerplant integration - The application of current experience to future developments
- [AFPIE PAPER 78-CF-113]
- p0008 1979-10768

### Concorde Aircraft

- Introduction and Summary

### Comparison of Temperatures and Winds Reported by Rawinsonde and Satellite

- [NASA-TN-7512319]
- p0630 1979-31251

### Some New Airfoils

- p0409 1979-23866

### Monitoring Stratospheric Winds with Concorde-generated Infrasound

- p0409 1979-23866

### Thermospheric Propagation of Sonic Booms from the Concorde Supersonic Transport

- [AD-8067101]
- p0505 1979-25855

### Some Results Related to Simulated and In-Flight Experimentation with an Electric Flight Control System that Can Be Generalized

- p0658 1979-30224

### A Comparison of Predictions Obtained from Wind Tunnel Tests and the Results from Cruising Flight

- [AFPIE BIBLIOGRAPHY 79-9974]
- p0633 1979-31163

### Supersonic Transport Vis-a-Vis Energy Savings

- [AFPIE 79-5464]
- p0655 1979-31163

### Concrete

- An investigation into the use of polymer-concrete for rapid repair of airfield pavements
- [AD-8059121]
- p0707 1979-13203

### Research in Airport Pavements

- [AD-8059121]
- p0707 1979-13203

### Development of a Structural Design Procedure for Rigid Airfield Pavements

- [AD-806946]
- p0568 1979-28167

### Recycling of Asphalt Concrete Airfield Pavements

- [AD-8072111]
- p0707 1979-32218

### Flight Conditions

- **NT** Flight Conditions
- **NT** Kutta-Quekouwski Condition
- **NT** Buran Conditions
CONDUCTING FLUIDS
- Theory of lifting surface in fluids of high electrical conductivity

CONDUCTIVE HEAT TRANSFER
- On calculating the temperature state of film-cooled turbine vane
- Transient temperature distribution in cooled turbine blades
- Most rational linearization of nonlinear unsteady heat conduction problems -- for flight vehicle parts and engines
- Prediction of in-depth gap heating ratios from wing glove model test data --- space shuttle orbiter

CONDUCTORS
- NT ELECTRIC CONDUCTORS
- NT ELECTRIC WIRE
- NT SUPERCONDUCTORS

COMBS
- NT CONICAL EODIFS
- NT NOSE COSTS
- NT CONICAL NOSE CONES

CONFERENCES
- Alternative hydrocarbon fuels: Combustion and chemical kinetics; SQID Workshop, Loyola College, Columbia, Md., September 7-9, 1977, Technical Papers
- SAFEE Association, Annual Symposium, 15th, Las Vegas, Nov., December 5-8, 1977, Proceedings
- Topics in fluid film bearing and rotor bearing system design and optimization; Proceedings of the Design Engineering Conference, Chicago, Ill., April 17-20, 1978
- Reliability and quality in aeronautics and astronautics; Meeting, Hanover, West Germany, April 27, 28, 1978, Reports
- Aerodynamic Decelerator and Balloon Technology Conference, 6th, Houston, Tex., March 5-7, 1979, Technical Papers
- Application of fracture mechanics to design --- Book
- Structures, Structural Dynamics, and Loads Conference, 20th, St. Louis, Mo., April 4-6, 1979, Technical Papers on Dynamics and Loads
- Numerical methods in laminar and turbulent flow; Proceedings of the First International Conference, University College of Swansea, Swansea, Wales, July 17-21, 1978
- Very Large Vehicle Conference, Arlington, Va., April 26, 27, 1979, Technical Papers
- Perspectives on airport environmental compatibility; Proceedings of the Economic/Environmental Specialty Conference, Miami, Fla., March 2, 3, 1978

Materials problems in gas turbine engine technology; Colloquium, Munich, West Germany, October 27, 28, 1977, Report

Lighter-Than-Air Systems Technology Conference, Palo Alto, Calif., July 11-13, 1979, Technical Papers

Service fatigue loads monitoring, simulation, and analysis; Proceedings of the Symposium, Atlanta, Ga., November 16-15, 1977

Atmospheric Flight Mechanics Conference for Non-Dimensional Space Systems, Boulder, Colo., August 6-8, 1979, Collection of Technical Papers

Conference on Certification of Aircraft for Lightning and Atmospheric Electricity Hazards, Chatillon-sous-Bagneux, Hauts-de-Seine, France, September 14-21, 1978, Proceedings


Computers in Aerospace Conference, 2nd, Los Angeles, Calif., October 22-24, 1979, Technical Papers

Icing testing for aircraft engines

Turbomachinery, part 1

Flexible Aircraft Environment Simulation Techniques

Preliminary CCCP program test results

Dynamic Stability Parameters

The rotary combustion engine: A candidate for general aviation --- conferences

Industrial centrifugal compressors, Volume 1

Advanced Technology Airfoil Research, Volume 1, part 1 --- conference on development of computational codes and test facilities

Research in airport pavements

Fracture Mechanics Design Methodology --- aircraft structures
CONTROL DEVICES

controllability characteristics of an aircraft from the transient processes p0021 79-12176
Active control --- aircraft systems p0026 79-12534
Design of the TKF system in relation to experience with the CCY-P104 program and functional redundancy --- digital flight control systems for tactical fighter aircraft [DGLR PAPER 78-139] p0062 79-14088
Unmanned flight vehicle design parameter selection --- control configured optimization p0069 79-14859
Optimizing finned pilotless flight vehicle design parameters p0069 79-14870
Problems raised by the application of the natural stability reduction concept to transport aircraft p1015 79-20117
Recent developments in active control technology --- for fighter aircraft design [AIAA 79-0708] p0277 79-27368
Control considerations for CCY fighters at high angles of attack p0461 79-37295
Preparing for the TKF 90 p0508 79-40326
Parameter and state estimation applicable to aircraft identification problem p0561 79-43946
Parallel procedures for aircraft parameter identification and state estimation [AIAA 79-1816] p0567 79-45316
Direct force node flight control for a vectored lift fighter [AIAA 79-14794] p0571 79-45386
From HMAT to future fighters --- Highly Maneuverable Aircraft Technology assessment p0607 79-87996
A microprocessor system for flight control research p0616 79-48623
Application of Lagrange Optimization to the drag polar utilizing experimental data [AIAA PAPER 79-1833] p0634 79-49355
A computer program for aircraft identification and derivative extraction p0648 79-50306
Investigations for the calculation of robust control systems --- aircraft control, sensor failure [AGARD-CP-488] p0048 79-11076
Active controls in aircraft design [AGARD-AE-234] p0235 79-16864
Active controls in aircraft design - an executive summary p0235 79-16865
Control configured vehicle design philosophy p0236 79-16866
Active-control design criteria p0236 79-16867
Control-configured combat aircraft p0236 79-16868
F-16 multi-national fighter p0236 79-16869
F-8 active control p0236 79-16870
Propulsion-flight control integration technology p0236 79-16871
Active controls for civil transports p0236 79-16872
Fuel conservative subsonic transport --- control surfaces activated by computers p0236 79-16873
B-1 ride control p0237 79-16876
Redundant strapdown navigation, guidance, and control of a control configured vehicle p0303 79-20016
Design considerations for implementing integrated mission-tailored flight control nodes --- digital fly-by-wire and the ccv yf-16 aircraft p0324 79-20022
Stability and control --- conferences [AGARD-CP-260] p0458 79-30218
System implications of active controls p0568 79-30219
Structural aspects of active controls p0568 79-30221

SUBJECT INDEX

Enhanced fighter mission effectiveness by use of integrated flight systems p0658 79-30223
Improvement of fighter aircraft maneuverability through employment of control configured vehicle technology p0659 79-30225
Stability and control aspects of the CCY-P104C p0659 79-30234
Design guidance from fighter CCV flight evaluations p0659 79-30235
A simulator investigation of handling quality criteria for CCV transport aircraft [MLA-TR-78035-09] p0660 79-30240

CONTROL DEVICES

U CONTROL EQUIPMENT

CONTROL EQUIPMENT

NT CONTROL STICKS

NT PRESSURE REGULATORS

The solid state remote power controller - Its status, use and perspective --- for aircraft and spacecraft p0012 79-10896
Control system requirements for aircraft gas turbine engines p0026 79-12530
Control systems and problems of their development from the viewpoint of technological and operational requirements --- for aircraft gas turbine engines p0026 79-12531
FC equipment spurs blisk manufacture - Full-scale production slated --- Numerical Control for integrated helicopter compressor blade and disk manufacture p0400 79-33589
Flight control. II - Control system design --- German book p0507 79-40155
Military considerations for helicopter flight controls p0692 79-53628
Automatic Stabilization Equipment for the Army/Hughes YAH-6A Advanced Attack Helicopter p0693 79-53637
Investigations for the calculation of robust control systems --- aircraft control, sensor failure [NASA-TP-488] p0048 79-11076
Compensating linkage for main rotor control [NASA-CAS-1AF-11799-1] p0175 79-15057
A study of longitudinal controllability and stability requirements for small general aviation airplanes [AD-4060467] p0175 79-15058
Evaluation of two inflow control devices for flight simulation of fan noise using a JT15D engine [NASA-TP-79072] p0221 79-15969
Validation of MIL-F-9490D: General specification for flight control system for piloted military aircraft. Volume 1: Summary of TP-17 and C-5A validations [AD-4061807] p0306 79-19008
Validation of MIL-F-9490D: General specification for flight control system for piloted military aircraft. Volume 2: YF-17 lightweight fighter validation [AD-4062088] p0306 79-19009
AHRS/TC control and display interface [AD-4067219] p0495 79-24992
The equipment-system interface in an antitank helicopter at night p0657 79-30211
Flight experience with advanced controls and displays during piloted curved decelerating approaches in a powered-fight STOL aircraft p0660 79-30234
Helicopter high grain control [NASA-CR-152055] p0672 79-31221

A-136
Recent progress in active controls applied to aircraft systems.

Recent developments in active control technology --- for fighter aircraft design.

Recent results of an inflight simulation of augmented dynamics in fighter approach and landing [AIAA 79-1886]...

Recent developments in active control technology --- for fighter aircraft design [AIAA 79-1886]...

Recent results of an inflight simulation of augmented dynamics in fighter approach and landing [AIAA 79-1886]...

Recent results of an inflight simulation of augmented dynamics in fighter approach and landing [AIAA 79-1886]...

Recent progress in active controls applied to flutter suppressors [p0369 A79-32277]...

Recent results of an inflight simulation of augmented dynamics in fighter approach and landing [AIAA 79-1886]...

Recent progress in active controls applied to flutter suppressors [p0369 A79-32277]...

Recent results of an inflight simulation of augmented dynamics in fighter approach and landing [AIAA 79-1886]...

Recent progress in active controls applied to flutter suppressors [p0369 A79-32277]...

Recent results of an inflight simulation of augmented dynamics in fighter approach and landing [AIAA 79-1886]...

Recent progress in active controls applied to flutter suppressors [p0369 A79-32277]...

Recent results of an inflight simulation of augmented dynamics in fighter approach and landing [AIAA 79-1886]...

Recent progress in active controls applied to flutter suppressors [p0369 A79-32277]...

Recent results of an inflight simulation of augmented dynamics in fighter approach and landing [AIAA 79-1886]...

Recent progress in active controls applied to flutter suppressors [p0369 A79-32277]...

Recent results of an inflight simulation of augmented dynamics in fighter approach and landing [AIAA 79-1886]...

Recent progress in active controls applied to flutter suppressors [p0369 A79-32277]...

Recent results of an inflight simulation of augmented dynamics in fighter approach and landing [AIAA 79-1886]...

Recent progress in active controls applied to flutter suppressors [p0369 A79-32277]...

Recent results of an inflight simulation of augmented dynamics in fighter approach and landing [AIAA 79-1886]...

Recent progress in active controls applied to flutter suppressors [p0369 A79-32277]...

Recent results of an inflight simulation of augmented dynamics in fighter approach and landing [AIAA 79-1886]...

Recent progress in active controls applied to flutter suppressors [p0369 A79-32277]...

Recent results of an inflight simulation of augmented dynamics in fighter approach and landing [AIAA 79-1886]...

Recent progress in active controls applied to flutter suppressors [p0369 A79-32277]...

Recent results of an inflight simulation of augmented dynamics in fighter approach and landing [AIAA 79-1886]...

Recent progress in active controls applied to flutter suppressors [p0369 A79-32277]...

Recent results of an inflight simulation of augmented dynamics in fighter approach and landing [AIAA 79-1886]...

Recent progress in active controls applied to flutter suppressors [p0369 A79-32277]...

Recent results of an inflight simulation of augmented dynamics in fighter approach and landing [AIAA 79-1886]...

Recent progress in active controls applied to flutter suppressors [p0369 A79-32277]...

Recent results of an inflight simulation of augmented dynamics in fighter approach and landing [AIAA 79-1886]...

Recent progress in active controls applied to flutter suppressors [p0369 A79-32277]...

Recent results of an inflight simulation of augmented dynamics in fighter approach and landing [AIAA 79-1886]...

Recent progress in active controls applied to flutter suppressors [p0369 A79-32277]...

Recent results of an inflight simulation of augmented dynamics in fighter approach and landing [AIAA 79-1886]...

Recent progress in active controls applied to flutter suppressors [p0369 A79-32277]...

Recent results of an inflight simulation of augmented dynamics in fighter approach and landing [AIAA 79-1886]...

Recent progress in active controls applied to flutter suppressors [p0369 A79-32277]...

Recent results of an inflight simulation of augmented dynamics in fighter approach and landing [AIAA 79-1886]...

Recent progress in active controls applied to flutter suppressors [p0369 A79-32277]...

Recent results of an inflight simulation of augmented dynamics in fighter approach and landing [AIAA 79-1886]...

Recent progress in active controls applied to flutter suppressors [p0369 A79-32277]...

Recent results of an inflight simulation of augmented dynamics in fighter approach and landing [AIAA 79-1886]...

Recent progress in active controls applied to flutter suppressors [p0369 A79-32277]...
CONVERGENT-DIVERGENT NOZZLES

CONVERGENT NOZZLES

CONVECTIVE BEAT TRANSFER

CONVECTION

CONVAIR MILITANT AIRCRAFT

CONTROLLERS

NT FORCED CONVECTION

U MILITARY AIRCRAFT

CONVECTION CURVES

A small aircraft gust-probe system for studies of boundary layer convection and transport

CONVECTIVE HEAT TRANSFER

Recent advances in convectively cooled engine and airframe structures for hypersonic flight

Jet cooling at the rim of a rotating disk

Gas turbine combustor cooling by augmented backside convection

Heat transfer investigation of laminated turbine airfoils

Convective heat exchange of gas-particle stream in flow passage of throttling device with vane-type turning element

Measurements of heat transfer in circular, rectangular and triangular ducts, representing typical turbine blade internal cooling passages using transient techniques

Transient heat conduction in intense radiative and convective environments

Numerical methods for solution of radiative-convective heat transfer problems - Radiative boundary layer for hypersonic blunt bodies in dense atmosphere

Recent advances in convectively cooled engine and airframe structures for hypersonic flight

CONVERGENCE

Comparative study of the convergence rates of two numerical techniques

Adaptive approximations in finite element structural analysis for aircraft components

On the balancing convergence of flexible rotors with special reference to asymmetric rotors

CONVERGENT NOZZLES

Flow of ideal gas in tapering nozzles

Aerodynamic and acoustic comparisons of scaled-down and actual engine jets

CONVERGENT-DIVERGENT NOZZLES

Characteristics of Laval nozzles with gas dynamic regulation

COOLING SYSTEMS

An approximate method for calculating a laminar boundary layer in micrometers

Experiments of shock associated noise of supersonic jets

Effect of several geometric parameters on the static internal performance of three nonaxisymmetric nozzle concepts

CONVEYORS

U V/STOL AIRCRAFT

A combined air-cushion and endless belt transportation system

COOLANTS

NT ENGINE COOLANTS

COOLING

NT AIR COOLING

NT FLUID COOLING

NT GAS COOLING

NT LIQUID COOLING

NT REGENERATIVE COOLING

NT SUPECOOLING

NT SURFACE COOLING

Thermal design of airborne radars - Present and future

Effect of cooling of the central body on startup, separation of the flow at the intake and the throttling characteristics of air scoops at supersonic and hypersonic velocities

Turbine Blade Cooling

Turbine blade cooling

Alternative turbine cooling technology

The aerodynamic penalties associated with turbine blade cooling

Hot flow testing of multiple nozzle exhaust systems --- Cooling exhaust gas from gas turbine powered ships

Flameless braking and heat treatment of a plate-fin sandwich actively cooled panel

COOLING PINS

The utilization of data relating to fin geometry and manufacturing processes of ceramic matrix systems to the design of ceramic heat exchangers

COOLING SYSTEMS

Performance and design of transpiration-cooled turbine blading

Turbo-driven refrigeration units in gas turbine engine cooling systems - Russian book

The application of foil air bearing turbomachinery in aircraft environmental control systems

Advanced environmental cooling concepts for supersonic aircraft

F-18 air conditioning system

Recent advances in convectively cooled engine and airframe structures for hypersonic flight

Soda and aircraft measurements of turbulence parameters within cooling tower plumes

Gas turbine combustor cooling by augmented backside convection

Heat transfer investigation of laminated turbine airfoils

Determination of heat transfer coefficients around a blade surface from temperature measurements

Lower sonic temperature - Lower life cycle cost
COORDINATE SYSTEMS

Heat transfer over the initial section of turbine blade cooling channels under conditions of rotation

Model tests on cooling of gas turbine blades

Gas turbine disc sealing system design

Advanced fabrication techniques for cooled engine structures

Radiative, actively cooled panel tests results

A cooling system for an aircraft having a cruise range from Mach 2 to Mach 8

Laminated turbine vane design and fabrication -- utilizing film cooling as a cooling system

COORDINATE SYSTEMS

COORDINATE TRANSFORMATIONS

Transformation of coordinates associated with linearized supersonic motions

Flag-lag stability with dynamic inflow by the method of multiblade coordinates -- for rotor deflections in forward flight

Generation of body-fitted coordinates for turbine cascades using multigrid

Three-dimensional coordinates about wings of an elbow-shaped air intake --- of gas turbine engines

Complex quaternion notation in coordinate transformations -- missile launching aircraft-inertial space transformations

COORDINATES

UT COORDINATES

Influence of gridboard line width and spacing on windscreen distortion measurements

COPILOTS

U AIRCRAFT PILOTS

Fasili integral fuel tank sealants, part 1

CORE FLOW

Aerodynamic and acoustic effects of eliminating core swirl from a full scale 1.6 stage pressure ratio fan (GR-5A)

Influence of the flow angle on the characteristics of an elbow-shaped air intake -- of gas turbine engines

Investigation of three-dimensional shock/boundary layer interactions at swept compression corners

A careful numerical study of flowfields about external conical corners. 1 -- Symmetric configurations

CORONA DISCHARGES

U ELECTRIC CORONA

CORONAS

UT ELECTRIC CORONA

CORRUPTION

Research on self-correcting wind tunnels

Wall corrections in transonic wind tunnel: Equivalent porosity

COORDINATION

UT CROSS CORRELATION

UT DATA CORRELATION

UT SPECTRAL CORRELATION

UT STATISTICAL CORRELATIONS

An off-design correlation of part span damper losses through transonic axial fan rotors

Delta method, an empirical drag buildup technique

COUPLE Correlation functions

COUPLED Correlations

A new high product rate 10 nanosecond, 256 point correlator for weapon system applications and fluid mechanics research

CORROSION

UT FUEL CORROSION

UT BONDING

UT SYMPH CORROSION

Influence of corrosion damage on fatigue crack initiation

Handling problems resulting from compressor deterioration -- in single engine jet aircraft

Development of a new flame sprayed erosion resistant abradable coating system -- for gas turbine engine parts

Effect of a chrozoa-containing fuel additive on hot corrosion

Corrosion tracking and prediction for C-141A aircraft maintenance scheduling

Turbine blades: Erosion and Corrosion. Citations from the NTIS data base

Turbine blades: Erosion and Corrosion. Citations from the Engineering Index data base

The trajectories of spherical particles in flow through cascaded turning vanes

Internally coated air-cooled gas turbine blading

A filerability study of corrosion inhibited JP-4

A new high product rate 10 nanosecond, 256 point correlator -- for weapon system applications

Corrosion resistance

UT OXIDATION RESISTANCE

Turbine blades: Erosion and Corrosion. Citations from the NTIS data base

Turbine blades: Erosion and Corrosion. Citations from the Engineering Index data base

Effect of an anti-corrosion penetrant on the fatigue life of various riveted joints during flight simulation tests

Evaluation of a new flame sprayed erosion resistant abradable coating system -- for gas turbine engine parts

TECHNIQUE FOR ENGINE MAINTENANCE COST FORECASTING

A technique for engine maintenance cost forecasting

Effect of an anti-corrosion penetrant on the fatigue life of various riveted joints during flight simulation tests

CORROSION RESISTANCE

UT OXIDATION RESISTANCE

Turbine blades: Erosion and Corrosion. Citations from the NTIS data base

Turbine blades: Erosion and Corrosion. Citations from the Engineering Index data base

Effect of a chrozoa-containing fuel additive on hot corrosion

Effect of an anti-corrosion penetrant on the fatigue life of various riveted joints during flight simulation tests

CORROSION RESISTANCE

UT OXIDATION RESISTANCE

Turbine blades: Erosion and Corrosion. Citations from the NTIS data base

Turbine blades: Erosion and Corrosion. Citations from the Engineering Index data base

Effect of an anti-corrosion penetrant on the fatigue life of various riveted joints during flight simulation tests

CORROSION RESISTANCE

UT OXIDATION RESISTANCE

Turbine blades: Erosion and Corrosion. Citations from the NTIS data base

Turbine blades: Erosion and Corrosion. Citations from the Engineering Index data base

Effect of an anti-corrosion penetrant on the fatigue life of various riveted joints during flight simulation tests

CORROSION RESISTANCE

UT OXIDATION RESISTANCE

Turbine blades: Erosion and Corrosion. Citations from the NTIS data base

Turbine blades: Erosion and Corrosion. Citations from the Engineering Index data base

Effect of an anti-corrosion penetrant on the fatigue life of various riveted joints during flight simulation tests

CORROSION RESISTANCE

UT OXIDATION RESISTANCE

Turbine blades: Erosion and Corrosion. Citations from the NTIS data base

Turbine blades: Erosion and Corrosion. Citations from the Engineering Index data base

Effect of an anti-corrosion penetrant on the fatigue life of various riveted joints during flight simulation tests
### SUBJECT INDEX

**COST EFFECTIVENESS**
- A comparison of costs associated with local actions to reduce aircraft noise impacts
- Technical characteristics and cost data for the IL-62 and IL-62M aircraft and optimal flight conditions
- The results of synthesizing and evaluating potential solutions for Multi-Function Inertial Reference Assembly/MBRA candidate configurations for transport and fighter aircraft
- Air Force Space Laser Communications
- Diagnostics of wear in aerostatic systems
- Identification of high payoff research for more efficient aircraft engines for transport and fighter aircraft
- Air Force Space Laser Communications
- Ramjet cost estimating handbook
- Avionics standardization potential analysis
- Aircraft transparency failure and logistical cost analysis. Volume 1: Program summary
- Aircraft transparency failure and logistical cost analysis. Volume 2: Design data and maintenance procedures
- Aircraft transparency failure and logistical cost analysis. Volume 3: Transparency analysis
- Ramjet cost estimating handbook
- Construction using carbon fiber composite materials and aluminum: A cost comparison

### COST EFFECTIVENESS

- An evaluation technique for determining the cost effectiveness of condition monitoring systems
- Evolution of the turboprop for high speed air transportation
- A glance at Soviet helicopter design philosophy
- Advanced technology impact upon ATC self test — by use of microprocessors and LSI
- Analysis of the economic benefits of utility helicopter safety design features
- Cost and operational effectiveness of RBM improvements
- Cost effective improvement of the timeless C-130 Hercules airlifter
- TP 41 condition monitoring system effectiveness study
- Extensive cost reduction studies: Composite engine component - L-1011 commercial airliner
- Manufacture of ring rolled components for gas turbine engines
- Introducing cost effectiveness into the tactical airplane design cycle in a cost effective manner
- Compromise between economic concerns and application of new technologies in the definition of a new airplane project
- Cost-effective production of flight vehicle shells by the pressure and flow-pressure processes
- Economical processing of fiber-reinforced components with thermal expansion bonding — CTRP structures for aircraft applications
- Compromise between economic concerns and application of new technologies

### COST ESTIMATES

- Cost effectiveness analysis of the proposed revisions in the exhaust emission standards for new and in-use gas turbine aircraft engines based on EPA's independent estimates
- Economical processing of fiber-reinforced composite materials and aluminum: A cost comparison

### COST REDUCTION

- Payback period — An engineering cost/benefit method for aircraft engines
- Problems of increasing the efficiency of Rallex. II airframe operations
- Analysis of Coast Guard missions for a maritime patrol airship
- The hydrofoil sea-plane as high-speed naval craft
- Propulsion system and airframe integration design for advanced air-to-surface aircraft
- A cheap, effective icing detector for general aviation aircraft
- Cost effectiveness analysis of the proposed revisions in the exhaust emission standards for new and in-use gas turbine aircraft engines based on EPA's independent estimates
- Solution of design problems for linear systems with uncertain parameters — Application to lift airships
- Weight and cost estimating relationships for heavy lift airships
- Lockheed urges hydrogen fuel
- Aircraft engine developments centre on improved performance, higher efficiency
- The Avionics Laboratory Predictive Operations and Support (ALPOS) cost model, volume 2
- An appraisal of models used in life cycle cost estimation for USAR aircraft systems
- The production function and airframe cost estimation
- Maintenance cost study of rotary wing aircraft, phase 2
- Naval aircraft operating and support cost estimating model, FY 1977 revision
- Avionics cost development for use of Loran-C navigation systems by low performance general-aviation aircraft
- A path performance diagnostic system to reduce J75-P-17 engine overhaul costs
- Economy in flight operations
- The F/A-18 challenge - Readiness and low cost operation
- The perils and pitfalls of low-cost vibration alternatives - Practical experience with pneumatically excited flutter suppression --- electronic equipment tests
COSTS

An estimate of the economic benefits from a communication satellite to oceanic air traffic
[SAE PAPER 78-0660]
p0075 A79-16087

Extensive cost reduction studies: Composite engine component - L-1011 commercial airliner
[SAE PAPER 78-0660]
p0112 A79-17091

Turbine engine cost reduction using life cycle cost techniques
[SAE PAPER 78-0660]
p0187 A79-20807

Future avionics - Keeping capability up, costs down
[SAE PAPER 78-0660]
p0257 A79-25903

New technology in commercial aircraft design for minimum operating cost
[AIAA 79-0690]
p0275 A79-27356

Computer graphics create the new wave of design
[SAE PAPER 78-0660]
p0460 A79-37046

Cost benefits from improved adaptation life prediction technology --- for aircraft engine combustor and turbine parts
[SAE PAPER 79-1154]
p0467 A79-38963

Damage tolerant design - An approach to reducing the life cycle cost of gas turbine engine disks
[AIAA PAPER 79-1169]
p0468 A79-38976

The nonotor gas turbine
[AIAA PAPER 79-1230]
p0470 A79-38994

Ten years of aerospace experience with the fenestron and conventional tail rotor
[AHS 78-12]
p0623 A79-48870

Small helicopter design - Evolution to simplicity
[SAE PAPER 80-0918]
p0633 A79-49108

Derivative engines for the 1980s will help limit acquisition and maintenance costs
[AIAA PAPER 79-1360]
p0511 A79-40764

Flight test technology development - A preview of Dynotech --- dynamic modeling
[AIAA 79-0184]
p0643 A79-50206

A direct drive fly-by-wire system
[SAE 80-0101]
p0654 A79-50435

Ten years of aerospace experience with the fenestron and conventional tail rotor
[SAE 78-12]
p0662 A79-50870

Small helicopter design - Evolution to simplicity
[SAE 80-0918]
p0663 A79-49108

Derivative engines for the 1980s will help limit acquisition and maintenance costs
[AIAA 79-1360]
p0511 A79-40764

Flight test technology development - A preview of Dynotech --- dynamic modeling
[AIAA 79-0184]
p0643 A79-50206

Reduction of computer usage costs in predicting unsteady aerodynamic loadings caused by control surface actions: Analysis and results
[WAVA-CR-3009]
p0360 A79-20072

Hybrid technology cost reduction and reliability improvement study
[AD-A062247]
p0270 A79-20319

COSTS

NT AIRPLANE PRODUCTION COSTS

NT FREIGHT COSTS

NT LOW COST

Findings and views concerning the erection of aviation gasoline from the mandatory petroleum allocation and price regulations
[SAR/VEA-1024]
p0557 A79-27336

COUNTERMEASURES

NT ELECTRONIC COUNTERMEASURES

NT JAMMING

NT OPTICAL COUNTERMEASURES

COPPELED MODES

A comparison of predicted and experimental rotor loads to evaluate flap-lag coupling with blade pitch
[AIN 78-19]
p0121 A79-18145

COPPLLING

Airplane cable parameter study
[AD-A056267]
p0152 A79-12077

COPPLING

NT CROSS COUPLING

ERP coupling to a composite aircraft
[AD-A064296]
p0249 A79-25321

Advanced coupling development program
[AD-A064296]
p0427 A79-22522

COUPLING COEFFICIENTS

Effect of structural coupling parameters on the flap-lag forced response of a rotor blade in forward flight using Floquet theory
[p0131 A79-18658

SUBJECT INDEX

COUPLING

A reliable spline coupling --- for aircraft power transmission
[ASAE PAPER 78-19/ABM-11]
p0189 A79-19725

Aircraft engine driven accessory shaft coupling improvements using high-strength nonmetallic adapter/bushings
[AD-A066237]
p0595 A79-29193

COWELL METHOD

U ON-METRICAL INTEGRATION

COUPLING

Experimental and theoretical study of the influence of various parameters on an icing section
[p0132 A79-10012

CRACK FORMATION

U CRACK INITIATION

CRACK INITIATION

Fretting fatigue, with reference to aircraft structures
[SAE PAPER 79-0612]
p0456 A79-36741

Elimination of friction induced thermal cracks in landing gear components
[p0531 A79-43273

Influence of corrosion damage on fatigue crack initiation
[MET-T8-75060-0]
p0242 A79-17269

Introduction to fracture mechanics --- crack initiation and stress corrosion cracking of aircraft structures
[p0372 A79-20410

Residual surface strain distributions near holes which are coldworked to various degrees
[p0598 A79-29550

CRACK PROPAGATION

Finite element analysis of fatigue crack growth in aircraft components
[p0375 A79-16794

Fracture mechanics problems for gas turbine engine structures
[p0113 A79-17542

Crack speed and propagation resistance prediction for steels and Al. alloy helicopter components
[p0136 A79-18700

Crack free and cracked life of the pressurized cabin of the 300 B = Calculation, tests and design measurements to improve damage tolerance
[p0156 A79-20119

Research conducted by ONERA on the relationship between the behavior and cumulative damage of materials and structures
[ONERA, TP NO. 1978-50]
p0156 A79-20121

The prediction of fatigue crack growth under flight-by-flight loading
[p0251 A79-25482

Four lectures on fatigue crack growth
[p0251 A79-25480

Fatigue crack propagation rate at low delta-K of two aluminum sheet alloys, 2024-T3 and 7075-T6
[p0376 A79-20885

Gust spectrum fatigue crack propagation in candidate skin materials
[p0399 A79-33201

Fretting fatigue, with reference to aircraft structures
[SAE PAPER 79-0612]
p0456 A79-36741

Evaluation of a crack-growth gauge for monitoring possible structural fatigue-crack growth
[p0562 A79-44858

Probability that the propagation of an undetected fatigue crack will not cause a structural failure
[AD-A057355]
p0049 A79-11439

Heat treatment studies of aluminum alloy forgings of the 74.61 type. Fatigue crack propagation performance under maneuver spectrum loading
[MET-T8-76074-0]
p0239 A79-16965

Environmental effects on crack growth in flight-simulation tests on 2024-T3 and 7075-T6 material
[MET-T8-76101-0]
p0295 A79-18012

Stress intensity factors in third-stage fan disk of the TP-30 turbine engine
[AD-A0620103]
p0365 A79-20119

Fatigue crack growth --- aircraft reliability
[p0372 A79-20412

Fatigue crack growth analysis
[p0373 A79-20415

Effect of flight load spectra variations on fatigue life of riveted specimens and crack

CREEP BUCKLING

Separation of core noise and jet noise [AIAA PAPER 79-0589]
Direct correlation of noise and flow of a jet using laser doppler [TITAS-230]

CROSS COUPLING
A dynamic calibrating apparatus for cross derivative experiments --- in high performance aircraft design
Considerations in the analysis of flight test maneuvers
Sensitivity of aircraft spinning motion to dynamic cross-coupling and acceleration derivatives
Experiments on cross-coupling and translational acceleration derivatives
Sensitivity of aircraft motion to aerodynamic cross-coupling at high angles of attack
Lateral-longitudinal cross-coupling effects - on aircraft stability

CROSS FLOW
Aerodynamic field induced by a jet penetrating a composite wing at subsonic velocities [ONERA, TP No. 1970-81]
Hyperersonic flow over conical wing-body combinations
Investigation of cross flow shocks on delta wings in supersonic flow [AIAA PAPER 79-0245]
On the stability of the boundary layer on a transonic swept wing [AIAA PAPER 79-0264]
An experimental study of a jet issuing from a lifting wing --- vertical-horizontal flight transitions in VTOL aircraft
The stability of the boundary layer on a swept wing with wall cooling
Flight investigation of piloting techniques and crosswind limitations using a research type crosswind landing gear [NASA-TP-1423]

CROSSFLOW WINGS
An experimental wind-tunnel investigation of a ram-air-spooler roll-control device on a forward-control missile at supersonic speeds [NASA-TP-7153]
Supersonic flow in the area of antisymetrical thin cruciform wings with supersonic leading edges in a horizontal plane, with consideration of flow separation on the edges [AD-0855993]

CRUDE OIL
Findings and views concerning the exemption of aviation gasoline from the mandatory petroleum allocation and price regulations [DOE/ERA-0024]

CRUSHER MISSILES
Unconstrained supersonic cruise and maneuvering configuration concepts --- for long range air-ground and air-air missiles [AIAA PAPER 79-0220]
Analysis, storage, and retrieval of elevation data with applications to improve penetration [AD-0856876]

CRUISING FLIGHT
Definition and analytical evaluation of a power management system for tilt-rotor aircraft [ABS 78-48]
Gust response and its alleviation for a hingeless helicopter rotor in cruising flight [AIAA PAPER 79-19606]

CREEP
Creep calculation for thin-walled structures operating under unsteady heating and loading conditions
Estimation of fatigue life of Al-alloy used for compressor disc of jet engine
Thermal-structural analysis of air-cooled gas turbine blades [NASA-TP-78563]

CREEP BUCKLING
Experimental and finite element investigation of the buckling characteristics of a beaded skin panel for a hypersonic aircraft

CREEP PROPERTIES
Prediction of gas-turbine alloy creep characteristics

CREEPS
Current research and applications in the aerospace field - Overview

CROSS CORRELATION
Aircraft noise identification system by correlation technique

A-144
Research conducted by ONERA on the relationship between the behavior and cumulative damage of materials and structures.

Fatigue reliability under multiple-amplitude loads.

Determination of inspection intervals for aircraft structures on the basis of fracture mechanics.

Determination of sample size in flight loads programs for aircraft structures.

CUBING
Pressure-controlled thermal expansion molding of advanced composite EPP wing structure.

CYLINDRICAL SHELLS

CUMULATIVE CT-114 AIRCRAFT CRYSTAL GROWTH

CRYSTAL GROWTH NT LIQUID CRYSTALS NT LIQUID HYDROGEN NT LIQUID OXYGEN NT DIRECTIONAL SOLIDIFICATION (CRYSTALS)

CROSSBREEDED AIRCRAFT 7 F-8 AIRCRAFT CYLINDRICAL SHELLS

Cylindrical shells

Cylindrical aircraft ground effect machine

Cylindrical bodies

Cylindrical antennas

Cylindrical airflow.

Cylindrical flow.
DAMPIRNG [TRADEMARK]
Lift and drag of sail aerofoil

DAMPIRNG [TRADEMARK]
Lift and drag of sail aerofoil

DAMPIRNG [TRADEMARK]
Lift and drag of sail aerofoil
DATA PROCESSORS

Enhancements of radar data-handling networks --- (AD-1058142) p0062 A79-48702
Real-time compression of video signals --- (AD-1058142) p0063 A79-48712

DATA CONVERTERS

NT ANALOG TO DIGITAL CONVERTERS
Correlation of experimental and theoretical steady-state spinning motion for a current fighter airplane using rotatio- balance aerodynamic data (AD-1058142) p0064 A79-12069
On the application of certain statistical methods to wind-tunnel testing (ARC-CF-1390) p0065 A79-15919
Correlation of predicted and measured thermal stresses on an advanced aircraft structure with similar materials [NASA-TR-72862] p0066 A79-20989
A correlation of mixing noise from concentric jets with inverted flow profiles [NASA-TP-1301] p0067 A79-22849
Buffeting measurements in flight and in a wind tunnel --- T-33 aircraft [AAAP-WT-76-17] p0068 A79-23104
Correlation of predicted and measured thermal stresses on an advanced aircraft structure with similar materials --- hypersonic heating simulation [NASA-TR-72865] p0069 A79-27088
Correlation of data related to shock-induced trailing-edge separation and extrapolation to flight Reynolds number [NASA-CR-3719] p0070 A79-31195

DATA HANDLING SYSTEMS

U DATA SYSTEMS

DATA LINKS

AIRC Communications Addressing and Reporting System /ACARS/ - The data link that got implemented and why p0072 A79-13082
Ground-air and air-ground communications links - Voice and data link in different systems p0073 A79-13234
The AGDLS - A multipurpose system for In-flight evaluation of new ATC techniques --- Air Ground Data Link System p0074 A79-13264
Real-time/near real-time receive wideband links --- airborne reconnaissance systems p0075 A79-17146
Air Force Space Laser Communications p0076 A79-38706
Investigation concerning an Airborne Terminal AT/ for pilot/controller communication over a ground/board-ground data link [DGLE PAPER 79-050] p0077 A79-42376
JTIDS relative navigation - Architecture, error characteristics and operational benefits --- Joint Tactical Information Distribution System p0078 A79-48715
Investigation of the feasibility of using the discrete address beacon system data link for non-ATC communications [AD-1058453] p0079 A79-13023
An asynchronous data transmission system with low error probability for the SETAC landing aid p0080 A79-31468
Performance predictions and trials of a helicopter UHF data link p0081 A79-31476

DATA MANAGEMENT

Geometric data transfer --- for computerized aircraft engineering drawings [ATAA PAPER 79-164a] p0082 A79-47910

DATA PROCESSING

NT DATA CORRELATION NT DATA REDUCTION NT DATA SMOOTHING NT MULTIPROCESSING (CCMPPS) NT OPTICAL DATA PROCESSING NT PARALLEL PROCESSING (COMPUTERS) NT SCENE ANALYSIS NT SIGNAL PROCESSING

A-147
DATA RECORDERS
Structural Integrity Recording System for helicopters
[AHS 78-57] p0125 A79-18178
Use of ADS recorded data for assessing service
load experience --- aircraft Integrated Data
System
0562 A79-44455
Overview of the C-5A Service Loads Recording Program
0562 A79-44456
DATA RECORDING
Recording methods for steady state and transient
signals --- aircraft engine tests
0253 A79-25849
Record keeping on aircraft instruments
[PB-295698/5] p0706 W79-32208
DATA REDUCTION
WT DATA SMOOTHING
Evaluation of a method to extract performance data
from dynamic maneuvers for a jet transport
aircraft
0155 A79-20118
Application of advanced data reduction methods to
gas turbine dynamic analysis
0477 A79-36024
Propeller aircraft noise around general aviation
airports
[SACE PAPER 790594] 0455 A79-36728
Review of aircraft bearing rejection criteria and
causes
0564 A79-45250
Aircraft wake vortex characteristics from data
measured at John F. Kennedy International Airport
[AD-A055059] p0158 W79-14026
Estimation of aerodynamic characteristics from
dynamic flight test data
0177 W79-15075
Interpretation of results
0296 W79-16066
Structuring of data systems: Psychophysiological
data from the dynamic flight simulator
[AD-A067175] 0564 W79-27014
DATA SAMPLING
Periodically unsteady flow in an imbedded stage of
a multistage, axial-flow turbomachine
[SACE PAPER 7907-6] p0195 A79-22328
Automating prevailing visibility --- airport
videograph sensor assessments
0346 A79-31898
A design method with application to prefiltering and
smearing-rate selection in digital flight
control systems
0095 W79-12095
DATA SMOOTHING
Kalman filtering and smoothing in Fotonap for
orbit determination using GPS measurements
[AD-A066463] p0479 W79-22071
A computer program for double sweep optimal
smoothing
[AD-A066512] 0502 W79-25278
Low ERM signature response techniques
[AD-A066211] 0557 W79-29397
DATA SYSTEMS
Multiplex system for the Hughes advanced attack
helicopter - YAH-60
[AMS 78-14] p0120 A79-18140
Statistics of disturbances and maintenance
according to conditions at Interflug, III --
technical requirements concerning the program
for the processing of disturbance data by means of
electronic data processing
0250 A79-25371
'KMD' /Reliability on Demand/ as an aid in
aircraft maintenance
[DGLR 75-C20] 0347 A79-31947
An optical-fiber multiterminal data system for
aircraft
0450 A79-36404
Realization of a helicopter-oriented real-time
data system for research, experimental, and
prototype flight testing
[AMS 78-00] p0632 A79-49102
Aeronautical information data subsystems /AIDS/
0467 A79-50920
Federal Energy Data System (FEDS) technical
documentation

A-148

SUBJECT INDEX

Avionics technology for tactical data handling
0050 W79-11542
0050 W79-25979
DATA TRANSMISSION
Emergency position-indicating radio-beacon systems
using 406 MHz band mobile-satellite service
0112 A79-17095
High speed digital transmission, the key for a
simple Aerostar airborne equipment
0112 A79-17098
The application of multiplex data transmission
standards to medium sized military helicopters
0112 A79-18664
Joint aircraft-ground systems automation: Real
time data transmission requirements --- for wind
hazard warning
0205 A79-23592
An optical communication system for aircraft
0200 A79-28034
An optical-fiber multiterminal data system for
aircraft
0050 A79-36404
Distributed TDMA - An approach to JTIDS phase II
-Time Division Multiple Access Joint Tactical
Information Distribution System
0638 A79-05954
A reliable and survivable data transmission system
for avionics processing
034A W79-20025
A digital communication system as gateway between
adjacent computerized air traffic control centres
0070 W79-31463
DC 3 AIRCRAFT
Aircraft accident report: National Jet Services,
Inc., Douglas DC-3, N51071, Evansville Dennis
Regional Airport, Indiana, 13 December 1977
[NTSB-AAR-78-10] p0591 W79-29161
DC 8 AIRCRAFT
Aircraft accident report: United Airlines, Inc.,
Douglas DC-8-54, N8047U near Kaysville, Utah, 18
December 1977
[NTSB-AAR-78-8] p0591 W79-29159
DC 9 AIRCRAFT
The DC-9 Super 80 - Much more than a simple stretch
0638 A79-49223
Aircraft accident report: E. S. M. Group, Inc.,
Cessna Citation, N51M and North Central
Airlines, Inc., DC-9-30, N9575 LaGuardia
Airport, Flushing, New York, 21 June 1978
[NTSB-AAR-78-3] p0362 W79-20091
Wind shear during approach: An investigation into
the influence of a tower measured wind
environment on the symmetric motions of a
simulated aircraft during an automatic approach
--- DC 9 aircraft
[WAF-TH-77078-0] p0704 W79-32192
DC 10 AIRCRAFT
Anatomy of an aircraft accident
004A W79-33644
What makes a plane crash --- DC-10 crash
investigation
0513 A79-41727
Numerical calculation of transonic flow past a
swept wing by a finite volume method
[COMPENSA-124] p0034 W79-10036
Aircraft accident report: Continental Aline, Inc.,
McDonnell-Douglas DC-10-10, N680US, Los Angeles,
California, March 1, 1979
[NTSB-AAR-79-1] p0289 W79-17826
DE HAVILLAND AIRCRAFT
DE HAVILLAND DH-106 AIRCRAFT
The design and fabrication of the de Havilland
DC-7 nose avionics compartment using aramid
composites
0111 A79-17059
Aircraft accident report: Rocky Mountain Airways,
Inc., DeHavilland DHC-6-300, N248MR, Cheyenne,
Wyoming, 27 February 1979
[NTSB-AAR-79-10] p0591 W79-29157
Aircraft accident report: Alaska Aeronautical
Industries, Inc., DeHavilland DHC-6-200, N563MA,
near Nome, Alaska, 6 September 1977
[NTSB-78-5] p0591 W79-29160
DE HAVILLAND DH-106 AIRCRAFT
DE LAVAL NOZZLES
DE CONVERGENT-DIVERGENT NOZZLES
DE GRADIENTING DEVICES
DRAF ENCOURAGE
Stability analysis of relative navigation systems
DEICING

Aircon electrically heated acrylic --- for ice formation prevention on aircraft transparencies [AD-PAPER 7906000] p0455 179-36732

Vibratory ice protection for helicopter rotor blades [AD-1057329] p0045 179-11038

The electro-impulse de-icing method --- aircraft structures [AD-227] p0433 179-23073

Helicopter Icing Symposium [AD-1067981] p0541 179-26048

Icing tests of a UH-1 helicopter with an electrothermal ice protection system under simulated and natural icing conditions [AD-1067737] p0541 179-26050

Hybrid heater/paste and heater/flexible coating schemes for de-icing helicopter rotor blades p0136 179-18685

Icing tests of a small gas turbine with inertial separation anti-icing system p0032 179-10015

Natural icing flight tests and additional simulated icing tests of a UH-1 helicopter incorporating an electrothermal ice protection system [AD-1059704] p0162 179-14084

Roads and runways, snow removal and deicing techniques. A bibliography with abstracts [NTIS/PS-78/1284/5] p0238 179-16884

DELTA AIRCRAFT DELIVERY

Delay

The FAA's airport landside model: Analytical approach to delay analysis [AD-3051165] p0167 179-16115

Terminal area delay and fuel consumption analysis [FAA-EM-78-20] p0231 179-16826

A method to determine the delays of landing aircraft with respect to runway capacity [NLR-NP-77016-U] p0232 179-16835

Comparison of some methods to determine the delays of landing aircraft with respect to runway capacity [NLR-NP-77016-U] p0704 179-32191

DEICING SYSTEMS

DELTA WINGS

Investigation of cross flow shocks on delta wings in supersonic flow [AIAA PAPER 79-0345] p0202 179-23551

Transonic flows past nonaxisymmetric slender shapes - Classical equivalence rule analysis p0315 179-26612

Approximate analysis of strake wings at low speeds p0242 179-30608

Flow past a small-aspect-ratio delta wing with vortex filament breakdown p0309 179-32054

Investigation of the regimes of flow past the upper surfaces of delta wings with shock waves separated from the leading edges p0410 179-35110

Optimization of wing structures to satisfy strength and frequency requirements p0411 179-35717

Further advancements in the concept of delta-winged hybrid-airships p0523 179-42393

Modern concepts for design of delta wings for supersonic aircraft of second generation --- for drag reduction p0561 179-43993

A careful numerical study of flowfields about external conical corners. I - Symmetric configurations [AIAA PAPER 79-15112] p0575 179-46701

Overall aerodynamic characteristics of caret and delta wings at supersonic speeds p0601 179-47012

The calculation of non-linear aerodynamic characteristics of wings and their wakes in subsonic flow p0602 179-47099

Solution of a mixed boundary value problem for flow past a thin delta wing p0640 179-89882

Synthesis of the thickness effect in the case of flow past a slender delta wing with leading edge vortices p0687 179-52268

Flow around small-aspect-ratio delta wing with vortex "bursting" p0696 179-54058

A numerical solution of supersonic and hypersonic viscous flow fields around thin planar delta wings p0302 179-10018

A numerical solution of supersonic and hypersonic viscous flow fields around thin planar delta wings [AD-1050513] p0043 179-11003

Nonlinear steady and unsteady aerodynamics of wings and wing-body-combinations p0085 179-12010

Flow-field in a vortex with breakdown above sharp edged delta wings [NASA-TP-72339] p0086 179-12017

Analytical studies of separated vortex flow on highly swept wings [NASA-CR-3021] p0099 179-13006


Analysis of the zero-lift wave drag measured on delta wings [ABC-R/H-3018] p0284 179-17806

A modification to linearized theory for prediction of pressure loadings on lifting surfaces at high supersonic Mach numbers and large angles of attack [NASA-TP-1406] p0286 179-17806

A slender delta wing oscillating in surface waves [VTH-LR-257] p0288 179-17818

XP4D Skyray development: Now it can be told [ILR-23] p0548 179-18997

Calculation of supersonic viscous flow over delta wings with sharp subsonic leading edges p0530 179-18909

A numerical solution of supersonic and hypersonic viscous flow fields around thin planar delta wings [AD-1006532] p0531 179-23028

Lee side flow field over slender delta wings of finite thickness [ILR-23] p0586 179-27103

Subsonic wind-tunnel investigation of leading-edge devices on delta wings (data report) --- conducted in Langley 7- by 10-foot subsonic wind tunnel
DIGITAL RADAR SYSTEMS

Enhancements of radar data-handling networks
A technical review of the radar systems implemented by Procontrol
Developments in radar data processing at the London Air Traffic Control Centre
Multisensor utilization investigation --- for automated ATC surveillance
Track-while-scan algorithms in a clutter environment
Dependence of track quality on the number of radar sensors --- air traffic control
The future --- ART III --- Automated Radar Terminal Systems for air traffic control
System for the display of extracted radar data on the basis of minicomputer-controlled display devices /DEMO-NC/ for an employment in Air Traffic Control
Adaptation of a digital airborne radar for use on the microphysics research aircraft
Digital target extraction at civil air traffic control radar installations in the Federal Republic of Germany and possibilities for its further development from the point of view of the Federal Institute of ATC
New approaches concerning the implementation of radar target extractors with the aid of very fast microprogrammable data processors
Concept of modular software for the stepwise construction of radar data processing systems with minicomputers, taking into account as example the ATX track System
Hardware and software structure of a coordination system for air traffic control on the basis of flight plan data
Problems of computer-aided tracking, giving particular attention to radar which can be electronically turned
Built-in test of A/C converters - Present approaches and recommendations for improved BIT effectiveness --- in airborne radar systems
Digital sensor simulation at the Defense Mapping Agency Aerospace Center
Combined VHF-band tracking radar
Automated tracking for aircraft surveillance radar systems
High speed radar processing using CMOS/SOS technology

Digital simulation of the Operational Loads Survey flight tests
ANS 78-58

Computational aerodynamics development and outlook
/Dryden Lecture in Research for 1979/ [AIAA PAPER 79-0129]
Structural parameter identification from measured vibration data --- for digital simulation of multiple shaker test
/AIAA 79-0829/

H/=1 least squares method for the Navier-Stokes equations --- numerical simulation of separated viscous flows around wings and airfoils
/AIAA 79-2904

Verification and validation of the NASA Terminal Configured Vehicles /TCV/ Wind Analysis program using real-time digital simulation
Study of some characteristics of helicopter rotor operation on the basis of a numerical experiment
On some methods for the numerical simulation of flows with complex structure
Digital simulation of a three-phase generator
A real-time simulation facility for advanced digital guidance and control system research
A study of some characteristics of the operation of a lifting propeller by numerical experiment
Airplane brake-energy analysis and stopping performance simulation
Advanced Digital Simulator system (ADSS) --- modeling sensors and their operating environments
Aircraft hydraulic systems dynamic analysis
Alternatives for jet engine control
A developmental computer model for investigations of air traffic management problems: A case investigating two decision strategies

Digital simulation of the Operational Loads Survey

Digital navigation

A digital fuel control system for gas turbines
Coupling of ILS and inertial data in all weather approach and landing operations
Design of the TKS system in relation to experience with the CCV-P04 program and functional redundancy --- digital flight control systems for tactical fighter aircraft
Automatic failure detection systems in commercial aircraft
Digital integrated test system improves testability --- of avionics
High speed digital transmission, the key for a simple hermetic airborne equipment
The coming of age of digital electronics in commercial transports --- expediting signal processing technology and Boeing 767 avionics
Approach and landing operations

Application of digital controls on the quiet clean short haul experimental engines
Application of digital controls on the quiet clean short haul experimental engines

RELSIM-A systems reliability simulation code
Increasing guidance accuracy through use of an integrated digital piloting system
Increasing effectiveness of piloting systems by modern methods of digital signal processing
New paths for the development of aircraft equipment opened up by the use of modern computer technology --- digital systems for civil aviation
Dual digital flight control redundancy management system development program
Flight test of a VTOL digital autoland system along complex trajectories

Subject Index

Aircraft brake-energy analysis and stopping performance simulation
Advanced Digital Simulator system (ADSS) --- modeling sensors and their operating environments
Aircraft hydraulic systems dynamic analysis
Alternatives for jet engine control
A developmental computer model for investigations of air traffic management problems: A case investigating two decision strategies
High speed digital transmission, the key for a simple hermetic airborne equipment
The coming of age of digital electronics in commercial transports --- expediting signal processing technology and Boeing 767 avionics
Increasing guidance accuracy through use of an integrated digital piloting system
Increasing effectiveness of piloting systems by modern methods of digital signal processing
New paths for the development of aircraft equipment opened up by the use of modern computer technology --- digital systems for civil aviation
Dual digital flight control redundancy management system development program
Flight test of a VTOL digital autoland system along complex trajectories

A-154
Digital flight control reliability — effects of redundancy level, architecture and redundancy management technique
[AIAA 79-1859]
p0573 A79-05418

NASA / P / A-18 Hornet display system
[p0617 A79-40630]

NASA / Princeton digital avionics flight test facility
[p0635 A79-49344]

CH - 53E digital automatic flight control system
[p0710 A79-33853]

A design method with application to preprocessors and sampling-rate selection in digital flight control systems
[p0095 A79-12095]

A nonlinear trajectory command generator for a digital flight-control system
[NASA-TP-1221]
[p0104 A79-13057]

Digital fly-by-wire flight control validation experience
[NASA-TM-22860]
[p0166 A79-14109]

Digital symbology generator program
[AD-A065216]
[p0166 A79-14111]

Analysis and preliminary design of an optical digital tip clearance sensor for propulsion control
[NASA-CH-159336]
[p0174 A79-15053]

Modern digital flight control system design for VTOL aircraft
[NASA-CH-159339]
[p0367 A79-20133]

Digital Avionics Information System (DAIS) serial Input / Output (I / O) exercise
[FAA-AD-66246]
[p0382 A79-21048]

Digital data acquisition system for use in aircraft engine condition monitoring
[ERL-ECR-79-507-151]
[p0436 A79-23088]

VLAM: A digital computer program for simulating VTOL aircraft launch and recovery from small ships. Volume 1: Program description
[AD-A066172]
[p0485 A79-23954]

Analysis of digital flight control systems with flying qualities applications. Volume 1: Executive summary
[AD-A066809]
[p0499 A79-25035]

Analysis of digital flight control systems with flying qualities applications. Volume 2: Technical report
[AD-A067177]
[p0500 A79-25036]

An experimental comparison of the readability of two digital altimeters
[ARL-STIS-NOTE-60]
[p0542 A79-26053]

An experimental comparison of the readability of two digital altimeters
[ARL-STS-NOTE-60]
[p0593 A79-29180]

Digital Avionics Information System (DAIS): Development and demonstration
[AD-A066436]
[p0593 A79-29191]

The development and in-flight evaluation of a triplex digital autostabilization system for a helicopter
[p0655 A79-30200]

The impact of a multi-function programmable control display unit in affecting a reduction of pilot workload
[p0656 A79-30210]

New devices for digital communications in avionics
[ARL-STIS-NOTE-60]
[p0675 A79-31881]

Transform domain processing for digital communication systems using surface acoustic wave devices
[p0675 A79-31881]

Digital Avionics Information System (DAIS): Testing requirements analysis model (TBAROM), volume 1
[AD-A066474]
[p0716 A79-33202]

DIGITAL TECHNIQUES

Large-area information display using digital laser beam deflection
[p0116 A79-17689]

Computer generated images for aircraft use
[p0166 A79-20792]

Interior noise path identification in flight aircraft using multivariate spectral analysis
[AIAA PAPER 79-0646]
[p0269 A79-26915]

Multitone radar processor --- for civil aircraft
[p0280 A79-28058]

Technological evolution of inertial navigation for aircraft
[p0334 A79-29760]

Modal analysis of gas turbine buckets using a digital test system
[AIAA PAPER 79-GT-124]
[p0393 A79-32293]

An analysis of SARTX image parameters as a function of processing parameters — for synthetic aperture radar data processing
[p0648 A79-48666]

Investigation of the cross-ship comparison monitoring method of failure detection in the HMAT R997 --- digital control techniques using airborne microprocessors
[NASA-CH-148879]
[p0091 A79-12064]

Development of a digital guidance and control law for steep approach automatic landings using modern control techniques
[NASA-CH-53704]
[p0230 A79-16242]

Excitation and analysis technique for flutter tests
[AGARD-R-672]
[p0367 A79-20137]

Investigation of augmented electronic fuel controls for modular engine diagnostics and condition monitoring
[ARL/SYS-IOTE-60]
[p0593 A79-29189]

The design of digital controllers for the C-141 aircraft using entire eigenstructure assignment and the development of an interactive computer design program
[AD-A069972]
[p0672 A79-31224]

Laboratory development of computer generated image displays for evaluation in terrain flight training
[AD-A0700065]
[p0674 A79-31236]

DIRECTIONAL ANTENNAS

U ANALOG TO DIGITAL CONVERTERS

U LATERAL STABILITY

ULATERAL WAVES

Dilatational model of noise from a moving jet in terms of arbitrary jet structure and observer location
[p0516 A79-42053]

DIMENSIONAL ANALYSIS

Analog modeling in studying supersonic flow around a wing and its governing analog-criteria
[p0695 A79-54036]

Similitude, Manufacturing, Identification, and instrumentation of test models --- aircraft models
[AAAF-NT-78-24]
[p0440 A79-23120]

DIRECTIONAL MEASUREMENT

Turbine blade tip clearance measurement utilizing borescope photography
[AIAA PAPER 78-GT-164]
[p0010 A79-10805]

DIRECT DIMENSIONAL

DIRECT SHELL STABILITY

DIRECT STRUCTURAL STABILITY

DIRECTNESSLESS NUMBERS

DIRECT BACH BODIES

DIRECT WEINRELLS NUMBER

DIRECT STROUD NUMBER

DIRECT HEIGHT

DIRECT SCALE HEIGHT

DIRECT LIGHT EMITTING DIODES

DIRECT LIGHT EMITTING DIODES

DIRECT LIFT CONTROLS

A velocity vector control system augmented with direct lift control --- stability augmentation using manual control
[NASA-CASP-LHN-12268-1]
[p0367 A79-20136]

DIRECT POWER GENERATORS

DIRECT MAGNETOHYDRODYNAMIC GENERATORS

DIRECT SOLAR CELLS

A conceptual framework
[NASA-TR-80445]
[p0502 A79-25310]

DIRECT FINDER FINDER (RADIO)

DIRECT RADIO FINDER FINDER

DIRECT DIRECTIONAL ANTENNAS

DIRECT LENS ANTENNAS

DIRECT SADAR ANTENNAS

DIRECT SLOT ANTENNAS

DIRECT STEERABLE ANTENNAS

Optimal excitation of amplitude-direction-finder antennas operating on the basis of the comparison method
[FAA BCAS concept, appendices A-E]
[p0411 A79-35502]

FAA BCAS concept, appendices F-H

FAA BCAS concept, appendices P-N
[FAA-EM-78-5-3-E]
[p0231 A79-16830]

FAA BCAS concept, appendices P-N
[FAA-EM-78-5-3-E]
[p0231 A79-16831]
**DIRECTIONAL CONTROL**

Design of VHF and UHF communications air/ground antennas  
[FAA-RD-79-7]  
0230 1979-17078

**DIRECTIONAL CONTROL**

DIRECTIONAL STABILITY

NT GEOSCOPIC STABILITY

A yaw stabilized S.A.R. serial  
0230 1979-10364

DIRECTIVITY

Relation between static and in-flight directivities of jet noise  
0407 1979-34585

DIRECTORS

U INDEXES (DOCUMENTATION)

DIRECTORY

U INDEXES (DOCUMENTATION)

DISCHARGE COEFFICIENT

Jet discharge coefficient through openings for parallel flow  
[ATA 79-750]  
0331 1979-29418

DISCHARGERS

NT STATIC DISCHARGERS

DISCONTINUITY

Calculation of supersonic flow past wings with consideration of tangential discontinuities shed from the edges within the scope of a model using a system of turbulence equations  
0704 1979-16372

DISCRETE ADDRESS BEACON SYSTEM

Plan for the reliability and maintainability evaluation of the Discrete Address Beacon System (DABS) engineering laboratory models  
[FAA-RA-78-31]  
0240 1979-17253

Discrete Address Beacon System (DABS) Air Traffic Control Radar Beacon System (ATCRBS)  
0589 1979-27119

Interim results of DABS/ATCRBS electromagnetic compatibility testing  
AD-AT72087  
0710 1979-32410

DISKS (SHAPES)

NT ACTUATOR DISKS

NT ROTATING DISKS

DISPERING

Atmospheric dispersion modeling --- for air pollutants  
0206 1979-23742

Study of the dispersity of oil droplets which form in the oil-system seals of gas-turbine engines  
0527 1979-42571

Carbon fiber release conditions  
0206 1979-18079

Carbon fiber dispersion models used for risk analysis calculations

**SUBJECT INDEX**

Estimation of economic losses  
0206 1979-18080

Monte Carlo simulation of single accident airport risk profile  
0206 1979-18086

Interpretation of results  
0206 1979-18086

DISPERSIONS

NT EMISSIONS

NT FOG

NT NUCLEAR EMISSIONS

NT SMOKE

DISPLAY DEVICES

NT ANMETERS

NT APPROACH INDICATORS

NT FLOW DIRECTION INDICATORS

NT HEAD-UP DISPLAYS

NT HOT-FILM ANMETERS

NT HOT-WIRE ANMETERS

NT MICROVISION LANDING AIDS

NT PLANPOSITION INDICATORS

NT POSITION INDICATORS

NT RADIO DIRECTION FINDERS

NT SPEED INDICATORS

NT WIND VANE

The electronic flight deck  
0216 1979-11175

Present and potential capabilities of three-dimensional displays using sequential excitation of fluorescence  
0219 1979-12033

Method of eliminating static and dynamic errors in the reproduction of motion of TV-simulator displays --- for aircraft flight  
0210 1979-12053

Testing of avionics display systems  
0203 1979-12309

Better utilization of PAA dynamic range --- airborne display capacity improvement  
0252 1979-12200

Man-machine interface --- aircraft control and displays  
0255 1979-12250

360-deg non-programmed visual display --- for flight training  
0211 1979-15152

Visual simulation systems --- for vehicle operator training  
0211 1979-15153

Acousto-optic methods of character generation for aircraft laser displays  
0211 1979-15178

Cockpit displays for advanced navigation -- Circa 2000  
0217 1979-16174

Integrated computer-display system for modern anti-tank/combathelicopters  
0217 1979-16233

Airborne video recording system  
0217 1979-17600

Large-area information display using digital laser beam deflection  
0216 1979-16899

Display of flight plan information on electronic data display devices -- A means for the enhancement of the capacity in air traffic control  
0217 1979-16794

A versatile approach to cockpit management --- for military helicopter control and display avionics  
0210 1979-18143

Development of a solid state vertical instrument display system --- for helicopters [AMS 78-17]  
0210 1979-18143

Simulation requirements for rotorcraft --- visual display, motion cue and computer considerations  
0312 1979-18666

Experimental evaluation of a wind shear alert and energy management display [DGFR PAPER 78-153]  
0315 1979-20016

DBD-MC -- The new ATC system in the GM [AN 79-20136]

Display of Extracted Radar Data-MiniComputer  
0204 1979-23599

Touch entry device for air traffic control  
0205 1979-23590
DYNAMIC MODELS

Determination of the natural frequency of an airfoil model
[AIAA 79-1582] p0524 A79-42602
Results of an improved version of LTMB2 for competing steady on-airfoil oscillating in transonic flow
[AIAA PAPER 79-1553] p0577 A79-46726
The electro-impulse de-icing method --- aircraft structures
[BO-227] p0433 N79-23073
Dynamic pressure loads in the air induction system of the tornado fighter aircraft
p0574 N79-27168
Dynamic loads analysis system (DYNOLPLEX) summary.
Volume 1: Engineering formulation
Dynamic loads analysis system (DYNOLPLEX) summary.
Volume 2: Supplemental system design information

DYNAMIC MODELS

The validity of the Leicester computer model for a parachute with fully-deployed canopy
[AIAA 79-0460] p0269 A79-26663
Structural parameter identification from measured vibration data --- for digital simulation of multiple shaker test
[AIAA 79-0829] p0323 A79-29045
Identification of a STOL propulsion plant model from flight data
p0406 A79-34521
Model verification of force determination for measuring vibratory loads --- of rotors on helicopters
p0450 A79-36379
The dynamics of a general aviation pilot promotion campaign
p0466 A79-38886
The relationship of unsteadiness in downwash to the quality of parameter estimates
[AIAA 75-1639] p0567 A79-45319
Aerodynamic coefficient estimation by means of an extended Kalman filter
[AIAA 76-1668] p0569 A79-45346
Flight test technology development - A preview of DynaTech --- dynamic modeling
p0645 A79-50435
Analytical-kinetic models for the evaluation of polluting emissions from aircraft gas turbines -- Limiting techniques
p0689 A79-52758
The fluid dynamic design of advanced centrifugal compressors
p0427 N79-22538
Enclosure fire dynamics model
p0667 N79-31173

DYNAMIC PRESSURE

Comparative study between two different active flutter suppression systems
p0081 A79-16955
Pressure measurement in air data instrumentation
p0253 A79-25850
Unsteady effects of circumferential pressure distortion in flow in compressors
(AD-062550) p0366 N79-20123
Dynamic pressure loads in the air induction system of the tornado fighter aircraft
p0574 N79-27168

DYNAMIC PROGRAMMING

A nonlinear approach to the design of jet engine control systems
p0070 A79-15016

DYNAMIC PROPERTIES

g DYNAMIC CHARACTERISTICS

DYNAMIC RESPONSE

WT TRANSIENT RESPONSE

Stochastic Response Secondary Surveillance Radar
/S.B.S.S.B./ p0031 A79-10381
Aerodynamic response for the airfoil experiencing sudden change in angle of attack
p0012 A79-10856
Gust response and its alleviation for a hingeless helicopter rotor in cruising flight
p0131 A79-18662
Dynamic response testing of gas turbines
[AIAA PAPER 78-GT-31] p0196 A79-22332

SDM lecture - Introduction of new SDM technology into production systems --- Structures, dynamics and materials technology in aircraft design

SUBJECT INDEX

[DYNAMIC MODELS] AIAA 79-0719 p0282 A79-28252
Dynamic response analysis of a 7-15 fast pack optical system installation --- structural vibration under flight environment
[AIAA 79-0719] p0322 A79-29032
The time-variant aerodynamic response of a stator row including the effects of airfoil camber
[ASME PAPER 79-GT-110] p0392 A79-32385
The analysis of propellers including interaction effects --- for general aviation aircraft
[SAE PAPER 790568] p0453 A79-36712
Nonlinear structural crash dynamics analyses
[SAE PAPER 790568] p0454 A79-36722
Application of bifurcation analysis and catastrophe theory methodology /HACER/ to aircraft stability problems at high angles-of-attack
p0611 N79-07983
Improved method of predicting helicopter control response and gust sensitivity
[AHS 79-25] p0629 A79-40797
Study of T53 engine vibration
[AD-A057292] p0160 A79-14047
Dynamic response of aircraft to unloaded and loaded pavement profiles
[AD-A057292] p0163 A79-14088
Can-operated pitch-change apparatus
[NASA-CAGS-1LW-13050-1] p0164 A79-14095
The influence of sweep on the aerodynamic loading of an oscillating NACA0012 airfoil. Volume 2: Data report
The optimal control frequency response problem in manual control --- of massed aircraft systems
p0444 N79-17476
Engine dynamics
[BVFG-PETT-78-6] p0293 N79-17602
Simulation correlation, and analysis of the structural response of a CH-47A to crash impact
[SAE PAPER 790568] p0550 N79-20994
Dynamical behaviour and control of single-shaft closed-cycle gas turbines
p0422 N79-22093
Aircraft hydraulic systems dynamic analysis
[AD-A067549] p0550 N79-27129
Determination of the dynamic response due to an imbalance at the attachments of a rotor on a pod --- caused by rotor blade loss
p0554 N79-27171
Longitudinal aerodynamics extracted from flight tests using a parameter estimation method
[AIAA/AERO-BOTY-379] p0580 N79-28144
Stability and nonlinear response of rotor-tearing systems with squeeze film bearings
p0598 N79-29519
Time history solution program, L225 (TZY126).
Volume 2: Supplemental system design and maintenance document --- for airplane dynamic response using frequency response data
Testing and analysis of dual-node adaptive landing gear, taxi mode test system for YF-12A

DYNAMIC STABILITY

WT AERODYNAMIC STABILITY
WT AEROSPACE STABILITY
WT ATTITUDE STABILITY
WT BOUNDARY LAYER STABILITY
WT COMBUSTION STABILITY
WT CONTROL STABILITY
WT DIRECTIONAL STABILITY
WT FLAP STABILITY
WT FLOW STABILITY
WT GYROSCOPIC STABILITY
WT HOVERING STABILITY
WT LATERAL STABILITY
WT LONGITUDINAL STABILITY
WT LOW SPEED STABILITY

A-162
The role of rotor impedance in the vibration analysis of rotorcraft

Finite element dynamic analysis of production aircraft — for rotor induced helicopter airframe vibrations

An experimental study of coupled rotor-body aeromechanical instability of hingeless rotors in hover

Effect of structural coupling parameters on the flap-lag forced response of a rotor blade in forward flight using Floquet theory

Fluid-structure interaction dynamics in fuel cells — aircraft vibrational analysis

Analytical life estimation for helicopter components

Vibration and flutter investigations of aircraft with special nonlinear structural properties

Analysis of longitudinal natural vibrations of deforming aircraft by the finite-element method

Structures, Structural Dynamics, and Materials Conference, 20th, Los Angeles, Calif., April 4-6, 1979, Technical Papers on Dynamics and Loads

Flap-lag stability with dynamic inflow by the method of multiblade coordinates — for rotor deflections in forward flight

Evaluation of MOSTAS computer code for predicting dynamic loads in two-bladed wind turbines

A generalized modal shock spectra method for spacecraft loads analysis

Crash simulation of composite and aluminum helicopter fuselages using a finite-element program

Dynamic analysis of landing impact

New methods for ground-testing aeronautical structures

Simplified analysis spectrum for joints exposed to complex continuously varying stresses — aerostatic structures

Application of bifurcation analysis and catastrophe theory methodology to aircraft stability problems at high angles-of-attack

Experimental measurements of the rotating frequencies and mode shapes of a full scale helicopter rotor in a vacuum and correlations with calculated results

Theoretical flap-lag damping with various dynamic inflow models

Application of finite-element and holographic techniques in the design of turboshaft engine components

The circulation control rotor flight demonstrator test program

An approach for estimating vibration characteristics of nonuniform rotor blades
and large cargo aircraft using both JP and alternative fuels [NASA-CR-154070] p0100 N79-13026
Estimation of economic losses p0296 N79-16003
ECONOMIC DEVELOPMENT
ECONOMIC FACTORS
Economics of commercial aviation safety p0072 A79-15374
New opportunities for future small civil turbine engines - Overviewing the GATE studies [SAE PAPER 790619] p0457 A79-36747
Air new service and deregulation - A study in transition p0507 A79-40172
Adaptation for the economy or adaptation for energy conservation -- passenger aircraft design [AAAF-MT-77-23] p0444 N79-23537
International Air Transportation Competition Act of 1970 --- congressional reports [GPO-34-912] p0651 N79-30168
ECONOMIC IMPACT
Impact of area navigation on controller productivity and ATC system capacity [PAA-RD-78-51] p0231 N79-16825
Monte Carlo simulation of single accident airport risk profile p0256 N79-18004
Maintenance improvement: An analysis approach including inferential technical data --- naval aircraft [AD-A068382] p0649 N79-30141
ECONOMICS
WT DEMAND (ECONOMICS)
The economic impact of revised gaseous emission regulations for commercial aircraft engines [PB-286772/9] p0181 N79-15486
EDDYS U VORCESS
EDDY CURRENTS
Small signal coresponse of magnetic fields resulting from aircraft maneuvers p0636 A79-49605
Feasibility evaluation of advanced eddy current inspection equipment for use in naval aviation maintenance environment [AD-A060076] p0168 N79-14401
Multifrequency eddy current inspection for cracks under fasteners, phase 2 [AD-A071102] p0711 N79-32560
EDDY DIFFUSION
U TURBULENT DIFFUSION
EDDY VELOCITY
The development and structure of turbulent plane jets p0137 A79-18387
Effects of turbulence model selection on the prediction of complex aerodynamic flows [AIAA PAPER 79-0070] p0201 A79-23541
A method for the calculation of 3D boundary layers on practical wing configurations p0466 A79-38906
EDGES
WT TRAILING EDGES
The effect of sheet edge working on the fatigue life under flight-simulation loading [NL-R-77095-0] p0388 N79-21449
EDUCATION
WT FLIGHT TRAINING
WT PILOT TRAINING
EFFECTIVE PERCEIVED NOISE LEVELS
On the loudness of sonic booms and other impulsive sounds --- auditory perception [UTIAS-236] p0285 N79-17658
Eff ects of duration and other noise characteristics on the annoyance caused by aircraft-flyover noise [NASA-TP-1386] p0375 N79-20832
EFFECTIVENESS
WT COST EFFECTIVENESS
WT SYSTEM EFFECTIVENESS
EFFECTORS
U CONTROL EQUIPMENT
EIGENVALUES
U EIGENVECTORS
EIGENSTATES
U EIGENVECTORS
EIGHTH ENGINEERS
U EIGHTH ENGINEERS
EIGHTH
Approximate solution of some boundary value problems on aircraft structural integrity p0022 A79-12284
Sound radiation from hyperboloidal inlet ducts [AIAA PAPER 79-06771] p0267 A79-26885
EIGHTH ENGINEERS
Accuracy of an approximate static structural analysis technique based on stiffness matrix eigenvectors [AIAA 79-0748] p0282 A79-28263
EJECTION SYSTEMS
Unique crew escape concepts for ATS mission aircraft p0403 A79-26864
An evaluation of a new format for ejection system information in a NATOPS manual [AD-A056910] p0335 N79-10037
EJECTION INJURIES
Aircrew experiences in USAF ejections, 1971-1977 p0401 A79-33609
Mechanism of extremity injuries occurring during ejection from F-4 aircraft p0401 A79-33610
An overview of the U.S. Navy Maximum Performance Ejection System p0402 A79-33613
EJECTION SEATS
WT FLIGHT SEATS
Can government specified reliability and maintainability requirements for complex aircrew escape systems be met p0065 A79-4403
Aircrew experiences in USAF ejections, 1971-1977 p0401 A79-33609
Development of hermetically sealed low-maintenance high-density packaging for ejection seat-mounted personnel parachutes p0402 A79-33616
Ejection systems in the year 2000 p0402 A79-33622
Development and testing of a dual node escape propulsion system p0403 A79-33635
The Swedish approach to escape system testing p0404 A79-50427
Crew escape concepts for advanced high performance aircraft [AD-A060519] p0171 N79-15016
EJECTORS

Escape system trajectory sensitivity analysis
[AD-A062429]
p0362 A79-20092

Preliminary investigation of the seated height limit for safe through-the-canopy ejection from the CT-116 aircraft
[AD-A062403]
p0362 A79-20093

Feasibility of non-catapult ejection and hazard of an ejection seat rocket plane
[AD-A067080]
p0539 A79-26036

Development of an inflatable head/neck restraint system for ejection seats, update
[AD-A067124]
p0540 A79-26038

Wind tunnel test of ACE 2 ejection seat with anthropometric dummy in asymmetric configurations
[AD-A068614]
p0592 A79-29163

EJECTORS

Inauguration of an ejector thrust-augmentor with a perforated nozzle for the ejected gas
p021 A79-12196

Determination of ejector nozzle starting parameters
p063 A79-14847

Theoretical study of simultaneous two-dimensional high-pressure and one-dimensional low-pressure flows of an ideal gas in ejector nozzles,
p197 A79-22437

Evaluation of an ejector-powered engine simulator at transonic Mach numbers
[AD-A067663]
p0406 A79-11051

Ejector optimization
[AD-A061251]
p0240 A79-19717

Interaxial aerodynamics of the single rotor helicopter configuration. Volume A: One-third octave band spectrograms of wake-fillet data, air ejectors with hubcaps, wings
[AD-A063244]
p0156 A79-21016

Interaxial aerodynamics of the single rotor helicopter configuration. Volume B: One-third octave band spectrograms of wake-fillet data, air ejectors
[AD-A063653]
p0379 A79-21018

Experimental investigation of turbojet test cell augmentors
[AD-A063172]
p0380 A79-21000

EJECTOR NOZZLES

U BOUNDARY LAYER TRANSITION

ELASTIC BODIES

Time-frequency method of solving large problems in the dynamics of elastic structures with local nonlinearities -- for aircraft structures
p020 A79-12155

Research conducted by ONERA on the relationship between the behavior and cumulative damage of materials and structures
[AD-A063653]
p0156 A79-20121

The influence of the environment on the elastoplastic properties of adhesives in metal bonded joints -- in aircraft structures
[ONERA, TP NO. 1978-50]
p0662 A79-30391

ELECTRIC APPLIANCES

U ELECTRIC EQUIPMENT

Laboratory tests to determine lightning attachment points with small aircraft models [Engineering test/]
p0680 A79-51129

Laboratory simulation of swept lightning strokes /Engineering test/
p0680 A79-51131

ELECTRIC BATTERIES

U NICKEL CADMIUM BATTERIES

ELECTRIC CHARGE

U ELECTROSTATIC CHARGE

Electrification of woven and film materials
p0407 A79-34604

Electric charging of helicopters -- aircraft hazards and static dischargers for accident prevention.
[BRNG-PBNW-78-7]
p0297 A79-18274

ELECTRIC CIRCUITS

U CIRCUITS

ELECTRIC CONDUCTORS

Problems in testing electrically conductive structural adhesives
p0696 A79-54240

ELECTRIC CONTACTS

Electrical bonding problems in aircraft
p0699 A79-52889
ELECTRIC CONTROL
Electric power system control techniques p0615 A79-48614
A direct drive fly-by-wire system p0622 A79-53630
Power by wire for aircraft - The all-electric air vehicle p0652 A79-53631
Results related to simulated and in-flight experimentation with an electric flight control system that can be generalized p0658 A79-30224

ELECTRIC CORONA
Laboratory tests to simulate lightning streamers at apertures / A qualification test/ p0682 A79-51138

ELECTRIC CURRENT
AT ALTERNATING CURRENT
AT DIRECT CURRENT
AT IEDY CURRENTS
AT ELECTRIC ARC
AT ELECTRIC CORONA
AT ELECTRIC DISCHARGES
AT HIGH CURRENT
AT LIGHTNING
Effects of lightning current waveform components on graphite/epoxy composite material --- aircraft hazards p0167 A79-20865
Laboratory tests for undesired conducted currents and surge voltages caused by lightning /Qualification test/ p0682 A79-51140
High frequency surface current and charge densities induced on aircraft by a plane electromagnetic wave (AD-A058010) p0168 A79-14298
The electro-impulse de-icing method --- aircraft structures (AD-227) p0433 A79-23073

ELECTRIC DISCHARGES
AT ELECTRIC ARC
AT ELECTRIC CORONA
AT LIGHTNING
Fifteenth utilization of an optical fiber transmission system on a Falcon 10 aircraft p0376 A79-20986

ELECTRIC EQUIPMENT
Laboratory tests for undesired conducted currents and surge voltages caused by lightning /Qualification test/ p0682 A79-51139
Advanced risk assessment of the effects of graphite fibers on electronic and electrical equipment, phase 1 --- simulating vulnerability to airports and communities from fibers released during aircraft fires (NASA CR-159027) p0586 A79-28419

ELECTRIC FIELDS
AT EXTERNAL SURFACE CURRNTS
Intensification of fuel vaporization in aircraft gas turbine engines by electrical forces p0280 A79-27748

ELECTRIC FILTERS
AT DIGITAL FILTERS
AT BAND FILTERS
AT TRACKING FILTERS
Filter weight minimization for rectified superconducting alternator power supplies --- for aircraft p0273 A79-26966

ELECTRIC GENERATORS
AT AC GENERATORS
AT DIRECT CURRENT GENERATORS
AT MAGNETOHYDRODYNAMIC GENERATORS
AT SOLAR CELLS
The Netherlands experimental vertical axis wind turbine p0112 A79-17120
System considerations for airborne, high power superconducting generators p0184 A79-20548
Permanent magnet generators - Next generation in VSCF power systems --- Variable Speed Constant Frequency p0350 A79-32243

ELECTRIC POWER SUPPLIES
Electric power system for new-technology transport power-by-wire airplane p0615 A79-48616
E-8H mission electrical power p0615 A79-48617
Digital simulation of a three-phase generator p0616 A79-48618
The 150 KVA samarium cobalt USCF starter generator electrical system [AD-A070078] p0710 A79-32668
Hydrogen use as a fuel. Citations from the NTIS data base [NTIS/PS-79/0779/3] p0720 A79-33397

ELECTRIC IGNITION
Dual breakerless aircraft magnets p0456 A79-36738

ELECTRIC MOTOR VEHICLES
All electric sub-systems for next generation transport aircraft [AIAA PAPER 79-1832] p0680 A79-47906
Power by wire for aircraft - The all-electric air vehicle p0692 A79-53631

ELECTRIC MOTORS
AT SYNCHRONOUS MOTORS
Electromechanical actuation for business aircraft [SAE PAPER 790622] p0457 A79-36750
Fly-by-wire tail rotor controls p0693 A79-53635
Direct drive control valve for fly-by-wire flight control systems actuators [AD-A065030] p0306 A79-19007
The 150 KVA samarium cobalt USCF starter generator electrical system [AD-A070078] p0710 A79-32468

ELECTRIC POWER SYSTEMS
Aircraft electric power networks - Structures. I p0016 A79-11369
Airport power supply --- Russian book p0647 A79-50499

ELECTRIC POTENTIAL
Identification of voltage transients on aircraft wiring cabling under LTA excitation --- Lightning Transient Analysis p0664 A79-39531
Laboratory tests for undesired conducted currents and surge voltages caused by lightning /Qualification test/ p0682 A79-51140
The prediction of lightning-induced voltages on metallic and composite aircraft p0243 A79-17422

ELECTRIC POWER CONVERSION
AT ELECTRIC GENERATORS
ELECTRIC POWER PLANTS
BPV electric power system study. Phase 2: Hot bench mockup development [AD-A065008] p0424 A79-22110

ELECTRIC POWER SUPPLIES
AT SPACECRAFT POWER SUPPLIES
Aircraft electric power networks - Structures. I p0016 A79-11369

ELECTRIC SYSTEMS
Combined-excitation ac generators for aviation --- Russian book p0126 A79-18200
Filter weight minimization for rectified superconducting alternator power supplies --- for aircraft p0273 A79-26966
Air Force applications of lightweight superconducting machinery --- in airborne power sources p0279 A79-27666
Permanent magnet generators - Next generation in VSCF power systems --- Variable Speed Constant Frequency p0350 A79-32243
All electric sub-systems for next generation transport aircraft [AIAA PAPER 79-1832] p0680 A79-47906
Electric power system control techniques p0615 A79-48614
Advanced BPV electrical systems p0273 A79-26966
Electrical power system for new-technology transport power-by-wire airplane p0615 A79-48616
Airport power supply --- Russian book p0647 A79-50499
<table>
<thead>
<tr>
<th>ELECTRIC POWER TRANSMISSION</th>
<th>SUBJECT INDEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>VSCF aircraft electrical power — Variable Speed Constant Frequency</td>
<td>NT ELECTRICAL RESISTIVITY</td>
</tr>
<tr>
<td>Frequency converter technology for aircraft power systems</td>
<td>NT POLARIZATION CHARACTERISTICS</td>
</tr>
<tr>
<td>AC aircraft electrical systems with rare earth permanent magnet machines</td>
<td>NT SKIN RESISTANCE</td>
</tr>
<tr>
<td>Results of power systems study advanced fighter/attack and YSTOL airplanes</td>
<td>NT SUPERCONDUCTIVITY</td>
</tr>
<tr>
<td>USAF thrust in aircraft electrical power technology</td>
<td>Relative behavior of graphite/epoxy and aluminized in a lightning environment — aircraft safety considerations</td>
</tr>
<tr>
<td>Closed Brayton cycle system optimization for undersized, terrestrial, and space applications</td>
<td>Effects of lightning current waveform components on graphite/epoxy composite material — aircraft hazards</td>
</tr>
<tr>
<td>ELECTRIC POWER TRANSMISSION</td>
<td>NT ELECTRICAL RESISTIVITY</td>
</tr>
<tr>
<td>The analysis and identification of flux-induced voltage transients on low-loss transmission lines with application to the Lightning-Transient-Analysis (LTA) problem</td>
<td>NT SKIN RESISTANCE</td>
</tr>
<tr>
<td>Electric power system control techniques</td>
<td>NT SUPERCONDUCTIVITY</td>
</tr>
<tr>
<td>Electrical power system for new-technology transport power-by-wire airplane</td>
<td>Static electricity hazards in aircraft fuel systems (AD-A067060)</td>
</tr>
<tr>
<td>RFV electric power system study. Phase I: Technology assessment</td>
<td>(AD-A060336)</td>
</tr>
<tr>
<td>ELECTRIC PROPULSION</td>
<td>(AD-A0691450)</td>
</tr>
<tr>
<td>NT SOLAR ELECTRIC PROPULSION</td>
<td>NT ELECTRICAL RESISTIVITY</td>
</tr>
<tr>
<td>ELECTRIC PROPELSSION</td>
<td>NT ALTERNATING CURRENT</td>
</tr>
<tr>
<td>NT ELECTRIC PROPULSION ELECTRIC propulsion for high performance light aircraft</td>
<td>NT STATIC ELECTRICITY</td>
</tr>
<tr>
<td>ELECTRIC WELDING</td>
<td>ELECTRIFICATION</td>
</tr>
<tr>
<td>NT ELECTRON BEAM WELDING</td>
<td>Investigation of the electrification of an aircraft model by a humid airstream in a wind tunnel</td>
</tr>
<tr>
<td>NT GAS TUNGSTEN ARC WELDING</td>
<td>Static electricity phenomena — Theory and problems — aircraft hazards</td>
</tr>
<tr>
<td>ELECTRIC WIRE</td>
<td>Fuel electrification — electrostatic hazards in aircraft fuel tanks</td>
</tr>
<tr>
<td>Bearing errors in the VHF omnirange due to scattering from wires — in aircraft receiver</td>
<td>ELECTRO-OPTICS</td>
</tr>
<tr>
<td>A hybrid technique for combining the moment method treatment of wire antennas with the ODT for curved surfaces</td>
<td>Optical engineering of first and second generation automatic tracking/laser designator pods — on F-16</td>
</tr>
<tr>
<td>[AIAA PAPER 79-1265]</td>
<td>Applications of electro-optical instrumentation in turbine engine development</td>
</tr>
<tr>
<td>ELECTRIC WELDING</td>
<td>Optoelectronic devices for flight vehicle control systems — Russian book</td>
</tr>
<tr>
<td>ELECTRICAL BREAKDOWN</td>
<td>Determining the contour of helicopter rotor blades automatically using electro-optical techniques</td>
</tr>
<tr>
<td>ELECTRICAL RESISTIVITY</td>
<td>BRL participation in the plan for assisting in the definition of Army helicopter electro-optical symbology (AD-A0587130)</td>
</tr>
<tr>
<td>ELECTRICAL CONDUCTIVITY</td>
<td>[P-16 advanced electro-optical pod field-of-view simulation study — task complexity during laser guided weapons delivery (AD-A063530)]</td>
</tr>
<tr>
<td>ELECTRICAL ENGINEERING</td>
<td>Stabilizing electro-optical systems on helicopters</td>
</tr>
<tr>
<td>Electric power system control techniques</td>
<td>ELECTROACOUSTIC TRANSDUCERS</td>
</tr>
<tr>
<td>Electrical power system for new-technology transport power-by-wire airplane</td>
<td>NT MICROPHONES</td>
</tr>
<tr>
<td>Standard avionic module study</td>
<td>ELECTROCATALYSTS</td>
</tr>
<tr>
<td>[AD-A061349]</td>
<td>Catalytic combustion for gas turbine applications (ASME PAPER 79-GT-188)</td>
</tr>
<tr>
<td>ELECTRICAL FAULTS</td>
<td>ELECTROCHEMICAL CELLS</td>
</tr>
<tr>
<td>End-to-end testing — to verify electrical equipment failure due to carbon fibers released in aircraft-fuel fires</td>
<td>Lighting conductive characteristics of graphite composite structures — aircraft protection</td>
</tr>
<tr>
<td>ELECTRICAL INSULATION</td>
<td>ELECTROGENERATORS</td>
</tr>
<tr>
<td>Electrical insulation fire characteristics. Volume 2: Toxicity</td>
<td>NT ELECTRIC GENERATORS</td>
</tr>
<tr>
<td>[PB-728491/2]</td>
<td>ELECTROHYDRAULIC CONTROL</td>
</tr>
<tr>
<td>ELECTRICAL LEADS</td>
<td>NT ELECTRIC CONTROL</td>
</tr>
<tr>
<td>ELECTRICAL CONDUCTORS</td>
<td>ELECTROHYDRAULIC COMPONENTS</td>
</tr>
<tr>
<td>ELECTRICAL MEASUREMENT</td>
<td>ELECTROHYDRAULIC RAMPS</td>
</tr>
<tr>
<td>Electric charging of helicopters — aircraft hazards and static dischargers for accident prevention</td>
<td>NT LUMINAIRES</td>
</tr>
<tr>
<td>[ENG-PEWT-78-7]</td>
<td>ELECTROMAGNETIC COMPATIBILITY</td>
</tr>
<tr>
<td>ELECTRICAL PROPERTIES</td>
<td>Some novel techniques for avoiding antenna obstructions and E.M.C. effects</td>
</tr>
<tr>
<td>NT ELECTRICAL RESISTANCE</td>
<td>The effects of lightning and nuclear electromagnetic pulse on the composite aircraft</td>
</tr>
<tr>
<td>NT SKIN RESISTANCE</td>
<td>Validation of TEMCAP using the B-52 — Intrasystem Electro Magnetic Compatibility Analysis Program</td>
</tr>
<tr>
<td>NT SUPERCONDUCTIVITY</td>
<td>p0207 A79-12162</td>
</tr>
<tr>
<td>NT ELECTRICAL RESISTIVITY</td>
<td>p0113 A79-17211</td>
</tr>
<tr>
<td>NT ALTERNATING CURRENT</td>
<td>p0615 A79-16846</td>
</tr>
<tr>
<td>NT STATIC ELECTRICITY</td>
<td>p0382 A79-17600</td>
</tr>
<tr>
<td>ELECTRIFICATION</td>
<td>Optoelectronic devices for flight vehicle control systems — Russian book</td>
</tr>
<tr>
<td>NT ELECTRICAL RESISTIVITY</td>
<td>Determining the contour of helicopter rotor blades automatically using electro-optical techniques</td>
</tr>
<tr>
<td>ELECTRIC WELDING</td>
<td>BRL participation in the plan for assisting in the definition of Army helicopter electro-optical symbology (AD-A0587130)</td>
</tr>
<tr>
<td>NT ELECTRICAL RESISTIVITY</td>
<td>[P-16 advanced electro-optical pod field-of-view simulation study — task complexity during laser guided weapons delivery (AD-A063530)]</td>
</tr>
<tr>
<td>ELECTRICAL ENGINEERING</td>
<td>Stabilizing electro-optical systems on helicopters</td>
</tr>
<tr>
<td>Electric power system control techniques</td>
<td>ELECTROACOUSTIC TRANSDUCERS</td>
</tr>
<tr>
<td>Electrical power system for new-technology transport power-by-wire airplane</td>
<td>NT MICROPHONES</td>
</tr>
<tr>
<td>Standard avionic module study</td>
<td>ELECTROCATALYSTS</td>
</tr>
<tr>
<td>[AD-A061349]</td>
<td>Catalytic combustion for gas turbine applications (ASME PAPER 79-GT-188)</td>
</tr>
<tr>
<td>ELECTRICAL FAULTS</td>
<td>ELECTROCHEMICAL CELLS</td>
</tr>
<tr>
<td>End-to-end testing — to verify electrical equipment failure due to carbon fibers released in aircraft-fuel fires</td>
<td>Lighting conductive characteristics of graphite composite structures — aircraft protection</td>
</tr>
<tr>
<td>ELECTRICAL INSULATION</td>
<td>ELECTROGENERATORS</td>
</tr>
<tr>
<td>Electrical insulation fire characteristics. Volume 2: Toxicity</td>
<td>NT ELECTRIC GENERATORS</td>
</tr>
<tr>
<td>[PB-728491/2]</td>
<td>ELECTROHYDRAULIC CONTROL</td>
</tr>
<tr>
<td>ELECTRICAL LEADS</td>
<td>NT ELECTRIC CONTROL</td>
</tr>
<tr>
<td>ELECTRICAL CONDUCTORS</td>
<td>ELECTROHYDRAULIC COMPONENTS</td>
</tr>
<tr>
<td>ELECTRICAL MEASUREMENT</td>
<td>ELECTROMAGNETIC COMPATIBILITY</td>
</tr>
<tr>
<td>Electric charging of helicopters — aircraft hazards and static dischargers for accident prevention</td>
<td>Some novel techniques for avoiding antenna obstructions and E.M.C. effects</td>
</tr>
<tr>
<td>[ENG-PEWT-78-7]</td>
<td>The effects of lightning and nuclear electromagnetic pulse on the composite aircraft</td>
</tr>
<tr>
<td>ELECTRICAL PROPERTIES</td>
<td>Validation of TEMCAP using the B-52 — Intrasystem Electro Magnetic Compatibility Analysis Program</td>
</tr>
<tr>
<td>NT ELECTRICAL RESISTANCE</td>
<td>p0207 A79-12162</td>
</tr>
<tr>
<td>NT SKIN RESISTANCE</td>
<td>p0113 A79-17211</td>
</tr>
<tr>
<td>NT SUPERCONDUCTIVITY</td>
<td>p0615 A79-16846</td>
</tr>
<tr>
<td>NT ELECTRICAL RESISTIVITY</td>
<td>Optoelectronic devices for flight vehicle control systems — Russian book</td>
</tr>
<tr>
<td>NT ALTERNATING CURRENT</td>
<td>Determining the contour of helicopter rotor blades automatically using electro-optical techniques</td>
</tr>
<tr>
<td>NT STATIC ELECTRICITY</td>
<td>BRL participation in the plan for assisting in the definition of Army helicopter electro-optical symbology (AD-A0587130)</td>
</tr>
<tr>
<td>ELECTRIFICATION</td>
<td>[P-16 advanced electro-optical pod field-of-view simulation study — task complexity during laser guided weapons delivery (AD-A063530)]</td>
</tr>
<tr>
<td>NT ELECTRICAL RESISTIVITY</td>
<td>Stabilizing electro-optical systems on helicopters</td>
</tr>
<tr>
<td>ELECTRIC WELDING</td>
<td>ELECTROACOUSTIC TRANSDUCERS</td>
</tr>
<tr>
<td>NT ELECTRIC GENERATORS</td>
<td>NT MICROPHONES</td>
</tr>
<tr>
<td>ELECTROHYDRAULIC CONTROL</td>
<td>ELECTROCATALYSTS</td>
</tr>
<tr>
<td>NT ELECTRIC CONTROL</td>
<td>Catalytic combustion for gas turbine applications (ASME PAPER 79-GT-188)</td>
</tr>
<tr>
<td>ELECTROHYDRAULIC COMPONENTS</td>
<td>LIGHTING CONDUCTIVE CHARACTERISTICS</td>
</tr>
<tr>
<td>NT LUMINAIRES</td>
<td>Some novel techniques for avoiding antenna obstructions and E.M.C. effects</td>
</tr>
<tr>
<td>ELECTROMAGNETIC COMPATIBILITY</td>
<td>The effects of lightning and nuclear electromagnetic pulse on the composite aircraft</td>
</tr>
<tr>
<td>Validation of TEMCAP using the B-52 — Intrasystem Electro Magnetic Compatibility Analysis Program</td>
<td>p0207 A79-28077</td>
</tr>
</tbody>
</table>
Electromagnetic Pulses

Electromagnetic Noise Measurement

Electromagnetic Interference

Electromagnetic Deduction

Electromagnetic Control

NT Reflectance

NT Electrical Properties

NT Photoelasticity

NT Optical Properties

NT Color

NT White Noise

NT Electromagnetic Noise Measurement

NT Radio Frequency Interference

NT Electromagnetic Noise

NT Jamming

NT Far Fields

NT Near Fields

The penetration of electromagnetic fields into aircraft from externally mounted RF antennas

The prediction of lightning-induced voltages on metallic and composite aircraft

Electromagnetic Interactions

Tests on actual aircraft for electromagnetic effects/Engineering tests/

Electromagnetic Interference

NT Electromagnetic Noise

NT Jamming

NT Radio Frequency Interference

NT White Noise

Some novel techniques for avoiding antenna obscurations and E.M.C. effects

Applied TCM. Volume 1 --- Book

The impact of the total lightning environment on aircraft flight control systems

Validation of IENCAP using the B-52 --- Intrasystem Electro Magnetic Compatibility Analysis Program

Electromagnetic coupling analysis of a learjet aircraft

Electromagnetic Measurement

NT Electromagnetic Noise Measurement

Feasibility evaluation of advanced eddy current inspection equipment for use in Naval aviation maintenance environment

NT White Noise

An investigation into the noise interference problems at Logan Airport, Boston

NT Electromagnetic Noise Measurement

The investigation of aircraft interference problems

Electromagnetic Properties

NT Absorptivity

NT Color

NT Electrical Properties

NT Optical Properties

NT Photoelasticity

NT Reflectance

NT Transparency

Electromagnetic Pulses

The effects of lightning and nuclear electromagnetic pulse on the composite aircraft

ERP coupling to a composite aircraft

Properties of induced transients associated with EN fields produced by lightning or other relatively slow rise-time ERP --- in aircraft

Surface current injection techniques - A theoretical investigation --- for simulating ERP-induced aircraft responses

The measurement of ER-Pulse phase and amplitude in the loading system ELS

The estimation of induced-voltage peak magnitude and energy level under LTA/ERP excitation of low-loss aircraft cable --- Lightning Transit Analysis/Electro-Magnetic Pulse

Aircraft cable parameter study

Electromagnetic coupling analysis of a learjet aircraft

Atmospheric Electricity Hazard (AEH)

A study of the EMP interaction with aircraft over an imperfect ground plane

Electromagnetic Radiation

NT Corent Light

NT Electromagnetic Pulses

NT Gamma Rays

NT Hydrogen Emission

NT Infrared Radiation

NT Light (Visible Radiation)

NT Light Ions

NT Microwaves

NT Millimeter Waves

Circulation-extreme direction finding of extended and point sources of electromagnetic oscillations

Lightning transient research on an F-111 aircraft

Investigation of penetration of electromagnetic energy through skin and先进 composite structures --- aircraft structures

Electromagnetic Scattering

A hybrid technique for combining the moment method treatment of wire antennas with the GTD for curved surfaces

High frequency near field scattering by an elliptic disk

An asymptotic result for the scattering of a plane wave by a smooth convex cylinder

Electromagnetic Wave Filters

NT Bandpass Filters

NT Digital Filters

NT Electrical Filters

NT Switched Filters

NT Radar Filters

NT Tracking Filters

Electromagnetic Wave Transmission

NT Light Transmission

NT Microwave Transmission

NT Multifunction Transmission

NT Radar Transmission

NT Short Wave Radio Transmission

NT Speereic Spectrum Transmission

NT Television Transmission

Electromagnetic Waves

NT Electromagnetic Radiation

NT High Field Magnets

NT Superconducting Magnets

AC aircraft electrical systems with rare earth permanent magnet machines

Electromechanical Devices

Electromechanical actuation for business aircraft

A comparison of hydraulic, pneumatic, and electro-mechanical actuators for general aviation flight controls

The operational impact of Navy's first TAP program --- P-3C Test, Analyze and Fix

Power by wire for aircraft - The all-electric aircraft vehicle
Comparison of electromechanical and cathode-ray-tube display mediums for an instrument approach display [NASA-TM-80045] p0404 479-23080
Electromechanical actuation development [AD-A056734] p0428 479-23101
Load spectrum measuring equipment. Part 1: Details of MX 1 system presently used to acquire data in Western MX 31 helicopters [ARL-MECH-ENG-NOTE-371] p0668 479-31194
Load spectrum measuring equipment. Part 2: Details of MX 2 system used to acquire torque load data in Sea King helicopters [ARL-MECH-ENG-NOTE-372] p0715 479-33190
ElectroN BEAN WELDING Introduction of electron beam welding in aircraft production Application of electron-beam welding to aviation production — tests of turbine engine parts welded by electron beam p0245 479-25268
Electron BEANS Fluid mechanical refracting gas prisms and aerodynamics of E - beam sustained discharge in supersonic flow, both applicable to laser technology p0371 479-20374
Electron RADIATION ST ELECTRON BEAMS ELECTRON TUBES NT CATHODE RAY TUBES NT ELECTRONIC AMPLIFIERS NN & AMPLIFIERS ELECTRONIC CONTROL AS testing aid control system for turbojet engines [ASME PAPERS 78-GT-115] p0007 479-10757
Electronic control for helicopter engines [AMS 78-45] p0323 479-18168
Definition of electronic control environment for an advanced aircraft engine [AIAA PAPERS 79-0128] p0186 479-19702
The impact of the total lightning environment on aircraft control systems p0249 479-25319
Problems of computer-aided tracking, giving particular attention to radar which can be electronically turned The FA-68 Weapon Systems trainer p0265 479-26761
Development and testing of a dual nose escape propulsion system p0350 479-32246
Fault-tolerant, high reliability electronic engine control system [AIAA PAPERS 79-1202] p0469 479-38983
New onboard structure of display and control system for piloting and air traffic control [DGLR PAPERS 79-040] p0520 479-42375
Small lightweight electrostrictive cylindrical antenna successfully utilized in an air traffic management system p0614 479-48597
Flight tests of a microprocessor control system [AIAA 79-1962] p0658 479-54412
The impact of parallel computers on the design of nonlinear flight controllers [AIAA 79-1966] p0658 479-54412
Hybrid packaging of integrated circuits for engine controls — jet engines [AD-A062525] p0370 479-20326
An electric control for an electrolydraulic active control aircraft landing gear [NASA-CS-3112] p0488 479-23948
A summary of NASA/Air Force full scale engine research programs using the P100 engine [NASA-TM-7057] p0653 479-30188
ELECTRONIC COUNTERMEASURES Real-time/near real-time recce wideband data links application for airborne reconnaissance systems Applied ECM. Volume 1 — Book p0112 479-17146
Radome design/fabrication criteria for supersonic EW aircraft — EE-111 A proposed integrated ECM system using the constant index lens antenna p0209 479-24091
Navstar/GPS /Global Positioning System/ and electronic counter measures — TACAN system vulnerability p0267 479-24726
Weapons for the black-box war The intercept of covert radar p0086 479-38624
Integrated C&W avionics — ECM-resistant Communication, Navigation and Identification p0463 479-38132
Airborne microwave ECM Performance of current radar systems in an EW environment — Electronic Warfare p0637 479-49554
Ellipsoidal modelling of aircraft targets for evaluation of electronic fuzes p0637 479-49580
ELECTRONIC EQUIPMENT NT CHARGE COUPLED DEVICES NT CMOS NT ELECTRONIC FILTERS NT ELECTRONIC MODULES NT ELECTRONIC PACKAGING NT MINIATURE ELECTRONIC EQUIPMENT NT SEMICONDUCTOR DEVICES NT SEMICONDUCTOR LASERS NT SOLID STATE DEVICES NT SOLID STATE LASERS NT SOS (SEMICONDUCTORS) NT SPACECRAFT ELECTRONIC EQUIPMENT NT TAG LASERS The electronic flight deck p0016 479-11175
Adaptation of electronic aid systems to the requirements of air traffic controllers p0054 479-13322
Display of flight plan information on electronic data display devices — A means for the enhancement of the capacity in air traffic control p0117 479-17694
Engineer’s handbook of flight and radio equipment of airplanes and helicopters p0345 479-31486
F-18 — A special report p0463 479-38131
Automatic test program generation selection — for aircraft structures p0620 479-48690
Performance of current radar systems in an EW environment — Electronic Warfare p0637 479-49555
Utilization of computerized ECM techniques to evaluate C-E system to environment compatibility — Electromagnetic Compatibility analysis for Communications Electronic systems p0690 479-52885
Modular Avionics Packaging (MAP) [AD-A059637] p0163 479-14939
Protection/hardening of aircraft electronic systems against the indirect effects of lightning p0297 479-18238
End-to-end testing — to verify electrical equipment failure due to carbon fibers released in aircraft-fuel fires p0426 479-22204
ELECTRONIC EQUIPMENT TESTS F-16 Avionics Intermediate Shop self-test Support systems for advanced military electronics — ATE design trends Advanced technology impact upon ATE self-test by use of microprocessors and LSI p0023 479-12305
Testing of avionics display systems .......................... p0023 A79-12306
Electronic packaging .............................................. p0023 A79-12309
EM - A recent real life case history ......................... p0023 A79-12300
Reliability Planning and Management test program .......... p0073 A79-15391
for airborne surveillance radar ................................ p0073 A79-15391
The perils and pitfalls of low-cost vibration alternatives - Practical experience with pneumatic exciters for production screening - electronic equipment tests ........................................ p0075 A79-16087
Digital integrated test system improves testability - of avionics ........................................ p0080 A79-16484
The challenge of new technology for avionics testing .... p0080 A79-16486
- U.S. Air Force assessment ................................... p0080 A79-16483
Operator and technician tasks for the heads-up display test set and versatile avionics shop test ........................................ p0080 A79-16446
Reliability improvement program - for military aircraft-electronic components ........................................ p0082 A79-16591
Electronic system safety - Testing reality - for avionics ........................................ p0082 A79-16591
[SAE PAPER 790570] .............................................. p0082 A79-16591
Built in test of A/D converters - Present approaches and recommendations for improved BIT effectiveness - in airborne radar systems ........................................ p0016 A79-48621
Microcomputer control of a test facility - for avionics ........................................ p0016 A79-48672
Operational experience with the AR/ER/131 Omega Navigation Set ........................................ p0016 A79-48672
A Navy plan for the development of a practical computer-aided programming/CAP/ system for analog circuit test design ........................................ p0023 A79-48870
AN/USH-449/V/A YE2 for worldwide support of the F-5 Orion ........................................ p0024 A79-48894
- Can avionic testability requirements be enforced? ........................................ p0024 A79-48894
Avionics design for testability - An aircraft contractor's viewpoint ........................................ p0024 A79-48887
Avionics design for testability - A vendor's viewpoint ........................................ p0024 A79-48888
Techniques for fault isolation ambiguity reduction - in military avionics ........................................ p0025 A79-48891
P-16 depot automatic test equipment ........................................ p0025 A79-48895
The investigation of aircraft interference problems ........................................ p0025 A79-52608
Problems in testing electrically conductive structural adhesives ........................................ p0096 A79-54240
ELECTRONIC FILTERS
A navigation filter for an integrated GPS/JITIS/EMS system for a tactical aircraft - Joint Tactical Information Distribution System ........................................ p0448 A79-36087
ELECTRONIC MODULES
Air Force modular automatic test equipment development program ........................................ p0624 A79-48878
Report on Modular Avionics Packaging (MAP) industry briefing and response ........................................ p0101 A79-13039
[AD-A059193] .............................................. p0101 A79-13039
Modular Avionics Packaging (MAP) ........................................ p0101 A79-13039
[AD-A055637] .............................................. p0101 A79-13039
Standard avionic module study ........................................ p0163 A79-14093
[AD-A056392] .............................................. p0163 A79-14093
Standard Avionics modules (SAM) for existing systems ........................................ p0233 A79-16846
[AD-A065629] .............................................. p0233 A79-16846
ELECTRONIC PACKAGING
Report on Modular Avionics Packaging (MAP) industry briefing and response ........................................ p0101 A79-13039
[AD-A059193] .............................................. p0101 A79-13039
Hybrid packaging of integrated circuits for engine controls - Jet engines ........................................ p0370 A79-20326
[AD-A062128] .............................................. p0370 A79-20326

EMERGENCY LIFE SUSTAINING SYSTEMS
Casualty evacuation by helicopter ........................................ p0023 A79-12306
The NASA Aircraft Energy Efficiency Program
Simulation study of the operational effects of fuel-conservative approaches
An analysis of operational procedures and design modifications for aircraft fuel conservation
Air buoyant vehicles — energy efficient vehicles
Energy efficient engine preliminary design and integration study
Enclosures
Aerospace Transparent Materials and Enclosures
Helicopter transparent enclosures. Volume 2: A general specification
Global enclosure fire modeling with applications
Enclosure fire dynamics model
Encounters
An introduction to co-kill probability estimation in the R on R encounter during combat aircraft maneuvers
Energy Conversion
Simulation study of the effect of fuel-conservative approaches on ATC procedures and terminal area capacity
Energy conservation aircraft design and operational procedures
The Netherlands experimental vertical axis wind turbine
Fuel-conservative guidance system for powered-lift aircraft
Fuel-efficient engine: Propulsion system-aircraft integration evaluation
Fuel conservative subsonic transport --- control surfaces activated by computers
Low energy consumption engines
Energy conservation aircraft design and operational procedures
General aviation energy-conservation research programs
Energy Conversion EFFICIENCY
Energy conversion efficiency
Making turbofan engines more efficient
The design and testing of a vertical-axis wind turbine used in ships
Energies for vehicles and buildings
SOLAR ENERGY CONVERSION
The Netherlands experimental vertical axis wind turbine
ENGINE DESIGN CONTD

[ASME PAPER 78-GT-137] p0010 A79-10794
Computations of three-dimensional gas-turbine combustion chamber flows
[ASME PAPER 78-GT-142] p0009 A79-10797
Development of a compact gas turbine combustor to give extended life and acceptable exhaust emissions
[ASME PAPER 78-GT-146] p0010 A79-10799
A design point correlation for losses due to part-span dampers on transonic rotors
[ASME PAPER 78-GT-153] p0010 A79-10802
Time-phased development methodology - The key for reliable engines in future military aircraft propulsion systems
[ASME PAPER 78-GT-167] p0010 A79-10807
Advanced turboshaft engines for low fuel consumption
[ASME PAPER 78-GT-196] p0011 A79-10816
Making turboshaft engines more energy efficient
[ASME PAPER 78-GT-201] p0012 A79-10821
The application of low cost manufacturing technology to a turbine gas generator
[ASME PAPER 78-GT-202] p0012 A79-10822
Near-net-shape engine methods emerge for aircraft engine parts fabrication technologies
[ASME PAPER 78-GT-200] p0011 A79-10820
Evolution of the turboprop for high speed air transportation
[ASME PAPER 78-GT-201] p0012 A79-10821
Advanced turboshaft engines for low fuel consumption
[ASME PAPER 78-GT-202] p0012 A79-10822
Near-net-shape engine methods emerge for aircraft engine parts fabrication technologies
[SAE PAPER 780991] p0255 A79-25877
Design of a multivariable controller for a high-order turboshaft engine model by Zakian's method of inequalities
[SAE PAPER 780992] p0255 A79-25878
Gas turbine analysis and design using interactive computer graphics
[SAE PAPER 780993] p0255 A79-25879
Choice of the main parameters in the design of aircraft engines
[SAE PAPER 780994] p0255 A79-25880
Current problems in the development and production of small gas turbine engines
[SAE PAPER 780995] p0256 A79-25881
Control system requirements for aircraft gas turbine engines
[SAE PAPER 780996] p0256 A79-25882
Control systems and problems of their development from the viewpoints of technological and operational requirements for aircraft gas turbine engines
[SAE PAPER 780997] p0256 A79-25883
Optimal design of gas-turbine engine turbomachinery on the basis of prototype elements I
[SAE PAPER 780998] p0256 A79-25884
Engine requirements for the next generation of fighter aircraft
[DSML PAPER 78-122] p0061 A79-14077
New technologies as basis for development of propulsion systems for future fighter aircraft
[DSML PAPER 78-123] p0061 A79-14078
Propulsion concept for future fighter aircraft
[DSML PAPER 78-124] p0061 A79-14079
Design of two-dimensional external compression supersonic inlets
[DSML PAPER 78-125] p0067 A79-14517
Representation of compressor characteristics in coordinates convenient for computer calculation of GTE parameters
[DSML PAPER 78-126] p0068 A79-14844
Influence of stator vane canting on alternating stress level in turbine rotor bladef
[DSML PAPER 78-127] p0068 A79-14845
Maintainability by design for turboshaft engine management
[DSML PAPER 78-128] p0078 A79-15510
Advanced turbine powerplants for future helicopter systems
[DSML PAPER 78-129] p0078 A79-16228
New technological advances in the development of helicopter powerplants for the 1990's
[DSML PAPER 78-130] p0078 A79-16232
Important criteria for the definition and design of future helicopter powerplants
[DSML PAPER 78-131] p0078 A79-16236
The Rolls-Royce Gea turboshaft engine for helicopters and its future developments

SUBJECT INDEX

600 shaft horsepower advanced technology demonstrator engine --- turboshaft for military helicopters
[AMS 78-47] p0124 A79-18170
Automation of blade design for aircraft turbines
[AMA 78-18298]
Technology evolution in the Allison Model 250 engine --- for helicopter propulsion
[AMA 78-18299]
Modeling parameter influences in gas turbine combustor design
[ATA A 78-035A] p0146 A79-19685
Design and development of a monorotor gas turbine auxiliary power unit
[ASME PAPER 78-WA/GT-2] p0149 A79-19791
Progress on the RHEEP approach to improved structural integrity in gas turbine engines - An overview --- Engine Structural Integrity Program
Fuel conservative aircraft engine technology
[ASA 1979-20078]
Recent advances in convective cooled engine and airframe structures for hypersonic flight
[ASA 1979-20087]
Aerodynamics of fluid flow engines
[DSML PAPER 78-226] p0183 A79-20483
Auxiliary gas turbine engines for aircraft --- Russian book
[ASA 1979-20088]
Marine prop - SMA propulsion module
[ASA 1979-20089]
Method for design and manufacture of the stage of a radial compressor
[ASA 1979-20090]
Engine technology for production turboshaft engines
[ASA 1979-20091]
NASA research on general aviation power plants
[ASA 1979-20092]
Recent General Electric engine development for improved service life
[ASA 1979-20093]
The application of a design verification system and accelerated mission testing to gas turbine engine development
[ASA 1979-20094]
TDS - A preliminary design system for turbines
[ASA 1979-20095]
Life Cycle Cost in advanced technology engine development
[ASA 1979-20096]
Applying design-to-life cycle cost methods during engine advanced development
[ASA 1979-20097]
Turbine engine cost reduction using Life Cycle Cost techniques
[ASA 1979-20098]
Life cycle cost in preliminary engine design for F-15
[ASA 1979-20099]
Small fan-jet engines --- for business aircraft
[ASA 1979-20100]
Influence of bypass ratio on jet engine weight
[ASA 1979-20101]
Influence of bypass ratio change on fan aerodynamic characteristics
[ASA 1979-20102]
Optimizing gasturbine engine flexible rotor balancing by the LP-search method
[ASA 1979-20103]
Design of proportional-plus-integral controllers for multivariable systems
[ASA 1979-20104]
Air-inlet engine matching problems of a jet aircraft
[ASA 79-T030] p0327 A79-29360
Aerodynamic development and performance of the CP6-6/LR2500 compressor
[ASA 79-T031] p0327 A79-29361
Optimizing the endurance of a low Mach number ramjet in a cruise application
[ASA 79-T040] p0327 A79-29402
Propulsion research - Current status and future prospects --- aircraft turbine engines
[ASA 1979-20590]
Rebinations and major decision outline - Total program
[ASA 1979-20591]
The 727-200 development
[ASA 1979-20592]
A review of tail rotor design and performance [AIAA PAPER 79-1157]

The NASA Aircraft Energy Efficiency program [AIAA PAPER 79-1170]

A novel correlation of centrifugal compressor performance for off-design prediction [AIAA PAPER 79-1159]

Rolls-Royce RB.401-07 turbofan engine for business aircraft in the 1980's [SIA PAPER 790620]

The evaluation of the weight of engine installations on transport aircraft [AIAA PAPER 79-1303]

Damage-tolerant fan blade design [AIAA PAPER 79-1119]

Propulsion system sensitivities for a strategic aircraft [AIAA PAPER 79-1151]

The multiple application core engine - sizing and usage criteria - high-pressure rotors in jet engines [AIAA PAPER 79-1123]

The selection of materials technologies for full-scale development - aircraft engine applications [AIAA PAPER 79-1152]

Lean, premixed, prevaporized combustion for aircraft gas turbine engines [AIAA PAPER 79-1166]
An overview of NASA research on positive displacement type general aviation engines

Design study and performance analysis of a high-speed multistage variable-geometry fan for a variable cycle engine

Basic problems of aircraft gas turbine engine analytic design

Preliminary study of optimal ductburning turbofan engine cycle design parameters for supersonic cruising

Engine performance considerations for the large subsonic transport

Fluidized bed gas turbine experimental unit for low energy consumption engines

Lean, premixed, prevaporized combustor conceptual design study

Lean, premixed, prevaporized combustor conceptual design study

Engine requirements for future general aviation aircraft

Review of the Rhein-Flugzeugbau Wankel powered engine potential --- with direct chamber injection

Lean, premixed, prevaporized combustor conceptual design study

Axial turbine performance prediction

A gas turbine off-design computing system

Advanced General Aviation Turbine Engine (GATE) study

A summary of NASA/Air Force full scale engine research programs using the F100 engine

Energy efficient engine flight propulsion system preliminary analysis and design report

A study of the effects of high pressure turbine active clearance control system --- for specific fuel consumption improvement

Exhaust emissions characteristics for a general aviation light aircraft Teledyne Continental Motors TSO360-C piston engine

Conceptional study of a turbojet/ramjet inlet

Aircraft engine design using experimental stress analysis techniques

Aircraft engine design using experimental stress analysis techniques

The importance of off-design operation

The prediction of compressor blade failures

A three dimensional flow computing system applicable to axial and radial flow turbomachines

Axial turbine performance prediction

A gas turbine off-design computing system

Advanced General Aviation Turbine Engine (GATE) study

A summary of NASA/Air Force full scale engine research programs using the F100 engine

Energy efficient engine flight propulsion system preliminary analysis and design report

The prediction of compressor blade failures

A three dimensional flow computing system applicable to axial and radial flow turbomachines

Axial turbine performance prediction

A gas turbine off-design computing system

Advanced General Aviation Turbine Engine (GATE) study

A summary of NASA/Air Force full scale engine research programs using the F100 engine

Energy efficient engine flight propulsion system preliminary analysis and design report

A three dimensional flow computing system applicable to axial and radial flow turbomachines

Axial turbine performance prediction

A gas turbine off-design computing system

Advanced General Aviation Turbine Engine (GATE) study
ENGINE INLETS

J85-CAN-15 compressor stall and flameout investigation

Icing testing for aircraft engines

Engine icing measurement capabilities at the AEDC

Effects of visual and action simulation cueing systems on pilot performance during takeoffs with engine failures

Effects of steady-state pressure distortion on the stall margin of a J85-21 turbojet engine

The integrity of aircraft jet engines under the impact of foreign bodies

Handling problems resulting from compressor distortion --- in single engine jet aircraft

[NEE-KP-78019-0] p0864 879-27174

ENGINE NOISE

Subject Index:

SUBJECT INDEX

Engine noise

[NASA-TM-79056] p0169 879-16999

Analysis of radiation patterns of interaction tones generated by inlet rods in the JT15 engine


Aircraft engines - aerodynamic aspects

Aerodynamic problems in engine airframe integration on fighter airplanes

[ASME-GT-1359-0] p0943 879-23936

Self-stabilizing sonic inlet

[NASA-CASE-LEW-11890-1] p0943 879-26976

Blind induced distortion experiments on an engine inlet

[AD-A066811] p0949 879-25026

Ultrasonic inspection of engine nacelle structure searching for cracks

[REPP-7610.909] p0557 879-27522

AIAE fan model test program

[AD-A069058] p0585 879-28272

Recent applications of theoretical analysis to V/STOL inlet design

[SD-A9-79-70271] p0133 879-29143

A flow field study for top mounted inlets on fighter aircraft configurations

[AC-10069732] p0650 879-30515

Conceptual study of a turbojet/ramjet inlet

[NASA-TM-80141] p0671 879-31215

Engine monitoring instruments

Military engine usage monitoring developments in the United Kingdom

[AIAA PAPER 79-0745] p0008 879-10772

An evaluation technique for determining the cost effectiveness of condition monitoring systems

[ASME PAPER 78-GT-166] p0101 879-10806

On-line computer for transient turbine cascade instrumentation

[TF 81 condition monitoring system effectiveness study] p0017 879-11488

Status of the F79 engine condition monitor systems

[EC/] p0080 879-16440

L2500 condition and performance monitoring system --- gas turbine for ship propulsion

[TF 81 condition monitoring system effectiveness study] p0080 879-16441

Applications of electro-optical instrumentation in turbine engine development

[EC/] p0080 879-16442

A European view on gas turbine engine monitoring of present and future civil aircraft

[AIAA PAPER 79-1200] p0069 879-38982

Diagnostics of wear in aeronautical systems

[AC 10 OF 3232] p0475 879-39805

Parts tracking and engine history recording for on-condition maintenance

[AIAA PAPER 79-1280] p0509 879-40486

A simplified gross thrust computing technique for an afterburning turbofan engine

[433630458] p0646 879-50440

Aircraft turbine engine monitoring experience: Implications for the P100 engine diagnostic system program

[AD-A0659282] p0671 879-31217

ENGINE NOISE

A method for assessing turbine engine run-up noise impact on airport neighbors

[SAP-PAPER 7805272] p0004 879-10397

Gas turbine jet exhaust noise prediction

[SAP app 876] p0018 879-11623

Effect of forward speed on noise emission and thrust of small aircraft propellers

[DGLE PAPER 78-127] p0061 879-14080

Correlation of combustor acoustic power levels inferred from internal fluctuating pressure measurements

[NEE-KP-78019-0] p0066 879-14976

Boeing's noise technology facilities

[NEE-KP-78019-0] p0074 879-15569

Full-scale engine tests of bulk absorber acoustic inlet treatment

[AIAA PAPER 79-0660] p0267 879-26881

The effect of throttling on forward radiated fan noise

[AIAA PAPER 79-0640] p0269 879-26917

Evaluation of two inflow control devices for flight simulation of fan noise using a J75 engine

[AIAA PAPER 79-0654] p0270 879-26956

A-177
Experiments concerning the anomalous behaviour of aero-engine exhaust noise in flight  
"(AIAA PAPER 79-0648)  p0271 A79-26930
Turbojet interior noise studies  
"(AIAA PAPER 79-0647)  p0271 A79-26931
Effects of simulated forward flight on jet noise, shock noise and interior noise  
"(AIAA PAPER 79-0615)  p0271 A79-26936
Flight effects on noise generated by the T76D engine with inverted pressure fan flow as measured in the NASA Ames 40 by 80 foot wind tunnel  
"(AIAA PAPER 79-0619)  p0271 A79-26937
Radiation of an acoustic source near the trailing edge of a wing in forward motion  
"(AIAA PAPER 79-0605)  p0272 A79-26940
Combustion noise prediction update  
"(AIAA PAPER 79-0588)  p0272 A79-26942
Unsteady stator response to upstream nonisothermal flow  
"(AIAA PAPER 79-0579)  p0272 A79-26945
Aerodynamic and acoustic comparisons of scaled-down and actual engine jets  
"(AIAA PAPER 79-0574)  p0273 A79-26946
Investigation of wing shielding effects on CTOL engine noise  
"(AIAA PAPER 79-0669)  p0318 A79-28970
Measurements and predictions of flyover and static engine noise of an afterburning turbofan engine in an F-111 airplane  
"(AIAA 79-7016)  p0328 A79-29391
Quieter short and medium haul aircraft  
"(AIAA 79-34921)  p0468 A79-34921
Propeller aircraft noise around general aviation airports  
"(NASA PAPER 790594)  p0455 A79-36728
Sound absorption through flow separation - a new possibility for acoustic attenuation of engines  
"(NASA 79-41238)  p0512 A79-41238
Duct noise radiation through a jet flow  
"(NASA 79-50110)  p0682 A79-50110
Measurements and predictions of flyover and static noise of a TF30 afterburning turbofan engine  
"(NASA-TF-1327)  p0702 A79-13245
Reassessed and predicted noise of the Aéro-Lyonnaise TF-102 turbofan noise  
"(NASA-TF-7069)  p0720 A79-15957
Analysis of radiation patterns of interacting tones generated by inlet rods in the J715D engine  
"(NASA-TM-7067A)  p0720 A79-15960
Investigation of wing shielding effects on CTOL engine noise  
"(NASA-TF-79078)  p0731 A79-20390
Engine integration and noise considerations for STOL aircraft  
"(NASA-TP-23005)  p0830 A79-23005
Engine-induced structural-borne noise in a general aviation aircraft  
"(NASA-CH-150099)  p0559 A79-29957
Noise generation by jet-engine exhaust deflection  
"(DLR-FB-78-21)  p0654 A79-30192
ENGINE PARTS
Near-net-shape engine methods emerge - aircraft engine parts fabrication technologies  
"(NASA 79-11449)  p0017 A79-11449
Examination of defects in the case of helicopter engines - for supersonic transport propulsion system components  
"(NASA-TP-12164)  p0020 A79-12164
New construction materials for gas turbine engines and technology for processing these materials  
"(NASA-CH-12533)  p0026 A79-12533
Assembly and repair of aircraft engine parts using pulsed YAG lasers  
"(NASA 79-15205)  p0071 A79-15205
Application of shock tube technology to the measurement of heat-transfer rate to gas turbine components  
"(NASA 79-15211)  p0072 A79-15211
NASA thermal barrier coatings - Summary and update  
"(NASA 79-21295)  p0019 A79-21295
Estimation of reliability from multiple independent grouped censored samples with failure times known  
"(NASA 79-23643)  p0206 A79-23643
Discrete time slice simulation of replacement requirements - for aircraft engine components  
"(NASA 79-23796)  p0206 A79-23796
Hot isostatic pressing structural materials for rocket engine applications  
"(NASA 79-24013)  p0270 A79-24013
Repair of directionally solidified airfoil components  
"(NASA 79-24134)  p0211 A79-24134
Causes for the deterioration of splined connections in aircraft engines during service  
"(NASA 79-25269)  p0294 A79-25269
Residual-stress formation during the thermal hardening of components in gas-turbine engines  
"(NASA 79-26828)  p0266 A79-26828
Thermal cycling endurance problems in gas-turbine parts  
"(NASA 79-26838)  p0266 A79-26838
Prediction of gas-turbine alloy creep characteristics  
"(NASA 79-26841)  p0266 A79-26841
Cost benefits from improved hot section life prediction technology - for aircraft engine combustor and turbine parts  
"(AIAA PAPER 79-1154)  p0467 A79-39863
Small hole drilling and inspection with pulsed laser systems - in air-cooled aircraft engine structures  
"(AIAA PAPER 79-1268)  p0470 A79-39912
New techniques in jet engine balancing  
"(NASA 79-40334)  p0507 A79-40334
Parts tracking and engine history recording for on-condition maintenance  
"(AIAA PAPER 79-1280)  p0509 A79-40486
Development of materials and processes for engine components - Current and future points of interest  
"(NASA 79-40680)  p0509 A79-40680
CFE jet engine performance deterioration  
"(NASA 79-12237)  p0512 A79-41175
Error localization in turbojet engines through determination of the characteristics of structural members - German thesis  
"(NASA 79-41827)  p0515 A79-41827
Application of hot isostatic pressing to aircraft gas turbines  
"(NASA 79-45067)  p0564 A79-45067
Composites emerging for aeropropulsion applications  
"(NASA 79-53720)  p0563 A79-53720
Advanced composites for turbines  
"(NASA 79-53889)  p0564 A79-53889
Superalloy knife edge seal repair  
"(AD-20057269)  p0047 A79-11055
Gas path sealing in turbine engines  
"(NASA 79-11057)  p0047 A79-11057
Oil sealing of aero engine bearing compartments  
"(NASA 79-11062)  p0047 A79-11062
Self active pad seal application for high pressure engines  
"(NASA 79-11071)  p0047 A79-11071
Testing of coatings and materials for jet engine components in simulated operational environments  
"(NASA 79-11860)  p0235 A79-25249
Materials and structural aspects of advanced gas-turbine and helicopter engines  
"(NASA-TF-790100)  p0353 A79-20008
A contribution on thermal fatigue in cooled turbine blading  
"(NASA 79-22153)  p0552 A79-22153
Forecasting engine life  
"(NASA 79-22154)  p0552 A79-22154
Application of engine usage analysis to component life utilization  
"(NASA 79-22160)  p0553 A79-22160
Boundary-integral equation analysis of an advanced turbine disk ring slot  
"(NASA 79-22161)  p0553 A79-22161
Engine rotor burst containment/control studies  
"(NASA 79-22162)  p0553 A79-22162
Small turbines: Experiences with disk ruptures  
"(NASA 79-22163)  p0553 A79-22163
Build 1 of an accelerated life test of a TF41 with block 76 hardware  
"(NASA 79-22164)  p0516 A79-40595
Development of spiral-groove self-acting seals for helicopter engines  
"(NASA-CH-156622)  p0711 A79-32551
Structural life prediction and analysis technology  
"(NASA 79-33483)  p0721 A79-33483
ENGINE STARTERS
An unstable subsonic critical speed solution - of shaft failures in F-16 engine start system  
"(NASA 79-10055)  p0258 A79-25916
Testing to assess the affect of degraded fuel specifications on the cold start ability of a
ENGINE TESTING LABORATORIES

Aeronautical test facilities capabilities and use

The NASA high pressure facility and turbine test rig

Afterbody tests in the Mocha hot gas bench

[ASME PAPER 78-WA-1016] p0403 479-20995

Turbine engine automated trialing and vibration diagnostics

[ASME PAPER 78-WA-1019] p0009 479-10973

Turbine blade tip clearance measurement utilizing borescope photography

[ASME PAPER 78-WA-1020] p0010 479-10805

Propulsion test facilities technical capabilities and international use

[ASME PAPER 78-WA-1021] p0011 479-10813

20 hp mini-BFV demonstrator engine program

[ASME PAPER 78-WA-1022] p0011 479-10820

CTC FLOW TESTS

A gas path performance diagnostic system to reduce J75-P-17 engine overhaul costs

[ASME PAPER 78-WA-1017] p0002 479-10967

Turbine engine automated trialing and vibration diagnostics

[ASME PAPER 78-WA-1018] p0009 479-10973

Turbine blade tip clearance measurement utilizing borescope photography

[ASME PAPER 78-WA-1019] p0010 479-10805

Propulsion test facilities technical capabilities and international use

[ASME PAPER 78-WA-1021] p0011 479-10813

20 hp mini-BFV demonstrator engine program

[ASME PAPER 78-WA-1022] p0011 479-10820

Certain problems which had to be solved between the prototype stage and mass production stage in the development of an engine --- turbojet engine tests

[ASME PAPER 78-WA-1023] p0026 479-12532

Statistical diagnostics of aircraft engines

[ASME PAPER 78-WA-1024] p0028 479-12950

LMD2500 condition and performance monitoring system --- gas turbine for ship propulsion

[ASME PAPER 78-WA-1025] p0080 479-16462

Parametric method for diagnosing the state of aircraft engines on the basis of limited information

[ASME PAPER 78-WA-1026] p0082 479-16781

Modern engine development test techniques --- for helicopters

[ASME PAPER 78-WA-1027] p0119 479-18660

Design and development of a rotating water table for flow studies in turbomachinery stages

[ASME PAPER 78-WA-1028] p0168 479-19762

Engine life usage experience of YF17/TF101 flight and ground testing

[ASME PAPER 78-WA-1029] p0189 479-19798

Dynamic response testing of gas turbines

[ASME PAPER 78-WA-1030] p0196 479-22332

Effect of forward velocity and crosswind on the reverse-thrust performance of a variable-pitch fan engine

[AIAA PAPER 78-1005] p0200 479-23512

Dynamic data analysis --- gas turbine engine vibration transducers

[ASME PAPER 78-WA-1031] p0252 479-25845

Recording methods for steady state and transient signals --- aircraft engine tests

[ASME PAPER 78-WA-1032] p0253 479-25849

Recent General Electric engine development testing for improved service life

[SAE PAPER 780590] p0255 479-25876

Planning the development and qualification process for the next generation of high technology aircraft engines

[SAE PAPER 780592] p0255 479-25878

Requirements and constraints in the development and qualification of gas turbine engines for the Navy

[SAA PAPER 780994] p0255 479-25879

Operational experience with linked-blade high-output gas-turbine engines

[ASME PAPER 78-WA-1033] p0266 479-26380

Aerodynamic and acoustic comparisons of scaled-down and actual engine jets

[AIAA PAPER 79-0574] p0273 479-26996

A decision theory model for health monitoring of aeroengines --- metal particles in lubricating oils as wear indicator

[AIAA PAPER 79-28361] p0284 479-28361

Testing to assess the effect of degraded fuel specifications on the cold start ability of a T63-A-700 engine

[AIAA 79-7009] p0328 479-28394

Characteristics of aerelastic instabilities in turboachinery - NASA full scale engine test results

[AIAA 79-7011] p0328 479-28396

Vibration measurements on planetary gears of aircraft turbine engines

[AIAA 79-7012] p0328 479-28397

Experimental study on the burning out of flameholders --- in ramjets

[AIAA 79-7021] p0329 479-28394

Initial wind tunnel tests at Mach 4 and 7 of a hydrogen-burning, airplane-integrated scramjet

[AIAA 79-7045] p0330 479-28413

Turbine performance analysis and engine to rig correlation

[AIAA 79-7048] p0331 479-28416

A low cost, on-site performance monitoring system --- thermodynamics of shaft power gas turbines

[ASME PAPER 79-WA-21] p0390 479-32334

Engine evaluation of a vibration damping treatment for in-line gas turbine engines

[ASME PAPER 79-WA-163] p0395 479-32425

The effect of a sample lot of fuel JETCOCs on emissions levels of a small gas turbine

[ASME PAPER 79-WA-165] p0395 479-32427

Identification of a STOL propulsion plant model from flight data

[ASME PAPER 79-WA-260] p0406 479-36521

F101 engine derivative work advances

[ASME PAPER 79-38600] p0407 479-38600

A review of advanced data reduction methods to gas turbine dynamic analysis

[ASME PAPER 79-36024] p0407 479-36024

A study of advanced data reduction methods to gas turbine dynamic analysis

[ASME PAPER 79-36024] p0407 479-36024

A review of Curtis-Wright rotary engine developments with respect to general aviation potential

[SAR PAPER 790621] p0457 479-36749

Engine induced structural-borne noise in a general aviation aircraft

[SAR PAPER 790626] p0456 479-36754

Detonation characteristics of Soviet aviation aircraft combustion engines

[SAR PAPER 790630] p0458 479-36757

High level maintenance below sea level

[ASME PAPER 79-38825] p0465 479-38825

Test verification of a turbofan partial swirl afterburner

[ASME PAPER 79-1199] p0469 479-38981

A streamlined control system development process --- to optimize aircraft propulsion system performance

[ASME PAPER 79-1344] p0472 479-39048

Multivariable control altitude demonstration on the F100 turbofan engine

[AIAA 79-7012] p0475 479-39048

Evaluation of turbo-propulsion simulators as a testing technique for fighter aircraft

[AIAA PAPER 79-7021] p0506 479-40880

A summary of NASA/Air Force Full Scale Engine Research programs using the P100 engine

[AIAA PAPER 79-1105] p0506 479-40880

Further test results with the airjet distortion generator - A new tool for aircraft turbine engine testing

[AIAA PAPER 79-1105] p0510 479-40752

Program on Variable Cycle Engines

[AIAA PAPER 79-1105] p0510 479-40759

Regenerator struttes for automotive gas turbines

[ASME PAPER 79-28291] p0528 479-28291

Statistical diagnostics of aircraft engines

[ASME PAPER 79-28291] p0528 479-28291
The test pilot in the airline industry or high bleed flow extraction rates

Full-scale engine tests of bulk absorber acoustic inlet treatment

Optical flow measurements: Applications to wind tunnels or water bench tests

Turbulence characteristics of compressor discharge flows -- JT9D engine tests

Turbulence measurements in the compressor exit flow of a General Electric CF6-50 engine

Evaluation of a simplified gross thrust calculation technique using two prototype F100 turbofan engines in an altitude facility

A new facility for structural engine testing

NASA CF6 jet engine diagnostic program: Long-term CF6-60 low-pressure turbine deterioration

A summary of NASA/Air Force full scale engine research programs using the F100 engine

Critical assessment of emissions from aircraft piston engines

Experimental Clean Combustor Program (ECCP), phase 3 -- commercial aircraft turbofan engine tests with double annular combustor

Aerodynamic performance of axial-flow fan stage operated at nine inlet guide vane angles --- to be used on vertical lift aircraft

CF6 jet engine performance improvement program. Short core exhaust nozzle performance improvement concept -- specific fuel consumption reduction

ENGINEERING DEVELOPMENT

U PRODUCT DEVELOPMENT

ENGINEERING DRAWINGS

Geometric data transfer -- for computerized aircraft engineering drawings

ENGINEERING MANAGEMENT

The test pilot in the airline industry or 'my bags are packed and I'm ready to go'

Engineering and development program plan: Aircraft safety

ENGINES

NT AIR BREATHING ENGINES

NT JET ENGINES

NT HELICOPTER ENGINES

NT HYDROGEN ENGINES

NT INTERNAL COMBUSTION ENGINES

NT JET-57 ENGINE

NT J-75 ENGINE

NT J-79 ENGINE

NT J-85 ENGINE

NT JET ENGINES

NT TURBOPROP ENGINES

NT TURBOFAN ENGINES

NT TURBOJET ENGINES

NT TURBOJET ENGINES

NT VARIABLE CYCLE ENGINES

NT WARKEL ENGINES

NT RAMJET ENGINES

NT ROCKET ENGINES

NT SUPERSONIC COMBUSTION RAMJET ENGINES
Environmental models for moisture absorption by aircraft composites

FAA proposes that the standard noise model be the integrated noise model /TAM/

Progress in mathematical modeling of the aircraft operational environment of DD 963 class ships /AIAA PAPER 79-1677/

ENVIRONMENT POLLUTION

Drop formation, evaporation modeling and environmental assessment of JP-4 fuel jetisoned from aircraft /AIAA PAPER 79-0186/

Some environmental and safety aspects of using hydrogen as a fuel /AIAA 1979-20774/

ENVIRONMENT PROTECTION

The effects of ambient conditions on gas turbine emissions - Generalized correction factors /AIAA PAPER 79-0234/

Helicopter noise standards - Another point of view: A national approach to rotorcraft noise regulation /AIAA 1979-18687/

Double recirculation zone two-stage combustor for aircraft engine emissions reduction /AIAA 79-7619/

ENVIRONMENTAL CCWTL

The McDonnell Aircraft Company Lightning Simulation Laboratory /AIAA 1979-3011/

Dynamic simulator test and evaluation of a JTIDS relative navigation system --- Joint Tactical Information Distribution System /AIAA 1979-06694/

Laboratory tests to determine lightning attachment points with small aircraft models /AIAA 1979-51129/

Laboratory simulation of swept lightning strokes /Engineering test/


Piloted Aircraft Environment Simulation Techniques /AGARD-CP-2691/

Mission environment simulation for Army rotorcraft development: Requirements and capabilities /AIAA 1979-15977/

Environmental requirements for simulated helicopter/VTOL operations from small ships and carriers /AIAA 1979-15978/

Proposed advances in simulation of atmospheric phenomena for improved training /AIAA 1979-15979/

ENVIRONMENT SIMULATORS

Evaluation of IFR handling qualities of helicopters using the NAF airborne V/STOL simulator /AIAA 1979-0702/

Development of a blast simulator for testing simulated aircraft fuel tanks /AD-105686/

Environmental fog/rain visual display system for aircraft simulators /NASA-CASE-ARC-1115-1/

ENVIRONMENTAL CHAMBERS

U TEST CHAMBERS

ENVIRONMENTAL CONTROL

Operational reliability of climate and pressure control equipment for passenger aircraft --- Russian book /AIAA 1979-10850/

The F-16 environmental control system /AIAA PAPER 78-765-11/

The application of foil bearing turbomachinery in aircraft environmental control systems /AIAA 1979-12560/

Lower avionic temperature - Lower life cycle cost /AIAA 1979-12567/

The influence of the noise environment on crew communications /AIAA 1979-39914/

ENVIRONMENTAL ENGINEERING

Advancements in helicopter cockpit technology /AIAA 1979-19625/

ENVIRONMENTAL LABORATORIES

Unique environmental test facilities at Orlando Division of Martin Marietta Aerospace /AIAA 1979-30448/

ENVIRONMENTAL MONITORING

Development and evaluation of a helicopter-borne water-quality monitoring system /AIAA 1979-15085/

California airport monitor noise data /AIAA 1979-15559/

Research aircraft and their capabilities --- in atmospheric environmental measurements /AIAA 1979-21971/

Analysis of Coast Guard missions for a maritime patrol airship /AIAA 1979-42379/

ENVIRONMENTAL QUALITY

ENVIRONMENTAL SUBSETS


Airport noise control and land use compatibility study /AIAA 1979-34972/

Jet engine test cells: Emissions and control measures, phase 2 /AIAA 1979-10072/

ENVIRONMENTAL TESTS

Development of an environmental design and test guide for Army rotary-wing aircraft /AIAA 1979-16078/

Status of the F79 engine condition monitor system /AIAA 1979-16481/

Environmental vibration testing of helicopter stores and equipment to the procedures outlined in MIL-FED-618C /AIAA 1979-20412/

Naval Air Development Center's unique environmental test facilities /AIAA 1979-18146/

Quantification of the storage logistics thermal environment -- environmental criteria for ordnance /AIAA 1979-22161/

A cyclic load test for environmental durability evaluation of bonded honeycomb structure --- aircraft AI panels /AIAA 1979-22162/

Recent advances in infrared lighting effects research /AIAA 1979-25313/

CENS technology applied to an airborne radar --- Combined Environment Reliability Testing /AIAA 1979-39993/

Helicopter component environmental vibration testing - The poor man's fatigue test /AIAA 1979-49101/

Combined environmental reliability test of the common strategic Doppler system /AIAA 1979-50368/
ERROR DETECTION CODES
ERROR CORRECTING DEVICES
ERROR CORRECTING CODES
ERROR BAND
ESCAPE SYSTEMS
ESCAPE (ABANDONMENT)
ESA
ERRORS
U ACCURACY
NT VELOCITY ERRORS
NT ABEOSAT SATELLITES
NT POSITION PROPS
NT PILOT ERROR
NT INSTRUMENT ERRORS
NT RANGE ERRORS
Death by misadventure --- helicopter escape system
Error model verificatica for a three axis laser
Unique crew escape concepts for ITS mission aircraft
Helicopter emergency escape
Development and initial test results of parachutes
Rotor Systems Research Aircraft /RSRA/ Emergency escape systems
Aircrew experiences in USAF ejections, 1971-1977
A system for survival --- passenger aircraft escape systems utilizing pyrotechnics
Escape system trajectory sensitivity analysis
The Swedish approach to escape system testing
Aeronautical systems technology needs: Escape, rescue and survival
Crew escape concepts for advanced high performance aircraft
Escape system trajectory sensitivity analysis
Escape system trajectory sensitivity analysis
Estimating A model for unsteady effects in lateral dynamics for use in parameter estimation --- aircraft stability
The relationship of unsteadiness in downwash to the quality of parameter estimates
An introduction to co-kill probability estimation in the N on N encounter --- during combat aircraft maneuvers
Estimation for advanced technology engines
Estimation of aircraft target motion using pattern recognition orientation measurements
Effect of sampling rate and record length on the determination of stability and control derivatives
Methanol, ethanol and jet fuel emissions comparison from a small gas turbine
ECLEIDIAN GEOMETRY
MT ANGLE OF ATTACK
MT ANGLES (GEOMETRY)
MT CHORDS (GEOMETRY)
MT CIRCUMFERENCES
MT LEADING EDGES
MT SWEEP ANGLE
EULER EQUATIONS OF MOTION
Calculation of supersonic flow past wings with consideration of tangential discontinuities shed from the edges within the scope of a model using a system of Euler equations
The consideration of the effect of winds in the mechanics-of-flight equations
Transonic flow over the NASA 64X006 with an oscillating flap-calculations based on the Euler equations
EUROPE
Joint Airworthiness Requirements - Their history and progress
The European helicopter industry and cooperation
The new European subsonic aerodynamic testing facilities --- aircraft wind tunnels
Euromissile - An example of cooperation with respect to missiles
Icing test facilities and test techniques in Europe
EUROPEAN AIRBUS
MT A-300 AIRCRAFT
Britain's better airbus wing --- A-310 aircraft wing design
Airbus picks up speed - and the junior A310 takes off
A European view on gas turbine engine monitoring of present and future civil aircraft [AIAA PAPER 79-1200] p0469 A79-38982
The European Airbus has definitively penetrated the world market p0516 A79-42062

EUROPEAN SPACE PROGRAMS

The European transonic wind-tunnel project p0334 A79-31021

EUTECTIC ALLOYS

Evaluation of an advanced directionally solidified gamma/gamma* - alpha # eutectic alloy [NASA-CS-159146] p0369 A79-20222

EUTECTICS

NT EUTECTIC ALLOYS

EVACUATING (TRANSPORTATION)

Casual evacuation by helicopter p0112 A79-18669
Injuries in air transport emergency evacuations p0561 A79-28160

EVALUATION

NT TRAINING EVALUATION

Basic for an objective evaluation of the paratroop jumping reliability p0402 A79-33619
Preliminary evaluation of several nondestructive-evaluation techniques for silicon nitride gas-turbine rotors [AML-77-69] p0249 A79-11414

EVAPORATION

NT TRANSPORTATION

Drop formation, evaporation modelling and environmental assessment of JE-4 fuel jettisoned from aircraft [AIAA PAPER 79-0186] p0143 A79-19585
Intensification of fuel vaporization in aircraft gas turbine engines by electrical forces p0280 A79-27748

EVAPORATION RATE

Theoretical approach to spray combustion in gas turbine combustor p0517 A79-42207

EVAPORATIVE COOLING

NT FILE COOLING

Evasive Actions
Numerical computation of optimal evasive maneuvers for a realistically modeled airplane pursued by a missile with proportional guidance [AIAA 79-1626] p0556 A79-45306

EVOLUTION (DEVELOPMENT)

Evolution of the turbosrop for high speed air transportation [AIAA PAPER 78-GT-201] p0012 A79-10021
The growth and evolution of the TPE331 [AIAA PAPER 79-GT-164] p0395 A79-32926

EXACTNESS

NT PRECISION

EXCHANGING

NT FOR EXCHANGING

EXCITATION

NT ACOUSTIC EXCITATION

Excitation and analysis technique for flutter tests [AGARD-8572] p0367 A79-20137

EXCITED STATES

NT EXCITATION

EXCLUSION

Findings and views concerning the exemption of kerosene fuels from the mandatory petroleum allocation and price regulations [DOD/ERA-0023] p0559 A79-28058

EXECUTIVE AIRCRAFT

U GENERAL AVIATION AIRCRAFT

U PASSENGER AIRCRAFT

EXTENSION

U PHYSICAL WORK

EXHAUST DIFFUSERS

Self-contained grease lubrication systems for aircraft applications [ABS 79-39] p0631 A79-49091
End wall and corner flow improvements of the rectangular ALPRA jet-diffuser ejector [AD-A057663] p0466 A79-11051

SUBJECT INDEX

Diffusers for gas turbine combustion systems p0308 A79-19369

EXHAUST EMISSION

Analytical-numeric models for the evaluation of polluting emissions from aircraft gas turbine - Limiting techniques p0689 A79-52758

Turbine engine particulate emission characterization [AD-1073198] p0717 A79-33208

VTOL FLOW SIMULATION

Wind tunnel model study of the hot exhaust plume from the compressor research facility at Wright-Patterson Air Force Base, Ohio [AIAA PAPER 79-GT-186] p0396 A79-32445
V/STOL aircraft configuration effects on exhaust gas emission [AIAA PAPERS 78-1284] p0471 A79-39019

Validation of scramjet exhaust simulation technique at Mach 6 [NASA-CR-3003] p0363 A79-20104

EXHAUST GASES

The effects of ambient conditions on gas turbine emissions - Generalized correction factors [ASME PAPER 78-GT-87] p0001 A79-10262
Development of a compact gas turbine combustor to give extended life and acceptable exhaust emissions [ASME PAPER 78-GT-186] p0010 A79-10799
Hydrogen enrichment for low-emission jet combustion p0134 A79-19358
Measurement and analysis of airport emissions p0205 A79-23743

Emissions of oxides of nitrogen from aircraft - air quality impact p0206 A79-23743

Updated model assessment of pollution at major U.S. airports p0206 A79-23745

Methanol, ethanol and jet fuel emissions comparison from a small gas turbine [ASA PAPER 781013] p0256 A79-25893

In-scanning camera measurements of an exhaust plume from an axisymmetric nozzle afterbody model at transonic Mach numbers p0281 A79-28097

Double recirculation zone two-stage combustor --- for aircraft engine emissions reduction [AIAA 79-7019] p0329 A79-29392

Aircraft engine emissions are under continuing surveillance p0392 A79-30581

Wind tunnel model study of the hot exhaust plume from the compressor research facility at Wright-Patterson Air Force Base, Ohio [ASME PAPER 79-GT-106] p0396 A79-32445
Characteristic time correlations of pollutant emissions from an annular gas turbine combustor --- of aircraft engines [ASME PAPER 79-GT-194] p0396 A79-32452

Concepts for reducing exhaust emissions and fuel consumption of the aircraft piston engine [ASA PAPER 790605] p0456 A79-36737

Aircraft engine emissions and the development of motor emission regulations [ONERA, TP NO. 1979-43] p0473 A79-39092

Analysis of plume rise from jet aircraft p0532 A79-43436


Pilot program to develop operating time emission degradation factors for general aviation piston engines [AD-A058158] p0505 A79-11562

Jet engine test cells: Emissions and control measures, phase 1 [PB-283470/3] p0505 A79-11580

Air pollution from aircraft operations at San Jose Municipal Airport, California [NASA-TP-78056] p0096 A79-12585

Effect of swirl mounted mixing venturi on emissions of flame-tube combustor using jet fuel [NASA-TP-1393] p0199 A79-14099
and development of aerodynamic and acoustic prediction procedures [NASA-CR-13168] p0671 A79-31212

EXHAUST SYSTEMS An acoustic problem in aeroelastic chambers arising from exhaust noise testing [AIAA PAPER 79-1820] p0271 A79-26929
Full-scale wind tunnel study of nacelle shape on cooling drag [AIAA PAPER 79-0649] p0607 A79-47900
Internal mixer investigation for JT8D engine jet noise reduction. Volume 1: Results [AD-A057319] p0237 A79-10059

EXHAUST VELOCITY
On the noise emitted by cold subsonic coaxial jets p0117 A79-17767
Effects of geometric and flow-field variables on inverted-velocity-profile coaxial jet noise -- nozzle geometry [NASA-TR-75095] p0375 A79-20830

EXITS (DOORS)
O DOORS

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

EXPANSION
NT GAS EXPANSION
NT THERMAL EXPANSION

EXPERIMENTAL DESIGN
NT FACTORIAL DESIGN

Experimental design for real-time simulations of air traffic control concepts p0017 A79-11481
The importance of experimenting in aerodynamics and fluid mechanics -- on-line wind tunnel-computer integration [NASA PAPER 78-229] p0184 A79-20485
Study of some characteristics of helicopter rotor operation on the basis of a numerical experiment p0486 A79-23966
A study of some characteristics of a lifting propeller by numerical experiment p0694 A79-53728
Feasibility design study for scale model of ZP-1 airship [AD-A056824] p0100 A79-12015
Experimental techniques for transonic testing in shock tubes p0342 A79-30690

EXPERIMENTATION
NT SPHERES
EXPLORING CONDUCTOR CIRCUITS
O CIRCUITS
EXPLORATION
NT SPACE EXPLORATION
EXPLORER SATELLITES

Considerations on the airborne use of DME interceptors or SSR transponders for ground-derived landing and surveillance systems p0055 A79-13247

EXPLOSIVES
NT NUCLEAR EXPLOSIONS
NT UNDERWATER EXPLOSIONS
Tests to determine the ullage explosion tolerance of helicopter fuel tanks [AD-A058168] p0117 A79-11481

EXPLOSIVE DEVICES
NT BOMBS (ORDNANCE)
Explosive removal of egress panels for emergency escape from helicopters underwater p0066 A79-14117

EXPLOSIVE REMOVAL OF EGRESS PANELS FOR EMERGENCY ESCAPE FROM HELICOPTERS UNDERWATER - a theoretical investigation - for simulating EMP-induced aircraft responses p0336 A79-30155
Inflight utilization of an optical fiber transmission system on a Falcon 10 aircraft p0376 A79-20986
F-16 high-alpha flight control characteristics and control system concept

Investigation of the YF-16 in high angle of attack asymmetric flight

Aerodynamic characteristics of forebody and nose strakes based on F-16 wind tunnel test experience. Volume 2: Data base

F-16 multi-national fighter

F-16 advanced electro-optical pod field-of-view simulation study --- task complexity during laser guided weapons delivery

Energy maneuverability display validation --- F-16 aircraft

Aerodynamic characteristics of forebody and nose strakes based on F-16 wind tunnel test experience. Volume 1: Summary and analysis

Systems implications of active controls

P-17 AIRCRAFT

Engine-aircraft afterbody interactions - Recommended testing techniques based on YF-17 experience

Active external store flutter suppression in the YF-17 flutter model

Validation of MIL-Y-94969G: General specification for flight control system for piloted military aircraft. Volume 1: Summary of YF-17 and C-5A validations

P-18 AIRCRAFT

F-16 air conditioning system

Designing-in reliability - A new approach --- for P-16 inertial Navigation System

The P/A-18 challenge - Readiness and low total cost

F-18 Hornet

Performance characteristics of nonaxisymmetric nozzles installed on the P-18 aircraft

P-18 status report

Two versions of the F-16 in hot competition

P-18 - A special report
### SUBJECT INDEX

<table>
<thead>
<tr>
<th>Title</th>
<th>Page Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analytic redundancy for flight control sensors on the Lockheed L-1011 aircraft</td>
<td>p0988 A79-36077</td>
</tr>
<tr>
<td>Failure detection in signal processing and sensing in flight control systems</td>
<td>p0611 A79-47960</td>
</tr>
<tr>
<td>Failure modes and redundancy analysis for the Multifunction Inertial Reference Assembly (MIRA)</td>
<td>p0612 A79-47971</td>
</tr>
<tr>
<td>Fail-safe optimal design of structures with substructuring</td>
<td>p0884 A79-23950</td>
</tr>
<tr>
<td>The requirement of damage tolerance. An analysis of damage tolerance requirements with specific reference to MIL-L-83344 [NASA-TN-77005-U]</td>
<td>p0550 A79-27135</td>
</tr>
<tr>
<td>W2 ENGINE FAILURE</td>
<td></td>
</tr>
<tr>
<td>W1 STRUCTURAL FAILURE</td>
<td></td>
</tr>
<tr>
<td>W7 SYSTEM FAILURES</td>
<td></td>
</tr>
<tr>
<td>FAILURE ANALYSIS</td>
<td></td>
</tr>
<tr>
<td>Hazard criticality analysis --- with emphasis on aircraft components</td>
<td>p0007 A79-10621</td>
</tr>
<tr>
<td>Advanced technology impact upon AVT self test --- by use of microprocessors and LSI</td>
<td>p0023 A79-12306</td>
</tr>
<tr>
<td>Time-dependent failure rates for jet aircraft</td>
<td>p0073 A79-15379</td>
</tr>
<tr>
<td>Application of the fault tree in fault testing and design improvement --- of aircraft components</td>
<td>p0082 A79-16585</td>
</tr>
<tr>
<td>Northrop/United States Air Force application of failure predictions to an operational aircraft --- for F-52/F</td>
<td>p0113 A79-17527</td>
</tr>
<tr>
<td>Airworthiness of helicopters /Cierva Memorial Lecture/</td>
<td>p0118 A79-18004</td>
</tr>
<tr>
<td>Bonding and durability --- for airframe structures</td>
<td>p0451 A79-36702</td>
</tr>
<tr>
<td>The aircraft air conditioner data revisited --- for comparison of alternative system concepts</td>
<td>p0476 A79-39995</td>
</tr>
<tr>
<td>Development of in-flight steady-state failure rates</td>
<td>p0877 A79-39912</td>
</tr>
<tr>
<td>The effect of endless burn-in on reliability growth projections --- for solid state aviation electronics equipment</td>
<td>p0477 A79-39920</td>
</tr>
<tr>
<td>Error localization in turbojet engines through determination of the characteristics of structural members --- German thesis</td>
<td>p0515 A79-81627</td>
</tr>
<tr>
<td>Review of aircraft bearing rejection criteria and causes</td>
<td>p0564 A79-45250</td>
</tr>
<tr>
<td>Failure detection in signal processing and sensing in flight control systems</td>
<td>p0612 A79-47971</td>
</tr>
<tr>
<td>Test implementation through support software --- A PIT translator --- automated Fault Isolation Tests on airborne radar system</td>
<td>p0620 A79-48687</td>
</tr>
<tr>
<td>Techniques for fault isolation ambiguity reduction --- in military avionics</td>
<td>p0625 A79-48897</td>
</tr>
<tr>
<td>Fault diagnosis of gas turbine engines by means of component characteristics determination</td>
<td>p0639 A79-48806</td>
</tr>
<tr>
<td>Determination of the probability of consequences of aircraft-system malfunctions in the evaluation of flight safety levels</td>
<td>p0697 A79-52144</td>
</tr>
<tr>
<td>Reliability analysis for optimum design --- applied to offshore drilling and aircraft structures</td>
<td>p0697 A79-52140</td>
</tr>
<tr>
<td>Mechanical characterization of structural adhesives</td>
<td>p0691 A79-53070</td>
</tr>
<tr>
<td>Helicopter bearing failure detection utilizing shock pulse techniques</td>
<td>p0691 A79-54236</td>
</tr>
<tr>
<td>Failure studies of a third stage fan disk from a TF-30 turbine engine</td>
<td>p0697 A79-54236</td>
</tr>
<tr>
<td>Failure modes and redundancy analysis for the Multifunction Inertial Reference Assembly (MIRA)</td>
<td>p0612 A79-47971</td>
</tr>
<tr>
<td>Fail-safe optimal design of structures with substructuring</td>
<td>p0884 A79-23950</td>
</tr>
<tr>
<td>The requirement of damage tolerance. An analysis of damage tolerance requirements with specific reference to MIL-L-83344 [NASA-TN-77005-U]</td>
<td>p0550 A79-27135</td>
</tr>
<tr>
<td>Correlation study between vibrational environmental and failure rates of civil</td>
<td>p0691 A79-53070</td>
</tr>
<tr>
<td>Analytic redundancy for flight control sensors on the Lockheed L-1011 aircraft</td>
<td>p0988 A79-36077</td>
</tr>
<tr>
<td>Failure detection in signal processing and sensing in flight control systems</td>
<td>p0611 A79-47960</td>
</tr>
<tr>
<td>Failure modes and redundancy analysis for the Multifunction Inertial Reference Assembly (MIRA)</td>
<td>p0612 A79-47971</td>
</tr>
<tr>
<td>Fail-safe optimal design of structures with substructuring</td>
<td>p0884 A79-23950</td>
</tr>
<tr>
<td>The requirement of damage tolerance. An analysis of damage tolerance requirements with specific reference to MIL-L-83344 [NASA-TN-77005-U]</td>
<td>p0550 A79-27135</td>
</tr>
<tr>
<td>Correlation study between vibrational environmental and failure rates of civil</td>
<td>p0691 A79-53070</td>
</tr>
</tbody>
</table>
FAILURE MODES

helicopter components
The electro-impulse de-icing method --- aircraft
structures
[BA-227] p0433 N79-23073
Failures in adhesively bonded structures
Aircraft transparency failure and logistical cost
analysis. Volume 2: Design data and
maintenance procedures
[AD-A0667201] p0552 N79-29173
Aircraft transparency failure and logistical cost
analysis. Volume 3: Transparency analysis
[AD-A0667211] p0592 N79-29174
An analysis of a programmed load fatigue failure
[NAS-70-7076] p0599 N79-29562

FAILURE MODES

Improved ballistic damage tolerant design through
laminated metal construction
[p0014 A79-10912]
Operational influences on maintainability
[p0073 A79-15382]
Filtration effects on ball bearing life and
condition in a contaminated lubricant
[ASME PAPER 78-155E-34] p0199 A79-23246
The problem of expendable snap-through
[Lusaka accident report] p0348 A79-32041
On the expendable snap-through problem
[p0656 A79-54045]
Failure modes and redundancy analysis for the
Multifunctional Testing Assembly (MTRA)
[AD-A0674495] p0222 A79-16834

FAIRCHILD MILITARY AIRCRAFT

FAIRCHILD MILITARY AIRCRAFT
The Fairchild can-opener - Shturmovik of the
eighties
[p0459 A79-36773]
Driftdown calculations for the YH/2270 aircraft
[SAND-78-1807] p0653 A79-30162

PAF INS

Optimum tail fairings for bodies of revolution
computerized design
[AD-A0679277] p0539 A79-26031

PAN IN WING AIRCRAFT
Development of V/STOL aircraft - 1950 to 1970
[p0604 A79-47606]

PANLTY DEVICES

PANS
Reduction of rotor-turbulence interaction noise in
static fan noise testing
[IAA PAPER 79-0656] p0270 A79-26925
Test methodology correlation for foreign object
damage
[AD-A0573322] p0555 A79-12093
Structural analysis of hollow blades: Torsional
stress analysis of hollow fan blades for
aircraft jet engines
[WALI-TR-533] p0241 A79-17261
Performance of two-stage fan having
low-aspect-ratio first-stage rotor blading
[NASA TP-1493] p0551 A79-27143

PAN FIELDS

Aircraft antenna pattern measurements using near
field techniques
[p0247 A79-24721]
Separation of core noise and jet noise
[IAA PAPER 79-0589] p0272 A79-26941
The influence of propeller design parameters on
far field harmonic noise in forward flight
[IAA PAPER 79-0609] p0317 A79-28059
The derivation of a thickness noise formula for
the far-field by Isch --- applied to helicopter
rotors
[p0410 A79-35449]
The aerodynamic and thermodynamic characteristics
of fountain and some far field temperature
distributions --- vertical takeoff aircraft
ground effect
[AD-A0661335] p0232 A79-16843

PAN CROPS
Study of future world markets for agricultural
aircraft

FAST FOURIER TRANSFORMATIONS
Transform domain processing for digital
communication systems using surface acoustic
wave devices
[p0676 N79-31482]
A new approach to the solution of large, full
matrix equations: A two-dimensional potential
flow feasibility study

FASTTRACKS

NT BOILS
An evaluation of coatings for steel and titanium
alloy fasteners for aircraft applications
[p0442 A79-23242]

FAITCUES (BIOLOGY)

NT FLIGHT FAITCUES

FAITCUES (MATERIALS)

NT BENDING FATIGUE

NT METAL FATIGUE

NT STRUCTURAL STRAIN

NT THERMAL FATIGUE

Fatigue strength of airplanes and modern
structural designs
[DGLR PAPER 78-176] p0151 A79-20018
Effect of CFSP technology on structural design and
fatigue behavior of modern fighter aircraft
[DGLR PAPER 78-179] p0151 A79-20020
Bibliography on the fatigue of materials,
components and structures. Volume 2 - 1951-1960
--- Fook
[p0192 A79-21725]
Four lectures on fatigue crack growth
[p0251 A79-25488]
Fretting fatigue, with reference to aircraft
structures
[SAE PAPER 790612] p0456 A79-36741
Designing with damping materials to reduce noise
and structural fatigue --- of aircraft components
[SAP PAPER 790631] p0458 A79-36758
Determination of sample size in flight loads
programs --- for aircraft structures
[p0561 A79-44454]
Evaluation of a crack-growth gage for monitoring
possible structural fatigue-crack growth
[p0562 A79-44458]
Flight-by-flight spectrum development --- sequence
stress analysis for aircraft structures
[p0562 A79-44460]
Methods of gust spectra prediction for fatigue
damage
[p0563 A79-44461]
Lusaka accident report
[p0662 A79-50109]
Probability that the propagation of an undetected
fatigue crack will not cause a structural failure
[AD-A0573535] p0008 A79-11439
Investigation into the effect of residual stresses
on fatigue strength and measurement of residual
stresses, with special reference to aircraft
construction
Some engineering property comparisons for 7050 and
74 61.61 die forgings
[MSL-MF-77040-U] p0239 A79-16968
Influence of corrosion damage on fatigue crack
initiation
[MLT-TR-75830-U] p0242 A79-17269
Introduction to fracture mechanics --- crack
initiation and stress corrosion cracking of aircraft
structures
[p0372 A79-20410]
Fatigue crack growth --- aircraft reliability
[p0372 A79-20412]
Fatigue crack growth analysis
[p0373 A79-20415]
Review of aeronautical fatigue investigations in
the Netherlands during the period March 1977 --
February 1979
[MLT-MF-79006-U] p0387 A79-21448
Definition and non-destructive detection of
critical adhesive bond-line flaws
[AD-A0655881] p0488 A79-24163
Non-Destructive methods for the early detection of
fatigue damage in aircraft components
[p0502 A79-25417]
An analysis of the low cycle fatigue behavior of
the superalloy Rene 95 by strain-rate
partitioning
[AD-A0608252] p0596 A79-29295

A-190
FATIGUE LIFE

Method for determining maximum allowable stress for preliminary aircraft wing design

Sumation of defects in the case of acoustothermal programmed loads — for supermarin transport propulsion system components

Processing a random loading process by computer to obtain life information — in-flight critical stress measurements in aircraft wing structures

Operation of long-service-life gas-turbine engines as a function of the technical state

Fatigue mechanics problems for gas turbine engine structures

Structural Integrity Recording System for helicopters

Fatigue life estimation methods for helicopter structural parts

A cumulative fatigue damage model for gas turbine engine disks subjected to complex mission loading

Statistical influence of size and configuration --- on fatigue strength of structural members of transport aircraft

Filtering effects on ball bearing life and condition in a contaminated lubricant

Design against fatigue — Current trends --- for aircraft structural reliability

Gust spectrum fatigue crack propagation in candidate skin materials

The strain-range partitioning behavior of an advanced gas turbine disk alloy, AF2-30A

Estimation of fatigue life of Al-alloy used for compressor disc of jet engine

Allowable notch effectivity criterion for aircraft structures

LCF life prediction for a flight-by-flight load sequence of a turbine disc — Low Cycle Fatigue

Gas turbine Engine operation based on technical condition --- Gas Turbine Engine

Helicopter component environmental vibration testing — The poor man's fatigue test

Low-cycle fatigue of thermal-barrier coatings at 982 deg C

Damage tolerance analysis of redundant structures --- transport aircraft structures

The effect of sheet edge working on the fatigue life under flight-simulation loading

Helicopter fatigue. A review of current requirements and substantiation procedures

US Army helicopter fatigue requirements and substantiation procedures

Helicopter fatigue evaluation. The UK approach

Fatigue life estimation methods for helicopter structural parts

Present fatigue analysis and design of helicopters --- requirements and qualification procedures

Three-dimensional finite-element techniques for gas turbine blade life prediction

Application of engine usage analysis to component life utilization

Review of the AGARD S and S panel evaluation program of the NASA-Lewis SRP approach to high-temperature LCF life prediction

Effect of variances and manufacturing tolerances on the design strength and life of mechanically fastened composite joints

Effect of an anti-Corrosion penetrant on the fatigue life of various riveted joints during flight simulation tests

Fatigue life prediction and analysis technology

Installation for studying fatigue strength of materials in acoustic loading --- for aircraft skins

Fatigue tests

Composite rotor hub, T, II --- fatigue and load tests for CH-54D helicopter design

Torsion welding of YAH-64 main rotor drive shaft

Monitoring of fatigue loading on rotor system and related components

Determination of the fatigue strength of heavily stressed components of the Alpha-Jet

Crack free and cracked life of the pressurized cabin of the A 300 E - Calculation, tests and design measurements to improve damage tolerance

Composite components under impact load and effects of defects on the loading capacity

Trisolander fatigue test progress

An unstable subsynchronous critical speed solution --- of shaft failures in F-16 engine start system

A system which uses a laser beam to control the regime of vibration tests with turbine and compressor blades

Fatigue data on a variety of non-woven glass composites for helicopter rotor blades

Experimental investigation of the endurance of airplane fin sections in acoustic loading

Service fatigue loads monitoring, simulation, and analysis; Proceedings of the Symposium, Atlanta, Ga., November 14-15, 1977

State of the art in aircraft loads monitoring

SUBJECT INDEX

Fatigue tests

Nature and prevention of shaft failures in F-16 engine start system

Low-cycle fatigue of thermal-barrier coatings at 982 deg C

Damage tolerance analysis of redundant structures --- transport aircraft structures

The effect of sheet edge working on the fatigue life under flight-simulation loading

Helicopter fatigue. A review of current requirements and substantiation procedures

US Army helicopter fatigue requirements and substantiation procedures

Helicopter fatigue evaluation. The UK approach

Fatigue life estimation methods for helicopter structural parts

Present fatigue analysis and design of helicopters --- requirements and qualification procedures

Three-dimensional finite-element techniques for gas turbine blade life prediction

Application of engine usage analysis to component life utilization

Review of the AGARD S and S panel evaluation program of the NASA-Lewis SRP approach to high-temperature LCF life prediction

Effect of variances and manufacturing tolerances on the design strength and life of mechanically fastened composite joints

Effect of an anti-Corrosion penetrant on the fatigue life of various riveted joints during flight simulation tests

Fatigue life prediction and analysis technology

Installation for studying fatigue strength of materials in acoustic loading --- for aircraft skins

Fatigue tests

Composite rotor hub, T, II --- fatigue and load tests for CH-54D helicopter design

Torsion welding of YAH-64 main rotor drive shaft

Monitoring of fatigue loading on rotor system and related components

Determination of the fatigue strength of heavily stressed components of the Alpha-Jet

Crack free and cracked life of the pressurized cabin of the A 300 E - Calculation, tests and design measurements to improve damage tolerance

Composite components under impact load and effects of defects on the loading capacity

Trisolander fatigue test progress

An unstable subsynchronous critical speed solution --- of shaft failures in F-16 engine start system

A system which uses a laser beam to control the regime of vibration tests with turbine and compressor blades

Fatigue data on a variety of non-woven glass composites for helicopter rotor blades

Experimental investigation of the endurance of airplane fin sections in acoustic loading

Service fatigue loads monitoring, simulation, and analysis; Proceedings of the Symposium, Atlanta, Ga., November 14-15, 1977

State of the art in aircraft loads monitoring

A-191
Determination of sample size in flight loads programs --- for aircraft structures.

Overview of the C-5A Service Loads Recording Program

Highlights of the C-141 service life monitoring program

Evaluation of a crack-growth rate for monitoring possible structural fatigue-crack growth

Flight spectra development for fighter aircraft

Flight-by-flight spectrum development --- sequence stress analysis for aircraft structures

Methods of gust spectra prediction for fatigue damage

Derivation of flight-by-flight spectra for fighter aircraft --- stress analysis for ground attack

Test simulation of fighter aircraft maneuver load spectra

Qualification program of the composite main rotor blade for the Model 214B helicopter

Operation and test of composite horizontal stabilizer for the Sikorsky Spirit helicopter

Helicopter component environmental vibration testing - The poor man's fatigue test

Fatigue acceleration in box beams under mechanical and thermal stress (second series)

Heat treatment studies of aluminum alloy forgings of the X 74.61 type. Fatigue crack propagation performance under maneuver spectra loading

Residual strength of the aluminum alloy 7075-T6 at low temperatures

Residual strength of the aluminum alloy 7475-T76

Fatigue of helicopters: Service life evaluation method

Fatigue properties of adhesive-bonded laminated sheet material of aluminum alloys

The effects of gust alleviation on fatigue in 2024-T3 Alclad

An analysis of a programmed load fatigue failure

Fatigue and fracture

Residual strength properties of carbon/epoxy composite materials --- airframe materials

Environmental fatigue crack propagation in metal/composite laminates

Residual strength of (0, + or - 45) sub s and (+ or - 45, 0) sub s carbon/epoxy laminates --- fatigue loading tests

Fault Mechanics

Feasibility analysis

Fault mechanics of a vertical seeking cost steering system

Feasibility study of GPS-inertial navigation for helicopters and study of advanced GPS signal processing techniques, volume 3

Lift performance indicator system feasibility study

Investigation of the feasibility of using the discrete address beam system data link for non-ATC communications

Feasibility of combining linear theory and impact theory methods for the analysis and design of high speed configurations

Testing the feasibility of Differential Omega for airborne use

Preliminary feasibility assessment of Multi-function Inertial Reference Assembly (MIRA) --- using the F-15 and a transport aircraft

JT8D and JT9D jet engine performance improvement program. Task 1: Feasibility analysis

Extended analytical study of the free-wing/free-trimmer concept

A new approach to the solution of large, full matrix equations: A two-dimensional potential flow feasibility study

Fatigue control

MTI VIBRATION FEEDBACK

A pitch attitude stabilization system using engine pressure ratio feedback signals

The influence of feedback on the aerelastic behavior of tilt proprotor aircraft including the effects of fuselage motion

A sensitivity analysis for the P100 turbofan engine using the multivariable Nyquist array feedback control design

A rotating stall control system for turboboke engines

An information matrix approach for aircraft parameter-insensitive control --- for C-5A wing loading alleviation

A nonlinear approach to the design of jet engine control systems

A sensitivity analysis for the P100 turbofan engine using the multivariable Nyquist array feedback control design

Flight testing the F119

Design of proportional-plus-integral controllers for multivariable systems

An elementary explanation of the flutter mechanism with active feedback controls

The role of the backside parameter in height control

Multivariable control design principles applied to a variable cycle turbofan engine

Cost alleviation - Criteria and control laws

Minimun expected cost control of linear systems with uncertain parameters - Application to remotely piloted vehicle flight control systems

Design criteria for optimal flight control systems

Estimation for advanced technology engines

Nonlinear decoupled control synthesis for multivariable systems

Testing the feasibility of Differential Omega for airborne use

A sensitivity analysis for the P100 turbofan engine using the multivariable Nyquist array feedback control design

Fault tolerant airborne use high speed configurations
Fiber optics use in the P-3C aircraft. A fiber manufacturing technology for fiber optic bundle optical control technology for helmet mounted display and sight development.

Composite structural materials for military fiber optics applications. An optical-fiber multiterminal data system for aircraft. Direct effects, protection methods for thin skins/composites — lightning protection for aircraft.

Composites important to Black Hawk --- UH-60A. Dynamic effects, protection methods for thin skins/composites — lightning protection for aircraft.

Fiber optics use in the P-3C aircraft. A fiber optic interconnect system for computer controlled alphanumeric displays in a P-3C aircraft.
Design study results of a supersonic cruise fighter wing  
[ASME PAPERS 79-0062] p0139 A79-19512

Effect of CFRP technology on structural design and fatigue behavior of modern fighter aircraft  
[DGLR PAPERS 78-179] p0151 A79-20020

Thoughts on the future of military aviation. I  
[DGLR PAPERS 78-184] p0151 A79-20025

Estimation of the useful life of the lower chord of the girder of the PC-7 'Turbo-Trainer'  
[DGLR PAPERS 78-158] p0164 A79-20498

Advanced weapons carriage concepts through integrated design --- for aircraft  
[AAIA PAPERS 79-0092] p0201 A79-22534

The logistics of life cycle cost --- in operations and support systems for fighter aircraft  
[p0205 A79-23628

Temperature/humidity criteria for advanced composite structures  
[p0211 A79-24131

The prediction of fatigue crack growth under flight-by-flight loading  
[p0251 A79-25482

Fundamentals of design. I - 'Whys' and 'wherefores' of wings  
[p0251 A79-25485

Applying design-to-life cycle cost methods during engine advanced development  
[SAE PAPERS 781030] p0257 A79-25902

SVI-jump - A great leap for tactical airpower --- V/STOL jet launching from upward-inclined ramp  
[AAIA 79-6096] p0276 A79-27361

Supersonic combat aircraft design  
[AAIA 79-6099] p0276 A79-27363

Recent developments in active control technology --- for fighter aircraft design  
[AAIA 79-0708] p0277 A79-27368

Enhanced capabilities of future fighters as a result of HIMIT  
[AAIA 79-6098] p0277 A79-27370

Multifrequency radar processor --- for combat aircraft  
[p0280 A79-28058

Aerocoustic tailoring studies in fighter aircraft design  
[AAIA 79-0725] p0282 A79-28257

Changing criteria in military aircraft design  
The 67th Wilbur and Orville Wright Memorial Lecture/ 
p0315 A79-28432

Statistical analysis of aircraft maneuvering data  
[AAIA 79-0741] p0319 A79-29013

Adaptive control of wing store flutter - A feasibility study  
[AAIA 79-0785] p0322 A79-29033

Decoupler pylons - a simple, effective wing/store flutter suppressor --- in fighter/attack aircraft  
[AAIA 79-0791] p0322 A79-29035

Airframe wake flow effect and horizontal tail buffet --- pressure distribution and response of fighter aircraft in transonic maneuvers  
[p0328 A79-30482

Future tactical fighter requirements - A propulsion technology update  
[ASME PAPERS 79-05-44] p0340 A79-30523

Aerodynamics of engine air intakes  
p0346 A79-31612

Flying the Avro Arrow --- Canadian fighter aircraft tests  
p0342 A79-30582

Unique crew escape concepts for ATS mission aircraft  
p0346 A79-33636

An experimental passive microwave attitude measurement system for escape system steering  
[p0366 A79-33637

The results of synthesizing and evaluating potential solutions for Multi-Function Inertial Reference Assembly (MIRA) candidate configurations --- for transport and fighter aircraft  
p0488 A79-36082

The British Aerospace Barrier: Case study in aircraft design --- Eek  
p0561 A79-36644

Control considerations for CCV fighters at high angles of attack  
p0661 A79-37295

Reliability and maintainability contribution to Hornet mission success  
p0777 A79-39915

Preparing for the TF 90  
p0508 A79-40326

Can Europe choose a common fighter aircraft?  
p0512 A79-41209

Fundamentals of design. III - V-G for combat aircraft  
p0536 A79-43725

Flight spectra development for fighter aircraft  
p0562 A79-44659

Derivation of flight-by-flight spectra for fighter aircraft --- stress analysis for ground attack  
p0563 A79-44662

Test simulation of fighter aircraft maneuver load spectra  
p0563 A79-44663

The external trajectory map - A new representation of combat capability  
[AAIA 79-1622] p0566 A79-45304

Approximate trajectory solutions for fighter aircraft  
[AAIA 79-1623] p0566 A79-45305

An analysis of operational procedures and design modifications for aircraft fuel conservation  
[AAIA 79-1656] p0568 A79-45328

Effects of spanwise blowing on two fighter aircraft configurations  
[AAIA 79-1663] p0568 A79-45330

An introduction to co-tail probability estimation in the R & D encounter --- during combat aircraft maneuver  
[AAIA 79-1729] p0571 A79-45373

Direct force mode flight control for a vectored lift fighter  
[AAIA 79-1748] p0571 A79-45386

Development of the Navy B-Dot Automatic Carrier Landing System designed to give improved approach control in air turbulence  
[AAIA 79-1772] p0572 A79-45401

Initial results of an inflight simulation of augmented dynamics in fighter approach and landing maneuver  
[AAIA 79-1783] p0572 A79-45410

Demonstration of aircraft wing/store flutter suppression systems  
p0574 A79-46238

Water tunnel flow visualization - Insight into complex three-dimensional flow fields --- around fighter aircraft  
[AAIA PAPERS 79-1530] p0576 A79-46712

Analysis of optimal loop and split-S by energy state modeling  
p0602 A79-47098

Design of advanced titanium structures --- for Advanced Tactical Systems Aircraft fuselage  
[AAIA PAPERS 79-1805] p0606 A79-47890

The nonaxisymmetric nozzle - It is for real --- fighter aircraft performance viewpoint  
[AAIA 79-1810] p0607 A79-47893

From HIMIT to future fighters --- Highly Maneuverable Aircraft Technology assessment  
[AAIA PAPERS 79-1816] p0607 A79-47896

Benefits of aerodynamic interaction to the three surface configuration  
[AAIA PAPERS 79-1830] p0608 A79-47904

User requirements for future combat search and rescue vehicles  
p0620 A79-48683

Airborne microwave ECM  
p0637 A79-49554

A CO2 laser for a compact imaging radar  
p0684 A79-51451

Nozzle design and integration in an advanced supersonic fighter  
[AAIA PAPERS 79-1813] p0685 A79-51707

Results of power systems study advanced fighter/attack and V/STOL airplanes  
p0686 A79-51915

Study of aerodynamic technology for V/STOL fighter/attack aircraft: Horizontal attitude concept  

An examination of the factors affecting the thrust requirements and the hover and short takeoff performance of several jet V/STOL fighter concepts  
[AD-A058128] p0691 A79-12068

Correlation of experimental and theoretical steady-state spinning motion for a current fighter airplane using rotation-balance aerodynamic data  
[AD-A058142] p0691 A79-12069

Development of a high temperature rotary actuator for aircraft hydraulic systems  
p0891 A79-13148

A-194
SUBJECT INDEX

Cyclic leakage of finite elements with application to aircraft structural analysis
[IAF PAPER 78-213] p0016 A79-11294

Application of an interactive graphics system for the design and optimization of aircraft lifting surfaces
p0025 A79-12636

Finite element analysis of fatigue crack growth in aircraft components
p0075 A79-15794

Finite element analysis of the shear-lag problem
p0127 A79-18550

Finite element dynamic analysis of production aircraft --- for rotor induced helicopter airframe vibrations
p0130 A79-18655

Application of the finite element method to rotary-wing aerelasticity --- in helicopter hovering flight
p0131 A79-18659

The calculation of two-dimensional compressible potential flow in cascades using finite area technique
[IAA A79-0077] p0140 A79-19522

Finite element methodology results compared with experimental data for a severely deformed wing in transonic flow
[IAA A79-0304] p0145 A79-19659

A low-frequency aerelastic element method and its application to the harmonic gust response analysis of a flexible airplane
p0190 A79-21975

An integrated quasi-3D finite element calculation program for turbomachinery flows
[ASME PAPER 78-CT-56] p0196 A79-22336

Adaptive approximations in finite element structural analysis --- for aircraft components
p0247 A79-24696

A shock capturing application of the finite element method --- to viscous compressible flow problems
[ASME PAPER 78-0935] p0267 A79-29829

Wave propagation in ducts using the finite element method --- for aircraft noise reduction
[IAA PAPER 79-0691] p0267 A79-29679

A finite element subvolume technique for structural-borne interior noise prediction --- in aircraft
[IAA A79-0965] p0267 A79-29682

Crash simulation of composite and aluminum helicopter fuselages using a finite-element program
[IAA A79-07813] p0321 A79-29685

Transonic flow computations by finite elements - - method --- for aircraft noise reduction
[ASME PAPER 78-07913] p0321 A79-29685

Experimental data for a severely deformed wing in transonic flow
[ASME PAPER 78-07913] p0321 A79-29685

Transient temperature distribution in cooled turbine blades
[ASME PAPER 78-07913] p0330 A79-29648

Transonic flow computations by finite elements - - method --- for aircraft noise reduction
[ASME PAPER 78-07913] p0330 A79-29648

The finite element method for turbomachinery analysis --- subsonic compressible flow
[ASME PAPER 78-07913] p0335 A79-29649

Designing, calculating, and manufacturing by means of data processing --- computer techniques for mechanical constructions
p0390 A79-32751

Some observations on the local instability of orthotropic structural sections
p0400 A79-33681

A finite element approach to subsonic aerodynamics
p0411 A79-35777

Nonlinear structural crash dynamics analyses
[ASME PAPER 790588] p0545 A79-36722

Simplified calculation method for subsonic airloads on wing-body combinations
p0507 A79-40200

Finite-element approach to compressor blade-to-blade cascade analysis
p0510 A79-41752

Application of finite-element and holographic techniques in the design of turboshaft engine components
[ASME PAPER 79-01] p0631 A79-49093

Evaluation of finite element formulations for transient conduction forced-convection analysis
p0635 A79-49343

Some additional items of interest
p0638 A79-49456

A-196
### SUBJECT INDEX

- Computer analysis of semi-monocoque shell sections
- Wing center section optimization with stress and local instability constraints
- Exterior flow with an isoparametric Hermit cubic element
- Numerical calculation of transonic flow past a swept wing by a finite volume method
- Finite element analysis of helicopter structures
- A finite element approach to the problem of sound propagation and attenuation in jet engine air intakes
- Applications of velocity potential function to acoustic duct propagation and radiation from inlets using finite element theory
- Time marching finite area method
- A stress and strain analysis of industrial radial compressor impellers using the framework method
- Experimental and finite element investigation of the buckling characteristics of a beaded skin panel for a hypersonic aircraft
- Recent developments in finite element analysis for transonic airfoils
- Stress intensity analysis: Analytical, finite element for surface flaws, holes
- Analysis of aircraft structure using applied fracture mechanics
- Application of finite element techniques in predicting the acoustic properties of turbomachinery inlets
- A finite element method for the computation of the transonic potential flow past airfoils
- Airfoil optimization for transonic flow using the methods of finite elements and characteristics
- Dynamic structural analysis with substructures
- ANALYSIS: Analysis of aerospace structures with membrane elements
- The computation of transonic flow in wing tunnels at inlets and cascades using the finite element method
- Three-dimensional finite-element techniques for gas turbine blade life prediction
- Finite element methods for incompressible and viscous flow problems
- Application of a finite element method to transonic flow problems using an optimal control approach
- Investigations of stress-strain history modeling at stress risers, phase 2
- Tapered roller bearing development for aircraft turbine engines
- A finite element model to study the buckling behavior of general orthotropic, midplane symmetric, elastic plates
- FINNED BODIES: Optimizing finned flightless flight vehicle design parameters
- Evaluation of ground-launch firings for the improved 2.75-inch rocket
- Experimental investigation of wing fin configurations for alleviation of vortex wakes of aircraft
- The development of a parametric method of measuring fin fatigue loads based on flight measurements on a lightning Mk.75
- Effects of a military cargo pod and tail fins on the aerodynamic characteristics of a large wide-body transport model
- Low-speed wind-tunnel investigation of wing fins as trailing-vortex-alleviation devices on a transport airplane model
- Effect of outboard vertical-fin position and orientation on the low-speed aerodynamic performance of highly swept wings
- cruise aircraft research
- FINE CONTROL
  - Application of an extended Kalman filter to an advanced fire control system
  - General principles of automatic video tracking
  - Reliability growth planning to achieve STANAG requirements for an airborne radar
  - SATELLITE - A millimeter wave radar fire control system
  - Estimation of target elevation angle from 2-D radars
  - Head-up Display and Weapon Aiming Computer /HUD/WAC/ system for the Sea Barrier
  - A status report on the advanced FIREFLY assessment program
  - Multisensor integration for defensive fire control surveillance
  - Measuring metres to the target
  - Analysis of the projected operational effectiveness of developmental weapon control avionics hardware
  - Flight test results of a virtual image, pannier mounted, control and display station
  - Array aircraft fire control systems performance evaluation
- FIRE DAMAGE
  - Laboratory fire testing of cabin materials used in commercial aircraft
  - Effects of boron and glass hybrid epoxy-composites on graphite-fiber release in an aircraft fire
  - Flammability of cabin furnishing materials --- in airliner interiors
  - Douglas Aircraft cabin fire tests
- FIRE Distinguishing
  - Fuel on fire - Rapid response to a military problem
  - New agents for the extinguishment of magnesium fires
- FIRE FIGHTING
  - Aircraft fire protection and rescue procedures
  - CFN Vehicle design and performance objectives
  - Crash Fire Rescue
  - Comparative nozzle study for applying aqueous film forming foam on large-scale fires

---

### FIRE FIGHTING

- **Evaluation of ground-launch firings for the improved 2.75-inch rocket**
- **Experimental investigation of wing fin configurations for alleviation of vortex wakes of aircraft**
- **The development of a parametric method of measuring fin fatigue loads based on flight measurements on a lightning Mk.75**
- **Effects of a military cargo pod and tail fins on the aerodynamic characteristics of a large wide-body transport model**
- **Low-speed wind-tunnel investigation of wing fins as trailing-vortex-alleviation devices on a transport airplane model**
- **Effect of outboard vertical-fin position and orientation on the low-speed aerodynamic performance of highly swept wings---supersonic cruise aircraft research**

---

### FINE CONTROL

- **Application of an extended Kalman filter to an advanced fire control system**
- **General principles of automatic video tracking**
- **Reliability growth planning to achieve STANAG requirements for an airborne radar**
- **SATELLITE - A millimeter wave radar fire control system**
- **Estimation of target elevation angle from 2-D radars**
- **Head-up Display and Weapon Aiming Computer /HUD/WAC/ system for the Sea Barrier**
- **A status report on the advanced FIREFLY assessment program**
- **Multisensor integration for defensive fire control surveillance**
- **Measuring metres to the target**
- **Analysis of the projected operational effectiveness of developmental weapon control avionics hardware**
- **Flight test results of a virtual image, pannier mounted, control and display station**
- **Array aircraft fire control systems performance evaluation**

---

### FIRE DAMAGE

- **Laboratory fire testing of cabin materials used in commercial aircraft**
- **Effects of boron and glass hybrid epoxy-composites on graphite-fiber release in an aircraft fire**
- **Flammability of cabin furnishing materials --- in airliner interiors**
- **Douglas Aircraft cabin fire tests**

---

### FIRE Distinguishing

- **Fuel on fire - Rapid response to a military problem**
- **New agents for the extinguishment of magnesium fires**

---

### FIRE FIGHTING

- **Aircraft fire protection and rescue procedures**
- **CFN Vehicle design and performance objectives**
- **Crash Fire Rescue**
- **Comparative nozzle study for applying aqueous film forming foam on large-scale fires**

---

### A-197
FIRE PREVENTION

A review of certificated airport crash fire rescue service criteria (AD-4053110)
p0167 N79-14116
Full-scale fire modeling tests of a compact rapid response foam and dry chemical powder dispensing system [FFA-81-79-17925]
p0289 N79-17825
Fuselage ventilation under wind conditions [NASA CR-79-17115]
p0667 N79-31175

FIREBREAKS

Recent advances in fire resistant materials in aircraft construction p0616 N79-19302
Preventing fires in airport fuel systems p0068 N79-36352
Cylindrical resistant fuel systems for general aviation aircraft [SAE PAPER 789592]
p0855 N79-36726
Survivability in aircraft fires - New standards are needed p0462 N79-38091

FIREPROOFING

Aircraft passenger seat material development for airline fire safety p0650 N79-43269
Preventing fires in aviation fuel storage and transport systems, II p0530 N79-43271
Conference on Fire Resistant Materials (FIREMEN): A compilation of presentations and papers [NASA CR-78523]
p0687 N79-12029
The 737 aircraft flammability testing p0087 N79-12030
Overview of FIREMEN program at Ames Research Center p0687 N79-12036
Development of aircraft lavatory compartments with improved fire resistance characteristics p0068 N79-12041
Development of fire-resistant, low smoke generating, thermally stable end items for aircraft and spacecraft p0688 N79-12043
Fire resistant aircraft seat materials p0688 N79-12044
Fabrics for fire resistant passenger seats in aircraft p0068 N79-12045
Enclosure fire modeling p0688 N79-12046
Model fire tests on polychlorinated rubber and polyvinyl chloride (FIC)/nitric rubber foams p0688 N79-12047
Aircraft engine npp fire mitigation, phase 2 [NASA CR-135379]
p0241 N79-16932
Development of fire test methods for airborne interior materials [NASA CR-160119]
p0206 N79-19112
Applicability of fiber optics to aircraft fire detection systems [AD-805974]
p0426 N79-22882

FIREBRAZ 2 TARGET DRONE AIRCRAFT

The development of the I(T) remotely piloted research vehicle for flight testing an active flutter suppression control system [NASA CR-148881]
p0291 N79-17849

FIRECABIN

Conference on Fire Resistant Materials: A compilation of presentations and papers [NASA CR-2094]
p0667 N79-31166
Pressure modeling of vertically burning aircraft materials [NASA CR-78523]
p0087 N79-12029
Pool fire radiation through a door in a simulated aircraft fuselage [PFRA-81-79-17925]
p0295 N79-17966
New agents for the extinguishment of magnesium fires [AD-405166A]
p0295 N79-17966
End-to-end testing --- to verify electrical equipment failure due to carbon fibers released in aircraft-fuel fires p0087 N79-22204
Ignition of fuel sprays by hot surfaces and stabilization of aircraft fires [AD-4066534]
p0441 N79-23181
Conference on Fire Resistant Materials: A compilation of presentations and papers [NASA CR-2094]
p0666 N79-31166
Airplane flammability, full scale fire tests p0666 N79-31167
Seat test program p0666 N79-31168
Recent advances in materials toxicology p0666 N79-31169
Status of candidate materials for full-scale tests in the 737 fuselage p0666 N79-31170
Global enclosure fire modeling with applications p0666 N79-31172
Enclosure fire dynamics model p0666 N79-31173
Development of aircraft lavatory compartments with improved fire resistance characteristics. Phase 2: Sandwich panel resin system development [NASA CR-152120]
p0674 N79-31359

FIREWORKS

U FIGHTING

FIRE IGNITING

ST ROCKET IGNITING

FIRESTARTING

FIAS

FLAME IGNITING

U AAR

FLAME IGNITING

U AAR

FLAMES

FLAME PROPAGATION

FLAME frontS

FLAME PROPAGATION

FLAME holders

Jet curtain flameholder for aircraft afterburners [KSAE PAPER 78-1785]
p0007 N79-10761
Experimental study on the burning out of flameholders --- in wind tunnels [AIAA 79-7021]
p0329 N79-23939
Lean stability augmentation for prewaxing, prewaxing combustors [AIAA PAPER 79-1319]
p0472 N79-39035

SUBJECT INDEX

Development of fire-resistant, low smoke generating, thermally stable end items for commercial aircraft and spacecraft using a basic poliamide resin p0666 N79-31171
Fire resistant aircraft seat program p0667 N79-31176
A review of Boeing interior materials and fire test methods development programs p0667 N79-31177
FIREMEN program p0667 N79-31178

FLAMES

ST FORBES

Conference on Fire Resistant Materials (FIREMEN): A compilation of presentations and papers [NASA CR-78523]
p0087 N79-12029
Douglas Aircraft cabin fire tests p0087 N79-12092
Fire testing in the Boeing 707 cabin section p0087 N79-12032
Dayton aircraft cabin fire model validation, phase I [AD-4052577]
Pressure modeling of vertically burning aircraft materials [NASA CR-78523]
p0087 N79-12029
New agents for the extinguishment of magnesium fires [AD-405166A]
p0295 N79-17966
End-to-end testing --- to verify electrical equipment failure due to carbon fibers released in aircraft-fuel fires p0087 N79-22204
Ignition of fuel sprays by hot surfaces and stabilization of aircraft fires [AD-4066534]
p0441 N79-23181
Conference on Fire Resistant Materials: A compilation of presentations and papers [NASA CR-2094]
p0666 N79-31166
Airplane flammability, full scale fire tests p0666 N79-31167
Seat test program p0666 N79-31168
Recent advances in materials toxicology p0666 N79-31169
Status of candidate materials for full-scale tests in the 737 fuselage p0666 N79-31170
Global enclosure fire modeling with applications p0666 N79-31172
Enclosure fire dynamics model p0666 N79-31173
Development of aircraft lavatory compartments with improved fire resistance characteristics. Phase 2: Sandwich panel resin system development [NASA CR-152120]
p0674 N79-31359

FIRES

U FIGHTING

FIRE ignition

U AAR

FIRE IGNITING

ST ROCKET IGNITING

FIRESTARTING

FIAS

FIREWORKS

U FIGHTING

FIRE IGNITING

U AAR

FIRE IGNITING

U AAR

FLAMES

FLAME IGNITING

U AAR

FLAMES

FLAME PROPAGATION

FLAME frontS

FLAME PROPAGATION

FLAME holders

Jet curtain flameholder for aircraft afterburners [KSAE PAPER 78-1785]
p0007 N79-10761
Experimental study on the burning out of flameholders --- in wind tunnels [AIAA 79-7021]
p0329 N79-23939
Lean stability augmentation for prewaxing, prewaxing combustors [AIAA PAPER 79-1319]
p0472 N79-39035

A-198
Lo-frequency augmentor instability investigation
computer program user's manual
[AM-A0657754] p0436 N79-23093

FLAMES Propagation
U ChemicaL Reactions
U FLAME RETARDANTS
The flammability of cabin furnishing materials --- in
thermal response of composite panels
[JAIA79-15167]
P0087 N79-12030
Flash-fire propensity and heat-release rate
studies of improved fire resistant materials
[NASA-78-78550] p0181 N79-15167
Aircraft engine flameout fire mitigation research
[NASA-CB-135579] p0241 N79-17219
Influence of jet fuel on flameout and
flammability characteristics of graphite epoxy
composites
[AD-A068586] p0585 N79-28245
Conference on Fire Resistant Materials: A
collection of presentations and papers
[NASA-CP-2094] p0666 N79-31166
Airport flammability, full scale fire tests
p0666 N79-31167

FLAPS (CONTROL SURFACES)
U AIRCRAFT CONTROL
U FLAPS (CONTROL SURFACES)
FLAPPING
A comparison of predicted and experimental rotor
loads to evaluate flap-lag coupling with blade
pitch
[AHS 78-19] p0121 A79-18145
Effect of structural coupling parameters on the
flap-lag forced response of a rotor blade in
forward flight using Floquet theory
[AHS 78-2194] p0131 A79-18655
Rotor blade stability in turbulent flows. 2
A79-38118

FLAPS (CONTROL SURFACES)
U EXTREMELY BLOW FLAPS
U JT JETS
U FLAP ALTERNATE SURFACES
U TRAILING-EDGE FLAPS
U WING FLAPS
* flap-lag-torsion aeroelastic stability of
circulation-controlled rotors in hover
[AHS 78-64] p0126 A79-18145
Effect of the entropy layer on the hypersonic flow
around aerodynamic control surfaces
[NASA 79-2194] p0190 A79-21948
Theoretical flap-lag damping with various dynamic
inflow models
[AHS 79-20] p0628 A79-49073
The size and performance effects of high lift
system technology on a modern twin engine jet
transport
[JAIA 79-7955] p0634 A79-49073
Wind tunnel tests of the CA(9)-2 aircraft with 20%\nailerons, 25% slotted flap, 30% Fowler flap and
50% slot-lip spoiler
[AHS-CN-1951] p0033 N79-10021
PIVoting output unit control systems activated by
jacks --- for controlling aircraft flaps
[AHS-CN-1951] p0038 N79-10066
Effects of wing leading-edge flap deflections on
subsonic longitudinal aerodynamic characteristics of a wing-fuselage configuration
with a 45deg swept wing
[NASA-TP-1351] p0095 N79-13002
Effect of operational envelope limits on teetering
tail flap raking
[AD-A759187] p0101 N79-13030
A new method for testing free models in the
laboratory to determine aerodynamic
characteristics
[AM-A759187] p0176 N79-15063
Reduction of computer usage costs in predicting
unsteady aerodynamic loadings caused by control
surface motions: Analysis and results
[NASA-CB-3009] p0360 N79-20072
Development and demonstration of manufacturing
processes for fabricating graphite/PMR-15
polyimide structural elements --- space shuttle
aircraft wing flap
p0661 N79-30301
FLARED BODIES

The transonic oscillating flap [AD-A070022]

FLARED BODIES

The aerodynamic effectiveness of split flare stabilizers [AIAA PAPER 79-0093]

FLASH POINT

Flash-fire propensity and heat-release rate studies of improved fire resistant materials [NASA TM-78550]

FLAT PLATES

Measurements in three-dimensional turbulent boundary layer on a yawed flat plate induced by leading edge vortex

Experimenatal study of an asymmetric thermal wake

Trailing edge conditions for unsteady flows at high reduced frequency --- application of Kutta-Joukowsky condition [AIAA PAPER 79-0152]

Numerical solution for supersonic flow near the trailing edge of a flat plate

Radiating laminar boundary layer flow over a flat plate at a large free-stream Mach number

Near field problems in three-dimensional panel methods --- mathematical modeling of flow characteristics

Experimenta! investigation of effects of jet decay rate on jet-induced pressures on a flat plate: Tabulated data [NASA-CR-158990]

Aerodynamic properties of a flat plate with cavity for optical-propagation studies [NASA-TP-790487]

FLAT SURFACES

Three-dimensional radiative heat-transfer problem with shading --- modeling aircraft components thermodynamics

Flow around a circular cylinder near a plane boundary

FLAP DETECTION

U NONDESTRUCTIVE TESTS

FLAWS

U DEFEcTS

FLEXIBILITY

Flexible polyside fuel tank sealants --- for military aircraft

Effects of vertical tail flexibility on the aerodynamic characteristics of a 0.03-scale NASA Space Shuttle Orbiter at Mach numbers from 0.90 to 1.55 [AD-4062371]

FLAT PLATES

Hydrodynamic propulsion by large amplitude oscillation of an airflow with chordwise flexibility

The 1-n-1 system of jack moments for the flexible liners of supersonic wind tunnels

Optimizing jetstabilized engine flexible rotor balancing by the LP-search method

Capabilities and applications of a computer program system for dynamic loads analyses of flexible airplanes with active controls [DNL/79-1672]

The balance of flexible rotors and their possible use in aero engines [AIAA 79-7014]

Acceleration of unbalanced flexible rotors through the critical speeds

On the balancing convergence of flexible rotors, with special reference to symmetric rotors

Effective rigidity of a thin-walled beam

Laser balancing demonstration on a high-speed flexible rotor

SUBJECT INDEX

[ASNE PAPER 79-GT-56] p0391 A79-32235

FLXIBLE WINGS

Finite element methodology results compared with experimental data for a severely deformed wing in transonic flow [AIAA PAPER 79-0304]

A low-frequency aeroelastic element and its application to the harmonic gust response analysis of a flexible airplane

A calculation of rotor impedance for hovering articulated-rotor helicopters

Combined strength and aeroelastic wing synthesis via constraint approximation [AIAA 79-0728]

Numerical computation of aerostatically corrected supersonic loads [AIAA 79-0766]

The effect of chordwise flexibility on the lift of a rapidly accelerated airfoil

Calculation of rotor impedance for articulated-rotor helicopters in forward flight

An analytical technique for predicting the characteristics of a flexible wing equipped with an active flap-flutter-suppression system and comparison with wind-tunnel data [NASA-TP-1367]

Handling qualities of large flexible control-configured aircraft [NASA-CR-156594]

Wind tunnel tests of four flexible wing ultralight gliders

FLYING

Significance of disk flexing in viscous-damped jet engine dynamics [AIAA PAPER 79-GT-107]

FLIGHT

U FLEXING

FLIGHT CHARACTERISTICS

The role of flight dynamic modeling in helicopter certification [SAGE PAPER 780550]

The Lynx hingeless rotor system and flight characteristics --- military helicopter

The YAK-18T aircraft: Construction and operation --- Russian book

Effect of structural coupling parameters on the flap-lag forced response of a rotor blade in forward flight using Floquet theory

The evaluation and use of flying qualities considerations in conceptual design [AIAA PAPER 79-0211]

Long sentencing into service --- Learjet 29/29 structures and performance capabilities [AIAA 79-1067]

Longitudinal motion of an aircraft in unsteady flow

Comparison of BBN ES and TFE characteristics in supersonic cruising flight --- Bypass Turbojet Engine

Identification of a STOL propulsion plant model from flight data

Technical characteristics and cost data for the 11-62 and 11-62M aircraft and optimal flight conditions

A-200
The Learjet 'Longhorn' series - The preliminary design, planning, and evaluation tasks
Possibilities and limits of the application of improved methods of predicting helicopter control
British civil airworthiness requirements for flight test techniques for a transonic aircraft
Evaluation of selected class III requirements of a microprocessor system for flight control research
AFFTC parameter identification experience --- for design criteria for optimal flight control systems
Preliminary airworthiness evaluation NB-B115-aircraft (samolot 11-15)
Plight experience with advanced controls and equipment unit prices of flight systems in aircraft flight characteristics
Non-linear parameter identification and its estimation methods for development costs and operational benefits from the Terminal Configured vehicles --- aircraft equipment for air traffic control integration for flight dynamic studies

PLIGHT CONTROL

Proceedings of AFSDL Flying Qualities Symposium
Analysis of digital flight control systems with flying qualities applications. Volume 1:
Analysis of digital flight control systems with flying qualities applications. Volume 2:
Executive summary
Analysis of digital flight control systems with flying qualities applications. Volume 3:
Preliminary airworthiness evaluation BU-21 H guaradrail V aircraft
Stallindicate requirements and scaling relationships as applied to model testing
Aircraft response to windshears and downdrafts
Stability and control aspects of the CVF-P100C
Flying qualities and the fly-by-wire aeroplane
Are today's specifications appropriate for tomorrow's airplanes?
Flight performance of the TCF E-737 airplane at Kennedy Airport using TRSB/MLS guidance
Limited airworthiness and flight characteristics evaluation model 214A helicopter with fiberglass main rotor blades
PLIGHT COMPUTERS

FLIGHT CONDITIONS

Coaxial jet noise in flight
Noise of an afterburning turbofan engine in an F-111 airplane
A review of helicopter control-display perspectives
A review of helicopter control-display requirements for decelerating instrument approach
Preliminary study of pilot lateral control of two light airplanes near the stall
Mathematical models of aircraft dynamics for extreme flight conditions (theory and experiment)
Non-linear formulation of the aerodynamic forces and gust sensitivity

FLIGHT CONTROL

MT AUTOMATIC FLIGHT CONTROL
MT AUTOMATIC LANDING CONTROL
MT FLIGHT BY TUBE CONTROL
MT FLIGHT BY WIRE CONTROL
MT POINTING CONTROL SYSTEMS
MT THROTTLE VECTOR CONTROL

Operational benefits from the Terminal Configured Vehicle --- aircraft equipment for air traffic improvement
Flight and propulsion control integration for selected in-flight thrust vectoring modes

SUBJECT INDEX

FLIGHT CONTROL
FLIGHT CONTROL CONID

Structural design flight maneuver loads using POP-10 flight dynamics model
p0013 A79-10905
The Wright brothers' flight-control system —
canard configuration
p0015 A79-11125
Control and stabilization in aerodynamics —
Russian book
p0016 A79-11392
Aircraft radio equipment — Russian book
p0016 A79-11439
'Strategic' time-based ATC — by long-terms flight
planning
p0026 A79-12473
Onboard navigation and flight control integrated
system architecture
p0055 A79-13251
Impact of new navigation methods on flight
guidance in the terminal maneuvering area
[DGLR PAPER 78-135]
p0061 A79-14085
RILESIS — An integrated navigation and air traffic
control system for the future needs of
international aviation
[DGLR PAPER 78-136]
p0062 A79-14086
Design of the TBF system in relation to experience
with the CCF-P60A program and function of
redundancy — digital flight control systems for
tactical fighter aircraft
[DGLR PAPER 78-139]
p0062 A79-14088
Information distribution in distributed
microprocessor based flight control systems
p0070 A79-14978
High angle of attack flight control using
stochastic model reference adaptive control
p0072 A79-15020
Flight control safety — A total systems approach
p0072 A79-15371
Flight profile investigation for microwave landing
system
p0076 A79-16162
Helicopter flight control /ESP/ — integrated
system including FLIR and laser range finder
p0150 A79-19900
Optoelectronic devices for flight vehicle control
systems — Russian book
p0185 A79-23665
Army outlook — Flight control systems — for
helicopters
p0198 A79-22772
F-16 high-alpha flight control characteristics and
control system concept
[AIAA PAPER 79-0403]
p0203 A79-23577
Flight test control by means of a microprocessor: 1
p0214 A79-24349
Control system time response optimization —
A nonlinear programming approach — for aircraft
flight
[AIAA PAPER 79-0540]
p0253 A79-25859
Flight testing the F111
p0259 A79-26530
Flying NASA's Terminal Configured Vehicle against
the Microwave Landing System
p0260 A79-26534
The U-2 story
p0260 A79-26537
Parachute inflation control using an attached apex
drogue
[AIAA 79-0849]
p0263 A79-26563
Air fleet and facility planning via optimal
control models
p0265 A79-26725
Study of the structure of an integrated system of
flight control, navigation and display
p0279 A79-27674
Tents of an integrated piloting, navigation, and
display system
p0279 A79-27675
Future VSTOL requirements for omnidirectional low
range airspeed
p0331 A79-29480
Design development of the 727-100
p0333 A79-29595
Flight test results — for 727 aircraft
p0333 A79-29596
Engineer's handbook of flight and radio equipment
of airplanes and helicopters
p0345 A79-31086
Reconstructed flight control sensor signals via
Luenberger observers

SUBJECT INDEX

The role of the backside parameter in height control
p0349 A79-32158
The results of synthesizing and evaluating
potential solutions for Multi-Function Inertial
Reference Assembly /MRIA/ candidate configurations
— for transport and fighter aircraft
p0006 A79-34522
Effects of a spin chute installation on spin
characteristics — of light general aviation
aircraft
[S A E PAPER 7905641]
p0052 A79-36705
Electromechanical actuation for business aircraft
[S A E PAPER 790622]
p0057 A79-36750
A comparison of hydraulic, pneumatic, and
electro-mechanical actuators for general
aviation flight controls
[S A E PAPER 790623]
p0058 A79-36751
'Thruster control for airships'
[A I A A 79-1595]
p0052 A79-42389
Structural adhesive bond repair of aircraft flight
control surfaces
p0531 A79-43314
Singular perturbation techniques for on-line
optimal flight path control
[A I A A 79-1678]
p0565 A79-45303
Gust alleviation using direct turbulence
measurements
[A I A A 79-1679]
p0568 A79-45339
A simulator investigation of roll response
requirements for aircraft with
rate-command/attitude-hold flight control
systems in the landing approach and touchdown
[A I A A 79-1679]
p0569 A79-45342
Folded shear plane control apparatus for aircraft
steering and stabilization
[A I A A 79-1682]
p0569 A79-45344
A multi microprocessor flight control system
design principles
[A I A A 79-1700]
p0569 A79-45355
Dual digital flight control redundancy management
system development program
[A I A A 79-1701]
p0569 A79-45356
Direct force mode flight control for a vectored
lift flight control
[A I A A 79-1748]
p0571 A79-45386
Minimum expected cost control of linear systems
with uncertain parameters — Application to
remotely piloted vehicle flight control systems
[A I A A 79-1748]
p0571 A79-45387
Design criteria for optimal flight control systems
[A I A A 79-1782]
p0572 A79-45409
Analytic redundancy for flight control sensors on
the Lockheed L-1011 aircraft
p0611 A79-47960
Failure detection in signal processing and sensing
in flight control systems
p0612 A79-47971
A status report on the advanced FIREFLY
assessment program
p0615 A79-48609
Synthesis of digital flight control tracking
systems by the method of entire eigenstructure
assignment
p0616 A79-48625
Terrain-following radar — Key to low-altitude flight
p0620 A79-48668
Analytical and experimental investigation of
V-type warpage contribution to directional
control in hover and forward flight
[ A S H 79-56]
p0633 A79-49106
Special Meeting on Helicopter Flight Controls,
Arlington, Va., October 11-13, 1976, Technical
Papers
p0692 A79-53626
Military considerations for helicopter flight
controls
p0692 A79-53628
Actuator and hydraulic survivability concepts for
Hughes TAH-64
p0692 A79-53636
Fiberglas flight controls — of helicopters
p0695 A79-53892
A multi microprocessor flight control system
Architectural concepts
[A I A A 79-1925]
p0696 A79-54392
Flight tests of a microprocessor control system
[A I A A 79-1962]
p0696 A79-54412
A-202
Study of aerodynamic technology for VTOL fighter/attack aircraft: Vertical attitude concept
Better performance for aircraft tracking and holding under gust and shearwind influence by use of direct digital control
[SSA-77-506] p0034 W9-11033
Investigation of the YF-16 in high angle of attack asymmetric flight
[AD-1056511] p0045 W9-11036
A contribution to the increase of aircraft guidance precision under wind disturbance conditions by using direct digital control
[DAL-PE-77-88] p006 W9-11075
Operational requirements for flight control and navigation systems for short haul transport
[AD-1056511] p006 W9-12054
Investigation of the cross-slip comparison monitoring method of failure detection in the HMIT BFW --- digital control techniques using airborne microprocessors
[AD-1056401] p0061 W9-12064
Design charts and boundaries for identifying departure resistant fighter configurations
[AD-1056026] p016 W9-12703
A design method with application to preprocessors and sampling-rate selection in digital flight control systems
[AD-1056026] p0095 W9-12905
Feedback controlled aircraft sensitivity to parameter variations
[AD-1056741] p0095 W9-12907
Design and test of the 172K fluidic rudder
[AD-1061674] p0104 W9-13055
Digital symbology generator program
[AD-1060541] p016 W9-14111
Remotely piloted vehicles, volume 2: A bibliography with abstracts
[WRTS-FS-70/124/W] p0172 W9-15035
Flight verification of the advanced flight control Actuation system (AFCAS) in the T-2C aircraft
[AD-1060326] p0175 W9-15059
The response of aircraft to discrete ramp gusts
[RAS-TS-77/165] p0222 W9-15971
HYOSH (Hydraulic Power Sharing system)
[AD-1061908] p0235 W9-16683
Active controls in aircraft design
[AGARD-AG-234] p0235 W9-16684
P-8 active control
[AD-1056682] p0236 W9-16671
Propulsion-flight control integration technology
[AD-1056682] p0236 W9-16672
Active controls for civil transports
[AD-1056682] p0236 W9-16673
Fuel conservative subsonic transport --- control surfaces activated by computers
[AD-1056682] p0236 W9-16674
C-SA load alleviation --- active lift distribution control system
[AD-1056682] p0237 W9-16675
E-1 ride control
[AD-1056682] p0237 W9-16676
Summary report of the Turbulence Committee
[AD-1056682] p0243 W9-17424
Summary of the Aircraft Operations Committee
[AD-1056682] p0243 W9-17428
Configuration management and automatic control of an augument wing aircraft with vectored thrust
[NASA-TF-1222] p0294 W9-17872
Development of the L-1011 flight management system
[AD-1060506] p0302 W9-18895
Validation of ETL-F-9490D: General specification for flight control system for piloted military aircraft. Volume 1: Summary of YF-17 and C-SA validation
[AD-1056187] p0306 W9-19008
Validation of ETL-F-9490D: General specification for flight control system for piloted military aircraft. Volume 2: YF-17 lightweight fighter validation
[AD-1060656] p0306 W9-19009
Design considerations for implementing integrated mission-tailored flight control nodes --- digital fly-by-wire and the ccv yf-16 aircraft
[AD-1060656] p0354 W9-20022
Modern digital flight control system design for Vtol aircraft
[AD-1060656] p0354 W9-20022
FLIGHT CREWS

Stability and control aspects of the CCV-T106C
Design guidance from fighter CCV flight evaluations
In-flight handling qualities investigation of various longitudinal short term dynamics and direct lift control combinations for flight path tracking using DYFLR BFS 320 variable stability aircraft
Flying qualities and the fly-by-wire aeroplane
Flight experience with advanced controls and displays during piloted curved decelerating approaches in a powered-lift STOL aircraft
The promise of multicycle control --- to control fatiguing blade loads and rotor vibration
Investigation of roll performance for a highly nonlinear statically unstable fighter-type aircraft
Reliability improvement warranty terms and conditions for the Integrated Avionics Control Systems (IACS)
Helicopter high gain control
The design of digital controllers for the C-141 aircraft using entire eigenstructure assignment and the development of an interactive computer design program
Inertial navigation system calculation for aircraft and the development of an interactive computer design program
Investigation of inverse Vandermonde matrix calculation for linear system applications --- adaptive flight control system
Path controllers: Unification of concepts and comparison of design methods

FLIGHT CREWS:
The air combat maneuvering range /ACMR/, a new approach to aircrew training
The prediction of aircrew crew survivability
Crew experience in USAF ejections
Unique crew escape concepts for ATS mission aircraft
High strength stitching for aircraft personnel restraint systems
Crew escape concepts for advanced high performance aircraft
US Army aviation fatigue-related accidents, 1971 - 1977
Design procedure for an information transfer method CUBITS for allocating panel area for aircrew station controls and displays
The approach to crew protection in the crash environment for the TAH-64
Test and evaluation of modified high performance jet aircrew life preserver
Definition of requirements for a performance measurement system for C-5 aircrew members
Design procedure for aircrew station labeling selection and abbreviation

FLIGHT FATIGUE
US Army aviation fatigue-related accidents, 1971 - 1977

FLIGHT HAZARDS
Possible near-term solutions to the wind shear hazard

SUBJECT INDEX
The unsafe zone for single engine helicopters --- height-speed envelopes at engine failure
Recent advances in indirect lightning effects research
Properties of induced transients associated with ER fields produced by lightning or other relatively slow rise-time EMP --- in aircraft
Aviation obstructions and the particular conditions for construction projects in the vicinity of airports
Parachute partial inversions
Stable boundary layer wind shear model for aircraft flight hazard definition
Analysis of bird strikes reported by European airlines 1972 to 1975
Birdstrike hazards to turbine-powered aircraft
Some statistical data on birds' strike to aircraft and helicopters over the territory of the Soviet Union
Some behavioural aspects of airfield bird control
Ecological interpretation of bird-aircraft collisions on the Nice Cote d'Azur Airfield
Project Munich IX - Aspects on the economic utilization of the airport area under consideration of the bird strike problem
Planning and control of bird hazard reduction at airports in the Transport Canada system
The use of falcons to disperse nuisance birds at Canadian airports - An update
Equipment and methods for dispersing birds used on French airfields
The incidence of bird strikes by aeroplanes at Entebbe Airport
Radar and bird-aircraft collisions
Bird strike - An increasingly important problem in aviation safety
Bird strike on medium/large civil fan engines
Bird control - The experience of one aerodrome
Evaluation of an inquiry to pilots concerning their knowledge of the bird strike problem and experience of strikes
Measurement of ozone in an aircraft
Missed approach of commercial aircraft regarding wind shear in the ground boundary layer
Influence of delay time and dead time on wind shear landings
Conference on Certification of Aircraft for Lightning and Atmospheric Electricity Hazards, Chatillon-sous-Bagneux, Hauts-de-Seine, France, September 14-21, 1978, Proceedings
A new standard for lightning qualification testing of aircraft technical overview, definitions and basic waveforms
Vulnerability assessment of aircraft systems to indirect lightning effects
Direct effects protection methods for thin skins/composites
Static electricity phenomena - Theory and problems
FLIGHT SIMULATION

Recent General Electric engine development testing
[AIAA PAPER 79-0648]
p0263 A79-26652

Determination of the probability of consequences of
circuit-system malfunctions in the
evaluation of flight safety levels
[p0687 A79-52144]

The determination of margins of safety for
critical aircraft systems --- electronic
equipment EMC
[p0690 A79-52887]

Development, experimental verification and
application of program REASH for general
aviation airplane structural crash dynamics
[LE-20682] p0230 A79-16817

Assessment of new technologies for general
aviation aircraft
[GSRC-6]
p0232 A79-16837

Collision avoidance an annotated bibliography
[FAA-RA-78-6] p0290 A79-17800

Analysis of the functional requirements for an
intelligents airbone computer system
[AD-A0516869]
p0303 A79-18962

Flutter suppressor for transonic flight
[p0376 A79-20983]

Experimental study of the flight envelope and
research of safety requirements for hang-giders
[p0566 A79-27083]

Aircraft guidance in the ATC sector - Problems and
perspectives
[DOLN PAPER 79-026]
p0518 A79-42359

Pave Low III --- H-53 helicopter avionics for
night/adverse weather rescue of military aircraft
[p0619 A79-48682]

Evaluation of two inflow control devices for
flight simulation of fan noise using a JT15D
engine
[AIAA PAPER 79-06545] p0270 A79-26626

Experiments concerning the anomalous behaviour of
aero-engine exhaust noise in flight
[AIAA PAPER 79-06485]
p0271 A79-26630

Effects of simulated forward flight on jet noise,
shock noise and lateral noise
[AIAA PAPER 79-06155]
p0271 A79-26636

Stable boundary layer wind shear model for
aircraft flight hazard definition
[p0278 A79-27575]

Design benefits from V/STOL control/display
simulation program at Lockheed
[p0331 A79-29479]

An X-22A flight experiment to investigate
control-display requirements for the AF-88 VSTOL
aircraft
[p0332 A79-29484]

Verification and validation of the NASA Terminal
Configured Vehicle's /TCV/ Wind Analysis program
using real-time digital simulation
[p0336 A79-29900]

The European transonic wind-tunnel project
[p0343 A79-31021]

Modelling helicopter flight dynamics --- Russian book
[p0346 A79-33901]

Control considerations for CCV fighters at high
angles of attack
[p0461 A79-37295]

A wind shear/downdraft drift angle warning system
[p0464 A79-38777]

An aircraft simulation using a product of
exponentials as saturant
[p0466 A79-38885]

The extremal trajectory map - A new representation
of combat capability
[AIAA 79-1622] p0566 A79-45304

Decoupled longitudinal controls for shear
penetration in the terminal area environment ---
during approach and landing engine jet transport
[AIAA 79-1678] p0568 A79-45341

An improved lateral stability augmentation system
for air-to-air tracking
[p0572 A79-45402]

A 4-D helical approach of a transport aircraft in an
ATC environment
[p0572 A79-45404]

Initial results of an inflight simulation of
augmented dynamics in fighter approach and landing
[AIAA 79-1793] p0572 A79-45410

A simulated flight simulation of a vehicle with a two-stage
parachute system
[AIAA 79-0468] p0263 A79-26652

Computer generated images for aircraft use
[p0616 A79-20792]

Low speed testing techniques for V/STOL aircraft
in the Princeton dynamic model test
[AIAA PAPER 79-0334]
p0202 A79-23558

Digital laboratory evaluation of integral
fuel-tank sealants
[p0211 A79-24125]

Recent General Electric engine development testing
for improved service life
[SAP PAPER 78-030]
p0255 A79-25876

Simulation studies of the flight dynamics of
gliding parachute systems
[AIAA 79-0477] p0262 A79-26268

A simple physical model of a descending parachute
[AIAA 79-0487] p0263 A79-26551

Aircraft motion sensitivity to dynamic stability
derivatives
[AIAA PAPER 79-1621] p0688 A79-52546

Airframe simulation of swept lightning strokes
[p0681 A79-51132]

Laboratory tests to determine lighting attachment
points on actual aircraft parts /Qualification
test/
p0681 A79-51134

Laboratory tests to determine the physical damage
/direct effects/ caused by lightning
/qualification test/
p0681 A79-51136

Laboratory tests to determine the physical damage
/direct effects/ caused by lightning
/p0681 A79-51137

Laboratory tests to simulate lightning streamers
at apertures /qualification test/
/p0682 A79-51138

Laboratory tests for undesired conducted currents
and surge voltages caused by lightning
/qualification test/
/p0682 A79-51140

Tests on actual aircraft for electromagnetic
effects /Engineering tests/
/p0682 A79-51141

Aircraft motion sensitivity to dynamic stability
derivatives
/p0688 A79-52546


d-207

SUBJECT INDEX
<table>
<thead>
<tr>
<th>FLIGHT SIMULATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-flight simulation with pilot-center of gravity offset and velocity mismatch</td>
</tr>
<tr>
<td>Investigation of motion base drive techniques [AD-A053830]</td>
</tr>
<tr>
<td>Flight Dynamics Laboratory at SLL</td>
</tr>
<tr>
<td>Improvements to the FATOGL computer program including nosewheel steering: Supplementary Instruction Manual [NASA-TM-78760]</td>
</tr>
<tr>
<td>Development and validation of a piloted simulation of a helicopter and external sling [NASA-TM-1265]</td>
</tr>
<tr>
<td>Piloted aircraft simulation concepts and overview [NASA-CR-152208]</td>
</tr>
<tr>
<td>Icing trials on the front fuselage and engine intakes of helicopters at conditions simulating forward flight [P0172 879-15039]</td>
</tr>
<tr>
<td>Evaluation of two inflow control devices for flight simulation of fan noise using a JT 5D engine [NASA-TM-79072]</td>
</tr>
<tr>
<td>Piloted Aircraft Environment Simulation Techniques [NASA-CR-125973]</td>
</tr>
<tr>
<td>Simulating the visual approach and landing [P0222 879-15975]</td>
</tr>
<tr>
<td>Mission environment simulation for rotary rotorcraft development: Requirements and capabilities [P0222 879-15977]</td>
</tr>
<tr>
<td>Non-Gaussian structure of the simulated turbulent environment in piloted flight simulation [P0223 879-15980]</td>
</tr>
<tr>
<td>Visual simulation requirements and hardware [P0223 879-15983]</td>
</tr>
<tr>
<td>Low budget simulation in weapon aiming [P0223 879-15984]</td>
</tr>
<tr>
<td>The Luftansa day/night computer generated visual system [P0223 879-15985]</td>
</tr>
<tr>
<td>A high resolution visual system for the simulation of in-flight refueling [P0224 879-15987]</td>
</tr>
<tr>
<td>Wide angle visual system developments [P0224 879-15988]</td>
</tr>
<tr>
<td>Visually induced motion in flight simulation [P0224 879-15989]</td>
</tr>
<tr>
<td>Motion versus visual cues in piloted flight simulation [P0224 879-15990]</td>
</tr>
<tr>
<td>Motion and force cueing requirements and techniques for advanced tactical aircraft simulation [P0224 879-15991]</td>
</tr>
<tr>
<td>Influence of motion wash-out filters on pilot tracking performance [P0224 879-15992]</td>
</tr>
<tr>
<td>Nannned air combat simulation: a tool for design development and evaluation for modern fighter weapon systems and training of aircrew [P0225 879-15998]</td>
</tr>
<tr>
<td>Use of piloted simulation for studies of fighter departure/spin susceptibility [P0225 879-15999]</td>
</tr>
<tr>
<td>The development and implementation of algorithms for an A-7E performance calculator [AD-A061344]</td>
</tr>
<tr>
<td>Environmental effects on crack growth in flight-simulation tests on 2024-T3 and 7075-T6 material [MIL-PR-76104-D]</td>
</tr>
<tr>
<td>Methods for the validation of synthesized images in visual flight simulation</td>
</tr>
<tr>
<td>Mission environment simulation for rotary rotorcraft development: Requirements and capabilities [P0222 879-15975]</td>
</tr>
<tr>
<td>Mission simulation as an aid to display assessment</td>
</tr>
<tr>
<td>Transonic wind tunnels [P0335 879-20028]</td>
</tr>
<tr>
<td>Review of aeronautical fatigue investigations in the Netherlands during the period March 1977 - February 1979 [MIL-PR-76006-D]</td>
</tr>
<tr>
<td>Special ground testing facilities and testing techniques for STOL aircraft [P0430 879-23007]</td>
</tr>
</tbody>
</table>

**A-208**

<table>
<thead>
<tr>
<th>SUBJECT INDEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>terrain flight [NASA-TM-78571]</td>
</tr>
<tr>
<td>Motion and force cueing requirements and techniques for advanced tactical aircraft simulation [AD-A061344]</td>
</tr>
<tr>
<td>Effects of steady-state pressure distortion on the stall margin of a J85-21 turbojet engine [NASA-TM-79123]</td>
</tr>
<tr>
<td>A simplified rotor system mathematical model for piloted flight dynamics simulation [NASA-TM-78575]</td>
</tr>
<tr>
<td>Motion in flight simulation: An annotated bibliography [AD-A061667]</td>
</tr>
<tr>
<td>Full-scale aircraft simulation with cryogenic scale and status of the National Transonic Facility [NASA-TM-78005]</td>
</tr>
<tr>
<td>A simplified rotor system mathematical model for piloted flight dynamics simulation [NASA-CR-152307]</td>
</tr>
<tr>
<td>The Luftsansa day/night computer generated visual system [P0223 879-15985]</td>
</tr>
<tr>
<td>A high resolution visual system for the simulation of in-flight refueling [P0224 879-15987]</td>
</tr>
<tr>
<td>Mission environment simulation for rotary rotorcraft development: Requirements and capabilities [P0222 879-15975]</td>
</tr>
<tr>
<td>Visually induced motion in flight simulation [P0224 879-15988]</td>
</tr>
<tr>
<td>Motion versus visual cues in piloted flight simulation [P0224 879-15989]</td>
</tr>
<tr>
<td>Motion and force cueing requirements and techniques for advanced tactical aircraft simulation [P0224 879-15990]</td>
</tr>
<tr>
<td>Influence of motion wash-out filters on pilot tracking performance [P0224 879-15991]</td>
</tr>
<tr>
<td>Nannned air combat simulation: a tool for design development and evaluation for modern fighter weapon systems and training of aircrew [P0225 879-15998]</td>
</tr>
<tr>
<td>Use of piloted simulation for studies of fighter departure/spin susceptibility [P0225 879-15999]</td>
</tr>
<tr>
<td>The development and implementation of algorithms for an A-7E performance calculator [AD-A061344]</td>
</tr>
<tr>
<td>Environmental effects on crack growth in flight-simulation tests on 2024-T3 and 7075-T6 material [MIL-PR-76104-D]</td>
</tr>
<tr>
<td>Methods for the validation of synthesized images in visual flight simulation</td>
</tr>
<tr>
<td>Mission environment simulation for rotary rotorcraft development: Requirements and capabilities [P0222 879-15975]</td>
</tr>
<tr>
<td>Mission simulation as an aid to display assessment</td>
</tr>
<tr>
<td>Transonic wind tunnels [P0335 879-20028]</td>
</tr>
<tr>
<td>Review of aeronautical fatigue investigations in the Netherlands during the period March 1977 - February 1979 [MIL-PR-76006-D]</td>
</tr>
<tr>
<td>Special ground testing facilities and testing techniques for STOL aircraft [P0430 879-23007]</td>
</tr>
</tbody>
</table>

**A-208**
SUBJECT INDEX

Simulators cutting the fuel bill — review of airline, military, general aviation and Soviet
trainers

A new baseline for the inertial navigation system

A new baseline for the inertial navigation system

A new baseline for the inertial navigation system

A new baseline for the inertial navigation system

Differences between simulation and real world at Six degrees of freedom large motion system for

The development and evaluation of a g seat for a high performance military aircraft training

Visibility modelling for a landing simulator with special reference to low visibility

Shear natural and computer-generated turbulence and shear

A simulation of amphibious hovercraft overturning during instrument flight

The evaluation and use of flying qualities considerations in conceptual design

A simulator investigation of roll response requirements for aircraft with rate-command/attitude-hold flight control systems in the landing approach and touchdown

Piloted simulator investigation of helicopter control systems effects on handling qualities during instrument flight

The T & E simulator — A comparison with flight test results

Flight testing and simulator flight fidelity — determination at Naval Air Test Center

Evaluation of a Low Fidelity Simulator (LFS) for instrument training

A program for determining flight simulator field-of-view requirements

Contributions of platform motion to simulator training effectiveness. Study 15 — first contact

The Total In-Flight Simulator (TIFS) aero-dynamics and systems: Description and analysis — maneuver control and gust alleviators

Results of piloted simulator studies of fighter aircraft at high angles of attack

Evaluation of a flight simulator (device 129A) for maintaining instrument proficiency among instrument-rated army pilots

Current deficiencies in simulation for training

Proposed advancements in simulation of atmospheric phenomena for improved training

Handling qualities of a simulated STOL aircraft in natural and computer-generated turbulence and shear

Visibility modelling for a landing simulator with special reference to low visibility

Dynamic characteristics of flight simulator motion systems

The development and evaluation of a g seat for a high performance military aircraft simulation

Six degrees of freedom large motion system for flight simulators

Differences between simulation and real world at the IABG air to air combat simulator with a wide angle visual system

Two-segment approach investigation on a moving-base piloted flight simulator

A new baseline for the inertial navigation strapdown simulator program. Volume 1: Introduction and summary

A new baseline for the inertial navigation strapdown simulator program. Volume 2: Analytical development

A new baseline for the inertial navigation strapdown simulator program. Volume 3: Program and description and users guide

A new baseline for the inertial navigation strapdown simulator program. Volume 4: Program listings

Advanced Simulator for Pilot Training (ASPT): Aerial refueling visual simulation-engineering

Active control for the Total-In-Flight simulator (ACTIFS)

An evaluation of turn anticipation techniques and offset flying procedures using a single-waypoint RNAV system

AAES laboratory simulator requirements (4-7 aircraft)

Optimal placement of regional flight simulators

Design of an off-axis wide field-of-view visual display system for flight simulators

Structuring of data systems: Psychophysiological data from the dynamic flight simulator

P-15 flight simulator: Development and analysis of computer scoring algorithm

Seat cushion to provide realistic acceleration cues to aircraft simulator pilot

Laboratory development of computer generated image displays for evaluation in terrain following training

Powered-lift aircraft handling qualities in the presence of naturally-occurring and computer-generated atmospheric disturbances

Simulation study of the operational characteristics of a two/three-dimensional multiwaypoint area navigation (RNAV) system — pilot performance and flight technical errors

Effect of image tilt of a virtual image display on simulated transport touchdown performance

FLIGHT STABILITY TESTS

The evaluation and use of flying qualities considerations in conceptual design

Flights response to lateral gusts— Exploratory study

A simulation of amphibious hovercraft overturning using DPVLR SF8 320 variable stability direct lift control combinations for flight path tracking using FFVLB HFB 320 variable stability aircraft

Qualification tests for helicopters to be used on board ships

FLIGHT TECHNICAL ERROR

A pilot error

FLIGHT TEST INSTRUMENTS

A general aviation flight test application of the on-board computer

Flight test verification of the ASSET system — Advanced Skewed Sensory Electronic Triad

High sink-rate landing testing of Navy aircraft

Flight test technology development — A preview of DyNoTech —— dynamic modeling

ARIA takeoff performance flight test program — Advanced Range Instrumented Aircraft

FLIGHT TEST VEHICLES

An air launched test vehicle for ejection seat parachutes

FLIGHT TESTS

MT FLIGHT STABILITY TESTS
The role of flight dynamic modeling in helicopter certification
[AIAA PAPER 78-0550] p0005 A79-10409
An instrumentation modeling technique used in the identification of aerodynamic coefficients from flight test data
[IAF PAPER 78-99] p0016 A79-11239
GPS Phase I user equipment field tests
[IEEE PAPER 78-9108] p0063 A79-10193
The effectiveness of pilot warning instrumentation
[IEEE PAPER 78-9109] p0063 A79-10193
An engineering model based upon flight test data
[IEEE PAPER 78-9110] p0065 A79-10411
Performance evaluation of the experimental RCAS /Beacon Collision Avoidance System /
[IEEE PAPER 78-9111] p0065 A79-10412
Aircraft aerodynamic coefficient estimation
[IEEE PAPER 78-9112] p0065 A79-10412
A new approach to helicopter rotor blade research instrumentation
[IEEE PAPER 78-9113] p0113 A79-17583
Rotor-airfoil flight investigation - Preliminary results
[AHS 78-05] p0119 A79-18132
Design and development tests of a four-bladed light helicopter rotor system
[AHS 78-07] p0119 A79-18134
Use of helicopter flight simulation for height-velocity test predictions and flight test risk reduction
[AHS 78-81] p0123 A79-18164
An innovative technique for static and dynamic VSTOL testing
[AHS 78-42] p0123 A79-18165
Testing of the TOW missile-configured AB-1T helicopter — Tube-launched Optically-tracked Wire guided
[AHS 78-43] p0123 A79-18166
Digital simulation of the Operational Loads Survey flight tests
[AHS 78-58] p0125 A79-18179
Status report on advanced development program utilizing circulation control rotor technology
[IEEE PAPER 78-9114] p0133 A79-18677
Helicopter flight-path and acoustic-signal repeatability for noise-diagnosis and noise-certification
[IEEE PAPER 78-9115] p0138 A79-18686
Height-velocity diagram determination for twin engine helicopters - Some aspects of present regulations
[AHS 78-05] p0137 A79-18702
Engine life usage experience of TF77/T5307 flight and ground testing
Preliminary flight and wind tunnel comparisons of the inlet/airframe interaction of the F-15 airplane
[IEEE PAPER 78-9102] p0200 A79-23513
Development and flight test evaluation of fuel tank sealants for F-16 aircraft - Utilization in active control systems
[IEEE PAPER 78-9116] p0210 A79-24214
Flight test control by means of a microprocessor. I
[IEEE PAPER 78-9117] p0214 A79-24849
P-16 high angle of attack testing
[IEEE PAPER 78-9118] p0259 A79-26527
P-18 status report
[IEEE PAPER 78-9119] p0259 A79-26529
Flight testing the EF14
[IEEE PAPER 78-9120] p0259 A79-26530
The Learjet Longhorn series - The first jets with winglets
[IEEE PAPER 78-9121] p0260 A79-26532
The continuity factor in aircraft development
[IEEE PAPER 78-9122] p0260 A79-26536
Development and testing of a shipboard launched balloon system
[IEEE PAPER 78-9020] p0262 A79-26631
Flight effects on noise generated by the JT9D engine with inverted primary/fan flow as measured in the NASA-Ames 40- by 80-foot wind tunnel
[IEEE PAPER 78-9123] p0271 A79-26937
KY-15 Tilt Rotor Research Aircraft - Program report
[IEEE PAPER 78-9070] p0277 A79-27371
Lateral noise-attenuation results from flyovers of three transport aircraft
[IEEE PAPER 78-9041] p0277 A79-27371

Flight test verification of the ASSET system ---
Advanced Skewed Sensory Electronic Triad
Navigation Set
Realization of a helicopter-oriented real-time
data system for research, experimental, and
prototype flight testing
Flight investigation of helicopter IFR approaches to
oil rigs using airborne weather and mapping
radar [AGARD-CP-235]
Wind tunnel and flight test of the XV-15 tilt
tail Rotor Research Aircraft
IXV-15 flight test results compared with design goals
Performance modelling methods --- in flight test
program
A computer system for identifying aircraft
characteristics
A computer program for aircraft identification
and derivative extraction
Flight testing and simulator flight fidelity ---
determination at Naval Air Test Center
Separation testing of large weapons from the B-1
bomber
INACT - Interactive test data analysis --- with
minicomputers
Estimation of longitudinal aircraft
characteristics using parameter identification
techniques
Considerations in the analysis of flight test
maneuvers
Flight test technology development - A preview of
DynoTech --- dynamic modeling
Evaluation of the radar altimeter reference method
for determining altitude system positioning errors
The evolution of the high-angle-of-attack features
of the F-16 flight control system
J85-CAN-15 compressor stall and flameout
investigation
Testing the F-18 at the U.S. Naval Air Test Center
Experiences with an airborne digital computer
system for general aviation flight testing
Flight demonstration of the AV-8B V/STOL concept
Recent results in parameter identification for
high angle-of-attack stall regimes
Doppler Rover System (DBS) flight test report
B-52B-006/DTV (Drop Test Vehicle) configuration 1
(with and without fins) flight test results -
captive flight and drop test mission
C-130 weldedbonded fuselage panel flight
evaluation program
AR-1G helicopter main rotor flow survey
Effect of structural parameters on the flap-lag
forced response of a rotor blade in forward flight
Initial flight test of a Loran-C receiver/data
collection system
Design and test of the 72K fluidic cymbal
A program for determining flight simulator
field-of-view requirements
Testing the feasibility of Differential Omega for
airborne use
Evaluation of a commercial OMEGA navigation system
installed in the C-118 aircraft
Natural icing flight tests and additional
simulated icing tests of a DH-109 helicopter
incorporating an electrothermal ice protection
system
Digital fly-by-wire flight control validation
experience
Thrust, performance, and stability
Tests to determine maneuverability and
controllability for forest fire service
DyHolech --- dynamic modeling
Dynamic Stability Parameters
Air Force Flight Test Center experience in the
identification of stability and control
parameters from dynamic flight test
maneuvers
Estimation of aerodynamic characteristics from
dynamic flight test data
Aerodynamic interactions on the F/A-18 CV test
aircraft
Identification of unsteady effects in lift buildup
Flight test evaluation of predicted light aircraft
design, performance, and stability
Gust response and its alleviation for a hingeless
helicopter rotor in cruising flight
The development of the DAST I remotely piloted
research vehicle for flight testing an active
flap/slip suppression control system
The need of stick force stability for
attitude-stabilized aircraft, Part 2
Environmental effects on crack growth in
flight simulation tests on 20214-T3 and 7075-T6
material
P-217 F-16 status report
Flight testing the EF2
The Learjet Longhorn series: The first jets with
winglets
Flight test techniques for low speed airfoil
evaluation
Guide to in-flight thrust measurement of turbojets
and fan engines
Fundamentals of thrust measurement in
flight
Thrust expressions, methodology, and options
Excitation and analysis technique for flutter tests
AGARD flight test instrumentation series. Volume 9:
Aerelastic flight test techniques and instrumentation
A new dimension. Wallops Island flight test
range: The first fifteen years
Inflight utilization of an optical fiber transmission system on a Falcon 10 aircraft

The problem: Aircraft in transonic flight
Flight test techniques for a transonic aircraft

Important factors in the maximum likelihood analysis of flight test maneuvers

Flight investigation of piloting techniques and crosswind limitations using a research type crosswind landing gear

Stabilized Terrain Optical Position Sensor (STOPS)

Buffeting measurements in flight and in a wind tunnel --- TCV airplane

Polar lift and drag determination during flight tests

Determination of subcritical frequency and damping from wind tunnel test data

High altitude altimeter flight test

A flight investigation of basic performance characteristics of a teetering-rotor attack helicopter

Turbin engine altitude chamber and flight testing with liquid hydrogen

Longitudinal aerodynamics extracted from flight tests using a parameter estimation method

An experimental comparison of the readabilty of two digital altimeters

A unique facility for V/STOL aircraft hover testing --- Langley Impact Dynamics Research Facility

Aerodynamic data development for the turboprop T-44A Operational Flight Trainer

Visual simulation devices for flight training simulators --- Russian book

Aerodynamic data development for the turboprop T-44A Operational Flight Trainer

Evaluation of a low Fidelity Simulator (LFS) for instrument training

A flight simulator (device 2824) for maintaining instrument proficiency among instrument-rated army pilots

L-1011 active controls, design philosophy and experience

A comparison of predictions obtained from wind tunnel tests and the results from cruising flight: Airbush and Concorde --- conferences

Lateral aerodynamics extracted from flight test using a parameter estimation method

Flight performance of the T55-L-712 engines

Side qualities criteria validation/pilot performance study: Flight test results

Preliminary airworthiness evaluation CH-47C with fiberglass rotor blades with T55-L-712 engines

Survey and evaluation of potential real-time interactive flight test facilities for the B-1

Flight determined lift and drag characteristics of an F-8 airplane modified with a supercritical wing with comparison to wind-tunnel results

Flight test evaluation of the high inertia rotor system

Preflight airworthiness evaluation OH-58C helicopter

Preflight airworthiness evaluation AH-1S helicopter installed with enhanced combat armament system (AR-15/BCAS)

A review of some head-up display formats --- tests on sensing equipment for flights following partly visible terrain close to the ground

THE AIRCRAFT MANEUverING RANGE /ACMR/, a new approach to aircraft training

360-deg non-programmed visual display --- for flight training

The development and use of simulators for helicopter flight training in the Royal Navy

Visual simulation devices for flight training simulators --- Russian book

Aerodynamic data development for the turboprop T-44A Operational Flight Trainer

Dutch roll excitation and recovery techniques on a C-141A Starlifter

Evaluation of a Low Fidelity Simulator (LFS) for instrument training

Evaluation of a flight simulator (device 2824) for maintaining instrument proficiency among instrument-rated army pilots

Visual criteria for out of the cockpit visual scenes

Lift system induced aerodynamics of V/STOL aircraft in a moving deck environment - Volume 2. Static and dynamic jet-induced force and moment data

A-212
Flow distribution

- Analysis of the flow field in a radial compressor [ASME PAPER 78-GT-7]
- Measurement of flow fields around an airfoil section with separation [p0008 A79-10776]
- Measurements in an axisymmetric turbulent boundary layer with weak and strong three-dimensional disturbances [p0012 A79-10868]
- Aerodynamic field induced by a jet penetrating a cross flow at subsonic velocities [ONERA, TP NO. 1978-81]
- Flow field calibration results for the AMDC High Enthalpy Ablation Test Facility [p0060 A79-13991]
- An investigation of the influence of fuselage flow field on rotor loads, and the effects of vehicle configuration [p0129 A79-10644]
- An alternating direction explicit method for computing three-dimensional viscous flow fields in turbomachines [p0147 A79-19501]
- Study of the flow field behind a transonic axial compressor rotor using laser-scanmetry and unsteady pressure measurements [p0147 A79-19524]
- Calculation of the three-dimensional flow field in supercritical at angle of attack using a bicharacteristic method with discrete shock wave fitting [p0147 A79-19655]
- Numerical study of the supercritical flow around wings [p0147 A79-19698]
- An alternating direction explicit method for computing three-dimensional viscous flow fields in turbomachines [p0256 A79-25884]
- Study of the flow field behind a transonic axial compressor rotor using laser-scanmetry and unsteady pressure measurements [p0301 A79-25840]
- The inverse problem for multiconnected airfoil systems [p0330 A79-29405]
- Small disturbance swirl flow in turbomachinery, bladings [p0334 A79-29700]
- Flow past a small-aspect-ratio delta wing with vortex filament breakdown (p0349 A79-32054)
- Experimental study on diffusers for mixed-flow machines [p0349 A79-32054]
- Investigation of a large Doppler velocimeter system to measure the flow field of a large scale V/STOL aircraft in ground effect [p0359 A79-29804]
- Analysis of an unsteady aerodynamic force on a blade due to two-dimensional gusts [p0470 A79-39895]
- Numerical solution for the flow field of a body with jet [p0565 A79-45250]
- A fast, conservative algorithm for solving the transonic full-potential equation [p0565 A79-45261]
- Three-dimensional coordinates about wings [p0565 A79-45261]
- Water tunnel visualization of the vortex flows of the F-15 [p0565 A79-45261]
- Numerical investigation of the perpendicular injector flow field in a hydrogen fueled scramjet [p0567 A79-45325]
- Transonic flow past a symmetrical airfoil at high angle of attack [p0574 A79-46686]
- Transonic flow past a symmetrical airfoil at high angle of attack [p0575 A79-46694]

Subject index

- Supercritical airfoil boundary-layer measurements [p0575 A79-46695]
- A careful numerical study of flowfields about external conical contours, X - symmetric configurations [p0575 A79-46701]
- Recent progress in finite-volume calculations for wing-fuselage combinations - transonic potential flow [p0575 A79-46702]
- The effect of blade-to-blade flow variations on the mean flow-field of a transonic compressor [p0575 A79-46703]
- Subsonic flow past an oscillating cascade with finite mean flow deflection [p0576 A79-46704]
- Water tunnel flow visualization - Insight into complex three-dimensional flow fields - around the F-15 [p0576 A79-46712]
- Evaluation of flow quality in two NASA transonic wind tunnels [p0576 A79-46714]
- The prediction of the turbulent flow field about an oscillating fin [p0577 A79-46719]
- A simple fluid flow model of ground effect on hovering [p0683 A79-51241]
- Flowfield chemistry effects on stability of bluff-body vortex rings [p0688 A79-52567]
- Combustor modelling for scramjet engines [p0706 A79-52675]
- A numerical solution of supercritical and hypersonic viscous flow fields around thin planar delta wings with dual deflection [p0706 A79-10018]
- A computer program for the calculation of the flow field in supersonic mixed-compression inlets at angle of attack using the three-dimensional method of characteristics with discrete shock wave fitting [NASA-TR-76991]
- A numerical solution of supercritical and hypersonic viscous flow fields around thin planar delta wings [NASA-CR-79-11003]
- Flow-field in a vortex with breakdown above sharp edged delta wings [NASA-TR-75339]
- Compressible viscous flowfields and airframe forces induced by two-dimensional lift jets in ground effect [NASA-CR-79-12017]
- Nonlinear interaction between mean and unsteady flowfields near Mach 1 [NASA-CR-79-12022]
- Non-conical flow past slender wings with leading edge vortex sheets [NASA-CR-79-15081]
- The aerodynamic and thermodynamic characteristics of a conical and a fuselage configuration [NASA-CR-79-15084]
- An improved supersonic, three-dimensional, external, inviscid flow field code [NASA-CR-79-17206]
- Analysis of some aerodynamic characteristics due to wing-fuselage interaction [NASA-CR-79-18977]
- Study of the flow field behind a transonic axial compressor rotor using laser-scanmetry and unsteady pressure measurements [NASA-CR-79-19921]
- Measurement of flow fields around an airfoil section with separation [NASA-CR-79-19946]
- Application of the AMT C sub 1 sub max prediction method to a number of airfoils [NASA-CR-79-20005]
- Studies of self-strioving wind tunnel real and imaginary flows [NASA-CR-79-20142]
A-215

Effects of geometric and flow-field variables on inverted-velocity-profile coaxial jet noise --- nozzle geometry
(NASA-TF-79005) p0375 A79-20830

A correlation of mixing noise from coaxial jets with inverted flow profiles
(NASA-TF-13031) p0828 A79-22849

Comparison of store trajectory and aerodynamic loads, and model flow-field characteristics obtained in the AEDC PWT/WT and VFK/A wind tunnels at Mach number 1.63
(AD-A065137) p0361 A79-23017

Development of a viscous vortex/airfoil interaction program for thick wings with bounded leading edge
(AD-A065181) p0361 A79-23020

A numerical solution of supersonic and hypersonic viscous flow fields around thin planar delta wings
(AD-A065632) p0361 A79-23028

Wall interference effects
p0389 A79-23113

Investigation of a laser Doppler velocimeter system to measure the flow field around a large scale V/STOL aircraft in ground effect
( NASA CR-152212) p0584 A79-26374

Lee side flow field over slender delta wings of finite thickness
(II-R-23) p0584 A79-27103

Scaling effects on shock-induced separation
p0588 A79-28574

Wing/store flow-field measurements at transonic speeds using a laser velocimeter
(AD-A068328) p0590 A79-29149

A flow field study for top mounted inlets on fighter aircraft configurations
(AD-A069732) p0650 A79-30151

Investigation of air stream from combustor-liner engine entry holes, 3
(NASA-TN-79430) p0670 A79-31206

Helicopter flow field analysis
(AD-A069542) p0702 A79-32174

A viscous flow analysis for the tip vortex generation process
( NASA CR-3188) p0712 A79-33162

FLOW EQUATIONS

Numerical solution of a linear integral equation of the first kind in the inverse problem of symmetric flow past a wing
p0199 A79-12138

Calculation of the flow with separation for airfoils and multi-element airfoil systems placed in proximity of the ground or in closed tunnels
p0058 A79-13295

A generalised 'capacity-pressure-rotational velocity' equation for axial turbines
p0316 A79-28718

On some methods for the numerical simulation of flows with complex structure
p0808 A79-38691

Solution of boundary value problems for the vibration equation for a jet engine model
p0411 A79-35895

A two-dimensional unsteady Euler-equation solver for flow regions with arbitrary boundaries
(AIAA 79-14651) p0139 A79-18837

Contribution to the development of theoretical calculations for the design and optimization of lifting bodies. (Solution of three-dimensional basic flow field dynamics equations with strong interacting attached and separated flow fields)
( ONERA TP NO. 1979-76) p0286 A79-17816

Viscous flows in centrifugal compressors
( NASA CR-3188) p0308 A79-19387

A new flow model for highly separated airfoil flows at low speeds
p0358 A79-20053

Axial flow turbines --- flow relations and equations
p0422 A79-22092

FLOW FIELDS

U FLOW DISTRIBUTION

Design of two-dimensional external compression
supersonic inlets
p067 A79-14517

Vortex pattern at the upper surface of a swept wing with a high angle of attack

The development and structure of turbulent plane jets
p037 A79-18837

Three dimensional modelling of cascade flows
[AIAA PAPER 79-0007] p0331 A79-29417

The influence of geometric asymmetry on the flow downstream of row of jets discharging normally into a free stream
p0246 A79-25065

Generation of body-fitted coordinates for turbine cascades using multigrid
[AIAA 79-7049] p0331 A79-29417

Optimal selection of the geometrical characteristics of the reversing channel of a small-scale turbine with readmission of the gas --- for aircraft auxiliary power systems
p0450 A79-36583

Influence of the flow angle on the characteristics of an elbow-shaped air intake --- of gas turbine engines
p0450 A79-36585

The 'cloud-in-cell' technique applied to the roll-up of vortex sheets
p0661 A79-37725

Profiling of two-dimensional and three-dimensional nozzles and calculation of their flows
p0663 A79-38168

Effect of base cavities on the aerodynamic drag of an axisymmetric cylinder
p0535 A79-43711

Unsteady wing boundary layer energization
p0566 A79-45312

The inner regions of annular jets
p0603 A79-47520

Flow patterns and aerodynamic characteristics of wing with strake
(AIAA PAPER 79-1877) p0610 A79-47928

The effect of short regions of high surface curvature on turbulent boundary layers
p0687 A79-52273

Trailing edge noise data with comparison to theory

Effect of steady-state temperature distortion and combined distortion on inlet flow to a turbopfan engine
[ NASA-TN-79237] p0653 A79-30187

FLOW MEASUREMENT

Analysis of the flow field in a radial compressor
[AIAA PAPER 78-GT-7] p0008 A79-10776

Measurement of flow fields around an airfoil section with separation
p0012 A79-10668

Experimental method for investigating preintake vortex circulation --- in engine air intakes
p0016 A79-11367

Measurements in three-dimensional turbulent boundary layer on a yawed flat plate induced by leading edge vortex
p0052 A79-13150

Aeroacoustic characterization of free jets
[ OREBA, TP NO. 1978-147] p0127 A79-18534

Comparison of two flow surveys above stalled wings
[AIAA PAPER 79-0147] p0143 A79-19564

The low-density channel of the Aerodynamic Institute
p0185 A79-20761

Pitot-tubes at 90 and 180 degrees of yaw
p0186 A79-20793

Experimental analysis methods for unsteady flows
in turbomachines
[ OREBA, TP NO. 1979-59] p0474 A79-39095

Experimental studies of axial and radial compressors by means of new measurement techniques
p0512 A79-61237

Split-fins anemometer measurements on an airfoil with turbulent separated flow
p0515 A79-62202

Supercritical airfoil boundary-layer measurements
[ AIAA PAPER 79-1532] p0576 A79-46714

Evaluation of flow quality in two NASA transonic wind tunnels

The effect of short regions of high surface curvature on turbulent boundary layers
p0687 A79-52273

Trailing edge noise data with comparison to theory

Effect of steady-state temperature distortion and combined distortion on inlet flow to a turbopfan engine
[ NASA-TN-79237] p0653 A79-30187

FLOW MEASUREMENT

Analysis of the flow field in a radial compressor
[AIAA PAPER 78-GT-7] p0008 A79-10776

Measurement of flow fields around an airfoil section with separation
p0012 A79-10668

Experimental method for investigating preintake vortex circulation --- in engine air intakes
p0016 A79-11367

Measurements in three-dimensional turbulent boundary layer on a yawed flat plate induced by leading edge vortex
p0052 A79-13150

Aeroacoustic characterization of free jets
[ OREBA, TP NO. 1978-147] p0127 A79-18534

Comparison of two flow surveys above stalled wings
[AIAA PAPER 79-0147] p0143 A79-19564

The low-density channel of the Aerodynamic Institute
p0185 A79-20761

Pitot-tubes at 90 and 180 degrees of yaw
p0186 A79-20793

Experimental analysis methods for unsteady flows
in turbomachines
[ OREBA, TP NO. 1979-59] p0474 A79-39095

Experimental studies of axial and radial compressors by means of new measurement techniques
p0512 A79-61237

Split-fins anemometer measurements on an airfoil with turbulent separated flow
p0515 A79-62202

Supercritical airfoil boundary-layer measurements
[ AIAA PAPER 79-1532] p0576 A79-46714

Evaluation of flow quality in two NASA transonic wind tunnels

The effect of short regions of high surface curvature on turbulent boundary layers
p0687 A79-52273

Trailing edge noise data with comparison to theory

Effect of steady-state temperature distortion and combined distortion on inlet flow to a turbopfan engine
[ NASA-TN-79237] p0653 A79-30187
Flow of ideal gas in tapering nozzles

Flow patterns

A laser velocimeter flow survey above a stalled wing
Calculation of the planar supercritical flow over a NASA supercritical profile
Study of mean- and turbulent-velocity fields in a large-scale turbine-vane passage
Optical flow measurements: Applications to wind tunnels or motor bench tests

Flow patterns

Flow velocity
Flow resistance
Flow separation
Flow stability
Flow visualization

Flow theory

Contribution to the asymptotic theory of flows at the trailing edge of a slender wing
Oscillating airfoils. II - Newtonian flow theory and application to power-law bodies in hypersonic flow

Flow visualization

Laser velocimeter

A laser velocimeter flow survey above a stalled wing
Calculation of the planar supercritical flow over a NASA supercritical profile
Study of mean- and turbulent-velocity fields in a large-scale turbine-vane passage
Optical flow measurements: Applications to wind tunnels or motor bench tests

Flows in turbomachinery. Volume 1: Theory, part 2
Mathematical model and stability of a hydraulic servodrive with jet-throttle regulation
Formulation of empirical formulas for calculating the hydraulic resistance of networks

Flow visualization

Laser velocimeter

A laser velocimeter flow survey above a stalled wing
Calculation of the planar supercritical flow over a NASA supercritical profile
Study of mean- and turbulent-velocity fields in a large-scale turbine-vane passage
Optical flow measurements: Applications to wind tunnels or motor bench tests

Flow theory

Contribution to the asymptotic theory of flows at the trailing edge of a slender wing
Oscillating airfoils. II - Newtonian flow theory and application to power-law bodies in hypersonic flow

Flow visualization

Laser velocimeter

A laser velocimeter flow survey above a stalled wing
Calculation of the planar supercritical flow over a NASA supercritical profile
Study of mean- and turbulent-velocity fields in a large-scale turbine-vane passage
Optical flow measurements: Applications to wind tunnels or motor bench tests

Flow theory

Contribution to the asymptotic theory of flows at the trailing edge of a slender wing
Oscillating airfoils. II - Newtonian flow theory and application to power-law bodies in hypersonic flow

Flow visualization

Laser velocimeter

A laser velocimeter flow survey above a stalled wing
Calculation of the planar supercritical flow over a NASA supercritical profile
Study of mean- and turbulent-velocity fields in a large-scale turbine-vane passage
Optical flow measurements: Applications to wind tunnels or motor bench tests

Flow theory

Contribution to the asymptotic theory of flows at the trailing edge of a slender wing
Oscillating airfoils. II - Newtonian flow theory and application to power-law bodies in hypersonic flow

Flow visualization

Laser velocimeter

A laser velocimeter flow survey above a stalled wing
Calculation of the planar supercritical flow over a NASA supercritical profile
Study of mean- and turbulent-velocity fields in a large-scale turbine-vane passage
Optical flow measurements: Applications to wind tunnels or motor bench tests

Flow theory

Contribution to the asymptotic theory of flows at the trailing edge of a slender wing
Oscillating airfoils. II - Newtonian flow theory and application to power-law bodies in hypersonic flow

Flow visualization

Laser velocimeter

A laser velocimeter flow survey above a stalled wing
Calculation of the planar supercritical flow over a NASA supercritical profile
Study of mean- and turbulent-velocity fields in a large-scale turbine-vane passage
Optical flow measurements: Applications to wind tunnels or motor bench tests

Flow theory

Contribution to the asymptotic theory of flows at the trailing edge of a slender wing
Oscillating airfoils. II - Newtonian flow theory and application to power-law bodies in hypersonic flow

Flow visualization

Laser velocimeter

A laser velocimeter flow survey above a stalled wing
Calculation of the planar supercritical flow over a NASA supercritical profile
Study of mean- and turbulent-velocity fields in a large-scale turbine-vane passage
Optical flow measurements: Applications to wind tunnels or motor bench tests

Flow theory

Contribution to the asymptotic theory of flows at the trailing edge of a slender wing
Oscillating airfoils. II - Newtonian flow theory and application to power-law bodies in hypersonic flow

Flow visualization

Laser velocimeter

A laser velocimeter flow survey above a stalled wing
Calculation of the planar supercritical flow over a NASA supercritical profile
Study of mean- and turbulent-velocity fields in a large-scale turbine-vane passage
Optical flow measurements: Applications to wind tunnels or motor bench tests

Flow theory

Contribution to the asymptotic theory of flows at the trailing edge of a slender wing
Oscillating airfoils. II - Newtonian flow theory and application to power-law bodies in hypersonic flow

Flow visualization

Laser velocimeter

A laser velocimeter flow survey above a stalled wing
Calculation of the planar supercritical flow over a NASA supercritical profile
Study of mean- and turbulent-velocity fields in a large-scale turbine-vane passage
Optical flow measurements: Applications to wind tunnels or motor bench tests

Flow theory

Contribution to the asymptotic theory of flows at the trailing edge of a slender wing
Oscillating airfoils. II - Newtonian flow theory and application to power-law bodies in hypersonic flow

Flow visualization

Laser velocimeter

A laser velocimeter flow survey above a stalled wing
Calculation of the planar supercritical flow over a NASA supercritical profile
Study of mean- and turbulent-velocity fields in a large-scale turbine-vane passage
Optical flow measurements: Applications to wind tunnels or motor bench tests

Flow theory

Contribution to the asymptotic theory of flows at the trailing edge of a slender wing
Oscillating airfoils. II - Newtonian flow theory and application to power-law bodies in hypersonic flow

Flow visualization

Laser velocimeter

A laser velocimeter flow survey above a stalled wing
Calculation of the planar supercritical flow over a NASA supercritical profile
Study of mean- and turbulent-velocity fields in a large-scale turbine-vane passage
Optical flow measurements: Applications to wind tunnels or motor bench tests

Flow theory

Contribution to the asymptotic theory of flows at the trailing edge of a slender wing
Oscillating airfoils. II - Newtonian flow theory and application to power-law bodies in hypersonic flow

Flow visualization

Laser velocimeter

A laser velocimeter flow survey above a stalled wing
Calculation of the planar supercritical flow over a NASA supercritical profile
Study of mean- and turbulent-velocity fields in a large-scale turbine-vane passage
Optical flow measurements: Applications to wind tunnels or motor bench tests
Making fluid flows visible

Application of a laminar lighting device to the smoke visualization of aerodynamic flows in wind tunnels

Experiments on an aerofoil at high angle of incidence in longitudinal oscillations

Unsteady wing boundary layer energization

Water tunnel visualization of the vortex flows of the F-15

Water tunnel flow visualization - Insight into complex three-dimensional flow fields -- around flock airfoils

Aerodynamics of spoiler control devices

LVV measurements on propellers

Test technique development in interference free testing, flow visualization, and remote control model technology at Langley's Unitary Plan wind tunnel

Experimental investigation of the subwing tip and its vortex structure

A water tunnel flow visualization study of the F-15

Visualization of the separation and subsequent transition near the leading edge of airfoils

Visualisations and calculations of air intakes at high angles of attack and low Reynolds number

A simple method of adapting a wind tunnel Schlieren system for interferometry

Flow visualization studies of a general research fighter model employing a strake-wing concept at subsonic speeds -- in the Langley high speed 7-by 10-ft wind tunnel

FIMETRYRES

HT ROT-WIRE FLOWMETERS

Advanced technology fuel mass flowmeter

FLUID AMPLIFICATION

U FLUID AMPLIFIERS

FLUID AMPLIFIERS

HT JET AMPLIFIERS

Engineering studies of aircraft hydraulic drives

Investigation of a low-cost servosensor for HiSaS

FLUID BOUNDARIES

LT LIQUID-SOLID INTERFACES

Fluid-structure interaction dynamics in fuel cells

--- aircraft vibrational analysis

FLUID DYNAMICS

HT AERODYNAMICS

HT AERO THERMODYNAMICS

HT COMPUTATIONAL FLUID DYNAMICS

HT GAS DYNAMICS

HT HYDRODYNAMICS

HT NAPHTHALENE GAS DYNAMICS

HT NUTR AERODYNAMICS

HT SUPERSONICS

Performance estimation of partial admission turbines

Radial equilibrium in axial turbomachines

Transonic 3-D flow analysis of compressor cascade with splitter vanes

Technical evaluation report on the Fluid Dynamics Panel Symposium on Unsteady Aerodynamics

Outlet air angle prediction for subsonic flow cascades

The fluid dynamic design of advanced centrifugal compressors

FLOW FILMS

HIGH EFFICIENCY FLUID FILM THRUST BEARINGS FOR TURBOMACHINERY

Topics in fluid film bearing and rotor bearing system design and optimization; Proceedings of the Design Engineering Conference, Chicago, Ill., April 17-20, 1978

STABILITY AND UNBALANCE RESPONSE OF CENTRALLY PRELOADED ROTORS MOUNTED IN JOURNAL AND SQUEEZE FILM BEARINGS

Oil squeeze film dampers for reducing vibration of aircraft gas turbine engines

FLOW PLANE

HT AIR FLOW

HT AIR JETS

HT AERONAUTICAL FLOW

HT AXIAL FLOW

HT AXISTHETRIC FLOW

HT BASE FLOW

HT BOUNDARY LAYER FLOW

HT BOUNDARY LAYER SEPARATION

HT CASCADE FLOW

HT CAVITATION FLOW

HT CHANNEL FLOW

HT COAXIAL FLOW

HT CONDUCTIBLE FLOW

HT COMPRESSION FLOW

HT CONICAL FLOW

HT CONTINUUM FLOW

HT CORNBELL FLOW

HT CROSS FLOW

HT DOCTOR FLOW

HT FREE FLOW

HT FREE MOLECULAR FLOW

HT FUEL FLOW

HT GAS FLOW

HT HARTFORD FLOW

HT HELICAL FLOW

HT HESPHIDIC FLOW

HT INCOMPRESSIBLE FLOW

HT INLET FLOW

HT INVERTED FLOW

HT ISOTHERMAL FLOW

HT JET FLOW

HT JET JIHING FLOW

HT JET STREAMS (METEOROLOGY)

HT LARGE FLOW

HT LIQUID FLOW

HT MAGNETOHYDRODYNAMIC FLOW

HT MASS FLOW

HT MERIDIONAL FLOW

HT MOLECULAR FLOW

HT MULTIPHASE FLOW

HT NONEQUILIBRIUM FLOW

HT NONNEWTONIAN FLOW

HT NONUNIFORM FLOW

HT NOZZLE FLOW

HT ONE DIMENSIONAL FLOW

HT ORIFICE FLOW

HT OSCILLATING FLOW

HT OUTLET FLOW

HT PARALLEL FLOW

HT PERIPHERAL JET FLOW

HT PIPE FLOW

HT POTENTIAL FLOW

HT RADIAL FLOW

HT REATTACHED FLOW

HT RECIRCULATING FLOW

A-217
FLUTTER ANALYSIS

The development of the EAST I remotely piloted weight optimization with flutter constraints
([NASA-CH-150834]) p0036 N97-10049
The research vehicle for flight testing an active flutter suppression control system
([NASA-CH-150881]) p0291 N97-17869
Turbo machinery flutter; introductory concepts
([NASA-CH-194881]) p0307 N97-19353
Identification of various flutter regimes and discussion of dynamic stall
([NASA-CH-194881]) p0307 N97-19354
Research on the flutter of axial turbo machine blading
([NASA-CH-194881]) p0366 N97-20126
Excitation and analysis technique for flutter tests
([NASA-CH-194881]) p0367 N97-20137
Treatment of the control mechanisms of light airplanes in the flutter clearance process
([NASA-CH-194881]) p0545 N97-27078
Stresses, vibrations, structural integration and engine integrity (including aeroelasticity and flutter)
([NASA-CH-194881]) p0551 N97-27148
Aeromechanics — unsteady flow, aeroelasticity, flutter, and servoc o ntrol
([NASA-CH-194881]) p0579 N97-28121
A method for obtaining practical flutter-suppression control laws using results of optimal control theory
([NASA-CH-194881]) p0588 N97-28614
Structural aspects of active controls
([NASA-CH-194881]) p0658 N97-30221
FLUTTER ANALYSIS

Dynamic stall of an airfoil with leading edge bubble separation involving time dependent re-attachment
([ASME PAPER 79-GT-198]) p0111 N97-10817
Supersonic uninstalled flutter
([NASA-CH-194881]) p0272 N97-12599
Synthesis and analysis of systems for active control and suppression of flutter of flying craft
([NASA-CH-194881]) p0272 N97-12705
Harmonic vibrations of an annular wing in the steady flow of an ideal fluid
([NASA-CH-194881]) p028 N97-12963
Influence of some factors on GTE turbine blade vibrational energy dissipation
([NASA-CH-194881]) p0658 N97-14845
Influence of stator vane canting on alternating stress level in turbine rotor blades
([NASA-CH-194881]) p0658 N97-14848
Airplane wing self-oscillatory bending-torsion vibrations
([NASA-CH-194881]) p0658 N97-14849
Automatic resonance condition maintenance during multipoint flight vehicle vibration excitation
([NASA-CH-194881]) p0658 N97-14850
Comparative study between two different active flutter suppression systems
([NASA-CH-194881]) p0081 N97-16495
Analysis of free torsional rotor blade oscillations under special consideration of asymmetric swash-plate support
([NASA-CH-194881]) p1031 N97-18660
Vibration and flutter investigations of aircraft with special nonlinear structural properties
([NASA-CH-194881]) p2007 N97-29073
On the role of shocks in the 'sub-transonic' flutter phenomenon
([NASA-CH-194881]) p0079 N97-29079
Adaptive control of wing store flutter — a feasibility study
([NASA-CH-194881]) p0320 N97-29019
Design, development, and testing of an active flutter margin augmentation system for a commercial transport airplane
([NASA-CH-194881]) p0322 N97-29033
Coupled bending-torsion flutter in cascades
([NASA-CH-194881]) p0322 N97-29034
Effect of chordwise forces and deformations and deformations due to steady lift on wing flutter
([NASA-CH-194881]) p0322 N97-29037
Flutter speed degradation of damaged, optimized flight vehicles
([NASA-CH-194881]) p0323 N97-29038
Investigation of flexible nozzle wall-flutter incidents in the NASA-Ames Research Center 11-by 11-foot transonic wind tunnel
([NASA-CH-194881]) p0323 N97-29040
Characteristics of aeroelastic instabilities in turbomachinery—NASA full scale engine test results
([NASA-CH-194881]) p0328 N97-29046
An elementary explanation of the flutter mechanism with active feedback controls
([NASA-CH-194881]) p0338 N97-30480
Recent progress in active controls applied to flutter suppressors
([NASA-CH-194881]) p0358 N97-32277
Study of compressor aeroelastic instabilities in a linear cascade wind tunnel
([NASA-CH-194881]) p0390 N97-32296
Dynamic identification of light aircraft structures and flutter certification
([NASA-CH-194881]) p0390 N97-32302
Aerodynamic and aeroelastic characteristics of oscillating loaded cascades at low Mach number
([ASME PAPER 79-GT-112]) p0393 N97-32387
An analysis of aeroengine fan flutter using twin orthogonal vibration nodes
([ASME PAPER 79-GT-126]) p0393 N97-32395
Aeroelastic stability analysis of the AD-1 manned oblique-wing aircraft
([NASA-CH-194881]) p0643 N97-38136
A summary of NASA/Air Force Full Scale Engine Research programs using the P100 engine
([ASME PAPER 79-GT-1308]) p0509 N97-40488
On the transonic-dip mechanism of flutter of a setback wing
([NASA-CH-194881]) p0514 N97-41763
Transonic flutter analysis of a rectangular wing with conventional airfoil sections
([NASA-CH-194881]) p0566 N97-45313
Application of two synthesis methods for active flutter suppression on an aeroelastic wind tunnel model
([ASME PAPER 79-GT-1633]) p0566 N97-45314
Demonstration of aircraft wing/store flutter suppression systems
([NASA-CH-194881]) p0579 N97-46238
Harmonic oscillations of annular wing in steady ideal fluid flow
([NASA-CH-194881]) p0651 N97-47009
Active external store flutter suppression in the TP-17 flutter model
([NASA-CH-194881]) p0639 N97-49866
Comment on 'active flutter control using generalized unsteady aerodynamic theory'
([NASA-CH-194881]) p0640 N97-49873
Supersonic uninstalled flutter --- aerodynamic loading of thin airfoils induced by cascade motion
([NASA-CH-194881]) p0043 N97-11000
An experimental study of the dynamic forces acting on an aerofoil
([NASA-CH-194881]) p0065 N97-12000
An analytical technique for predicting the characteristics of a flexible wing equipped with an active flutter-suppression system and comparison with wind-tunnel data
([NASA-CH-194881]) p0242 N97-17264
Aeroelastic addition to NASTRAN
([NASA-CH-194881]) p0287 N97-17812
Investigation of torsion free wing trend flutter models
([NASA-CH-194881]) p0302 N97-17857
Flap-lag-torsion flutter analysis of a constant lift rotor
([NASA-CH-194881]) p0363 N97-20099
Determination of subcritical frequency and damping from B-1 flight flutter test data
([NASA-CH-194881]) p0503 N97-25426
The analysis of engine vibrations
([NASA-CH-194881]) p0552 N97-27150
Technical evaluation report on the 2nd Symposium of the Propulsion and Energetics on Stress, Vibrations, Structural Integration and Engine Integrity (including aeroelasticity and flutter)
([NASA-CH-194881]) p0564 N97-28161
A summary of NASA/Air Force full scale engine research programs using the P100 engine
([NASA-CH-194881]) p0573 N97-30186
Flutter analysis of two-dimensional and two-degree-of-freedom airfoils in small-disturbance, unsteady transonic flow
([NASA-CH-194881]) p0665 N97-31157
Results related to simulated and in-flight experimentation with an electric flight control system that can be generalized

Design considerations for reliable FBW flight control

Flying qualities and the fly-by-wire aeroplane

Analysis of a lateral pilot-induced oscillation experienced on the first flight of the YF-16 aircraft

FLIGHT PERSONNEL
FLIGHT PLATE STABILITY
FLIGHT PLATFORMS
FLIGHT QUALITIES
FLIGHT VEHICLE CHARACTERISTICS
FLIGHT VING AIRCRAFT
FLIGHT VING PLATFORMS
FOAMS
FOG
FOG DISPERSAL
FOIL BEARINGS
FOILS (MATERIALS)
FOOKER AIRCRAFT
FLYING PLATFORMS
FRACTURE RESISTANCE

Highlights of the C-141 service life monitoring program

Advanced Turbine Engine Gas generator (ATEGG) fractography of cast nickel base superalloys [AD-4067101]

Fracture mechanics for structural adhesive bonds, part 2, phase 2 [AD-4061805]

Fracture Mechanics Design Methodology --- aircraft structures [NLR-DN-97]

Introduction to fracture mechanics --- crack initiation and stress corrosion cracking of aircraft structures

Fatigue crack growth --- aircraft reliability

Stress intensity analysis: Analytical, finite element for surface flaws, holes

Fatigue crack growth analysis

Design of heavy sections --- fracture mechanics of plated or forged airframe components

Design of redundant structures --- structural design criteria and fracture mechanics of large commercial transport aircraft

Analysis of aircraft structure using applied fracture mechanics

An integrated fault-tolerant avionics system concept for advanced aircraft [AD-1065136]

Trends in reliability modeling technology for fault tolerant systems [NASA-TP-80089]

Procedurings from the Government/Industry Workshop on the Reliability of Nondestructive Inspections [AD-1066223]

Three-dimensional laminate plates with through and part-through cracks

Engineering application of fracture mechanics to flight simulation [NLR-MP-78015-U]

FRAC TURE RESISTANCE

Damage tolerance in advanced composite materials

Northrop/United States Air Force application of failure predictions to an operational aircraft --- for F-147

Crack free and cracked life of the pressurized cabin of a 300 B - Calculation, tests and design measurements to improve damage tolerance

Fracture toughness of multiply layer adhesive bonded aluminum alloy sheet

Damage tolerant design -- an approach to reducing the life cycle cost of gas turbine engine disks [AIAA PAPER 79-1169]

Practical considerations for manufacturing high-strength Ti-10V-2Fe-3Al alloy forgings [AIAA PAPER 79-2610]

Fracture toughness of multiply layer adhesive bonded aluminum alloy sheet

Residual strength of a cracked lug --- stress corrosion cracking of aluminum alloy lugs [AIAA-2000-017]

Residual strength properties of carbon/epoxy composite materials --- airframe materials [NLR-TR-770131-0]

Aluminum alloys for advanced structural applications in transport aircraft [NLR-NP-77023-0]

FRAC TURE TOUGHNESS

Damage tolerance in advanced composite materials

RESIDUAL STRENGTH

Fatigue and fracture

Residual strength of the aluminum alloy 7475-T76

Practical considerations for manufacturing

Damage tolerant design --- an approach to reducing the life cycle cost of gas turbine engine disks

Fracture toughness of multiply layer adhesive bonded aluminum alloy sheet

Residual strength of a cracked lug --- stress corrosion cracking of aluminum alloy lugs

Thermal mechanical treatment of aluminum alloys --- airframe materials [NLR-MP-77031-U]

Damage tolerance analysis of redundant structures --- transport aircraft structures

Damage tolerance in practice --- aircraft safety and stress measurement

The effect of sheet edge working on the fatigue life under flight-simulation loading [NLR-TR-77095-U]

FRAC TURE TOUGHNESS

Damage tolerance in advanced composite materials

RESIDUAL STRENGTH

Fatigue and fracture

Residual strength of the aluminum alloy 7475-T76

Practical considerations for manufacturing

Damage tolerant design --- an approach to reducing the life cycle cost of gas turbine engine disks

Fracture toughness of multiply layer adhesive bonded aluminum alloy sheet

Residual strength of a cracked lug --- stress corrosion cracking of aluminum alloy lugs

Thermal mechanical treatment of aluminum alloys --- airframe materials [NLR-MP-77031-U]

Damage tolerance analysis of redundant structures --- transport aircraft structures

Damage tolerance in practice --- aircraft safety and stress measurement

The effect of sheet edge working on the fatigue life under flight-simulation loading [NLR-TR-77095-U]

FREE JETS

Aerodynamic characterization of free jets

Aerodynamic characterization of free jets [NLR, TP NO. 1978-1179]

Velocity slip and temperature difference of gas mixtures in quasi-one-dimensional nozzle flows

Application of Laser Doppler Anemometry to aeroscience research

A-222
FUEL CONSUMPTION

- Hydrocarbon fuels
- Impact of future fuel properties on aircraft engines and fuel systems
- Alternative hydrocarbon fuels: Combustion and chemical kinetics - SQUID Workshop, Loyola College, Columbia, 64., September 7-9, 1977, Technical Papers
- Future fuels in gas turbine engines
- Ignition/stabilization/atomization - Alternative fuels in gas turbine combustors
- Flame emission - Alternative fuels
- A characteristic time correlation for combustion inefficiency from alternative fuels
- Hydrogen enrichment for low-emission jet combustion
- Effects of fuel properties onoot formation in turbine combustion
- Fuel vaporization in aircraf
gas turbine engines by electrical forces
- Double recirculation zone two-stage combustor --- for aircraft engine emissions reduction
- The combustion of a range of distillate fuels in small gas turbine engines
- Fuel properties effects on combustor performance - aircraft synthetic and petroleum-derived fuels
- Catalytic combustion for gas turbine applications
- Detonation characteristics of Soviet GOST 1012-72 aviation gasoline
- Fossil fuel heat pumps for domestic, commercial and industrial space heating
- The effect of hydrogen addition on ignition delays and flame propagation in spark ignition engines
- Ignition of liquid fuel jets in a supersonic air stream
- Study of the nonuniformity of the temperature field of a homogeneous combustion chamber as the parameters of the primary zone vary
- Enthalpies of combustion of jet fuels
- On the question of selecting the characteristic quantity governing fuel self-ignition in a stream
- Experimental study of the turbulent wake downstream of a fan jet
- Combustor modelling for scramjet engines
- The role of fundamental combustion in the future aviation fuels program --- carbon formation in gas turbine primary zones
- Characteristics and combustion of future hydrocarbon fuels
- Effect of swirler-mounted mixing vortices on emissions of flame-tube combustor using jet A fuel
- Application of light extinction measurements to the study of combustion in solid fuel ramjets
- Evaluation of future jet fuel combustion characteristics
- Alternative hydrocarbon fuels: Combustion and chemical kinetics - synthetic aircraft fuels
- Airfoil cooling hole plugging by combustion gas impurities of the type found in coal derived fuels

SUBJECT INDEX

- FUEL CONSUMPTION
- Evaluation of future jet fuel Combustor Technology Focus
- Autogasification of fuels
- Effect of fuel/air nonuniformity on nitric oxide emissions
- Ionic mechanisms of carbon formation in flames - aircraft fuel combustion
- Analytical evaluation of the impact of broad specification fuels on high bypass turbofan engine combustors
- The combustion of a range of distillate fuels in small gas turbine engines
- Fuel properties effects on component design - aircraft engines
- The productivity of airships in long-range transportation
- Combustion and terminal area capacity
- Technology for aircraft energy efficiency
- Rule of fuel management --- for airlines
- Fuel conservation in aircraft engines
- Dynamic simulation studies of fuel conservation procedures used in terminal areas
- Prospects for reducing the fuel consumption of civil aircraft
- The NASA Aircraft Energy Efficiency Program
- Manufacturers developing fuel-efficient engines
- Concepts for reducing exhaust emissions and fuel consumption of the aircraft piston engine
- Changing requirements in aircraft design
- Turbo-fan design for general aviation - The evolution of the RB.401
- CF6 jet engine performance deterioration
- The productivity of airships in long-range transportation
- Simulation study of the operational effects of fuel-conservative approaches
- An analysis of operational procedures and design modifications for aircraft fuel conservation
- Fuel-conservative guidance system for powered-lift aircraft
- Energy efficient aircraft engines
- Alternative fuels in aviation
- Flight experiments to evaluate the effect of wing-tip nacelles on fuel consumption and handling characteristics
- Derivative engines for the 1980s will help limit acquisition and maintenance costs
- Aircraft engine developments centre on improved performance, higher efficiency
FUEL SYSTEMS

Theoretical approach to spray combustion in gas turbine combustor p0517 A79-42207

Ignition of fuel sprays by hot surfaces and stabilization of aircraft fires (AD-1065153) p0441 N79-23181

FUEL SYSTEMS

MT AIRCRAFT FUEL SYSTEMS

Impact of future fuel properties on aircraft engines and fuel systems p0018 A79-11600

Influence of fuels on the reliability of jet engines and jet aircraft: Reliability with respect to fuel and lubricants --- Russian book p0113 A79-17562

Section fuel supply systems for turbine powered general aviation aircraft p0214 A79-24304

Effect of broadened-specification fuels on aircraft engines and fuel systems [AIAA 79-7008] p0327 A79-29383

Impact of future fuel properties on aircraft engines and fuel systems p0107 N79-13197

Helicopter crashworthy fuel systems and their effectiveness in preventing thermal injury p0332 N79-19660

A method for selecting a crashworthy fuel system design [AD-106363] p0424 N79-19661

Advanced technology fuel mass flowmeter [AD-A083192] p0424 N79-22108

FUEL TANKS

MT TANKER TANKS

Fluid-structure interaction dynamics in fuel cells --- aircraft vibration analysis [AIAA PAPER 79-0237] p0155 A79-19674

Flexible polyimide fuel tank sealants --- for military aircraft p0188 A79-20868

Material and process control - Aircraft integral fuel tanks p0210 A79-24122

Adhesive sealing - A fuel leak deterrent --- for aircraft tanks p0210 A79-24123

Development and flight test evaluation of fuel tank sealants for Mach 3+ aircraft [AD-A085124] p0210 A79-24124

Dynamic laboratory evaluation of integral fuel tank sealants [AD-A085125] p0210 A79-24125

Fuel tank sealant requirements for advance high performance aircraft [AIAA 79-0007] p0283 A79-20288

Preventing fires in airport fuel systems p0408 A79-34923

Formation of water-fuel emulsions in tanks of grounded aircraft p0451 A70-36587

Crash-resistant fuel systems for general aviation aircraft [SIA PAPER 790552] p0455 A70-36726

Fuel on fire - Rapid response to a military problem p0462 A79-38090

Preventing fires in aviation fuel storage and transport systems. II p0536 A70-43734

Fuel electrification --- electrostatic hazards in aircraft fuel tanks p0633 A70-51188

Tests to determine the village explosion tolerance of helicopter fuel tanks [AD-A058188] p0092 N79-12074

Development of a blast simulator for testing simulated aircraft fuel tanks [AD-A058816] p0101 W79-13034

In-flight fuel tank temperature survey data [NASA-CR-159569] p0482 W79-23940


Fins integral fuel tank sealants, part 1 [AD-A067889] p0585 W79-28329

Fuel tank survivability for hydrodynamic ram induced by high velocity fragments. Part 2: Numerical analyses [AD-A070125] p0669 W79-31200

SUBJECT INDEX

Fuel tank survivability for hydrodynamic rain induced by high velocity fragments Part 1: Experimental Results and Design summary [AD-A070113] p0669 N79-31201

Experimental methods for aircraft design qualifications in an exploding warhead environment [AD-A070381] p0706 N79-32203

FUEL TESTS

Some aspects of aircraft jet engine fuels p0016 A79-11368

A characteristic time correlation for combustion inefficiency from alternative fuels [AIAA PAPER 79-0357] p0147 A79-19687

Effects of fuel properties on soot formation in turbine combustion [SIA PAPER 781026] p0257 A79-25899

Evaluation of the application of some new gas chromatographic methods for the determination of properties of synthetic fuels p0258 A79-25917

Accuracy of determination of aromatic hydrocarbon content in jet fuels by the sulfuric acid method p0328 A79-29120

Measurement of emulsion water content in aviation fuels p0328 A79-29122

Testing to assess the affect of degraded fuel specifications on the cold start ability of a 763-A-700 engine (AIAA 79-7000) p0328 A79-29384

The effect of a sample lot of fuel JECTOS on emissions levels of a small gas turbine [AD-CR-132558] p0355 A79-32427

Fuel property effects on combustor performance --- aircraft synthetic and petroleum-derived fuels [AIAA PAPER 79-0079] p0395 A79-32438

Detonation characteristics of Soviet GOST 1012-72 aviation gasoline [SIA PAPER 790630] p0458 A79-36757

The temperature at which thermal dissociation is initiated in jet fuels under static conditions p0561 A79-49953

The tendency of jet fuels to form deposits on a heated surface p0623 A79-48858

Changes in the quality of T-6 fuel upon prolonged storage p0623 A79-48858

Method of determining mechanical-inpurity contents in jet fuels p0623 A79-48859

Laboratory tests to determine the possibility of ignition of fuel vapors by lightning p0681 A79-51135


FUEL-LITE RATIO

Energy conservation in general aviation piston powered aircraft p0024 A79-12382

Critical influence of finite rate chemistry and unburnedness on ignition and combustion of supersonic R2-air streams [AIAA PAPER 79-0355] p0146 A79-19686

Preventing fires in airport fuel systems p0408 A79-34923


Effect of fuel-air unmixality on nitric oxide emissions p0496 N79-25004

Lean, premixed, prevaporized fuel combustor conceptual design study [NASA-CR-159647] p0707 N79-32211

FUELS

MT AIRCRAFT FUELS

MT DIESEL FUELS

MT FOSSIL FUELS

MT OILS
Subjects Index

Full Scale Tests

FUNCTIONAL ANALYSIS
- NT Harmonic Analysis
- NT Integral Equations
- NT Laplace Transformation
- NT Singular Integral Equations

The smooth approximation method and its application to the mathematical description of the aerodynamic characteristics of a wing

Nonlinear gust loads analysis — Monte Carlo vs. describing function analysis

A summary of NASA/Air Force Full Scale Engine Test Programs using the F100 engine

A theoretical investigation of noise reduction through the cylindrical fuselage of a twin-engine, propeller-driven aircraft

Loads: a computer program for determining the shear, bending moment and axial loads for fuselage type structures

Fuselages

Aeroelastic response and stability of a coupled rotor/support system with application to large horizontal axis with turbines

A projective family of long-pitch wing sections

A projective family of long-pitch wing sections

A program to predict hot gas noise in the scramjet engine

A description of a technique for generating a reference noise by aeroacoustic means

A study of structural concepts for low radar cross section aircraft fuselage configurations

A theoretical investigation of noise reduction through the cylindrical fuselage of a twin-engine, propeller-driven aircraft

POV ORS/ fuselage configurations

Vortices at the nose part of a fuselage model at supercritical angles of attack and different Reynolds numbers

Choice of a fuselage for a passenger aircraft

An investigation of the influence of fuselage flow field on rotor loads, and the effects of vehicle configuration

Green's function method for compressible unsteady aerodynamic analysis of rotor-fuselage interaction

Fluctuating surface pressure characteristics on a helicopter fuselage under hover and forward flight conditions

Nondestructive testing of adhesive bonded structures

Structural design, tooling and manufacturing of a composite fuselage

A fuselage design concept

Characteristics of propeller noise on an aircraft fuselage relative to interior noise transmission

Noise transmission — Turboprop problem

Crashworthiness tests on model aircraft fuselage structures

Crash simulation of composite and aluminum helicopter fuselages using a finite-element program

A report on hybrid wing box structures

Selecting the passenger airplane fuselage

Design of advanced titanium structures — for Advanced Tactical Systems aircraft fuselage

Identification of voltage transients on aircraft cabling under LTA excitation — Lightning Transient Analysis

Hybrid Wing Box structure

Design of advanced titanium structures — for Advanced Tactical Systems aircraft fuselage

An overview of the PABST program — Primary Adhesively Bonded Structure Technology for aircraft
Evaluation of the application of some gas chromatographic methods for the determination of properties of synthetic fuels
[NASA-TP-79015] p0230 W79-16930
Analysis of aircraft fuels and related materials
[AD-A070732] p0720 W79-33338
GAS COOLED REACTORS
MT HIGH TEMPERATURE GAS COOLED REACTORS
GAS COOLING
Jet cooling at the rim of a rotating disk
[ASME PAPER 78-GT-25] p0196 A79-22331
GAS DETECTORS
Emission probe investigation of a mixed flow JT8D-11 turbofan engine
[AD-A058038] p0505 W79-11561
GAS DYNAMICS
MT AERODYNAMICS
MT AEROTHERMODYNAMICS
MT AEROTHERMODYNAMICS
MT ROTOR AERODYNAMICS
MT SUPERSONICS
Experimental study of the gasdynamic characteristics of a nozzle guide vane row with air ejection onto the vane surface
p0082 A79-16787
Numerical investigation of the gasdynamic characteristics of control nozzles
p0197 A79-22439
Facility for studying the action of unsteady supersonic gas streams on the blades of a plane cascade
p0144 A79-31143
Gas flow in nozzles --- Russian book
p0247 A79-32025
Characteristics of Laval nozzles with gasdynamic regulation
p0080 A79-34650
Optimal selection of the geometrical characteristics of the reversing channel of a small-scale turbine with readmission of the gas --- for aircraft auxiliary power systems
p0450 A79-36583
Calculation of the working process in a piston-type 'slow' compression wind tunnel
p0525 A79-42546
Gas curtain in gas turbine engines
p0525 A79-42547
Experimental study of the gasdynamic characteristics of a stator cascade with cooling air discharge through the vane surface
p0613 A79-48499
The aerothermal dynamics of aircraft gas turbine engines
[AD-A059784] p0165 W79-114103
Design of multistage compressors with consideration of the real behavior of gas and gas mixtures
[AD-A058038] p0050 W79-11561
Aerodynamics
[ASA-PAPER 79-TT-765] p0480 W79-23908
Transonic wing redesign using a generalized fictitious gas method
[AD-A070013] p0705 W79-32202
GAS EXPANSION
Density changes and turbulence production in the expansion or compression of a turbulent flow at supersonic speed
GAS FLOW
MT AIR FLOW
MT CO2 FLOW
MT FREE MOLECULAR FLOW
MT JET STREAMS (METEOROLOGY)
MT RELATIVISTIC FLOW
MT MOLECULAR FLOW
MT NONEQUILIBRIUM FLOW
MT RING FLOW
MT SLIP FLOW
MT TRANSITION FLOW
MT VERTICAL AIR CURRENTS
Design and development of a rotating water table for flow studies in turbomachine stages
Plane problems of aerothermodynamics --- refraction in two-dimensional nonuniform media
p0266 A79-26865
Hypersonic viscous shock layer on infinite-span arrow wings at angle of attack
p010 A79-35158
GAS TURBINE ENGINES CONT

wepons systems ---
[ASME PAPER 78-GT-167]
Propulsion test facilities technical capabilities and international use
[ASME PAPER 78-GT-184]
Hanging turbofan engines more energy efficient
[ASME PAPER 78-GT-198]
Turbine-driven refrigeration units in gas turbine engine cooling systems --- Russian book
[ASME PAPER 78-GT-197]
On-line computer for transient turbine cascade instrumentation
[ASME PAPER 78-GT-196]
Gas turbine jet exhaust noise prediction
[SAE ARP 767]
Gas turbine engine inlet flow distortion guidelines
[SAE ARP 1420]
Alternative aviation turbine fuels
[ASME PAPER 78-GT-202]
Gas turbine analysis and design using interactive computer graphics
[ASME PAPER 78-GT-203]
Current problems in the development and production of small gas turbine engines
[ASME PAPER 78-GT-204]
Control system requirements for aircraft gas turbine engines
[ASME PAPER 78-GT-205]
Control systems and problems of their development from the viewpoint of technological and operational requirements --- for aircraft gas turbine engines
[ASME PAPER 78-GT-206]
New construction materials for gas turbine engines and technology for processing these materials
[ASME PAPER 78-GT-207]
Optimal designing of gas-turbine engine thermogasdynamics on the basis of prototype elements. I
[ASME PAPER 78-GT-208]
Future fuels in gas turbine engines
[ASME PAPER 78-GT-209]
Ignition/stabiliation/etomisation - Alternative fuels in gas turbine combustors
[ASME PAPER 78-GT-210]
Flame emissivities - Alternative fuels
[ASME PAPER 78-GT-211]
A probability estimate of the long-term strength of aviation gas-turbine rotor blades
[ASME PAPER 78-GT-212]
Representation of compressor characteristics in coordinates convenient for computer calculation of GTE parameters
[ASME PAPER 78-GT-213]
Influence of some factors on GTE turbine blade vibrational energy dissipation
[ASME PAPER 78-GT-214]
On calculating the temperature state of film-cooled turbine vanes
[ASME PAPER 78-GT-215]
Application of shock-tube technology to the measurement of heat-transfer rate to gas turbine components
[ASME PAPER 78-GT-216]
The Rolls-Royce Gem turboshaft engine for helicopters and its future developments
[ASME PAPER 78-GT-217]
Adjustment diagnostics for gas turbine engine controls
[ASME PAPER 78-GT-218]
Status of the VT5 engine condition monitor system
[ASME PAPER 78-GT-219]
LR2500 condition and performance monitoring system --- gas turbine for ship propulsion
[ASME PAPER 78-GT-220]
Applications of DS composites in aircraft gas turbines --- directional solidification
[ASME PAPER 78-GT-221]
Analytical representation of turbine characteristic in a form convenient for computer-aided computation of gas-turbine engine parameters
[ASME PAPER 78-GT-222]
Operation of long-service-life gas-turbine engines as a function of the technical state
[ASME PAPER 78-GT-223]
Fracture mechanics problems for gas turbine engine structures
[ASME PAPER 78-GT-224]
GAS TURBINE ENGINE COMPD

Lean, premixed, precompressed combustion for aircraft gas turbine engines
[AIAA PAPER 79-1318] p0472 A79-39034
Lean stability augmentation for premixed, precompressed combustors
[AIAA PAPER 79-1319] p0472 A79-39035
The effect of fuel sprays on emissions from a gas turbine combustor
[AIAA PAPER 79-1321] p0472 A79-39037
Emission characteristics of a premix combustor fueled with a simulated partial-oxidation product gas
[AIAA PAPER 79-1322] p0472 A79-39038
Materials and structural aspects of advanced gas-turbine engine engines
p0475 A79-39044
Causes of high pressure compressor deterioration in service
[AIAA PAPER 79-1234] p0508 A79-40463
Materials and processing of gas turbine engine technology; Collegium, Munich, West Germany, October 27, 28, 1977, Report
p0509 A79-40676
Development of materials and processes for engine components - Current and future points of interest
p0509 A79-40680
Service life parameters of turbine blades
p0510 A79-40684
Methodological considerations on the service life design of turbine disks
p0510 A79-40687
Contribution of the engine R & D community to reduced cost of ownership of Army helicopters
[AIAA PAPER 79-1360] p0511 A79-40764
Gas curtain in gas turbine engines
p0525 A79-42547
Study of the nonuniformity of the temperature field of a homogeneous combustion chamber as the parameters of the primary zone vary
p0525 A79-42549
Choice of optimal parameters for a heat exchanger with heat pipes for a gas turbine engine
p0526 A79-42552
Systematization of simple structural elements of a regulated gas turbine engine nozzle
p0526 A79-42555
Study of mass transfer between the primary zone and secondary zone in gas turbine engine combustion chambers
p0526 A79-42558
Study of the dispersion of oil droplets which form in the oil-system mains of gas-turbine engines
p0527 A79-42571
Estimation of fatigue life of Al-alloy used for compressor disc of jet engine
p0527 A79-42624
Regenerator matrices for automotive gas turbines
p0528 A79-42981
Application of hot isostatic pressing to aircraft gas turbines
p0564 A79-45067
Optimal thermodynamic design of gas turbine engines using element prototypes. I
p0601 A79-46997
The application of multiple swirl modules in the design and development of gas turbine combustors
[AIAA PAPER 79-1196] p0603 A79-47369
Nozzles for vectored thrust jet engines
--- Russian book
p0603 A79-47428
Fuels, lubricants and other fluids used in aviation
--- Russian book
p0603 A79-47433
Gas turbines for A/C's and hydrofoils
p0604 A79-47845
Estimation for advanced technology engines
p0604 A79-47864
Influence of gas turbine engine combustion chamber geometric parameters on mixture formation characteristics
p0611 A79-47957
Long-life GTI operation based on technical condition
--- Gas Turbine Engine
p0613 A79-48517
Development of a 'no adjustment' turboshaft engine control system
[AVS 79-42] p0632 A79-48590
Fault diagnosis of gas turbine engines by means of component characteristics determination
[AIS 79-42] p0632 A79-48590

SUBJECT INDEX

Duct noise radiation through a jet flap of gas turbine engines
p0639 A79-49806
Factors controlling stability of swirling flames at diffusers in gas turbines
p0669 A79-50110
Gas turbines for flight vehicle engines: Theory, design, and calculation /Third review and enlarged edition/ --- Russian book
p0688 A79-50421
Heat transfer over the initial section of turbine blade cooling channels under conditions of rotation
p0689 A79-52608
Analytical-kinetic models for the evaluation of polluting emissions from aircraft gas turbines - Limiting techniques
p0689 A79-52758
Basic problems of aircraft gas turbine engine analytic design. I
p0695 A79-54040
Model tests on cooling of gas turbine blades
p0697 A79-54273
Study of T53 engine vibration
Seal Technology in Gas Turbine Engines
AGARD-CP-237
p0046 A79-11056
Gas path sealing in turbine engines
p0046 A79-11057
Oil sealing in engine bearing compartments
p0047 A79-11062
The contribution of dynamic X-ray to gas turbine air sealed technology
p0047 A79-11065
Factors associated with rub tolerance of compressor tip seals --- self sustained combustion of titanium
p0047 A79-11069
Self-acting shaft seals --- gas turbine engines
p0047 A79-11070
Self active pad seal application for high pressure engines
p0047 A79-11071
Gas turbine disc sealing system design
p0048 A79-11072
Thermal-structural mission analyses of air-cooled gas turbine blades
Experimental clean combustor program: Phase 3: Turbulence measurement addendum
Development of sprayed ceramic seal systems for turbine gas path sealing
Cold-air performance of free power turbine designed for 112-kilowatt automotive gas-turbine engine - Effect of stator vane and clearances on performance
Analytical evaluation of the impact of broad specification fuels on high bypass turbine engine combustors
Future fuels for aviation
p0106 A79-13193
Integrated gas turbine engine-nacelle
Variable area exhaust nozzle
[ NASA-CASE-LEW-12378-1] p0164 A79-14097
The aerodynamics of aircraft gas turbine engines
[ AD-A059784] p0165 A79-14103
Research on centrifugal effects on turbine rotor blade film cooling
[ AD-30600201] p0165 A79-14106
Fluidized bed gas turbine experimental unit for MUS applications
[ CRNL/RDR/1100-32] p0169 A79-14564
A method to estimate weight and dimensions of large and small gas turbine engines
Study of mean- and turbulent-velocity fields in a large-scale turbine-vane passage
Air Force turbine engine emission survey. United States. Volume 1: Test summaries
[ AD-4061532] p0234 A79-16858
p0234 A79-16859

A-232
General aviation aircraft engine /GATE/ concepts
[AIAA PAPER 79-1157] p0367 A79-38966
Turbofan design for general aviation - the evolution of the RR RB.411
The application of the Prop-Fan concept in preliminary design of a very advanced technology light twin /MATIL/ '85/
[AIAA PAPER 79-1383] p0472 A79-39047
Camair challenge - business jet subsystems and structural design
p0507 A79-40313
First flight imminent for new technology wing
p0508 A79-40327
Garrett ATF 3
Application of the equilibrium spin technique to a typical low-wing general aviation design
[AIAA PAPER 79-1821] p0533 A79-43649
The effects of configuration changes on spin and recovery characteristics of a low-wing general aviation airplane
[AIAA PAPER 79-1786] p0604 A79-47876
Some flight data extraction techniques used on a general aviation spin research aircraft
[AIAA PAPER 79-1802] p0606 A79-47887
Full-scale wind tunnel study of nacelle shape on cooling drag
[AIAA PAPER 79-1820] p0607 A79-47900
Real time weather display in the general aviation cockpit
[AIAA PAPER 79-1821] p0608 A79-47902
A cheap, effective icing detector for general aviation aircraft
[AIAA PAPER 79-1821] p0608 A79-47902
The Beech Model 77 'Skipper' spin program
[AIAA PAPER 79-1835] p0608 A79-47907
Exploratory study of the influence of wing leading-edge modifications on the spin characteristics of a low-wing single-engine general aviation airplane
[AIAA PAPER 79-1837] p0608 A79-47908
NASA/Princeton digital avionics flight test facility
p0635 A79-49346
A design perspective on new technologies for general aviation
p0636 A79-49986
Experiences with an airborne digital computer system for general aviation flight testing
[AIAA PAPER 79-1821] p0608 A79-47902
An advanced technology engine family for general aviation
[AIAA PAPER 79-1161] p0685 A79-51705
NASA/AIAA general aviation crash dynamic program - an update
p0689 A79-52694
An overview of NASA research on positive displacement type general aviation engines
[AIAA PAPER 79-1824] p0694 A79-53750
Pilot program to develop operating time emission degradation factors for general aviation piston engines
[AD-A058158] p0650 W79-11562
Basic avionics module design for general aviation aircraft
NASA research on general aviation power plants
Low-speed aerodynamic characteristics of a 16-percent-thick variable-geometry airfoil designed for general aviation applications
[NASA-TP-1326] p0157 W79-14018
Preliminary GATE program test results
The gate studies: Assessing the potential of future small general aviation turbine engines
The rotary combustion engine: A candidate for general aviation - conferences
[NASA-CP-2067] p0221 W79-15961
Overview of NASA general aviation programs
p0221 W79-15962
General aviation energy-conservation research programs
p0221 W79-15963
Development status of rotary engine at Toyo Kogyo - for general aviation aircraft
p0221 W79-15964
Update of development on the new Audi NSU rotary engine generation - for application to aircraft engines
p0221 W79-15965
Review of the Rhein-Flugzeugbau Wankel powered aircraft program - ducted fan engines
p0221 W79-15966
Rotary engine developments at Curtiss-Wright over the past 20 years and review of general aviation engine potential - with direct chamber injection
p0221 W79-15967
Engine requirements for future general aviation aircraft
p0221 W79-15968
General aviation airplane structural crashworthiness program manual
[FAA-RD-78-122] p0247 W79-17829
Test of crash-resistant fuel system for general aviation aircraft
[FAA-RD-78-120] p0247 W79-17831
Development, experimental verification and application of program KAB59 for general aviation airplane structural crash dynamics
[LR-26862] p0230 W79-17817
Assessment of new technologies for general aviation aircraft
[GARC-4] p0232 W79-16837
New opportunities for future small civil turbine engine: Overviewing the GATE studies
Gust response analyses for ten general aviation aircraft using a two-degree-of-freedom power spectral technique
[ARAP-348] p0235 W79-16861
Briefs of accidents involving midair collisions, US general aviation, 1977
[NTSB-ANN-78-13] p0269 W79-17829
Briefs of accidents involving rotocraft, US general aviation, 1977
Briefs of fatal accidents involving weather as a cause/factor, US general aviation, 1977
[NTSB-ANN-78-16] p0290 W79-17832
Briefs of accidents involving alcohol as a cause/factor, US general aviation, 1977
[NTSB-ANN-78-17] p0290 W79-17833
Briefs of accidents involving missing and missing later recovered aircraft, US general aviation, 1977
[NTSB-ANN-78-18] p0290 W79-17834
Briefs of accidents, involving corporate/executive aircraft, US general aviation, 1977
[NTSB-ANN-78-19] p0290 W79-17835
Briefs of accidents involving amateur/home built aircraft, US general aviation, 1977
[NTSB-ANN-78-20] p0290 W79-17836
Briefs of accidents involving commerical air carriers and on-demand air taxi operations, US general aviation, 1977
[NTSB-ANN-78-22] p0290 W79-17838
Gust load estimation using a simplified power spectral technique
[ARAP-362] p0294 W79-17870
Gust load estimation using a simplified power spectral technique
[ARAP-362] p0294 W79-17870
Occasional injury mechanisms in civil helicopter accidents
p0311 W79-19653
Study of future world markets for agricultural aircraft
[NASA-CB-158954] p0377 W79-21000
Study of an advanced General Aviation Turbine Engine (GATE)
General aviation TFR operational problems
[NASA-CB-159522] p0419 W79-22068
A review of the icing situation from the standpoint of general aviation
p0461 W79-23518
Low-speed wind tunnel results for a modified 13-percent-thick airfoil
[NASA-TF-1-74018] p0492 W79-24560
Advanced General Aviation Turbine Engine (GATE) concepts
[NASA-CB-159603] p0497 W79-25017
A consideration of general aviation in the UK
[TI-7902] p0537 W79-26100
Investigation of a preliminary GPS receiver design for general aviation
[AD-A069059] p0592 W79-29164
The effect of oblique angle of sound incidence, realistic edge conditions, curvature and in-plane panel stresses on the noise reduction characteristics of general aviation type panels [NASA-CR-157452] p0599 879-29558
An overview of NASA research on positive displacement type general aviation engines [NASA-TM-79254] p0670 879-31210
Exhaust emissions characteristics for a general aviation light aircraft Teledyne Continental Motors TSIO-360-C piston engine [AD-107031] p0670 879-31211
Potential closure of airports p0673 879-31231
Avionics cost development for use of Loran-C navigation systems by low performance general-aviation aircraft [AD-1066266] p0706 879-32206
Rotary balance data for a typical single-engine general aviation design for an angle-of-attack range of 8 deg to 90 deg. 2: Low-wing model B [NASA-CR-30998] p0712 879-31316
Single engine, fixed wing general aviation accidents [PB-2972164] p0713 879-33176
GENERAL DYNAMICS AIRCRAFT
MT CANADIAN AIRCRAFT NT CL-61 AIRCRAFT NT F-102 AIRCRAFT NT F-106 AIRCRAFT NT F-111 AIRCRAFT
GENERAL DYNAMICS MILITARY AIRCRAFT U MILITARY AIRCRAFT GEOLOGY
Geodesy and coordinate conversion for position determination of aircraft p0397 879-32581
The basic geometric shapes and position lines p0533 879-43507
GEODETIC COORDINATES
Geodesy and coordinate conversion for position determination of aircraft p0357 879-32581
GEODESY
MT ANGLE OF ATTACK NT ANGLES (GEOMETRY) NT CHORDS (GEOMETRY) NT CIRCUMFERENCES NT COLLISION NT DESCRIPTIVE GEOMETRY NT ELEVATION ANGLE NT FLOW GEOMETRY NT HYPERBOLA NT LEADING EDGE SWEEP NT NOZZLE GEOMETRY NT SPECIFIC GEOMETRY NT SWEEP ANGLE NT VECTOR ANALYSIS NT VORTICITY
Introduction to the arcopter arc wing and the Bertelsen effect for positive pitch stability and control p0480 879-23895
GEOM (TRADEMARK)
POLYTINYL CHLORIDE
GEORGIA
Atlanta center upgraded third generation enroute ATC system operations: A case study [AD-1056860] p0161 879-14071
GEOSTATIONARY SATELLITES U SYNCHRONOUS SATELLITES
GEOTHERMAL RESOURCES
Infrared remote sensing on geothermal areas by helicopter p0197 879-22620
GEOTOPIC ARC HEATERS U HEATING EQUIPMENT
GEODETIC COORDINATES
GEOSTATIONARY SATELLITES
GEOMETRY
GENERAL DYNAMICS AIRCRAFT
GENERAL DYNAMICS MILITARY AIRCRAFT
GEOMETRY
MT ANGLE OF ATTACK NT ANGLES (GEOMETRY) NT CHORDS (GEOMETRY) NT CIRCUMFERENCES NT COLLISION NT DESCRIPTIVE GEOMETRY NT ELEVATION ANGLE NT FLOW GEOMETRY NT HYPERBOLA NT LEADING EDGE SWEEP NT NOZZLE GEOMETRY NT SPECIFIC GEOMETRY NT SWEEP ANGLE NT VECTOR ANALYSIS NT VORTICITY
Introduction to the arcopter arc wing and the Bertelsen effect for positive pitch stability and control p0480 879-23895
GEORGE A-237
GLIDE PATHS
Cross-country sailplane flight as a dynamic optimization problem
p0059 A79-13672
The ILS glidepath – New designs for severe sites
p0156 A79-20232
Comparative study of flare control laws –
optimal control of B-737 aircraft approach and landing
[RASA-CR-150111] p0230 A79-16822
Airborne determination of ground speed: A feasibility study – instrument landing system approaches
[AD-A073193] p0716 A79-33182
GLIDE SLOPES
G GLIDE PATHS
GLEIDES
ST RAND GLIDERS
CT PARAGLIDERS
Cross-country sailplane flight as a dynamic optimization problem
p0059 A79-13672
Simulation studies of the flight dynamics of gliding parachute systems
[AIAA 79-0417] p0262 A79-26728
Minimum landing-approach distance for a sailplane
p0338 A79-30483
The powered glider, SSD-45A Gog
p0397 A79-32584
A method for the optimal layout of driving mechanisms of the aileron for gliders and motorplanes
p0811 A79-35921
A case study in design – The Gossamer Condor
p0460 A79-37050
Some early experiments in the development of a flying platform for aerodynamic testing
p0603 A79-47535
Initial feasibility study of a microwave-powered sailplane as a high-altitude observation platform
p1057 A79-14515
An exploratory investigation of the effect of plastic coating on the profile drag of a practical-metal-construction sailplane airfoil
p0879 A79-23891
Optimun tail plane design for sailplanes
p0879 A79-23992
The application of microprocessor technology to in-flight computation
p0880 A79-23992
Design of propellers for motorsoars
p0480 A79-23903
Minimum altitude-loss soaring in a specified vertical wind distribution
p0545 A79-27071
A study of course deviations during cross-country soaring
p0545 A79-27072
On global optimum sailplane flight strategy
p0545 A79-27073
A general method for the layout of ailerons and elevators of gliders and motorplanes
p0545 A79-27076
Experimental investigation into the feasibility of an extruded wing
p0545 A79-27077
Advanced composites in sailplane structures: Application and mechanical properties
p0545 A79-27079
The ultralight sailplane
p0545 A79-27080
Analytical and scale model research aimed at improved hangglider design
p0546 A79-27081
Improvement of hang glider performance by use of ultralight elastic wing
p0546 A79-27082
Experimental study of the flight envelope and research of safety requirements for hang-giders
p0546 A79-27083
Wind tunnel tests of four flexible wing ultralight gliders
p0546 A79-27084
An exploratory investigation of the effect of a plastic coating on the profile drag of a practical-metal-construction sailplane airfoil
[RASA-TR-80052] p0547 A79-27098
Sensitivity study for a remotely piloted micro-powerd sailplane used as a high-altitude observation
[RASA-CR-150989] p0580 A79-28134
GLIDING
The science and technology of low speed and motorless flight, part 1
[RASA-CP-2085-P2-1] p0479 A79-23669
GLIFT
Canopy glint screening investigation
[AD-8606093] p0171 A79-15028
GLOBAL POSITIONING SYSTEM
Design of a spread-spectrum navigation receiver
/Navstar/ p0555 A79-13288
The 18/52-722 Navstar navigator
p0558 A79-13276
Principle of operation of Navstar and system characteristics
p0633 A79-14183
GPS receiver operation
p0633 A79-14189
Texas Instruments Phase I GPS user equipment
p1063 A79-14190
Performance enhancements of GPS user equipment
p0633 A79-14191
Test and evaluation procedures for the GPS user equipment
p0633 A79-14192
GPS Phase I user equipment field tests
p0636 A79-14193
Integration of GPS with inertial navigation systems
p0636 A79-14194
GPS for civil aviation – A new approach to improved civil air operations – Global Positioning System
p0777 A79-16166
GPS multipath error model – Global Positioning System
p0777 A79-16167
Airlines long-range navigation assessment
p1078 A79-16176
Navstar/GPS /Global Positioning System/ and electronic counter measures – TACAN system vulnerability
p4251 A79-25492
GPS – A universal navigation aid
p0319 A79-28680
Evaluation of GPS performance for low-cost general aviation
p0447 A79-36065
Loran C – Its future in the shadow of Navstar GPS
p0448 A79-36071
A navigation filter for an integrated GPS/JITIDS/INS system for a tactical aircraft – Joint Tactical Information Distribution System
p0448 A79-36087
Recent results in navigation systems utilizing signal aiding from Navstar satellites
p0499 A79-36096
The global positioning system /NAVSTAR/ for air armament/weaponry
p0574 A79-64666
A real-time sequential filtering algorithm for GPS low-dynamics navigation system
p0617 A79-68557
Functional requirements of the interface between the NAVSTAR GPS receiver model I and the advanced inertial reference system, volume 2
[AD-A057656] p0900 A79-12058
Feasibility study of GPS-inertial navigation for deepwater systems and study of advanced GPS signal processing techniques, volume 3
[AD-A0576559] p0900 A79-12059
Navstar aircraft inertial measurement system. Some initial considerations
[RAE-7M-RAD-PV-44] p0225 A79-16183
Global positioning system tactical missile guidance
p0353 A79-20013
Kalman filtering and smoothing in Potomac for orbit determination using GPS measurements
[AD-A0646131] p0419 A79-22071
Investigation of a preliminary GPS receiver design
[AD-A065059] p0592 A79-29164
GONIOMETRIC AERODYNAMICS
Goniometric aerodynamics: A different perspective: Description – Applications – missile configurations
[AD-A069059] p0419 A79-20271
PARACHUTES
Canopy glint screening investigation
[AD-8606093] p0171 A79-15028
Conical parachute systems
The science and technology of low speed and motorless flight, part 1
[RASA-CP-2085-P2-1] p0479 A79-23669
GLIFT
Canopy glint screening investigation
[AD-8606093] p0171 A79-15028
GLOBAL POSITIONING SYSTEM
Design of a spread-spectrum navigation receiver
/Navstar/ p0555 A79-13288
The 18/52-722 Navstar navigator
p0558 A79-13276
Principle of operation of Navstar and system characteristics
p0633 A79-14183
GPS receiver operation
p0633 A79-14189
Texas Instruments Phase I GPS user equipment
p1063 A79-14190
Performance enhancements of GPS user equipment
p0633 A79-14191
Test and evaluation procedures for the GPS user equipment
p0633 A79-14192
GPS Phase I user equipment field tests
p0636 A79-14193
Integration of GPS with inertial navigation systems
p0636 A79-14194
GPS for civil aviation – A new approach to improved civil air operations – Global Positioning System
p0777 A79-16166
GPS multipath error model – Global Positioning System
p0777 A79-16167
Airlines long-range navigation assessment
p1078 A79-16176
Navstar/GPS /Global Positioning System/ and electronic counter measures – TACAN system vulnerability
p4251 A79-25492
GPS – A universal navigation aid
p0319 A79-28680
Evaluation of GPS performance for low-cost general aviation
p0447 A79-36065
Loran C – Its future in the shadow of Navstar GPS
p0448 A79-36071
A navigation filter for an integrated GPS/JITIDS/INS system for a tactical aircraft – Joint Tactical Information Distribution System
p0448 A79-36087
Recent results in navigation systems utilizing signal aiding from Navstar satellites
p0499 A79-36096
The global positioning system /NAVSTAR/ for air armament/weaponry
p0574 A79-64666
A real-time sequential filtering algorithm for GPS low-dynamics navigation system
p0617 A79-68557
Functional requirements of the interface between the NAVSTAR GPS receiver model I and the advanced inertial reference system, volume 2
[AD-A057656] p0900 A79-12058
Feasibility study of GPS-inertial navigation for deepwater systems and study of advanced GPS signal processing techniques, volume 3
[AD-A0576559] p0900 A79-12059
Navstar aircraft inertial measurement system. Some initial considerations
[RAE-7M-RAD-PV-44] p0225 A79-16183
Global positioning system tactical missile guidance
p0353 A79-20013
Kalman filtering and smoothing in Potomac for orbit determination using GPS measurements
[AD-A0646131] p0419 A79-22071
Investigation of a preliminary GPS receiver design
[AD-A065059] p0592 A79-29164
GONIOMETRIC AERODYNAMICS
Goniometric aerodynamics: A different perspective: Description – Applications – missile configurations
[AD-A069059] p0419 A79-20271
PARACHUTES
Canopy glint screening investigation
[AD-8606093] p0171 A79-15028
Conical parachute systems
GOSS (SUPPORT SYSTEM)
U GROUND OPERATIONAL SUPPORT SYSTEM
GOVERNMENT PROCUREMENT
Developing a national airport system: Congressional guidance needed
(PD-29052)
GOVERNMENT/INDUSTRY RELATIONS
Airlines long-range navigation assessment
GOVERNMENT PROCUREMENT
Active control transport design criteria
GRADIENTS
HYDROPHONE GRADIENTS
Application of gradient methods to the optimal design of components of load-bearing structures
GRADIENTS
GRAPHITE
U Ground operational support system
U Calibrating magnetometers
U Calibrating magnetometers
GRAPHITE
Friction and wear of carbon-graphite materials for high-energy brakes
The development of a core cycle for C-10 phthalocyanine-graphite fiber fiber composites
An assessment of local risk --- to area associated with commercial operations of aircraft with graphite fiber composite structures
High performance composites and adhesives for V/STOL aircraft
Ultra-high-modulus graphite-epoxy conical shell development, supplement
GRAPHITE-EPoxy COMPOSITE MATERIALS
Advanced technology helicopter landing gear
Aerospace usage versus commercial utilization of graphite fiber reinforced epoxy composites
RELATIVE BEHAVIOR OF GRAPHITE-EPoxy AND ALUMINUM IN A LIGHTWEIGHT ENVIRONMENT --- AIRCRAFT SAFETY CONSIDERATIONS
EFFECTS OF LIGHTING CURRENT WAVEFORM COMPONENTS ON GRAPHITE-EPoxy COMPOSITE MATERIAL --- AIRCRAFT HAZARDS
Lighting conductive characteristics of graphite composite structures --- for aircraft protection
Advanced composite 727 elevator and 737 stabilizer programs
Lighting protection techniques for graphite-epoxy aircraft structures
An advanced composite helicopter main rotor hub
Advanced composite fan frame for the Quiet Clean Short-Haul Experimental Engine /OCSF/ Impact behavior of filament-wound graphite/epoxy fan blades --- foreign object damage to turbofan engines
The effects of lightning and nuclear electromagnetic pulse on the composite aircraft
Multidimensional advanced composites for improved impact resistance
EMP coupling to a composite aircraft
Environmental synergism and simulation in resin matrix composites --- under airfield humidity and temperature conditions
Design of a typical aeronautical structure from carbon-resin composites
YC-18 thermoplastic/graphite elevator
Fabrication of thick graphite/epoxy wing surface structure --- for subsonic transport aircraft
Overlap indicators for prepreg production materials performance for military aircraft
The structural effects and detection of vibrations in Hercules 350-5A and Avco 5505 resin systems
Chemical analysis of advanced composite prepregs and resins --- for quality control
Effects of boron and glass hybrid epoxy-composites on graphite-fiber release in an aircraft fire
Hybrid wing box structure
Design development of an advanced composite aileron graphite-epoxy structure for 1-101
Composite helicopter tail booms
Objective and test of composite horizontal stabilizer for the Sikorsky Spirit helicopter
Performance of graphite epoxy as an antenna ground plane
Reproducibility of structural strength and reproducibility of graphite-epoxy aircraft spoilers
Performance of graphite epoxy as an antenna ground plane
Advanced composites for turbines
Fiberglass flight controls --- of helicopters
Carbon fiber composites
Source of released carbon fibers
Bolted field repair of composite structures --- repairing fuel cell composite wing surfaces
Influence of jet fuel on permeation and flammability characteristics of graphite epoxy composites
Advanced risk assessment of the effects of graphite fibers on electronic and electric equipment, phase 1 --- simulating vulnerability to airplanes and communities from filters released during aircraft fires
Metallic coatings for graphite-epoxy composites
Thermal characteristics of 3501-6/AS and 5208/300 graphite epoxy composites
Investigation of penetration of electromagnetic energy through joints in advanced composite structures --- aircraft structure
GRAPHS (CHARTS)
The Rockwell International Sabreliner-65: Case study in aircraft design --- Book
Seat/Occupant crash dynamic analysis verification test program
Environmental synergism and simulation in resin matrix composites --- under airfield humidity and temperature conditions
Design of a typical aeronautical structure from carbon-resin composites
YC-18 thermoplastic/graphite elevator
Fabrication of thick graphite/epoxy wing surface structure --- for subsonic transport aircraft
Overlap indicators for prepreg production materials performance for military aircraft
The structural effects and detection of vibrations in Hercules 350-5A and Avco 5505 resin systems
Chemical analysis of advanced composite prepregs and resins --- for quality control
Effects of boron and glass hybrid epoxy-composites on graphite-fiber release in an aircraft fire
Hybrid wing box structure
Design development of an advanced composite aileron graphite-epoxy structure for 1-101
Composite helicopter tail booms
Objective and test of composite horizontal stabilizer for the Sikorsky Spirit helicopter
Performance of graphite epoxy as an antenna ground plane
Reproducibility of structural strength and reproducibility of graphite-epoxy aircraft spoilers
Performance of graphite epoxy as an antenna ground plane
Advanced composites for turbines
Fiberglass flight controls --- of helicopters
Carbon fiber composites
Source of released carbon fibers
Bolted field repair of composite structures --- repairing fuel cell composite wing surfaces
Influence of jet fuel on permeation and flammability characteristics of graphite epoxy composites
Advanced risk assessment of the effects of graphite fibers on electronic and electric equipment, phase 1 --- simulating vulnerability to airplanes and communities from filters released during aircraft fires
Metallic coatings for graphite-epoxy composites
Thermal characteristics of 3501-6/AS and 5208/300 graphite epoxy composites
Investigation of penetration of electromagnetic energy through joints in advanced composite structures --- aircraft structure
GRAPHS (CHARTS)
<table>
<thead>
<tr>
<th>SUBJECT INDEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>SKIRT COMPONENTS OF THE AERODYNAMIC CHARACTERISTICS OF AN AIR-CUSHION VEHICLE USING THE ONGOING FLOW TO GENERATE LIFT</td>
</tr>
<tr>
<td>PO028 A79-12949</td>
</tr>
<tr>
<td>CALCULATION OF THE FLOW WITH SEPARATION FOR AIRFOILS AND MULTI-ELEMENT AIRFOIL SYSTEMS PLACED IN PROXIMITY OF THE GROUND OR IN CLOSED TUNNELS</td>
</tr>
<tr>
<td>PO058 A79-13295</td>
</tr>
<tr>
<td>GROUND EFFECTS ON USB CONFIGURATIONS --- UPPER SURFACE BLowing</td>
</tr>
<tr>
<td>PO191 A79-21525</td>
</tr>
<tr>
<td>SOME BASIC TEST RESULTS OF V/STOL JET INDUCED LIFT EFFECTS IN HOWER</td>
</tr>
<tr>
<td>[AIAA PAPER 79-0339]</td>
</tr>
<tr>
<td>JET-INDUCED AERODYNAMICS OF V/STOL AIRCRAFT OVER A MOVING DECK</td>
</tr>
<tr>
<td>[AIAA PAPER 79-0337]</td>
</tr>
<tr>
<td>INVESTIGATION OF A LASER DOPPLER VELOCIMETER SYSTEM TO MEASURE THE FLOW FIELD OF A LARGE SCALE V/STOL AIRCRAFT IN GROUND EFFECT</td>
</tr>
<tr>
<td>[AIAA PAPER 79-1188]</td>
</tr>
<tr>
<td>A NEW ANALYTIC METHOD FOR THE STUDY OF CLASSIC HELICOPTER GROUND RESONANCE</td>
</tr>
<tr>
<td>PO51A A79-41767</td>
</tr>
<tr>
<td>SURFACE-EFFECT COMPONENTS OF AERODYNAMIC CHARACTERISTICS OF AIR-CUSHION VEHICLE WITH RAM PRESSURIZATION</td>
</tr>
<tr>
<td>PO601 A79-46995</td>
</tr>
<tr>
<td>THE DESIGN IMPACT OF POWER-AUGMENTED RAM TECHNOLOGY ON LARGE ENERGY EFFICIENT AIRCRAFT</td>
</tr>
<tr>
<td>[AIAA PAPER 79-1864]</td>
</tr>
<tr>
<td>ANALYSIS OF VEHICLES WITH WINGS OPERATING IN GROUND EFFECT</td>
</tr>
<tr>
<td>[AIAA 79-2034]</td>
</tr>
<tr>
<td>THRUST AND LIFT OF AERODYNAMIC CHARACTERS OF A 36 INCH DIAMETER TIP TURBINE AND THRUST SYSTEMS IN AND OUT OF GROUND EFFECT</td>
</tr>
<tr>
<td>[NASA-CR-152239]</td>
</tr>
<tr>
<td>INVESTIGATION OF A LASER DOPPLER VELOCIMETER SYSTEM TO MEASURE THE FLOW FIELD AROUND A LARGE SCALE V/STOL AIRCRAFT IN GROUND EFFECT</td>
</tr>
<tr>
<td>[NASA-CR-152212]</td>
</tr>
<tr>
<td>LOW SPEED WIND TUNNEL TESTS OF GROUND PROXIMITY AND DECK EDGE EFFECTS ON A LIFT CRUISE FAN V/STOL CONFIGURATION, VOLUME 1</td>
</tr>
<tr>
<td>[NASA-CR-152248]</td>
</tr>
<tr>
<td>POWERED LOW-ASPECT-RATIO WING IN GROUND EFFECT (WG) AERODYNAMIC CHARACTERISTICS --- CONDUCTED IN LANGLEY V/STOL TUNNEL</td>
</tr>
<tr>
<td>[NASA-TM-78793]</td>
</tr>
<tr>
<td>THEORETICAL AND EXPERIMENTAL INVESTIGATION OF GROUND-INDUCED EFFECTS FOR A LOW-ASPECT-RATIO HIGHLY SWEPT ARROW-WING CONFIGURATION</td>
</tr>
<tr>
<td>[NASA-TP-1508]</td>
</tr>
<tr>
<td>GROUND EFFECT MACHINERY --- CUSHIONCRAFT GROUND EFFECT MACHINE --- CUSHIONCRAFT GROUND EFFECT MACHINES</td>
</tr>
<tr>
<td>PO672 A79-31123</td>
</tr>
<tr>
<td>THE PRINCIPLES OF HOVERCRAFT, POWERING AND PRODUCTION</td>
</tr>
<tr>
<td>PO561 A79-44008</td>
</tr>
<tr>
<td>GAS TURBINES FOR ACT'S AND HYDROFOILS</td>
</tr>
<tr>
<td>PO604 A79-47844</td>
</tr>
<tr>
<td>JET PROPULSION FOR ACT'S AND HYDROFOILS</td>
</tr>
<tr>
<td>PO604 A79-47847</td>
</tr>
<tr>
<td>PERFORMANCE PREDICTIONS FOR OPEN OCEAN AIR CUSHION VEHICLES AND SURFACE EFFECT SHIPS</td>
</tr>
<tr>
<td>PO600 A79-49905</td>
</tr>
<tr>
<td>CHARACTERISTICS OF AN AIR CUSHION LANDING SYSTEM INCORPORATING AN INELASTIC TRUNK</td>
</tr>
<tr>
<td>PO600 A79-49905</td>
</tr>
<tr>
<td>ROAD FLOOR OPERATION OF AIR CUSHION ASSISTED VEHICLES --- AN EVALUATION OF TECHNICAL AND ECONOMIC PROBLEMS</td>
</tr>
<tr>
<td>PO661 A79-49910</td>
</tr>
<tr>
<td>A COMBINED AIR-CUSHION AND ENDLESS BELT TRANSPORTATION SYSTEM</td>
</tr>
<tr>
<td>PO661 A79-49911</td>
</tr>
<tr>
<td>INTEGRATION OF AIR CUSHION LANDING SYSTEM TECHNOLOGY INTO THE JINDIVIK REMOTELY PILOTED VEHICLE</td>
</tr>
<tr>
<td>[AD-A005880]</td>
</tr>
<tr>
<td>AIR CUSHION LANDING GEAR APPLICATIONS --- STANCE LANDING GEAR DESIGN</td>
</tr>
<tr>
<td>[NASA-CR-159002]</td>
</tr>
<tr>
<td>[NASA-CR-159002]</td>
</tr>
<tr>
<td>[NASA-CR-159002]</td>
</tr>
<tr>
<td>[NASA-CR-159002]</td>
</tr>
<tr>
<td>[NASA-CR-159002]</td>
</tr>
<tr>
<td>[NASA-CR-159002]</td>
</tr>
</tbody>
</table>

A simple fluid-flow model of ground effect on hovering

PO71 A79-39017

GROOVING SURFACES OF GROOVES IN BITUMINOUS RUNWAYS
[AD-069869] PO673 A79-31233

GROUND EFFECT METHODOLOGY FOR PREDICTION OF V/STOL PROPULSION INDUCED FORCES IN GROUND EFFECT
[AIAA PAPER 79-1281] PO71 A79-39017

GROOVING SURFACES OF GROOVES IN BITUMINOUS RUNWAYS
[AD-069869] PO673 A79-31233

GROUND EFFECT METHODOLOGY FOR PREDICTION OF V/STOL PROPULSION INDUCED FORCES IN GROUND EFFECT
[AIAA PAPER 79-1281] PO71 A79-39017

A SIMPLE FLUID-FLOW MODEL OF GROUND EFFECT ON HOVERING

PO72 A79-51241

COMPRESSIBLE VISCOUS FLOWFIELDS AND AIRFRAME FORCES INDUCED BY TWO-DIMENSIONAL LIFT JETS IN GROUND EFFECT
[AD-005423] PO606 A79-12022

THE AERODYNAMIC AND THERMODYNAMIC CHARACTERISTICS OF FOUNTAINS AND SOME FIELD TEMPERATURE DISTRIBUTIONS --- VERTICAL TAKEOFF AIRCRAFT GROUND EFFECT
[AD-006133] PO333 A79-16983

LIFT SYSTEM INDUCED AERODYNAMICS OF V/STOL AIRCRAFT IN A MOVING DECK ENVIRONMENT, VOLUME 1 --- STATIC AND DYNAMIC JET-INDUCED FORCES AND MOMENT DATA
[AD-A060957] PO361 A79-20084

UNSTABLE SMALL-GAP GROUND EFFECTS
[AD-006400] PO581 A79-20157

GROUND EFFECT (AERODYNAMICS) MEASUREMENT OF FLOW FIELDS AROUND AN AIRFOIL SECTION WITH SEPARATION
[PO122 A79-10868]
A study of requirements, model configurations, and test plans for air cushion system comparison tests [AD-A065006] p0585 879-26373

ACV cushion comparison tests: Preliminary review and definition of model and tests [AD-A068888] p0586 879-26374

Fea-v-pitch-roll analysis and testing of air cushion landing systems [NASA-CE-2917] p0651 879-30175

GROUND HANDLING

Reducing air pollutant emissions at airports by controlling aircraft ground operations [NT-AIR 79-0739] p0319 879-29011

A simulator study of aircraft ground-run handling in the Fossis Research Simulator - Some results and experiences p0259 879-26498

Airplane dynamic wheel loads during ground maneuvering -- computer program for L-1011 aircraft [NASA-79-0073] p0206 879-23794

Material developments for airline safety - Impact on the safety of ground maintenance employees p0531 879-43277

Preventing fires in aviation fuel storage and transport systems, II [AD-A073193] p0536 879-43734

A study of aircraft towing as proposed for Boston-Logan International Airport - field surface movements [FAA-79-77] p0237 879-16681

The 1990 direct support infrastructure p0549 879-27115

GROUND OPERATIONAL SUPPORT SYSTEM

New test concepts and their influence on maintenance [DGIL 79-022] p0387 879-31949

GROUND SPEED

Design and demonstration of a system for routine, boozless supersonic flights [PAA-77-77] p0231 879-16828

Simulation study to evaluate a constant-groundspeed approach method in moderate and severe wind shears [NASA-TM-80069] p0362 879-20089

Airborne determination of ground speed: A feasibility study -- instrument landing system approaches [AD-A073193] p0714 879-33182

GROUND STATIONS

Emergency position-indicating radio-beacon systems using 406 MHz band mobile-satellite service p0112 879-17095

Siting criteria for NLS stations, II [AD-A07-77] p0261 879-28184

Increasing the accuracy of integrated Doppler/TACAN navigation through frequent change of TACAN stations [AD-A947178] p0514 879-41778

Introduction to, ground station system of, and civil applications of remotely piloted vehicles p0218 879-15945

GROUND SUPPORT EQUIPMENT

WT GROUND OPERATIONAL SUPPORT SYSTEM

VOR - Its past, present, and future p0076 879-16161

High level maintenance below sea level p0465 879-38825

F-16 depot automatic test equipment p0625 879-48895

Airpower power supply -- Russian book p0687 879-50499

Potential applications of acoustic emission technology as a nondestructive evaluation method for naval aviation ground support [AD-A056650] p0039 879-10439

Performance of graphite epoxy as an antenna ground plane [AD-A058846] p0108 879-13247

Apparatus for measuring an aircraft's speed and height [NASA-CASE-LAB-12275-1] p0298 879-18296

GROUND SUPPORT SYSTEMS

AV/OSN-449/9/ ATV for worldwide support of the F3 Orion p0624 879-48880

GROUND TESTS

WT COLD FLOW TESTS

Certification-compliance demonstration by flight or simulation p0005 879-10408

Operator and technician tasks for the heads-up display test set and versatile avionics shop test /FAST/ p0800 879-16446

Engine life usage experience of YF17/T3101 flight and ground testing [ASHE PAPER 78-WA/6T-11] p0149 879-19798

An application of ground vibration test results to calculate aeroelastic stability and control parameters [KIA 79-0830] p0323 879-29046

Method of assessment of the antistatic protection of aircraft [OBEBA, TP NO. 1979-41] p0743 879-39090

New methods for ground-testing aeronautical structures [OBEBA, TP NO. 1979-47] p0536 879-43620

Full scale ground and air resonance testing of the Army-Boeing Vertol Bearingless Main Rotor [ARS 79-23] p0629 879-49075

GROUND test vehicle testing -- in helicopter development programs [ARS 79-40] p0631 879-49092

Laboratory tests to determine lightning attachment points on actual aircraft parts /qualification test/ p0681 879-51134

Tests on actual aircraft for electromagnetic effects /Engineering tests/ p0682 879-51141

Ground-based measurements of the wake vortex characteristics of a B-747 aircraft in various configurations [NASA-TM-80074] p0537 879-26016

GROUND WIND


GROUND-AIR-GROUND COMMUNICATIONS

Scanned-Incorrect air-ground communications links voice and data link in different systems p0058 879-13234

Collision avoidance in an integrated system. I - Advantages of the capability p0056 879-13258

The AGELS - A multipurpose system for in-flight evaluation of new ATC techniques -- Air Ground Data Link System p0056 879-13264

Sea-air rescue and offshore aerial navigation using Loran C p0057 879-13270

Investigation concerning an Airborne Terminal AT/ for pilot/controller communication over a ground/airground data link [DGIL PAPER 79-050] p0521 879-42376

A novel approach to the design of an all-digital aeronautical satellite communication system p0674 879-31461

Investigation on information error caused by traffic loading in approach and landing systems p0675 879-31480

GROWTH

WT DIRECTIONAL SOLIDIFICATION (CRYSTALS)

GRUMMAN AIRCRAFT

WT E-2 AIRCRAFT

WT F-14 AIRCRAFT

WT Y-11 AIRCRAFT

GUIDANCE (NOTION)

WT AIRCRAFT GUIDANCE

WT INERTIAL GUIDANCE

WT LASER GUIDANCE

WT MAP MATCHING GUIDANCE

WT STEADYHED INERTIAL GUIDANCE

WT TERMINAL GUIDANCE

Predictive guidance for interceptors with time delays p0611 879-47392

Flight experience with advanced controls and displays during piloted curved decelerating approaches in a powered-lift STOL aircraft [NASA-TM-78227] p0036 879-10056

Contributions of platform motion to simulator training effectiveness. Study 1: Basic contact [AD-A058416] p0105 879-13066

A system for providing an integrated display of instantaneous information relative to aircraft attitude, heading, altitude, and horizontal
SUBJECT INDEX

GUIDANCE SENSORS

Gust alleviation - Criteria and control laws
[AIAA 79-16761
p0568 179-45340
The Total In-Plight Simulator (TIPS) aerodynamics
and systems: Description and analysis
maneuver control and gust alleviators
(NASA-CE-1589651
p0166 7479-14113
C-5A load alleviation --- active lift distribution
control system
p0237 7479-16875
A wind-tunnel investigation of tilt-rotor gust
alleviation systems
[NASA-CR-152264]
p0543 R79-26062
Gust alleviator feasibility study for G91!
p0659 1179-30230
GUST LOADS
Method for determining maximum allowable stress
for preliminary aircraft wing design
p0016 A79-11370
Aerodynamic forces in finite wings in oscillatory
flow - An experimental study
p0060 179-13980
Study of the integration of active control
elements in the high lift system of a transport
aircraft into maneuver control, gust-load
control, and direct control of lift
(DGLR PAPER 78-1111
p0060 A79-14069
Gust response and its alleviation for a hingeless
helicopter rotor in cruising flight
p0131 A79-18662
Helicopter simulation in atmospheric turbulence
p0131 179-1,8663
Nonlinear gust loads analysis - Monte Carlo vs.
describing function analysis
[AIAA PAPER 79-0060]
p0139 179-19511
A multi-disciplinary approach to structural design
for stochastic loads
p0144 179-19613
(AIAA PAPER 79-02381
A low-frequency aeroelastic element method and its
application to the harmonic gust response
analysis of a flexible airplane
p0190 179-21475
Aircraft response to lateral gusts- Exploratory
study
p0389 839-32278
Gust spectrum fatigue crack propagation in
candidate skin materials
p0399 179-33201
Lifting surface approach to the estimation of gust
response of finite wings
p0407 179-34596
Analysis of an unsteady aerodynamic force on a
blade due to ununiform amplitude gusts
p0473 A79-39059
Structural loads due to gusts on semibuoyant
airships
p0522 179-42384
[AIAA 79-1581]
Methods of gust spectra prediction for fatigue
damage
p0563 179-144461
Improved method of predicting helicopter control
response and gust sensitivity
p0629 179-49077
EARS 79-25]
Load and dynamic assessment of 8-528-008 carrier
aircraft for finned configuration 1 space
shuttle solid rocket booster decelerator
subsystem drop test vehicle. Volume 2:
Airplane flutter and load analysis results
p0036 7479-10049
(NASA-CE-150834]
Gust response analyses for ten general aviation
aircraft using a two-degree-of-freedom power
spectral technique
p0235.1179-16861
(1RAP344)
Gust response and its alleviation for a hingeless
helicopter rotor in cruising flight
p0235 1779-16862
[AD-A061134]
C-5A load alleviation --- active lift distribution
control system
p0237 1179-16875
Gust load estimation using a simplified power
spectral technique
p0294 1779-17870
[ARAP-362]
Effect of flight load spectrum variations on
fatigue life of riveted specimens and crack
propagation in sheet made of Alciad 7076-T6
[NLR-TR-78071-U]
p0387 1779-21447
Aircraft design loads due to non-stationary
atmospheric turbulence patches
p0701 1779-32216
[NLR-TR-78073-U]

situation
p01495 979-24988
[RASA-CASE-FRC-11005-1)
Design guidance from fighter CCV flight evaluations
p0659 N79-30235
GUIDANCE SENSORS
Air Force applications for optical rotation rate
sensors
p0281 179-28122
Increasing guidance accuracy through use of an
integrated digital piloting system
p0520 179-142369
[DGLR PAPER 79-083]
Use of a gyroscope with adjustable torsion
suspension in precise gyroscopic sensors
p0538 179-43511
The implementation and application of a sensor
interfacing unit for strapdown inertial systems
p0230 1179-16821
(NAL-TR-532)
GUIDE VANES
NT JET VANES
Application of nonseries airfoil design technology
to highly loaded turbine exit guide vanes
p0008 A79-10787
[ASME PAPER 78-GT-108]
Experimental study of the gasdynamic
characteristics of a nozzle guide vane row with
air ejection onto the vane surface
p0082 A79-16787
Mean velocity and decay characteristics of the
guidevane and stator blade wake of an axial flow
compressor
p0339 A79-30507
[AsME PAPER 79-GT-91
Influence of freely rotating inlet guide vanes on
the return flows and stable operating range of
an axial flow fan
p0340 179-30517
[ASNE PAPER 79-GT-313
Study of mean- and turbulent-velocity fields in a
large-scale turbine-vane passage.
p0340 179-30519
(ASME PAPER 79-GT-33)
Engine evaluation of a vibration damping treatment
for inlet guide vanes
p0395 179-32425
[ASNE PAPER 79-GT-163]
V/STOL performance comparisons with variable pitch
and variable inlet guide vane fans - A report on
experimental data
p0509 179-40487
[AIAA PAPER 79-1286)
Further test results with the airjet distortion
generator - A new tool for aircraft turbine
engine testing
p0510 179-140752
[ATAA PAPER 79-11851
Measurement of heat transfer rate to turbine
blades and nozzle guide vanes in a transient
cascade
p0527 839-82891
Aerodynamic effects of an attitude control vane on
a tilt-nacelle V/STOL propulsion system
p0609 A79-47914
[AIAA PAPER 79-18551
Experimental study of the gasdynanic
characteristics of a stator cascade with cooling
air discharge through the vane surface
p0613 179-48498
Turbine exit guide vane program --- exhaust nozzles
p0164 1179-14101
[10-1060383]
Study of mean- and turbulent-velocity fields in a
large-scale turbine-vane passage
p0234 1179-16853
[9AS1CR3067)
Aerodynamic performance of axial-flow fan stage
operated at nine inlet guide vane angles --- to
be used on vertical lift aircraft
p0671 R79-31214
[NASA-TP-1510]
Laminated turbine vane design and fabrication
utilizing film cooling as a cooling system
p0716 N79-33204
[RASA-CR-159655)
GUNS (ORDNANCE)
Ultrasonic method of gun gas detection --- for
engine ingestion prevention in F-15
p0642 A79-50166
Precision controllability of the F-is airplane
p0887 R79-23979
[NASA-TM-72861]
Army aircraft fire control systems performance
evaluation
[AD-A070758]
p011S R79-33194
GUST ALLEVIATORS
Flutter suppression and gust alleviation using
active controls - Review of developments and
applications based on the aerodynamic energy
concept
p0156 179-20128
Gust alleviation using direct turbulence
measurements
p0568 A79-45339
[AIAA 79-16741
.
1-242



Gust spectrum fatigue crack propagation in candidate skin materials [NLR-BP-78022-0] p0711 N79-32597

GUSTs
The Dulles Airport pressure-sensor array for gust-front detection - System design and preliminary results p0192 N79-21919

A small aircraft gust-probe system for studies of boundary layer convection and transport p0193 N79-21972

The status of air motion measurements on B747 aircraft p0193 N79-21973

Gust-vehicle parameter identification by dynamic simulation in wind-tunnels p0180 N79-15097

The response of aircraft to discrete ramp gusts [NAS-N87-77165] p0222 N79-15971

GYRATION
MT AUTOROTATION
MT ROTATION
GYROCOMPASSES
Cosmos system for small aircraft p0534 N79-43510

Low-cost inertial navigation for moderate-g missions [NASA-T8-76611] p0706 N79-32205

GYROINTERACTION
U MAGNETIC RIGIDITY
GYROPLATES
U HELICOPTERS
GYROS
U GYROSCOPES
GYROSCOPES
MT ATTITUDE GYROS
MT ELECTROSTATIC GYROSCOPES
MT GYROCOMPASSES
MT GYROSCOPIC PENDULUMS
MT GYROSTABILIZERS
MT OPTICAL GYROSCOPES
MT ROTARY GYROSCOPES
Inertial technology and reliability — for navigation systems p0082 N79-16584

Use of a gyroscope with adjustable torsion suspension in precise gyroscopic sensors p0082 N79-16585

SLIC-7 laser gyro investigations — thermal and storage stability [AD-A059528] p0100 N79-13021

Failure modes and redundancy analysis for the Multifunction Inertial Reference Assembly (MIRA) [AD-A061849] p0222 N79-16834

GYROSCOPIC DECOY
U GYROSCOPES
U GYROSCOPIC STABILITY

GYROSCOPIC PENDULUMS
Autonomous navigation system — using gyroscopic pendulums and globes for air navigation system which disperses [NASA-CAS-E-ARC-11257-1] p0713 N79-33177

GYROSCOPIC STABILITY
Comparison of typical gyro-errors for strapdown applications p0067 N79-14662

Inertial measuring unit for strapdown application p0068 N79-14663

The DG-800 - A rugged, high performance heading reference unit — directional gyro design considerations p0619 N79-48677

GYROSTABILIZERS
Considerations on optimal self-alignment of gyrostabilized platforms p0068 N79-14671

Stabilizing electro-optical systems on helicopters p0657 N79-30216

H-53 HELICOPTER
Pave Low III — H-53 helicopter avionics for night/adverse weather rescue of military aircraft p0619 N79-48682

HARMONICS
CH-53 digital automatic flight control system p0693 N79-53638

The effect of operations on the ground noise footprints associated with a large multibladed, nonbanging helicopter p0040 N79-10851

HAILSTORMS
Cloud physics observations inside hailstorms with an armored aircraft data system p0192 N79-21960

HALL CURRENTS
U ELECTRIC CURRENT
HALOGEN COMPOUNDS
ST FLUORINE COMPOUNDS
ST POLYFLUOROBENZENES
HARDBOARD AIRCRAFT
ST BFP-320 AIRCRAFT
HARDBOARD BFP-320 AIRCRAFT
U BFP-320 AIRCRAFT
HANDBOOKS
ST USER HANDALS (COMPUTER PROGRAMS)


HANDLING EQUIPMENT
Handling problems through compressor deterioration p0554 N79-27169

HANDLING QUALITIES
U CONTROLLABILITY
HANG GLIDERS
A new life saving application for the parachute [AIAA 79-0456] p0264 A79-26659

HARDENING (MATERIALS)
ST HOT PRESSING
ST SILICONIZING
HARDENING (SYSTEMS)
Protection/hardening of aircraft electronic equipment against the indirect effects of lightning p0683 N79-51146

HARDWARE
High strength stitching for aircraft personnel restraint systems p0040 N79-33639

Hardwire simulation requirements and hardware p0223 N79-15983

HARMONIC ANALYSIS
A low-frequency aerelastic element method and its application to the harmonic gust response analysis of a flexible airplane p0190 N79-21475

Harmonic vibrations of an annular wing in the steady flow of an ideal fluid p0028 A79-12963

Theoretical prediction of dynamic stall on oscillating airfoils [AMS 78-62] p0125 A79-18183

On methods for application of harmonic control — helicopter vibration reduction by blade pitch variation p0131 A79-21475

Unsteady thin airfoil theory for transonic flows with embedded shocks [AIAA 79-0290] p0183 A79-19597

Harmonic oscillations of annular wing in steady ideal fluid flow p0601 A79-47009

A procedure for analyzing transonic flow over harmonically oscillating airfoils p0352 N79-20003

HARMONICS
ST HARMONIC OSCILLATION

SUBJECT INDEX
HARRIER AIRCRAFT

Composite wing technology on the AV-8B advanced aircraft
[APS 78-53]
p0123 A79-18176

Powered wind tunnel testing of the AV-8B - A straightforward approach pays off
[IAAA PAPER 79-0331]
p0202 A79-23557

Head-up Display and Weapon Aiming Computer /HUD/WAC/ system for the Sea Harrier
p0332 A79-29842

Sea Harrier night and low visibility approach development
p0332 A79-29483

An X-22A flight experiment to investigate control-display requirements for the AV-8B VTOL aircraft
p0332 A79-29844

The British Aerospace Harrier: Case study in aircraft design --- Book
p0451 A79-36644

Alliation of stability and control difficulties of a V/STOL Type B aircraft
[IAAA 79-1705]
p0573 A79-45412

Flight demonstration of the AV-8B V/STOL concept
[IAAA PAPER 79-1044]
p0664 A79-51249

Aircraft takeoff from a ski-jump platform
p0607 A79-52138

Is the AV-8B Advanced Harrier aircraft ready for full-scale development
[8P-290826/7]
p0495 A79-24987

Simulation and study of V/STOL landing aids for USMC AV-6 aircraft
p0657 A79-30214

HARDWARE

Heat generation in cavities at high velocity flights
--- resonance-pipe effect
[APPS-PWT-77-28]
p0288 N79-17815

SAFETY

WT JET/AIRCRAFT

HT V/STOL AIRCRAFT

WT BARRIER AIRCRAFT

HARRIER AIRCRAFT

U X-2 AIRCRAFT

HAZARDS

WT AIRCRAFT HAZARDS

WT FLIGHT HAZARDS

WT TOXIC HAZARDS

Proceedings of the Aircraft Wake Vortices Conference
[AD-A055510]
p0159 N79-14031

Static electricity hazards in aircraft fuel systems
[AD-A061450]
p0280 N79-17012

An assessment of local risk --- to area associated with commercial operations of aircraft with graphite fiber composite structures
p0426 N79-22207

Carbon Fiber Risk Analysis: Conclusions
[AD-A066927]
p0501 N79-25245

Factors affecting electrostatic hazards
[AD-A066927]
p0501 N79-25245

Feasibility of non-catastrophe ejection and hazard of an ejection seat rocket plane
[AD-A067080]
p0539 N79-26036

HC-1 HELICOPTER

U CB-47 HELICOPTER

HD-1 GROUND EFFECT MACHINES

U HOVERCRAFT GROUND EFFECT MACHINES

HEAD-UP DISPLAY

Acousto-optic methods of character generation for aircraft displays
p0071 A79-15178

Presentation of thermal or residual-light TV images on head-up displays for night or all-weather operations --- for military helicopters
p0079 A79-16240

Operator and technician tasks for the heads-up display test set and versatile avionics shop test
[VAST]
p0080 A79-16446

V/STOL all weather HUD landing simulation /Status report/
p0331 A79-29478

Head-up Display and Weapon Aiming Computer /HUD/WAC/ system for the Sea Harrier
p0332 A79-29482

An X-22A flight experiment to investigate control-display requirements for the AV-8B VTOL aircraft
p0332 A79-29844

SUBJECT INDEX

KC-135s get 'heads-up' research --- head-up displays in midair refueling
p0350 A79-32244

F/A-18 Hornets display system
p0617 A79-48630

Helmet mounted display and sight development
[APS 79-17]
p0268 A79-99070

Head aiming/tracking accuracy in a helicopter environment
[AD-A058434]
p0102 A79-13041

Holographic lens for pilot's head up display, phase 1
[AD-A058660]
p0102 A79-13043

Control and display concepts for combat aircraft --- head-up displays and helmet display sight system
p0354 A79-20019

Energy maneuverability display. validation --- F-16 aircraft
[AFDO-TR-78-35-VOL-1]
p0484 A79-23947

A review of some head-up display formats --- tests on sensing equipment for flights following partly visible terrain close to the ground
[NASA-TP-1499]
p0716 N79-33201

HEAD-UP DISPLAYS

ACOUSTIC FATIGUE

HEARING LOSS

AUDITORY EFFECTS

HEAT CONDUCTION

CONDUCTIVE HEAT TRANSFER

CONVECTION

ENTROPY

HEAT DISSIPATION

CHILLING

HEMEFFECTS

TEMPERATURE EFFECTS

HEAT EQUATIONS

HEAT EXCHANGERS

The F-16 environmental control system
[ASME PAPER 78-EMAS-11]
p0027 N79-12560

The utilization of data relating to fin geometry and manufacturing processes of ceramic matrix systems to the design of ceramic heat exchangers
p0028 A79-12924

Choice of optimal parameters for a heat exchanger with heat pipes for a gas turbine engine
p0526 A79-42552

Performance of hot fuel in a single tube heat exchanger test rig
[AD-A050744]
p0106 N79-13-93

HEAT FLOW

HEAT TRANSMISSION

HEAT PIPE

Application of shock-tube technology to the measurement of heat-transfer rate to gas turbine components
p0072 A79-15211

Measurement of heat transfer rate to turbine blades and nozzle guide vanes in a transient cascade
p0527 A79-42891

High heat flux actively cooled honeycomb sandwich structural panel for a hypersonic aircraft
[NASA-CS-2959]
p0372 N79-20397

HEAT GENERATION

Heat generation in cavities at high velocity flights
--- resonance-pipe effect
[APPS-PWT-77-28]
p0288 N79-17815

HEAT MEASUREMENT

Application of shock-tube technology to the measurement of heat-transfer rate to gas turbine components
p0072 A79-15211

Measurements of heat transfer in circular, rectangular and triangular ducts, representing typical turbine blade internal cooling passages using transient techniques
[ASME PAPER 79-0331]
p0391 A79-32383

Measurement of heat-transfer rate to a gas turbine stator
[ASME PAPER 79-GT-119]
p0399 A79-32935

Measurement of heat-transfer rate to turbine blades and nozzle guide vanes in a transient cascade
p0527 A79-42891
HEAT OF COMBUSTION
Enthropy of combustion of K-6
[AD-A067966] p0559 N79-28037

HEAT PUMPS
Choice of optimal parameters for a heat exchanger
with heat pipes for a gas turbine engine
[AD-A052672] p0526 A79-42552

HEAT TRANSFER
A cooling system for an aircraft having a cruise
range from Mach 2 to Mach 8

HEAT RESISTANCE
U THERMAL RESISTANCE

HEAT RESISTANT ALLOYS
NT NITRIDE ALLOYS
NT REFRACTOR METAL ALLOYS
NT TUNGSTEN ALLOYS
NT TUNGSTEN ALLOYS

- Bead on a log heat treatment of tungsten fiber reinforced superalloy turbine blades
- Effect of a chromium-containing fuel additive on hot corrosion
- Potential uses of rapidly solidified alloys in gas turbine engines
- Thermal cycle life of turbine blades

Tungsten fiber reinforced PdCrAlY - A first generation composite turbine blade material
Directionally solidified blades - Greater strength
The application of rapid solidification rate superalloys to radial wafer turbine blades
Achieving consistency in the production of critical jet engine components by means of press forging

Superalloy knife edge seal repair
Advanced Turbine Engine Gas generator (ATEGG)
Fractography of cast nickel base superalloys
An oxide dispersion strengthened alloy for gas turbine blades

Heat treatment of P/M nickel-base superalloys for turbine disks
An experimental, low-cost, silicon alloy/aluodide hightemperature coating for superalloys
An analysis of the low cycle fatigue behavior of the superalloy Rene 95 by strainrange partitioning

HEAT SHIELDING
Transient ablation of Teflon in intense radiative and convective environments

HEAT SINKS
Configuration development study of the X-24C hypersonic research airplane, phase 1

HEAT SOURCES
NT GEOTHERMAL RESOURCES
Design and evaluation of aircraft heat source systems for use with high-freezing point fuels

HEAT TESTS
U HIGH TEMPERATURE TESTS
HEAT TRANSFER
NT CONDUCTIVE HEAT TRANSFER
NT CONVECTIVE HEAT TRANSFER
NT RADIATIVE HEAT TRANSFER
NT TURBONOMIC HEAT TRANSFER
NT TURBONOMIC HEAT TRANSFER

Measurement of heat transfer and forces on very high temperature models in a closed subsonic wind tunnel
Aerodynamics and heat transfer of transonic turbine blades at off-design angles of incidence
Internal aerodynamics and heat transfer problems associated with film cooling of gas turbines
An experimental study of endwall and airfoil surface heat transfer in a large scale turbine blade cascade
[ASME PAPER 79-GT-99] p0392 A79-32375

Analytical modeling of ramjet combustor heat transfer modes

Heat transfer over the initial section of turbine blade cooling channels under conditions of rotation

A thermal investigation of the APARL turbine engine heat transfer test facility
The effect of high pressure facility and turbine test rig
Flash-fire propensity and heat-release rate studies of improved fire resistant materials
Small laminated axial turbine hot-rig test program
Pressure and heat-transfer distributions in a simulated wing-elevator core with variable leakage
Heat transfer problems in advanced gas turbines for naval applications
Computerized heat-transfer and stress analysis of wind tunnel metal turbine liners

Pressure and thermal distributions on wings and adjacent surfaces induced by elevator deflections

HEAT TRANSFER COEFFICIENTS
A two-dimensional cascade test of an air-cooled turbine nozzle

Determination of heat transfer coefficients around a blade surface from temperature measurements
[ASME PAPER 79-GT-28] p0340 A79-30515
Measurement of heat-transfer rate to a gas turbine stator
[ASME PAPER 78-GT-119] p0399 A79-32935
Nonstability of heat transfer in the blade cascade of an axial-flow turbine during engine start-up

The influence of longitudinal pressure gradient and turbulence of the flow upon heat transfer in turbine blades

HEAT TRANSMISSION
NT CONDUCTIVE HEAT TRANSFER
NT CONVECTIVE HEAT TRANSFER
NT TURBONOMIC HEAT TRANSFER
NT TURBONOMIC HEAT TRANSFER

Heat transfer problems of aluminum alloy forgings of the AZ 74.61 type. Fatigue crack propagation performance under maneuver spectrum loading

RESIDENT STRESS RELIEVING
Residual-stress formation during the thermal hardening of components in gas-turbine engines

Heat treatment studies of aluminum alloy forgings of the AZ 74.61 type. Fatigue crack propagation performance under maneuver spectrum loading

Flawless brazing and heat treatment of a plate-film sandwich actively cooled panel
Analysis of free torsional rotor blade oscillations under special consideration of asymmetric swash-plate support p0131 A79-18660
Helicopter flight control /HSF/ --- integrated system including PLIR and laser range finder p0156 A79-19900
Army outlook -- Flight control systems --- for helicopters p0198 A79-22772
Evaluation of IFP handling qualities of helicopters using the NASA airborne V/STOL simulator [AIAA 79-0702] p0276 A79-27365
A flyable suspended model helicopter for the investigation of the human pilot behaviour p0412 A79-35923
Model study of transient processes in a hydraulic power amplifier p0465 A79-38814
A piloted simulator investigation of helicopter precision decelerating approaches to hover to determine single-pilot IFP/SPITR/ requirements [AIAA 79-1886] p0573 A79-45413
Helicopter performance methodology at Bell Helicopter Textron [JSS 79-2] p0626 A79-49055
Multiple technology applied to helicopters [JSS 79-14] p0627 A79-49067
Advances in decelerating steep approach and landing for helicopter instrument approaches [AAE 79-16] p0628 A79-49069
Spirit helicopter handling qualities design and development [JSS 79-24] p0629 A79-49076
Improved method of predicting helicopter control response and gust sensitivity p0629 A79-49077
Piloted simulator investigation of helicopter control systems effects on handling qualities during instrument flight [JSS 79-26] p0629 A79-49078
Advanced Scout Helicopter flying qualities requirements - How realistic are they? [JSS 79-28] p0629 A79-49080
Handling quality and display requirements for low speed and hover in reduced flight visibility [JSS 79-29] p0630 A79-49081
Flight investigation of helicopter IFP approaches to oil rigs using airborne weather and mapping radar [JSS 79-52] p0633 A79-49104
Analytical and experimental investigation of V-type empennage contribution to directional control in hover and forward flight [JSS 79-56] p0633 A79-49106
Flight controls/avionics research -- Impact on future civil helicopter operating efficiency and mission reliability p0692 A79-53627
Military considerations for helicopter flight controls p0692 A79-53628
Three basics of design for civil certification p0692 A79-53629
A direct drive fly-by-wire system p0692 A79-53630
Optical control technology --- for helicopters-fiber-optic data transfer p0693 A79-53632
STAR flight control system p0693 A79-53634
Fly-by-wire tail rotor controls p0693 A79-53635
Actuator and hydraulic survivability concepts for Hughes YAH-64 p0693 A79-53636
Automatic Stabilization Equipment for the Army/Hughes YAH-64 Advanced Attack Helicopter p0693 A79-53637
CH-53E digital automatic flight control system p0693 A79-53638
Fiberglass flight controls --- of helicopters p0695 A79-53892

**HEATING**

**HEATING**

- NT AERODYNAMIC HEATING
- NT RESISTANCE HEATING

**HEATING EQUIPMENT**

- Hybrid heater/paste and heater/flexible coating schemes for de-icing helicopter rotor blades p013A A79-19665
- Characterizing expansive soils for airport pavement design [AD-A059765] p0168 A79-14247

**HEAVY LIFT HELICOPTERS**

- Longitudinal dynamic stability of a hovering helicopter with a sling load p0561 A79-44096

**HIGH (HIGH ENERGY FUELS)**

- NT HIGH ENERGY FUELS

**HEIGHT**

- NT SCALE HEIGHT
- Theoretical fundamentals of radio altimetry --- Russian book p0463 A79-38145

**HELICAL FLOW**

- Helical instabilities of slowly divergent jets p051A A79-47414

**HELICAL INDUCERS**

- An experimental study of three-dimensional turbulent boundary layer and turbulence characteristics inside a turbomachinery rotor passage [ASM PAPER 79-02-111] p0001 A79-10266

**HELICOPTER ATTITUDE INDICATORS**

- ATTITUDE INDICATORS
- Optical control technology --- for VTF helicopters-fiber-optic data transfer p0693 A79-53636

**HELICOPTER CONTROL**

- Automatic stabilization of helicopters --- Russian book p0667 A79-14550
- Application of a north seeking heading and attitude reference for the autonomous navigation of helicopters p0668 A79-14668
- Optimal control of helicopter longitudinal motion on the basis of an operational algorithm p0669 A79-14807
- Integrated computer-display system for modern anti-task/combatt helicopters p0078 A79-16233
- Chief features of future helicopter avionics p0079 A79-16236
- A versatile approach to cockpit management --- for military helicopter control and display avionics [JSS 79-17] p0120 A79-18143
- Handling qualities aspects of the Bell Model 222 design and development program [JSS 79-26] p0122 A79-18152
- Analytical design of a high performance stability and control augmentation system for a hingeless rotor helicopter [JSS 79-27] p0122 A79-18153
- Simulation of automatic flight control system failures [JSS 79-28] p0122 A79-18154
- A piloted simulator investigation of augmentation systems to improve helicopter map-of-the-earth handling qualities [JSS 79-29] p0122 A79-18155
- Handling qualities of Army/Hughes YAH-64 advanced attack helicopter [JSS 79-31] p0122 A79-18157
- Wind-tunnel test results of a full-scale multicyclic controllable twist rotor [JSS 79-60] p0125 A79-18189
- Experimental effects of tip shape on rotor control loads [JSS 79-61] p0125 A79-18182
- Flap-lag-torsion aeroelastic stability of circulation-controlled rotors in hover [JSS 79-68] p0126 A79-18185
- On methods for application of harmonic control --- helicopter vibration reduction by blade pitch variation p0131 A79-18657

**HEATING SUBJECT INDEX**

- Analysis of free torsional rotor blade oscillations under special consideration of asymmetric swash-plate support p0131 A79-18660
- Helicopter flight control /HSF/ --- integrated system including PLIR and laser range finder p0156 A79-19900
- Army outlook -- Flight control systems --- for helicopters p0198 A79-22772
- Evaluation of IFP handling qualities of helicopters using the NASA airborne V/STOL simulator [AIAA 79-0702] p0276 A79-27365
- A flyable suspended model helicopter for the investigation of the human pilot behaviour p0412 A79-35923
- Model study of transient processes in a hydraulic power amplifier p0465 A79-38814
- A piloted simulator investigation of helicopter precision decelerating approaches to hover to determine single-pilot IFP/SPITR/ requirements [AIAA 79-1886] p0573 A79-45413
- Multiple technology applied to helicopters [JSS 79-14] p0627 A79-49067
- Advances in decelerating steep approach and landing for helicopter instrument approaches [AAE 79-16] p0628 A79-49069
- Spirit helicopter handling qualities design and development [JSS 79-24] p0629 A79-49076
- Improved method of predicting helicopter control response and gust sensitivity p0629 A79-49077
- Piloted simulator investigation of helicopter control systems effects on handling qualities during instrument flight [JSS 79-26] p0629 A79-49078
- Advanced Scout Helicopter flying qualities requirements - How realistic are they? [JSS 79-28] p0629 A79-49080
- Handling quality and display requirements for low speed and hover in reduced flight visibility [JSS 79-29] p0630 A79-49081
- Flight investigation of helicopter IFP approaches to oil rigs using airborne weather and mapping radar [JSS 79-52] p0633 A79-49104
- Analytical and experimental investigation of V-type empennage contribution to directional control in hover and forward flight [JSS 79-56] p0633 A79-49106
- Flight controls/avionics research -- Impact on future civil helicopter operating efficiency and mission reliability p0692 A79-53627
- Military considerations for helicopter flight controls p0692 A79-53628
- Three basics of design for civil certification p0692 A79-53629
- A direct drive fly-by-wire system p0692 A79-53630
- Optical control technology --- for helicopters-fiber-optic data transfer p0693 A79-53632
- STAR flight control system p0693 A79-53634
- Fly-by-wire tail rotor controls p0693 A79-53635
- Actuator and hydraulic survivability concepts for Hughes YAH-64 p0693 A79-53636
- Automatic Stabilization Equipment for the Army/Hughes YAH-64 Advanced Attack Helicopter p0693 A79-53637
- CH-53E digital automatic flight control system p0693 A79-53638
- Fiberglass flight controls --- of helicopters p0695 A79-53892

A-246
An investigation of the influence of fuselage flow field on rotor loads, and the effects of vehicle configuration  

2D simulation of unsteady phenomena on a rotor --- helicopter design  

Rotor blade lag plane frequency optimization using visco-elastic damping --- for helicopters  

The role of rotor impedance in the vibration analysis of rotorcraft  

Finite element dynamic analysis of production aircraft --- for rotor induced helicopter airframe vibrations  

The prediction of helicopter crew information requirements  

An operators viewpoint on future rotorcraft H & D criteria  

U.S. Army helicopter technology initiatives  

Advancements in design and testing of helicopter drive systems  

Demonstration of potential acoustic gains from conventional cabin soundproofing treatments  

Cabin noise reduction for the Agusta A-109 helicopter  

Integration of nondestructive testing methods into design for structural integrity assurance  

Design and checking of helicopter transmission components using photoelastic analysis techniques  

The unsafe zone for single engine helicopters --- height-speed envelopes at engine failure  

Flight research capabilities of the NASA/Air Force Rotor Systems Research Aircraft  

Green's function method for the computational aerodynamic analysis of complex helicopter configurations  

Recent developments in helicopter noise reduction  

Helicopter aerodynamics (DGLR PAPER 78-225)  

Analytical life estimation for helicopter components (DGLR PAPER 78-195)  

An advanced composite helicopter main rotor hub (AIAA PAPER 79-20876)  

Sikorsky S-76 stresses performance  

A helicopter fuselage design concept  

Helicopter rotor radius optimization (AIAA PAPER 79-0558)  

Advanced overrunning clutch technology --- US-60A helicopter transmission application (SAE PAPER 701039)  

An investigation of model helicopter rotor blade slap at low tip speeds (AIAA PAPER 79-0613)  

Fracture mechanics and fail-safe design for helicopter rotor structures (AIAA PAPER 79-26986)  

Perspectives of technological development for helicopters (AIAA 79-0701)  

Structural development of the Modernized Chinook helicopter transmission gearing (AIAA 79-0728)  

Structural stiffening of transmission housings with metal matrix materials (AIAA 79-0806)  

Design and development of an helicopter rotor hub and elastogantic bearing (AIAA 79-0815)  

An overview of technical problems in helicopter rotor loads prediction methods (AIAA 79-0816)  

Displays for Army combat aviation  

Study of some characteristics of helicopter rotor operation on the basis of a numerical experiment  

Advanced technology applied to the OH-60A and S-76 helicopters  

Review of problems of unsteady aerodynamics of helicopters  

Experimental analysis of V.H.F. antennas for helicopter honing systems using scale-model techniques  

Composite applications at Bell Helicopter (SAE PAPER 79578)  

New versus existing engines for new helicopter systems -- a life cycle cost view (AIAA PAPER 79-27-79-1316)  

User requirements for future combat search and rescue vehicles  

H-I combat search and rescue avionics study results  

Helicopter obstacle strike tolerance (AHS 79-7)  

A system for interdisciplinary analysis -- a key to improved rotorcraft design (AHS 79-8)  

Composite helicopter tail booms (AHS 79-9)  

Designing with experimental mechanics --- three-dimensional photoelastic analysis of helicopter components (AHS 79-11)  

Dynamics requirements for an Advanced Scout Helicopter (AHS/19)  

Evaluation of the practical aspects of vibration reduction using structural optimization techniques (AHS 79-21)  

Spirit helicopter handling qualities design and development (AHS 79-24)  

Development of a fly-by-wire elevator for the Bell Helicopter X-39 (AHS 79-39)  

Model 206L composite litter door (AHS 79-11)  

Superplastic forming diffusion bonding of titanium helicopter airframe components (AHS 79-33)  

Ground test vehicle testing -- in helicopter development programs (AHS 79-40)  

Design, analysis, and testing of a new generation tail rotor (AHS 79-57)  

Ten years of Aerospatiale experience with the fenestron and conventional tail rotor (AHS 79-58)  

Helicopter noise rules -- are they appropriate and reasonable (AHS 79-68)  

Aerospatiale A-350 and A-355 (AHS 79-9184)  

Design and development of the Agusta A-109 helicopter (AHS 79-9185)  

The Bell Model 222 (AHS 79-9186)  

Naval architectural considerations in the design of a helicopter (AIAA 79-2013)  

A study of some characteristics of the operation of a lifting propeller by numerical experiment (AHS 79-53728)  

Composite rotors -- an evolving art (AHS 79-53790)  

Composite for noise reduction -- helicopter structures (AHS 79-53791)  

Composite important to Black Hawk --- US-60A helicopter (AHS 79-53793)
<table>
<thead>
<tr>
<th>HELICOPTER PERFORMANCE</th>
<th>Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine/airframe/drive train dynamic interface documentation</td>
<td>[p0639 A79-49081]</td>
</tr>
<tr>
<td>Review of engine/airframe/drive train dynamic interface development problems</td>
<td>[p0638 A79-10668]</td>
</tr>
<tr>
<td>Engine/airframe/drive train dynamic interface documentation</td>
<td>[p0636 A79-10666]</td>
</tr>
<tr>
<td>US Army helicopter fatigue requirements and substantiation procedures</td>
<td>[p0634 A79-23075]</td>
</tr>
<tr>
<td>[AD-A0659988] Helicopter transmission vibration and noise reduction program</td>
<td>[p0637 A79-23973]</td>
</tr>
<tr>
<td>Prediction of aeroelastic instabilities in rotorcraft</td>
<td>[p0635 A79-27159]</td>
</tr>
<tr>
<td>Development of spiral-groove self-acting seals for helicopter engines</td>
<td>[p0711 A79-32551]</td>
</tr>
<tr>
<td>HELICOPTER PERFORMANCE</td>
<td>Subjects</td>
</tr>
<tr>
<td>Engine/airframe/drive train dynamic interface documentation</td>
<td>[p0639 A79-49081]</td>
</tr>
<tr>
<td>Review of engine/airframe/drive train dynamic interface development problems</td>
<td>[p0638 A79-10668]</td>
</tr>
<tr>
<td>Engine/airframe/drive train dynamic interface documentation</td>
<td>[p0636 A79-10666]</td>
</tr>
<tr>
<td>US Army helicopter fatigue requirements and substantiation procedures</td>
<td>[p0634 A79-23075]</td>
</tr>
<tr>
<td>Helicopter transmission vibration and noise reduction program</td>
<td>[p0637 A79-23973]</td>
</tr>
<tr>
<td>Prediction of aeroelastic instabilities in rotorcraft</td>
<td>[p0635 A79-27159]</td>
</tr>
<tr>
<td>Development of spiral-groove self-acting seals for helicopter engines</td>
<td>[p0711 A79-32551]</td>
</tr>
</tbody>
</table>

**SUBJECT INDEX**

An experimental study of coupled rotor-body aerostructural instability of hingeless rotors in hover | p1030 A79-18656 |
Effect of structural coupling parameters on the flap-lag forced response of a rotor blade in forward flight using Floquet theory | p1031 A79-18658 |
Application of the finite element method to rotary-wing aeroelasticity --- in helicopter hovering flight | p1031 A79-18659 |
Gust response and its alleviation for a hingeless helicopter rotor in cruising flight | p1031 A79-18662 |
Helicopter simulation in atmospheric turbulence | p1031 A79-18663 |
Simulation requirements for rotorcraft --- visual display, motion cue and computer considerations | p1032 A79-18666 |
Correlation aspects of helicopter flight mechanics and pilot behavior | p1032 A79-18667 |
Casualty evacuation by helicopter | p1032 A79-18669 |
Sea behaviour prediction of helicopters through free model tests | p1032 A79-18670 |
Ice protection systems of the Puma --- helicopter operations | p1032 A79-18664 |
Hybrid heater/paste and heater/flexible coating schemes for de-icing helicopter rotor blades | p1031 A79-18665 |
Helicopter flight-path and acoustic-signal repeatability for noise-diagnosis and noise-certification | p1034 A79-18686 |
Helicopter noise standards --- Another point of view: A national approach to rotorcraft noise regulation | p1035 A79-18687 |
Theoretical modeling of high-speed helicopter impulsive noise | p1037 A79-22474 |
Parameter identification applied to analytic hingeless rotor modeling | p1037 A79-22475 |
Infrared remote sensing on geothermal areas by helicopter | p1037 A79-22620 |
Sikorsky S-76 stresses performance | p1038 A79-22839 |
Reliability based quality /88W technique for evaluating the degradation of reliability during manufacturing --- for army helicopter systems and components | p1035 A79-23631 |
Calculation of hovering helicopter flight dynamics with a circulation-controlled rotor | p1032 A79-24179 |
Some statistical data on birds strike to aircraft and helicopters over the territory of the Soviet Union | p1032 A79-29354 |
Modeling helicopter flight dynamics --- Russian book | p1032 A79-31501 |
Inflatable survival systems for helicopters | p1043 A79-33624 |
Helicopter emergency escape | p1043 A79-33626 |
The derivation of a thickness noise formula for helicopter blade | p1045 A79-33627 |
Helicopter obstacle strike tolerance | p1046 A79-34055 |
Helicopter performance methodology at Bell Helicopter Textron | p1046 A79-34059 |
Helicopter transmission vibration and noise reduction program | [p0637 A79-23973] |
Prediction of aeroelastic instabilities in rotorcraft | [p0635 A79-27159] |
Development of spiral-groove self-acting seals for helicopter engines | [p0711 A79-32551] |
| [AHS-CR-159622] | |
Theoretical flap-lag damping with various dynamic inflow models
[AHS 79-201] p0626 A79-49073

Full scale ground and air resonance testing of the
Army-Boeing Vertol Rotorless Main Rotor
[AHS 79-23] p0629 A79-49075

Piloted simulator investigation of helicopter
control system effects on handling qualities
during instrument flight
[AHS 79-26] p0629 A79-49078

Advanced Scout helicopter flying qualities
requirements - how realistic are they?
[AHS 79-28] p0629 A79-49080

The influence of engine/fuel control design on
helicopter dynamics and handling qualities
AHS 79-37] p0631 A79-49089

Realization of a helicopter-oriented real-time
data system for research, experimental, and
prototype flight testing
[AHS 79-50] p0632 A79-49102

Design and development of the Agusta A109
helicopter
AHS 79-95] p0639 A79-49185

Flight controls/avionics research - Impact on
military and civil helicopter operating efficiency and
mission reliability
AHS 79-103] p0642 A79-53627

Three basics of design for civil certification
AHS 79-127] p0642 A79-53629

The cost of applying current helicopter external
noise reduction methods while maintaining
realistic vehicle performance
AHS 79-147] p0641 A79-10855

Lift performance indicator system feasibility study
[AD-A059236] p0653 A79-12079

Preliminary airworthiness evaluation EH-18
helicopter quick fix, phase 1
[AD-A059705] p0652 A79-13027

Rotary-wing aerodynamics, volume 2: Performance
prediction of helicopters
[NASA-CH-3083] p0287 A79-17081

Helicopter operations development plan

Observations on the dynamic stall characteristics
of advanced helicopter rotor airfoils
AHS 79-2006] p0352 A79-20006

Fatigue of helicopters: Service life evaluation
method
AHS 79-23079] p0438 A79-23079

A flight investigation of basic performance
characteristics of a tettetering-rotor attack
helicopter
[NASA-TH-00112] p0547 A79-27097

Review of airworthiness standards for certification
of helicopters for instrument flight rules (IFR)
operation
[AD-A068097] p0549 A79-27127

A compilation and analysis of helicopter handling
qualities data, volume 2: Data analysis
[NASA-CH-3145] p0672 A79-31222

Qualification tests for helicopters to be used on
board ships
[NLR-MP-78032-01] p0706 A79-32204

Processing of on-board recorded data for quick
analysis of aircraft performance - rotor
systems research aircraft

Flight test evaluation of the high inertia rotor
system
[AD-A0771698] p0715 A79-33195

Preliminary airworthiness evaluation OH-58C
helicopter
[AD-A0771699] p0715 A79-33196

Limited airworthiness and flight characteristics
evaluation model 219A helicopter with fiberglass
main rotor blades
[AD-A0771721] p0716 A79-33197

Preliminary airworthiness evaluation AH-1S
helicopter installed with enhanced cobra
armor system (AH-1S/2005)
[AD-A0771831] p0716 A79-33198

HELICOPTER PROPELLER DRIVE

The Lynx binary rotor system and flight
characteristics --- military helicopter
AHS 78-32] p0079 A79-16241

Trends in helicopter rotor head design
AHS 78-32] p0079 A79-16244

Inertia welding of TAD-64 main rotor drive shaft
[AHS 78-32] p0122 A79-18158

Damage tolerant design of the YAH-64 drive system
[AHS 79-46] p0123 A79-18169

The EBSN active isolation/rotor balance system ---
rotor system research aircraft
AHS 79-46] p0130 A79-18654

On methods for application of harmonic control ---
helicopter vibration reduction by blade pitch
variation
AHS 79-46] p0131 A79-18657

Free-feathering rotor --- helicopter applications
AHS 79-46] p0131 A79-18661

Status report on advanced development programs
utilizing circulation control rotor technology
AHS 79-37] p0133 A79-18677

Advances in design and testing of helicopter
drive systems
AHS 79-46] p0138 A79-18683

Design implications of recent gearbox noise and
vibration studies --- for helicopters
AHS 79-46] p0139 A79-18688

Advanced overrunning clutch technology ---
helicopter transmission application
AHS 79-46] p0258 A79-25907

Advanced technology applied to the CH-47 drive
system
[AHS 79-46] p0258 A79-25908

The Lynx transmission and conformal gearing ---
helicopter drive train
AHS 79-46] p0258 A79-25909

Developments in gear analysis and test techniques
for helicopter drive systems
[AHS 79-46] p0258 A79-25910

A laboratory study of the subjective response to
helicopter blade-slap noise
[NASA-CH-158973] p0108 A79-13819

HELICOPTER MOTORS

U Rotor blade motors

Fatigue data on a variety of non-woven glass
composites for helicopter rotor blades
AHS 79-19] p0628 A79-10971

A review of tail rotor design and performance
AHS 79-47] p0344 A79-31170

Advanced technology applied to the CH-46A and S-76
helicopters
AHS 79-47] p0344 A79-31172

Design, analysis, and testing of a new generation
tail rotor
[AHS 79-57] p0632 A79-89100

Fly-by-wire tail rotor controls
AHS 79-47] p0639 A79-53635

Rating helicopter noise
AHS 79-47] p0040 A79-10845

HELICOPTER WAKES

Green's function method for compressible unsteady
potential aerodynamic analysis of rotor-fuselage
interaction
AHS 79-47] p0129 A79-18645

Green's function method for the computational
aerodynamic analysis of coupled helicopter
configurations
[AIAA PAPER 79-0287] p0186 A79-19680

An iterative lifting surface method for thick
bladed bowing helicopter rotors
[AIAA PAPER 79-1517] p0576 A79-86705

A lifting-surface method for hover/club airloads
[AHS 79-47] p0626 A79-89056

Interactional aerodynamics --- a new challenge to
helicopter technology
[AHS 79-59] p0633 A79-89109

Interactional aerodynamics of the single rotor
canister configuration. Volume II: Frequency
analyses of wake single film data, basic
configuration wake exploration
[AD-A062013] p0302 A79-19956

Interactional aerodynamics of the single rotor
canister configuration. Volume I: One-third
cube test spectrograms of wake split-films
[AHS 79-47] p0129 A79-18645
data, fairings and surface devices --- utility aircraft

{AD-0062000} p0360 N79-20074

Interactional aerodynamics of the single rotor helicopter configuration. Volume 6-C:
One-third octave band spectrograms of wake single film data, hubcaps and air ejectors --- utility aircraft
{AD-0062800} p0360 N79-20075

Interactional aerodynamics of the single rotor helicopter configuration. Volume 7-A:
Frequency analyses of wake splilt-film data, build-up to baseline --- utility aircraft
{AD-0062399} p0360 N79-20076

Interactional aerodynamics of the single rotor helicopter configuration. Volume 7C:
Frequency analyses of wake split-film data, solid hubcaps --- utility aircraft
{AD-0062840} p0360 N79-20077

Interactional aerodynamics of the single rotor helicopter configuration. Volume 7-D:
Frequency analyses of wake split-film data, open hubcaps --- utility aircraft
{AD-0062841} p0360 N79-20078

Interactional aerodynamics of the single rotor helicopter configuration. Volume 7-E:
Frequency analyses of wake split-film data, air ejectors
{AD-0062900} p0361 N79-20079

Interactional aerodynamics of the single rotor helicopter configuration. Volume 7-F:
Frequency analyses of wake split-film data, air ejectors with hubcaps --- utility aircraft
{AD-0062117} p0361 N79-20080

Interactional aerodynamics of the single rotor helicopter configuration. Volume 7-G:
Frequency analyses of wake split-film data, fairings and surface devices --- utility aircraft
{AD-0062842} p0361 N79-20081

Interactional aerodynamics of the single rotor helicopter configuration. Volume 8-A:
One-third octave band spectrograms of wake split-film data, basic configuration wake explorations
{AD-0063712} p0376 N79-21012

Interactional aerodynamics of the single rotor helicopter configuration. Volume 8A:
One-third octave band spectrograms of wake split-film data, build-up to baseline
{AD-0063711} p0379 N79-21013

Interactional aerodynamics of the single rotor helicopter configuration. Volume 8-B:
One-third octave band spectrograms of wake split-film data, open hubcaps
{AD-0063211} p0379 N79-21014

Interactional aerodynamics of the single rotor helicopter configuration. Volume 8-B:
Frequency analyses of wake split-film data, basic configuration wake explorations
{AD-0063243} p0379 N79-21015

Interactional aerodynamics of the single rotor helicopter configuration. Volume 8B:
One-third octave band spectrograms of wake single film data, basic configuration wake explorations
{AD-0061861} p0482 N79-23931

Interactional aerodynamics of the single rotor helicopter configuration. Volume 8A:
Flow angle and velocity wake profiles in low frequency band, basic investigations and hub vibrations
{AD-0061766} p0482 N79-23932

Interactional aerodynamics of the single rotor helicopter configuration. Volume 8B:
Flow angle and velocity wake profiles in low frequency band, air ejection systems and other devices
{AD-0061767} p0483 N79-23933

HELCIOPERTS

WT AQ-6A HELICOPTER
WT BO-105 HELICOPTER
WT CH-46 HELICOPTER
WT CH-47 HELICOPTER
WT CH-54 HELICOPTER
WT COMARERO HELICOPTERS
WT H-53 HELICOPTER
WT HEAVY LIFT HELICOPTERS
WT MILITARY HELICOPTERS
WT OH-58 HELICOPTER
WT P-531 HELICOPTER
WT R-61A HELICOPTER
WT SH-3 HELICOPTER
WT SH-60A HELICOPTER
WT SH-61A HELICOPTER

WT SR-3 HELICOPTER
WT TANDER ROTOR HELICOPTERS
WT UH-1 HELICOPTER
WT UH-60A HELICOPTER
WT UH-61A HELICOPTER

Development and evaluation of a helicopter-borne water-quality monitoring system
{AD-0137} p0071 N79-15085

Helicopter navigation goals
{AD-0136} p0076 N79-16160

Role of helicopters in airport access
{AD-0028} p0128 N79-18574

Helicopter tail rotor noise generated by aerodynamic interactions
{AD-0135} p0135 N79-18689

The influence of the transonic flow field on high-speed helicopter impulsive noise
{AD-0135} p0135 N79-18690

Recent advancements in elastomeric products for improving helicopter reliability and maintainability
{AD-0135} p0136 N79-18695

Fatigue life estimation methods for helicopter structural parts
{AD-0136} p0136 N79-18697

Helicopter behaviour in crash conditions
{AD-0136} p0136 N79-18698

Crack speed and propagation resistance prediction for steels and Alloys helicopter components
{AD-0136} p0136 N79-18700

Height-velocity diagram determination for twin engine helicopters - Some aspects of present regulations
{AD-0136} p0137 N79-18702

Engineer's handbook of flight and radio equipment of airplanes and helicopters
{AD-0135} p0135 N79-31486

Model verification of force determination for measuring vibratory loads --- of rotors on helicopters
{AD-0135} p0135 N79-36379

Westland unveils W30 transport helicopter
{AD-0135} p0142 N79-30992

A new analytic method for the study of classic helicopter ground resonance
{AD-0135} p0158 N79-51767

The European helicopter industry and cooperation
{AD-0156} p0156 N79-62064

Calculation of rotor impedance for articulated-rotor helicopters in forward flight
{AD-0135} p0157 N79-42799

Agricultural helicopters --- test and simulation results
{AII 79-60} p0172 N79-69064

Automatic scanning inspection of composite helicopter structure using an advanced technology fluoroscopic system
{AII 79-35} p0181 N79-69087

Helicopter component environmental vibration testing - The poor man's fatigue test
{AII 79-947} p0182 N79-49101

A digital guidance and control system research results
{AII 79-51090} p0187 N79-51090

The future of the helicopter
{AII 79-50400} p0186 N79-51090

The dynamic ice detector for helicopters
{AII 79-10010} p0131 N79-10010

Highly survivable truss type tail boom
{AD-0093800} p0136 N79-10052

Engine/airframe/drive train dynamic interface documentation
{AD-0095660} p0138 N79-10064

Finite element analysis of helicopter structures
{AD-0095956} p0139 N79-10453

Helicopter Acoustics, part 2 --- conferences
{BASA-CP-2052-PS-2} p0140 N79-10883

Subjective evaluation of helicopter blade slap noise
{AD-0095} p0140 N79-10884

Helicopter cabin noise: Methods of source and path identification and characterization
{AD-0091} p0141 N79-10856

A practical approach to helicopter internal noise prediction
{AD-0091} p0141 N79-10857

The influence of the noise environment on crew communications
{AD-0091} p0141 N79-10860

A-252
<table>
<thead>
<tr>
<th>Subject Index</th>
<th>Helicopters Contd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helicopter internal noise reduction research and development application to the SA 360 and SA 365 Dauphin</td>
<td>Principles of helicopter performance [AD-A0616171] p033 779-18970</td>
</tr>
<tr>
<td>The status of rotor noise technology: One man's opinion</td>
<td>Casualty evacuation by helicopter [AD-A0619350] p030 779-19615</td>
</tr>
<tr>
<td>Trends in Langley helicopter noise research</td>
<td>Advancements in helicopter cockpit technology [AD-A0619355] p030 779-19625</td>
</tr>
<tr>
<td>Aeroacoustic research: An Army perspective</td>
<td>Visual pockets: A design parameter for helicopter instrument panels [AD-A0622554] p031 779-19641</td>
</tr>
<tr>
<td>Comprehensive helicopter analysis: A state of the art review</td>
<td>Some aspects of helicopter consummations [AD-A0622557] p031 779-19647</td>
</tr>
<tr>
<td>Unsteady aerodynamics of oscillating containers and application to the problem of dynamic stability of helicopter underslung loads [AD-A061351] p0177 779-15073</td>
<td>Civil Helicopter icing problems [AD-A065018] p043 779-23100</td>
</tr>
</tbody>
</table>
HELICOP TER I CING SYMPOSIU M  [AD-0067961] p0541 N79-26048
Icing tests of a UH-1H helicopter with an electrothermal ice protection system under simulated and natural icing conditions [AD-0067731] p0541 N79-26050
The influence of feedback on the aeroelastic behavior of tilt proprotor aircraft including the effects of fuselage motion [NASA-CR-158778] p0549 N79-27125
A simulation model of attack helicopter vulnerability to hostile artillery fire [AD-0069753] p0593 N79-29179
Helmet noise level functions for use in community noise analyses [AD-0069455] p0600 N79-29994
Helmet obstacle strike tolerance concepts analysis p0652 N79-30179
Helicopter drive system B and M design guide [AD-0069355] p0652 N79-30180
Helicopter drive system B and M design guide [AD-0069691] p0652 N79-30181
Investigations on the design of active vibration isolation systems for helicopters with rigid and elastic modeling of the fuselage [DLR-FR-78-04] p0653 N79-30183
The guidance and control of Helicopters and V/STOL aircraft at night and in poor visibility [AGARD-CP-258] p0659 N79-30198
The development and in-flight evaluation of a triplex digital autostabilization system for a helicopter p0655 N79-30200
Some aspects of the design and development of the maritime autopilot modes for the Westland Lynx helicopter p0655 N79-30201
A self contained collision avoidance system for helicopters p0656 N79-30206
An advanced guidance and control system for rescue helicopters p0657 N79-30217
The promise of multicyclic control -- to control fatigue and blade load and rotor vibration [NASA-TM-87621] p0663 N79-31137
Load spectrum measuring equipment. Part 1: Details of 94 systems presently used to acquire data in Wessex AR 318 helicopters [ABL-RECH-ENG-NOTN-371] p0668 N79-31194
Performance predictions and trials of a helicopter gms data link p0675 N79-31476
Helicopter flow field analysis [AD-0069542] p0702 N79-32174
Some nonlinear problems in transonic helicopter acoustics [AD-0069564] p0712 N79-32974
Nondestructive evaluation of fiber reinforced epoxy composites: A state-of-the-art survey --- applicable to helicopter structures [AD-0071973] p0719 N79-33263
HELIDRONE Calculation and design of closed cycle helium turbines for high temperature reactors p0423 N79-22098
HELIUM-NEON LASERS Small hole drilling and inspection with pulsed laser systems --- in air-cooled aircraft engine structures [AILA PAPER 79-1268] p0470 A79-39012
HELIPADS Helmet mounted display and sight development [AIR 79-17] p0628 A79-45070
An active noise reduction system for aircrew helmets [ONROO N79-10953] p0080 N79-10953
Control and display concepts for combat aircraft --- head-up displays and helmet display sight system p0356 N79-20019
HERCULES AIRCRAFT 0 C-130 AIRCRAFT
HONEYCOMB STRUCTURES

BONING DEVICES

HOLOHORPHISI

HOLOGRAPHY

HOLOGRAPHIC SPECTROSCOPY

HOLOGRAPHIC INTRR!EROHETRT

HOLDERS

HOLDERS

BT PLANE HOLDERS

HOLE DISTRIBUTION (MECHANICS)

Airfoil cooling hole plugging by combustion gas
impurities of the type found in coal derived fuels

[NASA-TM-79-20265]

Stress intensity analysis: Analytical, finite
element for surface flaws, holes

[AD-A058660]

Investigation of air stresses from combustor-liner
air entry holes, 3

[AD-A066117]

HOLOGRAPHIC INTERFEROMETRY

Determination of the wave drag of an airfoil in a
transonic flow by shear interferometers

[AD-A0598660]

Possibilities concerning the nondestructive
testing of composite materials with the aid of
holography

[HOT-WIRE PLOWNETERS]

Application of finite-element and holographic
techniques in the design of turbohaft engine
components

[HOT-WIRE ANEMOMETERS]

[HOT-FILM ANEMOMETERS]

SOT GASES

HOT GAS SYSTEMS

U JET FLCW

U JET EXHAUST

U STABILIZERS (FLUID DYNAMICS)

HORIZONTAL TAIL SURFACES

Aircraft wake flow effect and horizontal tail buffet
--- pressure distribution and responses of
fighter aircraft in transonic maneuvers

Aircraft stabilizer for the Sikorsky Spirit helicopter

(AF-ABP 1538)

A relative motion analysis of horizontal collision
avoidance

[NASA-CASE-PRC-11005-1]

A system for providing an integrated display of
instantaneous information relative to aircraft
temperature, heading, altitude, and horizontal
situation

[AD-A066117]

BONING DEVICES

Horizontal tail buffet for an active control relaxed stability
transport application

[AD-A056513]

AERODYNAMIC IMPACTS

Comparison of the aerodynamic properties of an
airplane with the tail-first configuration and
with the conventional configuration

[ILL-BTA-11520]

Optimise tail plane design for sailplane

[AD-A066117]

APPLICATION TO STRUCTURAL ADHESIVE JOINTS

A cyclic load test for environmental durability
evaluation on bonded honeycomb structure ---
aircraft AL panels

[AD-A0598660]

A helicopter fuselage design concept

[AD-A066117]

Aerospace industry review of aluminum and titanium
alloying systems --- Russian book

[AD-A066117]

Experimental analysis of V.A.P. antennas for
helicopter boom systems using scale-model
techniques

[AD-A066117]

Experience with net-shape processes for titanium
alloys

[AD-A066117]

Comparison of the aerodynamic properties of an
airplane with the tail-first configuration and
with the conventional configuration

[ILL-BTA-11520]

Optimise tail plane design for sailplane

[AD-A066117]

A relative motion analysis of horizontal collision
avoidance

[NASA-CASE-PRC-11005-1]

A system for providing an integrated display of
instantaneous information relative to aircraft
temperature, heading, altitude, and horizontal
situation

[AD-A066117]

Heat treatment of P/N nickel-base superalloys for
turbine disks

[AIAA 79-0757]

Aerospace industry review of aluminum and titanium
alloying systems --- Russian book

[AD-A066117]

Heat treatment of P/N nickel-base superalloys for
turbine disks

[AIAA 79-0757]

Aerospace industry review of aluminum and titanium
alloying systems --- Russian book

[AD-A066117]
HOT-RIB! TURBULENCE METERS
HOVERCRAFT
HOUSINGS
HOVERING
HOT-WIRE PLOWNETEBS
IT
IT COWLINGS
O GROUND

The flying hot wire and related instrumentation
Small hovercraft design - Evolution to simplicity
A simulation of amphibious hovercraft overturning
Theater - I - Air cushion ice breaker in commercial
Hovercraft skirt design requirements
Flap-lag-torsion aeroelastic stability of
A calculation of rotor impedance for hovering
Hovering impulsive noise - Some measured and
Some basic test results of V/STOL jet induced lift
Current Canadian developments related to low-speed

HOVERING
Definition and analytical evaluation of a power
management system for tilt-rotor aircraft
Flap-lag-torsion aeroelastic stability of
circulation-controlled rotors in hover
A calculation of rotor impedance for hovering
Articulated-rotor helicopters
Some basic test results of V/STOL jet induced lift
effects in hover
A comparison of linear acoustic theory with
experimental noise data for a small-scale
hovering rotor
A simple fluid-flow model of ground effect on
Hovering impulsive noise - Some measured and
calculated results -- from helicopter rotors in an
anechoic chamber

Effect of tip shape on blade loading
characteristics for a two-bladed rotor in hover
A lifting-surface method for hover/climb airloads
Handling quality and display requirements for low
speed and hover in reduced flight visibility
Analytical and experimental investigation of
V-type engine/contribution to directional
control in hover and forward flight
A simple fluid-flow model of ground effect on
hovering
A lifting surface performance analysis with
circulation coupled wake for advanced
configuration hovering rotors
Doppler Ewer Systes (BBS) flight test report
An examination of the factors affecting the thrust
requirements and the hover and short takeoff
performance of several jet V/STOL fighter concepts
Flag-lag-torsion flutter analysis of a constant
life rotor
Stabilized Terrain Optical Position Sensor (STOPS)
flight test report
A method of computing the pressure distribution on
a single-bladed hovering helicopter rotor
An evaluation of linear acoustic theory for a
hovering rotor
A unique facility for V/STOL aircraft hover testing

A simple fluid-flow model of ground effect on
hovering
An examination of coupled rotor-body

aeromechanical instability of hingeless rotors in hover
Application of the finite element method to
rotary-wing aeroelasticity --- in helicopter
hovering flight
Calculated hovering helicopter flight dynamics
with a circulation-controlled rotor
A unique facility for V/STOL aircraft hover testing
Effect of inertia of blower on stability of
air-cushion vehicle
Longitudinal dynamic stability of a hovering
helicopter with a sling load
Alleration of stability and control difficulties
of a V/STOL Type B aircraft
A piloted simulator investigation of helicopter
precision decelerating approaches to hover to
determine single-pilot IFR /SIMPL/ requirements
Development of V/STOL aircraft - 1950 to 1970
The principles of hovercraft, powering and
propulsion
Wind tunnel and flight test of the XV-15 Tilt
Rotor Research Aircraft

Composite rotor hub. I, II --- fatigue and load
tests for CH-54B helicopter design
Moments on the hub of a lifting propeller with
hinge-mounted blades
An advanced composite helicopter main rotor hub
Design and development of an helicopter rotor hub
and elastomeric bearing
Effect of hub and tip annular flow blockage on the
performance of a single-stage axial flow
compressor
Development of linear and non-linear hub springs
for two-bladed rotors
An Integrated analytical and experimental
investigation of helicopter hub drag
Design, fabrication and laboratory testing of a
helicopter composite main rotor hub ---
graphtite-epoxy hubs for the CH-54 helicopter
Interdisciplinary aerodynamics of the single rotor
helicopter configuration. Volume 4-3:
One-three octave band spectrograms of wake
split-film data, open hubcaps
Interdisciplinary aerodynamics of the single rotor
helicopter configuration. Volume 4-1:
One-three octave band spectrograms of wake
split-film data, open hubcaps

HUGHES AIRCRAFT

HUGHES MILITARY AIRCRAFT

HUMAN ENGINEERING
 HYDROELASTICITY

a gliding flat-bottomed plate with keel

THERMOELASTICITY AND DYNAMIC PHENOMENA IN SOLIDS
ARSENOV, A. A., 1979, HYDROGEN AND NUCLEAR REACTORS, PHYSICAL PROBLEMS OF REACTOR NUCLEAR ENERGY, VINITI, U15754

PERFORMANCE OF A TAP-2 HYDROFOIL
[AD-H065102]

HYDROFOILS
U HYDROFOIL CRAFT
U HYDROFOIL BOATS
U HYDROFOIL WINGS

GAS TURBINES FOR AVIATION, AIRCRAFT AND AIRCRAFT MOTORS
[AD-H064486]

HYDROFOIL CRAFT
U HYDROFOIL WINGS
U HYDROFOIL BOATS

PERFORMANCE OF A TAP-2 HYDROFOIL
[AD-H065102]

HYDROGEN

HYDROGEN ENGINES

HYDROGEN COMPOUNDS

HYDROGEN FLUIDS

HYDROGEN CERAMICS

HYDROGEN FUELS

HYDROGEN ENGINES

HYDROGEN ENGINES

HYDROELASTICITY

a gliding flat-bottomed plate with keel

THERMOELASTICITY AND DYNAMIC PHENOMENA IN SOLIDS
ARSENOV, A. A., 1979, HYDROGEN AND NUCLEAR REACTORS, PHYSICAL PROBLEMS OF REACTOR NUCLEAR ENERGY, VINITI, U15754

PERFORMANCE OF A TAP-2 HYDROFOIL
[AD-H065102]

HYDROFOILS
U HYDROFOIL CRAFT
U HYDROFOIL BOATS
U HYDROFOIL WINGS

GAS TURBINES FOR AVIATION, AIRCRAFT AND AIRCRAFT MOTORS
[AD-H064486]

HYDROFOIL CRAFT
U HYDROFOIL WINGS
U HYDROFOIL BOATS

PERFORMANCE OF A TAP-2 HYDROFOIL
[AD-H065102]

HYDROGEN

HYDROGEN ENGINES

HYDROGEN COMPOUNDS

HYDROGEN FLUIDS

HYDROGEN CERAMICS

HYDROGEN FUELS

HYDROGEN ENGINES

HYDROGEN COMPOUNDS

HYDROGEN FLUIDS

HYDROGEN CERAMICS

HYDROGEN FUELS

HYDROGEN ENGINES

HYDROGEN COMPOUNDS

HYDROGEN FLUIDS

HYDROGEN CERAMICS

HYDROGEN FUELS

Hydrogen enrichment for low-emission jet combustion

Optimizing scramjet performance using a laser induced fluorescence technique
[AD-A096781]

Thermodynamic and dynamic phenomena in solid...
HYPERSONIC PLIGHT

HYPERSONIC PLOW

Formulation of aerodynamic prediction techniques for hypersonic configuration design

Experimental and finite element investigation of the buckling characteristics of a beaded skin panel for a hypersonic aircraft

High heat flux actively cooled honeycomb sandwich structural panel for a hypersonic aircraft

Recent advances in structures for hypersonic flight, part 1 --- conferences

Hypersonic structures: An aerodynamicist’s perspective, or one man’s dream is another man’s nightmare

Recent advances in convectively cooled engine and airframe structures for hypersonic flight

Design and analysis of a scramjet engine --- regenerative cooled and airframe-integrated advanced cooling systems

Advanced fabrication techniques for cooled engine structures

Design and fabrication of a skin stringer discrete tube actively cooled structural panel

Design and analysis of a plate-fin sandwich actively cooled structural panel

Design and fabrication of a radiative actively cooled honeycomb sandwich panel

Radiative, actively cooled panel test results

HYPERSONIC FLIGHT

Autoignition of hydrogen injected transversely to a supersonic airstream

Numerical methods for solution of radiative-conductive heat transfer problems --- Radiative boundary layer for hypersonic blunt bodies in dense atmosphere

Flowfield chemistry effects on stability of blunt slender cones

Configuration development study of the X-24C hypersonic research airplane, phase 1

Recent Advances in Structures for Hypersonic Flight, part 2

Structures and TPS for the NRFBP/LTED

HYPERSONIC FLOW

Oscillating airfoils, II - Newtonian flow theory and application to power-law bodies in hypersonic flow

Comparative study of the convergence rates of two numerical techniques

Effect of the entropy layer on the hypersonic flow around aerodynamic control surfaces

Hypersonic flow over conical wing-body combinations

Parabolized Navier-Stokes solutions for hypersonic viscous flows over blunt cones at large angles of attack

Hypersonic viscous shock layer on infinite-span arrow wings at angle of attack

Second approximation in theory of a finite-span thin wing in a hypersonic gas flow

HYPERSONIC HEAT TRANSFER

Correlation of predicted and measured thermal stresses on an advanced aircraft structure with similar materials

HYPERSPEED F PERSPECTIVES

Effect of cooling of the central body on startup, separation of the flow at the intake and the throttling characteristics of air scoops at supersonic and hypersonic velocities

Conceptual study of a turbojet/ramjet inlet

HYPERSONIC SPEED

Effect of slip on the aerodynamic characteristics of a wing at hypersonic speed

HYPERSONIC VEHICLES

Hydraulic vehicles

On the aerodynamics of hypersonic cruise vehicles at off-design conditions

Optimization of hypersonic three-dimensional shapes and flight test requirements

Theoretical and experimental investigation of the aerodynamic characteristics of three-dimensional bodies

An analytic theory of supersonic/hypersonic stability at high angles of attack

Airframe-integrated propulsion system for hypersonic cruise vehicles

Hypersonic airframe structures: Technology needs and flight test requirements

HYPERSONIC WIND TUNNELS

NT CASCADE WIND TUNNELS

NT SHOCK TUNNELS

Stability and pressure measurements in the Naval Surface Weapons Center hypervelocity tunnel

Calculation of the working process in a piston-type 'slow' compression wind tunnel

Extension of running time in the NASA hypersonic shock tunnel

HYPERSONIC IMPACT

HYPERSONIC PROJECTILES

Analysis of high velocity impact on hybrid composite fan blades

Fuel tank survivability for hydrodynamic ram induced by high velocity fragments. Part 2: Numerical analyses

HYPERSONIC PROJECTILES

Optimum operating techniques of two-state hypersonic gun tunnel

HYPERSONIC WIND TUNNELS

NT CASCADE WIND TUNNELS

NT SHOCK TUNNELS

HYSTERESIS

Wing rock due to aerodynamic hysteresis
Aircraft icing: Introduction

Preventive summary of Aircraft Icing Specialists Workshop

Icing of aircraft Some remarks with an historical slant from a cloud physicist

Safety hazard of aircraft icing

Civil Helicopter icing problems

A review of the icing situation from the standpoint of general aviation

Overview of helicopter ice protection system developments

An operational research investigation of the ice-detection capability and utility of the surface condition analyzer (SCAN) system and its applicability to Navy-wide use

Hybrid heater/paste and heater/flexible coating schemes for de-icing helicopter rotor blades

Vibratory ice protection for helicopter rotor blades

Artificial icing test photic coatings on 8-18-105 engine installation

Roads and runways, snow removal and deicing techniques. A bibliography with abstracts

Ice protection systems of the Puma --- helicopter operations

A cheap, effective icing detector for general aviation aircraft

Aircraft icing: Introduction

Aircraft icing

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION

ICE FORMATION
The enhancement of aircraft parameter identification using linear transformations --- for stability

A computer program for aircraft identification and derivative extraction

Estimation of longitudinal aircraft characteristics using parameter identification techniques

Recent results in parameter identification for high angle-of-attack stall regimes [AIAA PAPER 79-1640]

An IFF antenna with superior sidelobe and backlobe suppression characteristics

The enhancement of aircraft parameter estimation of longitudinal aircraft

A computer program for aircraft identification and parameter estimation applicable to aircraft identification problem

An 1FF antenna with superior sidelobe and backlobe suppression characteristics

Real-time compression of video signals --- protection against jamming

Scan converter and raster display controller for night vision display systems

The effect of image tilt of a virtual image display on simulated transport touchdown performance [NASA TP-1520]
<table>
<thead>
<tr>
<th>IMPACT</th>
<th>SUBJECT INDEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMPACT</td>
<td>The integrity of aircraft jet engines under the impact of foreign bodies p0556 N79-27174</td>
</tr>
<tr>
<td>ECONOMIC IMPACT</td>
<td>IMPACT SENSITIVITY</td>
</tr>
<tr>
<td>HYPERVELOCITY IMPACT</td>
<td>IMPACT SENSITIVITY</td>
</tr>
<tr>
<td>IMPACT DAMAGE</td>
<td>IMPACT LOADS</td>
</tr>
<tr>
<td>Improved ballistic damage tolerant design through laminated metal construction p0014 A79-10912</td>
<td></td>
</tr>
<tr>
<td>Improved ballistic damage tolerant design through laminated metal construction p0014 A79-10912</td>
<td></td>
</tr>
<tr>
<td>The survivability of helicopters to rotor blade ballistic damage p0014 A79-10913</td>
<td></td>
</tr>
<tr>
<td>Impact behavior of filament-wound graphite/epoxy fan blades - foreign object damage to turbofan engines p0189 A79-20860</td>
<td></td>
</tr>
<tr>
<td>Damage-tolerant fan blade design [AIAA PAPER 79-1119] p0466 A79-38951</td>
<td></td>
</tr>
<tr>
<td>Non destructive evaluation of impact damage in thick graphite composite aircraft structures - for dropped tools on airfields p0530 A79-43257</td>
<td></td>
</tr>
<tr>
<td>Helicopter obstacle strike tolerance [AHS 79-7] p0626 A79-49059</td>
<td></td>
</tr>
<tr>
<td>Crashworthy armored crewseat for the OH-60A Black Hawk [AHS 79-10] p0627 A79-49062</td>
<td></td>
</tr>
<tr>
<td>Laboratory test procedures to determine lightning attachment points on actual aircraft parts /A qualification test/ p0681 A79-51133</td>
<td></td>
</tr>
<tr>
<td>Laboratory tests to determine the physical damage /direct effects/ caused by lightning /qualification test/ p0681 A79-51136</td>
<td></td>
</tr>
<tr>
<td>NASA/FAA general aviation crash dynamics program - An update p0689 A79-52694</td>
<td></td>
</tr>
<tr>
<td>Impact of soft bodies on jet engine fan blades [AD-A058198] p0094 N79-12091</td>
<td></td>
</tr>
<tr>
<td>Engineering analysis of crash injury in army aircraft p0312 N79-19655</td>
<td></td>
</tr>
<tr>
<td>A method for selecting a crashworthy fuel system design p0312 N79-19661</td>
<td></td>
</tr>
<tr>
<td>The approach to crew protection in the crash environment for the YAH-64 p0312 N79-19664</td>
<td></td>
</tr>
<tr>
<td>Interna field procedure for bomb damage repair using crushed limestone for crater repairs and simikad trade name for spall repairs [AD-A069617] p0580 N79-28189</td>
<td></td>
</tr>
<tr>
<td>Helicopter obstacle strike tolerance concepts analysis [AD-A069677] p0652 N79-30179</td>
<td></td>
</tr>
<tr>
<td>IMPACT DECLARATION U DECELERATION</td>
<td></td>
</tr>
<tr>
<td>IMPACT LOADS</td>
<td>IMPACT RESISTANCE</td>
</tr>
<tr>
<td>Composite components under impact load and effects of defects on the loading capacity [DCLB PAPER 78-190] p0104 A79-20981</td>
<td></td>
</tr>
<tr>
<td>Hugoniot pressure loading in soft body impacts - on aircraft [AIAA 79-0782] p0321 A79-29026</td>
<td></td>
</tr>
<tr>
<td>Large plastic deformation analysis of impulsively loaded curved frames [AIAA 79-0784] p0322 A79-29028</td>
<td></td>
</tr>
<tr>
<td>IMPACT PREDICTION</td>
<td>IMPACT RESISTANCE</td>
</tr>
<tr>
<td>Optical missile guidance for low mass and perpendicular impact [AIAA 79-1734] p0571 A79-45377</td>
<td></td>
</tr>
<tr>
<td>IMPACT RESISTANCE</td>
<td>IMPACT RESISTANCE</td>
</tr>
<tr>
<td>Damage tolerant design of the YAH-64 drive system [AHS 78-46] p0123 A79-18169</td>
<td></td>
</tr>
<tr>
<td>Multidimensional advanced composites for improved impact resistance p0208 A79-29080</td>
<td></td>
</tr>
<tr>
<td>Test methodology correlation for foreign object damage [AD-A057322] p0959 N79-12093</td>
<td></td>
</tr>
<tr>
<td>Test of crash-resistant fuel system for general aviation aircraft [HA-A-D-78-122] p0229 N79-16815</td>
<td></td>
</tr>
<tr>
<td>Rain-erosion resistant materials in air and space travel [VAR-LIB-TRANS-2003] p0385 N79-21201</td>
<td></td>
</tr>
</tbody>
</table>
images on head-up displays for night or all-weather operations --- for military helicopters  p0079 A79-16240
Infrared resolution target system p0081 A79-16550
Infrared remote sensing on geothermal areas by helicopter p0197 A79-22620
Reliability growth on B-52 FLIR systems p0248 A79-24658
Elimination of scale and turbulence distortions in thermal imaging systems with a large field of view --- onboard aircraft p0277 A79-27416
INFRARED LASERS
Multifunction CO2 heterodyning laser radar for low level tactical operations p0620 A79-48685
INFRARED RADIATION
Infrared signature measurement techniques and simulation methods for aircraft survivability [ AIAA PAPER 79-1186] p0468 A79-38975
INFRARED IMAGING
Detection of fast and low altitude wind shear by on-board aircraft IR sensors - An update p0403 A79-33630
INFRARED SCANNERS
IR scanning camera measurements of an exhaust plume from a axisymmetric nozzle afterbody model at transonic Mach numbers p0281 A79-28097
INFRARED SPECTROMETERS
Infrared signature measurement techniques and simulation methods for aircraft survivability [ AIAA PAPER 79-1186] p0468 A79-38975
INFRARED THERMOMETERS
Infrared landing system for a mini remotely-piloted vehicle p0019 A79-12093
Infrared resolution target system p0081 A79-16550
Optoelectronic devices for flight vehicle control systems --- Russian book p0185 A79-20665
Measuring systems to the target p0650 A79-53723
INFRASONIC FREQUENCIES
Monitoring atmospheric winds with Concorde-generated infrasound p0574 A79-46225
INGESTION (ENGINES)
Descent-tolerant fan blade design [ AIAA PAPER 79-1119] p0466 A79-38951
V/STOL aircraft configuration effects on exhaust gas ingestion [ AIAA PAPER 79-1284] p0471 A79-39019
The integrity of aircraft jet engines under the impact of foreign bodies p0554 A79-27174
INHIBITORS
WT CRASH INJURIES
Water absorption of fluids/oils --- contamination of aircraft engine oils and inhibitors [ AD-A059153] p0488 A79-28158
INITIAL VALUE PROBLEMS
G BOUNDARY VALUE PROBLEMS
INJECTION
WT FLUID INJECTION
WT FUEL INJECTION
WT GAS INJECTION
WT LIQUID INJECTION
WT WATER INJECTION
INJECTION CARTRIDGES
WT DYE INJECTION
INJECTORS
WT WATER INJECTORS
Instability of fluid flow in centrifugal injectors p0279 A79-27731
Combined pressure and temperature distortion effects on internal flow of a turbofan engine [AIAA PAPER 79-1103]

Aerodynamic improvement of the inlet pipe of a gas turbine [p0526 A79-22560]

An analysis of air intakes in the boundary layer [p0526 A79-24562]

Performance of a V/STOL tilt nozzle inlet with blowing boundary layer control [AIAA PAPER 79-1163]

Recent applications of theoretical analysis to V/STOL inlet design [p0636 A79-49530]

An approach to optimum subsonic inlet design [NASA-TM-79051]

Measurements of inlet flow distortions in an axial flow fan (6-8 blade rotor) [NASA-CR-157882]

Theoretical study of V/STOL tilt-nozzle airfoil [NASA-TM-1380]

Experimental evaluation of the effect of inlet distortion on compressor blade vibrations [NASA-TM-79089]

Effects of inflow distortion profiles on fan tone noise calculated using a 3-D theory [p0227 N79-16647]

Aerodynamic and Mechanical factors affecting the surge line: Inlet flow distortion influences on axial flow compressors [p0307 N79-19363]

Unsteady effects of circumferential pressure disturbed inlet flows in compressors [AD-A062550]

An experimental study of response of a turbo-machine rotor to a low frequency inlet distortion [AD-A064776]

Effect of steady-state pressure distortion on flow characteristics entering a turbofan engine [NASA-TM-79134]

Self stabilizing sonic inlet [NASA-CAS-LSW-11890-1]

Performance of a V/STOL tilt nozzle inlet with blowing boundary layer control [NASA-TM-79176]

Effect of rotor meridional velocity ratio on response to inlet radial and circumferential distortion [NASA-TM-1276]

Recent applications of theoretical analysis to V/STOL inlet design [NASA-TM-79211]

Effect of steady-state temperature distortion and combined distortion on inlet flow to a turbofan engine [NASA-TM-79237]

An experimental study of the response of a turbo-machine rotor to a low frequency inlet distortion [p0546 N79-27093]

INLET NOZZLES

Preliminary flight and wind tunnel comparisons of the inlet/airframe interaction of the F-15 airplane [AIAA PAPER 79-0102]

Analysis of radiation patterns of interaction tones generated by inlet rods in the J15D engine [AIAA PAPER 79-0581]

Asymmetric distortion generation in a variable height annulus --- for compressor inlet flow [NASA-TM-79002]

An approach to optimum subsonic inlet design [ASEP PAPER 79-05-51]

Aerodynamic improvement of the inlet pipe of a gas turbine [p0526 A79-42560]

Inlet design studies for a Mach 2.2 advanced supersonic cruise vehicle [AIAA PAPER 79-1614]

High angle of incidence implications upon air intake design and location for supersonic cruise aircraft and highly maneuverable transonic aircraft [p0684 A79-51247]

Theoretical fan velocity distortions and nozzle --- in V/STOL aircraft [NASA-TM-79150]

INLET PRESSURE

Determination of ejector nozzle starting parameters [p0341 A79-30527]

Total pressure recovery of flared fan nozzles used as inlets [p0521 A79-24178]

Predicted F100 engine response to circumferential pressure and temperature distortion [p0502 A79-25412]

Further test results with the airjet distortion generator - a new tool for aircraft turbine engine testing [AIAA PAPER 79-1185]

Unloading the drive of gas distributor valves operating at high pressures [p0526 A79-42564]

INLETS (DEVICES)

U NTAKE SYSTEMS

INORGANIC COATINGS

INORGANIC NITRATES

INLET PEBSSOBB

INPUT/OUTPUT ROUTINES

VORTAB - a data-tablet method of developing input data for the VORTAB program [NASA-CR-155926]

Digital Avionics Information System [AIAA PAPER 79-0581]


INSECTS

Some aspects of unsteady insect aerodynamics: Acceleration potential methods in plane unsteady airfoil theory, and measurements of unsteady-periodic forces generated by the blowfly [p0765 N79-31154]

INSPECTION

U NTAKE SYSTEMS

INSPECT

INSPECTIONS

INSPECTIONS (SUBJECT INDEX)

SUBJECT INDEX

INSPECTIONS
INSTRUMENT APPROACH
Development of a microwave multilateration system for V/STOL landing guidance
A review of helicopter control-display requirements for decelerating instrument approach
Survey of helicopter control/display investigations for instrument decelerating approach
Subjective assessment of a helicopter approach system for IFR conditions
Simulation and study of V/STOL landing aids for USNC AV-8 aircraft

INSTRUMENT ERRORS
Comparison of typical gyro-errors for strapdown applications
Experience with integrated navigation involving compensation according to the method of the least squares --- for air traffic control
Small signal compensation of magnetic fields resulting from aircraft maneuvers

INSTRUMENT FLIGHT RULES
ATC simulations for the implementation of bilingual IFR control in Canada
Evaluation of IFR handling qualities of helicopters using the NASA airborne V/STOL simulator
A piloted simulator investigation of helicopter precision decelerating approaches to hover to determine single-pilot IFR/SIR/A/ requirements
Piloted simulator investigation of helicopter control systems effects on handling qualities during instrument flight
Flight investigation of helicopter IFR approaches to oil rigs using airborne weather and mapping radar
Single pilot IFR operating problems determined from accidental data analysis
Evaluation of a flight simulator (device 282Q) for maintaining instrument proficiency among instrument-rated army pilots
LED instrument approach instruction display
General aviation IFR operational problems

INSTRUMENT LANDING SYSTEMS
Review of airworthiness standards for certification of helicopters for Instrument Flight Rules (IFR) operation
Coupling of ILS and inertial data in all weather approach and landing operations
System for confirming ILS or MLS for Cat II type landing without decision height
The MLS approach and landing system
The ILS glidepath - New designs for severe sites
New technology SFL simulator
Inertial Referenced Flight Inspection System
Advances in decelerating steep approaches to hover for helicopter instrument approaches
The 7 6 E simulator - A comparison with flight test results
An evaluation of some display parameters for an advanced landing display
The Look-point Aircraft Coordinate Estimator (LACE) and potential applications
State of the Federal Aviation Administration’s microwave landing system
Evaluation of a remote tone signaling control/monitor system as lightning/transient protection for solid state instrument landing systems
An asynchronous data transmission system with low error probability for the SSTC landing aid
Airborne determination of ground speed: A feasibility study --- instrument landing systems approaches
The selection of glide slope antenna patterns for use in the frequency assignment process

INSTRUMENT PACKAGES
A modular approach to airborne research instrumentation

INSTRUMENTAL ANALYSIS
U AUTOMATION
ININSULATION
ET ELECTRICAL INSULATION
XTRA SYSTEMS
ET AIR INFLUENCES
ET AXIAL INFLUENCES
ET ENGINE INLETS
ET BICEPHALIC INLETS
ET SUPERSONIC INLETS
ET INTERNAL COMPRESSION INLETS
ET SUPERSONIC INLETS
Development of an inlet for a tilt nacelle subsonic V/STOL aircraft
The effect of intake conditions on supersonic flatness in turbofan engines
Influence of the ellipticity of the inlet section of an S-shaped air intake on the uniformity of the outward flow --- for aircraft engines
An experimental study of a catalytic combustor for an expendable turbojet engine
An approach to optimum subsonic inlet design
Icing trials on the front fuselage and engine intakes of helicopters at conditions simulating forward flight
Applications of velocity potential function to acoustic duct propagation and radiation from inlets using finite element theory

INSTRUMENTคณะกรรมการ
SUBJECT INDEX

Theoretical and experimental investigation of the flow at the inlet of the vaned diffuser for a high pressure ratio centrifugal compressor
[VT-TR-125] p0226 A79-16421
Full-scale engine tests of bulk absorber acoustic inlet treatment
A study of inlet conditions for three-dimensional transonic compressor flows
[AD-A062688] p0361 A79-20086
Application of finite element techniques in predicting the acoustic properties of turbofan inlets

Intake design and intake/airframe integration for a post-stall fighter aircraft concept
Wind tunnel test at low speeds of a dorsal air intake on a fighter configuration

Wind-tunnel shock-tube simulation and evaluation of blast effects on an engine inlet

Theoretical fan velocity distortions due to inlets and nozzles --- in/STOL aircraft

Unsteady rotor/stator blade loading in an axial compressor with steady-state inlet distortions

Distortions, rotating stall, and mechanical solicitations

The unsteady aerodynamics of a cascade in translation

An experimental study of sound radiation from hyperboloidal inlet ducts

INTEGRAL EQUATIONS
NT SINGULAR INTEGRAL EQUATIONS
Three-dimensional lifting-surface theory for an annular blade row

Construction of an initial approximation for the solution of the integral equation of a lifting surface

The transonic integral equation method with curved shock waves

Boundary-integral equation analysis of an advanced turbine disk rim slot

INTEGRAL TRANSFORMATIONS
NT LAPLACE TRANSFORMATION

INTEGRATED CIRCUITS
NT LARGE SCALE INTEGRATION
Advances in avionics --- emphasizing microprocessor technology and integrated circuits

[NASA-PAPER 79-0528] p0622 A79-38117
Radar signal processing development for application of VHSI

Integrated CMOS avionics --- ECR-resistant Communication, Navigation and Identification

Development of a 10 KVA power conditioner unit, aircraft, 115/200 volt, 3-phase, 400 Hz

Hybrid packaging of integrated circuits for engine controls --- jet engines

INTEGRATED OPTICS
Aerospace and military -- Progress in space structure research, aircraft landing systems, integrated optics, and digital communications

INTEGRATORS
NT DIGITAL INTEGRATORS

INTEGRODIFFERENTIAL EQUATIONS
U DIFFERENTIAL EQUATIONS
U INTEGRAL EQUATIONS

INTELLIGENCE
NT ARTIFICIAL INTELLIGENCE

INTERACTIVE GRAPHICS
U GRAPHICS
INTERNAL COMPRESSION INLETS

- NT TURBOPROP ENGINES
- NT WANKEL ENGINES
  - Plane engine - Alternative fuels
  - Computer simulation of an aircraft engine fuel
  - injection system
    - [NASA-CR-152414]
    - p0174 W79-15052

INTERNAL COMPRESSION INLETS

- The influence of compressor inlet guide
  - vane/rotor relative circumferential positioning
  - on blade wake transport and interaction
    - [AD-A067969]
    - p0543 W79-26060

INTERNAL PRESSURE

- Combined pressure and temperature distortion
  - effects on internal flow of a turbofan engine
    - [AIAA PAPER 79-1309]
    - p0471 A79-39021

INTERNAL STRESS

- U RESIDUAL STRESS
- INTERNATIONAL COOPERATION
  - The German-Dutch wind tunnel DNV - Design aspects
  - and status of construction
    - p0155 A79-20115
  - Aircraft engine emissions are under continuing
  - surveillance
    - p0342 A79-30581
  - Internationalization of GMFG
    - p0447 A79-36069
  - Can Europe choose a common fighter
    - p0512 A79-41209
  - The European helicopter industry and cooperation
    - p0516 A79-42064
  - CPM56 - An act of cooperation, a new class of
  - engine, a path towards the aeronautics of tomorrow
    - p0516 A79-42065
  - Eurocopter - An example of cooperation with
  - respect to missiles
    - p0517 A79-42067
  - Development of an airborne military system (MECA
  - system)
    - [MBB-DPB-1322-0]
    - p0480 W79-23904
  - Review of the AGARD S and II panel evaluation
  - program of the NASA-Lewis SRP approach to
  - high-temperature LCF life prediction
    - p0555 W79-27179

INTERNATIONAL LAW

- Problems of airports in the vicinity of foreign
  - states
    - p0343 A79-30940
  - Wake turbulence and the jumbo jets - Whose
  - responsibility, pilot or controller
    - p0343 A79-30943

INTERNATIONAL RELATIONS

- NT INTERNATIONAL COOPERATION
  - International Air Transportation Competition Act
  - of 1978 --- congressional reports
    - [CPD-3A-912]
    - p0651 W79-30168
  - INTERNATIONAL TRADE
  - Joint Airworthiness Requirements - Their history
  - and progress
    - p0460 A79-37149

INTERPLANETARY FLIGHT

- Path in rocket technology - Selected works,
  1924-1946 --- Russian book
    - p0278 A79-27599

INTERPLANETARY PROPULSION

- NT ROCKETS ENGINES
- NT INTERPOLATION
  - Application of a factorial interpolation method to
  - the analytical designging of aircraft landing gears
    - p0308 A79-32052
  - Time optimal control of a jet engine using a
  - quasi-inverse interpolation model
    - [NASA-CR-158711]
    - p0498 W79-25019
  - Modal interpolation program, L215 (INTERP).
    - Volume 1: Engineering and usage
      - [NASA-CR-2847]
      - p0702 W79-32164

INTERROGATION

- UpLink ATCRBS environment measurements along the
  - Boston-Washington corridor. Volume 2:
  - Interrogator characteristics
    - [AD-A067986]
    - p0540 W79-26041

INVENTORY MANAGEMENT

- Parts tracking and engine history recording for
  - on-condition maintenance
    - [AIAA PAPER 79-1280]
    - p0507 A79-40386

INVERSIONS

- NT TEMPERATURE INVERSIONS
  - Parachute partial inversions
    - p0066 A79-14424

INVESITRATES

- NT INSECTS
- NT INVESTIGATION
- NT ACCIDENT INVESTIGATION
- NT AIRCRAFT ACCIDENT INVESTIGATION

INVISCID FLOW

- Theory of lifting surface in fluids of high
  - electrical conductivity
    - p0255 A79-12399
  - Hydrodynamic propulsion by large amplitude
  - oscillation of an airfoil with chordwise flexibility
    - p0137 A79-18034
  - Calculation of transonic inlet flowfields using
  - generalized coordinates
    - p0138 A79-19477
  - Influence of fundamental parameters on the
  - supersonic base flow problem in presence of an
  - exhaust jet
    - [AIAA PAPER 79-0133]
    - p0204 A79-23578
  - Quasi-natural numerical methods for the
  - computation of inviscid potential or rotational
  - transonic flows
    - p0259 A79-26487
  - Axial-flow compressor turning angle and loss by
  - inviscid-viscous interaction blade-to-blade
  - computation
    - [ASME PAPER 79-GT-5]
    - p0359 A79-30504
  - A calculation procedure for three-dimensional,
  - time-dependent, inviscid, compressible flow
  - through turbomachine blades of any geometry
    - p0345 A79-31247
  - Second approximation in theory of a finite-span
  - thin wing in a hypersonic gas flow
    - p0467 A79-35927
  - Region of a plane pointed profile in supersonic flow
    - p0528 A79-43136
  - Viscid/inviscid interaction analysis of thrust
  - augmenting ejectors
    - [AD-A093546]
    - p0175 W79-15055
  - An analytic theory of supersonic/hypersonic
  - stability at high angles of attack
    - p0178 W79-15082
  - An improved supersonic, three-dimensional,
  - external, inviscid flow field code
    - [NASA-CR-3108]
    - p0286 W79-17807
  - Viscous-inviscid flow matching: Numerical method
  - and applications to two-dimensional, transonic
  - and supersonic flows
    - p0376 W79-20977
  - Numerical calculation of inviscid transonic flow
  - through rotors and fans
    - p0800 W79-23906
  - Finite element methods for inviscid and viscous
  - flow problems
    - p0586 W79-28474
  - The panel method for subsonic aerodynamic flow:
  - A survey of mathematical formulations and
  - numerical models with an outline of the new
  - British aerospace scheme
    - p0586 W79-28475
  - Multi-element airfoil viscous-inviscid interactions
    - [NASA-CR-159125]
    - p0701 W79-32157

INVISIBILITY

- NT VISIBILITY
- NT EXCHANGING
  - Ion chromatographic determination of sulfur in fuels
    - p0189 A79-21222

IONIZATION

- NT SUBSURFACE IONIZATION
- NT IONIZING RADIATION
- NT COSMIC RAY SHOWERS
- NT COSMIC RAYS
- NT GAMMA RAYS
- NT PROTONS
- NT ELECTRON PRODUCTION
- NT COMPUTERIZED SIMULATION

IRON ALLOYS

- NT HIGH STRENGTH STEELS

IRON ALLOYS

- NT TOXICITY AND SAFETY HAZARD

IRON-ALLOY ENGINE

- NT TOXICITY AND SAFETY HAZARD

IRON-ALLOY ENGINE

- NT TOXICITY AND SAFETY HAZARD

IRON-ALLOY ENGINE

- NT TOXICITY AND SAFETY HAZARD

IRON-ALLOY ENGINE

- NT TOXICITY AND SAFETY HAZARD

IRON-ALLOY ENGINE

- NT TOXICITY AND SAFETY HAZARD

IRON-ALLOY ENGINE

- NT TOXICITY AND SAFETY HAZARD

IRON-ALLOY ENGINE

- NT TOXICITY AND SAFETY HAZARD

IRON-ALLOY ENGINE

- NT TOXICITY AND SAFETY HAZARD

IRON-ALLOY ENGINE

- NT TOXICITY AND SAFETY HAZARD

IRON-ALLOY ENGINE

- NT TOXICITY AND SAFETY HAZARD

IRON-ALLOY ENGINE

- NT TOXICITY AND SAFETY HAZARD

IRON-ALLOY ENGINE

- NT TOXICITY AND SAFETY HAZARD

IRON-ALLOY ENGINE

- NT TOXICITY AND SAFETY HAZARD

IRON-ALLOY ENGINE

- NT TOXICITY AND SAFETY HAZARD

IRON-ALLOY ENGINE

- NT TOXICITY AND SAFETY HAZARD

IRON-ALLOY ENGINE

- NT TOXICITY AND SAFETY HAZARD

IRON-ALLOY ENGINE

- NT TOXICITY AND SAFETY HAZARD

IRON-ALLOY ENGINE

- NT TOXICITY AND SAFETY HAZARD

IRON-ALLOY ENGINE

- NT TOXICITY AND SAFETY HAZARD

IRON-ALLOY ENGINE

- NT TOXICITY AND SAFETY HAZARD

IRON-ALLOY ENGINE

- NT TOXICITY AND SAFETY HAZARD
### Subject Index

<table>
<thead>
<tr>
<th>Aircraft Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-104 AIRCRAFT</td>
<td>Jet aircraft</td>
</tr>
<tr>
<td>F-106 AIRCRAFT</td>
<td>Jet aircraft</td>
</tr>
<tr>
<td>F-111 AIRCRAFT</td>
<td>jet aircraft</td>
</tr>
<tr>
<td>G-91 AIRCRAFT</td>
<td>Jet aircraft</td>
</tr>
<tr>
<td>N90-320 AIRCRAFT</td>
<td>Jet aircraft</td>
</tr>
<tr>
<td>IL-62 AIRCRAFT</td>
<td>Jet aircraft</td>
</tr>
<tr>
<td>JINDIVIK TARGET AIRCRAFT</td>
<td>Jet aircraft</td>
</tr>
<tr>
<td>L-1011 AIRCRAFT</td>
<td>Jet aircraft</td>
</tr>
<tr>
<td>LEAR JET AIRCRAFT</td>
<td>Jet aircraft</td>
</tr>
<tr>
<td>MT-262 AIRCRAFT</td>
<td>Jet aircraft</td>
</tr>
<tr>
<td>MIRAM 3 AIRCRAFT</td>
<td>Jet aircraft</td>
</tr>
<tr>
<td>P-3 AIRCRAFT</td>
<td>Jet aircraft</td>
</tr>
<tr>
<td>T-J 3 AIRCRAFT</td>
<td>Jet aircraft</td>
</tr>
<tr>
<td>T-J 8 AIRCRAFT</td>
<td>Jet aircraft</td>
</tr>
<tr>
<td>T-J9 AIRCRAFT</td>
<td>Jet aircraft</td>
</tr>
<tr>
<td>TURBOTAN AIRCRAFT</td>
<td>Jet aircraft</td>
</tr>
<tr>
<td>TURBOPROP AIRCRAFT</td>
<td>Jet aircraft</td>
</tr>
<tr>
<td>V-1 AIRCRAFT</td>
<td>Jet aircraft</td>
</tr>
</tbody>
</table>

### Key Terms

- Jet noise radiation
- Vocal fold jet noise
- Jet engine noise
- Jet noise shielding
- Jet noise suppression
- Jet noise control
- Jet noise abatement
- Jet noise prediction
- Jet noise measurement
- Jet noise reduction
- Jet noise assessment
- Jet noise mitigation
- Jet noise alleviation
- Jet noise attenuation
- Jet noise evaluation
- Jet noise modeling
- Jet noise reduction technologies
- Jet noise control strategies
- Jet noise suppression techniques
- Jet noise management
- Jet noise analysis
- Jet noise monitoring
- Jet noise measurement methods
- Jet noise simulation
- Jet noise emissions
- Jet noise standards
The chemical stability of kerosene fractions

The temperature at which thermal dissociation is initiated in jet fuels under static conditions

Enthalpies of combustion of ramjet fuels

The tendency of jet fuels to form deposits on a heated surface

Evaluation of the temperature of the initiation of jet fuel decomposition by means of the 'hardness factor'

Changes in the quality of T-6 fuel upon prolonged storage

Method of determining mechanical-impurity contents in jet fuels

Lockheed urges hydrogen fuel

Alternative fuels in aviation

Comparison of alternate fuels for aircraft

Aviation turbine fuels, 1977

[BERC/PPS-78/2]

Prediction of selected fuel jet test results using ASTM test method D2987 data with multiple linear regression analysis

[AD-A059165]

Aircraft engine: Future Fuels and Energy Conservation

[AGARD-LS-96]

Future fuels for aviation

Future aviation fuels fuel suppliers views

The role of fundamental combustion in the future of aviation fuels program --- carbon formation in gas turbine primary zones

Characteristics and combustion of future hydrocarbon fuels

Impact of future fuel properties on aircraft engines and fuel systems

Evaluation of future jet fuel combustion characteristics

Naval Air Systems Command-Naval Research Laboratory Workshop on Basic Research Needs for Synthetic Hydrocarbon Jet Aircraft Fuels

High freezing point fuels used for aviation turbine engines

Behavior of nonmetallic materials in shale oil derived jet fuels and in high aromatic and high sulfur petroleum fuels --- compatibility of aircraft materials to fuels

[AD-A060222]

Static electricity hazards in aircraft fuel systems

Evaluation of motor gasoline in the jet fuel thermal oxidation tester --- fuel for gas turbine airplane engines

[AD-A061027]

Parametric performance of a turbojet engine combustor using jet A and A diesel fuel

[WASA-TR-19069]

Some aspects of aircraft jet engine fuels

[WASA-TR-75095]

Thermodynamics of organic compounds

[AD-A066564]

Stability characteristics of hydrocarbon fuels from alternative sources

[NASA-TN-178-23]

The impact of alternate fuels on aircraft configuration characteristics --- military aircraft

[AD-A066983]

A filterability study of corrosion inhibited JP-4 fuel

[AD-A066867]

Fuel hydrogen content as an indicator of radiative heat transfer in an aircraft gas turbine combustor

[AD-A067059]
The influence of geometric asymmetry on the flow downstream of a jet discharging normally into a free stream p0245 A79-25065
Lean combustion limits of a confined pressurized-pervaporated propane jet [AIAA PAPER 79-0538] p0253 A79-25856
Sound absorption caused by worticity shedding, demonstrated with a jet flow [AIAA PAPER 79-0575] p0260 A79-26905
Flight effects on subsonic jet noise [AIAA PAPER 79-0616] p0317 A79-28961
Analysis of flight effects on noise radiation from dual-flow coastal jets [ONERA, TP NO. 1978-81] p0060 179-13991
The effect of slot configuration and arrangement on the characteristics of jet flow [HAL-TR-185] p0337 A79-30377
Peak Strouhal frequency of subsonic jet noise as a function of Reynolds number p0406 A79-34537
Asymmetry of a circular jet observed in near and far fields -- low Re turbulence and acoustic characteristics p0406 A79-34539
Effects of forward velocity on sound radiation from converging nozzle and dipole sources in jet flow -- subsonic aircraft model p0464 A79-38393
Laser velocimetry measurements on high temperature round and rectangular twin-jet flows p0516 A79-42061
Study of mass transfer between the primary zone and secondary air jets in gas turbine engine combustion chambers p0526 A79-42558
Numerical solution for the flow field of a body with jet [NASA-TR-1842] p0565 A79-45620
The inner regions of annular jets p0603 A79-47520
Experimental study of the turbulent wake downstream of a fan jet p0613 A79-48507
Direct correlation of noise and flow of a jet using laser doppler [UTIAS-230] p0709 A79-13822
Experimental investigation of effects of jet decay rate on jet-induced pressures on a flat plate: Tabulated data [NASA-CH-150960] p0708 A79-15981
Experimental investigation of the aerodynamic characteristics of a wing in a jet flow -- wind tunnel tests [NASA-CH-77091-0] p0703 A79-32177

JET FUELS

U JET ENGINE FUELS

JET IMPINGEMENT

Aerodynamic field induced by a jet penetrating a cross flow at subsonic velocities [TOWER, TP. No. 1728-61] p0660 A79-13991
Determination of the deflection angle of a jet impinging on a deflector with an end plate -- for thrust reversers p0682 A79-16789
The plane turbulent impinging jet p0117 A79-18841
Jet flow interactions -- in powered lift STOL aircraft p0153 A79-20089
Jet cooling at the rim of a rotating disk [A561 PAPER 78-07-25] p0196 A79-22331
Jet-induced aerodynamics of V/STOL aircraft over a moving deck [AIAA PAPER 79-0337] p0202 A79-23556
Further test results with the air jet actuation generator -- A new tool for aircraft turbine engine testing [AIAA PAPER 79-1185] p0550 A79-40752
Mathematical model of the oscillatory cycle associated with nonsteady interaction of a supersonic jet with a barrier p0515 A79-42007
Engine-aircraft afterbody interactions -- Recommended testing techniques based on 77-17 experience [AIAA PAPER 79-1829] p0608 A79-47903
Determination of turning angle of a jet impinging on a bucket with a visor -- for thrust reversers p0515 A79-42007

JET THRUST

Measurements in a large angle oblique jet impingement flow [NASA-CH-158385] p0613 A79-68500

JET NOISE

The sound power spectrum of shock-free jets [AIAA PAPER 79-0595] p0269 A79-26918
An experimental study of the influence of flight-stream turbulence on jet mixing noise [AIAA PAPER 79-0617] p0271 A79-26935
Jet mixing noise -- Comparison of measurement and theory [AIAA PAPER 79-0570] p0317 A79-28954
Development of a gas turbine combustor dilution zone design analysis [AIAA PAPER 79-1191] p0458 A79-38979
Ignition of liquid fuel jets in a supersonic air stream [AIAA PAPER 79-1238] p0470 A79-38997
An improved method for predicting the effects of flight on jet mixing noise p0475 A79-39803
The amplification factor in the two-dimensional interaction between a transverse sonic jet and a supersonic flow p0526 A79-42565
Influence of gas turbine engine combustion chamber geometric parameters on mixture formation characteristics p0612 A79-48495
Interaction of the supersonic flow below a wing and a supersonic free jet (two-dimensional situation) [VTR-TR-268] p0660 A79-17819
Computer-aided design study of hypermixing nozzles [AD-A062374] p0365 A79-20122
A correlation of mixing noise from conical jets with inverted flow profiles [NASA-TP-1301] p0428 A79-22869
Jet noise: A status report -- jet mixing and shock noise studies p0443 A79-23379

JET PILOTS

U AIRCRAFT PILOTS

JET PROPELATION

Jet propulsion for ACVs and hydrofoils p0604 A79-47428
Aircraft vortex warning program [NASA-CH-162299] p0709 A79-32156
Jet streams (meteorology) The characteristics of the spray generated by the efflux of various aircraft propulsors impinging normally on water [AD-A067742] p0541 A79-26894
Jet thrust Statistical evaluation of reverser influence on bypass turbojet engine parameters in the forward thrust regime p0669 A79-14850
A new technique to compute installed jet engine thrust -- Applications to trimmings for economic and operational benefits [AIAA PAPER 79-7010] p0318 A79-29385
An examination of the factors affecting the thrust requirements and the hover and short takeoff performance of several jet V/STOL fighter concepts [AD-A058128] p0801 A79-12068
KARHAN VORTEX STREET

[SAND-79-2032] p0590 A79-29152
KARHAN VORTEX STREET
Steady and unsteady vortex-induced asymmetric loads - Review and further analysis --- on slender axisymmetric bodies
[AIAA PAPER 79-1531] p0576 A79-46713

KC-130 AIRCRAFT

U C-130 AIRCRAFT

U C-135 AIRCRAFT

KELVIN-HELBOLITZ INSTABILITY
The "cloud-in-cell" technique applied to the roll up of vortex sheets
p0861 A79-37725

KERSHEW
Laser aircraft --- using kerosene
p0261 A79-26597
The chemical stability of kerosene fractions
p0517 A79-92275
On the question of selecting the characteristic quantity governing fuel self-ignition in a stream
p0613 A79-89997
Comparison of alternate fuels for aircraft --- liquid hydrogen, liquid methane, and synthetic aviation kerosene

KEVLAR (TRADEMARK)

[...]

KEVLAN (TRADEMARK)
Spacecraft composite structures
[ARS 78-52] p0124 A79-18175
Overtest results for the 7-3-p/24-ft/ diameter hybrid Kevlar-29/nylon ribbon parachute
p0391 A79-21254
Design criteria for and development of Kevlar ribbon parachutes
[AIAA 79-0430] p0262 A79-26638
Design and development of the 24-foot diameter hybrid Kevlar-29/nylon ribbon parachute
[AIAA 79-0434] p0263 A79-26641
Full-scale engine tests of bulk absorber acoustic inlet treatment
[AIAA PAPER 79-0600] p0267 A79-26681
Development of an aircraft composite propeller
[SAP PAPER 790257] p0453 A79-26714
Model 206 composite litter door
[ARS 79-31] p0620 A79-49083
Operation and test of composite horizontal stabilizer for the Sikorsky Spirit helicopter
[ARS 79-45] p0632 A79-49097
Flight service evaluation of Kevlar-29 epoxy stream composite panels in wide-bodied commercial transport aircraft

KEYING

MT PHASE SHIFT KEYING
KINETIC EQUATIONS
HYDRODYNAMIC EQUATIONS
KINETIC FRICTION
SLIDING FRICTION
AERODYNAMIC HEATING
KINETICS
REACTION KINETICS
KIRCHHOFF-HELBOLITZ FLOW
PIPE FLOW
KIRCHHOFF-HUTCHINS PRINCIPLE
U DIFFRACTION
U WAVE PROPAGATION
KITE BALLOONS
U TETHERED BALLOONS
KNOWLEDGE
U PHILOSOPHY
U BAND
U SUPERHIGH FREQUENCIES
U C-141 AIRCRAFT
U C-141 AIRCRAFT
KUTTA-JOUKOVSKY CONDITION
Trailing edge conditions for unsteady flows at high reduced frequency --- application of Kutta-Joukovskov condition
[AIAA PAPER 79-0152] p0143 A79-19567
The wing section theory of Kutta and Shukowski
p0338 A79-29701

L

L-BAND
U ULTRASOUGHT FREQUENCIES
L-1011 AIRCRAFT
Extensive cost reduction studies: Composite sparasse component - L-1011 commercial airliner
p0187 A79-20807
Development of the L-1011 Flight Management System
p0260 A79-26535
Airplane dynamic wheel loads during ground maneuvering --- computer program for L-1011 aircraft
[AIAA 79-0739] p0319 A79-29011
Design, development, and testing of an active flutter margin augmentation system for a commercial transport airplane
[AIAA 79-0790] p0322 A79-29038
Reconstructed flight control sensor signals via Luenserberger observers
p0389 A79-32158
Design development of an advanced composite alleron --- graphite-epoxy structure for L-1011
Fuel conservative subsonic transport --- control surfaces activated by computers
p0236 A79-16874
Development of the L-1011 flight management system
p0606 A79-97989
Systems implications of active controls
p0658 A79-30219
L-1011 active controls, design philosophy and experience
p0660 A79-30236
Accelerated development and flight evaluation of active controls concepts for subsonic transport aircraft
ARPOP validation study: Lockheed L-1011
p0722 A79-33968

LABELING (RANKING)
U MARKING
U ENGINE TESTING LABORATORIES
U ENVIRONMENTAL LABORATORIES
U LABORATORY EQUIPMENT
U LABORATORY TESTS

LAC (DELAY)
U ALPHA LAC

LAGRANGE MULTIPLIERS
Application of Lagrange Optimization to the drag polar utilizing experimental data
[AIAA PAPER 79-1833] p0634 A79-49335

LAKE ICH
Applications of a high-altitude powered platform
[SAFETY] p0524 A79-62937

LAMINAR BOUNDARY LAYER
Calculation of laminar separation bubbles and their effect on airfoil performance
[AIAA PAPER 79-0385] p0184 A79-19685
Distribution of the intermittency factor along the transition region between laminar and turbulent boundary-layers
p0190 A79-21421
Laminar boundary layer with foreign gas injection on a conical body
p0274 A79-27203

Goertler vortices in the nonlinear region --- unsteadiness development and onset in blowdown wind tunnels
p0334 A79-29684
A method for the calculation of 3D boundary layers on practical wing configurations
p0656 A79-39096
An approximate method for calculating a laminar boundary layer in micrometers
p0526 A79-62559
Radiating laminar boundary layer flow over a flat plate at a large free-stream Mach number
p0528 A79-62989
Application of stability theory to laminar flow control
The stability of the boundary layer on a swept wing with wall cooling
1-280

SUBJECT INDEX

KAPPAN VORTEX STREET

L-1011 AIRCRAFT

L BAND

L-BAND
U ULTRASOUGHT FREQUENCIES
L-1011 AIRCRAFT
Extensive cost reduction studies: Composite sparasse component - L-1011 commercial airliner
p0187 A79-20807
Development of the L-1011 Flight Management System
p0260 A79-26535
Airplane dynamic wheel loads during ground maneuvering --- computer program for L-1011 aircraft
[AIAA 79-0739] p0319 A79-29011
Design, development, and testing of an active flutter margin augmentation system for a commercial transport airplane
[AIAA 79-0790] p0322 A79-29038
Reconstructed flight control sensor signals via Luenserberger observers
p0389 A79-32158
Design development of an advanced composite alleron --- graphite-epoxy structure for L-1011
Fuel conservative subsonic transport --- control surfaces activated by computers
p0236 A79-16874
Development of the L-1011 flight management system
p0606 A79-97989
Systems implications of active controls
p0658 A79-30219
L-1011 active controls, design philosophy and experience
p0660 A79-30236
Accelerated development and flight evaluation of active controls concepts for subsonic transport aircraft
ARPOP validation study: Lockheed L-1011
p0722 A79-33968

LABELING (RANKING)
U MARKING
U ENGINE TESTING LABORATORIES
U ENVIRONMENTAL LABORATORIES
U LABORATORY EQUIPMENT
U LABORATORY TESTS

LAC (DELAY)
U ALPHA LAC

LAGRANGE MULTIPLIERS
Application of Lagrange Optimization to the drag polar utilizing experimental data
[AIAA PAPER 79-1833] p0634 A79-49335

LAKE ICH
Applications of a high-altitude powered platform
[SAFETY] p0524 A79-62937

LAMINAR BOUNDARY LAYER
Calculation of laminar separation bubbles and their effect on airfoil performance
[AIAA PAPER 79-0385] p0184 A79-19685
Distribution of the intermittency factor along the transition region between laminar and turbulent boundary-layers
p0190 A79-21421
Laminar boundary layer with foreign gas injection on a conical body
p0274 A79-27203

Goertler vortices in the nonlinear region --- unsteadiness development and onset in blowdown wind tunnels
p0334 A79-29684
A method for the calculation of 3D boundary layers on practical wing configurations
p0656 A79-39096
An approximate method for calculating a laminar boundary layer in micrometers
p0526 A79-62559
Radiating laminar boundary layer flow over a flat plate at a large free-stream Mach number
p0528 A79-62989
Application of stability theory to laminar flow control
The stability of the boundary layer on a swept wing with wall cooling
EVALUATION OF LAMINAR FLOW CONTROL SYSTEMS

A theoretical investigation of aerodynamic control systems designed for laminar boundary-layer flow

Evaluation of laminar flow control system concepts for subsonic commercial transport aircraft

Summary report of the second wind tunnel test of the Boeing LFC model

Effects of laminar flow control on the performance of a large span-distributed-load flying wing

Summary of past experience in natural laminar flow

Study of the application of superplastically formed and diffusion bonded (SPE/DC) titanium sheet material to laminar flow control (LFC) wing design

Aircraft energy efficiency laminar flow control glove flight conceptual design study

Numerical methods in laminar and turbulent flow; Proceedings of the First International Conference, University College of Swansea, Swansea, Wales, July 17-21, 1978

Calculation of the flow around a swept wing, taking into account the effect of the three-dimensional boundary layer. Part 2: Wing with laminar boundary layer on the lower surface

Calculation of a laminar wall jet in a wake

Numerical solution for supersonic flow near the trailing edge of a flat plate

Numerical solution for the flow field of a body with jet

The prediction of the turbulent flow field about an isolated airfoil

Laminar flow stabilization by surface cooling on hydrogen fueled aircraft

Detection of the transitional layer between laminar and turbulent flow areas on a wing surface — using an accelerometer to measure noise levels during wind tunnel tests

Evaluation of a long-endurance-surveillance unmanned aerial vehicle concept

Evaluation of a long-endurance-surveillance unmanned aerial vehicle concept designed for natural laminar boundary-layer flow

Temperature measurements in natural laminar flow and experimental program for resilient leading edge

Application of stability theory to laminar flow
LAND USE

LAND USE

Airport project Munich II - Aspects on the economic utilization of the airport area under consideration of the bird strike problem [AD-282 A79-29357]

Airport noise control and land use compatibility study [p0409 A79-34972]

Off-airport land use compatibility - The Maryland approach and experience [p0609 A79-34974]

LAX airport/land use planning study. Phase 1 report: Short term noise abatement (PB-281622/1) [p0038 A79-10071]

DOD's commendable initial efforts to solve land use problems around airfields [ON-294167/9] [p0426 A79-22120]

LANDFILLS

MT GREAT BRITAIN

MT INDONESIA

MT JAPAN

MT MOUNTAINS

LANDING

MT AIRCRAFT LANDING

MT CRASH LANDING

MT DETECTING (LANDING)

MT SOFT LANDING

MT TOUCHDOWN

MT VERTICAL LANDING

LANDING AIDS

MT AIRPORT BEACONS

MT AIRPORT LIGHTS

MT ALL-WEATHER LANDING SYSTEMS

MT APPROACH INDICATORS

MT ARRESTING GEAR

MT AUTOMATIC LANDING CONTROLLER

MT INSTRUMENT LANDING SYSTEMS

MT LANDING INSTRUMENTS

MT LANDING RADIUS

MT MICROVISION LANDING AIDS

MT MICROWAVE LANDING SYSTEMS

MT MICROWAVE SCANNING BEAM LANDING SYSTEM

MT RUNWAY LIGHTS

Impact of new navigation methods on flight guidance in the terminal maneuvering area (DGRL PAPER 78-135) [p0061 A79-14905]

Aerodynamics and performance of a gliding parachute with landing brakes [p0066 A79-14923]

Experimental evaluation of a wind shear alert and energy management display (DGRL PAPER 78-153) [p0151 A79-20016]

The measurement of N7-pulse phase and amplitude in the landing gears DLS [p0408 A79-34608]

An evaluation of nose display parameters for an advanced landing display [p0679 A79-51992]

Windshear indication systems [p0667 A79-52399]

System capacity of the approach- and landing aid SETAC [p0978 A79-53555]

Fresnel Lens Optical Landing System MK6 Mod 3 stabilization circuit board test specifications [AD-A057866] [p0161 A79-18075]

Lighting and marking of exit taxways [AD-A062559] [p0180 A79-15098]

Evaluation of threshold and prethreshold lights for median intensity approach lighting systems [FRA-VA-78-44] [p0237 A79-16878]

Approach light aiming criteria [NAEC-911] [p0237 A79-16880]

Simulation and study of V/STOL landing aids for HNC AV-9 aircraft [p0657 A79-39214]

LANDING GEARS

Relative pavement bearing strength requirements of aircraft [SAP PAPER 780568] [p0006 A79-10415]

Advanced technology helicopter landing gear [p0014 A79-10518]

Application of a factorial interpolation method to the analytical designging of aircraft landing gears [p0348 A79-32052]

Landig gear overhaul survey [p0350 A79-32242]

Designing aircraft shock absorbers [p0357 A79-32585]

A dynamic analysis of landing impact [p0514 A79-61768]

Elimination of friction induced thermal cracks in landing gear components [p0531 A79-63273]

Characteristics of an Air Cushion Landing System incorporating an inelastic trunk [p0640 A79-49909]

Airplane brake-energy analysis and stopping performance simulation [p0649 A79-53870]

Boron/aluminum landing gear for Navy aircraft --- A-7 aircraft nose wheel linkages [AD-A058888] [p0101 A79-13028]

New concepts in composite material landing gear for military aircraft. Volume 1: Technical discussion [AD-A058529] [p0101 A79-13032]

New concepts in composite material landing gear for military aircraft. Volume 2: Appendices [AD-A058672] [p0101 A79-13033]


Airframe noise component interaction studies [NASA-CR-3110] [p0333 A79-19815]

Flight investigation of piloting techniques and crosswind limitations using a research type crosswind landing gear [NASA-TP-1423] [p0430 A79-23012]

Evaluation of an energy distribution system for helicopter landing gears during hard landing [AD-A065298] [p0433 A79-23069]

An electric control for an electrohydraulic active control aircraft landing gear [NASA-CR-3113] [p0484 A79-23948]

Air cushion landing gear applications study [NASA-CR-159002] [p0540 A79-26045]


Environment load interaction effects on crack growth [AD-A071660] [p0721 A79-33504]

LANDING LOADS

MT APPROACH INDICATORS

Cat III landing operations at Air Inter --- instrument landing system [p0056 A79-13260]

Description and preliminary studies of a computer drawn instrument landing approach display [NASA-TM-78771] [p0045 A79-11039]

Flight performance of the CTV V-737 airplane at Kennedy airport using TTRSS/MLS guidance [NASA-TR-80148] [p0667 A79-31186]

Landing loads

Ship motion effects on landing impact loads --- V/STOL landing on aircraft carrier [lica paper 79-0762] [p0320 A79-29018]

Proper aircraft tire size selection - Optimum performance with minimum maintenance [SAP PAPER 790598] [p0455 A79-36730]

A dynamic analysis of landing impact [p0514 A79-41768]

The hydrofoil sea-plane as high-speed naval craft [p0532 A79-42456]

Recent progress in aircraft sink rate measurement [AIAA PAPER 79-1798] [p0605 A79-47884]

Characteristics of an Air Cushion Landing System incorporating an inelastic trunk [p0640 A79-49909]

Parachute-rocket deceleration system design [p0696 A79-54057]


LANDING MACHS

Nondestructive evaluation procedure for military airfields [AD-282 A79-13076]

An evaluation of asphalt-rubber mixtures for use in pavement systems [AD-106948] [p0661 A79-30246]

LANDING RADARS

Flight investigation of helicopter IFR approaches to oil rigs using airborne weather and mapping radar [ADS 79-52] [p0633 A79-49104]
SUBJECT INDEX

LANDING SIMULATION
Flight profile investigation for microwave landing system p0076 A79-16162
A method for estimating takeoff and landing performance of V/STOL aircraft in shipboard environments p0133 A79-18675
V/STOL all weather HUD landing simulation [Status report] p0331 A79-29478
An evaluation of some display parameters for an advanced landing display p0679 A79-51092
Construction of electronic models of microwave landing systems p0684 A79-51266
Effect of image tilt of a virtual image display on simulated transport touchdown performance [AIAA PAPER 79-1520] p0715 A79-33189

LANDING AIDS
The ILS glidepath - New designs for severe sites p0156 A79-20232
The characteristics of a lift cruise fan V/STOL configuration in near proximity to a small deck with finite edge positions [AIAA PAPER 79-1854] p0605 A79-47913

LANGUAGES
MT PL/I
MT PROGRAMMING LANGUAGES
ATC simulations for the implementation of bilingual IFR control in Canada p0126 A79-18229

LAP JOINTS
Moisture/temperature effects upon mean strength of composite-to-metal adhesively bonded joint elements --- for Y-16 aircraft p0209 A79-28087

LAPLACE OPERATIONS
LAPLACE TRANSFORMATION
Applications of Laplace transform methods to airflow motion and stability calculations [AIAA 79-0772] p0324 A79-29050

LARGE SCALE INTEGRATION
Advanced technology impact upon ATE self test --- by use of microprocessors and LSI p0233 A79-12306
Multistage radar processor --- for combat aircraft p0280 A79-20058
The Impact of Integrated Guidance and Control Technology on Weapons Systems Design (AGARD-CP-257) p0353 A79-20009

LASER ARMAMENTS
Turbulent wake measurements with a laser velocimeter [AIAA PAPER 79-1087] p0462 A79-30058

LASER APPLICATIONS
Present and potential capabilities of three-dimensional displays using sequential excitation of fluorescence p0019 A79-12033
360-deg non-programmed visual display --- for flight training p0071 A75-15152
Laser aircraft propulsion p0082 A79-16618
Laser-powered aircraft and rocket systems with laser energy relay units p0082 A79-16619
A laser yaw alignment system for wind tunnels p0113 A79-17592
Large-area information display using digital laser beam deflection p0116 A79-17689
An aircraft compatible laser induced fluorescence system - In situ and remote measurements of trace gases p0194 A79-21989
Air Force Space Laser Communications p0213 A79-24236

LASER PROPULSION
Using kerosene p0261 A79-26597
A system which uses a laser beam to control the regime of vibration tests with turbine and compressor blades p0316 A79-28638
Air Force Space Laser Communications p0665 A79-38706
Small bore drilling and inspection with pulsed laser systems --- in air-cooled aircraft engine structures [AIAA PAPER 79-1268] p0870 A79-39012

LASER GUIDANCE
Laser aircraft --- using kerosene p0261 A79-26597
A system which uses a laser beam to control the regime of vibration tests with turbine and compressor blades p0316 A79-28638
Air Force Space Laser Communications p0665 A79-38706
Small bore drilling and inspection with pulsed laser systems --- in air-cooled aircraft engine structures [AIAA PAPER 79-1268] p0870 A79-39012

LASER COMMUNICATION
OPTICAL COMMUNICATION
LASER GUIDANCE

LASER COMMUNICATION
OPTICAL COMMUNICATION
LASER GUIDANCE
The estimation of lateral-directional aerodynamic derivatives at subsonic speeds

An angular wing

A summary of AGARD FDP meeting on dynamic stability parameters --- advanced aircraft performance at high angle of attack

Lateral stability at high angles of attack, particularly wing rock

Lateral aerodynamics extracted from flight test using a parameter estimation method

LASER RADAR

F-16 advanced electro-optical pod field-of-view simulation study --- task complexity during laser guided weapons delivery

LASER RADAR

F-16 advanced electro-optical pod field-of-view simulation study --- task complexity during laser guided weapons delivery

LASER TARGET DESIGNATORS

Recent progress in aircraft sink rate measurement

LASER WELDING

Measuring metres to the target

LASERS

Assembly and repair of aircraft engine parts using pulsed TAG lasers

LAWS

A simple method of adapting a wind tunnel Schlieren system for interferometry

LATERAL OSCILLATION

A multiple objective optimization approach to aircraft control systems design

LATERAL STABILITY

A model for unstable effects in lateral dynamics for use in parameter estimation --- aircraft stability

LATERAL STABILITY

An improved lateral stability augmentation system for air-to-air tracking

LATERAL STABILITY

Preliminary study of pilot lateral control of two light airplanes near the stall

LATERAL STABILITY

A multiple objective optimization approach to aircraft control systems design

LATERAL STABILITY

A model for unstable effects in lateral dynamics for use in parameter estimation --- aircraft stability

THEORETICAL ESTIMATION OF NONLINEAR LONGITUDINAL CHARACTERISTICS OF WINGS WITH SMALL AND MODERATE ASPECT RATIO BY THE VORTEX-LATTICE METHOD IN INCOMPRESSIBLE FLOW
LEADING EDGES

**SHARP LEADING EDGES**

- Dynamic stall of an airfoil with leading edge bubble stabilization involving time dependent re-attachment
- Application of advanced technologies to improve C-141 cruise performance --- wing modifications for drag reduction
- Aerodynamic development of a high pressure leading edge blowing boundary layer control system
- Calculation of laminar separation bubbles and their effect on airfoil performance
- A visual investigation of the separation and subsequent transition near the leading edge of airfoils
- Investigation of the regimes of flow past the upper surfaces of delta wings with shock waves separated from the leading edges
- C-141 hybrid composite leading edge materials and fabrication methods
- Particle trajectories near an airfoil with a film-cooled leading edge
- Transonic flow past a symmetrical airfoil at high angle of attack
- Exploratory study of the influence of wing leading-edge modifications on the spin characteristics of a low-wing single-engine general aviation airplane
- Boundary layer control on wings using sound and leading edge serrations
- Effects of wing leading-edge flap deflections on subsonic longitudinal aerodynamic characteristics of a wing-fuselage configuration with a 44 deg swept wing
- Non-conical flow past slender wings with leading edge vortex sheets
- Airframe noise component interaction studies
- Visualization of the separation and subsequent transition near the leading edge of airfoils
- Improved prediction of laminar leading edge separation
- Strake-induced separation from the leading edges of wings of moderate sweep
- On slender wings with leading edge casings
- An experimental investigation of the entrainment of a leading-edge vortex
- Supersonic flow in the area of antisymmetric thin cruciform wings with supersonic leading edges in a horizontal plane, with consideration of flow separation on the edges

**ADDITIONAL TOPICS**

- Effects of wing leading-edge deflection on low-speed aerodynamic characteristics of a low-aspect-ratio highly swept arrowwing configuration --- wind tunnel tests
- Summary of past experience in natural laminar flow and experimental program for resilient leading edge
- Rotary balance data for a single-engine trainer design for an angle-of-attack range of 8 deg to 90 deg --- conducted in largely spin tunnel
- Adhesive sealing - a fuel leak deterrent --- for aircraft tanks
- Transmission seal development
- Electromagnetic coupling analysis of a Learjet aircraft
- A proposed integrated ECM system using the Learjet Longhorn series - The first jets with winglets
- Simultaneous measurements of ozone outside and inside cabins of two B-747 airliners and a Gates Learjet business jet
- The Learjet 'Longhorn' series - The first jets with winglets
- Winglets are no drag --- enhancement of aerodynamic efficiency with vertical wingtip extensions
- The Learjet Longhorn series: The first jets with winglets
- Learjet business jet
- Electromagnetic coupling analysis of a Learjet aircraft
- A proposed integrated ECM system using the Learjet Longhorn series - The first jets with winglets
- Electromagnetic coupling analysis of a Learjet aircraft
- A proposed integrated ECM system using the Learjet Longhorn series - The first jets with winglets
### SUBJECT INDEX

<table>
<thead>
<tr>
<th>The development of high lift, single-component aerofoil sections</th>
<th>p0243 A79-30922</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effect of chordwise flexibility on the lift of a rapidly accelerated airfoil</td>
<td>p0243 A79-30923</td>
</tr>
<tr>
<td>Conversion of wing surface pressures into normalized lift coefficient</td>
<td>p052 A79-36707</td>
</tr>
<tr>
<td>Analysis of an unsteady aerodynamic force on a blade due to ununiform amplitude gusts</td>
<td>p0473 A79-39059</td>
</tr>
<tr>
<td>Lift and drag of sail aerofoil</td>
<td>p0515 A79-41945</td>
</tr>
<tr>
<td>Wing aerodynamic loading caused by jet-induced lift associated with STOL-OTW configurations</td>
<td>p0603 A79-47346</td>
</tr>
<tr>
<td>Lifting-line theory for a swept wing at transonic speeds</td>
<td>p0604 A79-47750</td>
</tr>
<tr>
<td>Dynamic test techniques - Concepts and practices</td>
<td>p0642 A79-50164</td>
</tr>
<tr>
<td>Formulas for spanwise distribution of lift on aircraft wings</td>
<td>p0694 A79-53871</td>
</tr>
<tr>
<td>Lift performance indicator system feasibility study</td>
<td>p0809 A79-12079</td>
</tr>
<tr>
<td>Lift system induced aerodynamics of V/STOL aircraft in a moving deck environment</td>
<td>Volume 1: Technical discussion</td>
</tr>
<tr>
<td>A new method for testing free models in the laboratory to determine aerodynamic characteristics</td>
<td>p0176 A79-15063</td>
</tr>
<tr>
<td>Identification of unsteady effects in lift buildup</td>
<td>p0178 A79-15083</td>
</tr>
<tr>
<td>Optimization of multi-element airfoils for maximum lift</td>
<td>p0237 A79-20044</td>
</tr>
<tr>
<td>Lift system induced aerodynamics of V/STOL aircraft in a moving deck environment. Volume 2: Static and dynamic jet-induced force and moment data</td>
<td>p0361 A79-20084</td>
</tr>
<tr>
<td>The aerodynamics and performance characteristics of direct lift schemes</td>
<td>p0429 A79-23004</td>
</tr>
<tr>
<td>Generation and breakdowns of aerodynamic lift: Physical mechanism</td>
<td>p0479 A79-23889</td>
</tr>
<tr>
<td>Polar lift and drag determination during flight tests</td>
<td>p0685 A79-28986</td>
</tr>
<tr>
<td>Leading-edge slat optimization for maximum airfoil lift</td>
<td>p0547 A79-27100</td>
</tr>
<tr>
<td>Upper-surface modifications for C sub l max improvement of selected NASA 6-series airfoils</td>
<td>p0640 A79-30143</td>
</tr>
<tr>
<td>In-flight handling qualities investigation of various longitudinal short term dynamics and direct lift control combinations for flight path tracking using DFVLR NPF 320 variable stability aircraft</td>
<td>p0660 A79-30237</td>
</tr>
<tr>
<td>The oblique wing as a lifting-line problem in transonic flow</td>
<td>p0702 A79-32166</td>
</tr>
<tr>
<td>Lift determined and drag characteristics of an F-8 airplane modified with a supercritical wing with comparison to wind-tunnel results</td>
<td>p0712 A79-33159</td>
</tr>
</tbody>
</table>

### LIFT AUGMENTATION

| Method of calculating potential flows of an incompressible fluid past a wing with a high-lift device | p0019 A79-12126 |
| Improvements in rotor performance by rotor tip blowing | p0130 A79-18650 |
| Development of modern aerofoil sections for high subsonic cruise speeds | p0275 A79-27353 |
| Flight testing the circulation control wing | p0605 A79-47880 |

**LIFT DRAG RATIO**

- **LIFT DRAG RATIO**
  - The design impact of power-augmented ram technology on large energy efficient aircraft
  - [AIAA PAPER 79-1864] p0641 A79-51250
- In the Wain-Poph principle exploitable in turbomachinery — aerodynamic lift generation without vortex shedding
  - p0679 A79-58362
- Study of aerodynamic technology for V/STOL fighter/attack aircraft, volume 1
  - C-SA load alleviation --- active lift distribution control system
  - p0237 A79-16875
- Engine integration and noise considerations for STOL aircraft
  - p0224 A79-29096
- Aerodynamics and performance characteristics of wing lift augmentation schemes
  - p0430 A79-23006

**LIFT COEFFICIENTS**

- **U AERODYNAMIC COEFFICIENTS**
  - Lift devices
  - A parachute that goes up — lift-devices for non-aerodynamic power augmentation procedures
  [CONF-771215-1] p0067 A79-14831
  - Powered wind tunnel testing of the AV-8B — a straightforward approach pays off
  [AIAA PAPER 79-0333] p0202 A79-23557
  - Method for studying experimentally the aerodynamic interference of small secondary structures with a lifting surface
  p0324 A79-29096
- Lift devices, performance effects of high lift systems technology on a modern twin engine jet transport
  - [AIAA PAPER 79-1795] p0634 A79-49332
- Current Canadian developments related to low-speed heavy lift ACV
  - p0691 A79-49915
- Stability of the perturbed longitudinal motion of a lift-controlled aircraft
  - p0687 A79-52146
- A lifting surface performance analysis with circulation coupled wake for advanced configuration hovering rotors
  - p032 A79-10017
- Direct numerical solution of the transonic perturbation integral equation for lifting and nonlifting airfoils
- Vortex—lift roll-control device
- Unsteady small-gap ground effects
  - p0581 A79-28157

**LIFT DISTRIBUTION**

- U FORCES DISTRIBUTION
- U LIFT

**LIFT DRAG RATIO**

- Optimum two dimensional wings in supersonic flows
  - p0064 A79-14200
- An efficient transonic shock-free wing redesign procedure using a fictitious gas method
  - [AIAA PAPER 79-0075] p0180 A79-19520
- Investigation of the transonic drag characteristics for wing-body combinations and their equivalent axisymmetric bodies at zero lift
  - p0153 A79-20102
- The application of winglets to rotors
  - p0154 A79-20109
- Analysis of vehicles with wing's operating in ground effect
  - [AIAA 79-2034] p0692 A79-53621
- Subcritical drag minimization for highly swept wings with leading edge vortices
  - p0414 A79-22021
- Performance of a TAP-2 hydrofoil
  - [AD-A065102] p0443 A79-23261
- An annular wing
- Scaling effects on drag prediction — wind tunnel tests
  - p0579 A79-28123
LIGHTNING SUPPRESSION

The McDonnell Aircraft Company Lightning Simulation Laboratory
Conference on Certification of Aircraft Lightning and Atmospheric Electricity Hazards, Chatillon-sous-Bois, Hauts-de-Seine, France, September 14-21, 1976, Proceedings
A new standard for lightning qualification testing of aircraft /Technical overview, definitions and basic waveforms
Laboratory tests to determine lightning attachment points with small aircraft models /engineering test/
Laboratory tests to determine lightning attachment points with small aircraft models /engineering test/
Laboratory simulation of swept lightning strokes /Engineering test/
Laboratory simulation of swept lightning strokes
Laboratory tests to determine lightning attachment points on actual aircraft parts /Qualification test/
Laboratory tests to determine lightning attachment points on actual aircraft parts /Qualification test/
Laboratory tests to determine the possibility of ignition of fuel vapors by lightning
Laboratory tests to determine the physical damage /Direct effects/ caused by lightning
Laboratory tests to determine the physical damage /Direct effects/ caused by lightning
Laboratory tests to simulate lightning streamers at apertures /Qualification test/
Laboratory tests for undesired conducted currents and surge voltages caused by lightning /Qualification test/
Laboratory tests for undesired conducted currents and surge voltages caused by lightning /Qualification test/
Tests on actual aircraft for electromagnetic effects /Engineering tests/
Vulnerability assessment of aircraft systems to indirect lightning effects
Direct effects protection methods for thin skins/composites
Direct effects, protection methods for thin skins/composites --- lightning protection for aircraft
Lightning hazards to aircraft
The prediction of lightning-induced voltages on metallic and composite aircraft
Summary report of the Lightning and Static Electricity Committee
An RF compatible lightning diverter strip
Protection/hardening of aircraft electronic systems against the indirect effects of lightning
Induced effects of lightning on an all composite aircraft
A new standard for lightning qualification testing of aircraft: Technical overview, definitions and basic waveforms
Analysis and calculations of lightning interactions with aircraft electrical circuits

[AD-A062606]
Lightning transient research on an F-111F aircraft
[AD-A063765]
Evaluation of a remote tone signaling control/monitor system as lightning/transient protection for solid state instrument landing systems
[AD-A063766]
Composite forward fuselage systems integration, volume 2 -- effects of lightning
[AD-A066540]
The feasibility of inflight measurement of lightning strike parameters
[NASA-CR-158991]
Atmospheric Electricity Hazard (AES) Volume 16
[AD-A069330]
Lighting hazards overview: Aviation requirements and interests

An investigation into the noise interference problems at Logan Airport, Boston
[AD-A072057]

LIGHTING SUPPRESSION

Lightning protection from aircraft
Lightning protection techniques for graphite/epoxy aircraft structures
Identification of voltage transients on aircraft cabling under LTA excitation --- Lightning Transient Analysis
Protection methods for hardware --- Lightning protection for aircraft components
Protection/hardening of aircraft electronic systems against the indirect effects of lightning

LUMINARIES

LIMITATIONS

CONSTRAINTS

LINE OF SIGHT COMMUNICATION

Tethered telecommunications, broadcast, and monitoring systems

THE ILS GLIDEPATH

New designs for severe sites

LINEAR EQUATIONS

Linearization in the recursive estimation of navigation parameters
On a property of the linearized boundary layer equations with self-induced pressure

LINEAR FILTERS

Optimizing linear flight vehicle stabilization systems with orthogonal filters

LINEAR PREDICTION

Prediction of selected jet fuel test results using ASTM test method 2887 data with multiple linear regression analysis

LINEAR SYSTEMS

Desensitizing constant gain feedback linear regulators
Improved wave drag predictions using modified linear theory
Modeling the sensitivity of a linear system to a decrease in its order by the method of infinitesimal transformation in the problem of yaw control
Obtaining solutions of the lifting-surface equation
Parameter and state estimation applicable to aircraft identification problem
Linearization of the boundary-layer equations of the minimum time-to-climb problem

A-290
On modeling sensitivity of a linear system to reduction of its order by the infinitesimal transformation method in the yaw motion control problem

Time history solution program, L225 (TJEV126).

Investigation of inverse Vandermonde matrix calculation for linear system applications --- adaptive flight control systems

Optimal controller design methods for linear systems with uncertain parameters --- development, evaluation, and comparison --- autopilots for remotely piloted vehicles

The enhancement of aircraft parameter identification using linear transformations --- for stability

Demonstration of ceramic design methodology for a ceramic combustor liner

The application of finite element techniques to acoustic transmission in lined ducts with flow

Acoustic duct liner optimization using finite elements

Analytical design of a contoured wind-tunnel liner for supercritical testing

User guide for Stenil: a boundary-layer program for contoured wind-tunnel liner design

On the abatement of sound by three-dimensionally segmented acoustic liners in a rectangular duct

Locking redundant link

Compensating linkage for main rotor control

Comparison of alternate fuels for aircraft

Comparison of alternate fuels for aircraft

Fuel injection

Significance of disk flexing in viscous-damped jet engine dynamics

The DO-800: a rugged, high performance bending reference unit --- directional gyro design considerations

Evaluation of stiffness and damping coefficients for fluid-film bearings

Drag reduction by cooling in hydrogen fueled aircraft

The stability of the boundary layer on a swept wing with wall cooling

Lack of problems in cooled turbine blade design for small gas turbine

Display measurements. Measurements of reflectance-type displays

Measuring the moment imparted by a liquid pump in startup regime

Alternate aircraft fuels prospects and operational implications

The potential of liquid hydrogen as a military aircraft fuel

Cryogenic-fuel for tomorrow's commercial aircraft

Liquid hydrogen fueled commercial aircraft

The stability of the boundary layer on a swept wing with wall cooling

Hydrogen technology, 1900-1985

Study of hydrogen recovery systems for gas stored while refueling liquid-hydrogen fueled aircraft

Turbine engine altitude chamber and flight testing with liquid hydrogen

Comparison of alternate fuels for aircraft --- liquid hydrogen, liquid methane, and synthetic aviation kerosene

Study of the application of hydrogen fuel to long-range subsonic transport aircraft. Volume 1: Summary

Effect of injection angle on liquid injection in supersonic flow --- for increasing fuel jet penetration

Ignition of liquid fuel jets in a supersonic air stream

Hydrogen technology, 1900-1985

Study of the application of hydrogen fuel to long-range subsonic transport aircraft. Volume 2: Supplemental system design and problem reduction of its order by the infinitesimal evaluation, and comparison --- autopilots for remotely piloted vehicles

Significance of disk flexing in viscous-damped jet engine dynamics

Evaluation of stiffness and damping coefficients for fluid-film bearings

Liquid cooling
LOAD TESTING MACHINES
Load spectrum measuring equipment. Part 2: Details of NE 2 system used to acquire torque load data in Sea King helicopters
[ARL/RECH-ENG-NP-372]
P0715 N79-33190

LOAD TESTS
Composite rotor hub. I, II --- fatigue and load tests for CH-54A helicopter design

Summation of defects in the case of non-isothermal programmed loads --- for supersonic transport propulsion system components

Digital simulation of the Operational Loads Survey flight test

A cumulative fatigue damage model for gas turbine engine disks subjected to complex mission loading
[ASME PAPER-84/GT-14] P0150 N79-19819

A cyclic load test for environmental durability evaluation of bonded honeycomb structure --- aircraft AL panels

An improved method for load survey flight testing --- for military cargo aircraft
[AIAX PAPER 79-1799] P0606 N79-47885

Heat treatment studies of aluminum alloy forgings of the AE 74.61 type. Fatigue crack propagation performance under maneuver spectrum loading
[MLR-TF-76074-01] P0238 N79-16565

Review of the AGARD S and S panel evaluation program of the NASA-Levis SRP approach to high-temperature LCF life prediction

The effects of gust alleviation on fatigue in 2024-T3 Alclad

An analysis of a programmed load fatigue failure
[BR-J-78078] P0598 N79-24504

NAST structural development design methodology --- aerelastic tailoring of the canard and wing box and distributed load tests
[NASA-CR-140456] P0705 N79-32197

Effect of an anti-corrosion penetrant on the fatigue life of various riveted joints during flight simulation tests
[MLR-TF-77103-07] P0709 N79-32350

LOADING FORCES
LOADS (FORCES)

Load and dynamic assessment of B-52B-008 carrier aircraft for finned configuration 1 space shuttle solid rocket booster decelerator subsystem drop test vehicle. Volume 3: Pylon load data method 1
[NASA-CR-150885] P036 N79-10050

Load and dynamic assessment of B-52B-008 carrier aircraft for finned configuration 1 space shuttle solid rocket booster decelerator subsystem drop test vehicle. Volume 4: Pylon load data
[NASA-CR-150836] P036 N79-10051

A study of the effects of aircraft dynamic characteristics on structural loads criteria
[STL-T-79080-11] P0222 N79-16638

C-5A load alleviation --- active lift distribution control system
P0237 N79-166875

Load spectrum measuring equipment. Part 1: Details of NE 1 system presently used to acquire data in #1 Necker NY 318 helicopters
[ARL/RECH-ENG-NP-371] P0668 N79-31194

Load spectrum measuring equipment. Part 2: Details of NE 2 system presently used to acquire torque load data in Sea King helicopters
[ARL/RECH-ENG-NP-372] P0715 N79-33190

LOADING WAYS
U LOADS (FORCES)

LOADS (FORCES)

Load and dynamic assessment of B-52B-008 carrier aircraft for finned configuration 1 space shuttle solid rocket booster decelerator subsystem drop test vehicle. Volume 3: Pylon load data method 1
MACH NUMBER
A special extension of the General Point Performance Equation --- for flight paths
Design and demonstration of a system for routine, boomless supersonic flights
Calculation of pressure distribution for a wing-body combination at subsonic Mach numbers
MACH REFLECTION
A two-dimensional unsteady Euler-equation solver for flow regions with arbitrary boundaries
MACHINE LIFE
U SERVICE LIFE
MACHINE RECOGNITION
U ARTIFICIAL INTELLIGENCE
MACHINE TOOLS
GASP IV simulation model for the composites and bonding production facility
MACHINING
Stress-free straightening of complex machined aircraft parts
Laser balancing demonstration on a high-speed flexible rotor
MAGNETISM
Structural stiffening of transmission housings with metal matrix materials
MAGNETIC CIRCUITS
Combined-excitation ac generators for aviation --- Russian book
MAGNETIC EFFECTS
MAGNETIC FIELD CONFIGURATIONS
MAGNETIC STORAGE
MAGNETIC INDUCTION
High frequency surface current and charge densities induced on aircraft by a plane electro-magnetic wave
Analytical modeling of the dynamics of brushless dc motors for aerospace applications: A conceptual framework
MAGNETIC PERMEABILITY
Lighting transient research on an F-111 aircraft
MAGNETIC PROPERTIES
MAGNETIC INDUCTION
MAGNETIC PERMEABILITY
MAGNETIC SUSCEPTIBILITY
MAGNETIC SUSPENSION
MAGNETIC RIGIDITY
Vertical cutoff rigidity and the intensity distribution of cosmic rays near Cape Town

SUBJECT INDEX
### SUBJECT INDEX

**NAN MACHINE 51572115**

- FAA remote terminal system frequency assignment
- Touch entry device for air traffic control
- Integrated ATC development — The next decade: The controller's viewpoint
- Touch entry device for air traffic control
- FAA remote terminal system frequency assignment model

**NAN MACHINE SYSTEMS**

- Experimental design for real-time simulations of air traffic control concepts
- Onboard navigation and flight control integrated system architecture
- Impact of new navigation methods on flight guidance in the terminal maneuvering area
- Flight simulations -- Russian book
- Flight profile investigation for microwave landing system
- Conflict warning for the radar controller in air traffic control
- Helicopter combat mission simulator
- Pilot night vision system /FMS/ for advanced attack helicopter /AH/
- A versatile approach to cockpit management -- for military helicopter control and display avionics
- Correlation aspects of helicopter flight mechanics and pilot behaviour
- Computer generated images for aircraft use
- AIC operations in first decade of en route automation
- Integrated AIC development — The next decade: The controller's viewpoint
- Touch entry device for air traffic control
- Real-time simulation in air traffic control
- FAA remote terminal system frequency assignment model

**NAN AIRCRAFT MAINTENANCE**

- Operator and technician tasks for the heads-up display test set and versatile avionics shop test /VAST/
- The test pilot in the airline industry or 'by bags are packed and I'm ready to go'
- Parts tracking and engine history recording for on-condition maintenance
- CF6 jet engine performance deterioration
- Centralizing Air Force aircraft component repair in the field can provide significant savings
- If any helicopter maintenance is to be ready for wartime, it must be made efficient and effective in peacetime
- Parts tracking and engine history recording for on-condition maintenance

**NAN AUTOMATION**

- Commercial parachutes --- from safety standpoint
- Determination of the probability of consequences of aircraft-system malfunctions in the evaluation of flight safety levels
- Investigation of the cross-ship comparison monitoring method of failure detection in the HMIT RPN --- digital control techniques using airborne microprocessors
- Masked failures --- aircraft control and displays

**MALFUNCTIONS**

- Flight deck alarm systems
- Flight test of stick force stability
- Role of Numerical control Design in the computer-aided design/manufacturing interface at Sikorsky
- Handling quality and display requirements for low speed and hover in reduced flight visibility
- Military considerations for helicopter flight controls
- Flight test results
- Operational model of the pilot in discrete time

**NAN OPERATIONS INFORMATION SYSTEMS**

- A case study in design — The Gossamer Condor
- Management information systems

**NAN ENGINEERING MANAGEMENT**

- Flight test of stick force stability
- Role of Numerical control Design in the computer-aided design/manufacturing interface at Sikorsky
- Handling quality and display requirements for low speed and hover in reduced flight visibility

**NAN SAFETY MANAGEMENT**

- Determination of the probability of consequences of aircraft-system malfunctions in the evaluation of flight safety levels
- Investigation of the cross-ship comparison monitoring method of failure detection in the HMIT RPN --- digital control techniques using airborne microprocessors
- Masked failures --- aircraft control and displays

**NAN PROJECT MANAGEMENT**

- Flight deck alarm systems
- Flight test of stick force stability
- Role of Numerical control Design in the computer-aided design/manufacturing interface at Sikorsky
- Handling quality and display requirements for low speed and hover in reduced flight visibility

**NAN LOGISTICS MANAGEMENT**

- Determination of the probability of consequences of aircraft-system malfunctions in the evaluation of flight safety levels
- Investigation of the cross-ship comparison monitoring method of failure detection in the HMIT RPN --- digital control techniques using airborne microprocessors
- Masked failures --- aircraft control and displays

**NAN INVENTORY MANAGEMENT**

- Flight deck alarm systems
- Flight test of stick force stability
- Role of Numerical control Design in the computer-aided design/manufacturing interface at Sikorsky
- Handling quality and display requirements for low speed and hover in reduced flight visibility

**NAN RESEARCH MANAGEMENT**

- Determination of the probability of consequences of aircraft-system malfunctions in the evaluation of flight safety levels
- Investigation of the cross-ship comparison monitoring method of failure detection in the HMIT RPN --- digital control techniques using airborne microprocessors
- Masked failures --- aircraft control and displays

**NAN FINANCIAL MANAGEMENT**

- Flight deck alarm systems
- Flight test of stick force stability
- Role of Numerical control Design in the computer-aided design/manufacturing interface at Sikorsky
- Handling quality and display requirements for low speed and hover in reduced flight visibility

**NAN DATA MANAGEMENT**

- Flight deck alarm systems
- Flight test of stick force stability
- Role of Numerical control Design in the computer-aided design/manufacturing interface at Sikorsky
- Handling quality and display requirements for low speed and hover in reduced flight visibility

**NAN CONTRACT MANAGEMENT**

- Flight deck alarm systems
- Flight test of stick force stability
- Role of Numerical control Design in the computer-aided design/manufacturing interface at Sikorsky
- Handling quality and display requirements for low speed and hover in reduced flight visibility

**NAN CONFIGURATION MANAGEMENT**

- Flight deck alarm systems
- Flight test of stick force stability
- Role of Numerical control Design in the computer-aided design/manufacturing interface at Sikorsky
- Handling quality and display requirements for low speed and hover in reduced flight visibility

**NAN DATA MANAGEMENT**

- Flight deck alarm systems
- Flight test of stick force stability
- Role of Numerical control Design in the computer-aided design/manufacturing interface at Sikorsky
- Handling quality and display requirements for low speed and hover in reduced flight visibility

**NAN INFORMATION MANAGEMENT**

- Flight deck alarm systems
- Flight test of stick force stability
- Role of Numerical control Design in the computer-aided design/manufacturing interface at Sikorsky
- Handling quality and display requirements for low speed and hover in reduced flight visibility

**NAN INVENTORY MANAGEMENT**

- Flight deck alarm systems
- Flight test of stick force stability
- Role of Numerical control Design in the computer-aided design/manufacturing interface at Sikorsky
- Handling quality and display requirements for low speed and hover in reduced flight visibility

**NAN LOGISTICS MANAGEMENT**

- Flight deck alarm systems
- Flight test of stick force stability
- Role of Numerical control Design in the computer-aided design/manufacturing interface at Sikorsky
- Handling quality and display requirements for low speed and hover in reduced flight visibility

**NAN INVENTORY MANAGEMENT**

- Flight deck alarm systems
- Flight test of stick force stability
- Role of Numerical control Design in the computer-aided design/manufacturing interface at Sikorsky
- Handling quality and display requirements for low speed and hover in reduced flight visibility

**NAN RESEARCH MANAGEMENT**

- Flight deck alarm systems
- Flight test of stick force stability
- Role of Numerical control Design in the computer-aided design/manufacturing interface at Sikorsky
- Handling quality and display requirements for low speed and hover in reduced flight visibility

**NAN OPERATIONS INFORMATION SYSTEMS**

- A case study in design — The Gossamer Condor
- Management information systems
Hydrodynamic propulsion by large amplitude oscillation of an airfoil with chordwise flexibility

Marine superyacht propulsion module [ASME PAPER 78-GT-58]

Gas turbines for ACV's and hydrofoils

Jet propulsion for ACV's and hydrofoils

Folded shear plane control apparatus for aircraft steering and stabilization

Naval architectural considerations in the design of helicopters [AIAA 79-0842]

Sea behaviour prediction of helicopters through free flight tests

Goodyear aerospace conceptual design maritime patrol airship EP3

Factors and tradeoffs affecting gas-air parachutes designed for civilian personnel applications [NASA-JSC-26560]

How to get the world airborne --- market research [NASA-CP-158937]

Demand for large freighter aircraft as projected [NASA-CE-1521841]

Study of future world markets for agricultural components - Current and future points of interest [NASA-CR-158916]

Study of future world markets for agricultural aircraft [NASA-CE-158937]

Goodyear aerospace conceptual design maritime patrol airship EP3

Some main points about general-aviation design practice [AD-A069339]

Design criteria for airline operation [AIAA PAPER 79-10497]

A graph-theoretic method to quantify the airline route authority [NASA-CE-1521841]

Engine requirements for future general aviation aircraft [NASA-CE-158915]

Cargo/Logistics Airlift System Study (CLASS), Volume 1

Cargo/Logistics Airlift System Study (CLASS), Volume 2

Cargo/Logistics Airlift System Study (CLASS), executive summary [NASA-CE-158915]

Study of future world markets for agricultural aircraft [NASA-CE-158937]

Airbus picks up speed - and the junior A310 takes off [NASA-CE-158915]

The European Airbus has definitively penetrated the world market [NASA-CE-158915]

Additional analyses of air carried load factors and competition [NASA-CE-158915]

Airfield marking paints state-of-the-art [NASA-CE-158915]

Design procedure for aircrew station labelling, selection and abbreviation [NASA-CE-158915]
Stability and control derivative estimates obtained from flight data for the Beech 99 aircraft [NASA TM-72663] p0367 A79-20134
Determination of the stability and control derivatives for the variable-response research aircraft using a modified maximum likelihood estimator [AD-1063270] p0384 A79-21082
Important factors in the maximum likelihood analysis of flight test maneuvers [NASA TP-1959] p0425 A79-22113

MECHANICAL DEVICES


MECHANICAL DRAWINGS

U ENGINEERING DRAWINGS

STABILITY AND CONTROL

STABILITY AND CONTROL DERIVATIVES

STABILITY AND CONTROL DERIVATIVES

STABILITY AND CONTROL DERIVATIVES

STABILITY AND CONTROL DERIVATIVES

STABILITY AND CONTROL DERIVATIVES

STABILITY AND CONTROL DERIVATIVES

STABILITY AND CONTROL DERIVATIVES

STABILITY AND CONTROL DERIVATIVES

STABILITY AND CONTROL DERIVATIVES

STABILITY AND CONTROL DERIVATIVES

STABILITY AND CONTROL DERIVATIVES

STABILITY AND CONTROL DERIVATIVES

STABILITY AND CONTROL DERIVATIVES

STABILITY AND CONTROL DERIVATIVES

STABILITY AND CONTROL DERIVATIVES

STABILITY AND CONTROL DERIVATIVES
Electrical bonding problems in aircraft

Behavior of adhesively bonded joints under cyclic loading

METEOROLOGICAL INSTRUMENTS
Failure analysis of aerospace components

METALLOIDS
Failure analysis of aerospace components

METALLURGY
The role of metallurgy in aircraft accident investigation and litigation

METALS
The technology of brazing and soldering in broad-based and vital to the industrial economy

UNECHABICAL PROPERTIES
TUNGSTEN
TITANIUM
RARE EARTH ELEMENTS
POWDERED ALUMINUM
NICKEL COATING
METAL COATINGS
CHROMIUM
ALUMINUM COATINGS
MAGNESIUM
COBALT

Aircraft dropwindsonde system

Aircraft icing

A new airborne data system for atmospheric research

Research aircraft and their capabilities --- in atmospheric environmental measurements

A small aircraft gust-probe system for studies of boundary layer convection and transport

The status of air motion measurements on NOAA aircraft

The Cessna-207 aircraft turbulence and temperature measuring system

Design of a flexible aircraft data acquisition system --- for meteorological research

METEOROLOGICAL RADAR
Adaptation of a digital airborne radar for use on the microphysics research aircraft

Design considerations for the NOAA airborne meteorological radar and data system

Geneva, Zurich get fine-grain 3-D color weather radar

Real time weather display in the general aviation cockpit

Echolocation of severe storms on airport surveillance radars

METEOROLOGICAL RESEARCH AIRCRAFT
Cloud physics observations inside hailstorms with an armored aircraft data system

A modular approach to airborne research instrumentation

A new airborne data system for atmospheric research

Research aircraft and their capabilities --- in atmospheric environmental measurements

A small aircraft gust-probe system for studies of boundary layer convection and transport

The status of air motion measurements on NOAA aircraft

The Cessna-207 aircraft turbulence and temperature measuring system

Design of a flexible aircraft data acquisition system --- for meteorological research

METEOROLOGICAL ROCKETS
C: Turbulence missions

METEOROLOGICAL SERVICES
Availability and use of weather data --- in general aviation

Joint aircraft-ground systems automation: Real time data transmission requirements --- for wind hazard warning

Summary report of the Weather Services Committee

METEOROLOGICAL STATIONS
U WEATHER RADAR
Metereological and operational aspects of 46 clear air turbulent sampling missions with an instrumented B-57B aircraft. Volume 2, appendix C: Turbulence missions

A report on atmospheric obstructions to visibility. Volume 2: Results of literature search --- bibliographies

Aerospace and avionics, volume 32, number 5

Proposed advancements in simulation of atmospheric phenomena for improved training

Summary Report of the Icing Committee

Summary report of the Visibility Committee

Summary of the Aircraft Operations Committee

Summary report of the Human Factors Committee

Summary report of the Aircraft Design Committee

Summary report of the Visibility Committee

Summary report of the Data Acquisition and Utilization

MEASURING INSTRUMENTS

A-305
Contribution of the engine 8 & 0 community to Development of in-flight steady-state failure rates Nuclear aircraft innovations and applications [AIAA PAPER 79-1360] Alpha Jet - The Franco-German training and tactical support aircraft P0516 A79-242063

Possibilities and limits of the application of estimation methods for development costs and equipment unit prices of flight systems in preliminary design, planning, and evaluation tasks [DGLR PAPER 79-052] P0517 A79-243488


Usage indicators for prepared products --- materials performance for military aircraft [NT UH-60A HELICOPTER] P0530 A79-825352

Fundamentals of design. II - VTO for combat aircraft [NT OH-58 HELICOPTER] P0535 A79-82743

State of the art in aircraft loads monitoring Electric power system control techniques [NT CH-46 HELICOPTER] P0561 A79-844533

Propulsion system and airframe integration consideration for advanced air-to-surface aircraft [NT CH-54 HELICOPTER] P0563 A79-848000

Advanced EPP electrical systems [NT AH-64 HELICOPTER] P0615 A79-848164

The effect of standardization of avionics software quality assurance [NT HEAVE LIFT HELICOPTERS] P0615 A79-848165

Evaluation of selected class III requirements of MIL-P-87858 /ASG/ 'Flying Qualities of Piloted Airplanes' [NT UN-I HELICOPTER] P0680 A79-511286

A new standard for lightning qualification testing of aircraft technical overview, definitions and basic waveforms [NT 5-61 HELICOPTER] P0680 A79-511288

The determination of margins of safety for critical aircraft systems --- electronic equipment EMC [NT CH-46 HELICOPTER] P0650 A79-528087

Military considerations for helicopter flight controls [NT CH-46 HELICOPTER] P0652 A79-536280

Integrated Avionics Control System (IACS) [NT CH-47 HELICOPTER] P0637 T9-100554

Nondestructive evaluation procedure for military airfields [NT CH-54 HELICOPTER] P0653 T9-480000

Computerization of tactical aircraft performance data for fleet application [NT CH-54 HELICOPTER] P0106 T9-130677

Dynamic response of aircraft to unloading and loaded pavement profiles [NT CH-54 HELICOPTER] P0106 T9-130679

The development of a parametric method of measuring in-flight loads based on flight measurements on a lightning Mk.T5 [ARC/F/R-3028] P0163 T9-140888


Testing of coatings and materials for jet engine components in simulated operational environments [MBJ-NF-78001-1] P0228 T9-168585

A survey of communications in the high noise environment of Army aircraft [MBJ-NF-78001-1] P0228 T9-168586

Airborne fiber optics manufacturing technology. Aircraft installation processes [MBJ-NF-78001-1] P0235 T9-168694

Some UK research studies of the use of wing-body strakes on combat aircraft configurations at high angles of attack [MBJ-NF-78001-1] P0235 T9-168695

Development of a NICD battery interface unit --- for use on Army aircraft [MBJ-NF-78001-1] P0235 T9-168696

An appraisal of models used in life cycle cost estimation for USAF aircraft systems [MBJ-NF-78001-1] P0429 T97-229462

Optimum frequencies for aircraft classification [MBJ-NF-78001-1] P0490 T97-224220

The impact of alternate fuels on aircraft configuration characteristics --- military aircraft [MBJ-NF-78001-1] P0501 T97-252980

Application of engine usage analysis to component life utilization [MBJ-NF-78001-1] P0553 T97-271600

Naval aircraft operating and support cost-estimating model, FY 1977 revision [MBJ-NF-78001-1] P0649 T97-291040

Enforcer aircraft [MBJ-NF-78001-1] P0651 T97-301749

Design procedure for aircrew station labeling selection and abbreviation [MBJ-NF-78001-1] P0656 T97-302848

GCU, the Guidance and Control Unit for all weather approach [MBJ-NF-78001-1] P0657 T97-302849

Experimental methods for aircraft design qualifications in an exploding warhead environment [MBJ-NF-78001-1] P0706 T97-322023

MILITARY AVIATION

Support systems for advanced military electronics --- ATF design trends [MBJ-NF-78001-1] P0023 T97-123057

The MAV/TH-132 Navistar navigator [MBJ-NF-78001-1] P0058 T97-123737

The challenge of new technology for avionics testing --- U.S. Air Force assessment [MBJ-NF-78001-1] P0080 T97-164439

Thoughts on the future of military aviation. I [MBJ-NF-78001-1] P1051 T97-200225

In-flight refuelling and the world of the eighties /Second Sir Alan Cobham Memorial Lecture/ [MBJ-NF-78001-1] P1067 T97-207090

Army outlook - Flight control systems --- for helicopters [MBJ-NF-78001-1] P1098 T97-227729

The logistics of life cycle cost --- in operations and support systems for fighter aircraft [MBJ-NF-78001-1] P2005 T97-236269

The new P3 Orion aircraft with the BAEF [MBJ-NF-78001-1] P2032 T97-294866

Survey of the Cost estimation process used during the transporter design stage --- military aviation [MBJ-NF-78001-1] P2057 T97-423499

The application of pulsed 'G' band radio altimeters to modern military aircraft [MBJ-NF-78001-1] P2063 T97-495900

MILITARY HELICOPTERS

VT AH-64 HELICOPTER [AD-A0564333]

VT CH-46 HELICOPTER [AD-A0564333]

VT CH-47 HELICOPTER [AD-A0564333]

VT CH-54 HELICOPTER [AD-A0564333]

VT H-53 HELICOPTER [AD-A0564333]

VT UH-60 HELICOPTER [AD-A0564333]

VT OH-58 HELICOPTER [AD-A0564333]

VT S-61 HELICOPTER [AD-A0564333]

VT UH-1 HELICOPTER [AD-A0564333]

VT OH-6A HELICOPTER [AD-A0564333]

VT OH-61A HELICOPTER [AD-A0564333]

A systematized approach to helicopter safety [AD-A0564333]

Development of an environmental design and test guide for Army rotary-wing aircraft [AD-A0564333]

Integrated computer-display system for modern anti-tank/combat helicopters [AD-A0564333]

MBB helicopters for the army [AD-A0564333]

Important criteria for the definition and design of future helicopter powerplants [AD-A0564333]

Chief features of future helicopter avionics [AD-A0564333]

Presentation of thermal or residual-light TV images on head-up displays for night or all-weather operations --- for military helicopters [AD-A0564333]

A-309
The Lynx hingeless rotor system and flight characteristics — military helicopter  
Lynx reliability and maintainability design and military service experience — helicopter performance  
Improvement of safety for helicopter crews  
Why the AATAT chose the 'Gazelle/Hot' /SA-342 R/ as antitank helicopter  
Helicopter combat mission simulator (ABS 78-13)  
Environmental vibration testing of helicopter stores and equipment to the procedures outlined (ABS-STD-810C)  
Pilferment wound main rotor blade — The Army's new production blade for the MH-1  
Testing of the TOW missile-configured AH-1T helicopter — Tube-launched, optically-tracked fire guided (ABS 78-43)  
Generalizing helicopter flight test performance data /FUEL/ (ABS 78-44)  
800 shaft horsepower advanced technology demonstrator engine — turboshaft for military helicopters (ABS 78-47)  
The application of multiplex data transmission standards to medium sized military helicopters (ABS 78-1664)  
U.S. Army helicopter technology initiatives (ABS 78-1667)  
The development and use of simulation for helicopter flight training in the Royal Navy (ABS 78-20791)  
Army outlook — Flight control systems — for helicopters (ABS 78-22772)  
The Lynx transmission and conformal gear box — helicopter drive train (SAN PAPER 781041)  
Crash simulation of composite and aluminum helicopter fuselages using a finite-element program (AIR 79-0701)  
Advanced technology applied to the US-66A and S-76 helicopters (AIR 79-01672)  
Copter windshields made tougher — Special coating extends life, adds safety (AIR 79-31172)  
Death by misadventure — helicopter escape system proposals (AIR 79-33588)  
Design and development of the Agusta A109 helicopters (AIR 79-33640)  
Aircraft RAM (MMR/FR) data comparative analysis (AIR-1056893)  
Intensive tropic function testing (AIR-1056416)  
The effective acoustic environment of helicopter crews (AIR-1056416)  
A static acoustic signature system for the analysis of dynamic flight information (AIR-1057443)  
AH-1G helicopter main rotor flow survey (AIR-1057443)  
HEL participation in the plan for assisting in the development of army helicopter electro-optical symbology (AIR-1058730)  
Evaluation of aircraft equipment monitoring devices, procedures, and techniques (AIR-1058846)  
Internal cockpit reflections of external point light sources for the model YAH-64 advanced attack helicopter (AIR-1058846)  
Comparative injury patterns in US Army helicopters (AIR-1058846)  
Engineering analysis of crash injury in army aircraft (AIR-1058846)  
Assessment of the benefits of aircraft crashworthiness (AIR-10591965)  
Helicopter crashworthy fuel systems and their effectiveness in preventing thermal injury (AIR-10591965)  
The approach to crew protection in the crash environment for the YAH-64 (AIR-10591965)  
Helicopter underwater escape trainer (AIR-10591965)  
A computer model for determining weapon release parameters for a helicopter in non-accelerated flight (AIR-10622155)  
Aircraft design test 1, Hughes YAH-64, advanced attack helicopter (AIR-10643959)  
Naval equipment system program for US Army helicopters (AIR-10653089)  
Preliminary airworthiness evaluation AH-1S helicopter equipped with a Garrett infrared radiation suppressor and an AN/ALQ-144 jammer (AIR-10677577)  
A flight investigation of basic performance characteristics of a teetering-rotor attack helicopter (AIR-10678412)  
Electromagnetic compatibility (EMC) investigation on CH-47 Chinook helicopter (RB-5333-44R-001)  
Maintenance cost study of rotary wing aircraft, phase 2 (NAV-AW-RO112)  
A flight-10 heliopert, 19-round lightweight airborne launcher jetison envelope determination (AIR-1069828)  
A helicopter high definition rotor blade radar (AIR-10702209)  
Subjective assessment of a helicopter approach system for IFR conditions (AIR-10702209)  
The equipment-system interface in an antitank helicopter at night (AIR-10702209)  
Project RAVOLO (KIN vertical takeoff and landing capability development) (AIR-10702209)  
Implementation of flight control in an integrated guidance and control system (AIR-10702209)  
Stabilizing electro-optical systems on helicopters (AIR-10702209)  
Preliminary airworthiness evaluation CH-47C with enhanced cobra armament system (AR-1S/ECAS) (AIR-10702209)  
Flight test results of a virtual image, pantograph controlled, and display station (AIR-10702209)  
If any helicopter maintenance is to be ready for wartime, it must be made efficient and effective in peacetime (AIR-10702209)  
Load spectra measuring equipment. Part 2: Details of K-2 system used to acquire torque load data in Sea King helicopters (AIR/MECH-ENG-MCTF-372)  
Preliminary airworthiness evaluation — helicopter installed with enhanced cobra armament system (AIR/ECAS) (AIR-1071383)  
Military Operations

MT COBAT

High-performance VTOL for over-the-horizon targeting — for surface to surface cruise missiles (AIR 78-107)  
in-flight refuelling and the world of the eighties /Second Sir Alan Cobham Memorial Lecture/ (AIR 78-1836)  
Lighter-than-air craft for strategic mobility (AIR 78-1597)  
Lighter-than-air craft for strategic mobility (AIR 78-1598)  
Coast guard missions for lighter-than-air vehicles (AIR 78-1570)  
Distributed TOSA — An approach to JASS phase II (AIR 78-16203)  
Time Division Multiple Access Joint Tactical (AIR 78-16203)
MISSILE COMPONENTS

MISSILE COMPONENTS

MISSILE ANTENNAS
Wings
Rain-erosion resistant materials in air and space
travel
[AIAA-79-18921]
p0301
Aerodynamics of low aspect ratio wings
[AIAA 79-21201]
Pressure distributions on three different cruciform aft-tail control surfaces of a wingless missile at mach 1.60, 2.36, and 3.70
Volume 1: Trapezoidal tail — conducted in Langley Unitary Plan wind tunnel
[NASA-TP-80009-VOL-1] p0547
Ultra-high-modulus graphite-epoxy conical shell development, supplement
[AD-A069755] p0662

MISSILE CONFIGURATIONS
Unconstrained supersonic cruise and maneuvering configuration concepts — for long range air-ground and air-air missiles
[AIAA PAPER 79-02201] p0144
Conventional aerodynamic; A different prospective: Description — Applications — missile configurations
[AIAA 79-1650] p0567
Improved transonic nose drag estimates for the NSWC missile aerodynamic computer program
[AD-A057645] p0358
Vortex models on missile configurations — computer program for determining aerodynamic coefficients and flow deflection
[AM-56-FW-77-27] p0287
Bumblebee program. Aerodynamic data. Part 1: Supersonic flow field, pressure field, and panel load data for validation of computational methods
[NSWC-CT-3111] p0378
Bumblebee Program: Aerodynamic data. Part 4: Wing loads at Mach numbers 1.5 and 2.0 — missile configurations
[NSWC-CT-3117] p0817
Effect of nose bluntness and afterbody shape on aerodynamic characteristics of a monoplanar missile concept with bodies of circular and elliptical cross sections at a Mach number of 2.50
[NSWC-TR-80055] p0538

MISSILE PERFORMANCE
Band spread effect of a Doppler miss distance measurement system — for missile scoring system
[AD-A068747] p0064
High-performance VTO for over-the-horizon targeting — for surface to surface cruise missiles
[AMS 78-10] p0179
The aerodynamic effectiveness of split-flap stabilizers
[AIAA PAPER 79-0093] p0181
Numerical computation of optimal evasive maneuvers for a realistically modeled airplane pursued by a missile with proportional guidance
[AIAA 79-1628] p0566
Optimal missile guidance for low miss and perpendicular impact
[AIAA 79-1736] p0571
A comparison of air-to-air missile guidance laws based on optimal control and differential game theory
[AIAA 79-1736] p0571
Complex quaternion notation in coordinate transformations for missile launching aircraft-inertial space transformations
[AMS 78-10] p0619
Coherent optical processing for missile guidance
[AD-A059028] p0684
SLIC-7 laser gyro investigations — thermal and storage stability
[AD-A059028] p0100
Stability and control characteristics of a monoplanar elliptic missile model at Mach numbers from 1.60 to 2.66
[NASA-TP-1352] p0287
Global positioning system tactical missile guidance
[NSWC-TR-8003] p0353

MISSILE DESIGN
Optimizing finned pilotless flight vehicle design parameters
[NSWC-CS-20004] p0569
Atmospheric Flight Mechanics Conference for Future Space Systems, Boulder, Colo., August 6-8, 1979,
SUBJECT INDEX

Design for Mars exploration
[AD-A057310/5] p0038 N79-10065

Mixing
- Linear mixing
- Turbulent mixing

Mixtures
- Liquid solutions
- Emulsions
- Exotic alloys
- Fog
- Gas mixtures
- Metal matrix composites
- Nuclear emulsions
- Smoke
- Nuclear alloys
- Metal matrix composites
- Fog
- Aqueous solutions

Vibration
- Wind tunnel models
- Semi-span models
- Dynamic models
- Digital simulation
- Aircraft models
- Modal response
- Scale models
- Atmospheric models
- Analog simulation
- Spacecraft models

Subject index

- Fluidized bed gas turbine experimental unit for Mars exploration
- Design of a segmented mission analysis program for Advanced Scout Helicopter flying qualities
- Modern rigid airships as deep water control escorts
- Internal mixer investigation for JT8D engine jet noise reduction
- Volume 2: Appendices A, B, C, D

Modal response
- Structural parameter identification from measured vibration data, for digital simulation of multiple shafts
- Forced vibrations of a single stage axial compressor rotor
- Modal analysis of gas turbine buckets using a digital test system
- New methods for ground-testing aeronautical structures

Bending moments
- Bending moment distribution

Electronic modules
- A high temperature turbine research module
- Assessment of augmented electronic fuel controls for modular engine diagnostics and condition monitoring
- Electromechanical modules
- Modular integrated utility system
- Fluidized bed gas turbine experimental unit for Mars exploration

Mode in communications channels with fading---
for short wave aircraft communication

Standard avionics modules (SAM) for existing modules
[AD-A065629] p0386 N79-31691
[AD-A0653629] p0435 N79-23083

Nukes
- Modular integrated utility system

Modulators
- Modulators and demodulators
- Modems
- Modems

Moisture
- Soil moisture
- Moisture content
- Atmospheric moisture
- Moisture/temperature effects upon mean strength of composite-to-metal adhesively bonded joint elements---
for F-16 aircraft
- Measurement of emulsion water content in aviation fuels
- Environmental synergism and simulation in resin matrix composites---under airfield humidity and temperature conditions
- Formation of water-fuel emulsions in tanks of ground aircraft
- Installation of icing tests
- Experimental and theoretical study of the influence of various parameters on an icing section
- Helicopter ice detection, icing severity and liquid water content measurements

Holding materials
- Pressure-controlled thermal expansion molding of advanced composite HP wing structure

Molecular electronics
- Large scale integration
- Molecular flow
- Slip flow
- Transition flow
- The low-density channel of the Aerodynamic Institute

Helicopter morphology
- Cosmic ray showers

Heli徳urum alloys
- Here 95

Robert distribution
- Measuring the moment imparted by a liquid pump in startup regime

Robots
- Bending robots
PASA PROGRAMS

NASA PROGRAMS

Subject Index

NT TILT ROTOR RESEARCH AIRCRAFT PROGRAM

NT TERMINAL CONFIGURED VEHICLE PROGRAM

NT SUPERSONIC CRUISE AIRCRAFT RESEARCH

NT QUIET ENGINE PROGRAM

NT ATLIT PROJECT

Overview of FIREMEN program at Ames Research Center

Fire resistant aircraft seat materials

Development of aircraft lavatory compartments with demand for large freighter aircraft as projected

An overview of NASA research on positive general aviation crashworthiness seat

NASA general aviation energy-conservation research programs

Fabric for fire resistant passenger seats in aircraft

Enclosure fire modeling

Model fire tests on polyphosphazene rubber and polyvinyl chloride (PVC)/nitrile rubber foams

NASA research on general aviation power plants

Preliminary concept program test results

Overview of NASA general aviation program

General aviation energy-conservation research programs

Algorithms and logic for incorporating MLS back azimuth information into the NASA TCV B-737 airplane area navigation system

Flying NASA's terminal configured vehicle against the microwave landing system

NASA research objectives and roles

Langley airfoil-research program

Overview of two-dimensional airfoil research at Ames Research Center

Tests of NASA ceramic thermal barrier coating for gas-turbine engines

Generalization of analytical tools for helicopter-rotor airfoils

Ozone contamination in aircraft cabins:

- Recommendations of the panels: Panel on flight measurements

- Recommendations of the panels: Panel on flight planning to avoid high ozone

Ozone contamination in Aircraft Cabins: Summary of recommendations

Ozone contamination in Aircraft Cabins: Post workshop review of recommendations

Ozone contamination in Aircraft Cabins: Appendix B: Ozone toxicity

Ozone contamination in Aircraft Cabins: Appendix B: Overview papers. In-flight measurements

Ozone contamination in Aircraft Cabins: Appendix B: Overview papers. Flight 8 planning to avoid high ozone

Ozone contamination in Aircraft Cabins: Appendix B: Overview papers. Ozone destruction techniques

Important factors in the maximum likelihood analysis of flight test maneuvers

NASA cargo/logistics airlift systems studies

NASA general aviation crashworthiness seat development

Effect of lip and centerbody geometry on aerodynamic performance of inlets for tilting-rotor VTOL aircraft

Determined the dynamic response due to an imbalance at the attachments of a rotor on a pod --- caused by rotor blade loss

Ultrasonic inspection of engine nacelle structure searching for cracks

Recent applications of theoretical analysis to V/STOL inlet design

Technology for aircraft energy efficiency

Flight research capabilities of the NASA/Army Rotors Systems Research Aircraft

Composite structure applications for commercial aircraft

The NASA high pressure facility and turbine test rig

Development of noise and vibration ride comfort criteria

NASA plans and programs in support of integrated NTC development

Engine technology for production turbofan engines

NASA research on general aviation power plants

Prop-fan propulsion - its status and potential

An aeroelastic study of the IT-15 Tilt Rotor Research Aircraft

Advanced supersonic technology and its implications for the future

Enhanced capabilities of future fighters as a result of BIMAS

NASA/AIAA general aviation crash dynamics program - a status report

Verification and validation of the NASA Terminal Configured Vehicle's /TCP/ Wind Analysis program using real-time digital simulation

A NASA initiative for general aviation - The general aviation airfoil design and analysis service

The NASA Aircraft Energy Efficiency program

Up and away with OSRA --- Quiet Short-haul Research Aircraft

Demand for large freighter aircraft as projected by the NASA cargo/logistics airlift systems studies

NASA general aviation crashworthiness seat development

An overview of NASA research on positive displacement type general aviation engines

Overview of FIREMEN program at Ames Research Center

Development of aircraft lavatory compartments with improved fire resistance characteristics

Development of fire-resistant, low smoke generating, thermally stable end items for aircraft and spacecraft

Fire resistant aircraft seat materials

NASA gear research and its probable effect on rotorcraft transmission design

A-316
NASA STRUCTURAL ANALYSIS PROGRAM

NASTRAN

The use of 3-D finite element analysis in the design of helicopter mechanical components

Aerelastic addition to NASTRAN

Analysis of high velocity impact on hybrid composite fan blades

Analysis of aircraft structure using applied fracture mechanics

Correlation of predicted and measured thermal stresses on an advanced aircraft structure with similar materials

NATIONAL AIRSPACE UTILIZATION SYSTEM

An evaluation of certain selected modifications to the national airspace system bimodal tracking algorithm

NATIONAL AVIATION SYSTEM

Considerations in local administration of airports in Canada

National airport system plan 1978-1987

International Air Transportation Competition Act of 1978 --- congressional reports

NAVIGATION

NT DEVELOPING NATIONS

NAVIER-STOKES EQUATION

Computational aerodynamics development and outlook

Numerical solution of unsteady flows of viscous incompressible fluids about airfoils by a combined method of order O(h^2) and O(h^4)

H^1−/1 least squares method for the Navier-Stokes equations --- numerical simulation of separated viscous flows around wings and airfoils

Parabolized Navier-Stokes solutions for hypersonic viscous flows over blunt cones at large angles of attack

Numerical solution of a body-propeller combination flow including swirl and comparisons with data

Numerical aerodynamic simulation facility --- for flows about three-dimensional configurations

Prospects for computing airfoil aerodynamics with Reynolds averaged Navier-Stokes codes

Numerical solution of the Navier-Stokes equations for arbitrary two-dimensional multi-element airfoils

Visualisations and calculations of air intakes at high angles of attack and low Reynolds number --- Navier-Stokes equation

NAVIGATION AIDS

VT VHFB OMNIRANGE NAVIGATION

A system for providing an integrated display of instantaneous information relative to aircraft attitude, heading, altitude, and horizontal situation

NAVIGATION AIDS

NT AIRPORT DEBEONS

NT BRACONS

NT COMPASSES

NT GYROCOMPASS

NT MICROWAVE SCANNING BEAM LANDING SYSTEM

NT NAVIGATION INSTRUMENTS

NT OMIDIRECTIONAL RADIO RANGES

NT RADAR DEBEONS

NT RADAR SCANNERS

NT RADIO DIRECTION FINDERS

NT TACOM

Experimental design study of an airborne interferometer for terrain avoidance


Loran-C as an international aid to navigation

New-generation Tacan equipment

Fail-safe output stage for navigation transmitters --- reliability design for TACAN equipment

The AN/ARN-132 Navstar navigator

MILECS - An integrated navigation and air traffic control system for the future needs of international aviation

DAS for TMA navigation --- DMF Azimuth System for Terminal Maneuvering Area

Application of a north seeking heading and attitude reference for the autonomous navigation of helicopters

Navigation planning - Need for a new direction --- unnecessary redundancies between current navigation systems

Aeronautical aspects of the DOT National Plan for Navigation

VOR - Its past, present, and future

Direction finders in the service of safety for air and sea traffic

DEED-MC - The new TAC system in the FRC --- Display of Extracted Radar Data-Link Computer

Navstar/GPS /Global Positioning System/ and electronic counter measures --- TACAN system vulnerability

How to add satellite navigational accuracy and stability to existing offshore NAV Systems

GPS - A universal navigation aid

Hyperbolic positioning per se is passe --- navigation computations from range measurements using microprocessor

Loran C - Its future in the shadow of Navstar GPS

Advanced instrumentation and data evaluation techniques for flight tests --- of aircraft navigation systems

CKS - Taiwan's 21st century airport navigation aid

The DMZ-based Azimuth System /DAS/ as a commercial navigation aid
A simple integrated navigation system based on multiple BME

The basic geodetic shapes and position lines

Some possibilities for the navigation of small passenger aircraft

Inertial measuring unit for strapdown application

GPS receiver operation

Performance enhancements of GPS user equipment

Initial measuring unit for strapdown application

Helicopter navigation goals

A simple integrated navigation system based on multiple BME

Application of instrument rotation in the context of inertial navigation systems

Distribution System

Use of the Omega Navigation System in the North Atlantic in the framework of the Navigation

Recent results in navigation systems utilizing signal aiding from Navstar satellites

Design of a spread-spectrum navigation receiver

Use of the Omega Navigation System in the North Atlantic in the framework of the Navigation

Recent results in navigation systems utilizing signal aiding from Navstar satellites

A simple integrated navigation system based on multiple BME

Use of a gyroscope with adjustable torsion suspension in precise gyroscope sensors

Study of the structure of an integrated system of flight control, navigation, and display

Use of the Omega Navigation System in the North Atlantic in the framework of the Navigation

Recent results in navigation systems utilizing signal aiding from Navstar satellites
A survey of communications in the high noise environment of Army aircraft

Some aspects of helicopter communications

Integrated noise model --- computerized simulation of commercial jet aircraft noise near airports

Statistical comparisons of aircraft flyover noise adjustment procedures for different weather conditions

Three noise sources of three supersonic helical tip speed propellers in a wind tunnel

Engine-induced structural-borne noise in a general aviation aircraft

Experimental investigation of helicopter flight-path and acoustic-signal path identification and characterization

Airframe noise component interaction studies

A comparison of linear acoustic theory with experimental noise data for a small-scale engine-induced structural-borne noise in a general aviation aircraft

A comparison of linear acoustic theory with experimental noise data for a small-scale engine-induced structural-borne noise in a general aviation aircraft

Experimental noise data for a small-scale engine-induced structural-borne noise in a general aviation aircraft
Some effects of applying sonic boom assimilation to supersonic cruise aircraft design
[AIAA PAPER 79-0652] p0270 A79-26927
Experiments concerning the anomalous behaviour of aero-engine exhaust noise in flight
[AIAA PAPER 79-0648] p0271 A79-26930
Effects of simulated forward flight on jet noise, shock noise and internal noise
[AIAA PAPER 79-0615] p0271 A79-26936
Master Plan for prediction of vehicle interior noise
[AIAA PAPER 79-0652] p0272 A79-26943
Inside noise of C-1 cargo aircraft and the noise reduction performance by interior materials
[AIAA PAPER 79-0649] p0274 A79-27121
Advanced supersonic technology and its implications for the future
[SAE PAPER 790594] p0276 A79-27359
Structural stiffening of transmission housings with metal matrix materials
[AIAA 79-0806] p0283 A79-28287
Reduction of cabin noise during cruise conditions by stringer and frame damping
[SAE PAPER 79-0609] p0315 A79-28611
The influence of propeller design parameters on far field harmonic noise in forward flight
[AIAA PAPER 79-0616] p0317 A79-28959
Flight effects on subsonic jet noise
[AIAA PAPER 79-0616] p0317 A79-28961
Analysis of flight effects on noise radiation from dual-flow coaxial jets
[AIAA PAPER 79-0619] p0317 A79-28962
Experimental study of coaxial nozzle exhaust noise
[AIAA PAPER 79-0631] p0317 A79-29363
A jet exhaust noise prediction procedure for inverted velocity profile coannular nozzles
[AIAA PAPER 79-0633] p0317 A79-29364
Asymmetric stator interaction noise
[AIAA PAPER 79-0636] p0318 A79-29655
Lateral noise-attenuation results from flyovers of three transport aircraft
[AIAA PAPER 79-0651] p0318 A79-29666
Airframe noise component interaction studies
[AIAA PAPER 79-0668] p0318 A79-29669
Investigation of wing shielding effects on CTOL engine noise
[AIAA PAPER 79-0669] p0318 A79-29700
Twin jet noise shielding for a supersonic cruise vehicle
[AIAA PAPER 79-0670] p0318 A79-29797
A thermodynamic investigation of the aileron for noise reduction based on the work availability function 'exergy' --- of bypass jet engine gas turbine
[AIAA 79-7917] p0328 A79-29930
Requirements and decision outline - Total program
[SAE PAPER 790584] p0333 A79-29593
Acoustics and performance of high-speed, unequally spaced fan rotors
[SARE PAPER 79-784] p0339 A79-30503
A review of tail rotor design and performance
[SAE PAPER 79-0647] p0344 A79-31170
Quieter short and medium haul aircraft
[RAE PAPER 79-0649] p0408 A79-34921
A comparison of costs associated with local actions to reduce aircraft noise impacts
[SAE PAPER 79-0654] p0409 A79-34973
Design of quiet efficient propellers
[SAE PAPER 790559] p0454 A79-36719
The impact of noise regulations on propeller design
[SAE PAPER 790593] p0455 A79-36727
Propeller aircraft noise around general aviation airports
[SAE PAPER 790594] p0455 A79-36728
Preliminary OCGA program test results --- Quiet, Clean General Aviation Turbofan
[SAE PAPER 790596] p0455 A79-36729
Engine induced structural-borne noise in a general aviation aircraft
[SARE PAPER 790626] p0458 A79-36754
Summary of noise reduction characteristics of typical general aviation materials
[SARE PAPER 790627] p0458 A79-36755
Designing with damping materials to reduce noise and structural fatigue --- of aircraft components
[SARE PAPER 790631] p0458 A79-36758
A study of the evolution of noise exposure under different hypotheses of regulation
[ONERA, TP NO. 1979-44] p0473 A79-39093
General Electric Company variable cycle engine technology demonstrator program
[AIAA PAPER 79-1311] p0510 A79-40758
Design and performance of the propulsion system for the quiet short-haul research aircraft GSRA
[AIAA PAPER 79-1313] p0510 A79-40760
Sound absorption through flow separation - A new possibility for acoustic attenuation of engines
[p0512 A79-41238
Hawking impulsive noise - Some measured and calculated results --- from helicopter rotors in an anechoic chamber
[p0533 A79-43499
An experimental study of high frequency noise from model rotors - Prediction and reduction
[p0533 A79-43500
Helicopter noise rules - Are they appropriate and reasonable
[p0636 A79-49478
Supersonic transport aircraft noise, problems of noise reduction and establishment of standards
[p0643 A79-50237
Impact of noise generated by supersonic transports on the environment
[p0685 A79-51598
Composite noise reduction --- helicopter structures
[p0695 A79-53891
A study of noise generated by all types of transport engines.
[AD-00573001] p0037 A79-10509
Aerodynamic investigation of the aileron for noise reduction based on the work availability function 'exergy' --- of bypass jet engine gas turbine
[RAE PAPER 79-0615] p0041 A79-10857
Supersonic transport aircraft noise, problems of noise reduction and establishment of standards
[AD-00573105] p0038 A79-10505
A study of noise generated by all types of transport engines.
[AD-00573310] p0041 A79-10858
The cost of applying current helicopter external noise reduction methods while maintaining realistic vehicle performance
[p0041 A79-10855
A study of noise generated by all types of transport engines.
[AD-00573310] p0041 A79-10859
An analytical method for designing low noise helicopter transmissions
[p0041 A79-10859
A study of noise generated by all types of transport engines.
[AD-00573310] p0041 A79-10860
A study of noise generated by all types of transport engines.
[AD-00573310] p0042 A79-10863
Research on helicopter rotor noise
[AD-00583880] p0109 A79-13054
A study of noise generated by all types of transport engines.
[AD-00573310] p0109 A79-13057
Initial results of a porous plug nozzle for supersonic jet noise suppression
[AD-00583880] p0109 A79-13200
A study of noise generated by all types of transport engines.
[AD-00573310] p0109 A79-13203
An attempt to function 'exergy' --- of bypass jet engine gas turbine
[AD-00583880] p0109 A79-13207
An experimental investigation of noise reduction through the cylindrical fuselage of a twin-engine, propeller-driven aircraft
[AD-00583880] p0109 A79-13210
Evaluation of flowfield control devices for flight simulation of fan noise using a JT15D engine
[AD-00583880] p0109 A79-13217
Full-scale engine tests of bulk absorber acoustic treatment
[AD-00583880] p0109 A79-16645
A commercial airport noise environment: Measurement, prediction and control
[AD-00583880] p0119 A79-19814
Wind tunnel performance of four energy efficient propellers designed for Mach 0.8 cruise --- Lewis 0.5 foot wind tunnel studies for noise reduction in high speed turboprop aircraft
[AD-00583880] p0119 A79-20099
An experimental study of high frequency noise from model rotors - Prediction and reduction
[AD-00583880] p0119 A79-20290
Noise and performance calibration study of a Mach 2.2 supersonic cruise aircraft
[AD-00583880] p0128 A79-21629
Jet noise: A status report --- jet mixing and shock noise studies
[p0384 A79-23379

Approximate analysis of strake wings at low speeds
Northrop F-5F shark nose development
[ NASA-CR-158936 ]
p0935  A79-10047
Prediction of lateral aerodynamic loads on aircraft at high angles of attack
[ NASA-CP-102618 ]
p0415  A79-22024

Aerodynamic characteristics of forebody and nose strut based on F-16 wind tunnel test experience. Volume 2: Data base
[ NASA-CR-158922 ]
p0091  A79-12066
Experimental study of spanwise blowing on the surface pressure distribution and vortex-lift characteristics of a trapezoidal wing-strake configuration
[ NASA-CP-1290 ]
p0228  A79-16803
Subsonic longitudinal and lateral aerodynamic characteristics for a systematic series of stroke-wing configurations
[ NASA-TP-78642 ]
p0359  A79-20063
Some UK research studies of the use of wing-body strakes on combat aircraft configurations at high angles of attack
p0413  A79-21999

Design guidelines for the application of forebody and nose strakes based on F-16 wind tunnel test experience
p0413  A79-22000

Investigation of aerodynamic characteristics of subsonic wings
[ NASA-CR-158861 ]
p0481  A79-23921
Aerodynamic characteristics of forebody and nose strakes based on F-16 wind tunnel test experience. Volume 1: Summary and analysis
[ NASA-CR-3053 ]
p0580  A79-28143

Design guidelines for the application of forebody and nose strakes to a fighter aircraft based on F-16 wind tunnel test experience
p0413  A79-22000

Strake-induced separation from the leading edges of wings of moderate sweep
p0413  A79-22002

Investigation of aerodynamic characteristics of subsonic wings
[ NASA-CR-158861 ]
p0481  A79-23921
Aerodynamic characteristics of forebody and nose strakes based on F-16 wind tunnel test experience. Volume 1: Summary and analysis
[ NASA-CR-3053 ]
p0580  A79-28143

Aerodynamic performance of scarf inlets
[ AIAA PAPER 79-0380 ]
p0200  A79-23510
Performance characteristics of nonaxisymmetric nozzles installed on the F-16 aircraft
[ AIAA PAPER 79-0101 ]
p0201  A79-23532
Relations of nozzle performance coefficients
[ ASME PAPER 79-GT-185 ]
p0394  A79-32411
Aerodynamic improvement of the inlet pipe of a gas turbine
p0526  A79-42560

Determination of ejector nozzle starting parameters
p0568  A79-14048

Influence of stator vane cavitating on alternating stress level in turbine rotor blades
p0568  A79-14048

Experimental study of the gasdynamic characteristics of a nozzle guide vane row with air ejection onto the vane surface
p0982  A79-16787

Flow of ideal gas in tapering nozzles
p0567  A79-45325
A numerical study of jet entrainment effects on the subsonic flow over nozzle afterbodies
[ AIAA PAPER 79-0135 ]
p0142  A79-19554
Theoretical studies of simultaneous two-dimensional high-pressure and one-dimensional low-pressure flows of an ideal gas in nozzle ejectors
p0197  A79-22437
Numerical investigation of the gasdynamic characteristics of control nozzles
p0197  A79-22439
Total pressure recovery of flared fan nozzles used as inlets
p0211  A79-24178

Quasi-steady numerical methods for the computation of inviscid potential or rotational transonic flows
p0259  A79-26487

Discrete noise spectrum generated by an acoustically excited jet
[ AIAA PAPER 79-0592 ]
p0267  A79-26688
Sound absorption caused by vorticity shedding, demonstrated with a jet flow
[ AIAA PAPER 79-0575 ]
p0268  A79-26905
An experimental study of USB flap noise reduction through mean flow modification --- Upper Surface Blows
[ AIAA PAPER 79-0607 ]
p0268  A79-26908
Experimental study of coaxial nozzle exhaust noise
[ AIAA PAPER 79-0631 ]
p0317  A79-28963
Gas flow in nozzles --- Russian book
p0247  A79-32205

Relationships for nozzle performance coefficients
[ ASME PAPER 79-GT-145 ]
p0394  A79-32411
NOZZLE GEOMETRY

Velocity slip and temperature difference of gas mixtures in quasi-one-dimensional nozzle flows p0050 A79-36023

Profiling of two-dimensional and three-dimensional nozzles and calculation of their flows p0063 A79-38168

Progress on Variable Cycle Engines [AIAA PAPER 79-1312] p0510 A79-40759

Twisting of the blades of an axial turbine stage during tangential inclination of the nozzle blades p0027 A79-42569

Experimental study of the gasdynamic characteristics of a stator cascade with cooling air discharge through the vane surface p0013 A79-48898

Effect of nozzle spacing on ground interference for a V/STOL aircraft [AIAA PAPER 79-1856] p0635 A79-49339

NOZZLE GEOMETRY

Investigation of an ejector thrust-augmentor with a perforated nozzle for the ejected gas p0021 A79-12196

Performance characteristics of nonaxi-symmetric nozzles installed on the F-10 aircraft [AIAA PAPER 79-0101] p0201 A79-23532

Experiments on coaxial nozzle exhaust noise [AIAA PAPER 79-0631] p0377 A79-28963

Profile of a nozzle shaping the free-molecule flow intended to investigate air-intakes and cascades p0049 A79-36122

A parametric study of support system interference effects on nozzle/afterbody throat dependent drag in wind tunnel tests [AIAA PAPER 79-1168] p0467 A79-38968

Assessment at full scale of nozzle/wing geometry effects on OTW aeroacoustic characteristics --- Over The Wing STOL aircraft engine configurations p0475 A79-39002

Effects of Reynolds number and other parameters on the throat-dependent, nozzle/afterbody drag of an 0.11 scale single-engine aircraft model [AIAA PAPER 79-1167] p0021 A79-42559

Performance characteristics of a wedge nozzle installed on an F-16 propulsion wind tunnel model [AIAA PAPER 79-1174] p0511 A79-42559

An approximate method for calculating a laminar boundary layer in micronozzles p0052 A79-42559

The nonaxisymmetric nozzle - It is for real --- fighter aircraft performance viewpoint [AIAA PAPER 79-1610] p0057 A79-47693

Effects of geometric and flow-field variables on inverted-velocity-profile coaxial jet noise --- nozzle geometry [NASA-TR-79095] p0375 N79-20830

Theoretical fan velocity distortions due to inlets and nozzle --- in V/STOL aircraft [NASA-TR-79150] p0081 N79-23911

Assessment at full scale of nozzle/wing geometry effects on OTW aeroacoustic characteristics --- short takeoff aircraft noise [NASA-TR-79168] p0504 N79-25841


NOZZLE INSERTS

Computerized heat-transfer and stress analysis of wind tunnel metal throat liners [AD-A062318] p0368 N79-20143

NOZZLE THROTTLE COEFFICIENTS


Characteristics of laval nozzles with gasdynamic regulation p0068 A79-34560

NOZZLES

Evaluation of methods for prediction of propulsion system drag [AIAA PAPER 79-1118] p0866 A79-38961

Aerodynamic characteristics of a large-scale semicircular model with swept wing and an augmented jet flap with hyperbasing nozzles --- p0067 A79-38962

Nuclear Energy

Evaluation of atmospheric interactions at aeroplane altitude --- gamma ray emission experiments p0411 A79-37573

NOVA-2S, a stiffened panel extension of the NOVA-2 computer program [AD-A063018] p0084 N79-23951

NUCLEAR PARTICLES

MT PHOTONS

Nuclear propulsion

Nuclear diatomic system for aircraft propulsion [AIAA PAPER 79-0519] p0393 A79-32389

Advanced nuclear systems for large aircraft [AIAA 79-0852] p0405 A79-33835

Nuclear aircraft innovations and applications [AIAA PAPER 79-0846] p0515 A79-41913

Nuclear Radiation

MT GAME BASE

Nuclear Reactors

MT HIGH TEMPERATURE GAS COOLED REACTORS

Nuclear vulnerability fixed byte and bit slice microcomputer survivability techniques --- in aircraft subject to electromagnetic or nuclear radiation [AIAA 79-1964] p0698 A79-54436

NUCLIDOS

Vertical cutoff rigidity and the intensity distribution of cosmic rays near Cape Town p0041 A79-37468

NULL NOBES

Radiation pattern sidelobes and null filling produced by aircraft vibration [AD-A070472] p0710 N79-32422

NUMERICAL ANALYSIS

MT APPLICATION

MT COMPUTATIONAL FLUID DYNAMICS

MT ERROR ANALYSIS

MT FINITE DIFFERENCE THEORY

MT FINITE ELEMENT METHOD

MT ITERATION

MT INTERPOLATION

MT ITERATIVE SOLUTION

MT LEAST SQUARES METHOD

MT MONTI CARLO METHOD

MT TENSOR-HAPHON METHOD

MT GEOMETRICAL INTEGRATION

Method of determining the stability and controllability characteristics of an aircraft from the transient processes p0021 A79-12176

Numerical-analytical solution of the problem of the constrained torsion of a cantilever wing p0021 A79-12195

Application of optimization techniques in engineering design --- computerized structural design p0025 A79-12408

Determination of the dynamic derivatives of lengthwise and side movement with the noble oscillating derivative balance and systematic studies of the influence of several parameters on the results --- in low speed wind tunnel testing [AIAA PAPER 79-115] p0061 A79-14073

Computation of three-dimensional turbulent separated flows at supersonic speeds [AIAA PAPER 79-0002] p0138 A79-19471

Numerical comparisons of panel methods at subsonic and supersonic speeds p0184 A79-19713

A surface source and vorticity panel method --- for potential flow in arbitrary and wing/body geometries p0194 A79-21998

Recent advances in the solution of three-dimensional flow over wings with leading edge vortex separation [AIAA PAPER 79-0282] p0202 A79-23562

Large plastic deformation analysis of impulsively loaded curved frames [AIAA 79-0784] p0322 A79-29028
Numerical Integration

An efficient user-oriented method for calculating compressible flow about three-dimensional inlets
[AIAA PAPER 79-0081]

Computational aerodynamics development and outlook
[Ogden Lecture in Research for 1979]

Numerical study of unsteady flows of viscous incompressible fluids about airfoils by a combined method of order O(1/h²) and O(1/h⁴)

Nonlinear mathematical simulation of unsteady flow past a helicopter rotor

A two-dimensional unsteady R–e equation solver for flow regions with arbitrary boundaries

Vector processor algorithms for transonic flow calculations

Progress in transonic flow computations analysis and design methods for three-dimensional flows

Numerical calculation of inviscid transonic flow through rotors and fans

Numerical Integration

Numerical solution of a linear integral equation of the first kind in the inverse problem of falling free asymptotic flow past a wing

Application of the method of alternating directions to the numerical analysis of the thermal states of a bladed turbine disk

The calculation of two-dimensional compressible potential flow in cascades using finite area techniques

Use of the method of variable directions for numerical study of the thermal states of a turbine disk with blades

Nylon (Trademark)

Overest results for the 7.3- by 28-ft/ diameter hybrid Kevlar-29/synthetic ribbon parachute

Design and development of the 28-ft-diameter hybrid Kevlar-29/synthetic ribbon parachute

Lift and drag of sail aerofoil

Oblique Shock Waves

A shock-capturing application of the finite element method to viscous compressible flow problem

Oblique Wings

Lifting-line theory of oblique wings

Lifting-line theory of oblique wings in transonic flows

Theory of oblique wings of high aspect ratio

Measurements in a large angle oblique jet impingement flow

The oblique wing as a lifting-line problem in transonic flow

Observation

Earth Observations (PERSIEN Space)

Satellite Observation

Observation Aircraft

T-2 Aircraft

T-5 Aircraft

G-91 Aircraft

T-100 Aircraft

T-0 Aircraft

Development of casualty evacuation kit for the light observation helicopter (Klw)

wind estimates from cloud motions: Result of an in situ aircraft verification experiment

Commercial aircraft derived high resolution wind and temperature data from the tropics for PGGE: Implications for NASA
SUBJECT INDEX

An airborne microcomputer for radio navigation (AD-A060153) p0199 A79-23250
Omega - Global navigating by VLF fix (AD-A059339) p0396 A79-32722
Internationalization of Omega (VKI-LECTURE-SERIES-60-VOL-2) p0408 A79-36059
The U-1105, an integrated Transit/Omega navigator (AD-A059339) p0441 A79-36072
The distribution pattern of Omega observations (AD-A060153) p0464 A79-40647
Omega navigation system --- signal processing methods (AD-A060153) p0533 A79-43504

Operational experience with the AN/ARN-121 Omega Navigation Set (AD-A060880) p0659 A79-49856
Testing the feasibility of Differential Omega for airborne use (AD-A065527) p0660 A79-23063
Evaluation of a commercial Omega navigation system installed in the C-118 aircraft (AD-A065527) p0682 A79-28165
Omega and VLF aircraft installations [BAR-TH-RAD-RAY-66] (VKI-LECTURE-SERIES-1-PT-1) p0704 A79-14059
Factors affecting omega accuracy (JORE-71) (AD-A060153) p0717 A79-14077

Environmental effects on VLF navigation systems, Omega (AD-A068882) p0718 A79-22069
Omega possibilities: Limitations, options, and opportunities (AD-A065527) p0728 A79-22073
Pacific area evaluation of a commercial Omega navigation system installed in a C-118 aircraft, supplement 1 (AD-A066106) p0757 A79-28172

MONDIRECTIONAL ANTENNAS

NT MONOPOLAR ANTENNAS

MONDIRECTIONAL RADIO RANGES

Radio navigation and antenna technology, an area of study of many years' standing at the Institute for Communications Engineering of Braunschweig Technical University (AD-A065527) p0806 A79-12526

VOR - Its past, present, and future (SIR PIPER 781010) p0876 A79-16161
Future VSTOL requirements for omnidirectional low range airspeed (AD-A059339) p0876 A79-16161
An analysis of radio navigation sensor accuracies associated with area navigation (BNAV) (AD-A059339) p0876 A79-16161
Natural calibration evaluation with a computer controlled avionics data acquisition system [NL-RP-78030-0] (AD-A059339) p0876 A79-16161

ONBOARD NAVIGATOR U VHF NAVIGATION

ON-LINE PROGRAMMING

Singlar perturbation techniques for on-line optimal flight path control (ATAA 79-1620) (AD-A072793) p0917 A79-11488

ONBOARD COMPUTERS U AIRBORNE SPACECRAFT COMPUTERS

ONBOARD EQUIPMENT

NT AIRBORNE EQUIPMENT

NT SPACECRAFT ELECTRONIC EQUIPMENT NT TERCOM

Shuttle success is a function of the airborne system design --- in F-16 avionics (AD-A072793) p0969 A79-16432
Digital integrated test system improves testability --- of avionics (AD-A059339) p0969 A79-16432
Emergency position-indicating radio-beacon systems using 406 MHz band mobile-satellite service (AD-A059339) p0969 A79-17095
A general aviation flight test application of the on-board computer (AD-A059339) p0969 A79-17095

OPTICAL COMMUNICATION

SAGE PAPER 790563 (UNCLASSIFIED) p0943 A79-26376
Onboard methods for increasing landing approach capacity upon introduction of MLS (dép) PAPER 79-047 (AD-A059339) p0950 A79-45369
Aircraft antenna systems -- Russian book (AD-A059339) p0954 A79-44892
Real-time gravity filtering from on-board gravimeters (ATAA PAPER 77-1767) (AD-A059339) p0969 A79-52556
ON-60A HEDEVAC kit (SIR 79-19614) p0970 A79-52556
Development of casualty evacuation kit for the light observation helicopter (Kiwa) (SIR 79-19614) p0970 A79-52556

CR-77-150 EOC evaluation of selected subsystems, ENC test report (AD-77-771/6-4) p0992 A79-29170


OPERATING SYSTEMS [COMPUTERS]

Modal interpolation program, L215 (IMTEP). Volume 2: Supplemental system design and maintenance document --- to calculate displacements at several points on an aerodynamic surface (NASA-CP-2846) (AD-A068106) p0994 A79-31147

Operations technology (AD-A068106) p0994 A79-31147

Engine demonstration test of a cooled laminated axial turbine (ATAA PAPER 79-1229) (AD-A068106) p0994 A79-38993

OPERATIONAL PROBLEMS

ATC delays - The number one problem in the next decade (AD-A068106) p1004 A79-23586

Environmental factors affecting the installation and operation of gas turbine engines in agricultural aircraft (SAGE PAPER 781010) (AD-A059339) p1004 A79-23586
Review of engine/airframe/drive train dynamic interface development problems (AD-A057932) (AD-A059339) p1004 A79-23586
General aviation IFR operational problems (ATAA PAPER 79-1229) (AD-A068106) p1004 A79-38993

STOL Technology, volume 2 (VRIPuster-771040) (AD-A068106) p1004 A79-38993
Scene generation in a cruise application (AD-A068106) p1004 A79-38993

Operations research

MT MATHEMATICAL PROGRAMMING

Helicopter operations development plan (AV-45-77101) (AD-A059339) p1005 A79-18799
Helicopter air traffic control operations (AD-A059339) p1005 A79-33100

OPERATION PERFORMANCE

Operator and technician tasks for the heads-up display test set and versatile avionics shop test (AV-45-77101) (AD-A059339) p1005 A79-18799

OPERATORS (PERSONNEL)

MT AIRCRAFT PILOTS

MT HELICOPTER PILOTS (PERSONNEL)

MT TEST PILOTS

OPTICAL ABSORPTION

U LIGHT TRANSMISSION

OPTICAL COMMUNICATION

Air Force Space Laser Communications (AD-A059339) p0943 A79-26376
An optical communication system for aircraft (AD-A059339) p0943 A79-26376
Military fiber optics applications (AD-A059339) p0943 A79-26376
An optical-fiber multiserial data system for aircraft (AD-A059339) p0943 A79-26376
OPTICAL COUNTERMEASURES

Air Force Space Laser Communications
[AD-A068316]

Fly-by-light
[AD-A0683458]

Optical fiber-optic interconnect systems project
[AD-A0683458]

OPTICAL COUNTERMEASURES

Preliminary airworthiness evaluation AH-1S helicopter equipped with a Garrett infrared radiation suppressor and an AN/ALQ-164 jammer
[AD-A0677577]

OPTICAL DATA PROCESSING

NT SCENE ANALYSIS

Coherent optical processing for missile guidance
[AD-A0684714]

Optical control technology --- for helicopters-fiber-optic data transfer
[AD-A0693532]

OPTICAL EQUIPMENT

NT IMAGE CONVERTERS

MT INFRARED SPECTROMETERS

MT LASER DOPPLER VELOCIMETERS

MT MULTISPECTRAL BAND SCANNERS

MT OPTICAL GYROSCOPES

MT OPTICAL MEASURING INSTRUMENTS

MT OPTICAL RANGERS

MT OPTICAL RANGE FINDERS

MT PRISMS

MT TELEVISION CAMERAS

MT WIDE ANGLE LENSES

Dynamic response analysis of an F-15 Fast Pack optical system installation --- structural vibration under flight environment
[AIAA 79-0788]

Composite global materials study
[AD-A0592289]

OPTICAL GYROSCOPES

Air Force applications for optical rotation rate sensors
[AD-A0712122]

OPTICAL HETERODYING

Multifunction CO2 heterodyning laser radar for low level tactical operations

CO2 laser for a compact imaging radar
[AD-A0748685]

A CO2 laser for a compact imaging radar
[AD-A0748685]

OPTICAL RANGES MODULATION

U LIGHT MODULATION

MT LASERS

OPTICAL MEASUREMENT

U LIGHT MODULATION

OPTICAL SCANNERS

U LASERS

OPTICAL MEASUREMENT

Making fluid flows visible

Influence of gridboard line width and spacing on windscreen distortion measurements
[AD-A065821]

Optical flow measurements: Applications to wind tunnels or motor bench tests
[AF-WT-78-07]

OPTICAL MEASURING INSTRUMENTS

MT INFRARED SPECTROMETERS

MT MULTISPECTRAL BAND SCANNERS

MT OPTICAL GYROSCOPES

Applications of electro-optical instrumentation in turbine engine development

Automating prevailing visibility --- airport videograph sensor assessments
[AF-WT-78-07]

Analysis and preliminary design of an optical digital tip clearance sensor for propulsion control
[NASA-CR-159434]

Stabilized Terrain Optical Position Sensor (STOPS) flight test report
[AD-A065018]

OPTICAL MODULATION

U LIGHT MODULATION

OPTICAL PROPERTIES

MT ABSORPTIVITY

MT COLOR

MT REFLECTANCE

MT TRANSPARENCY

Windshield technology demonstrator program-canopy detail design options study
[AD-A070376]

OPTICAL RADAR

Multifunction CO2 heterodyning laser radar for low level tactical operations

[AD-A0704885]

Heterodyning CO2 laser radar for airborne applications
[AD-A0713025]

OPTICAL RANGES MODULATION

U LIGHT MODULATION

OPTICAL PROPERTIES

MT ABSORPTIVITY

MT COLOR

MT REFLECTANCE

MT TRANSPARENCY

Windshield technology demonstrator program-canopy detail design options study
[AD-A070376]

OPTICAL RADAR

Multifunction CO2 heterodyning laser radar for low level tactical operations

subject index

level tactical operations

Heterodyning CO2 laser radar for airborne applications

OPTICAL RANGE FINDERS

NT LASER RANGE FINDERS

Determining the contour of helicopter rotor blades automatically using electro-optical techniques
[AIAA 79-115]

OPTICAL SCANNERS

MT MULTISPECTRAL BAND SCANNERS

OPTICAL SENSORS

U OPTICAL MEASURING INSTRUMENTS

OPTICAL SIGNALS

U OPTICAL COMMUNICATION

OPTICAL SPECTRUM

U LIGHT (VISIBLE RADIATION)

U OPTICAL COMMUNICATION

OPTICAL TRACKING

General principles of automatic video trackers. II - Area trackers

Deferrable mirror surface control --- Hardware, algorithms
[AIAA 79-1757]

Parametric analysis of stereoscopic tracker for use in tactical aircraft
[AD-A064685]

Considerations on optical self-alignment of gyrostabilized platforms

Information matrix approach for aircraft parameter-insensitive control --- for C-5A wing loading alleviation

Information distribution in distributed microprocessor based flight control systems

A nonlinear approach to the design of jet engine control systems

Optical control of turbine engines
[AIAE PAPER 78-WA/DSC-33]

Control system time response optimization - A nonlinear programming approach --- for aircraft flight
[AIAE PAPER 79-0540]

Air floor and facility planning via optimal control models

Linearization in the recursive estimation of navigation parameters

Minimum landing-approach distance for a sailplane

VTOL aircraft optimal state-space tracking control

Radio-engineering tracking systems

Extrenal radio-navigation --- Russian book

Singular perturbation techniques for on-line optical flight path control
[AIAA 79-1620]

Numerical computation of optimal evasive maneuvers for a realistically modeled airplane pursued by a missile with proportional guidance
[AIAA 79-1624]

Application of two synthesis methods for active flutter suppression on an aeroelastic wind tunnel
OPTIMIZATION

Solution of the inverse problem of aerodynamics by a random search technique

Optimization of body shape at small Reynolds numbers

Performance enhancements of GPS users equipment

Optimum two dimensional wings in supersonic flows

Rotor airfoil optimization - An understanding of the physical limits

Supercritical wing design using numerical optimization and comparisons with experiment --- to improve C-141 cruise performance

Design of transonic airfoil sections using a similarity theory

An efficient algorithms for numerical airfoil optimization

A procedure for axial blade optimization

To the problem of starting and airfoil-shape optimization of the supersonic compressor cascade

Development of modern airfoil sections for high subsonic cruise speeds

Optimizing gas turbine engine flexible rotor balancing by the LP-search method

An aeroelastic optimization procedure for composite high aspect ratio wings

Combined strength and aeroelastic wing synthesis via constraint approximation

Optimal excitation of amplitude-direction-finder antennas operating on the basis of the comparison method

Optimization of hypersonic three-dimensional shapes

Optimization of wing structures to satisfy strength and frequency requirements

Optimal selection of the geometrical characteristics of the reversing channel of a small-scale turbine with readsmission of the gas --- for aircraft auxiliary power systems

The design and selection of optimum propellers for general aviation aircraft

Proper aircraft tire size selection - Optimum performance with minimum maintenance

Optimal thermoelastic design of gas turbine engines using element prototypes.

Solution of the inverse aerodynamics problem by the random search method

Application of Lagrange Optimization to the drag polar utilizing experimental data

Reliability analysis for optimum design --- applied to offshore drilling and aircraft structures

Wing center section optimization with stress and local instability constraints

Optimal design of wing structures with substructuring

Design of supersonic airfoils by numerical optimization

Subject Index

Gust alleviation - Criteria and control laws

Optimal missile guidance for low miss and perpendicular impact

A comparison of air-to-air missile guidance laws based on optimal control and differential game theory

Design criteria for optimal flight control systems

Predictive guidance for interceptors with time delays

A multiple objective optimization approach to aircraft control systems design

Linearization of the boundary-layer equations of the minimum time-to-climb problem

The optimal control frequency response problem in manual control --- of manned aircraft systems

Approximation concepts for numerical airfoil optimization

Optimum cruise performance

Display/control requirements for automated VTOL aircraft

Active control for the Total-In-Flight simulator

Time optimal control of a jet engine using a quasi-hermite interpolation model

Optimal placement of regional flight simulators

Study of the theoretical to real correspondence of an optimal control model and the significance of this model for the description of working methodology with partly automated aircraft guidance and control systems

Application of a finite element method to transonic flow problems using an optimal control approach

A method for obtaining practical flutter-suppression control laws using results of optimal control theory

OREMA's model of the pilot in discrete time

Optimal controller design methods for linear systems with uncertain parameters-development, evaluation, and comparison --- autopilots for remotely piloted vehicles

Optimization of flight optimization

Optimal control optimization

Trajectory optimization

Development of gas turbine performance seeking logic

Application of gradient methods to the optimal design of components of load-bearing structures --- for aircraft minimum weight design

A method of solving multicritierial optimization problems for load-bearing structures --- for large aspect ratio wings

Application of optimization techniques in engineering design --- computerized structural design

Program HFV - A wing structural optimization computer program for preliminary design of fighter aircraft

Optimal designing of gas-turbine engine thermodynamics on the basis of prototype elements.

...
<table>
<thead>
<tr>
<th>Subject Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preliminary study of optimum ductburning turbofan engine cycle design parameters for supersonic cruising</td>
</tr>
<tr>
<td>Analysis of a theoretically optimized transonic airfoil</td>
</tr>
<tr>
<td>Airfoil design by numerical optimization using a minicomputer</td>
</tr>
<tr>
<td>Weight optimization with flutter constraints</td>
</tr>
<tr>
<td>Ejector optimization</td>
</tr>
<tr>
<td>Turbocharger design and development — technology assessment and design optimization</td>
</tr>
<tr>
<td>Optimization of multi-element airfoils for maximum lift</td>
</tr>
<tr>
<td>Application of numerical optimization to the design of advanced supercritical wings</td>
</tr>
<tr>
<td>Closed Brayton cycle system optimization for underwater, terrestrial, and space applications</td>
</tr>
<tr>
<td>Adaptation for the economy or adaptation for energy conservation — passenger aircraft design</td>
</tr>
<tr>
<td>Minimization theory of induced drag subject to constraint conditions</td>
</tr>
<tr>
<td>Substructuring methods for design sensitivity analysis and structural optimization</td>
</tr>
<tr>
<td>Leading-edge slat optimization for maximum airfoil lift</td>
</tr>
<tr>
<td>Extension of running time in the RAE hypersonic shock tunnel</td>
</tr>
<tr>
<td>Pump design</td>
</tr>
<tr>
<td>Multi-element airfoil design by optimization</td>
</tr>
<tr>
<td>OPTIMUM CONTROL U OPTIMAL CONTROL</td>
</tr>
<tr>
<td>ORBIT CALCULATION</td>
</tr>
<tr>
<td>Kalman filtering and smoothing in Potonap for orbit determination using GPS measurements</td>
</tr>
<tr>
<td>ORBITS U EARTH ORBITS</td>
</tr>
<tr>
<td>ORNAMENT</td>
</tr>
<tr>
<td>Quantification of the storage logistics thermal environment — environmental criteria for ordnance</td>
</tr>
<tr>
<td>A computer model for determining weapon release parameters for a helicopter in non-accelerated flight</td>
</tr>
<tr>
<td>ORGANIC COMPOUNDS</td>
</tr>
<tr>
<td>Thermodynamics of organic compounds</td>
</tr>
<tr>
<td>ORGANIZATIONS U NORTH ATLANTIC TREATY ORGANIZATION (NATO)</td>
</tr>
<tr>
<td>The FAA's airport landside model: Analytical approach to delay analysis</td>
</tr>
<tr>
<td>AIRCRAFT U AIRCRAFT</td>
</tr>
<tr>
<td>ORTHOGRAFIC ALIGNED SHOT</td>
</tr>
<tr>
<td>ORTHOGRAFIC PRODUCTS</td>
</tr>
<tr>
<td>Optimizing linear flight vehicle stabilization systems with orthogonal filters</td>
</tr>
<tr>
<td>Osmotic plates</td>
</tr>
<tr>
<td>Some observations on the local instability of orthotropic structural sections</td>
</tr>
<tr>
<td>A finite element model to study the buckling behavior of general orthotropic, midplane symmetric, elastic plates</td>
</tr>
<tr>
<td>OSCILLATING Cylinders</td>
</tr>
<tr>
<td>Vortex-induced oscillations — a selective review</td>
</tr>
<tr>
<td>OSCILLATING FLOW</td>
</tr>
<tr>
<td>Development of turbulence through non-steady boundary layer</td>
</tr>
<tr>
<td>Oscillating airfoils. I — Newtonian flow theory and application to power-law bodies in hypersonic flow</td>
</tr>
<tr>
<td>Nonlinear unsteady potential flow calculations for three-dimensional oscillating wings</td>
</tr>
<tr>
<td>Aerodynamic forces in infinite wings in oscillatory flow — an experimental study</td>
</tr>
<tr>
<td>Influence of liquid oscillations in fuel line on head of pump operating in regions without reverse flow</td>
</tr>
<tr>
<td>A new approach to rotor blade stall analysis</td>
</tr>
<tr>
<td>Unsteady aerodynamics of a circulation controlled airfoil</td>
</tr>
<tr>
<td>Hydrodynamic propulsion by large amplitude oscillation of an airfoil with chordwise flexibility</td>
</tr>
<tr>
<td>On turbulence modeling for unsteady transonic flows</td>
</tr>
<tr>
<td>Effects of periodic changes in free stream velocity on flows over airfoils near static stall</td>
</tr>
<tr>
<td>Engineering analysis of dynamic stall</td>
</tr>
<tr>
<td>Drag on an oscillating airfoil in a fluctuating free stream — helicopter rotor blade application</td>
</tr>
<tr>
<td>An experimental study of pulsating flow in a three stage axial flow compressor</td>
</tr>
<tr>
<td>Unsteady effects on a stalled wing in pulsed flow — comparison with back-and-forth oscillating case</td>
</tr>
<tr>
<td>Implementation of unsteady oscillatory flows in a transonic wind tunnel</td>
</tr>
<tr>
<td>Subsonic flow past an oscillating cascade with finite mean flow deflection</td>
</tr>
<tr>
<td>Oscillatory aerodynamics and stability derivatives for airfoil spoiler motions</td>
</tr>
<tr>
<td>Prediction of unsteady aerodynamic forces in high frequency oscillatory flow</td>
</tr>
<tr>
<td>A slender delta wing oscillating in surface waves</td>
</tr>
<tr>
<td>Some steady and oscillating airfoil test results, including the effects of sweep, from the tunnel spanning wing</td>
</tr>
<tr>
<td>Unsteady boundary layer flow reversal in a longitudinally oscillating flow</td>
</tr>
<tr>
<td>Theoretical analysis of transonic flow past untagged oscillating cascades</td>
</tr>
<tr>
<td>OSCILLATIONS U HYDRODYNAMIC OSCILLATION</td>
</tr>
<tr>
<td>NONSTABLIZED OSCILLATION</td>
</tr>
<tr>
<td>PRESSURE OSCILLATIONS</td>
</tr>
<tr>
<td>SELF OSCILLATION</td>
</tr>
<tr>
<td>STABLE OSCILLATION</td>
</tr>
<tr>
<td>TRANSIENT OSCILLATIONS</td>
</tr>
<tr>
<td>TRANSVERSE OSCILLATION</td>
</tr>
<tr>
<td>WING OSCILLATIONS</td>
</tr>
<tr>
<td>Free oscillations of a large drop in space</td>
</tr>
<tr>
<td>Wing rock due to aerodynamic hysteresis</td>
</tr>
<tr>
<td>Improved sonic-boom computer program for calculating transonic aerodynamic loads on oscillating wings with thickness</td>
</tr>
<tr>
<td>OPTIMUM CONTROL U OPTIMAL CONTROL</td>
</tr>
<tr>
<td>APPLICATIONS OF THE GENERAL ORTHOTROPIC PLATE</td>
</tr>
<tr>
<td>Behavior of general orthotropic, midplane symmetric, elastic plates</td>
</tr>
<tr>
<td>OPTIMUM CONTROL U OPTIMAL CONTROL</td>
</tr>
<tr>
<td>APPLICATIONS OF THE GENERAL ORTHOTROPIC PLATE</td>
</tr>
<tr>
<td>Behavior of general orthotropic, midplane symmetric, elastic plates</td>
</tr>
<tr>
<td>OPTIMUM CONTROL U OPTIMAL CONTROL</td>
</tr>
<tr>
<td>APPLICATIONS OF THE GENERAL ORTHOTROPIC PLATE</td>
</tr>
<tr>
<td>Behavior of general orthotropic, midplane symmetric, elastic plates</td>
</tr>
</tbody>
</table>

K-332
Determining the nonlinearities of dynamic stability
Nonlinear oscillations at high incidence
An introduction to dynamic derivatives. 2: The equations of motion for wind tunnel pitch-yaw oscillation riggs
OSCILLATORS
NT CATHODE TUBE TERMS
NT CHROMOSCOPE PENDULUMS
Aerospace applications of oscillators --- for location navigation, detection, telecommunications, and instrumentation
[ONERA, TP No. 1979-48]

OUTLET FLOW
The effects of coolant air inlet conditions on the flow regime between a turbine disk and its casing
[ASME PAPER 79-GT-35]
Outlet air angle prediction for subsonic flow cascades

Turbulence measurements in the compressor exit flow of a General Electric CF6-50 engine

OVERPRESSURE
NOVA-25, a stiffened panel extension of the NOVA-2 computer program

OXIDATION
NT BURNING
Oxidation of hydrazine in aqueous solutions
[AD-A08239]n
Evaluation of motor gasoline in the jet fuel thermal oxidation tester --- fuel for gas turbine aircraft engines
[AD-A061027]
OXIDATION RESISTANCY
The chemical stability of kerosene fractions

The thermal oxidation stability of B-37 lubricant --- for aviation

OXIDES
NT ALUMINUM OXIDES
NT CARBON MONOXIDE
NT NITRIC OXIDE
NT NITROGEN OXIDES
An oxide dispersion strengthened alloy for gas turbine blades
[NASA-TM-79098]

OXIDIZERS
NT LIQUID OXYGYN
OXGEN
NT LIQUID OXYGEN
NT OZONE
Characteristics of a turbojet bypass engine with afterburner during oxygen supply to the afterburner
Characteristics of afterburning bypass turbojet engine with oxygen injection into the afterburner chasrer

OXYGEN BREATHING
Electrification of woven and film materials

OZONE
Aircraft cabin ozone measurements on B747-100 and B747-SP aircraft: Correlations with atmospheric ozone and ozone encounter statistics
[NASA-TM-79063]
Ozone Contamination in Aircraft Cabins
[NASA-CF-2066]
Ozone contamination in aircraft cabins: Objectives and approach
Recomendations of the panels: Panel on in-flight measurements
Recomendations of the panels: Panel on flight planning to avoid high ozone
Ozone Contamination in Aircraft Cabins: Summary of recommendations
Ozone Contamination in Aircraft Cabins: Post workshop review of recommendations

P-3 AIRCRAFT
The new P3C Orion aircraft with the RAFF
The operational impact of Navy's first TAAP program --- P-3C Test, Analyze and Fix
AN/DSM-649/ V/ ATE for worldwide support of the P3 Orion
Comparison of engineering properties of 7050-T742 and 7075-T651 extrusions for potential P-3 applications

[AD-A058002]

Fiber optics use in the P-3C aircraft. A fiber optic interconnect system for computer-controlled alphanumeric displays in a P-3C aircraft
[AD-A060318]

Formulas for takeoff performance P3-A, B and C airplanes
[AD-A062290]

P-31 HELICOPTER
Advanced Scout Helicopter flying qualities requirements - How realistic are they

PACIFIC ISLANDS
NT JAPAN
PACKAGING
NT ELECTRONIC PACKAGING
PACKING DENSITY
Development of hermetically sealed low-maintenance high-density packaging for ejection seat-mounted personnel parachutes

PAINTS
Composicly assessment of selected propeller and tail rotor paint schemes
[FAA-AM-78-29]

Airfield marking paints state-of-the-art
[FAA-AM-78-104]

PANEL FLIGHT
Investigation of flexible nozzle wall-flutter incidents in the NASA Ames Research Center 11-by-11-foot transonic wind tunnel
[AAIA 79-0797]
An elementary explanation of the flutter mechanism with active feedback controls

Time-variant aerodynamics of oscillating airfoil surfaces in a supersonic flowfield

PAINTS
NT CURVED PANELS
NT FLAT PANELS
The supersonic triplet - A new aerodynamic panel singularity with directional properties --- internal wave elimination
[AAIA PAPER 79-0273]
A cyclic load test for environmental durability evaluation of bonded honeycomb structure --- aircraft 31 panels

Thermal response of composite panels
PARACHUTES

- Overload results for the 7.3-m/24-ft/ diameter hybrid Kevlar-29/nylon ribbon parachute
  p0191 A79-21524
- Design criteria for and development of Kevlar ribbon parachutes
  (AIAA 79-0430) p0262 A79-26638
- Development and initial test results of parachutes with automatic inflation modulation /K7/ (AIAA 79-0467)
  p0265 A79-26673
- Development of hermetically sealed low-maintenance high-density packaging for ejection seat-mounted personnel parachutes
  p0402 A79-33616
- On the status of experimental stress analysis of parachute canopies
  p0404 A79-33646

PARACHUTE VARIANTS

- Towed high lift systems
  p0067 A79-14430
- Aerodynamic Decelerator and Balloon Technology Conference, 6th, Houston, Tex., March 5-7, 1979, Technical Papers
  p0262 A79-26662
- Fabrication and quality assurance procedure to assure a symmetrical lifting parachute
  (AIAA 79-0427) p0262 A79-26636
- A new life saving application for the parachute
  p0264 A79-26650
- Factors and tradeoffs affecting ram-air parachutes designed for civilian personnel applications
  (AIAA 79-0457) p0264 A79-26660
- Commercial parachutes --- from safety standpoint
  p0264 A79-26661
- Development and initial test results of parachutes with automatic inflation modulation /K7/ (AIAA 79-0430)
  p0402 A79-33618
- Basis for an objective evaluation of the paratroop jumping reliability
  p0264 A79-33619
- Milestones in the history of parachute development
  p0262 A79-33620
- Effects of a spin chute installation on spin characteristics --- of light general aviation aircraft
  [SIA PAPER 790564] p0452 A79-36705
- Experimental measurement of parachute canopy stress during inflation
  [AD-1015647] p0099 A79-13011

U PARACHUTE DESCENT

- Parallel procedures for aircraft parameter identification and state estimation
  p0567 A79-85316

PARACHUTING

- US PARACHUTE DESCENT
  p0264 A79-26671
  p0264 A79-26670
  p0264 A79-26669
- Parallel procedures for aircraft parameter identification and state estimation
  p0567 A79-85316

PARAGLIDERS

- US PARACHUTE DESCENT
  p0264 A79-26671
  p0264 A79-26670
  p0264 A79-26669
- Parallel procedures for aircraft parameter identification and state estimation
  p0567 A79-85316

PARACHUTE MATERIALS

- Overload results for the 7.3-m/24-ft/ diameter hybrid Kevlar-29/nylon ribbon parachute
  p0191 A79-21524
- Development of lightweight, fire-resistant, low-smoke, high-strength, thermally stable aircraft floor paneling
  p0087 A79-12033
- The use of panel methods with a view to problems in aircraft dynamics
  p0087 A79-15916
- Design and fabrication of a skin stringer discrete tube actively cooled structural panel
  p0368 A79-21430
- Design and analysis of a plate-fin sandwich actively cooled structural panel
  p0368 A79-21431
- Radiative, actively cooled panel tests results
  p0368 A79-21433
- Tests of beaded and tubular structural panels
  p0367 A79-21436
- NOVA-25, a stiffened panel extension of the NOVA-2 computer program
  [AD-A060398] p0488 A79-23951
- Flight service evaluation of Kevlar-49 epoxy composite panels in wide-bodied commercial transport aircraft
- Actively cooled plate-fin sandwich structural panels for hypersonic aircraft
- Advanced welding process establishment for aluminum
  [AD-A071016] p0721 A79-33480
- Contributions to fluid mechanics
  p0676 A79-31524

PARACHUTE DESCENT

- Detached flow about an opening canopy
  p0015 A79-11006
- parachute canopy opening dynamics
  p0015 A79-11008
- Free periodic oscillations of a parachute system in the longitudinal plane
  p0029 A79-12971
- Paracone ejection seat --- evaluation and compared to present parachute system
  p0066 A79-19420
- Parachute partial inversions
  p0066 A79-19424
- Simulation studies of the flight dynamics of gliding parachute systems
  [AIAA 79-0417] p0262 A79-26628
- Recovery systems preliminary design - a first-order theory for determining drogue chute staging, timing, and altitude requirements
  [AIAA 79-0464] p0263 A79-26650
- A simple physical model of a descending parachute
  [AIAA 79-0447] p0263 A79-26651
- Flight simulation of a vehicle with a two-stage parachute system
  [AIAA 79-0468] p0263 A79-26652
- Parachute inflation control using an attached apex drogue
  [AIAA 79-0464] p0263 A79-26653
- A first-order theory for the effects of line ties on parachute deployment
  [AIAA 79-0450] p0263 A79-26654
- Parachute partial inversions
  [AIAA 79-0451] p0264 A79-26655
- Longitudinal oscillation damping for fully-inflated parachute canopies
  [AIAA 79-0459] p0264 A79-26662
- The validity of the Leicester computer model for a parachute with fully-deployed canopy
  [AIAA 79-0460] p0264 A79-26663
- Hardware options for gliding airdrop guidance systems
  [AIAA 79-0471] p0264 A79-26664
- Aerohydroelastic opening of a shell in unsteady flow
  p0325 A79-29151
- Parachute-rocket deceleration system design
  p0696 A79-54057
- Bailout from autorotating helicopters
  p0313 A79-19666

声波传输 - 航空器问题

- Development of lightweight, fire-resistant, low-smoke, high-strength, thermally stable aircraft floor paneling
  p0087 A79-12033
- The use of panel methods with a view to problems in aircraft dynamics
  p0087 A79-15916
- Design and fabrication of a skin stringer discrete tube actively cooled structural panel
  p0368 A79-21430
- Design and analysis of a plate-fin sandwich actively cooled structural panel
  p0368 A79-21431
- Radiative, actively cooled panel tests results
  p0368 A79-21433
- Tests of beaded and tubular structural panels
  p0367 A79-21436
- NOVA-25, a stiffened panel extension of the NOVA-2 computer program
  [AD-A060398] p0488 A79-23951
- Flight service evaluation of Kevlar-49 epoxy composite panels in wide-bodied commercial transport aircraft
- Actively cooled plate-fin sandwich structural panels for hypersonic aircraft
- Advanced welding process establishment for aluminum
  [AD-A071016] p0721 A79-33480
- Contributions to fluid mechanics
  p0676 A79-31524

PARACHUTE DESCENT

- Detached flow about an opening canopy
  p0015 A79-11006
- Parachute canopy opening dynamics
  p0015 A79-11008
- Free periodic oscillations of a parachute system in the longitudinal plane
  p0029 A79-12971
- Paracone ejection seat --- evaluation and compared to present parachute system
  p0066 A79-19420
- Parachute partial inversions
  p0066 A79-19424
- Simulation studies of the flight dynamics of gliding parachute systems
  [AIAA 79-0417] p0262 A79-26628
- Recovery systems preliminary design - a first-order theory for determining drogue chute staging, timing, and altitude requirements
  [AIAA 79-0464] p0263 A79-26650
- A simple physical model of a descending parachute
  [AIAA 79-0447] p0263 A79-26651
- Flight simulation of a vehicle with a two-stage parachute system
  [AIAA 79-0468] p0263 A79-26652
- Parachute inflation control using an attached apex drogue
  [AIAA 79-0464] p0263 A79-26653
- A first-order theory for the effects of line ties on parachute deployment
  [AIAA 79-0450] p0263 A79-26654
- Parachute partial inversions
  [AIAA 79-0451] p0264 A79-26655
- Longitudinal oscillation damping for fully-inflated parachute canopies
  [AIAA 79-0459] p0264 A79-26662
- The validity of the Leicester computer model for a parachute with fully-deployed canopy
  [AIAA 79-0460] p0264 A79-26663
- Hardware options for gliding airdrop guidance systems
  [AIAA 79-0471] p0264 A79-26664
- Aerohydroelastic opening of a shell in unsteady flow
  p0325 A79-29151
- Parachute-rocket deceleration system design
  p0696 A79-54057
- Bailout from autorotating helicopters
  p0313 A79-19666
PARAMETERIZATION

PARALLEL STRIP LINES
U MICROSTRIP TRANSMISSION LINES

PARAMETERIZATION
Choice of the main parameters in the design of aircraft engines
Modeling parameter influences in gas turbine combustor design
[AIAA PAPER 79-0354]
[AD-A068181]
[AD-A0684491]
FFT parameter identification experience --- for aircraft flight characteristics
[AIAA PAPER 79-1803]
Identification of the stability parameters of an aerelastic airplane

Life cycle cost analysis concepts and procedures
Longitudinal aerodynamics extracted from flight tests using a parameter estimation method
[ASME PAPER 78-WA/GT-1]
Parametric studies of model helicopter blade slap and rotational noise
Similitude requirements and scaling relationships as applied to model testing

PARAMETERS
U INDEPENDENT VARIABLES
PARTICLE BEAMS
Nt ELECTRON BEAMS

PARTICLE DIFFUSION
Thermophoresis - Enhanced deposition rates in combustion turbine blade passages
[AIAA PAPER 78-WA/GT-1]

PARTICLE INTERACTIONS
Observation of atmospheric interactions at aeroplane altitude --- gamma ray emulsion experiments

PARTICLE SIZE DISTRIBUTION
Wear particle analysis of grease samples

PARTICLE TRAJECTORIES
Particle trajectories near an airfoil with a filled leading edge
Particle trajectories in turbine cascades

PARTICLES
Nt DROPS (LIQUIDS)
Nt ELECTRON BEAMS
Nt PRO
Nt LIGHT BEAMS
Nt METAL PARTICLES
Nt NUCLEONS
Nt PHOTONS
Nt POWDER (PARTICLES)
Nt POWDERED ALUMINUM
Nt Soot

Separation and investigation of wear particles from aero-engines
[BELL-DENSM-78-3308-(0991.97)]

PARTICLE FILTERS
U FLUID FILTERS

PANTS
U COMPONENTS

PASSENGER AIRCRAFT
Nt A-300 AIRCRAFT
Nt DASH 111 AIRCRAFT
Nt HS-105 HELICOPTER
Nt HUNTING 707 AIRCRAFT
Nt HUNTING 727 AIRCRAFT
Nt NOXON 737 AIRCRAFT
Nt NOXON 747 AIRCRAFT
Nt CESSNA 172 AIRCRAFT
Nt CH-47 HELICOPTER
Nt CH-54 HELICOPTER
Nt CH-47 HCHELICOPTER
Nt CH-54 HCHELICOPTER
Nt CONIF 4 AIRCRAFT
Nt DC 8 AIRCRAFT
Nt DC 10 AIRCRAFT
Nt EUROPA AIRCRAFT
Nt M-27 AIRCRAFT
Nt N-53 HELICOPTER
Nt N-75 120 AIRCRAFT
Nt NL-62 AIRCRAFT
Nt T-101 AIRCRAFT
Nt T-19 AIRCRAFT
Nt VISCOUNT AIRCRAFT

OPERATIONAL RELIABILITY OF CLIMATE AND PRESSURE CONTROL EQUIPMENT FOR PASSENGER AIRCRAFT

Aspects of short-takeoff aircraft --- optimization of aircraft, airports and flight regimes
[AD-A068181]
[AD-A0684491]

Passenger ride quality in transport aircraft
Determination of the geometrical parameters and position of the nose flap at the root section of a swept wing on the basis of wind tunnel data.

Choice of a fuselage for a passenger aircraft

A system for survival --- passenger aircraft escape systems utilizing pyrotechnics
Findings of the Ottawa-Montreal STOL Demonstration service

Computers on the airliner flight deck

The cost situation in the material maintenance of civil aviation aircraft

Britain's better airbus wing --- A-310 aircraft wing design

Four jets for short-haul work Bae 146

A European view on gas turbine engine monitoring of present and future civil aircraft

Aircraft passenger seat material development for airline fire safety

Some possibilities for the navigation of small passenger aircraft

Navigation at high latitudes

Selection of geometric parameters and location of nose flap on swept wing root profile from tunnel test data

Selecting the passenger airplane fuselage

The aerial relay system - An energy-efficient solution to the airport congestion problem --- using cruise liner aircraft for in-air passenger transfer

Design criteria for airline operation

Flammability of cabin furnishing materials --- in airline interiors

An analysis of long and medium-haul air passenger demand, volume 1

An analysis of short haul air passenger demand, volume 2

Passenger ride quality in transport aircraft

Adaptation for the economy or adaptation for energy conservation --- passenger aircraft design

The airport performance model. Volume 1: Extensions, validations, and applications

Advantages and problems of large subsonic aircraft

Fire resistant aircraft seat material

Designing airport terminals for transfer passengers

Development of noise and vibration ride comfort criteria

Physical and subjective studies of aircraft interior noise and vibration

Goodyear aerospace conceptual design marine patrol aircraft 2P3G

EVTIMATION OF AIRCRAFT TARGET MOTION USING PATTERN RECOGNITION
penetration
[AIAA PAPER 79-0383]
p047 A79-19700
Analysis, storage, and retrieval of elevation data
with applications to improve penetration
[AD-A106 navigation]
p582 A79-28166
PENETRATION BALLISTICS
U TERMINAL BALLISTICS
PREDICTION
MT AUDITORY PERCEPTION
MT MOTION PERCEPTION
MT SENSORY PERCEPTION
MT SPACE PERCEPTION
MT VIBRATION PERCEPTION
MT VISUAL PERCEPTION
PERFECT GAS
I IDEAL GAS
PERFORMANCE PREDICTION
MT PREDICTION ANALYSIS TECHNIQUES
A gas path performance diagnostic system to reduce
J75-P-17 engine overhaul costs
[AD-A064698]
p0002 A79-10267
A new stage stacking technique for axial-flow
compressor performance prediction
[AD-A059787]
p0002 A79-10268
Performance and design of transpiration-cooled
turbine blades
[AD-A059788]
p0006 A79-10790
Computations of three-dimensional gas-turbine
combustion chamber flows
[AD-A059789]
p0009 A79-10797
Research of the TF3-1 turbofan engine
[AD-A059790]
p0111 A79-10819
A performance measure for evaluating aircraft
landing trajectories
[AD-A059791]
p0177 A79-11494
Helicopter noise - State-of-the-art
[AIAA PAPER 77-1337]
p0025 A79-12395
Early identification of high-maintenance helicopters
[AD-A068617]
p0074 A79-15411
Aircraft structural reliability prediction based
on dynamic loads and ultimate strength test data
[AD-A069048]
p0186 A79-16111
Theoretical prediction of dynamic stall on
oscillating airfoils
[AD-A069548]
p0125 A79-18183
Sea behaviour prediction of helicopters through
free model tests
[AD-A072117]
p0132 A79-18670
Prediction methods in aeroelasticity
[AD-A072118]
p0155 A79-20118
Evaluation of a method to extract performance data
from dynamic maneuvers for a jet transport
aircraft
[AD-A072119]
p0155 A7-20118
Improved wave drag predictions using modified
linear theory
[AD-A072120]
p0191 A79-21523
PCS reduction of installed aircraft antennas ---
Radar Cross Section prediction
[AD-A072121]
p0247 A79-24716
Radar system design for track-while-scan
[AD-A072122]
p0248 A79-25139
Prediction of gas-turbine alloy creep
characteristics
[AD-A072123]
p0266 A79-26841
A refined prediction method for supersonic
unsteady aerodynamics with AIC partition scheme
--- aerodynamic Influence Coefficient
[AIAA 79-0770]
p321 A79-29023
Turbine performance analysis and engine to rig
correlation
[AIAA 79-0704]
p331 A79-29416
Performance estimation of partial admission turbines
[AD-A072124]
p393 A79-32992
Relationships for nozzle performance coefficients
[AIAA PAPER 79-GT-145]
p394 A79-32411
Evaluation of MPS performance for low-cost commercial
airlines
[ADVANCED PAPER 79-1650]
p447 A79-48604
Reliability, performance, and fault isolation
considerations in the design of interconnected
navigation systems
[AD-A072125]
p0047 A79-36065
The design and selection of optimum propellers for
general aviation aircraft
[SAA PAPER 790576]
p0552 A79-36711
The analysis of propellers including interaction
effects --- for general aviation aircraft
[SAA PAPER 790577]
p0553 A7-36712
<table>
<thead>
<tr>
<th>SUBJECT INDEX</th>
<th>PERFORMANCE TESTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selection of aircraft turbocoupled systems</td>
<td>handling and performance characteristics</td>
</tr>
<tr>
<td>[SIP PAPER:790608]</td>
<td>Prediction of unsteady aerodynamic forces in high frequency oscillatory flow</td>
</tr>
<tr>
<td>General aviation aircraft design for performance</td>
<td></td>
</tr>
<tr>
<td>using small computers</td>
<td></td>
</tr>
<tr>
<td>[SIE PAPER:790611]</td>
<td></td>
</tr>
<tr>
<td>Fossil fuel heat pumps for domestic, commercial and industrial space heating</td>
<td></td>
</tr>
<tr>
<td>[SIE PAPER:790785]</td>
<td></td>
</tr>
<tr>
<td>A tire runway interface friction prediction model concept</td>
<td></td>
</tr>
<tr>
<td>[AIAA PAPER:79-1123]</td>
<td></td>
</tr>
<tr>
<td>The multiple application core engine - Sizeng and usage criteria --- high-pressure rotors in jet engines</td>
<td></td>
</tr>
<tr>
<td>[AIAA PAPER:79-1590]</td>
<td></td>
</tr>
<tr>
<td>A novel correlation of centrifugal compressor performance for off-design prediction</td>
<td></td>
</tr>
<tr>
<td>[AIAA PAPER:79-1327]</td>
<td></td>
</tr>
<tr>
<td>Damage tolerant design - An approach to reducing the life cycle cost of gas turbine engine sizes</td>
<td></td>
</tr>
<tr>
<td>[AIAA PAPER:79-1188]</td>
<td></td>
</tr>
<tr>
<td>Methodology for prediction of V/STOL propulsion induced forces in ground effect</td>
<td></td>
</tr>
<tr>
<td>[AIAA PAPER:79-1189]</td>
<td></td>
</tr>
<tr>
<td>What small turbine engine does the small helicopter need, or The road to hell is paved with good intentions --- fuel consumption, performance, environmental and engine reliability and acceptability considerations secondary advanced turbine engine development for small helicopters</td>
<td></td>
</tr>
<tr>
<td>[AIAA PAPER:79-1314]</td>
<td></td>
</tr>
<tr>
<td>An improved method for predicting the effects of flight on jet mixing noise</td>
<td></td>
</tr>
<tr>
<td>[AIAA PAPER:79-1302]</td>
<td></td>
</tr>
<tr>
<td>Weight and cost estimating relationships for heavy lift airships</td>
<td></td>
</tr>
<tr>
<td>[AIAA PAPER:79-1577]</td>
<td></td>
</tr>
<tr>
<td>Canadian interest in modern LTA transport</td>
<td></td>
</tr>
<tr>
<td>[AIAA PAPER:79-1585]</td>
<td></td>
</tr>
<tr>
<td>Flight dynamics analyses and simulation of Heavy lift airships</td>
<td></td>
</tr>
<tr>
<td>[AIAA PAPER:79-1593]</td>
<td></td>
</tr>
<tr>
<td>Air buoyant vehicles - Energy efficient aircraft</td>
<td></td>
</tr>
<tr>
<td>[AIAA PAPER:79-1602]</td>
<td></td>
</tr>
<tr>
<td>Helicopter performance methodology at Bell Helicopter Textron</td>
<td></td>
</tr>
<tr>
<td>[AIAA PAPER:79-1600]</td>
<td></td>
</tr>
<tr>
<td>Improved method of predicting helicopter control response and gust sensitivity</td>
<td></td>
</tr>
<tr>
<td>[AIAA PAPER:79-1592]</td>
<td></td>
</tr>
<tr>
<td>The size and performance effects of high lift system technology on a modern twin engine jet transport</td>
<td></td>
</tr>
<tr>
<td>[AIAA PAPER:79-1795]</td>
<td></td>
</tr>
<tr>
<td>A design perspective on new technologies for general aviation</td>
<td></td>
</tr>
<tr>
<td>[AIAA PAPER:79-1799]</td>
<td></td>
</tr>
<tr>
<td>Performance predictions for open ocean air cushion vehicles and surface effect ships</td>
<td></td>
</tr>
<tr>
<td>[AIAA PAPER:79-1596]</td>
<td></td>
</tr>
<tr>
<td>Dynamic test techniques - Concepts and practices - aircraft performance predictions from thrust/ lift/ drag model</td>
<td></td>
</tr>
<tr>
<td>[AIAA PAPER:79-5016]</td>
<td></td>
</tr>
<tr>
<td>Performance modelling methods --- in flight test program</td>
<td></td>
</tr>
<tr>
<td>[AIAA PAPER:79-5016]</td>
<td></td>
</tr>
<tr>
<td>A lifting surface performance analysis with circulation coupled wake for advanced configuration hovering rotors</td>
<td></td>
</tr>
<tr>
<td>[AIAA PAPER:79-1001]</td>
<td></td>
</tr>
<tr>
<td>Engineering and development program plans: Cental flow control system</td>
<td></td>
</tr>
<tr>
<td>[AD-AP5041]</td>
<td></td>
</tr>
<tr>
<td>Loran-C time difference calculations</td>
<td></td>
</tr>
<tr>
<td>[NASA-CR-157597]</td>
<td></td>
</tr>
<tr>
<td>A new blade element method for calculating the performance of high and intermediate solidity axial flow fans</td>
<td></td>
</tr>
<tr>
<td>[NASA-CR-3063]</td>
<td></td>
</tr>
<tr>
<td>Analysis of water ingestion effects in axial flow compressors</td>
<td></td>
</tr>
<tr>
<td>[AIAA PAPER:79-13047]</td>
<td></td>
</tr>
<tr>
<td>Computerization of tactical aircraft performance data for fleet application</td>
<td></td>
</tr>
<tr>
<td>[AIAA PAPER:79-13052]</td>
<td></td>
</tr>
<tr>
<td>A theoretical and experimental means to predict ice accretion shapes for evaluating aircraft</td>
<td></td>
</tr>
<tr>
<td>[AIAA PAPER:79-12087]</td>
<td></td>
</tr>
<tr>
<td>&lt;18 status report</td>
<td></td>
</tr>
<tr>
<td>Tests of an integrated piloting, navigation, and display system</td>
<td></td>
</tr>
<tr>
<td>[AIAA PAPER:79-24221]</td>
<td></td>
</tr>
<tr>
<td>Generalizing helicopter flight test performance data /GETWIT/</td>
<td></td>
</tr>
<tr>
<td>[AIAA PAPER:79-1799]</td>
<td></td>
</tr>
<tr>
<td>Advanced technology helicopter landing gear</td>
<td></td>
</tr>
<tr>
<td>[AIAA PAPER:79-1097]</td>
<td></td>
</tr>
<tr>
<td>Test and evaluation procedures for the GPS user equipment</td>
<td></td>
</tr>
<tr>
<td>[AIAA PAPER:79-11918]</td>
<td></td>
</tr>
<tr>
<td>GPS Phase I user equipment field tests</td>
<td></td>
</tr>
<tr>
<td>[AIAA PAPER:79-11913]</td>
<td></td>
</tr>
<tr>
<td>Performance evaluation of the experimental EACS /Beacon Collision Avoidance System/</td>
<td></td>
</tr>
<tr>
<td>[AIAA PAPER:79-14142]</td>
<td></td>
</tr>
<tr>
<td>Lessons learned from the A&amp;J/ARC-164 test program - airborne radio transceiver test cycle test</td>
<td></td>
</tr>
<tr>
<td>[AIAA PAPER:79-17665]</td>
<td></td>
</tr>
<tr>
<td>Generalizing helicopter flight test performance data /GETWIT/</td>
<td></td>
</tr>
<tr>
<td>[AIAA PAPER:79-18167]</td>
<td></td>
</tr>
<tr>
<td>Development of an integral fuel injection concept for staged combustors</td>
<td></td>
</tr>
<tr>
<td>[AIAA PAPER:79-15701]</td>
<td></td>
</tr>
<tr>
<td>Overheat results for the stage combustors</td>
<td></td>
</tr>
<tr>
<td>[AIAA PAPER:79-0384]</td>
<td></td>
</tr>
<tr>
<td>An experimental study of pulsating flow in a three stage axial flow compressor</td>
<td></td>
</tr>
<tr>
<td>[AIAA PAPER:79-21524]</td>
<td></td>
</tr>
<tr>
<td>C14 status report</td>
<td></td>
</tr>
<tr>
<td>Tests of an integrated piloting, navigation, and display system</td>
<td></td>
</tr>
<tr>
<td>[AIAA PAPER:79-26529]</td>
<td></td>
</tr>
</tbody>
</table>

A-337
PERFORMANCE TESTS CONT'D

SUBJECT INDEX

Initial wind tunnel tests at Mach 4 and 7 of a hydrogen-burning, airframe-integrated scramjet
[AIAA 79-7045] p0330 A79-29413

Flight test results -- for 727 aircraft
[AIAA 79-7051] p0333 A79-29596

Design and testing of two supercritical compressor
cascades

Shock boundary layer interaction on high turning
transonic turbine cascades
[ASME PAPER 79-GT-27] p0390 A79-32302

An overview of the U.S. Navy Maximum Performance
Ejection System
p0402 A79-33613

Development and initial test results of parachutes
with Automatic Inflation Modulation /A.I.M./
p0402 A79-33618

U.S. Navy developments in crashworthy seating
p0403 A79-33623

Development and testing of a dual mode escape
propulsion system
p0403 A79-33635

A new high product rate 10 nanosecond, 256 point
 correlator -- for weapon system applications and
 fluid mechanics research
p0405 A79-38305

The impact of noise regulations on propeller design
[S.A.E. PAPR 790591] p0455 A79-36727

Determination of cooling air mass flow for a
horizontally-opposed aircraft engine installation
[S.A.E. PAPR 790609] p0456 A79-36760

A canister fuel pump for general aviation aircraft
[S.A.E. PAPR 790626] p0458 A79-36752

An experimental study of propeller-induced
structural vibration and interior noise
[S.A.E. PAPR 790573] p0459 A79-36759

Wind tunnel performance of four energy efficient
propellers designed for Mach 0.8 cruise
p0465 A79-38816

Model study of aircraft disk brakes
p0465 A79-38817

Tachystoscopic testing of onboard instruments
p0465 A79-38817

Test verification of a turboshaft partial swirl
afterburner
[AIAA PAPER 79-1199] p0469 A79-38981

Partially variable area turbine nozzle
[AIAA PAPER 79-1226] p0469 A79-38992

Engine demonstration test of a cooled lamineated
axial turbine
[AIAA PAPER 79-1229] p0469 A79-38993

Evaluation of ground-launch firings for the
improved 2.75-inch rocket
[AIAA PAPER 79-1297] p0471 A79-39027

Fissile characteristics of a pressur combustor
fueled with a simulated partial-oxidation
product gas
[AIAA PAPER 79-1322] p0472 A79-39018

V/STOL performance comparisons with variable pitch
and variable inlet guide vane fans -- A report on
experimental data
[AIAA PAPER 79-1286] p0509 A79-40487

Assembly and testing of flight-vehicle hydraulic
and pneumatic systems /2nd enlarged and revised
dition/ --- Russian book
p056 A79-44893

The DG-600 -- A rugged, high performance heading
reference unit -- directional gyro design
considerations
p0619 A79-46677

A new U.G.T./test station interface
p0625 A79-48906

Crashworthy armored crewseat for the 0B-60A Black
Hawk
[NAV 79-10] p0627 A79-49062

The Sikorsky elastometric rotor --- helicopter
rotor bearings
[NAV 79-48] p0632 A79-49100

The circulation control rotor flight demonstrator
program [NAV 79-51] p0633 A79-49103

Ultrasonic method of gun gas detection -- for
engine ingestion prevention in F-15
p0642 A79-50166

Flying test bed and simulator flight fidelity
determination at Naval Air Test Center
p0644 A79-50307

The Swedish approach to escape system testing
p0644 A79-50427

An evaluation of sidestick force/deflection
characteristics on aircraft handling qualities
Laboratory tests to determine lightning attachment
points with small aircraft models/engineering
test/ Flight demonstration of the YF-88 V/STOL concept
[AIAA PAPER 79-1841] p0684 A79-51249

Analysis, design, fabrication and testing of the
Mini-Bryant rotating unit (M2S-B-RU). Volume 2: Figures and drawings

Prediction of selected jet fuel test results using
ASTM test method D2887 data with multiple linear
regression analysis
[AD-A059185] p0998 A79-12265

Definition study for variable cycle engine testbed
engine and associated test program

Flight profile performance handbook. Volume 3:
AN-10 (COBRA)
[AD-A0600056] p0171 A79-15030

Flight profile performance handbook. Volume 5:
AN-15 (COBRA)
[AD-A0600057] p0171 A79-15032

Test of a pressurized fuel system for general
aircraft aviation
[AFML-RD-79-122] p0229 A79-16815

Test evaluation of phase III Bendix bank angle
and small community time reference scanning Beam
microwave landing system
[NASA-CP-80-1127] p0231 A79-16829

P-16 high angle of attack testing
p0299 A79-16888

Principles of helicopter performance
p0303 A79-18970

Supercritical tests of a self-optimizing,
variable-Camber wind tunnel model
p0357 A79-20048

Developments in testing airfoil techniques at
University of Southampton
p0358 A79-20056

Aerodynamic performance of axial-flow fan stage
operated at nine inlet guide vane angles --- to
be used on vertical lift aircraft
[NASA-CP-151510] p0671 A79-32148

Aerodynamic data for three supercritical airfoils:
(AFS 79-3) 90633 879-49103 RAE(NPL)
[9515 and 9530, and RAE 9550. Parts 1
and 2]

Evaluation of ground-launch firings for the
(CPSA PAPER 79-0625) p0458 A79-36759

Principles of helicopter performance
p0303 A79-18970

Supercritical tests of a self-optimizing,
variable-Camber wind tunnel model
p0357 A79-20048

Developments in testing airfoil techniques at
University of Southampton
p0358 A79-20056

Formulas for takeoff performance P3-A, B and C
airplanes
[AD-A0602290] p0364 A79-21015

Parametric performance of a turbomach engine
combustor using jet A and B diesel fuel
[NAV 79-70089] p0365 A79-21014

JT9D and JT9D jet engine performance improvement
program. Task 1: Feasibility analysis

CP6 jet engine performance improvement program.
Task 1: Feasibility analysis

Ceramic mainshaft rolling bearing performance in a
gas turbine engine
[AD-A067904] p0398 A79-21074

Internal/external lighting (aviation materiel)
[AD-A0689951] p0563 A79-28171

AEIC fan model test program
[AD-A066058] p0595 A79-28372

NASA CP6 jet engine diagnostics program:
Long-term CP6-60 low-pressure turbine
deterioration

Subjective assessment of a helicopter approach
system for IFP conditions
p0656 A79-30209

Testing and analysis of dual-mode adaptive landing
gear, taxi mode test system for YF-12A

Aerodynamic performance of axial-flow fan stage
operated at nine inlet guide vane angles --- to
be used on vertical lift aircraft
[NASA-CP-151510] p0671 A79-32148

Aerodynamic data for three supercritical airfoils:
(RAE) 9515 and 9530, and RAE 9550. Parts 1
and 2
[ARC/B-M-3820] p0703 A79-32119

Trials of the Doppler microwave landing system at
London (Gatwick) Airport, August 1977
[NASA-TR-78126] p0704 A79-32119

Trials of the Doppler microwave landing system at
Manchester International Airport,
October/November 1977
<table>
<thead>
<tr>
<th>SUBJECT INDEX</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PILOT SELECTION</strong></td>
</tr>
<tr>
<td>- ACMR/I system --- Air Combat Maneuvering Influence of motion wash-out filters on pilot training performance</td>
</tr>
<tr>
<td>- Summary report of the Human Factors Committee The optimal control frequency response problem in manual control of amassed aircraft systems Two-segment approach investigation on a moving-base piloted flight simulator Visual pockets: A design parameter for helicopter instrument panels Flight evaluation 88 2 integrated controller Flight experience with advanced controls and displays during piloted curved decelerating approaches in a powered-lift STOL aircraft Ride qualities criteria validation/pilot performance study: Flight test results A compilation and analysis of helicopter handling qualities data. Volume 2: Data analysis Simulation study of the operational characteristics of a two/three-dimensional multiwaypoint area navigation (MWNAV) system --- pilot performance and flight technical errors</td>
</tr>
<tr>
<td><strong>PILOT TRAINING</strong></td>
</tr>
<tr>
<td>The dynamics of a general aviation pilot promotion campaign Synthetic image generation for visual simulation in training simulators using the Tornado Visual simulator as an example ACS/II system --- Air Combat Maneuvering Range/Instrumentation Flight simulators --- Russian book Computer generated images for aircraft use Visual simulation devices for flight simulators --- Russian book Airline approach to CMT III New technology 5618 simulator Aerodynamic data development for the turboprop T-44A Operational Flight Trainer AIAA 79-1637 Flight testing and simulator flight fidelity --- determination at Naval Air Test Center In-flight simulation with pilot-center of gravity offset and velocity mismatch Results of piloted simulator studies of fighter aircraft at high angles of attack Piloted Aircraft Environment Simulation Techniques Differences between simulation and real world at the IABG air to air combat simulator with a wide angle visual system Manned air combat simulation: A tool for design development and evaluation for modern fighter weapon systems and training of aircrews Use of piloted simulation for studies of fighter departure/spin susceptibility</td>
</tr>
<tr>
<td><strong>PILOTLESS AIRCRAFT</strong></td>
</tr>
<tr>
<td>- Tactical pilotless aircraft - Do they really have a future Propulsion --- remotely piloted vehicles BPT electric power system study. Phase 2: Hot bench mockup development</td>
</tr>
<tr>
<td><strong>PILOTS</strong></td>
</tr>
<tr>
<td>Holographic lens for pilot's head up display, phase 8</td>
</tr>
<tr>
<td><strong>PILOTS (PERSONNEL)</strong></td>
</tr>
<tr>
<td>Air traffic control strategies for handling air traffic in the terminal area Investigation concerning an Airborne Terminal (AT) NPV electric power system study. Phase 2: Hot bench mockup development</td>
</tr>
<tr>
<td><strong>PIPPES</strong></td>
</tr>
<tr>
<td>Preventing fires in aviation fuel storage and transport systems. II Techniques for cathodic protection testing over airfield pavements</td>
</tr>
<tr>
<td><strong>PIPE FLOW</strong></td>
</tr>
<tr>
<td>The effect of the aerodynamic resistance of the nozzle line on the operation of safety valves The influence of geometric asymmetry on the flow downstream of row of jets discharging normally into a free stream Heat generation in cavities at high velocity flights --- resonance-pipe effect</td>
</tr>
<tr>
<td><strong>PISTON ENGINES</strong></td>
</tr>
<tr>
<td>Aircraft piston oils: Past - present - future Energy conservation in general aviation and operation and maintenance of Avco Lycoming piston engines Energy conservation in general aviation piston powered aircraft Concepts for reducing exhaust emissions and fuel consumption of the aircraft piston engine Determination of cooling air mass flow for a horizontally-opposed aircraft engine installation Effects of extended oil changes on aircraft piston engine wear and oil characteristics What small turbine engine does the small helicopter need, or The road to hell is paved with good intentions --- fuel consumption, performance, environmental and engine reliability and acceptability considerations subordinating advanced turbine engine development for small helicopters</td>
</tr>
</tbody>
</table>
PISTON THEORY

PITOT TUBES

PITOT TUBE THEORY

Effect of friction on motion of a piston driven by combustion products

Calculation of the working process in a piston-type 'slow' compression wind tunnel

PISTONS

Centrifugal-reciprocating compressor

PITCH (INCLINATION)

Analytic design of airplane automatic pitch controller

Influence of the pitch/chord ratio of a subsonic cascade of turbine blades

A comparison of predicted and experimental rotor loads to evaluate flap-lag coupling with blade pitch

On the influence of relative pitch in the subsonic turbine cascade

A pitch attitude stabilization system utilizing engine pressure ratio feedback signals

Introduction to the acceptor arc wing and the Bertelson effect for positive pitch stability and control

An introduction to dynamic derivatives. 2: The equations of motion for wind tunnel pitch-yaw oscillation rigs

Longitudinal aerodynamics extracted from flight tests using a parameter estimation method

Parametric studies of model helicopter blade slap and rotational noise

Pitch-roll analysis and testing of air cushion landing systems

PITCH ANGLES

0 PITCH (INCLINATION)

PITCH ATTITUDE CONTROL

0 LONGITUDINAL CONTROL

PITCHING MOMENTS

Effect of interblade phase angle and incidence angle on cascade pitching stability

Some theoretical considerations of a stall proof airplane

Experiments on an aerofoil at high angle of incidence in longitudinal oscillations

Normal force and pitching moment of wing-body combinations in the nonlinear angle-of-attack range at subsonic speeds


Pipe theory

Construction and calibration of pitot-tube systems

PIVOTED WING AIRCRAFT

U TILT WING AIRCRAFT

PL/1

GASP-PL/1 simulation of integrated avionic system processor architectures

PLAN POSITION INDICATORS

Target marker placement for dive-toss deliveries with wings non-level

PLANE STRUCTURES

Minimization theory of induced drag subject to constraint conditions

PLANES

An asymptotic result for the scattering of a plane wave by a smooth convex cylinder

PLANETARY ATMOSPHERES

The ATMOSAT Program 1975-78 --- named superpressure balloon flights for atmospheric monitoring

PLANETARY ENVIRONMENT

NT PLANETARY ATMOSPHERES

NT SPACE EXPLORATION

NT PLANETARY SPACE FLIGHT

NT INTERPLANETARY FLIGHT

NT ROCKS (PLANET)

NT PLANETS

NT MATERIALS

NT PLANEFORMS

NT BOW WINGS

NT CARPET WINGS

NT DELTA WINGS

NT TRIANGULAR WINGS

NT RECTANGULAR PLANOIDS

NT RECTANGULAR PLANES

NT RECTANGULAR WINGS

NT SWEPT FORWARD WINGS

NT SWEPTBACK WINGS

NT TRapezoidal WINGS

NT VARIABLE SWEEP WINGS

NT FILD WING PLANFORMS

PLANNING

NT AIRPORT PLANNING

NT AIRPORT PLANNING

NT ANCHORAGE PLANNING

NT REGIONAL PLANNING

NT PROJECT PLANNING

NT NATIONAL PLANNING

NT TUBE PLANNING

PLASHA FLOW

NT MAGNETOHYDRODYNAMIC FLOW

PLASHA SOUND WAVES

NT MAGNETOHYDRODYNAMIC WAVES

PLASHA SPREATING

Development of a new flame sprayed erosion resistant ablative coating system --- for gas turbine engine parts

Development of sprayed ceramic seal systems for turbine gas path sealing

NASA thermal barrier coatings: Summary and update

PLASTIC AIRCRAFT STRUCTURES

All weather cockpit canopies. 1 - The F16

Smoke hazards from aircraft materials

Advanced composite 727 elevator and 737 stabilizer programs

Lightning protection techniques for graphite/epoxy aircraft structures
Jet engine test cells: Emissions and control measures, phase 2
[PB-282412/6]
Jet engine test cells: Emissions and control measures, phase 1
[PB-283370/3]
Investigation of turbo-dyne energy charger (GB: value trademarks): An air bleed device
[PB-285381/0]
Cost effectiveness analysis of the proposed revisions in the exhaust emission standards for new and in-use gas turbine aircraft engines based on EPA's independent estimates
[PB-286388-10-VOL-5]
Airframe/airport noise control
[AD-A061120]
The feasibility of controlling turbine engine test cell particulate emissions with a baghouse
[AD-A061193]
Boundary conditions for pollution abatement of fast coast-offs and static tests
[AD-A065193]
Time degradation factors for the turbine engine exhaust emissions. Volume 1: Program description and results --- air pollution control
[NREC-1238-8-VOL-1]
Time degradation factors for the turbine engine exhaust emission. Volume 2: JT8D-9 test data --- air pollution control
[NREC-1238-8-VOL-2]
Time degradation factors for turbine engine exhaust emission. Volume 3: JT8D-7 test data --- air pollution control
[NREC-1238-8-VOL-3]
Time degradation factors for turbine engine exhaust emission. Volume 4: JT3D-7 test data --- air pollution control
[NREC-1238-9-VOL-4]
Time degradation factors for turbine engine exhaust emission. Volume 5: JT3D-3B test data --- air pollution control
[NREC-1238-9-VOL-5]
Time degradation factors for turbine engine exhaust emission. Volume 6: JT200-3A test data --- air pollution control
[NREC-1238-11-VOL-6]
Time degradation factors for turbine engine exhaust emissions. Volume 7: BB211-22B test data --- air pollution control
[NREC-1238-12-VOL-7]
Time degradation factors for turbine engine exhaust emissions. Volume 8: C700-2 test data --- air pollution control
[NREC-1238-13-VOL-8]
Control of air pollution from aircraft and aircraft engines
[PB-285962/2/3]
Low efficiency control measures for jet engine test cells
[AD-A0626657]
Evaluation of emission control strategies for airfield operations at the Los Angeles and San Francisco International Airports
[PB-2869622/2/3]
Advanced low emissions catalytic combustor program at General Electric
[PR-285630/0]
Advanced low emissions catalytic combustor program at Pratt and Whitney
[PR-2869622/2/3]
Lean, premixed, prevaporized combustor conceptual design study
[PR-285630/0]
Lean, premixed, prevaporized combustor conceptual design study
[PR-2869622/2/3]
Experimental Clean Combustor Program (ECCP), phase 3 --- commercial aircraft turbofan engine tests with double annular combustor
[BASA-CR-135384]
Pollution Monitoring Development and Evaluation of a Helicopter-Borne Water-Quality Monitoring System
[PR-2869622/2/3]
An aircraft compatible laser induced fluorescence system -- In situ and remote measurements of trace gases
[PR-2869622/2/3]
An alternative approach to the high aspect ratio surface source and vorticity panel method for the calculation of two-dimensional compressible potential flow around a high-lift device with jet flap by matched asymptotic expansions - [AIAA PAPER 79-0077] p0056 A79-13262

A method for calculating the potential flow around a system of aerodynamic profiles in an incompressible fluid - [AIAA PAPER 79-1513] p0575 A79-46702

Fully conservative numerical solutions for unsteady irrotational transonic flow about a rectangular wing between parallel walls - p0602 A79-47342

Some calculations of transonic potential flow for the NASA 640060 airfoil with oscillating flap - p0572 A79-20005

Improvements in surface singularity analysis and design methods - applicable to airfoils - p0356 A79-20043


Two-dimensional compressible potential flow around profiles in cascade - p0383 A79-21059

The computation of transonic flow in wind tunnels at inlets and cascades using the finite element method - [MBE-UFE-1421-0] p0493 A79-29470

A viscous/potential flow interaction analysis for circulation-controlled airfoils - p0539 A79-26303

Multi-element airfoil viscous-inviscid interactions - p0701 A79-32157

Transonic wing redesign using a generalized fictitious gas method - p0705 A79-32202

Unsteady subsonic and supersonic potential aerodynamics for complex configurations - p0023 A79-12366


A three dimensional flow computing system applicable to axial and radial flow turbomachines - [NASA-CR-3082] p0587 A79-28558

Powder (Particles)

Powdered Aluminum

Power Amplifiers

Fail-safe output stage for navigation transmitters reliability design for TACAN equipment - p0057 A79-13271
SUBJECT INDEX

POWER CONDITIONING
Filter weight minimization for rectified superconducting alternator power supplies --- for aircraft
[AD-A072118] p0269 79-26912
High power UHF slide screw tuner for antenna breakdown measurements
[AD-A063766] p0215 79-22116
Permanent magnet generators - Next generation in VSCP power systems --- Variable Speed Constant Frequency
[ASME PAPER 790622] p0457 79-36750
Electromechanical actuation for business aircraft
[SAE PAPER 790622] p0457 79-36750
Development of a 10 kVA power conditioner unit, aircraft, 240/200 volt, 3-phase, 400 Hz
[AD-A056119] p0045 79-11049

POWER DENSITY (ELECTROMAGNETIC)

1-347

POWER EFFICIENCY
Manufacturers developing fuel-efficient engines
[SAE PAPER 78-1029] p0018 79-11623
Effectiveness of readmission of the gas in high-pressure-ratio small-scale turbines --- for aircraft auxiliary power systems
[AIAA PAPER 79-0581] p0656 79-30204

POWER GENERATORS

POWER LINES
Identification of voltage transients on aircraft cabling under LTA excitation --- Lightning Transient Analysis
[ARC-9/8] p0217 79-15922
Manufacturing technology for fiber optic bundle cabling --- electric cables for aircraft
[AD-A056958] p0109 79-13861
Evaluation of a remote tone signaling control/monitor system as lightning/transient protection for solid state instrument landing systems
[AD-A063766] p0425 79-22116

POWER PLANTS
Powerplant integration - The application of current experience to future developments
[ASME PAPER 78-07-113] p0008 79-10798

POWER PROCESSING SYSTEMS

POWER SERIES
On the evaluation of wall interference in two-dimensional ventilated wind tunnels by subsonic linear theory
[ARC-R/A] p0217 79-15922

POWER SPECTRA
The sound power spectrum of shock-free jets
[AIAA PAPER 79-0595] p0269 79-26918
Application of advanced data reduction methods to gas turbine dynamic analysis
[ARC-9/8] p0247 79-36024
Peak Strouhal frequency of subsonic jet noise as a function of Reynolds number
[AIAA PAPER 79-1525] p0576 79-46709
Gust response analyses for ten general aviation aircraft using a two-degree-of-freedom power spectral technique
[ARP-360] p0235 79-16861
Gust load estimation using a simplified power spectral technique
[ARP-362] p0298 79-17870
Prediction of the angular response power spectral density of aircraft structures
[ARP-366] p0485 79-23956

POWER SUPPLY CIRCUITS
The solid state remote power controller - Its status, use and perspective --- for aircraft and spacecraft
[AD-A066141] p0012 79-10896
Power hybridization - Key to reducing avionics power supply weight and volume
[ARP-362] p0617 79-48652

POWER TRANSMISSION
Loss-of-lubrication operation of helicopter transmissions
[ANS 78-49] p0124 79-18172
Overstress testing of helicopter transmissions
[ANS 78-50] p0124 79-18173
High altitude powered platform - A microwave powered aircraft
[AIAA 79-1600] p0525 79-42405

PREDICTION ANALYSIS TECHNIQUES

S-4B mission electrical power
[SAE PAPER 78-86] p0615 79-48617
Initial feasibility study of a microwave-powered sailplane as a high-altitude observation platform

POWERED LIFT AIRCRAFT
Recent progress in rotorcraft and powered-lift research
[SAE PAPER 79-18678] p0133 79-18678
Stoppable and stowable jet-flap rotor concept
[SAE PAPER 79-18679] p0134 79-18679
Jet flow interactions --- in powered lift STOL aircraft
[SAE PAPER 79-20069] p0153 79-20069
Fuel-conservative guidance system for powered-lift aircraft
[NASA-TP-1222] p0294 79-17872
Fuel-conservative guidance system for powered-lift aircraft
Powered low-aspect-ratio Wing In Ground Effect (VIG) aerodynamic characteristics -- conducted in Langley V/STOL tunnel
Powered-lift aircraft handling qualities in the presence of naturally-occurring and computer-generated atmospheric disturbances
[AD-A072118] p0705 79-32198

PPD (POSITION INDICATORS)

U PLAN POSITION INDICATORS

PRECAUTIONS

U ACCIDENT PREVENTION

PRECIPITATION (METEOROLOGY)

PRECIPITATION PARTICLE MEASUREMENT

U RAIN

U SNOW

U DAY/NIGHT PRECISION AIRCRAFT CONTROL

PREDICTION ANALYSIS TECHNIQUES
Gas turbine jet exhaust noise prediction
[SAE RP 876] p0044 79-11623
Operational influences on maintainability
[SAE RP 876] p0044 79-11623
Use of helicopter flight simulation to heighten reliability growth planning to achieve RSW/GHSF requirements for an airborne radar
[SAE RP 876] p0284 79-24965

Validation of IEMCAP using the D-52 --- Intrastatus Electro Magnetic Compatibility Analysis Program
[SAE RP 876] p0225 79-25326
Life Cycle Cost in advanced technology engine development
[SAA PAPER 78-07029] p0257 79-25901
A finite element subvolume technique for structural-borne interior noise prediction --- in aircraft
[AIAA PAPER 79-0585] p0267 79-26882
Diagnostic evaluation of jet noise suppression mechanisms
[AIAA PAPER 79-0574] p0269 79-26912
Master Plan for prediction of vehicle interior noise
[AIAA PAPER 79-0582] p0272 79-26903
Factors affecting residual strength prediction of a cracked aircraft structure
[SAE PAPER 79-0582] p0284 79-26882
Jet mixing noise - Comparison of measurement and theory
[AIAA PAPER 79-0570] p0317 79-28954
PREDICTIONS

A jet exhaust noise prediction procedure for
inverted velocity profile combustor nozzle
[AIAA PAPER 79-0633]
A comparison of panel methods for subsonic flow
computations
[AGARD-AG-241]
Application of finite element techniques in
predicting the acoustic properties of turbofan
inlets
[AIAA-CR-159087]
A comparison of panel methods for subsonic flow
computations
[AGARD-AG-241]
Validation of aircraft noise prediction programs
[AIAA-CR-159087]
Comparison of theoretical predicted longitudinal
aerodynamic characteristics with full-scale wind
tunnel data on the AII airplane
[AIAA-CR-158753]
Forecasting engine life
[AD-249288]
Effect of scale on aerodynamic properties
- wind tunnel tests
[AD-249288]
Lift, moment and pressure distribution on cambered
airfoil in generalized isothermal flow
perturbations
[AIAA PAPER 79-0486]
Experimental studies of unsteady aerodynamics on
wind tunnel models of helicopter rotors
[AIAA PAPER 79-0574]

PRELIMINARY ANALYSIS

Aircraft aerodynamic coefficient estimation
[AD-249288]
New technology 561M simulator
[AD-249288]
Le Recherche Aerospatiale. Bi-monthly Bulletin
No. 1978-3
Calculation of the pressure distribution over a slender wing in supersonic flow

Aerodynamic performance of a 1.35 pressure ratio axial-flow fan stage

Effect of an alternate vinglet on the pressure and spanwise load distributions of a first generation jet transport wing

Calculation of aerodynamic pressure distributions on arbitrary aircraft geometries using the Woodward aerodynamic analysis program

Dynamic response of lift fans subject to various backpressures

Interactional aerodynamics of the single rotor helicopter configuration. Volume 2-8: Harmonic analyses of airframe surface pressure data, runs 23-23, aft section

Interactional aerodynamics of the single rotor helicopter configuration. Volume 2-21: Harmonic analyses of airframe surface pressure data, runs 23-33, aft section

Effects of spanwise blowing on the surface pressure distribution and vortex-lift characteristics of a trapezoidal wing-strake configuration

Experimental studies on the effects of a sting support on the pressure distribution around a spherical object

A modification to linearized theory for prediction of pressure loadings on lifting surfaces at high supersonic Mach numbers and large angles of attack

Pressure and heat-transfer distributions in a simulated wing-elevator cove with variable leakage at a free-stream Mach number of 6.9

Pressure and thermal distributions on wings and adjacent surfaces induced by eleven deflections at Mach 6

Boundary layer effects on pressure variations in Ludwig tubes

Possibilities for scale effect on swept wings at high subsonic speeds. Recent evidence from pressure plotting tests

Bumblebee program. Aerodynamic data. Part 1: Superflow stream field, pressure field, and panel load data for validation of computational methods

Pressure distributions on axial flow compressor blading and comparison with distributions on similar cascade blading

Prediction and measurement of the aerodynamic forces and pressure distributions of tail-tail configurations at very high angles of attack

Surface pressure data for a supersonic cruise airplane configuration at Mach numbers of 2.3 and 2.5

An investigation into the pressure distributions over a wing and store combination at low speeds

Notes concerning testing time requirements in steady and unsteady measurements

Wall interference effects

The effect of blockage in shear flow in the wind tunnel

Combined pressure and temperature distortion effects on internal flow of a turbofan engine

A method of computing the pressure distribution on a single-bladed hovering helicopter rotor

Pressure distributions on three different cruciform aft-tail control surfaces of a wingless airplane at Mach 1.60, 2.36, and 3.70

Volume 1: Trappedodral tail -- conducted in Langley Unitary Plan wind tunnel

Calculation of pressure distribution for a wing-body combination at subsonic Mach numbers

Pressure drag

Depth to pressure effects

Supersonic drag

Wing drag

Theoretical lower limits of forebody drag

Scaling effects on drag prediction --- wind tunnel tests

Pressure effects

Effects of inlet distortions on a multi-stage compressor --- transonic flow pressure distortion

Influence of the flow angle on the characteristics of an elbow-shaped air intake --- of gas turbine engines

Combined pressure and temperature distortion effects on internal flow of a turbofan engine

Predicted P1100 engine response to circumferential pressure and temperature distortion

The influence of longitudinal pressure gradient and turbulence of the flow upon heat transfer in turbine blades

Experimental investigation of effects of jet decay rate on jet-induced pressures on a flat plate: Tabulated data

Effect of steady-state pressure distortion on flow characteristics entering a turbofan engine

Effect of steady-state temperature distortion and combined distortion on inlet flow to a turbofan engine

Pressure fields

Pressure measurement in air data instrumentation

Feasibility and cost effectiveness of airborne tire pressure indicating systems

Pressure gradients

The influence of longitudinal pressure gradient and turbulence of the flow upon heat transfer in turbine blades

Adverse pressure gradients effects on supersonic boundary layer turbulence

An experimental investigation into the influence of acoustic disturbances on the development of a turbulent boundary layer

Pressure modeling of vertically burning aircraft materials

Distortions, rotating stall and mechanical solicitations

Pressure measurements

Correlation of combustor acoustic power levels inferred from internal fluctuating pressure measurements

Application of shock-tube technique to the measurement of heat-transfer rate to gas turbine components

Stability and pressure measurements in the Naval Surface Weapons Center hypervelocity tunnel

A-349
PRESSURE SENSORS

Pressure measurements on a spinning wind tunnel model by means of telemetry

Pressure and velocity measurements in a three-dimensional wall jet — high lift V/STOL wing-flap

Pressure measurement in air data instrumentation

Unsteady pressure measurements on rotor blade tips with incidence

Unsteady aerodynamic pressure measurements on rotating lifting systems

Interrogation aerodynamics of the single rotor helicopter configuration. Volume 2-B: Harmonic analyses—airframe surface pressure data, cross-23-25, mid section

Fluctuating loads measured on an over-the-wing supersonic jet model

Measurements of acoustic sources in motion

An improved system for use in conducting wake investigations for a wing in flight — differential pressure measurements for drag investigations

Section drag coefficients from pressure probe transversals of a wing wake at low speeds

Effect of number of probes and their orientation on the calculation of several compressor face distortion descriptors

Fuselage surface pressure measurements of a helicopter wind-tunnel model with a 3.15-meter diameter single rotor

Aerodynamic performance of 1.38-pressure-ratio, variable-pitch fan stage

Fluctuating surface pressure characteristics on a helicopter fuselage under hover and forward flight conditions

Experimental investigation of unsteady phenomena in vaneless radial diffusers

Unsteady pressures on a NACA 64A010 airfoil – Experimental and theoretical results

Subsonic base pressure fluctuations

On a property of the linearized boundary layer equations with self-induced pressure

Effects of steady-state pressure distortion on the stall margin of a J85-21 turbojet engine

PRESSURE PROBES

U PRESSURE SENSORS

PRESSURE RECOVERY

Total pressure recovery of flared fan nozzles used as inlets

PRESSURE REDUCTION

An investigation of the performance of a J52-P-8A engine operating under the influence of high bleed flow extraction rates

PRESSURE REGULATORS

Development of anti-G valves for high performance aircraft

Pressure-controlled thermal expansion sealing of advanced composite EPF wing structure

PRESSURE SENSORS

Recent developments in sensors for the gas turbine engine

Pitot-tubes at 90 and 180 degrees of yaw

An omnidirectional, tilt insensitive, wind speed threshold detector

Error assessment and control

A-350
Helicopter icing research
Rain-erosion resistant materials in air and space travel
An evaluation of coatings for steel and titanium alloy fasteners for aircraft applications
An experimental, low-cost, silicon nitride/alumina high-temperature coating for superalloys
Metallic coatings for graphite/epoxy composites
Optimal design of gas-turbine engine thermodynamics on the basis of prototype elements. I
Optimal thermodynamic design of gas turbine engines using element prototypes. II
Realization of a helicopter-oriented real-time data system for research, experimental, and prototype flight testing

SUBJECT INDEX

Development of a 10 KVA power conditioner unit, aircraft, 115/200 volt, 3-phase, 400 Hz

QUADRATIC PROGRAMMING

PULSE MODULATION

Development of a 10 KVA power conditioner unit, aircraft, 115/200 volt, 3-phase, 400 Hz

QUADRATIC PROGRAMMING

PULSE MODULATION

Development of a 10 KVA power conditioner unit, aircraft, 115/200 volt, 3-phase, 400 Hz

PLANE GUIDANCE MATRIX

Pulse duration modulation

Development of a 10 KVA power conditioner unit, aircraft, 115/200 volt, 3-phase, 400 Hz

Q FACTORS

An efficient algorithm for computing the Q-guidance matrix

Development of a 10 KVA power conditioner unit, aircraft, 115/200 volt, 3-phase, 400 Hz
Dependence of track quality on the number of radar sensors --- air traffic control

System for the display of extracted radar data on the basis of minicomputer-controlled display devices /DEED-MC/ for an employment in Air Traffic Control.

Geneva, Zurich get fine-grain 3-D color weather radar

Preprocessing for advanced image matching techniques

Synthetic aperture radar map matching for navigation

Digital sensor simulation at the Defense Mapping Agency Aerospace Center

A CO2 laser for a compact imaging radar

Numerical studies of conversion and transformation in a surveillance system employing a multitude of radars, part 2 --- advanced air traffic control services

Radars, part 2 --- advanced air traffic control services

A family of air traffic control radars

Millimeter airborne radar target detection and selection techniques

Ellipsoidal modelling of aircraft targets for evaluation of electronic fuses

Survey of radar simulation training at ATC field facilities

Target marker placement for dive-toss deliveries with wings non-level

Low ES signature response techniques

Radar applications of millimeter waves

Dependence of track quality on the number of radar sensors --- air traffic control

Radar system design for track-while-scan

Grating lobe control in limited scan arrays

Radar system design for track-while-scan

Heading and speed errors for \( x, y \) tracking filters

Radar targets in clutter environment

Radar system design for track-while-scan

Grating lobe control in limited scan arrays

Low ES signature response techniques

Radar targets in clutter environment

Radar system design for track-while-scan

Heading and speed errors for \( x, y \) tracking filters

Low ES signature response techniques

Radar applications of millimeter waves

Dependence of track quality on the number of radar sensors --- air traffic control

Radar system design for track-while-scan

Grating lobe control in limited scan arrays

Radar system design for track-while-scan

Heading and speed errors for \( x, y \) tracking filters

Low ES signature response techniques

Radar applications of millimeter waves

Dependence of track quality on the number of radar sensors --- air traffic control

Radar system design for track-while-scan

Grating lobe control in limited scan arrays

Radar system design for track-while-scan

Heading and speed errors for \( x, y \) tracking filters

Low ES signature response techniques
Radar Transmitters

The servoed modulation FMCW radar altimeters in military applications

RADAR TRANSMITTERS

Tactical electronic reconnaissance sensor - radar emission detection

RADAR DISTRIBUTION

Effect of compressor geometry on the unsteady regimes of a low speed compressor

RADIAL VELOCITY

Multidar tracking system using radial velocity measurements

RADIANT FLOW DENSITY

Vertical cutoff rigidity and the intensity distribution of cosmic rays near Cape Town

RADIANT INTENSITY

U RADIANT FLOW DENSITY

RADIATION ABSORPTION

WT ATMOSPHERIC ATTENUATION

RADIATION DAMAGE

Fixed point and microcomputer survivability techniques - aircraft subject to electromagnetic or nuclear radiation

RADIATION DISTRIBUTION

NT ANTENNA RADIATION PATTERNS

NT SIDEBANDS

RADIATION EFFECTS

NT RADIATION DAMAGE

Induced effects of lightning on an all composite aircraft

RADIATION HARDENING

Protection/hardening of aircraft electronic systems against the indirect effects of lightning

RADIATION INTENSITY

U RADIANT FLOW DENSITY

RADIATION MEASURING INSTRUMENTS

NT PLANAR DETECTORS

NT INFRARED DETECTORS

NT INFRARED INSTRUMENTS

NT INFRARED RADIOMETERS

NT INFRARED ScANNERS

NT INFRARED SPECTROMETERS

RADIATION NOISE

U ELECTROMAGNETIC NOISE

RADIATION PRESSURE

MT LUMINOUS INTENSITY

RADIATION SOURCE

RADIATION PROTECTION

Lightning hazards overview: Aviation requirements and interests

RADIATION SOURCES

MT NEUTRON SOURCES

MT POINT SOURCES

RADIATIVE HEAT TRANSFER

Three-dimensional radiative heat-transfer problems - modeling aircraft compartments thermodynamics

Radio Beacons

Plane emissivities - alternative fuels

Transmit ablation of Teflon in intense radiative and convective environments

Numerical methods for solution of radiative-convective heat transfer problems - radiative boundary layer - hypersonic blunt bodies in dense atmosphere

Pool fire radiation through a door in a simulated aircraft fuselage

Design and fabrication of a radiative actively cooled honeycomb sandwich panel

Radiative, actively cooled panel test results

RADAR BEACONS

Emergency position-indicating radio-beacon systems

Sea-air rescue and offshore aerial navigation

Low profile polarization cage for VOR-S antennas

High altitude altimeter flight test

RADAR ANTENNAS

MT MICROVAVE ANTENNAS

Electronically scanned Tacan antenna

Low profile polarization cage for VOR-S antennas

Experimental analysis of V.H.P. antennae for helicopter homing systems using scale-model techniques

Radiation from quarter-wavelength monopoles on finite cylindrical, conical, and rocket-shaped conducting bodies - airborne antenna design

The penetration of electromagnetic fields into aircraft from externally mounted HF antennas

HF coplanar-slot antenna for aircraft-to-satellite data communications

RADIO BEACONS

MT OMNIDIRECTIONAL RADIO BANGES

Sea-air rescue and offshore aerial navigation using Loran C

Fail-safe output stage for navigation transmitters - reliability design for TACAN equipment

Emergency position-indicating radio-beacon systems using 406 MHz band mobile-satellite service

Application oriented simulation as a tool for the planning of radio beacon systems - aircraft communications

Investigation of the feasibility of using the discrete address beacon system data link for
SUBJECT INDEX

An analysis of radio navigation sensor accuracies associated with area navigation (RNAV) [AD-0058544] p0049 N79-12055
Pacific area evaluation of a commercial Omega navigation system installed in a VC-118 aircraft, supplement 1 [AD-0068106] p0582 N79-28115

RADIO RECEIVERS

N RADIO RANGES

N RADIO WAVES

N RADIO TRANSMITTERS

N RADIO TRANSMISSION

N RADIO TELEMETRY

N RADIO SCATTERING

N RADIO BEACONS

N RADIO WAVES

N HYDROXYL EMISSION

N INFRARED DETECTORS

N INFRARED BIOMETERS

N INFRARED SCANNERS

RADIO BEACONS

NT MILLIMETER WAVES

NT MULTIPATH TRANSMISSION

NT SHORT WAVE RADIO TRANSMISSION

NT SPREAD SPECTRUM TRANSMISSION

NT CROSSDIRECTONAL RADIO RANGES

NT RADIO BEACONS

High power UHF slide screw tuner for antenna breakdown measurements p0349 N79-32190
Evaluation of an FM/CW range measurement system for VTOL landing p0468 N79-36506
The search and rescue satellite (SARSAT) system project p0296 N79-18115

RADIO WAVES

NT HYDROXYL EMISSION

NT MICROWAVES

NT MILLIMETER WAVES

RADIOGRAPHY

The contribution of dynamic X-ray to gas turbine air sealed technology p0047 N79-11065
C-130 weldbonded fuselage panel flight evaluation program [AD-0057928] p0092 N79-12071
High resolution radiography in the Aero-engine industry . p0502 N79-25414
X-ray inspection of aircraft structures using mobile sources: A compendium of radiographic results [AD-0068316] p0598 N79-29532

RADIOMETERS

NT INFRARED DECTECTORS

NT INFRARED BIOMETERS

NT INFRARED SCANNERS
A multi-disciplinary approach to structural design for stochastic loads

Random processes

Solution of the inverse problem of aerodynamics by a random search technique

Solution of the inverse aerodynamics problem by the random search method

Response of plate to nonstationary random load

Response of plate to nonstationary random load

A new L-band MSL/DME with high accuracy

Heading and speed errors for x, y tracking filters

Hyberbolic positionining per se in presence --- navigation computations from range measurements using microprocessor

Evaluation of an FM/CW range measurement system for VTOV landing

Experimential ECAS performance results

Parametric analysis of stereoinetric tracker for use in tactical aircraft

Echo tracker/range finder for radars and sonars

Stability analysis of relative navigation systems --- TDOA system for multi-member aircraft communities

Airlines long-range navigation assessment

A new dimension, Wallops Island flight test

Range/Instrumentation

Radar APPROACH CONTROL

Rapid TRAJECTORY CONTROL

Rapid QUENCHING (METALLURGY)

Potential uses of rapidly solidified alloys in gas turbine engines

Rapid transit systems

Role of helicopters in airport access

Airplane plan based on the PIPF concept proposal for a remodelled Catania-Pontanarosa

Radar earth compounds

NT Sanitation compounds

AC aircraft electrical systems with rare earth permanent magnet machines

Bare gases

Helium

Rarefiend gas dynamics

The low-density channel of the Aerodynamic Institute

Rate meters

Measuring instruments

Rate (Per Time)

Acceleration (Physics)

Acoustic velocity

Airspeed

Angular acceleration

Angular velocity

Turning rate

Critical velocity

Deceleration

Eevaporation rate

Therms velocity

Thrust

High acceleration

High speed

Supersonic speed

Low speed

Lorinos intensity

Flow rate

Propagation velocity

Radial velocity

Radiant flux density

Motor speed

Signal fading rate

Synchonic speed

Supersonic speeds

TIP speed

Transonic speed

Wind velocity

Rate

Aspect ratio

Fuel-air ratio

Lift drag ratio

Low aspect ratio

Rach number

Reynolds number

Signal TG noise ratios

Strobal number

Thrust

Thrust-weight ratio

Radar

Computation of the radiation characteristic of antennas on complicated structures in the high frequency case. Principle of the geometrical theory of diffraction

Newtonian

Jet

Jet thrust

Jet thrust

Critical influence of finite rate chemistry and uniqueness on ignition and combustion of supersonic 82-air streams

Alternative hydrocarbon fuels: Combustion and chemical kinetics --- synthetic aircraft fuels

Radar time

Rapid reaction time techniques for a strapdown navigator employing electrostatic gyro technology

Real gases

Theoretical investigations of real gas effects in cryogenic wind tunnels

Real time operation

Experimental design for real-time simulations of air traffic control concepts

Range/Instrumentation

Real-time/real-time recce wideband data links

Airborne reconnaissance system

Real-time simulation in air traffic control

Verification and validation of the NASA Terminal Configured Vehicle's TCYS/ Wind analysis program
**SUBJECT INDEX**

**RECOVERY**
- Reduction of redundant components for flight vehicles [Russian book] p0254 A79-25875
- Dual digital flight control redundancy management system development program [AIAA 79-1771] p0569 A79-45356
- R-16 flight control system redundancy concepts [AIAA 79-1793] p0572 A79-45400
- Digital flight control system reliability - Effects of redundancy level, architecture and redundancy management technique [AIAA 79-1893] p0573 A79-45418
- Redundant strapdown navigation, guidance, and control of a control configured vehicle [AD-A072117] p0707 N79-32218
- Damage tolerance in practice --- aircraft safety and stress measurement [AD-A072117] p0707 N79-20016

**REDUNDANT COMPONENTS**
- Analytic redundancy for flight control sensors on the Lockheed L-1011 aircraft [AIAA 79-1793] p0572 A79-45400
- Failure detection in signal processing and sensing in flight control systems [AIAA 79-1771] p0612 A79-47971
- Behaviour of a two-dissimilar unit imperfect standby system with connected switching and priority repair [AD-A072117] p0707 N79-20016
- Optical control technology --- for helicopter-filter-optic data transfer [AD-A072117] p0707 N79-20016
- Fly-by-wire tail rotor controls [AD-A072117] p0707 N79-20016
- Damage tolerance analysis of redundant structures --- transport aircraft structures [AD-A072117] p0707 N79-20016
- Design of redundant structures --- structural design criteria and fracture mechanics of large commercial transport aircraft [AD-A072117] p0707 N79-20016
- Program for the critical components of a fly-by-the-slip backup flight control system, part 1 [AD-A072117] p0707 N79-31226

**REDUNDANT STRUCTURES**
- U RECOVERY COMPONENTS
- U RECOVERY VEHICLES
- NT AEROSPACEPLANES
- REFERENCE SYSTEMS
- An experimental passive microwave attitude measurement system for escape system steering [AD-A072117] p0403 A79-33637
- The basic geodetic shapes and position lines [AD-A072117] p0533 A79-43507
- Microcomputer applications in strapdown heading and attitude reference system [AD-A072117] p0614 A79-48606

**REFERENCES (STANDARDS)**
- U STANDARDS

**REFLECTANCE**
- Display measurements. Measurements of reflectance-type displays [AD-A068602] p0594 N79-29185

**REFLECTION**
- NT MACH REFLECTION
- NT SIGNAL REFLECTION
- Internal cockpit reflections of external point light sources for the model YAH-6A advanced attack helicopter [ARC-CP-1390] p0216 N79-15919

**REFRACTION**
- Plane problems of aerothermooptics --- refraction in two-dimensional nonuniform medium [AD-A072117] p0707 N79-20016

**REFRACTORY MATERIALS**
- NT CHROMIUM
- NT RECOVERY METAL ALLOYS
- NT TUNGSTEN ALLOYS

**REGRESSION ANALYSIS**
- Prediction of selected jet fuel test results using ASTM test method D2887 data with multiple linear regression analysis [AD-A059185] p0908 N79-12245
- On the application of certain statistical methods to wind-tunnel testing [ARC-CP-1390] p0216 N79-15919
RELIABILITY ENGINEERING

RELIABILITY CONTROL

QUALITY CONTROL

RELIABILITY ENGINEERING

Hazard criticality analysis --- with emphasis on aircraft components

A high temperature turbine research module

[ASME PAPER 76-GT-73]

[ASME PAPER 79-10521]

Stopping development methodology - The key for reliable engines in future military aircraft

[ASME PAPER 76-GT-167]

Thermal design of airborne radars - Present and future

[ASME PAPER 79-10807]

Support systems for advanced military electronics

--- MT design trends

Can government specified reliability and maintainability requirements for complex aircrew escape systems be met

[p0023 A79-12305]


[p0065 A79-14403]

RIW data collection and reporting method --- Reliability Improved Warranty for military aircraft

[p0072 A79-15351]

Designing-in reliability - A new approach --- for F-18 Inertial Navigation System

[p0072 A79-15360]

Cost and operational effectiveness of 20X improvements

[p0073 A79-15403]

Reliability and quality in aeronautics and astronautics; Meeting, Hanover, West Germany, April 27, 26, 1978, Reports

[p0081 A79-15657]

Reliability of aircraft structures

[p0082 A79-16583]

Inertial technology and reliability --- for navigation systems

[p0082 A79-16584]

Application of the fault tree in fault testing and design improvement --- of aircraft components

[p0082 A79-16585]

Reliability improvement program --- for military aircraft electronic components

[p0082 A79-16591]

Advances in design and testing of helicopter drive systems

[p0134 A79-16683]

Recent advances in elastomerics products for improving helicopter reliability and maintainability

[p0136 A79-16695]

Reliability and maintainability growth of a modern, high performance aircraft, the F-14A

[p0205 A79-23629]

Reliability based quality /BBQ/ technique for evaluating the degradation of reliability during manufacturing --- for array helicopter systems and components

[p0205 A79-23631]

CP-140 aircraft reliability program - A "tailored" management approach

[p0206 A79-23632]

Reliability growth planning to achieve RIW/GHTBP requirements for an airborne radar

[p0248 A79-24965]

Technology and the new look meet the reliability challenge

[SAE PAPER 781024]

Crawfordsworth tests on model aircraft fuselage structures

[p0256 A79-25897]

Design against fatigue - Current trends --- for aircraft structural reliability

[p0275 A79-27354]

Concorde is service

[p0333 A79-29606]

The influence of the blading surface roughness on the aerodynamic behavior and characteristic of an axial compressor

[ASME PAPER 79-GT-102]

Reliability, performance, and fault isolation considerations in the design of interconnected navigation systems

[p0402 A79-33622]

Changing requirements in aircraft design

[p0460 A79-37044]

Fault-tolerant, high reliability electronic engine control systems

[p0469 A79-38983]

The F-16 EW program --- Reliability Improvement Warranty

[p0476 A79-39989]

The operational impact of Navy's first TAAP program --- P-3C Test, Analyze and Fix

[p0476 A79-39989]

A multi microprocessor flight control system design principles

[AD-1062287]

Omega possibilities: Limitations, options, and opportunities

[p0370 A79-20319]

Reliability improvement warranty terms and conditions for the Integrated Avionics Control System (IACS)

[p0670 A79-31205]

Belief Maps

Meeting the challenge of precise navigation during map-of-the-earth flight

[AD-1063766]

[ASME PAPER 79-12021]

Reliability Valves

Unlocking the drive of gas distributor valves operating at high pressures

[p0556 A79-42564]

Previsions and experimental results in open balloon controlled descent

[p0677 A79-31691]

Relining

MT STRESS RELINING

Remote Terminals

Fail remote terminal system frequency assignment model

[p0250 A79-25323]

Remote Control

MT RADIO CONTROL

The solid state remote power controller - Its status, use and perspective --- for aircraft and spacecraft

[p0012 A79-10896]

Drone formation control system /DPCS/ - A new generation test range system

[p0048 A79-36086]

Systems development of a stall/spin research facility using remotely controlled/augmented aircraft models. Volume 1: Systems overview

[NASA-CR-162351]

Evaluation of a remote tone signalling control/monitor system as lightning/transient protection for solid state instrument landing systems

[AD-1063766]

[p0425 A79-22116]

Previsions and experimental results in open balloon controlled descent

[p0677 A79-31691]

Remote Sensors

Potential applications of advanced aircraft in developing countries --- Brazil and Indonesia

[NASA-FR-80133]

Remote Sensors

AV-NOS and AUTOB - An update --- Aviation Automated Weather Observation System and Automatic Observation systems

[p0192 A79-21920]
RESEARCH

AIRCRAFT
- H-X combat search and rescue avionics study results p0620 79F-48640
- Aerosalon systems technology needs: Escape, rescue and survival [AD-A058229] p0089 79F-12051
- A review of certified airport crash fire rescue service criteria [AD-A053110] p0167 79F-14116
- The search and rescue satellite (SARSS) system project p0296 79F-18115
- Rescue helicopters in primary and secondary missions p0310 79F-19606
- Casualty evacuation by helicopter p0310 79F-19616
- Development of casualty evacuation kit for the light observation helicopter (Kiwa) p0310 79F-19616
- Bailout from autorotating helicopters p0313 79F-19666
- Analysis of visual detection performance: Fall 1976 experiment [AD-A065118] p0432 79F-23061
- An advanced guidance and control system for rescue helicopters p0687 79F-30217

RESEARCH
- NT DYNAMIC PROGRAMMING
- NT GAME THEORY
- NT MARKET RESEARCH
- NT MATHEMATICAL PROGRAMMING
- NT NONLINEAR PROGRAMMING
- NT OPERATIONS RESEARCH
- NT ROTOR SYSTEMS RESEARCH AIRCRAFT
- NT U-2 AIRCRAFT
- NT V-24 AIRCRAFT
- NT X-24 AIRCRAFT
- NT X-22 AIRCRAFT
- NT Z-0 AIRCRAFT
- NT Z-2 AIRCRAFT

SUBJECT INDEX

- Performance evaluation method for dissimilar aircraft designs --- using the square of the wing span for nondimensional comparisons of aerodynamic characteristics [NASA-RP-1042] p0649 79F-30139
- Research and development of the YFJ-1 turbofan engine [ASME PAPER 78-GT-199] p0044 79F-10189
- Development of an environmental design and test guide for army rotary-wing aircraft p0075 79F-16078
- MMU helicopters for the army p0078 79F-16234
- An operator's viewpoint on future rotorcraft R & D criteria p0132 79F-18668
- The role of fluid mechanics in aviation technology [DGLR PAPER 78-216] p0183 79F-20477
- Research and development in the area of fluid mechanics and aerodynamics in the Federal Republic of Germany [DGLR PAPER 78-223] p0183 79F-20481
- NASA research on general aviation power plants [AIAA PAPER 79-0561] p0254 79F-25870
- Planning the development and qualification process for the next generation of high technology aircraft engines [SAE PAPER 780992] p0255 79F-25789
- Requirements and constraints in the development and qualification of gas turbine engines for the Navy [SAE PAPER 780994] p0255 79F-25789
- The continuity factor in aircraft development [AIAA PAPER 79-1308] p0509 79F-26536
- Development and initial test results of parachutes with automatic inflation modulation /AIN/ [AIAA PAPER 79-1308] p0509 79F-26536
- Propulsion research -- current status and future prospects --- aircraft turbine engines p0323 79F-29942
- Case study in aircraft design: The Boeing 727 --- book p0332 79F-29590
- The 727--200 development p0332 79F-29592
- The combustion of a range of distillate fuels in small gas turbine engines [ASME PAPER 79-GT-175] p0395 79F-32435
- A review of Curtiss-Wright rotary engine development with respect to general aviation potential [SAE PAPER 790621] p0657 79F-36749
- A summary of NASA/AF Force Pull Scale Engine Research Programs using the F100 engine [AIAA PAPER 79-1308] p0509 79F-40648
- Contribution of the engine R & D community to reduced cost of ownership of Army helicopters [AIAA PAPER 79-1360] p0511 79F-40764
- The DGLR-F4 transonic wing as European test model p0512 79F-41224
- Historical development of worldwide supersonic aircraft [AIAA PAPER 79-1815] p0607 79F-47895
- USAF thrust in aircraft electrical power technology p0686 79F-51916
- Lightweight hydraulic systems development p0686 79F-51917
- An overview of NASA research on positive displacement type general aviation engines [AIAA PAPER 79-1824] p0694 79F-53750
- Holography and LDV techniques, their status and use in airfoil research p0351 79F-19999
- Research and development activities in Italy in the field of aerospace structures and materials [AGARD-R-675] p0889 79F-24202

RESEARCH FACILITIES
- Overview of two-dimensional airfoil research at Ames Research Center p0355 79F-20033
- Langley's two-dimensional research facilities: Capabilities and plans p0358 79F-20055
- A new airfoil research capability p0358 79F-20057
The effect of surface imperfections on the calibration of the AER-C-PVT 16-foot transonic wake curvature and trailing edge interaction experiments on tandem diffusers with effects of Reynolds number and other parameters on visualizations and calculations of air intakes at flow-field in a vortex with breakdown above sharp peak Strouhal frequency of subsonic jet noise as a part of the Lynx hingeless rotor system and flight characteristics — military helicopter.

The design of models and their supports, the Evans clear-flow tunnel. A review of some of the various proposals — the design of high Reynolds number, transonic wind tunnels.

European transonic wind tunnel project for high Reynolds numbers — cryogenic proposal.

Construction problems specific to models for high Reynolds number wind tunnel windward — scale models.

High Reynolds Number Subsonic Aerodynamics: A review of some of the various proposals — the design of high Reynolds number, transonic wind tunnels.

Reclamation of synthetic turbine engine oil mixtures.

Nechanism of determination of the shedding of parachute-rocket deceleration system design.

Parachute-rocket deceleration system design.

Optimization of body shape at small Reynolds numbers — in Stokes flow.

Genesis of the European high-Reynolds-number transonic wind tunnel project.

Mechanism of determination of the shedding frequency of vortices behind a cylinder at low Reynolds numbers.

On the laminar separation, transition, and turbulent reattachment of low Reynolds number flows near the leading edge of airfoils.

Reynolds number, scale and frequency content effects on T-15 inertial instantaneous distortion.

Scale effects on supercritical airfoils.

Characteristic aerodynamic coefficients at high Reynolds numbers.

Experimental and analytical investigation of the effects of Reynolds number and blade surface roughness on multistage axial flow compressors.

Effects of Reynolds number and other parameters on the throttle-dependent, nosele/afterbody drag of an 0.11 scale single-engine aircraft model.

Autocotating flat-plate wings — the effect of the moment of inertia, geometry and Reynolds number.

Trailing-edge flows at high Reynolds number.

Peak Strouhal frequency of subsonic jet noise as a function of Reynolds number.

Flow-field in a vortex with breakdown above sharp edged delta wings.

Experiments on tandem diffusers with boundary-layer suction applied in between.

Prospects for computing airfoil aerodynamics with Reynolds-averaged Navier-Stokes codes.

Wake curvature and trailing edge interaction effects in viscous flow over airfoils.

Design and characteristics of high Reynolds number test facilities: The Ludwig tube.

Visualisations and calculations of air intakes at high angles of attack and low Reynolds number — Navier-Stokes equation.

Calibration of the AEC-PWT 16-foot transonic tunnel aerodynamic test section at various Reynolds numbers.

The effect of surface imperfections on the aerodynamic performance of an airfoil at moderate Reynolds numbers.
Investigation of roll performance for a highly nonlinear statically unstable fighter-type aircraft [AD-A069301]  p0669 A79-31199

ROLL CONTROL

U LATERAL CONTROL

ROLL FORCING

Basic problems of controlling non-Newtonian fluid flow in roll clearance — roll forcing of aircraft plastics

Preparation of double-curvature planking by rolling — for aircraft structures

ROLLER BEARINGS

Overtress testing of helicopter transmissions [AHS 78-80]  p0124 A79-18173

A functional evaluation of a thrust carrying cylindrical roller bearing design [ASME PAPERS 78-L03-28]  p0199 A79-23296

Review of aircraft bearing rejection criteria and causes

Ceramic sailshaft roller bearing performance in a gas turbine engine [AD-A067990]  p0557 A79-27516

Tapered roller bearing development for aircraft turbine engines [AD-A068980]  p0662 A79-30555

Investigation of the use of ceramic material in aircraft engine bearings [AD-A070631]  p0718 A79-33214

ROLLING


Some observations on the mechanism of aircraft wing rock

ROTARY DRIVES

U MECHANICAL DRIVES

ROTARY GEARS

On mechanics of gyroscopes in gimbal suspension

Dynamics of nonideal gyroscopic systems

ROTARY STABILITY

WT GYROSCOPIC STABILITY

The influence of tilting pad bearing characteristics on the stability of high speed rotor-bearing systems

Dynamic stability of a two-blade rotor


ROTARY WING AIRCRAFT

WT AR-64 HELICOPTER

WT BO-105 HELICOPTER

WT CH-46 HELICOPTER

WT CH-47 HELICOPTER

WT CH-54 HELICOPTER

WT COMPOUND HELICOPTERS

WT H-53 HELICOPTER

WT SHOR-LIFT HELICOPTERS

WT HELICOPTERS

WT TANDEM ROTOR AIRCRAFT

WT TILT ROTOR AIRCRAFT

WT UH-1 HELICOPTER

WT UH-60A HELICOPTER

WT UH-61A HELICOPTER

WT XV-15 AIRCRAFT

Development of an environmental design and test guide for Army rotary-wing aircraft

Rotocraft technology for the year 2000

ROTARY WING SYSTEM IDENTIFICATION TECHNIQUES FOR HANDLING QUALITIES AND STABILITY AND CONTROL EVALUATION [AHS 78-80]  p0122 A79-18156

The use of analytic tools in the design and development of rotocraft

The role of rotor impedance in the vibration analysis of rotocraft

Recent progress in rotorcraft and powered-lift research

Kleitz Do 34 — The German contribution to the ARGUS program — tethered rotor platform for battlefield surveillance system

A system for interdisciplinary analysis — A key to improved rotocraft design [AHS 78-80]  p0150 A79-19897


Prediction of aeroelastic instabilities in rotocraft


NASA gear research and its probable effect on rotocraft transmission design [NASA-TM-79292]  p0721 A79-33477

ROTARY WINGS

WT BEARINGLESS ROTORS

WT CIRCULATION CONTROL ROTORS

WT LIFTING ROTORS

WT RIGID ROTORS

WT TILTING ROTORS

WT TIP DRIVEN ROTORS

Damage-tolerant design of the YUH-61A main rotor system

The survivability of helicopters to rotor blade ballistic damage

Damage tolerant design of the YUH-64 main rotor blade

Composite rotor hub, L, II — fatigue and load tests for CH-54B helicopter design

Survey of the application of reinforced composites in European helicopters

Development of a multibladed spar composite main rotor blade

Boeing Vertol bearingless main rotor structural design approach using advanced composites


The Lynx hingeless rotor system and flight characteristics — military helicopter

Trends in helicopter rotor head design

Composite materials in helicopters

A new approach to helicopter rotor blade research instrumentation

Analytic investigation of advancing blade drag reduction by tip modifications [AHS 78-01]  p0118 A79-18127

What are the lift and propulsive force limits at high speed for the conventional rotor [AHS 78-02]  p0118 A79-18128

Full-scale wind tunnel tests of a modern helicopter main rotor — Investigation of tip Mach number effects and comparisons of four tip shapes [AHS 78-03]  p0119 A79-18129

Full-scale wind tunnel tests of a modern helicopter main rotor — Correlation with model rotor test data and with theory [AHS 78-038]  p0119 A79-18130
SUBJECT INDEX

Rotor airfoil optimization - An understanding of the physical limits
[ABS 78-04] p0119 A79-19131
Rotor-airfoil flight investigation - Preliminary results
[ABS 78-05] p0119 A79-19132
Design and development tests of a four-bladed light helicopter rotor system
[ABS 78-07] p0119 A79-19134
A comparison of predicted and experimental rotor loads to evaluate flap-lag coupling with blade pitch
[ABS 78-18] p0121 A79-19145
Examination of the air resonance stability characteristics of a bearingless main rotor
[ABS 78-22] p0121 A79-19148
Antiresonant rotor isolation for vibration reduction - in helicopters
[ABS 78-24] p0121 A79-19150
Lag damping in autorotation by a perturbation method - for rigid rotor blades
[ABS 78-25] p0121 A79-19151
Inertia welding of YAH-64 main rotor drive shaft
[ABS 78-32] p0122 A79-19158
Filament wound main rotor blade - The Army's new production blade for the NH-1
[ABS 78-36] p0123 A79-19162
The 214 fiberglass blade - Design for inspectability - for helicopters
[ABS 78-37] p0123 A79-19163
The aerodynamically conformable rotor concept
[ABS 78-59] p0125 A79-18180
Wind-tunnel test results of a full-scale multicyclic controllable twist rotor
[ABS 78-60] p0125 A79-18181
Experimental effects of tip shape on rotor control
[ABS 78-61] p0125 A79-18182
Onset of leading edge separation effects under dynamic conditions and low Mach number
[ABS 78-62] p0126 A79-19184
The prediction of supercritical pressure distributions on blade tips of arbitrary shape over a range of advancing blade azimuth angles - for helicopter rotors
[ABS 78-63] p0128 A79-19639
Application of the local momentum theory to the aerodynamic characteristics of tandem rotor in yawed flight
[ABS 78-64] p0128 A79-19640
Green's function method for compressible unsteady potential aerodynamic analysis of rotor-fuselage interaction
[ABS 78-65] p0129 A79-19645
2D simulation of unsteady phenomena on a rotor - helicopter design
[ABS 78-66] p0129 A79-19646
A new approach to rotor blade stall analysis
[ABS 78-67] p0129 A79-19647
Unsteady aerodynamics of a circulation controlled airfoil design and wind tunnel testing of 1.5 diameter model rotors
[ABS 78-68] p0129 A79-19648
Improvements in rotor performance by rotor tip blowing
[ABS 78-69] p0129 A79-19649
Hot-wire measurements of stall and separation on helicopter rotor blades
[ABS 78-70] p0130 A79-19650
Rotor blade lag plane frequency optimization using visco-elastic damping - for helicopters
[ABS 78-71] p0130 A79-19651
Effect of structural coupling parameters on the flap-lag forced response of a rotor blade in forward flight using floquet theory
[ABS 78-72] p0131 A79-19658
Application of the finite element method to rotary-wing aeroelasticity - in helicopter hovering flight
[ABS 78-73] p0131 A79-19659
Analysis of free torsional rotor blade oscillations under special consideration of anysemic mesh-plate support
[ABS 78-74] p0131 A79-19660
Free-feathering rotor - helicopter applications
[ABS 78-75] p0131 A79-19661

ROTOR WINGS CONTD

Gust response and its alleviation for a hingeless helicopter rotor in cruising flight
[ABS 78-04] p0131 A79-18662
Hybrid heater/paste and heater/flexible coating schemes for de-icing helicopter rotor blades
[ABS 78-05] p0134 A79-18685
Helicopter tail rotor noise generated by aerodynamic interactions
[ABS 78-18] p0135 A79-18689
Fluctuating surface pressure characteristics on a helicopter fuselage under hover and forward flight conditions
[ABS 78-22] p0135 A79-18691
Monitoring of fatigue loading on rotor system and related components
[ABS 78-24] p0136 A79-18696
Flight research capabilities of the NASA/Army Rotor Systems Research Aircraft
[ABS 78-25] p0137 A79-18703
The CB-46 rotor blade transition from metal to composite materials
[ABS 78-26] p0148 A79-19723
The application of winglets to rotors
[ABS 78-27] p0154 A79-20109
Helicopter aerodynamics
[ABS 78-28] p0183 A79-20482
An advanced composite helicopter main rotor hub
[ABS 78-29] p0188 A79-20876
A calculation of rotor impedance for hovering articulated-rotor helicopters
[ABS 78-30] p0195 A79-21521
Theoretical modeling of high-speed helicopter impulsive noise
[ABS 78-31] p0197 A79-22474
Near-field analysis of helicopter rotating blades nodalization interference
[ABS 78-32] p0248 A79-25131
Helicopter rotor radius optimization
[ABS 78-33] p0254 A79-25865
Lifting surface theory for skewed and swept subsonic wings
[ABS 78-34] p0254 A79-25869
An investigation of model helicopter rotor blade slap at low tip speeds
[ABS 78-35] p0272 A79-26938
Fracture mechanics and fail-safe design for helicopter rotor structures
[ABS 78-36] p0273 A79-26986
Design and development of an helicopter rotor hub and elastomeric bearing
[ABS 78-37] p0283 A79-26989
An overview of technical problems in helicopter rotor loads prediction methods
[ABS 78-38] p0323 A79-29041
Study of some characteristics of helicopter rotor operation on the basis of a numerical experiment
[ABS 78-39] p0362 A79-30690
Fatigue data on a variety of non-woven glass composites for helicopter rotor blades
[ABS 78-40] p0343 A79-31029
Development of linear and non-linear hub springs for two-bladed rotors
[ABS 78-41] p0344 A79-31171
Advanced technology applied to the UH-60A and S-76 helicopters
[ABS 78-42] p0344 A79-31172
Review of problems of unsteady aerodynamics of helicopters
[ABS 78-43] p0389 A79-32293
Retreating blade and dynamic stall - for helicopter rotors
[ABS 78-44] p0389 A79-32294
Experimental studies of unsteady aerodynamics on wind tunnel models of helicopter rotors
[ABS 78-45] p0389 A79-32295
Erosion resistant clad rotor blades - Boride coatings do the job
[ABS 78-46] p0400 A79-33590
Unsteady pressure measurements on rotor blade tips with incidence
[ABS 78-47] p0406 A79-34534
The derivation of a thickness noise formula for the far-field by Isom - applied to helicopter rotors
[ABS 78-48] p0410 A79-35449
Rotor blade stability in turbulent flows
[ABS 78-49] p0462 A79-38118
 Autorotating flat-plate wings - The effect of the moment of inertias, geometry and Reynolds number
[ABS 78-50] A79-38118
| Principles of helicopter performance | p0303 79-16970 |
| Nonlinear equations of equilibrium for elastic helicopter or wind turbine blades undergoing moderate deformation | [NASA-CP-150478] p0309 79-19414 |
| Observations on the dynamic stall characteristics of advanced helicopter rotor airfoils | p0352 79-20006 |
| Interactional aerodynamics of the single rotor helicopter configuration. Volume 6C: One-third octave band spectrograms of wake single film data, fairings and surface devices --- utility aircraft | p0360 79-20074 |
| Interactional aerodynamics of the single rotor helicopter configuration. Volume 7C: Frequency analyses of wake single film data, wide hucbacs --- utility aircraft | p0360 79-20075 |
| Interactional aerodynamics of the single rotor helicopter configuration. Volume 7-D: Frequency analyses of wake single film data, open hubcaps --- utility aircraft | p0360 79-20077 |
| Interactional aerodynamics of the single rotor helicopter configuration. Volume 7-E: Frequency analyses of wake single film data, air ejectors | p0361 79-20079 |
| Interactional aerodynamics of the single rotor helicopter configuration. Volume 7-F: Frequency analyses of wake single film data, air ejectors with hubcaps --- utility aircraft | p0361 79-20080 |
| Interactional aerodynamics of the single rotor helicopter configuration. Volume 8-A: Frequency analyses of wake single film data, build up to baseline | p0361 79-20082 |
| Generalization of analytical tools for helicopter-rotor airfoils | p0378 79-21011 |
| Interactional aerodynamics of the single rotor helicopter configuration. Volume 88: One-third octave band spectrograms of wake single film data, basic configuration wake explorations | p0378 79-21012 |
| Interactional aerodynamics of the single rotor helicopter configuration. Volume 89: One-third octave band spectrograms of wake single film data, build up to baseline | p0379 79-21013 |
| Interactional aerodynamics of the single rotor helicopter configuration. Volume 8-A: One-third octave band spectrograms of wake single film data, open hubcaps | p0379 79-21014 |
| Interactional aerodynamics of the single rotor helicopter configuration. Volume 8-B: Frequency analyses of wake single film data, basic configuration wake explorations | p0379 79-21015 |
| Interactional aerodynamics of the single rotor helicopter configuration. Volume 8-C: One-third octave band spectrograms of wake single film data, air ejectors with hubcaps, wings | p0379 79-21016 |
| Interactional aerodynamics of the single rotor helicopter configuration. Volume 8-D: Harmonic analyses of hub wake | p0379 79-21017 |
| Interactional aerodynamics of the single rotor helicopter configuration. Volume 8-E: One-third octave band spectrograms of wake single film data, air ejectors | p0379 79-21018 |
| Experimental investigation of three helicopter rotor airfoils designed analytically in the Langley 6 by 19 inch and 6 by 28 inch transonic wind tunnels | p0016 79-22037 |
| Rotary-wing aerodynamics. Volume 1: Basic theories of rotor aerodynamics with application to helicopters --- momentum, vortexes, and potential theory | p0016 79-22039 |
| Or-56 composite main rotor blades preliminary design investigation | p0021 79-22085 |
| Studies of the dynamic stall or airfoil profiles for helicopter rotors | p0047 79-22541 |
| System design requirements for advanced rotary-wing agricultural aircraft | p0081 79-26046 |
| Helicopter icing Symposium | p0084 79-26048 |
| Icing tests of a GR-18 helicopter with an electrothermal ice protection system under simulated and natural icing conditions | p0084 79-26050 |
| Establishment of manufacturing method and technology for the fabrication of helicopter main rotor blade spars by continuous seamless diffusion bonding titanium sheet material | p0085 79-28170 |
| Experimental and theoretical studies on model helicopter rotor noise | p0059 79-28584 |
| Parametric studies of model helicopter blade slap and rotational noise | p0060 79-29962 |
| Helicopter obstacle strike tolerance concepts analysis | p0062 79-30179 |
| Evaluation of pylon focusing for reduced helicopter vibration | p0065 79-30196 |
| A helicopter high definition rotor blade radar system | p0065 79-30207 |
| Study of design constraints on helicopter noise | p0067 79-32054 |
| Preliminary airworthiness evaluation CR-47C with fiberglass rotor blades with TTS-1-712 engines | p0070 79-32199 |
| Some nonlinear problems in transonic helicopter acoustics | p0071 79-32974 |
| Flight test evaluation of the high inertia rotor system | p0072 79-33195 |
| Limited airworthiness and flight characteristics evaluation model 214A helicopter with fiberglass main rotor blades | p0075 79-33197 |
| Analysis of aeroelastic torsional and bending eigenvalues for a helicopter main rotor blade system | p0076 79-34084 |
| Landing performance evaluation of the I22A composite main rotor blade | p0077 79-34179 |
| Dynamic performance and stability studies for the I22A composite main rotor blade | p0078 79-34313 |
| A comparison of dynamic characteristics of a composite main rotor blade with a titanium blade | p0079 79-34398 |
| Analysis of the effects of material properties on the dynamic characteristics of a composite main rotor blade | p0080 79-34532 |
ROTATING CYLINDERS

- ROTATING TURBINES
- ROTATING VEHICLES

<table>
<thead>
<tr>
<th>SUBJECT INDEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>performance of a compressor cascade</td>
</tr>
<tr>
<td>[AIAA 79-7031] p0330 A79-29403</td>
</tr>
<tr>
<td>Retreating blade and dynamic stall -- for helicopter rotors</td>
</tr>
<tr>
<td>p0384 A79-32294</td>
</tr>
<tr>
<td>Distortions, rotating stall and mechanical solicitations</td>
</tr>
<tr>
<td>p0555 A79-27177</td>
</tr>
<tr>
<td>Axial compressor stall -- effects on aircraft engines</td>
</tr>
<tr>
<td>p0557 A79-27435</td>
</tr>
<tr>
<td>ROTATING VEHICLES</td>
</tr>
<tr>
<td>U ROTATING ROBOTS</td>
</tr>
<tr>
<td>U FLUID FLOW</td>
</tr>
<tr>
<td>U VORTICES</td>
</tr>
<tr>
<td>ROTOR AERODYNAMICS</td>
</tr>
<tr>
<td>An experimental study of three-dimensional turbulent boundary layer and turbulence characteristics inside a turbomachinery rotor passage</td>
</tr>
<tr>
<td>[ASME PAPER 78-GT-95] p0016 A79-11239</td>
</tr>
<tr>
<td>Helicopter transport efficiency payoffs from advanced technology</td>
</tr>
<tr>
<td>[SAT PAPER 80536] p0001 A79-10266</td>
</tr>
<tr>
<td>Rotating Stall Control System Design and Development of a Rotating Water Table for Flow Studies in Turbomachine Stages</td>
</tr>
<tr>
<td>[ASME PAPER 78-WA/DS-16] p0318 A79-19762</td>
</tr>
<tr>
<td>Radiation field of a conformal phased array of rotational-polarization elements situated on a surface of revolution</td>
</tr>
<tr>
<td>p0368 A79-32737</td>
</tr>
</tbody>
</table>

Acoustic driving of rotor |

ROTATING CYLINDERS

- Basic problem of controlling non-Newtonian fluid flow in roll forming of aircraft plastics |
| p0069 A79-18585 |
| Pressure measurements on a spinning wind tunnel model by means of telemetry |
| p0113 A79-17593 |

ROTATING DISKS

- Significance of disk flexing in viscous-damped jet engine dynamics |
| [ASME PAPER 78-GT-107] p0001 A79-10263 |
- Jet cooling at the rim of a rotating disk |
| [ASME PAPER 78-GT-25] p0196 A79-22331 |
- The effects of coolant air inlet conditions on the flow regime between a turbine disk and its casing |
| [ASME PAPER 79-GT-35] p0340 A79-30520 |
- Gas turbine disk sealing system design |
| p0048 A79-11072 |

Small turbines: Experiences with disk ruptures |
| p0533 A79-27163 |

ROTATING FLUIDS

- Small pulsation analysis of nonuniform rotating disturbances in a waveless diffuser |
| [ASME PAPER 78-GT-156] p0002 A79-10270 |
- Quasi-natural numerical methods for the computation of inviscid potential or rotational transonic flows |
| p0259 A79-26487 |

Small disturbance swirl flow in turbomachinery blades |
| p0338 A79-29705 |

ROTATING GENERATORS

- 2D simulation of unsteady phenomena on a rotor --- helicopter design |
| p0129 A79-18644 |
| Optimisation of jet distribution along the blade for VTOL jet propelled rotor |
| p0129 A79-18640 |
| Rotor prediction with different downwash models |
| p0129 A79-18641 |
| An investigation of the influence of fuselage flow on rotor loads, and the effects of vehicle configuration |
| p0129 A79-18642 |

Green's function method for compressible unsteady potential aerodynamic analysis of rotor-fuselage interaction |
| p0129 A79-18645 |

2D simulation of unsteady phenomena on a rotor --- helicopter design |
| p0129 A79-18644 |

A new approach to rotor blade stall analysis |
| p0129 A79-18647 |

Unsteady aerodynamics of a circulation controlled airfoil |
| p0129 A79-18648 |
| Design and wind tunnel testing of 1.5 m diameter model rotors |
| p0129 A79-18649 |
| Improvements in rotor performance by rotor tip blowing |
| p0130 A79-18650 |

Hot-wire measurements of stall and separation on helicopter rotor blades |
| p0130 A79-18651 |

The RSA Active Isolation/Rotation Balance System --- Rotor Systems Research Aircraft |
| p0130 A79-18654 |

Free-plotting rotor --- helicopter applications |
| p0131 A79-18661 |

Composite blade for a 5 m diameter tilt rotor |
| p0133 A79-18676 |

Status report on advanced development program utilizing circulation control rotor technology |
| p0133 A79-18677 |
Stoppable and stowable jet-flap rotor concept

Viscous flow analysis in mixed flow rotors -- in turbomachinery

Helicopter aerodynamics

A calculation of rotor impedance for hovering articulated-rotor helicopters

Parameter identification applied to analytic hingeless rotor modeling

Calculated hovering helicopter flight dynamics with a circulation-controlled rotor

Effects of periodic changes in free stream velocity on flows over airfoils near static stall

Drag on an oscillating airfoil in a free stream --- helicopter rotor blade application

Wake induced time-variant aerodynamics including rotor-stator axial spacing effects

A fundamental criterion for the application of casing treatment --- in axial flow compressors

Characteristics of the wake of a lightly loaded compressor or fan rotor

A comparison of linear acoustic theory with experimental noise data for a small-scale hovering rotor

Unsteady stator response to upstream rotor wakes

Wake-induced time-variant aerodynamics including rotor-stator axial spacing effects

A generalized 'capacity-pressure-rotational velocity' equation for axial turbines

Transonic boundary layer on compressor or fan blades as calculated and measured in wind tunnel

A wind-tunnel investigation into the effect of errors in blade setting on the stalling performance of a compressor cascade

Theoretical and experimental investigations on aerodynamically highly-loaded compressor bladings with boundary layer control

Study of the flow field behind a transonic axial compressor rotor using laser-anemometry and unsteady pressure measurements

Small disturbance swirl flow in turbomachinery bladings

Acoustics and performance of high-speed, unequally spaced fan rotors

Influence of freely rotating inlet guide vanes on the return flow and its stable operating range of an axial flow fan

Study of some characteristics of helicopter rotor operation on the basis of a numerical experiment

A review of tail rotor design and performance

Review of problems of unsteady aerodynamics of helicopters

Retreating blade and dynamic stall --- for helicopter rotors

Experimental studies of unsteady aerodynamics on wind tunnel models of helicopter rotors

An off-design correlation of part-span damped lossess through transonic axial fan rotors

Aerodynamic and aeroelastic characteristics of oscillating loaded cascades at low Mach number

Optimization for rotor blades of tandem design for axial flow compressors

The prediction of steady, circumferential pressure and temperature disturbances in multiple axial flow compressors

Three-variant aerodynamics of oscillating airfoil surfaces in a supersonic flowfield

Unsteady pressure measurements on rotor blade tips with incidence

The derivation of a thickness noise formula for the far-field by Isoe --- applied to helicopter rotors

Experimental analysis methods for unsteady flows in turbomachines

Experimental analysis methods for unsteady flows in turbomachines

V/STOL performance comparisons with variable pitch and variable inlet guide vane fans - A report on experimental data

Unsteady aerodynamic pressure measurements on rotating lifting systems

Nonlinear mathematical simulation of unsteady flow past a helicopter rotor

Rotor blade stability in turbulent flows. II

Finite-element approach to compressor blade-to-blade cascade analysis

Computation of subsonic and transonic flow about lifting rotor blades

Aerodynamic excitation forces of blade vibrations in axial turbomachinery as a result of interference from nearby cascades

Effect of tip shape on blade loading characteristics for a two-bladed rotor in hover

An integrated analytical and experimental investigation of helicopter hub drag

Ten years of Aerospatiale experience with the fenestron and conventional tail rotor

Interactive aerodynamics - A new challenge to helicopter technology

FY-15 flight test results compared with design goals

Laser velocimeter applied to the study of circular distortion effects in a low speed compressor

Structural design and analysis of prop-fan blades

A study of some characteristics of the operation of a lifting propeller by numerical experiment

In the Weis-Pogh principle exploitable in turbomachinery - aerodynamic lift generation without vortex shedding

A lifting surface performance analysis with circulation coupled wake for advanced configuration hovering rotors

The status of rotor noise technology: One man's opinion

Interactional aerodynamics of the single rotor helicopter configuration. Volume 2-A: Harmonic analyses of airframe surface pressure data, runs 7-14, forward section

Interactional aerodynamics of the single rotor helicopter configuration. Volume 2-C: Harmonic analyses of airframe surface pressure data, runs 9-10, aft section
Interactional aerodynamics of the single rotor helicopter configuration. Volume 7-E: Frequency analyses of wake single film data, fairings and surface devices — utility aircraft

Interactional aerodynamics of the single rotor helicopter configuration. Volume 7-C: Frequency analyses of airframe surface pressure data, runs 15-22, aft section

Interactional aerodynamics of the single rotor helicopter configuration. Volume 7-M: Frequency analyses of model rotor blade single film data, buildup to baseline

The role of rotor impedance in the vibration analysis of rotorcraft, part 4

Experimental investigation of three helicopter rotor airfoils designed analytically — in the Langley 6 by 10 inch and 6 by 10 inch transonic wind tunnels

Interactional aerodynamics of the single rotor helicopter configuration. Volume 7-A: Experimental and theoretical studies on model rotor blade transition from metal to composite materials

Some nonlinear problems in transonic helicopter acoustics

The promise of multicyclic control — to control fatiguing blade loads and rotor vibration

The effect of rotor aerodynamic velocity ratio on response to inlet radial and circumferential distortion

The performance of two-stage fan with a first-stage rotor redesigned to account for the presence of a part-span damper

The promise of multicyclic control — to control fatigue blade loads and rotor vibration

Some nonlinear problems in transonic helicopter acoustics

A viscous flow analysis for the tip vortex

The role of rotor impedance in the vibration analysis of rotorcraft, part 4

The promise of multicyclic control — to control fatigue blade loads and rotor vibration

Some nonlinear problems in transonic helicopter acoustics

A new approach to helicopter rotor blade research instrumentation

The aeroelastically controllable rotor concept

Experimental effects of tip shape on rotor control loads

The CH-46 rotor blade transition from metal to composite material

Experimental investigation of three helicopter rotor airfoils designed analytically — in the Langley 6 by 10 inch and 6 by 10 inch transonic wind tunnels

The promise of multicyclic control — to control fatigue blade loads and rotor vibration

The performance of two-stage fan with a first-stage rotor redesigned to account for the presence of a part-span damper

The role of rotor impedance in the vibration analysis of rotorcraft, part 4

The promise of multicyclic control — to control fatigue blade loads and rotor vibration

Some nonlinear problems in transonic helicopter acoustics

A new approach to helicopter rotor blade research instrumentation

The aeroelastically controllable rotor concept

Experimental effects of tip shape on rotor control loads

The CH-46 rotor blade transition from metal to composite material

Experimental investigation of three helicopter rotor airfoils designed analytically — in the Langley 6 by 10 inch and 6 by 10 inch transonic wind tunnels

Experimental investigation of three helicopter rotor airfoils designed analytically — in the Langley 6 by 10 inch and 6 by 10 inch transonic wind tunnels

Experimental investigation of three helicopter rotor airfoils designed analytically — in the Langley 6 by 10 inch and 6 by 10 inch transonic wind tunnels

Experimental investigation of three helicopter rotor airfoils designed analytically — in the Langley 6 by 10 inch and 6 by 10 inch transonic wind tunnels

Experimental investigation of three helicopter rotor airfoils designed analytically — in the Langley 6 by 10 inch and 6 by 10 inch transonic wind tunnels
Designing a ring for protecting the gas-turbine engine casing from fragments of the rotor

Characteristics of aeroelastic instabilities in turbomachinery - NASA full scale engine test results

An experimental investigation of film cooling on a turbine rotor blade

Effect of rotor tip clearance and configuration on overall performance of a 12.77-centimeter tip diameter axial-flow turbine

Experimental evaluation of the effect of inlet distortion on compressor blade vibrations

Development of linear and non-linear hub springs for two-bladed rotors

Advanced technology applied to the TH-60A and S-76 helicopters

A calculation procedure for three-dimensional, time-dependent, inviscid, compressible flow through turbomachinery blades of any geometry

On the balancing convergence of flexible rotors, with special reference to asymmetric rotors

Forced vibrations of a single stage axial compressor rotor

Aeroservoelastic and aeroelastic characteristics of oscillating loaded cascades at low Mach number

Optimization for rotor blades of tandem design for axial flow compressors

Three-dimensional lifting-surface theory for an annular blade row

Preliminary studies using photon correlation velocimetry in turbomachinery and combustion systems

Causes of high pressure compressor deterioration in service

Subsonic flow past an oscillating cascade with finite mean flow deflection

Design and development of a hybrid composite rotor blade for the circulation control system of the AH-64

An approach for estimating vibration characteristics of nonuniform rotor blades

Effect of rotor tip clearance and configuration on overall performance of a 12.77-centimeter tip diameter axial-flow turbine

Effect of structural parameters on the flap-lag forced response of a rotor blade in forward flight

A new blade element method for calculating the performance of high and intermediate solidity axial flow fans

Research on centrifugal effects on turbine rotor blade film cooling

Effect of casing treatment on performance of a two-stage high-pressure-ratio fan

Strain gage system evaluation program

Turbulence-lag-torsion flutter analysis of a constant life rotor

The fluid dynamic design of advanced centrifugal compressors

A new method for calculating the performance of high and intermediate solidity axial flow fans

A method for estimating vibration characteristics of nonuniform rotor blades

Effect of rotor tip clearance and configuration on overall performance of a 12.77-centimeter tip diameter axial-flow turbine

Effect of structural parameters on the flap-lag forced response of a rotor blade in forward flight

A new blade element method for calculating the performance of high and intermediate solidity axial flow fans

A method for estimating vibration characteristics of nonuniform rotor blades

Effect of rotor tip clearance and configuration on overall performance of a 12.77-centimeter tip diameter axial-flow turbine

A new method for calculating the performance of high and intermediate solidity axial flow fans

A method for estimating vibration characteristics of nonuniform rotor blades

Effect of rotor tip clearance and configuration on overall performance of a 12.77-centimeter tip diameter axial-flow turbine

A new method for calculating the performance of high and intermediate solidity axial flow fans

A method for estimating vibration characteristics of nonuniform rotor blades
SEATS

WE EJECTION SEATS

U.S. Navy developments in crashworthy seating    p0036  A79-33628

Seat/Occupant crash dynamic analysis verification test program    p0045  A79-36726

NASA general aviation crashworthiness seat development    p0045  A79-36725

Aircraft passenger seat material development for airline fire safety    p0050  A79-43271

Crashworthy arced crewseat for the 98-601 Black Hawk [FARS 79-10]    p0067  A79-49062

NASA/FAA general aviation crash dynamics program - An update    p0089  A79-52694

Development of fire-resistant, low smoke generating, thermally stable end items for aircraft and spacecraft    p0088  N79-12043

Fire resistant aircraft seat materials    p0088  N79-12044

Fabric for fire resistant passenger seats in aircraft    p0088  N79-12045

Study to develop improved fire resistant aircraft passenger seat materials, phase 2 [NASA-CR-152046]    p0089  N79-12046

Crashworthy helicopter seats and occupant restraint systems    p0132  N79-19658

Some improvements to the OH helicopter cockpit p0132  N79-19659

Development of crashworthy passenger seats for general-aviation aircraft    p0066  N79-31164

Seat test program    p0066  N79-31168

Fire resistant aircraft seat program    p0067  N79-31176

Seat cushion to provide realistic acceleration cues to aircraft simulator pilot [NASA-CR-12749-2]    p0073  N79-31228


SECONDARY FLOW

An axial compressor end-wall boundary layer calculation method [ASME PAPER 78-GT-81]    p0007  A79-10767

Determination of ejector nozzle starting parameters    p0007  A79-10767

Boundary layer induced secondary flows due to wing-body interference [AIAA PAPER 79-0140]    p0142  A79-19557


Secondary-flow-related vortex cavitation    p0378  N79-21003

SECONDARY RADAR


Operational evaluation of an Air Traffic Control Radar Beacon System open array antenna    p0278  A79-27139

Reflection elimination in secondary surveillance radar --- for air traffic control    p0574  A79-46241

SEDIMENTATION

U LONG TERM EFFECTS

SEDIMENTATION

Continuation study of alternate fuels nitrogen chemistry [AD-1049031]    p0057  N79-29359


SHEARS

U HOMEING DEVICES

SHEEPAGE

Analysis of water ingestion effects in axial flow compressors [AD-4059025]    p0103  N79-13052
SSWEPERUTION

The flying hot wire and related instrumentation
[NASA-CS-3061]
[ASPPE-A-1797]
Analytical studies of separated vortex flow on
highly swept wings
[NASA-CS-3032]
[AD-A059516]
A study of turbulent flows about oscillating
airfoils
[AD-A059516]
Effect of flow separation vortices on aircraft
unsteady aerodynamics
[AD-A059516]
A new boundary-layer interaction techniques for
separated flows
[NASA-78-7690]
[AD-A059516]
Contribution to the development of theoretical
calculations for the design and optimization of
lifting bodies. (Solution of three-dimensional
basic thermo fluid dynamics equations with
strong interacting attached and separated flow
flows)
[AD-A059516]
Analysis of base-flow problems during powered
supersonic flight
[AD-A059516]
Visualization of the separation and subsequent
transition near the leading edge of airfoils
[AD-A059516]
A new flow model for highly separated airfoil
flows at low speeds
[AD-A059516]
Structure of the turbulent separated flow around a
stalled airfoil
[NASA-CS-19263]
[AD-A059516]
Scaling effects on shock-induced separation
[AD-A059516]
Correlation of data related to shock-induced
trailing-edge separation and extrapolation to
flight Reynolds number
[NASA-CS-1978]
[AD-A059516]
Separators
[AD-A059516]
Power filters
[AD-A059516]
Sequential control
[AD-A059516]
An all-time sequential filtering algorithm for GFS
low-dynamics navigation systems
[AD-A059516]
Series (Mathematics)
[AD-A059516]
Series (Power)
[AD-A059516]
Series (Elevator)
[AD-A059516]
Boundary layer control on wings using sound and
leading edge serrations
[AD-A059516]
Service life
[AD-A059516]
Military engine usage monitoring developments in
the United Kingdom
[AD-A059516]
Development of a compact gas turbine combuster to
give extended life and acceptable exhaust
emission levels
[AD-A059516]
Determination of inspection intervals for aircraft
structures with allowance for the two-stage
nature of fatigue damage
[AD-A059516]
Operation of long-service-life gas-turbine engines
as a function of the technical state
[AD-A059516]
Northrop/United States Air Force application of
failure predictions to an operational aircraft
--- for Y-52/F
[AD-A059516]
Engine life usage experience of YF17/TF101 flight
and ground testing
[AD-A059516]
Crack free and cracked life of the pressurized
cabin of the A 300 B - Calculation, tests and
design measurements to improve damage tolerance
[AD-A059516]
Analytical life estimation for helicopter components
[DELS PAPER 78-195]
[AD-A059516]
Estimation of the useful life of the long chord of
the gilder of the FC-7 'Turbo-Trainer'
[DGLA PAPER 78-198]
[AD-A059516]
Causes for the deterioration of splined
connections in aircraft engines during service
[AD-A059516]
Recent General Electric engine development testing
for improved service life

A-386
SHORT WAVE RADIATION

[AD-A063848] p026 N79-22215
STOL technology, volume 1
[VKI-Lectures-SERIES-60-VOL-1] p0429 N79-22996
Airworthiness and certification aspects of civil aircraft for STOL
p0429 N79-22997
Wind tunnel corrections for STOL models
p0429 N79-22998
Review of large low speed wind tunnel requirements for STOL testing
p026 N79-22999
Review lecture on transport aircraft concepts, utilisation and prospects
p0429 N79-23000
Takeoff and landing ground rules
p0429 N79-23001
STOL Technology, volume 2
Flight dynamics problems with STOL operation
p0429 N79-23003
The aerodynamics and performance characteristics of direct lift schemes
p0429 N79-23004
Engine integration and noise considerations for STOL aircraft
p0830 N79-23005
Aerodynamics and performance characteristics of wing lift augmentation schemes
p0830 N79-23006
Special Ground testing facilities and testing techniques for STOL aircraft
p0430 N79-23007
Assessment at full scale of nozzle/wing geometry effects on OTW aero-acoustic characteristics
p0540 N79-25841
Quiet takeoff lift for commercial airlines
Quiet propulsive lift for commercial airliners
Wing aerodynamic loading caused by jet-induced lift associated with STOL-OTW configurations
An in-flight simulator investigation of roll and yaw control power requirements for STOL approach and landing: Development of capability and preliminary results
Flight experience with advanced controls and displays during piloted curved decelerating approaches in a powered-lift STOL aircraft
p0660 N79-30243
Effect of transport/transponder loads spectra on crack growth
[AD-A069267] p0668 N79-31197
SHORT WAVE RADIATION
U MICROWAVES
U MILLIMETER WAVES
SHORT WAVE RADIO TRANSMISSION
Estimate of the noise immunity of a double-PSK modem in communications channels with fading --- for short wave aircraft communication
p0346 N79-31651
The penetration of electromagnetic fields into aircraft from externally mounted RP antennas
p0699 N79-52691
SHROUDED BODIES
U SHROUDS
SHROUDED PROPELLERS
Aerodynamic design and analysis of propellers for remotely piloted air vehicles. Volume 2: Ducted propellers
[AD-A056948] p0037 N79-10062
Disassemble inspection and overhaul of X-22A gear reduction and propeller assemblies
[AD-A059755] p0165 N9-14104
SHROUDED TURBINES
Operational experience with linked-blade high-output gas-turbine
p0266 N79-26830
Damping capacity of paired shrouded turbine blades in relation to shroud contact conditions
p0398 N79-32827
Composite seal for turboachinery --- backings for turbine engine shrouds
[NASA-CASE-LEW-12131-1] p0298 N79-18310
SHROUDED PROPELLERS
Composite seal for turboachinery --- backings for turbine engine shrouds
[NASA-CASE-LEW-12131-1] p0298 N79-18310
SHROUDS
U DYNASES
U CIRCUITS
SHUTTLE EMBLEMS
U SPACE SHUTTLE EMBLEMS
SIC (COEFFICIENTS)
U STRUCTURAL INFLUENCE COEFFICIENTS
SIDE-LOOKING RADAR
U T R A D A R  T R A Q T R Y
An analysis of SAPPHIRE image parameters as a function of processing parameters --- for synthetic aperture radar data processing
p0136 A79-48666
SIDEBANDS
Capture-effect and sideband-reference glide-slope performance in the presence of deep snow 1977-1978
p057 N79-16833
SIDELOOK REDUCTION
Grating lobe control in limited scan arrays
p0179 N79-18711
An IFP antenna with superior sidelobe and backlobe suppression characteristics
p0247 N79-24718
SIDELOBES
Radiation pattern sidelobes and null filling produced by aircraft vibration
[AD-A070472] p0710 N79-32422
SIGNAGE INDICATION
U VISCERAL PERCEPTION
SIGNAL DETECTION
Integrated communication, navigation, and identification in the 1980's and beyond using low duty distributed time-frequency-phase code technology --- for aircraft, missiles, and other mobile platforms
p007 N79-13266
Tactical electronic reconnaissance sensor --- radar emission detection
p0622 A79-48717
SIGNAL DETECTORS
Applicability of fiber optics to aircraft fire detection systems
[AD-A063974] p0428 N79-22882
SIGNAL DISCRIMINATORS
U SIGNAL DETECTORS
SIGNAL DISTORTION
Preprocessing for advanced image matching techniques
p0614 A79-48602
SIGNAL ENCODING
Precision DME at L-band using phase-coded transmission
p0055 A79-13245
High speed digital transmission, the key for a simple, modular airborne equipment
p0112 A79-17098
SIGNAL ENCODING RATE
Estimate of the noise immunity of a double-PSK modem in communications channels with fading --- for short wave aircraft communication
p0346 A79-31691
SIGNAL GENERATORS
U FUNCTION GENERATORS
SIGNAL MEASUREMENT
Aircraft antenna pattern measurements using near field techniques
p0247 A79-24721
The measurement of RF-pulse phase and amplitude in the landing system DLS
p0608 A79-34608
SIGNAL PROCESSING
Multi-filter MFI system
p0003 A79-10320
Development of a microwave multilateration system for VTOOL landing guidance
p0055 A79-13273
JIDS modular design to use SAW devices --- Joint Tactical Information Distribution System for aircraft communications
p0064 A79-14247
RPA - A recent real life case history --- U Reliability Planning and Management test program for airborne surveillance radar
p0073 A79-15391
Recording methods for steady state and transient signals --- aircraft engine tests

A-390
The coming of age of digital electronics in commercial transports --- emphasizing signal processing technology and Boeing 767 avionics

Multimode radar processor --- for combat aircraft

Linearization in the recursive estimation of navigation parameters

Reconstructed flight control sensor signals via Luenberger observers

Reading and speed errors for x, y tracking filters

The FA-6B Weapon Systems trainer

Correlation-extremal direction finding of extended and point sources of electromagnetic oscillations

Recent results in navigation systems utilizing signal aiding from Navstar satellites

Application oriented simulation as a tool for the planning of radio beacon systems --- for aircraft communications

Increasing effectiveness of piloting systems by modern methods of digital signal processing

Omega navigation system --- signal processing methods

External radio-navigation --- Russian book

Guidance law design for tactical weapons with strapdown seekers

Failure detection in signal processing and sensing in flight control systems

Microcomputer applications in strapdown heading and attitude reference system

Multisensor integration for defensive fire control surveillance

Quaternion matching in transfer alignment for SAR motion compensation

Radar signal processing development for application of VHIS

High speed radar processing using CMOS/SOS technology

Feasibility study of GPS-inertial navigation for helicopters and study of advanced GPS signal processing techniques, volume 3

Modernization of the low speed wind tunnel at Breugat de Velizy: Measuring system modernization --- minicomputer T I 58A

Information processing for target detection and identification

Transform domain processing for digital communication systems using surface acoustic wave devices

State of the art in digital signal processing with applications to multiple access systems

Estimate of the noise immunity of a double-FSK mode in communications channels with fading --- for short wave aircraft communications

Small signal compensation of magnetic fields resulting from aircraft maneuvers

Small signal compensation of magnetic fields resulting from aircraft maneuvers

Signal to noise ratios

Signal reflection

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios

Signal to noise ratios
SILICON-ON-SAPPHIRE TRANSISTORS

SILICON-ON-SAPPHIRE TRANSISTORS
SILICON-ON-SAPPHIRE TRANSISTORS

SILICONIZING

SILICONE RUBBER

SIMILITUDE LAW

SIMILITUDE LAW

SIMULATION

SIMULATION

SIMULATION

SIMULATION

SIMULATION

SIMULATION

SIMULATION

SIMULATION

SIMULATION

SIMULATION

SIMULATION

SIMULATION

SIMULATION

SINGULAR INTEGRAL EQUATIONS

SINGULARITY (MATHEMATICS)

SINGULAR POINTS

SINGULARITY (MATHEMATICS)

SINGULARITY THEOREM

SINUSOIDAL WAVES

SITTING POSITION

SITTING POSITION

SKIDDED"
SOLAR ELECTRIC PROPULSION

SOLAR CELLS

SOLAR ENERGY CONVERSION

SOLAR POWER SATELLITES

SOLAR PROPULSION

SOLID PROPELLANTS

SOLID ROCKETS

SOLID STATE DEVICES

SOLID STATE LASERS

SOLID STATE DEVICES

SOLDERING

SONAR

SOPHIA

SPACECRAFT

SPACECRAFT RECOVERY

SPACECRAFT RECOVERY
SPACE NAVIGATION
The global positioning system NAVSTAR
[p0150 A79-19853]

SPACE PERCEPTION
Methods for the validation of synthesized images in visual flight simulation --- space perception during landing approach
[p0574 A79-46466]

SPACE PLASMA / E INTERACTION EXPERIMENTS
[SPS91]

SPACE PROCESSING
Free oscillations of a large drop in space
[AA Paper 79-0225]
[p0203 A79-23571]

SPACE SHUTTLE ORBITERS
An overview of the Space Shuttle Orbiter
Communication and Tracking System
[p0150 A79-19853]

SPACE SHUTTLE ORBITERS
Prediction of in-depth gap heating ratios from wing glove model test data --- space shuttle orbiter
[p0178 A79-15084]

SPACE SHUTTLE ORBITERS
Turbulence simulation mechanization for Space Shuttle Orbiter dynamics and control studies
[NASA-CP-161046]
[p0356 A79-20068]

SPACE SHUTTLE ORBITERS
Effects of vertical tail flexibility on the aerodynamic characteristics of a 0.01-scale NASA Space Shuttle Orbiter at Mach numbers from 0.90 to 1.55
[Aero 4062377]
[p0369 A79-20175]

SPACE SHUTTLE ORBITERS
Development and demonstration of manufacturing processes for fabricating graphite/phenolic polyimide structural elements --- space shuttle aft body flap
[p0661 A79-30301]

SPACE SHUTTLE ORBITERS
Space shuttle afterbody aerodynamics/plume simulation data summary
[NASA-TP-1384]
[p0287 A79-17810]

SPACE SURVEILLANCE (SPACECRAFT)
Considerations on the airborne use of DME interrogators or SSR transponders for ground-derived landing and surveillance systems
[p0055 A79-13247]

SPACE SYSTEMS ENGINEERING
U.S. AEROSPACE ENGINEERING
SPACE TRANSPORTATION SYSTEM
SPACELAB SHUTTLES
SPACECRAFT ANTENNAS
A model for calculating the radiation field of microstrip antennas
[p0315 A79-28422]

SPACECRAFT CABINS
Non-flammable polyimide materials for aircraft and spacecraft applications
[TAF Paper 79-204]
[p0691 A79-53355]

SPACECRAFT CHARGING
Electrification of woven and film materials
[p0348 A79-32042]

SPACECRAFT COMMUNICATION
An overview of the Space Shuttle Orbiter
Communication and Tracking System
[p0150 A79-19853]

SPACECRAFT CONFIGURATIONS
Technology requirements and readiness for very large vehicles
[NASA-CP-80127]
[p0546 A79-27086]

SPACECRAFT Configurations
Current work in materials and methods-of-construction research --- composite and ceramic materials for aerospace systems
[p0332 A79-29591]

SPACECRAFT DESIGN
Introduction to the computer-aided design of flight vehicles --- Russian book on spacecraft design
[p0279 A79-27648]

SPACECRAFT ELECTRONIC EQUIPMENT
Aerospac applications of oscillators --- for location navigation, detection, telecommunications, and instrumentation
[ONERA, TP NO. 1979-48]
[p0535 A79-43621]

SPACECRAFT MODELS
Development of fire-resistant, low smoke generating, thermally stable end items for commercial aircraft and spacecraft
[p0089 A79-52556]

SPACECRAFT PROPULSION
NT SOLAR ELECTRIC PROPULSION
Laser-powered aircraft and rocket systems with laser energy relay units
[p0082 A79-16619]

SPACECRAFT RECOVERY
A new dimension in 'SAR' --- manned spacecraft search and rescue operations
[p0067 A79-10896]

SPACECRAFT STRUCTURES
Development of fire-resistant, low smoke generating, thermally stable end items for commercial aircraft and spacecraft using a basic polyimide resin
[p0666 A79-31171]

SPACECRAFT TRAJECTORIES
4-D helical approach of a transport aircraft in an ATC environment
[AA Paper 79-1776]
[p0572 A79-45404]

SPACECRAFT TRAJECTORIES
A new dimension in 'SAR' --- manned spacecraft search and rescue operations
[p0067 A79-10896]

SPACECRAFT TRAJECTORIES
A new dimension in 'SAR' --- manned spacecraft search and rescue operations
[p0067 A79-10896]

SPACECRAFT TRAJECTORIES
A new dimension in 'SAR' --- manned spacecraft search and rescue operations
[p0067 A79-10896]

SPACECRAFT TRAJECTORIES
A new dimension in 'SAR' --- manned spacecraft search and rescue operations
[p0067 A79-10896]

SPACECRAFT TRAJECTORIES
A new dimension in 'SAR' --- manned spacecraft search and rescue operations
[p0067 A79-10896]

SPACECRAFT TRAJECTORIES
A new dimension in 'SAR' --- manned spacecraft search and rescue operations
[p0067 A79-10896]
SPLINES

Rotary balance data for a typical single-engine
general aviation design for an angle-of-attack
range of 8 deg to 90 deg. 2: High-wing model A
Rotary balance data for a single-engine trainer
design for an angle-of-attack range of 8 deg to
90 deg - conducted in langley spin tunnel

SPLINES

A reliable spline coupling --- for aircraft power
transmission
[ ASME PAPER 78-WA/AHE-11] p0148 79-19725
Causes for the deterioration of splined
connections in aircraft engines during service
p0249 79-25249
Modal interpolation program, L215 (INTEPF).

SPLINTING

Transonic 3-D flow analysis of compressor cascade
with splitter vanes
[ AD-A057504] p0044 79-11034

SPILLERS

Spillers cross consideration of a stall proof
airplane
[ SA' PAPER 7909608] p0456 79-36736
Structural adhesive bond repair of aircraft flight
control surfaces
[ AIAA PAPER 79-1073] p0610 79-47925
Reproducibility of structural strength and
stiffness for graphite-epoxy aircraft spoolers
 Oscillatory aerodynamics and stability
derivatives for airfoil spoiler motions
p0178 79-15085
An experimental wind-tunnel investigation of a
cam-air-spoiler roll-control device on a
forward-control missile at supersonic speeds
[ NASA-TF-1353] p0207 79-17809
Low-speed wind-tunnel parametric investigation oflight spoilers as trailing-vortex-allervation
devices on a transport aircraft model
[ NASA-TP-1419] p0016 79-22038
An investigation into the transient aerodynamics
associated with a spoiler emerging into a
uniform airstream
[AD-2019] p0431 79-23086

SPRAY NOZZLES

Comparative nozzle study for applying aqueous film
forming foam on large-scale fires
[ AD-A058562] p0105 79-13064

SPRAYED COATINGS

Development of a new flame sprayed erosion
resistant abradable coating system --- for gas
turbine engine parts
[ ASME PAPER 78-WA/07-6] p0149 79-19794
Development of sprayed ceramic seal system for
turbine gas path sealing
[ ASME PAPER 78-WA/07-7] p0149 79-19795
Effect of an anti-corrosion penetrant on the
fatigue life of various riveted joints during
flight simulation tests
[ NLR-TR-77103-U] p0709 79-32350

SPRAYED PROTECTIVE COATINGS

0 PROTECTIVE COATINGS
0 SPRAYED COATINGS

SPRING

MT SPRING

Spring balance data for a typical single-engine
general aviation design for an angle-of-attack
range of 8 deg to 90 deg. 2: High-wing model A
Rotary balance data for a single-engine trainer
design for an angle-of-attack range of 8 deg to
90 deg - conducted in langley spin tunnel

SPRING (ELASTIC)

Development of linear and non-linear hub springs
for two-bladed rotors
p0384 79-31171
Design and development of a motion compensator for
the FHA main rotor control
p0427 79-22541

STABILITY

MT ACOUSTIC INSTABILITY
MT AEROBRAKE INSTABILITY
MT AIRCRAFT INSTABILITY
MT ATTITUDE INSTABILITY
MT BOUNDARY LAYER INSTABILITY
MT CORROSION INSTABILITY
MT CONTROL INSTABILITY
MT DIRECTIONAL INSTABILITY
MT DYNAMIC INSTABILITY
MT FLAP INSTABILITY
MT FLOW INSTABILITY
MT GEODESY INSTABILITY
MT HEAT INSTABILITY
MT PROPELLER INSTABILITY
MT SHELL INSTABILITY
MT STATIC INSTABILITY
MT STORAGE INSTABILITY
MT STRUCTURAL INSTABILITY
MT SYSTEMS INSTABILITY
MT TURBULENT INSTABILITY

STABILITY AUGMENTATION

Active control --- aircraft systems
p0026 79-12530
Analytical design of a high performance stability
and control augmentation system for a hingeless
rotor helicopter
[AHS 78-27] p0122 79-18153
A piloted simulator investigation of augmentation
systems to improve helicopter nap-of-the-earth
handling qualities
[AHS 78-28] p0122 79-18155
A velocity vector control system augmented with
direct lift control --- stability augmentation
using manual control
Advanced fluidic temperature studies
[ AD-A063147] p0371 79-20386

STABILITY DERIVATIVES

MT FISHING MOMENTS
MT ROLLING MOMENTS
MT TANGENT MOMENTS

Aerodynamic force and moment on oscillating
airfoils in cascade
[ ASME PAPER 78-07-161] p0011 79-10812
Determination of the dynamic derivatives of
longside and side movement with the mobile
oscillating derivative balance and systematic
studies of the influence of several parameters
on the results --- in low speed wind tunnel
testing
[ DGLR PAPER 78-115] p0061 79-14073
Stability and pressure measurements in the Naval
Surface Weapons Center hypervelocity tunnel
A dynamic calibrating apparatus for cross
derivative experiments --- in high performance
aircraft design
p0074 79-15665
Method of calculating the longitudinal, lateral,
and cross aerodynamic derivatives of an aircraft
at subsonic velocities
p0127 79-18385
Lift, moment and pressure distributions on cambered
airfoil in generalized sinusoidal flow
perturbations
p0055 79-13248
Maximum likelihood identification of aircraft
parameters with unsteady aerodynamic modelling
[ NASA PAPER 79-0400] p0148 79-19710
Evaluation of a method to extract performance data
from dynamic maneuver for a jet transport
aircraft
p0155 79-20118

SUBJECT INDEX

Application to CCC and integrated CBI ---
Command, Control, Communication and integrated
Navigation, Identification
p0058 79-13367
Aerodynamic and aeroelastic characteristics of oscillating loaded cascades at low Mach number. I - Pressure distribution, forces, and moments [ASME PAPER 79-GT-111] p0392 790-22386


An investigation of the rolling stability derivatives of a T-tail fighter configuration at high angles-of-attack p0642 790-50165

A computer program for aircraft identification and derivative extraction p0644 790-50306

Considerations in the analysis of flight test maneuvers p0645 790-50433

APRDC parameter identification experience — Air Force Flight Test Center aircraft flight testing p0645 790-50434

Aircraft motion sensitivity to dynamic stability derivatives [AIAA PAPER 79-1621] p0688 790-25266


Effect of sampling rate and record length on the determination of stability and control derivatives [NASA-TR-72058] p0095 790-12996

Air Force Flight Test Center experience in the identification of stability derivatives from dynamic flight test maneuvers p0177 790-15074

Nonlinear parameter identification and its application to transport aircraft p0177 790-15078

Presentation of stability derivatives and missile aerodynamics and theoretical methods for their prediction p0178 790-15080

The use of panel methods for stability derivatives p0178 790-15081

An analytic theory of supersonic/hypersonic stability at high angles of attack p0178 790-15082

Oscillatory aerodynamics and stability derivatives for airfoil spoiler motions p0178 790-15085

Aircraft stability characteristics at high angles of attack p0179 790-15089

Sensitivity of aircraft motion to aerodynamic cross-coupling at high angles of attack p0179 790-15094

Aircraft motion sensitivity to variations in dynamic stability parameters p0180 790-15095

The estimation of lateral-directional aerodynamic derivatives at subsonic speeds p0215 790-15099

A review of methods for obtaining subsonic longitudinal aerodynamic derivatives p0215 790-15100

Transonic/supersonic longitudinal aerodynamic derivatives prediction methods in aircraft design p0215 790-15110

Transonic/supersonic lateral aerodynamic derivatives --- stability and control estimates for aircraft design p0215 790-15111

Stability and control derivative estimates obtained from flight data for the Beech 99 aircraft [NASA-TM-72863] p0367 790-20134

A force and moment test of a 1/4-scale T-111 model at Mach numbers from 0.7 to 1.3 [AD-A070192] p0665 790-31156

STABILITY TESTS

WT FLIGHT STABILITY TESTS

WT VORD TUNNEL STABILITY TESTS

Design, analysis, and testing of a new generation tail rotor [AMS 79-57] p0633 790-49107

STABILIZATION

MT SPIN STABILIZATION

Investigations for the calculation of robust control systems — aircraft control, sensor
STARTING
Problems involved in starting and shutdown of gas turbines: Thermodynamic and mechanical aspects p0587 879-28565

STATE EQUATIONS
0 EQUATIONS OF STATE
STATE VECTORS
Design of proportional-plus-integral controllers for multivariable systems p0281 A79-28223
Parameter and state estimation applicable to aircraft identification problems p0561 A79-43996
STATE AERODYNAMIC CHARACTERISTICS
The effect of canard relative size and vertical location on the subsonic longitudinal and lateral-directional static aerodynamic characteristics for a model with a swept forward wing — in the Langley 7x10 ft high speed tunnel [NASA-TR-78-757] p0580 A79-28138

STATIC DISCHARGERS
Aircraft static charging testing [NASA SP-1780-10] p0258 A79-26130
Electric charging of helicopters — aircraft hazards and static dischargers for accident prevention [WVNS-FWST-78-7] p0297 A79-18274
An investigation into the noise interference problems at Logan Airport, Boston [AD-A072057] p0710 A79-32417

STATIC ELECTRICITY
Static electricity phenomena — Theory and problems — aircraft hazards p0663 A79-51147
Static electricity hazards in aircraft fuel systems [A-L-60450] p0240 A79-17012
Summary report of the Lightning and Static Electricity Committee p0243 A79-17427

STATIC LOADS
Determination of the natural frequency of an airship model [AIAA 79-1582] p0524 A79-42402
A-10 static structural test program [AD-A077182] p0715 A79-33192

STATIC PRESSURE
Construction and calibration of pitot-static systems p0345 A79-31156
Conversion of wing surface pressures into normalized lift coefficient [NASP 70067] p0452 A79-36707
Effect of steady-state pressure distortion on flow characteristics entering a turbofan engine [NASA-TR-79-1346] p0486 A79-23969

STATIC STABILITY
ST SHELL STABILITY
ST STRUCTURAL STABILITY
Control considerations for CCF fighters at high angles of attack p0461 A79-37295
Aerodynamic development of a small horizontal tail for an active control relaxed stability transport application [AIAA 79-1653] p0568 A79-45327
F-16 flight control system redundancy concepts [AIAA 78-1771] p0572 A79-45800
A study of longitudinal controllability and stability requirements for small general aviation airplanes [AD-A060467] p0175 A79-15058

STATIC TESTS
Aircraft structural reliability prediction based on dynamic loads and ultimate strength test data p0076 A79-16111
An innovative technique for static and dynamic V/STOL testing [AIAA 78-42] p0123 A79-18165
Reduction of rotor-turbulence interaction noise in static fan noise testing [AIAA PAPER 79-0656] p0270 A79-26225
Environmental study of coaxial nozzle exhaust noise [AIAA PAPER 79-0631] p0317 A79-28985
Static evaluation of surface coatings for compliant gas bearings in an oxidizing atmosphere to 650°C p0345 A79-21533

STATE TESTS
Static test of a large scale swivel nozzle thrust deflector [AIAA PAPER 79-1285] p0471 A79-39020
Boundary conditions for pollution abatement of fast cook-offs and static tests [AD-A061093] p0242 A79-17362
Aerodynamic characteristics of a large-scale semispan model with a swept wing and an augmented jet flap with pyramiding nozzles — Ames 40- by 80-Foot Wind Tunnel and Static Test Facility [NASA-TR-73236] p0590 A79-29144

STATICS
WT ELECTROSTATICS
WT STATIONARY
WT GROUND STATIONS
WT RESEARCH STATIONS
Master plan flight service station automation program [AD-A052001/5] p0381 A79-21036

STATISTICAL ANALYSIS
MT ANALYSIS OF VARIANCE
MT FACTOR ANALYSIS
MT PROBABILITY DENSITY FUNCTIONS
MT PROBABILITY DISTRIBUTION FUNCTIONS
MT REGRESSION ANALYSIS
MT STATISTICAL CORRELATION
MT STATISTICAL TESTS
Statistical diagnostics of aircraft engines — A probability estimate of the long-term strength of aviation gas-turbojet rotor blades p0028 A79-12950
Statistical evaluation of reverser influence on bypass turbojet engine parameters in the forward thrust regime p0609 A79-14850
Statistical estimation of economic life for aircraft structures [AIAA 79-0761] p0283 A79-28275
Statistical analysis of aircraft maneuvering data [AIAA 79-0741] p0319 A79-29013
Determination of sample size in flight loads programs — for aircraft structures p0561 A79-48454
Test simulation of fighter aircraft maneuver load spectra p0563 A79-44463
Statistical diagnostics of aircraft engines p0601 A79-46596
A statistical analysis of selected human factors involved in aviation safety [AD-A05284] p0089 A79-12052
Airport Improvement Task force delay study: Data collection, reduction and analysis [AD-A05201] p0096 A79-12999
Annual review of aircraft accident data: U.S. general aviation, calendar year 1977 p0217 A79-15925
Aircraft accident reports: Brief format US Civil Aviation issue number 5 - 1976 accidents [NTSB-AR-77-3] p0217 A79-15926
Probabilistic analysis of air carrier accidents p0296 A79-18078

A-400
Safety hazard of aircraft icing

Statistical comparisons of aircraft flyover noise adjustment procedures for different weather conditions

[NASA-TP-1430] 0401 W79-23916

Forcasting the quantitative characteristics of aircraft icing

[IEEE-TRANS-1364 (9022, 549)] 0402 W79-23971

An experimental comparison of the readability of two digital altimeters

[NRL/ST/S-NOTE-60] 0582 W79-26053

STATISTICAL CORRELATION

The development of a parametric method of measuring fatigue in fatigue loads based on flight measurements on a lightning Wk.75

[ASAE PAPER 79-104] 0220 W79-19556

STATISTICAL DISTRIBUTIONS

The distribution pattern of Omega observations


STATISTICAL MECHANICS

Statistical influence of size and configuration on static strength of structural members of transport aircraft

[AIAA 79-70005] 0282 A79-29381

STATISTICAL PROBABILITY

A critical review of performance monitoring systems on the basis of the experience obtained from routine applications --- for aircraft engines

[ATIA 79-70005] 0327 A79-29381

STATOR BLADES

False induced time-variant aerodynamics including rotor-stator axial spacing effects

[ASME PAPER 79-GT-9] 0213 A79-42188

Transonic boundary layer on compressor stator blades as calculated and measured in wind tunnel

[OMEN, TP No. 1979-25] 0329 A79-23997

Mean velocity and decay characteristics of the guidedwake and stator wake blade of an axial flow compressor

[ASME PAPER 79-GT-50] 0339 A79-30507

Unsteady upstream effects in axis-flow supersonic compressor stages

[ASME PAPER 79-GT-50] 0391 A79-32350

The time-variant aerodynamic response of a stator row including the effects of airfoil camber

[ASME PAPER 79-GT-111] 0392 A79-32385

Cold-air performance of free power turbine designed for 112-kilowatt automotive gas-turbine engine

[ASME PAPER 79-GT-79] 0316 A79-48618

Cold-air performance of free power turbine designed for 112-kilowatt automotive gas-turbine engine

[ASME PAPER 79-GT-9] 0316 A79-48618

Effect of casing treatment on performance of a two-stage high-pressure-ratio fan

[ASAE PAPER 79-GT-9] 0234 A79-16582

The influence of compressor inlet guide vane/stator relative circumferential positioning on blade wake transport and interaction

[AD-A067969] 0563 W79-26060

STABILIZATION

Asymmetrie stator interaction noise

[AIAA PAPER 79-608] 0318 A79-28685

Measurement of heat-transfer rate to a gas turbine stator

[ASME PAPER 79-GT-11] 0399 A79-32395

The monorotor gas turbine

[AIAA PAPER 79-120] 0470 A79-38994

Digital simulation of a three-phase generator

[ASME PAPER 79-GT-11] 0399 A79-32395

Cold-air performance of free power turbine designed for 112-kilowatt automotive gas-turbine engine

[ASME PAPER 79-GT-9] 0316 A79-48618

Cold-air performance of free power turbine designed for 112-kilowatt automotive gas-turbine engine

[ASME PAPER 79-GT-9] 0316 A79-48618

STABILITY

Mixed flow

The method of discrete vortices --- for steady flow past finite-span wing

[ASME PAPER 79-1456] 0565 A79-45261

Harmonic oscillations of annular wing in steady ideal fluid flow

[ASME PAPER 79-1456] 0565 A79-45261

A fast, conservative algorithm for solving the transonic full-potential equation

[ASME PAPER 79-1456] 0565 A79-45261

STIFFNESS MATRIX

Some steady and oscillating airfoil test results, including the effects of sweep, from the tunnel spanning wing

[ASME PAPER 79-1456] 0565 A79-45261

Notes concerning testing time requirements in steady and unsteady measurements

[ASME PAPER 79-1456] 0565 A79-45261

STEADY STATE

Correlation of experimental and theoretical steady-state spinning motion for a current fighter airplane using rotation-balance aerodynamic data

[ADV. 79-1456] 0399 W79-12069

Steady state behaviour of a cable used for suspending a monor body from a helicopter

[ADV. 79-1456] 0372 W79-20400

Unsteady rotor blade loading in an axial compressor with steady-state inlet distortions

[ADV. 79-1456] 0555 W79-27176

STEELS

A critical review of performance monitoring systems on the basis of the experience obtained from routine applications --- for aircraft engines

[ATIA 79-70005] 0327 A79-29381

AN PATTERNS

Feasibility demonstration of a vertical seeking nose steering system

[ASME 79-1456] 0392 A79-32385

STELLAR DOPPLER SHIFTS

A Doppler effect

[ASME 79-1456] 0392 A79-32385

STEREOGRAPHY

Numerical studies of conversion and transformation in a surveillance system employing a multitude of radars, part 1--- advanced air traffic control services

[AD-A072086] 0709 W79-32415

Numerical studies of conversion and transformation in a surveillance system employing a multitude of radars, part 2 --- advanced air traffic control services

[AD-A072086] 0709 W79-32415

STEREOGRAPHIC PHOTOGRAPHY

Stereo photographic analysis of stereometric tracker for use in tactical aircraft

[ASME 79-1456] 0421 A79-22086

PERFORMANCE EFFECTS

CTHERMAL DEGRADATION

Structural stiffening of transmission housings for fluid-film bearings

[ASME 79-1456] 0401 A79-28685

Stress intensity factors, for collinear cracks in a stiffened sheet

[ASME 79-1456] 0401 A79-28685

Stress intensity factors, for collinear cracks in a stiffened sheet

[ASME 79-1456] 0401 A79-28685

STIFFENING

The fibre composite helicopter blade

[ASME 79-1456] 0421 A79-22086

Stiffness matrix

Accuracy of an approximate static structural analysis technique based on stiffness matrix eigenvalues

[ASME 79-1456] 0401 A79-28685

A-401
The structural effects and detection of variations in Hercules 3501-5A and Avco 5505 resin systems

Service fatigue loads monitoring, simulation, and analysis; Proceedings of the Symposium, Atlanta, Ga., November 14-15, 1977

Some observations on four current subjects related to aeroelastic stability

Evaluation of finite element formulations for transient conduction forced-convection analysis

Computer analysis of semi-monocoque shell sections

Wing center section optimization with stress and local instability constraints

Structural analysis of variable-sweep wings

Thermal-structural mission analyses of air-cooled gas turbine blades

Effect of structural parameters on the flap-lag forced response of a rotor blade in forward flight

Vehicle Design Evaluation Program (VDEP). A computer program for weight sizing, economic, performance and mission analysis of fuel-conservative aircraft, multimodied aircraft and large cargo aircraft using both JP and alternative fuels

Structural analysis of hollow blades: Torisonal stress analysis of hollow fan blades for aircraft jet engines

Turbomachinery flutter: Introductory concepts

Industrial Centrifugal Compressors, Volume 2

Fracture Mechanics Design Methodology --- aircraft structures

Analysis of aircraft structure using applied fracture mechanics

Correlation of predicted and measured thermal stresses on an advanced aircraft structure with similar materials

Development of Integrated Programs for Aerospace-vehicle design (IPAD): Reference design process

Failures in adhesively bonded structures

Low-speed single-element airfoil simulations

Some new airfoils

ANALYZE: Analysis of aerospace structures with membrane elements

Aerodynamically conformable rotor mission analysis

User's guide: Computer program with interactive graphics for analysis of plane frame structures

Stresses, vibrations, structural integration, and engine integrity (including aeroelasticity and flutter)

Structural analysis of a gas turbine impeller using finite-element and holographic techniques

Tapered roller bearing development for aircraft turbine engines

Modal interpolation program, L215 (INTP2P), Volume 1: Engineering and usage

Structural 1D prediction and analysis technology

STRUCTURAL BEAMS

U BEAMS (SUPPORTS)

CONFERENCE PROCEEDINGS


Structural design flight maneuver loads using FDP-10 flight dynamics model

A study of structural concepts for low radar cross section /LRCS/ fuselage configurations

The use of 3-D finite element analysis in the design of helicopter mechanical components

Boeing Vertol bearingless main rotor structural design approach using advanced composites

Decreasing stress concentrations in structures made of high-strength materials

Application of optimization techniques in engineering design --- computerized structural design

An overview of airfield pavement design

Optimization of high-aspect-ratio multivehicle wing structure

Construction of a refrigerated wind tunnel with a supercooled droplet production system for research on icing

Integration of nondestructive testing methods into design for structural integrity assurance

Aerodynamic development of a high pressure leading edge blowing boundary layer control system

A multi-disciplinary approach to structural design for stochastic loads

Fatigue strength of airplanes and modern structural designs

Effect of CFEP technology on structural design and fatigue behavior of modern fighter aircraft

The pressurized subsonic wind tunnel, Pt. 1, at ONERA's Panga-Massac Center

Towards a realistic structural analysis/design system --- computerized aircraft design

Application of fracture mechanics to design --- Book

Structures, Structural Dynamics, and Materials Conference, 20th, St. Louis, Mo., April 4-6, 1979, Technical Papers on Dynamics and Loads

SDM lecture - Introduction of new SDM technology into production systems --- Structures, Dynamics and Materials technology in aircraft design

Aeroelastic tailoring studies in fighter aircraft design

An aeroelastic optimization procedure for composite high aspect ratio wings

Structural development of the Modernized Chinook helicopter transmission gearing

Design and fabrication of advanced titanium structures

Combined strength and aeroelastic wing synthesis via constraint approximation

A generalized modal shock spectra method for spacecraft loads analysis

Hypomot pressure loading in soft body impacts

Research needs in aerospace structural dynamics

Calculation of wings of variable sweep

A-405
A new high product ratio 10 nanosecond, 256 point correlator -- for weapon system applications and fluid mechanics research.

Optimization of wing structures to satisfy strength and frequency requirements p0405 A-19-34305

A starter for gas turbine engines p0459 A-19-36797

The role of three-dimensional flow analysis in the design of turbomachinery [AIAA PAPER 79-1231] p0470 A-19-38995
Canadair Challenger --- business jet subsystems p0507 A-19-40313

State of the art in aircraft loads monitoring program p0641 A-19-4453

Design and development of a hybrid composite rotor blade for the circulation control rotor system [AMS 79/67] p0632 A-19-49099
Design and development of the Agusta A 109 helicopter p0639 A-19-49815

Wing center section optimization with stress and local instability constraints p0694 A-19-53771

Optimal design of wing structures with substructuring p0694 A-19-53773
Formulas for spanwise distribution of lift on aircraft wings p0694 A-19-53781
A theoretical investigation of forebody shapes designed for natural laminar boundary-layer flow [NASA TP 1375] p0215 A-19-59033
Design outline for a new multimatic ATC simulation facility at NASA-Ames Research Center p0244 A-19-75010

Turbomachinery flutter: Introductory concepts p0307 A-79-19353
The design and development of high performance combustors p0308 A-79-19360

Design of multistage compressors with consideration of real behavior of gas and gas mixtures p0309 A-79-19390

Materials and structural aspects of advanced gas-turbine helicopter engines [NASA TM 79-100] p0353 A-79-20008
Application of numerical optimization to the design of advanced supercritical airfoils p0357 A-79-20049
Inverse boundary-layer technique for airfoil design p0358 A-79-20054
Design and calibration of slotted walls for transonic airfoil wind tunnels p0358 A-79-20058

Numerical design of shockless airfoils [NASA CR 158039] p0359 A-79-20065
A computer aided design and fabrication system adapted to the design of three dimensional objects --- helicopter design p0374 A-79-20762

DRAPO: A computer aided design and fabrication system p0374 A-79-20763
Recent Advances in Structures for Hypersonic Flight, part 1 --- conferences [NASP-CP 79-2065-PT-1] p0385 A-79-21422

Hypersonic structures: An aerodynamicist's perspective, or one man's dream is another man's nightmare p0385 A-79-21423

Design problems of small turbomachinery p0422 A-79-22097
Calculation and design of closed cycle helium turbines for high temperature reators p0423 A-79-22098
The design of models and their supports, the Evans clean-flow tunnel. A review of some of the various proposals --- the design of high Reynolds number, transonic wind tunnels p0439 A-79-23110

Low-speed single-element airfoil synthesis p0479 A-79-23990
Optimus tail plane design for sailplanes p0479 A-79-23992
Introduction to the aerocopter arm wing and the Bertelmann effect for positive pitch stability and control p0480 A-79-23995

Some new airfoils p0480 A-79-23996

Design of propellers for notormroars p0480 A-79-23903
Substructuring methods for design sensitivity analysis and structural optimization [AD 1006592] p0504 A-79-23999

Full-safe optimal design of structures with substructuring [AD 1006593] p0504 A-79-23999
The application of structured design of distributed techniques to avionics information processing architectures p0505 A-79-25991
A new facility for structural engine testing p0554 A-79-27173
Wing design, body design, high lift systems and flying qualities with introduction p0579 A-79-28125

Construction problems for high Reynolds number wind tunnel models [ORS-PA-77-1708-6] p0708 A-79-32224

STRUCTURAL DESIGN CRITERIA

The effects of latest military criteria on the structural weight of the Hughes advanced attack helicopter - TAH-64 p0013 A-79-10904
Impact of operational issues on design of advanced composite structures for army helicopters p0013 A-79-10907
A glance at Soviet helicopter design philosophy p0013 A-79-10910
Thermal design of airborne radars - Present and future p0018 A-79-11919

Quality index for an iterative process of optimizing long-range aircraft parameters p0020 A-79-12152
A method of solving multicriterial optimization problems for load-bearing structures --- for large aspect ratio wings p0020 A-79-12163

Aircraft manufacturing quality assurance p0069 A-79-14868
Investigation of the crash impact characteristics of composite airframe structures [AMS 79-51] p0124 A-79-18174


Redesign design/fabrication criteria for supersonic BW aircraft --- EP-111 p0209 A-79-24091

Temperature/humidity criteria for advanced composite structures p0211 A-79-24131

Integrally cast turbine rotor for high volume production [SAS PAPER 79-100] p0255 A-79-25883
Damage-tolerance practices applied to transport aircraft structures [SAS PAPER 79-102] p0256 A-79-25896
Fracture mechanics and fail-safe design for helicopter rotor structures p0273 A-79-26886

Accelerated basic loads analysis --- improved computer systems programming approach for aircraft structural analysis [AIAA 79-0737] p0324 A-79-29051
Experimental verification of progress KASH - A mathematical model for general aviation structural crash dynamics [SAE Paper 770589]

Damage tolerant design - An approach to reducing the life cycle cost of gas turbine engine disks [AIAA Paper 79-1189]

British civil airworthiness requirements for airships [AIAA 79-1600]

Dynamics requirements for an Advanced Scout Helicopter [AHS-19]

Certification of composites in civil aircraft [AHS 79-W-3]

Design criteria for airline operation [AIAA Paper 79-1849]

The feasibility of modern dirigibles [ONERA, TN NO. 1979-93]

Hovercraft skirt design requirements [P0640 A79-69907]

Characteristics of an Air Cushion Landing System incorporating an inflatable tank [P0640 A79-69909]

Structural concepts and experimental considerations for a versatile high-speed research airplane [NASA-TM-78743]

Summary report of the Aircraft Design Committee [P0162 N79-14008]

Transonic compressors for heavy gases. Part 1: Selections of the aero-design parameters [P0634 A79-49337]

Transonic compressors for heavy gases. Part 2: Aero-mechanical considerations, testing and operation [P0307 N79-19351]

Flow modelling and aerodynamic design techniques for centrifugal compressors [P0300 N79-19386]

Application of aerodynamic design techniques to process compressor design --- cost-terrified techniques [P0309 N79-19388]

Development testing of stages for centrifugal process compressors [P0309 N79-19392]

Turbocharger design and development --- technology assessment and design optimization [P0309 N79-19393]

Fracture Mechanics Design Methodology --- aircraft structures [AED-CE-577]

Design of heavy sections --- fracture mechanics of plate or forged airframe components [P0372 N79-20409]

Design of redundant structures --- structural design criteria and fracture mechanics of large commercial transport aircraft [P0373 N79-20416]

The effects of design and operating variables on the response of the axial flow fan to inlet flow distortions [NASA-CP-156522]

Development of a structural design procedure for rigid airport pavements [AD-A065948]

Design considerations for reliable FBW flight control [P0508 N79-28187]

Windshield technology demonstrator program-canopy - detail design options study [AD-A070376]

Wind structural development design methodology --- aerelastic tailoring of the canard and wing box and distributed load tests [NASA-CP-164886]

Thermal-structural design study of an airframe-integrated Scaarfjet [NASA-CE-31411]

[AD-A061428]

Some engineering property comparisons for 7050 and AZ 74.61 die forgings [MLR-EP-77040-0]

Dynamics structural analysis with substructures [AD-A065937]

Wind tunnels with adapted walls for reducing wall interference [NASA-TM-75501]

[AD-A061428]

Finite element analysis of fatigue crack growth in aircraft components [AD-A057335]

Fatigue resistance under multiple-amplitude loads [P0118 N79-20495]

Probability that the propagation of an undetected fatigue crack will not cause a structural failure [AD-A056689]

The development of a parametric method of measuring tin fatigue loads based on flight measurements on a lightning Mt. TS [P0220 N79-19596]

Structural Fatigue

Fatigue (Materials)

Structural Influence Coefficients

An application of ground vibration test results to calculate aerelastic stability and control parameters [AIAA 79-0830]

A computational scheme for structural influence coefficients of certain planar wings [P0407 N79-34597]

Structural Materials

Construction Materials

Structural Members

Mountains (supports)

Airboxes

Mount Carriever beams

Mount elastic plates

Mount flat plates

Mount membrane structures

Mount orthotropic plates

Mount reinforced plates

Mount skin (structural members)

Mount strakes

Mount stringers

Mount struts

Mount stiffeners

Mount wing panels

Error localization in turbojet engines through determination of the characteristics of structural members --- German thesis [P0415 N79-1827]

Airframe noise component interaction studies [NASA-CP-3110]

Advanced fabrication techniques for cooled engine structures [P0386 N79-21428]

Structural Reliability

Fatigue-deterrent design of the TN-611 main rotor system [AD-A001314]

Aircraft structural reliability prediction based on dynamic loads and ultimate strength test data [P0076 N79-16111]

Reliability of aircraft structures [P0082 N79-16583]

Fatigue strength of airplanes and modern structural designs [DGLR Paper 78-179]

Determination of the fatigue strength of heavily stressed components of the Alpha-Jet [DGLR Paper 78-177]

Crack free and cracked life of the pressurized cabin of the A 300 B - Calculation, tests and design measurements to improve damage tolerance [P0238 N79-16598]
Aerodynamic and aeroelastic characteristics of effective rigidity of a thin-walled beam
Experimental investigation of the endurance of applications of Laplace transform methods to formulation of the aeroelastic stability and flap-lag stability with dynamic inflow by the examination of the air resonance stability an aeromechanical stability analysis for thermal stability of relative pavement bearing strength requirements of build 1 of an accelerated mission test of a TF41 approximate solution of some boundary value problems on aircraft structural integrity an aeromechanical stability analysis for bearingless rotor helicopters [AIAA 79-21] thermal stability of ribbed sheet systems [AD-406550] approximate solution of some boundary value problems on aircraft structural integrity [AD-406595]

STRUCTURAL VIBRATION

Subject Index

Material and process control - Aircraft integral fuel tanks [AIAA 79-0122]
Commercial parachutes - from safety standpoint [AIAA 79-0558]
Fracture mechanics and fail-safe design for helicopter rotor structures [AIAA 79-26661]
Crashworthiness tests on model aircraft fuselage structures [AIAA 79-0688]
Design against fatigue - Current trends -- for aircraft structural reliability [AIAA 79-0689]
Factors affecting residual strength prediction of a cracked aircraft structure [AIAA 79-28380]
Fatigue reliability under multiple-amplitude loads [AIAA 79-28691]
Aircraft design and strength /2nd revised and enlarged edition/ -- Russian book [AIAA 79-31716]
Derivation of flight-by-flight spectra for fighter aircraft -- stress analysis for ground attack [AIAA 79-44462]
Reliability analysis for optimum design -- applied to offshore drilling and aircraft structures [AIAA 79-53070]
Damage tolerance in practice -- aircraft safety and stress measurement [AIAA 79-20420]
Structural properties of adhesives, volume 1 [AD-406550]
Build 1 of an accelerated mission test of a TF41 with block 76 hardware [AD-406595]

Structural Rigidty

Structural Rigidity

Some observations on the local instability of orthotropic structural sections [AIAA 79-33461]
Aeroelastic stability analysis of the AD-1 manned oblique-wing aircraft [AIAA 79-38135]
Rotor blade stability in turbulent flows, II [AIAA 79-41751]
A new analytic method for the study of classic helicopter ground resonance [AIAA 79-41767]
Some observations on four current subjects related to aeroelastic stability [AIAA 79-47093]
Developments in gear analysis and test techniques for helicopter drive systems [AIAA 79-47654]
Dynamics requirements for an Advanced Scout Helicopter /AS/ [AIAA 79-49072]
Mechanical characterization of structural adhesives [AIAA 79-54232]
Dynamic stability of a two-blade rotor [AIAA 79-54238]
Flutter suppressor for transonic flight [AIAA 79-20983]
A-10 static structural test program [AD-407172]
Structural Stain

Thermostructural analysis of a scramjet fuel-injection strut [AIAA 79-21427]

Thermomechanical analysis of a scramjet fuel-injection strut

Some observations on the local instability of orthotropic structural sections

Aerelastic stability analysis of the AD-1 manned oblique-wing aircraft

Rotor blade stability in turbulent flows, II

A new analytic method for the study of classic helicopter ground resonance

Some observations on four current subjects related to aeroelastic stability

Developments in gear analysis and test techniques for helicopter drive systems

Dynamics requirements for an Advanced Scout Helicopter /AS/

Structural Stain


Thermostructural analysis of a scramjet fuel-injection strut

Some observations on the local instability of orthotropic structural sections

Aerelastic stability analysis of the AD-1 manned oblique-wing aircraft

Rotor blade stability in turbulent flows, II

A new analytic method for the study of classic helicopter ground resonance

Some observations on four current subjects related to aeroelastic stability

Developments in gear analysis and test techniques for helicopter drive systems

Dynamics requirements for an Advanced Scout Helicopter /AS/

Structural Stain


Thermostructural analysis of a scramjet fuel-injection strut
Experimental evaluation of the effect of inlet distortion on compressor blade vibrations

[ASM PAPER 79-GT-106] p0392 A79-32383

The time-variant aerodynamic response of a stator row including the effects of airfoil camber

[ASM PAPER 79-GT-110] p0392 A79-32385

Model verification of force determination for measuring vibratory loads — of rotors on helicopters

p0450 A79-36379

An experimental study of propeller-induced structural vibration and interior noise

[SAP PAPER 790625] p0058 A79-36753

Designing with damping materials to reduce noise and structural fatigue — of aircraft components

[SAP PAPER 790631] p0058 A79-36758

A new analytic method for the study of classic helicopter ground resonance

p0518 A79-41767

Few methods for ground-testing aeronautical structures

[CKTPA, TP NO. 1979-67] p0534 A79-43620

Experimental measurements of the rotating frequencies and mode shapes of a full scale helicopter rotor in a vacuum and correlations with calculated results

[CHS 79-18] p0628 A79-49071

Evaluation of the practical aspects of vibration reduction using structural optimization techniques

[CHS 79-21] p0628 A79-49074

An approach for estimating vibration characteristics of actinomorphic rotor blades

p0639 A79-49718

INACX — Interactive test data analysis — with minicomputers

p0645 A79-50430

Effect of structural parameters on the flap-lag response of a rotor blade in forward flight

[AD-A063311] p0159 A79-14036

The Shock and Vibration Digest, Volume 10, no. 9

p0579 A79-17096

Noise and vibration problems: Outline notes

p0345 A79-28124

ATLAS, an integrated structural analysis and design system: Volume 5: System demonstration problems

[NASA-CP-159965] p0676 A79-31624

Large amplitude response of complex structures due to high intensity noise

[AD-A771404] p0721 A79-33505

STRUCTURAL WEIGHT

The effects of latest military criteria on the structural weight of the Hughes advanced attack helicopter — YAH-64

p0013 A79-10904

Application of gradient methods to the optimal design of load-bearing structures — for aircraft minimum weight design

p0020 A79-12144

Influence of bypass ratio on jet engine weight

p0279 A79-27737

The evaluation of the weight of engine installations on transport aircraft

p0061 A79-37827

Computerized systems analysis and optimization of aircraft engine performance, weight, and life cycle costs

[NASA-TP-792212] p0599 A79-29938

STUTS

Noise from struts and splitters in turboshaft exit ducts

[AIAA PAPER 79-0637] p0270 A79-26923

Local buckling and crippling of T, Z and channel section struts

[ESPD-76020] p0090 A79-12060

Locating redundant link

[NASA-CSP-19100-1] p0168 A79-14382

Thermostructural analysis of a scramjet fuel-injection strut

p0386 A79-21827

Investigations of interference effects in a wind tunnel caused by a model support strut on a reflection plane mounted half model

[FFA PAPER 79-AD-13352] p0588 A79-27109

SUBCIRCUITS

U CIRCUITRY

SUBLATTICES

U LATTICES (MATHEMATICS)

SUBMERSIBLE WOODS

Helicopter underwater escape trainer (905)

p0313 A79-19665

SUBSONIC AIRCRAFT

Propulsion cycle and configuration commonalities: considerations for subsonic V/STOL design

[AM C PAPER 79-GT-86] p0007 A79-10764

Development of an inlet for a tilt nacelle subsonic V/STOL aircraft

[AAM PAPER 79-GT-121] p0009 A79-10789

A parachute that goes up — lift-devices for subsonic and transonic deliveries and recoveries

[CORES-771215-1] p0067 A79-14341

Positive tail loads for minimum induced drag of subsonic aircraft

p0080 A79-16494

Technology for future air transports

[ATIA PAPER 79-0529] p0253 A79-25853

Development of modern airfoil sections for high subsonic cruise speeds

[AIAA 79-0687] p0275 A79-27353

Structural aluminum materials for the 1980s

[AIAA 79-0755] p0282 A79-28270

Aeroacoustic design of the Prop Fan

[AAM PAPER 79-0610] p0317 A79-28960

Propulsion system considerations for the subsonic V/STOL

[AAM PAPER 79-GT-57] p0398 A79-32934

Advanced low-emissions catalytic combustor program at Pratt and Whitney

p0977 A79-25012

High Reynolds Number Subsonic Aerodynamics

[VIK-LECTURE-SERIES-16] p0579 A79-28119

Advantages and problems of large subsonic aircraft

p0759 A79-28120

SUBSONIC FLOW

Calculation of effect of viscosity on nonseparated subsonic flow past a wing with flap

p0222 A79-12290

Unsteady subsonic and supersonic potential aerodynamics for complex configurations

p0233 A79-12366

Aerodynamic field induced by a jet penetrating a cross flow at subsonic velocities

[CKTPA, TP NO. 1978-91] p0060 A79-13991

Influence of the pitch/chord ratio of a subsonic cascade of turbine blades

p083 A79-16792

On the noise emitted by cold subsonic coaxial jets

p0010 A79-17767

A numerical study of jet entrainment effects on the subsonic flow over nozzle afterbodies

[AIAA PAPER 79-0125] p0142 A79-19556

Subsonic and transonic similarity rules for jet-flapped wings

[AIAA 79-0523] p0146 A79-19678

Effect of spanwise blowing in the angle-of-attack regime alpha equals 0 plus 90 deg

[CORES, TP NO. 1979-80] p0152 A79-20083

Propeller slipstream wing interactions at Mach no. 0.8

[ASME PAPER 760997] p0255 A79-25881

Flight effects on subsonic jet noise

[AIAA PAPER 79-0616] p0317 A79-28961

Applications of Laplace transform methods to airfoil motion and stability calculations

[AIAA 79-0772] p0324 A79-29050

On the design of thin subsonic airfoils

p0324 A79-29052

Blade-to-blade pressure, temperature, and velocity profiles downstream of a single rotor row at high subsonic speed

[AIAA 79-7033] p0331 A79-29419

The finite element method for turbomachinery analysis — subsonic compressible flow

p0335 A79-29840

An approach to optimum subsonic inlet design

[AM PAPER 79-GT-51] p0341 A79-30527

Subsonic base pressure fluctuations

p0342 A79-30610

A calculation procedure for three-dimensional, time-dependent, inviscid, compressible flow through turbine blades of any geometry

p0343 A79-30610
Progress in transonic flow computations analysis and design methods for three-dimensional flows --- supersonic and transonic wings and body combinations

In-flight three-dimensional boundary layer and wake measurements from a swept supercritical wing

Application of numerical optimization to the design of advanced supercritical airfoils

Simulated propeller slipstream effects on a supercritical wing [NASA-CR-152116]

An artificial viscosity method for the design of supercritical airfoils [NASA-CR-150640]

Aerodynamic data for three supercritical airfoils: RAE-WPL 9515 and 9530, and RAE 9550. Parts 1 and 2

A new high field magnet system for the design of supercritical airfoils [NASA-CR-X-3250]

Development and flight test evaluation of fuel tank sealants for each aircraft

The ATMOSAT Program 1975-78 --- manned flight determination lift and drag characteristics of a supersonic cruise [NASA-CR-150640]

Study of the application of superplastically formed and diffusion bonded (SDF/DC) titanium structure to laminar flow control (LFC) wing design [NASA-CR-150979]

Concurrent superplastic forming/diffusion bonding of B-1 components

Fabrication of titanium at high temperatures

The implementation and practical verification of a superposition method for the solution of elastic crack problems

The ATS/OSAT Program 1975-78 --- manned superpressure balloon flights for atmospheric monitoring [AIAA 75-1609]

The implementation and practical verification of a superposition method for the solution of elastic crack problems

The effect of sonic boom on --- lift-devices for supercritical cruise aircraft design [AIAA PAPER 79-0652]

Supersonic wing design for transport aircraft [AIAA PAPER 79-0755]

Supersonic combat aircraft design [AIAA PAPER 79-0699]

Structural aluminum materials for the 1980's [AIAA PAPER 79-0755]

Fuel tank sealant requirements for advanced high performance aircraft

Method of determining precipitates formed during use and storage of synthetic oils --- for supersonic aircraft gas turbine engines

Aerodynamics of engine air intakes

Fabrication research for supercritical cruise aircraft --- 7P-12 skin structures

Wave propagation associated with wings --- three dimensional unsteady flow analysis for supercritical aircraft

Opportunities for supercritical performance gains through non-linear aerodynamics [AIAA PAPER 79-1527]

Technique for developing design tools from the analysis methods of computational aerodynamics [AIAA PAPER 79-1527]

Historical development of worldwide supersonic aircraft [AIAA PAPER 79-1515]

Combined I/Ke-band tracking radar

A parachute that goes up --- lift-devices for atmospheric monitoring [AIAA 79-42399]

Supersonic Airfoils

Design study results of a supercritical cruise fighter wing [AIAA PAPER 79-0962]

Subject Index

NT F-106 AIRCRAFT

Calculation of the transient aerodynamic characteristics of a supersonic vehicle [COMP-771215-1]

A parachute that goes up --- lift-devices for subsonic and transonic deliveries and recoveries [AIAA PAPER 79-0233]

Surface pressure data for a supercritical-cruise airplane configuration at Mach numbers of 2.30, 2.54, 2.73 [NASA-TM-80061]

High angle of incidence implications upon air intake design and location for supercritical cruise aircraft and highly maneuverable transonic aircraft [NASA-TM-80061]
Calculation of pressure distribution over a slender wing in supersonic flow  
Design and demonstration of a system for routine, boomless supersonic flights  
[FAA-RD-77-72]
Analysis of flow above a ship in supersonic flight  
[ASNE PAPER 79-0133]

SUPERSONIC FLOW

Regions of supersonic flow past thin wings  
Calculation of flow past conical bodies with supersonic leading edges  
Unsteady subsonic and supersonic potential aerodynamics for complex configurations  
Density changes and turbulence production in the expansion or compression of a turbulent flow at supersonic speed  
[ONERA, TP No. 1978-153]
Optimum two-dimensional wings in supersonic flows  
Calculation of supersonic flow past wings with consideration of tangential discontinuities shed from the edges within the scope of a model using a system of Euler equations  
Calculation of shock waves shed.  

Computation of three-dimensional turbulent separated flows at supersonic speeds  
[IAIA PAPER 78-00138 A79-19471]
High speed smoke flow visualization for the determination of cascade shock losses  
A model of transverse fuel injection applied to the computation of supersonic combustor flow  
Effect of injection angle on liquid injection in supersonic flow — for increasing fuel jet penetration  
Numerical study of the supersonic flow around wings  
Effect of the transverse curvature of the lower surface on the conical supersonic flow field on a delta vehicle  
Experimental study on flow in a supersonic centrifugal impeller  
Computation of supersonic viscous flows over ogive-cylinders at angle of attack  
Investigation of cross flow shocks on delta wings in supersonic flow  
Influence of fundamental parameters on the supersonic base flow problem in presence of an exhaust jet  
Laminar boundary layer with foreign gas injection on a conical body  
Attached shock regime at the edges of a conical wing  
A refined prediction method for supersonic unsteady aerodynamics with HIC partition scheme — Aerodynamic Influence Coefficient  
Shock waves around bodies travelling at slightly greater than sonic speed  
Facility for studying the action of unsteady supersonic gas streams on the blades of a plane cascade  
Analysis simulation and its defining similarity criteria in the analysis of supersonic flows past wings  
Time-variant aerodynamics of oscillating airfoil surfaces in a supersonic flowfield  
Numerical solution for supersonic flow near the trailing edge of a flat plate  
The amplification factor in the two-dimensional interaction between a transverse sonic jet and a supersonic jet  

Region of a plane pointed profile in supersonic flow  
Deformation of a shell under the influence of a supersonic gas flow  
A two-dimensional unsteady Euler-equation solver for flow regions with arbitrary boundaries  
Numerical solution of the problem of unsteady supersonic flow around the front part of the wings with a detached shock wave  
Comment on 'active flutter control using generalized unsteady aerodynamic theory'  
An improved supersonic, three-dimensional, external, inviscid flow field code  
Interaction of the supersonic flow below a wing and a supersonic free jet (two-dimensional situation)  
Calculation of supersonic viscous flow over delta wings with sharp subsonic leading edges  
Fluid mechanical refracting gas prism and aerodynamics of T - beam sustained charge in supersonic flow, both applicable to laser technology  
Viscous-inviscid flow matching: Numerical method and applications to two-dimensional, transonic and supersonic flows  
Buselbee program. Aerodynamic data. Part 1: Supersonic Flow field, pressure field, and panel load data for validation of computational methods  
The generation, radiation and prediction of supersonic jet noise. Volume 2, appendix: Computer program listing  
The influence of two supersonic jets at the trailing edge of transonic turbine blades  
Theory of thin wing in a supersonic flow with consideration of the non-equilibrium state of excitation of oscillating degrees of freedom  
Supersonic flow in the area of antisymmetric thin cruciform wings with supersonic leading edges in a horizontal plane, with consideration of flow separation on the edges  
Supersonic flow past conical bodies with nearly circular cross sections  
Aeroacoustic systems test facility: Calibration test in tunnel A  
An aerodynamic analysis of deformed wings in subsonic and supersonic flow  

Supersonic Flows Inlets  
Supersonic Inlets  
Supersonic Flutters  

Supersonic uninstalled flutter  
The effect of intake conditions on supersonic flutter in two-fountain engines  
Unsteady flows — subsonic and supersonic aeroelasticity oscillating airfoils and displacement bodies  
An analysis of aerodynamic fan flutter using twin orthogonal vibration modes  
Numerical model of the oscillatory cycle associated with nonsteady interaction of a supersonic jet with a barrier  
Supersonic uninstalled flutter — aerodynamic loading of this airfoils induced by cascade motion
### SUBJECT INDEX

<table>
<thead>
<tr>
<th>SUPERSONICS</th>
<th>SUPERSONIC TRANSPORTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUPERSONIC INLETS</td>
<td>ST COMCOSDE AIRCRAFT</td>
</tr>
<tr>
<td>SUPERSONIC JET FLOW</td>
<td>SUBSONIC TRANSPORTS</td>
</tr>
<tr>
<td>SUPERSONIC NOZZLES</td>
<td>SUMMARY OF DEFECTS</td>
</tr>
<tr>
<td>SUPERSONIC SPEEDS</td>
<td>TRANSONIC WIND TUNNELS</td>
</tr>
<tr>
<td>SUPERSONIC WIND TUNNELS</td>
<td>TRANSFORMATION OF COORDINATES</td>
</tr>
</tbody>
</table>

**SUPERSONIC INLETS**
- Design of two-dimensional external compression super sonic inlets
- Calculation of the three-dimensional flow field in supersonic inlets at angle of attack using a bicharacteristic method with discrete shock wave fitting
- Diffusers for supersonic intakes - the dependence of conical diffuser performance on inlet flow conditions
- Effect of cooling of the central body on startup, separation of the flow at the intake and the throttling characteristics of air scoops at supersonic and hypersonic velocities
- Interference of vortexes with shocks in air scoops

**SUPERSONIC JET FLOW**
- A computer program for the calculation of the flow field in supersonic mixed-compression inlets at angle of attack using the three-dimensional method of characteristics with discrete shock wave fitting
- A throat-bypass stability bleed system using relief valves to increase the transient stability of a mixed-compression inlet
- [NASA-TP-1083] p0563 N79-28176

**SUPERSONIC NOZZLES**
- Determination of ejection nozzle starting parameters for supersonic jets
- Convective heat exchange of gas-particle flows in flow passage of throttling device with vane-type turning element
- Experiments of shock associated noise of supersonic jets

**SUPERSONIC SPEEDS**
- Supersonic propeller noise in a uniform flow
- Numerical comparisons of panel methods at subsonic and supersonic speeds
- Computer calculation of aerodynamic characteristics of aircraft at supersonic velocities
- High-performance wings with significant leading-edge thrust at supersonic speeds
- Transonic/supersonic longitudinal aerodynamic derivatives
- Transonic/supersonic lateral aerodynamic derivatives

**SUPERSONIC WATER**
- Design
- An experimental wind-tunnel investigation of a ram-air-spoiler and control device on a forward-control missile at supersonic speeds
- Tone noise of three supersonic helical tip speed propellers in a wind tunnel

**SUPERSONIC TRANSPORTS**
- ST COMCOSDE AIRCRAFT
- Supersonic transport aircraft noise, control of noise reduction and establishment of standards
- Inlet design studies for a Mach 2.2 advanced supersonic cruise vehicle
- Aerodynamic design and analysis of the AST-200 supersonic transport configuration concept
- Characteristics of the advanced supersonic technology AST-105-1 configured for long-range with Pratt and Whitney aircraft variable strea m control engines
- The flow through low cambered transonic turbine cascades
- Aerodynamics and heat transfer of transonic turbine blades at off-design angles of incidence
- Shock boundary layer interaction on high turning transonic turbine cascades
- The flow past a supersonic trailing edge in transonic turbine cascades
- Rolls-Royce RB.401-07 turbofan engine for business aircraft in the 1980's
- The flow through low cambered transonic turbine cascade
- An extension to the method of Garabedian and Korn for the calculation of transonic flow past an aerofoil to include the effects of a boundary layer wind tunnel models

**SUPERSONIC WAVES**
- The 1-4-1 system of jack movements for the flexible liners of supersonic wind tunnels
- Low-turbulence high-speed wind tunnel for the determination of cascade shock losses
- An exploratory investigation of quasi-free flying models in a supersonic short-duration wind tunnel
- Computerized heat-transfer and stress analysis of supersonic wind tunnel metal throat liners
- Transformation of coordinates associated with linearized supersonic motions
SURFACE DISTORTION
- Surface Defects
- Surface Cracks

Improved wave drag predictions using modified linear theory
- The determination of parameters of a chemically active magnetogasdynamics medium in the proximity of a wall.
- Supersonic transport via-via energy savings

[ASME Paper 79-GT-199]
[ASME Paper 79-GT-200]
[NASA-TM-75377]
[AC-150/5220-3]

SURFACE FINISHING
- Aircraft manufacturing quality assurance
- The comparative evaluation of prebond surface treatments for titanium --- military aircraft structures
- An automated system for phosphoric acid nitriding of aluminum alloys
- Use of coatings in turbomachinery gas path seals
- Surface finishing --- adhesive bonding of plastic film to metal airfoil surfaces

[ONERA, TP NO. 1979-40]
[ASME Paper 79-GT-182]
[NASA-T9-75377]
[NASA-TM-78503]
[NASA-TM-75377]

SURFACE GEOMETRY
- Application of an interactive graphics system for the design and optimization of aircraft lifting surfaces
- Numerical comparisons of panel methods at subsonic and supersonic speeds
- Three-dimensional lifting-surface theory for an annular blade row
- Effects of upper surface modification on the aerodynamic characteristics of the NASA 63 sub 2-215 airfoil section
- Vortex pattern development on the upper surface of a swept wing at high angle of attack

[ASME Paper 79-GT-182]
[的人都有数据库79-23588]
[NASA-TM-78503]
[NASA-TM-75377]

SURFACE INTERACTIONS
- Surface Reactions

Surface reactions --- adhesive bonding of plastic film to metal airfoil surfaces

[NASA-TM-75377]

SURFACE PROPERTIES
- Surface Coefficients of Friction
- Surface Skin Temperature (Non-Biological)
- Surface Cracks
- Surface Defects
- Surface Roughness
- Wall Temperature

Runway surface condition sensor

[AC-150/5220-13]
Sweepback

- Laboratory simulation of swept lightning strokes (Engineering test) p0680 A79-51131
- Some steady and oscillating airfoil test results, including the effects of sweep, from the tunnel spanning wing p0359 N79-20059

Sweep Forward Wings
- NT Trapezoidal Wings
  - NT Swept Back Wings
  - NT Delta Wings
  - NT Swept Forward Wings
  - NT Sweptback Wings

Viscous transonic flows about 3-D wings p0058 A79-13296
The high-lift characteristics in the case of the Y-wing concept [NSHP 79-0722] p0282 A79-28255
Application of Lagrange Optimization to the drag polar utilizing experimental data [AIAA PAPER 79-1833] p0634 A79-49335
The effect of canard relative size and vertical location on the subsonic longitudinal and lateral-directional static aerodynamic characteristics for a model with a swept forward wing — in the Langley 7x10 ft high speed tunnel [NASA-TM-78739] p0580 N79-20813

Sweep Wings
- NT Arrow Wings
- NT Delta Wings
- NT Swept Forward Wings
- NT Sweptback Wings
- NT Trapezoidal Wings

Skin And Spar Interface Program (SASIP) A-418

Subject Index

- Using tunnel test data. II p0695 A79-54042
- Vortex patterns develop on the upper surface of a swept wing at high angle of attack [NASA-TM-75377] p0300 N79-18914
- In-flight three-dimensional boundary layer and wake measurements from a swept supercritical wing p0352 N79-20002
- Possibilities for scale effect on swept wings at high subsonic speeds. Recent evidence from pressure plotting tests [SFC-18] p0177 N79-20999
- Strake leading edge sweep separation from the leading edges of wings of moderate sweep p0413 N79-22002
- Vortex patterns developing on the upper surface of a swept wing at high angle of attack p0178 N79-22007
- Subcritical drag minimization for highly swept wings with leading edge vortices p014 N79-22021
- Aerodynamic characteristics of the close-coupled canard as applied to low-to-moderate swept wings. Volume 1: General trends [AD-0663819] p0178 N79-22057
- Aerodynamic characteristics of a large-scale nacelle wing model with a swept wing and an augmented jet flap with hypersonic nozzles — Ames 40- by 80-Foot Wind Tunnel and Static Test Facility [NASA-TM-79236] p0590 N79-29144
- Wing/store flow-field measurements at transonic speeds using a laser velocimeter [AD-0663828] p0590 N79-29149

Sweepback Wings
- NT Arrow Wings
- NT Delta Wings
- NT Trapezoidal Wings

On the transonic-dip mechanism of flutter of a sweptback wing p0514 A79-81763
- Fundamentals of design. III - Y-D for combat aircraft p0536 A79-83725
- Near field problems in three-dimensional panel methods --- mathematical modeling of flow characteristics p0536 A79-83779
- Calculation of the flow around a swept wing, taking into account the effect of the three-dimensional boundary layer. Part 2: Wing with laminar boundary layer on the lower surface [NASA-TR-79-77066-01] p0702 N79-25176
- Skin And Spar Interface Program (SASIP) --- sweptback and variable sweep wings [AD-1071715] p0716 N79-33199

Squirting
- Some low speed experimental results on the effects of swirl and velocity distribution on an axi-symmetric jet p0194 A79-21999
- Instability of fluid flow in centrifugal injector p0279 A79-27731
- The effect of swirl on a ramjet dump combustor [AIAA 79-7042] p0279 A79-27731
- Test verification of a turbofan partial swirl combustor [AIAA PAPER 79-1197] p0469 A79-38981
- The application of multiple swirl modules in the design and development of gas turbine combustors [AIAA PAPER 79-1199] p0603 A79-38739
- Factors controlling stability of swirling flames at diffusers in gas turbines p0643 A79-50209

Squirting Wakes
- U TURBULENT WAKES
- Switches
- NT Switching Circuits
Feasibility study of mini-BPV for attack

Air Force - avionic related research required to
develop an effective high-speed runway exit system

Enhanced fighter mission effectiveness by use of
integrated flight systems

ADVANCED COMPUTER SYSTEMS DESIGN
Preparations for the application of current experience to future developments

Powerplant integration - The application of current experience to future developments

Aircraft air conditioning systems - Russian book

F-16 LRU test program - A systems approach

Line Replaceable Units

APNC Communications Addressing and Rerouting System /ACARS/ - The data link that got implemented and why

The evolving air transport avionics

Onboard navigation and flight control integrated
system architecture

Distributed time division multiple access /DTDMA/ - An advanced communication technique with
application to CCC and integrated CWI --- Command, Navigation, Identification

Integration of GPS with inertial navigation systems

Navigational systems requirements via collision
risk model --- for aircraft

Shop test success in a function of the airborne
system design --- in F-16 avionics

Airworthiness of helicopters /Cierva Memorial
Lecture/

Simulation of automatic flight control system
failures

The DC-9-80 digital flight guidance system's
monitoring techniques

Implementation of the Omega system for air
navigation

An economical approach to an accident information
retrieval system /AIRS/

Flight control safety - A total systems approach

CITS - Tomorrow's test system today --- Central
Integrated Test System for F-16 avionics

Application of the fault tree in fault testing and
design improvement --- of aircraft components

Drone formation control system /DFCS/ - A new
generation test range system

Disaggregate mode-share models for air freight
policy analysis

A system for interdisciplinary analysis - A key to
improved rotorcraft design

APTCF parameter identification experience --- Air
Force Flight Test Center aircraft flight testing

Multifunction Inertial Reference Assembly
Technology (MIRA) simulation development,
configuration evaluation, and test plan
development

Analysis of water ingestion effects in axial flow
compressors

Preliminary feasibility assessment of
Multi-function Inertial Reference Assembly (MIRA) --- using the F-15 and a transport aircraft

Aerolift point of view and objectives on computer
aided design

The NASA-langley 7-inch transonic cascade wind
tunnel at the Deutsche Versuchsanstalt fuer
Luft- und Raumfahrt and first test results

System approach to life-cycle design of
pavements. Volume 3: IFMS program listing
T-53 ENGINE

Computer-assisted high-speed balancing of T53 and T55 power turbines
[NASA CR-135449] p0031 179-10461

Study of T53 engine vibration
[NASA CR-135449] p0037 179-10461

T-55 ENGINE

Effect of forward velocity and crosswind on the reverse-thrust performance of a variable-pitch fan engine
[IAA PAPER 79-0105] p0200 179-23512

Computer-assisted high-speed balancing of T53 and T55 power turbines
[NASA CR-135449] p0631 179-49088

T-63 ENGINE

Testing to assess the effect of degraded fuel specifications on the cold start ability of a T63-A-700 engine
[IAA 79-7009] p0329 179-29384

Infrared suppressor effect on T63 turbofan engine performance
[NASA CR-78-8970] p0045 179-11043

T-55 ENGINE

Measurements of inlet flow distortions in an axial flow fan (6 and 9 blade rotor)
[NASA CR-157342] p0059 179-13009

Annual review of aircraft accident data: US army aviation
[ADA-059386] p0217 179-15925

TACAN

New-generation TACAN equipment
[ADA 79-0105] p0057 179-13269

Fail-safe output stage for navigation transmitters --- reliability design for TACAN equipment
[ADA 79-13271] p0057 179-13269

Electronically scanned TACAN antenna
[ADA 79-13272] p0057 179-13269

TACAN NIM program --- Reliability Improvement
[Warranty for avionics] p0072 179-15359

Navtex/GPS/Global Positioning System/ and electronic counter measures --- TACAN system vulnerability
[AD-057329] p0251 179-25492

A navigation filter for an integrated GPS/UTIDS/INS system for a tactical aircraft --- Joint Tactical Information Distribution System
[AD-057342] p0048 179-36087

Increasing the accuracy of integrated Doppler/TACAN navigation through frequent change of TACAN stations
[AD-056491] p0514 179-41778

System capacity of the approach and landing aid
[SETAC] p0654 179-53855

TACAN

Acquisition planning for tactical avionics systems
[AD-056960] p0163 179-18089

Motion and force cueing requirements and techniques for advanced tactical aircraft simulation
[AD-059913] p0224 179-15591

Motion and force cueing requirements and techniques for advanced tactical aircraft simulation
[AD-056491] p0438 179-23102

An asynchronous data transmission system with low error probability for the SETAC landing aid
[Spectral sensitivity] p0675 179-31468

TACHISTOSCOPES

Tachystoscopic testing of onboard instruments
[ADA 79-0060] p0645 179-38017

TACTICAL AIR NAVIGATION

U TACAN

TACTENS

Computerization of tactical aircraft performance data for fleet application
[AD-059912] p0162 179-14087

TAGGING

U HARFING

TAIL ASSEMBLIES

Positive tail load for minimum induced drag of subsonic aircraft
[IAA PAPER 79-0060] p0080 179-16494

Nonlinear gust loads analysis - Monte Carlo vs. describing function analysis
[IAA PAPER 79-0060] p0139 179-19511

Extensive cost reduction studies: Composite empennage component - L-1011 commercial airliner
[p187 179-20007

T-55 ENGINE

Experimental investigation of the endurance of airplane fuselage sections in acoustic loading
[AD-053620] p0346 179-31716

Analytical and experimental investigation of T-55 engine performance contribution to directional control in hover and forward flight
[AD-057329] p0633 179-49106

Highly survivable truss type tail boom
[AD-0505430] p0036 179-10052

Comparison of the aerodynamic properties of an aeroplane with the tail-first configuration and with the conventional configuration
[EL-R-785-11520] p0285 179-17799

Experimental studies on the effects of a sting support on the pressure distribution around a spherical object
[NASA CR-156627] p0285 179-17800

Effects of vertical tail flexibility on the aerodynamic characteristics of a 0.03-scale NASA Space Shuttle Orbiter at Mach numbers from 0.90 to 1.55
[AD-0602377] p0369 179-20175

Highly survivable truss tail boom
[AD-0606181] p0620 179-22079

Fail-safe optimal design of structures with substructuring
[AD-059386] p0084 179-23950

Optimum tail fairings for bodies of revolution --- computerized design
[AD-0607927] p0539 179-26031

TAIL MOUNTINGS

U TAIL ASSEMBLIES

U HORIZONTAL TAIL SURFACES

TAIL ROTORS

NT HELICOPTER TAIL ROTORS

Helicopter tail rotor noise generated by aerodynamic interactions
[AD-057342] p0315 179-18689

Ten years of aeronautical experience with the fenestron and conventional tail rotor
[IAA 79-58] p0633 179-49108

Vibratory ice protection for helicopter rotor blades
[AD-057329] p0045 179-11038

Fusion design study of a tail rotor Blade jettison concept
[AD-057329] p1051 179-13029

Interactional aerodynamics of the single rotor helicopter configuration. Volume 2-C: Harmonic analysis of aircraft surface pressure data, runs 7-14, aft section
[AD-056130] p0228 179-16808

Interactional aerodynamics of the single rotor helicopter configuration. Volume 2-F: Harmonic analysis of aircraft surface pressure data, runs 15-22, aft section
[AD-056130] p0229 179-16810

Conspicuity assessment of selected propeller and tail rotor paint schemes
[FAA-AN-78-709] p0229 179-16813

TAIL SURFACES

NT HORIZONTAL TAIL SURFACES

NT 2 TAIL SURFACES

Flexibility of the bearing pedestals of control-surface hinge plates --- aircraft structures
[AD-059386] p0687 179-52145

Pressure distributions on three different cruciform a'ft-tail control surfaces of a wingless missile at Mach 1.60, 2.36, and 3.70

TAILLESS AIRCRAFT

NT P-102 AIRCRAFT

NT P-106 AIRCRAFT

NT MIRAGE 3 AIRCRAFT

Very large vehicles - To be or not to be --- aircraft design concepts
[AD-056130] p0338 179-30884

Large-vehicle concepts --- aircraft design
[AD-056130] p0338 179-30885

TAILS (ASSEMBLIES)

U TAIL ASSEMBLIES

NT VERTICAL TAIL""
TECHNIQUES

TECHNICAL FORECASTING

The need and impact of long-term advances in aircraft technology - The airliner's point of view
[DGLR PAPER 78-057] p0005 679-10410

Advanced turbofan engines for low fuel consumption
[DGLR PAPER 78-CT-192] p0101 679-10916

New technologies as basis for development of propulsion systems for future fighter aircraft
[DGLR PAPER 78-125] p0061 679-14078

Propulsion concepts for future fighter aircraft
[DGLR PAPER 78-126] p0061 179-14079

Cockpit displays for advanced navigation - Circa 2000
[p0077 179-16174

Advanced turbine powerplants for future helicopter systems
[p0078 179-16228

Rotorcraft technology for the year 2000
[p0078 179-16229

New technological advances in the development of helicopter turbine powerplants for the 1980's
[p0078 179-16232

The Rolls-Royce Gem turbofan engine for business aircraft
[p0078 179-16233

Chief features of future helicopter avionics
[p0079 179-16237

The proposed cryogenic European Transonic Wind Tunnel /ETW/
[p0112 179-17118

Automation in air traffic control - Planning for the 80's within the province of the Federal Institute of Air Traffic Control
[p0117 179-17693

An operators viewpoint on future rotorcraft R & D criteria
[p0132 179-18668

The value of various technology advances for several V/STOL configurations
[p0133 179-18672

Thoughts on the future of military aviation. I
[DGLR PAPER 78-184] p0151 179-20025

Projected aircraft systems development
[AAS PAPER 78-194] p0189 179-21278

A look at the near future --- computerized flow control systems for AIC
[p0204 179-23585

Integrated AIC development - The next decade: A Safety Board viewpoint
[p0204 179-23587

Technology for future air transports
[DIAA PAPER 77-0539] p0253 179-25853

General aviation aircraft in the 1980's
[DIAA PAPER 79-0566] p0254 179-25866

The coming of age of digital electronics in commercial transports --- emphasizing signal processing technology and Boeing 767 avionics
[AAS PAPER 79-0686] p0275 179-27352

Advanced supersonic technology and its implications for the future
[AAS PAPER 79-0684] p0276 179-27359

Future advanced technology rotorcraft
[DIAA PAPER 79-0705] p0276 179-27366

Future V/STOL requirements for omnidirectional low range airspeed
[p0331 179-29480

The future shape of medias and long-range civil engines
[p0333 179-29607

Tactical pilotless aircraft - Do they really have a future
[p0344 179-31236

Ejection systems in the year 2000
[p0402 179-33622

Advanced nuclear systems for large aircraft
[AIAA 79-0852] p0405 179-33835

Global services systems - Space communication
[AIAA 79-0964] p0406 179-34761

Rolls-Royce RB.401-07 turbofan engine for business aircraft in the 1980's
[SAGE PAPER 790620] p0457 179-36748

Impact of advanced technologies on aircraft design
[AIAA PAPER 79-0705] p0460 179-37085

New materials for future commercial aircraft
[AIAA PAPER 79-1804] p0666 179-47889

Lil electric subsystems for next generation transport aircraft

SUBJECT INDEX

[AIAP PAPER 79-1832] p0608 179-47906

User requirements for future combat search and rescue vehicles
[p0620 179-48683

The future of the helicopter
[p0696 179-54200

Aeronautical systems technology needs: Test facilities and test equipment
[AD-A058290] p0906 179-12104

New advances for future small civil turbine engines: Overviewing the SAGE studies

Total environment survivability methodology
[p0330 179-18971

Demand for large freighter aircraft as projected by the NASA cargo/logistics airlift system studies

The 1990 system characteristics and requirements
[p0548 179-27113

Airfreight forecasting methodology and impact
[p0548 179-27114

Hypersonic airframe structures: Technology needs and flight test requirements

Technology trends and maintenance workload requirements for the A-7, F-4, and F-14 aircraft
[AD-A070936] p0701 179-32153

TECHNOLOGIES

ENERGY TECHNOLOGY

Marine Technology

Military Technology

Technology Assessment

Polish radar developments
[p0002 179-10283

Helicopter transport efficiency payoffs from advanced technology
[DIAA PAPER 780536] p0005 179-10405

Aircraft lighting equipment - interior and exterior illumination
[p0016 179-11366

Energy conservation aircraft design and operational procedures

Aircraft piston oils: Past - present - future
[p0029 179-12377

New construction materials for gas turbine engines and technology for processing these materials
[p0026 179-12533

Technological advancements in general aviation avionics
[p0052 179-13083

New technologies for transport aircraft - Expectations and hopes of the air transportation industry
[DGLR PAPER 78-059] p0060 179-14061

Technology for aircraft energy efficiency
[p0062 179-14136

Very large aircraft - Technology and operational implications
[p0062 179-14137

The integration of airport planning and environmental assessment - A focus on air quality analysis
[p0075 179-16092

Computer-aided design at Israel Aircraft Industries
[p0077 179-10424

U.S. Army helicopter technology initiatives
[p0133 179-18671

The role of fluid mechanics in aviation technology
[DGLR PAPER 78-218] p0183 179-20477

Present and future developments in aerospace materials and structures
[p0208 179-26081

Advances in avionics --- emphasizing microprocessor technology and integrated circuits
[DIAA PAPER 79-0562] p0253 179-25862

Prop-fan propulsion - Its status and potential
[SAGE PAPER 780993] p0253 179-25860

Advanced overrunning clutch technology --- DE-60A helicopter transmission application
[SAGE PAPER 780139] p0258 179-25907

The continuity factor in aircraft development
[p0260 179-26536

Design against fatigue - Current trends --- for helicopters
[AIAA 79-0668] p0275 179-27355

Perspectives of technological development for helicopters
[AIAA 79-0701] p0276 179-27364
Recent developments in active control technology
For fighter aircraft design
[AIAA 79-0708] p0277 A79-27368

Technological evolution of inertial navigation for aircraft
Technology requirements and readiness for very large vehicles
[AIAA 79-0851] p0405 A79-33834

New opportunities for future small civil jet engines - Overviewing the GATE studies
[SAE PAPER 790619] p0857 A79-36747

Propulsion system sensitivities for a strategic aircraft
[AIAA PAPER 79-1121] p0466 A79-38592

Development of materials and processes for engine components - Current and future points of interest
p0509 A79-40680

Progress on Variable Cycle Engines
Military-technology-related flight testing in the framework of DFPL/BMW cooperation - States and perspectives
p0512 A79-41233

British lighter-than-air activity - A review
[AIAA 79-1583] p0252 A79-42385

Canadian interest in modern LTA transport
[AIAA 79-1585] p0252 A79-42386

Recent advances in fire resistant materials in aircraft construction
p0530 A79-43269

New fields for the development of aircraft equipment opened up by the use of modern computer technology -- digital systems for civil aviation
p0533 A79-43501

V/STOL Technology - Where do we stand
p0604 A79-47607

Recent V/STOL aircraft designs
p0604 A79-47608

Manned strategic system concepts 1990-2000
p0605 A79-47882

Historical development of worldwide supersonic aircraft
[AIAA PAPER 79-1815] p0607 A79-47895

From HMT to future fighters - Highly Maneuverable Aircraft Technology assessment
p0607 A79-47896

A status report on the advanced FIREFLY assessment program
p0615 A79-48609

Terrain-following radar - Key to low-altitude flight
p0620 A79-48866

Agricultural helicopters - test and simulation results
[AHS 79-60] p0627 A79-49064

Superplastic forming diffusion bonding of titanium helicopter airframe components
[AHS 79-33] p0630 A79-49085

Lockheed urges hydrogen fuel
p0634 A79-49224

A design perspective on new technologies for general aviation
p0636 A79-49486

The feasibility of modern dirigibles
[ONEA, TP No. 1979-93] p0636 A79-49541

The application of radars and 'G' band radio altimeters to modern military aircraft
p0636 A79-49550

Road vehicle operation of air cushion supported vehicles - An evaluation of technical and economic problems
p0641 A79-49910

An evaluation of sidestick force/deflection characteristics on aircraft handling qualities
p0644 A79-50428

Evaluation of the radar altimeter reference method for determining altitude system positioning errors
p0645 A79-50436

Non-flammable polyside materials for aircraft and spacecraft applications
[IFP PAPER 79-204] p0691 A79-53355

Flight control/avionics research - impact on future civil helicopter operating efficiency and mission reliability
p0652 A79-53627

Assessment of software development and maintenance costs due to retrofit of embedded avionics computer
[AIAA 79-1906] p0679 A79-59303

The status of rotor noise technology: One man's opinion
p0679 A79-59303

Planning for airport access: An analysis of the San Francisco Bay area. Technological options
p0679 A79-59974

Non-destructive evaluation systems for the naval aviation maintenance environment technology assessment
[AD-0056146] p0805 A79-12003

Comprehensive helicopter analysis: A state of the art review

A summary report on store heating technology
[AD-4059415] p0104 A79-14030

NPV electric power system study. Phase 1: Technology assessment
[AD-806036] p0165 A79-14102

Large cargo aircraft: A technology assessment, volume 1
[PR-286656/6] p0217 A79-15927

Large cargo aircraft: A technology assessment, volume 2
[PR-286657/9] p0217 A79-15928

Launch and Recovery --- technology assessment
p0219 A79-15951

Recent advances in television visual systems
p0223 A79-15986

Air traffic control in the year 2000
p0231 A79-16827

New initiatives in high-altitude aircraft
p0239 A79-17000

Hydrogen technology, 1900-1945
p0239 A79-17008

Alternative turbine cooling technology
p0304 A79-18984

Industrial centrifugal compressors, volume 1
[PTF-LECTURE-SEIES-95-VOL-1] p0308 A79-19385

Turbocharger design and development - technology assessment and design optimization
p0309 A79-19393

A study on the utilization of advanced composites in commercial aircraft wing structure:
Executive summary
[NASA-CHR-159892-1] p0369 A79-20189

Some aspects of aircraft jet engine fuels
[NASA-THR-75195] p0370 A79-20264

Study of an advanced General Aviation Turbine Engine (GATE)
[NASA-CHR-159559] p0383 A79-21073

STOL technology, volume 1
[FTI-LECTURE-SEIES-60-701-1] p0429 A79-22996

The science and technology of low speed and rotorless flight, part 1
[NASA-CHR-2085-77-1] p0479 A79-23889

Overview of helicopter ice protection system developments
p0481 A79-23919

Premixed Prevaporized Combustor Technology Forum
[NASA-CP-2078] p0496 A79-24994

Advanced low emissions catalytic combustor program at Pratt and Whitney
p0497 A79-25012

Non-destructive methods for the early detection of fatigue damage in aircraft components
p0502 A79-25417

Feasibility study for a numerical aerodynamic simulation facility: Summary
[NASA-CHR-152286] p0543 A79-26067

State of the art survey of technologies applicable to NASA's aerodynamics, avionics and controls program
[NASA-CHR-159595] p0546 A79-27087

The 1990 system characteristics and requirements
p0548 A79-27113

New devices for digital communications in avionics
p0576 A79-31081

State of the art in digital signal processing with application to multiple access systems
p0676 A79-31487
Roadrunner: A novel radar guidance concept  

TECHNOLOGY UTILIZATION

Commercial test software development practices for military applications --- for avionics support equipment  
p0023 779-12320

European scientific notes, volume 32, number 5  
[ AD-0656400]  p0465 779-23885

NASA gear research and its probable effect on rotorcraft transmission design  

TELECOMMUNICATION

New-generation Tacan equipment  
p0057 779-13269

Multifunctional potentials of present-day radio navigation systems  
p0058 779-13277

The challenge of new technology for avionics testing --- U.S. Air Force assessment  
p0080 779-16843

U.S. Coast Guard utilization of remote sensing techniques for ocean surveillance  
p0158 779-22673

New technology in commercial aircraft design for minimum fuel operating cost  
[ AIAA 79-0690]  p0275 779-27356

Compromise between ecologic concerns and application of new technologies in the definition of a new airplane project  
[ AIAA 79-0693]  p0276 779-27358

Enhanced capabilities of future fighters as a result of BIMAT  
[ AIAA 79-0698]  p0277 779-27370

Large lighter-than-air vehicles  
[ AIAA 79-0887]  p0404 779-33831

New technologies for general aviation aircraft  
[ SAE PAPER 790613]  p0456 779-36762

Dry friction in the aerospace industry  
p0776 779-39973

Unmanned mini-blimp system  
[ AIAA 78-1603]  p0524 779-42401

Coast guard missions for lighter-than-air vehicles  
[ AIAA 79-1570]  p0524 779-42493

Applications of metal-matrix composites, the emerging structural materials  
p0532 779-43320

Aerospace applications of oscillators --- for location navigation, detection, telecommunications, and instrumentation  
[ ONERA, TP NO. 1979-48]  p0535 779-43621

Advanced 8K9 electrical systems  
p0615 779-48615

Radar signal processing development for application of VHSI  
p0618 779-48664

Road flood operation of air cushion assisted vehicles - An evaluation of technical and economic problems  
p0681 779-49910

USAF thrust in aircraft electric power technology  
p0686 779-51916

The technology of brazing and soldering as broad-based and vital to the industrial economy /1979 Adams Lecture/  
p0689 779-52856

Identification of high payoff research for more efficient applicator helicopters in agriculture and forestry  

Research and development activities in Italy in the field of aerospace structures and materials  
[ AGARD-TC-675]  p0849 779-24202

Advanced low emissions catalytic combustor process at General Electric  
p0947 779-25011

Recent experience in the development and application of LCC models  
p0502 779-25410

Air cushion landing gear applications study  
[ NASA-CR-155002]  p0540 779-26045

Composite structural materials  

Spinoff 1979  
[ NASA-TN-80481]  p0589 779-29108

TELESCOPING

A flight investigation of basic performance characteristics of a teetering-rotor attack helicopter  

TEFLOX (TRADEMARK)

Transient ablation of Teflon in intense radiative and convective environments  
p0462 779-38123

TELEVISION

NT AIRCRAFT TELEVISION

NT CLOSER CIRCUIT TELEVISION

NT DATA LINKS

NT DEFENSE COMMUNICATIONS SATELLITE SYSTEM

NT GROUND-AIR-GROUND COMMUNICATIONS

NT OPTICAL COMMUNICATION

NT PULSE COMMUNICATION

NT RADIO COMMUNICATION

NT RADIO BEAY SYSTEMS

NT SPACECRAFT ANTENNAS

NT SPACECRAFT COMMUNICATION

NT TELEMETRY

NT TIME DIVISION MULTIPLE ACCESS

NT VIDEO COMMUNICATION

NT YOTCH COMMUNICATION

NT WIDEAER COMMUNICATION

Global services systems - Space communication  
[ AIAA 79-0946]  p0408 779-34761

Tethered telecommunications, broadcast, and monitoring systems  
[ AIAA 79-1603]  p0524 779-42400

Aerospace applications of oscillators --- for location navigation, detection, telecommunications, and instrumentation  
[ NASA-CE-15885]  p0535 779-43621

Investigation of the feasibility of using the discrete address beacon system data link for non-MC communications  
[ AD-058415]  p1000 779-13023

European scientific notes, volume 32, number 5  
[ AD-0656400]  p0645 779-23885

State of the art in digital signal processing with applications to multiple access systems  
p0676 779-31487

TELECONTENTS

0 TELEMETRY

NT TELEMETRY

NT RADIO TELEMETRY

Pressure measurements on a spinning wind tunnel model by means of telemetry  
p0113 779-17593

TELEMETRY AND SYSTEMS

Strategic satellite communications come of age --- Air Force airborne and ground UHF teletype terminals  
p0190 779-21350

TELEVISION CAMERAS

Stereovisual reconnaissance system  
p0113 779-17147

A three-channel high-resolution-TV image generation system --- flight simulator application  
p0281 779-28160

TELEVISION EQUIPMENT

NT TELEVISION CAMERAS

NT TELEVISION SCREENS

NT CLOSED CIRCUIT TELEVISION

Method of eliminating static and dynamic errors in the reproduction of motion of TV-simulator displays --- for aircraft flight  
p0020 779-12153

General principles of automatic video trackers. II --- Area trackers  
p0071 779-15159

Presentation of thermal or residual-light TV images on head-up displays for night or all-weather operations --- for military helicopters  
p0079 779-16240

Elimination of scale and luminance distortions in thermal imaging systems with a large field of view --- onboard aircraft  
p0277 779-27416

A three-channel high-resolution-TV image generation system --- flight simulator application  
p0281 779-28160

Aviation wide angle visual system //AWSV/ - Visual system performance  
p0281 779-28161

Laboratory development of computer generated image displays for evaluation in terrain flight training  
p0281 779-28161

A-426
Characteristics of an Air Cushion Landing System

A unique facility for V/STOL aircraft hover testing

Low speed testing techniques for V/STOL aircraft

The low-density channel of the Aerodynamic Institute

Laboratory tests to determine the physical damage /direct effects/ caused by lightning

Qualification test/

Aeronautical systems technology needs: Test

facilities and test equipment

Definition study for variable cycle engine testbed

engine and associated test program

Feasibility evaluation of advanced eddy current

inspection equipment for use in Naval aviation maintenance environment

Evaluation of motor gasoline in the jet fuel

tank of a fighter \textemdash\ fuel for gas turbine aircraft engines

Development testing of stages for centrifugal

process compressors

TEST FACILITIES

AEREOCHIC CHAMBERS

BALLISTIC RANGES

BLOWDOWN WIND TUNNELS

CASCADE WIND TUNNELS

ENGINE TESTING LABORATORIES

ENVIRONMENTAL LABORATORIES

HYDRAULIC TEST TUNNELS

HYPERSONIC WIND TUNNELS

LOW SPEED WIND TUNNELS

MISSILE RANGES

SHOCK TUNNELS

SPLITTER WIND TUNNELS

SUBSONIC WIND TUNNELS

SUPERSONIC WIND TUNNELS

TEST RANGES

TEST STANDS

WIND TUNNELS

Propulsion test facilities technical capabilities

and international use

Application of shock-tube technology to the measurement of heat-transfer rate to gas turbine components

Boeing's noise technology facilities

Flow field calibration results for the AEDC High

Enthalpy Ablation Test Facility /BET/4 /

An innovative technique for static and dynamic

V/STOL testing

Testing of the 704 missile-configured AH-1F

helicopter \textemdash\ Tube-launched Optically-tracked

Wire guided

Wire-guided

Design and development of a rotating water table

for flow studies in turbomachine stages

Aeronautical test facilities capabilities and use

The low-density channel of the Aerodynamic Institute

Naval Air Development Center's unique environmental test facilities

Low speed testing techniques for V/STOL aircraft

in the Princeton dynamic model test program

Recent advances in indirect lightning effects

research

Unique environmental test facilities at Orlando

Division of Martin Marietta Aerospace

A unique facility for V/STOL aircraft hover testing

A streamlined control system development process

\textemdash\ to optimize aircraft propulsion system

performance

Microcomputer control of a test facility \textemdash\ for

avionics

NASA/Princeton digital avionics flight test facility

Laboratory test procedures to determine lightning

attachment points on actual aircraft parts /A

qualification test/

Laboratory tests to determine the physical damage

/direct effects/ caused by lightning

NASA/FAA general aviation crash dynamics program -

An update

Icing test facilities at the National Gas Turbine

Establishment

Jet engine test cells: Emissions and control

measures, phase 2

Aeronautical systems technology needs: Test

facilities and test equipment

A thermal investigation of the AFAPL turbine

engine heat transfer test facility

Icing test facilities and test techniques in Europe

Icing test facilities in Canada

The NASA high pressure facility and turbine test rig

Design outline for a new multirotor NCT simulation

facility at NASA-Ames Research Center

Small fan-jet engines

Advanced Technology Airfoil Research Research

Volume 1, part 1 \textemdash\ conference on development of

computational codes and test facilities

NASA-CP-2085-2085

Langle airfoil-research program

Developments in testing airfoil techniques at

University of Southampton

Tranasonic Aerodynamic Testing

Tranasonic test facilities: The Ludwig tube

Design and characteristics of high Reynolds number

test facilities: The Ludwig tube

Special Ground testing facilities and testing

techniques for STOL aircraft

Dynamic evaluation of experimental integral

fuel-tank sealants, part 2

Ground winds for Kennedy Space Center, Florida,

1979 revision

Evaluation of a simplified gross thrust

calculation technique using two prototype Y100

turbofan engines in an altitude facility

A new facility for structural engine testing

Compressor research facility aerodynamic analysis

TEST PILOTS

The test pilot in the airline industry or 'My bags

are packed and I'm ready to go'

TEST RANGES

BALLISTIC RANGES

MISSILE RANGES

Drone formation control system /DPCS/ \textemdash\ A new

generation test range system

A new dimension. Wallops Island flight test

range: The first fifteen years

TEST STANDS

Experimental investigation of the endurance of airplane fin sections in acoustic loading
TEST VEHICLES


TESTERS
U TEST EQUIPMENT

TESTING TIME
Notes concerning testing time requirements in steady and unsteady measurements p0439 N79-23112

TESTS
Effects of a military cargo pod and tail fins on the aerodynamic characteristics of a large wide-body transport model [NASA-TP-80052] p0363 N79-20101

TETHERED BALLOONS
The influence of balloon motions on the longitudinal stability of tethered aerostats [AIAA 79-0465] p0263 A79-26649

Tethered telecommunications, broadcast, and monitoring systems [AIAA 79-1605] p0524 A79-42400

TETHERING
An innovative technique for static and dynamic V/STOL testing [NSC 78-42] p0123 A79-18165

A unique facility for V/STOL aircraft hover testing --- Langley Impact Dynamics Research Facility [NASA-SP-1478] p0955 N79-29199

TETHERLINES
Dynamic stability of a flight vehicle laying out an uncoiling line p0398 A79-32919

TEXAS
An evaluation of the bird/aircraft strike hazard Dynamic Air Force Base, Texas [AD-A0668026] p0540 N79-26039

TEXTBOOKS
 Aerodynamics [NASA-TP-7-765] p0480 N79-23908

TP-30 ENGINE
Measurements and predictions of flyover and static noise of an afterburning turbofan engine in an F-111 airplane [AIAA 76-7018] p0328 A79-29391

Combined pressure and temperature distortion effects on internal flow of a turbofan engine [AIAA PAPER 79-1305] p0471 A79-39031

Emission mass probe investigation of a mixed flow TP30 turbofan engine [AIAA 79-23] p0365 N79-20115

TP-30 ENGINE
Parts tracking and engine history recording for on-condition maintenance [AIAA PAPER 79-1280] p0509 A79-40486

TP-41 ENGINE
TP-41 condition monitoring system effectiveness study p0800 A79-16440

TPX AIRCRAFT
U P-111 AIRCRAFT

SUBJECT INDEX

THEODORS
NT SIMILARITY THEOREM

THEORETICAL PHYSICS
Contributions to fluid mechanics p0676 N79-31529

THERMAL BOUNDARY LAYER
High speed interference heating loads and pressure distributions resulting from eleven deflections --- shock wave interaction effects on hypersonic aircraft surfaces [AIAA PAPER 79-0165] p0142 A79-19562

Numerical methods for solution of radiative-convective heat transfer problems --- radiative boundary layer --- for hypersonic blunt bodies in dense atmosphere p0528 A79-42971

THERMAL CONDUCTIVITY
Most rational linearization of nonlinear unsteady heat conduction problems --- for flight vehicle parts and engines p0613 A79-48501

THERMAL CONTROL COATINGS
NASA thermal barrier coatings --- Summary and update p0189 A79-21295


THERMAL CYCLING TESTS
Sumption of defects in the case of nonisothermal programmed loads --- for supersonic transport propulsion system components p0200 A79-12164

Effect of a chromium-containing fuel additive on hot corrosion p0261 A79-26566

Thermal cycling endurance problems in gas-turbine parts p0266 A79-26838

Static evaluation of surface coatings for compliant gas bearings in an oxidizing atmosphere to 650 C p0347 A79-31957

Prospects of using wedge-shaped models for investigating thermal fatigue of turbine blades p0398 A79-32825

Fabrication research for supersonic cruise aircraft --- TF-12 skin structures p0529 A79-43283

THERMAL DECOMPOSITION
NT PYROLYSIS
The temperature at which thermal dissociation is initiated in jet fuels under static conditions p0564 A79-44853

Evaluation of the temperature of the initiation of jet fuel decomposition by means of the ‘hardness factor’ p0523 A79-48857

THERMAL DEGRADATION

THERMAL EFFECTS
U TEMPERATURE EFFECTS
THERMAL EFFICIENCY
U THERMODYNAMIC EFFICIENCY
THERMAL ENVIRONMENTS
Integrated Thermal Avionics Design (ITAD) [AD-A0661227] p0292 A79-17855

THERMAL EXPANSION
Pressure-controlled thermal expansion welding of advanced composite BPF wing structural parts p0209 A79-24093

THERMAL FATIGUE
Flame-composite reinforcement of cracked aircraft structures Thermal-stress and thermal-fatigue studies p0111 A79-17018

Prospects of using wedge-shaped models for investigating thermal fatigue of turbine blades p0398 A79-32825

Fatigue acceleration in box beams under mechanical and thermal stress [second series] [AD-RF-3817] p0226 A79-16311

A contribution on thermal fatigue in cooled turbine blading p0552 A79-27153
<table>
<thead>
<tr>
<th>Subject Index</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>THERMOELASTICITY</td>
<td>Principles of jet engine operation [AD-A056158] p0046 W79-11050</td>
</tr>
<tr>
<td>THERMODYNAMICS</td>
<td>Thermodynamics of organic compounds [AD-A065664] p0042 W79-22322</td>
</tr>
<tr>
<td></td>
<td>Air Force Academy aeronautics digest, fall 1978 [AD-A065984] p0060 W79-30113</td>
</tr>
<tr>
<td>THERMOMECHANICAL TREATMENT</td>
<td>THERMOPLASTIC FILMS</td>
</tr>
<tr>
<td></td>
<td>Dynamic stall of an airfoil with leading edge bubble separation involving time dependent re-attachment [AD-A067374] p0309 W79-193396</td>
</tr>
<tr>
<td>THERMOGRAMS</td>
<td>RECORDING INSTRUMENTS</td>
</tr>
<tr>
<td>THERMOSETTING RESINS</td>
<td>Thermophysical properties, 1978 --- thermophysical properties</td>
</tr>
<tr>
<td>THERMOPHYSICAL PROPERTIES</td>
<td>THERMOPLASTIC FILMS</td>
</tr>
<tr>
<td>THIN AIRFOILS</td>
<td>Theory of lifting surface in fluids of high electrical conductivity [AIAA PAPER 79-0204] p0025 W79-12394</td>
</tr>
<tr>
<td>THIN FILMS</td>
<td>Unsteady thin airfoil theory for transonic flows with embedded shocks</td>
</tr>
<tr>
<td>THIN WALLED SHELLS</td>
<td>Computation of aerodynamic interference effects on oscillating airfoils with control in ventilated subsonic wind tunnels</td>
</tr>
<tr>
<td>THIN WALLS</td>
<td>Behavior of elastic systems in separated flow</td>
</tr>
<tr>
<td>THIN WINES</td>
<td>Nonsteady flow of an incompressible liquid over slender permeable profiles</td>
</tr>
<tr>
<td>THIN WINGS</td>
<td>On the design of thin subsonic airfoils</td>
</tr>
<tr>
<td></td>
<td>Supersonic unstalled flutter --- aerodynamic loading of thin airfoils induced by cascade motion</td>
</tr>
<tr>
<td>NT THERMAL STABILITY</td>
<td>A method of solving multicriteria optimization problems for load-bearing structures --- for large aspect ratio wings</td>
</tr>
<tr>
<td></td>
<td>Regimes of supersonic flow past thin wings</td>
</tr>
<tr>
<td></td>
<td>Theory of large-aspect ratio wings in transonic gas flow</td>
</tr>
<tr>
<td></td>
<td>Calculation of supersonic flow past wings with consideration of tangential discontinuities shed from the edges within the scope of a model using a system of Tuler equations</td>
</tr>
<tr>
<td></td>
<td>Lifting surface theory for skewed and swept subsonic wings</td>
</tr>
<tr>
<td></td>
<td>Slender wing in compressible flow --- Russian book</td>
</tr>
<tr>
<td></td>
<td>Second approximation in theory of a finite-span thin wing in a hypersonic gas flow</td>
</tr>
<tr>
<td></td>
<td>Unsteady hypersonic gas flow past a thin finite-span wing</td>
</tr>
<tr>
<td></td>
<td>Obtaining solutions of the lifting-surface equation</td>
</tr>
<tr>
<td></td>
<td>A numerical solution of supersonic and hypersonic viscous flow fields around thin planar delta wings</td>
</tr>
<tr>
<td></td>
<td>Effect of canard vertical location, size, and deflection on canard-wing interference at subsonic speeds</td>
</tr>
<tr>
<td></td>
<td>Theory of this wing in a supersonic flow with consideration of the non-equilibrium state of excitation of oscillating degrees of freedom</td>
</tr>
</tbody>
</table>

Additional references are listed in the document, including papers and reports, for detailed information on various topics related to aerodynamics, thermodynamics, and materials science.
THREE DIMENSIONAL FLOW

THREE DIMENSIONAL BOUNDARY LAYER
An experimental study of three-dimensional turbulent boundary layer and turbulence characteristics inside a turbomachinery rotor passage [ASME PAPER 78-DE-114] p0001 A79-10266
Measurements in three-dimensional turbulent boundary layer on a yawed flat plate induced by leading edge vortex p0052 A79-13150

Viscous transonic flows about 3-D wings
Stability of three-dimensional compressible boundary layers over wings with suction [AIAA PAPER 79-19631] p0009 A79-10797
A method for the calculation of 3D boundary layers on practical wing configurations p0066 A79-38906
In-flight three-dimensional boundary layer and wake measurements from a swept supercritical wing p0052 A79-20002
Calculation of the flow around a swept wing, taking into account the effect of the three-dimensional boundary layer. Part 2: Wing with laminar boundary layer on the lower surface [ML-78-77066-U] p0702 A79-32176

THREE DIMENSIONAL COMPOSITES
Multi-dimensional advanced composites for improved impact resistance p0208 A79-20800
Three-dimensional laminate plates with through and part-through cracks p0708 W79-32276

THREE DIMENSIONAL FLOW
ST SECONDARY FLOW
Computations of three-dimensional gas-turbine combustion chamber flows [ASME PAPER 78-07-142] p0009 A79-10797
Numerical solution of the direct problem of ideal gas flow in three-dimensional turbine cascades p0021 A79-12194
Measurements in an axisymmetric turbulent boundary layer with weak and strong three-dimensional disturbances p0052 A79-13151

Nonlinear unsteady potential flow calculations for three-dimensional oscillating wings p0060 A79-13979
Operation of a multistage axial compressor with nontwisted blades from viewpoint of three-dimensional axisymmetric flow theory p1339 A79-19382
Computations of three-dimensional turbulent separated flows at supersonic speeds [AIAA PAPER 79-0943] p0139 A79-19471
Three-dimensional modeling of cascade flows [AIAA PAPER 79-0047] p0139 A79-19500
Supercritical wing design using numerical optimization and comparisons with experiment --- to improve C-141 cruise performance [AIAA PAPER 79-0065] p0140 A79-19514
An efficient user-oriented method for calculating compressible flow about three-dimensional inlets [AIAA PAPER 79-19524] p0141 A79-19524
Pressure and velocity measurements in a three-dimensional wall jet --- high lift V/STOL wing-flap [AIAA PAPER 79-0352] p0146 A79-19683
Application of computational aerodynamics methods to the design and analysis of transport aircraft [NASA CR-20099] p0153 A79-20099
Lifting-line theory of oblique wings in transonic flows p0191 A79-21520
Numerical investigation of the gasdynamic characteristics of control nozzles p0167 A79-22439
Recent advances in the solution of three-dimensional flow over wings with leading edge vortex separation [AIAA PAPER 79-0282] p0202 A79-23562
An alternating direction explicit method for computing three-dimensional viscous flow fields in turbomachines [SAE PAPER 781001] p0256 A79-25884
Effects of inflow distortion profiles on fan tone noise calculated using a 3-D theory [AIAA PAPER 79-0577] p0269 A79-26911
An extension of the classical cascade model to a 3D model for blade-bubble and blade-casing interaction - Experiments and calculations [AIAA PAPER 79-0729] p0290 A79-29401
Computer program of flow calculation on relative stream surfaces 51 and 52 employing non-orthogonal curvilinear coordinates and non-orthogonal velocity components and their application to the design of turbomachine blades based on three-dimensional flow [AIAA PAPER 79-7035] p0330 A79-29406
Influence of freely rotating inlet guide vanes on the return flows and stable operating range of an axial flow fan [ASME PAPER 79-07-311] p0340 A79-30517
A calculation procedure for three-dimensional, time-dependent, inviscid, compressible flow through turbomachinery blades of any geometry p0352 A79-31247
An application of 3-D viscous flow analysis to the design of a low-aspect-ratio turbine [AIAA PAPER 79-07-53] p0391 A79-32348
Three-dimensional lifting-surface theory for an annular blade row [AIAA PAPER 79-07-52] p0396 A79-32441
Parameters of three-dimensional flow past a wing near the free surface of a ponderable fluid p0430 A79-35155
Profilng of two-dimensional and three-dimensional nozzles and calculation of their flows p0430 A79-35155
Development of a gas turbine combustor dilution zone design analysis [AIAA PAPER 79-1194] p0466 A79-38979
The role of three-dimensional flow analysis in the design of turbomachinery [AIAA PAPER 79-1231] p0470 A79-38995
Theoretical and experimental investigation of the aerodynamic characteristics of three-dimensional bodies p0528 A79-43166
Wave propagation associated with wings --- three dimensional unsteady flow analysis for supercruise aircraft p0534 A79-43597
Near field problems in three-dimensional panel methods --- mathematical modeling of flow characteristics p0536 A79-43779
A fast, conservative algorithm for solving the transonic full-potential equation [AIAA PAPER 79-1456] p0565 A79-45261
Three-dimensional coordinates about wings [AIAA PAPER 79-1461] p0565 A79-45265
Investigation of three-dimensional shock/boundary layer interactions at swept compression corners [AIAA PAPER 79-1498] p0575 A79-46693
Water tunnel flow visualization - Insight into complex three-dimensional flow fields around fighter aircraft [AIAA PAPER 79-1530] p0576 A79-46712
Numerical aerodynamic simulation facility --- for flows about three-dimensional configurations p0593 A79-10450
An automated procedure for computing the three-dimensional transonic flow over wing-body combinations, including viscous effects. Volume 2: Prosgus user's manual and code description [AD-A054998] p0807 A79-12027
The design of supercritical wings by the use of three-dimensional transonic theory [NASA CR-1406] p0228 A79-16804
Contribution to the development of theoretical calculations for the design and optimization of lifting bodies. Solution of three-dimensional basic thero fluid dynamics equations with strong interacting attached and separated flow p0286 A79-17807

SUBJECT INDEX
THREE DIMENSIONAL FLOW
SUBJECT INDEX

Concurrent superplastic forming/diffusion bonding of H-1 components
Fabrication of titanium at high temperatures
Fracture toughness in titanium alloys
Hot salt stress corrosion studies
Collected engineering data sheets, Air Force data sheet program --- airframe materials
Environmental fatigue crack propagation in metal/composite laminates

TOLERANCES (MECHANICS)
TOLERANCES (PHYSIOLOGY)
TOOLING
TOROIDAL WHEELS
TORNADO AIRCRAFT
TOOLS
TORSIONAL STRESS
TORSIONAL VIBRATION
TORSIONAL VIBRATION
TORQUE MEASURING APPARATUS
TOUCHDOWN
TRACKING FILTERS

TOUCHDOWN
Effect of image tilt of a virtual image display on simulated transport touchdown performance

TOWED BODIES
Unsteady aerodynamics of oscillating containers and application to the problem of dynamic stability of helicopter underwing loads

TOWED TARGETS
U TOWED BODIES
TOWERS
UT AIRPORT TOWERS
Soda and aircraft measurements of turbulence parameters within cooling tower plumes
AVIATION obstructions and the particular conditions for construction projects in the vicinity of airports

TOUING
A study of aircraft towing as proposed for Boston-Logan International Airport --- airfield surface movements

TOXIC HAZARDS
Smoke hazards from aircraft materials

OPTICAL TRACKING

TOXICITY
Ozone contamination in aircraft cabins. Appendix A: Ozone toxicity

TOXICITY AND SAFETY HAZARD
Material developments for airline safety - Impact on the safety of ground maintenance employees

TOXICOLOGY
Applicability of certain plastics in aviation industry from viewpoint of toxicology

TRACE CONTAMINANTS
An aircraft compatible laser induced fluorescence system - In situ and remote measurements of trace gases

TRACKING (POSITION)

TRACKING ANTENNAS

TOUGHER MAT TOOLS

TO TUMBLER AIRCRAFT
U HCA AIRCRAFT

TOWING

TOWERS
UT AIRPORT TOWERS
Soda and aircraft measurements of turbulence parameters within cooling tower plumes
AVIATION obstructions and the particular conditions for construction projects in the vicinity of airports

TOUING
A study of aircraft towing as proposed for Boston-Logan International Airport --- airfield surface movements

TOXIC HAZARDS
Smoke hazards from aircraft materials

OPTICAL TRACKING

TOXICITY
Ozone contamination in aircraft cabins. Appendix A: Ozone toxicity

TOXICITY AND SAFETY HAZARD
Material developments for airline safety - Impact on the safety of ground maintenance employees

TOXICOLOGY
Applicability of certain plastics in aviation industry from viewpoint of toxicology

TRACE CONTAMINANTS
An aircraft compatible laser induced fluorescence system - In situ and remote measurements of trace gases

TRACKING (POSITION)

TRACKING ANTENNAS

TOUGHER MAT TOOLS

TO TUMBLER AIRCRAFT
U HCA AIRCRAFT

TOWING

TOWERS
UT AIRPORT TOWERS
Soda and aircraft measurements of turbulence parameters within cooling tower plumes
AVIATION obstructions and the particular conditions for construction projects in the vicinity of airports

TOUING
A study of aircraft towing as proposed for Boston-Logan International Airport --- airfield surface movements

TOXIC HAZARDS
Smoke hazards from aircraft materials

OPTICAL TRACKING

TOXICITY
Ozone contamination in aircraft cabins. Appendix A: Ozone toxicity

TOXICITY AND SAFETY HAZARD
Material developments for airline safety - Impact on the safety of ground maintenance employees

TOXICOLOGY
Applicability of certain plastics in aviation industry from viewpoint of toxicology

TRACE CONTAMINANTS
An aircraft compatible laser induced fluorescence system - In situ and remote measurements of trace gases

TRACKING (POSITION)

TRACKING ANTENNAS

TOUGHER MAT TOOLS

TO TUMBLER AIRCRAFT
U HCA AIRCRAFT

TOWING

TOWERS
UT AIRPORT TOWERS
Soda and aircraft measurements of turbulence parameters within cooling tower plumes
AVIATION obstructions and the particular conditions for construction projects in the vicinity of airports

TOUING
A study of aircraft towing as proposed for Boston-Logan International Airport --- airfield surface movements

TOXIC HAZARDS
Smoke hazards from aircraft materials

OPTICAL TRACKING

TOXICITY
Ozone contamination in aircraft cabins. Appendix A: Ozone toxicity

TOXICITY AND SAFETY HAZARD
Material developments for airline safety - Impact on the safety of ground maintenance employees

TOXICOLOGY
Applicability of certain plastics in aviation industry from viewpoint of toxicology

TRACE CONTAMINANTS
An aircraft compatible laser induced fluorescence system - In situ and remote measurements of trace gases

TRACKING (POSITION)

TRACKING ANTENNAS
Tracking Networks

Subject Index

Trailing-edge flows at high Reynolds number
[IAIA PAPER 79-1503] p0575 A79-66697
Flight testing the circulation control wing
[IAIA PAPER 79-1791] p0605 A79-87880
On single-degree-of-freedom flutter induced by
activated controls
p0640 A79-49867
Wake curvature and trailing edge interaction
effects in viscous flow over airfoils
The confluence of two supersonic jets at the
trailing edge of transonic turbine blades
Low-speed wind-tunnel investigation of wing fngs
as trailing-vortex-alevation devices on a
transonic airplane model
[AIAA-TP-1453] p0492 A79-29861
Correlation of data related to shock-induced
trailing-edge separation and extrapolation to
flight Reynolds number

Trailing-edge Flaps
An experimental study of USB flap noise reduction
through nose flow modification --- Upper Surface
Blown
[IAIA PAPER 79-0607] p0268 A79-26908
Variable area exhaust nozzle
Airframe noise component interaction studies
[AIAA-CR-3110] p0313 A79-19815
Optimization of multielement airfoils for maximum
lift
p0357 A79-20044
Trailing edge noise data with comparison to theory

Trainers

Training Aircraft

NT TRAING DEVICES
NT ALPHA JET AIRCRAFT
NT CL-41 AIRCRAFT
NT G-5 AIRCRAFT
NT T-2 AIRCRAFT
NT T-28 AIRCRAFT
NT T-33 AIRCRAFT
NT T-38 AIRCRAFT
NT T-39 AIRCRAFT

The Yak-110 aircraft: Construction and operation
--- Russian book
p0126 A79-18297
Exhaust of the useful life of the lower chord
of the girders of the PC-7 'Turbo-Trainer'
[DGLR PAPER 78-198] p0184 A79-20498
Alpha Jet - The Franco-German training and
tactical support aircraft
p0516 A79-42063
Aerodynamic data development for the turboprop
T-44A operational flight trainer
[IAIA 79-1637] p0567 A79-45317
The Beech Model 77 'Skipper' spin program
[IAIA PAPER 79-1835] p0608 A79-47907
Rotary balance data for a single-engine trainer
donign for an angle-of-attack range of 8 deg to
90 deg --- conducted in largely spin tunnel

Training Devices

The MLS moving-base flight simulator
p0102 A79-17119
The development and use of simulators for
helicopter flight training in the Royal Navy
p0186 A79-20791
Proposed advancements in simulation of atmospheric
phenomena for improved training
p0223 A79-15979
Recent advances in television visual systems
p0223 A79-15986

Training Evaluation

Digital avionics Information System (DAIS):
Training requirements analysis model (TRMOM),
volume 1
[AD-8069474] p0716 A79-33202

Training Simulators

NT COCKPIT SIMULATORS
NT FLIGHT SIMULATORS
Synthetic image generation for visual simulation
in training simulators using the Tornado visual
simulator as an example
[DGLR PAPER 78-150] p0643 A79-18095
ACMI system --- Air Combat Maneuvering
Range/Instrumentation

A-438
TRANSONIC FLOW COSTS

Studies on blade-to-blade surfaces in an axial compressor rotor

A procedure for analyzing transonic flow over harmonically oscillating airfoils

A new two-dimensional oscillating wing apparatus for unsteady aerodynamics research

Some calculations of transonic potential flow for the NASA 64A005 airfoil with oscillating flap

Transonic flow over the NASA 64A006 with an oscillating flap-calculations based on the Euler equations

Transonic airfoil codes

Application of direct-inverse techniques to airfoil analysis and design

Numerical solution of the Navier-Stokes equations for arbitrary two-dimensional multi-element airfoils

Recent developments in finite element analysis for transonic airfoils

Numerical design of shockless airfoils

A study of inlet conditions for three-dimensional transonic compressor flows

Viscous-inviscid flow matching: Numerical method and applications to two-dimensional, transonic and supersonic flows

Experimental techniques for transonic testing in shock tubes

The flow through low cambered transonic turbine cascade

Computer program to calculate three-dimensional boundary layer flows over wings with wall mass transfer

User guide for STBRUN: A boundary-layer program for contoured wind-tunnel liner design

Improvements on the C/D/Vernon wind tunnel --- transonic operation

Transonic flows in turbomachinery. Volume 1: Theory

The computation of transonic flow in wind tunnels --- unstaggered oscillating cascades

Numerical calculation of incompressible transonic flow through rotors and fans

A finite element method for the computation of the transonic potential flow past airfoils

Airfoil optimization for transonic flow using the methods of finite elements and characteristics

Theoretical analysis of transonic flow past unshaped oscillating cascades

The computation of transonic flow in wind tunnels at inlets and cascades using the finite element method

An exploratory study of a finite difference method for calculating unsteady transonic potential flow

Numerical evaluation of transonic equivalence rule

Design of shock-free transonic flow in turbomachinery

Application of a finite element method to transonic flow problems using an optimal control approach

An extension to the method of Garabedian and Ros for the calculation of transonic flow past an
TRANSPORT AIRCRAFT

TRANSPARENT MATERIALS

TRANSPARENCY

TRANSONICS

NT CH-46 HELICOPTER
NT CH-56 HELICOPTER
NT CONCORD HELICOPTER
NT DC 3 AIRCRAFT
NT DC 8 AIRCRAFT
NT DC 9 AIRCRAFT
NT DC 10 AIRCRAFT
NT EUROPEAN AIRBUS
NT P-27 AIRCRAFT
NT H-53 HELICOPTER
NT VH-320 AIRCRAFT
NT L-1011 AIRCRAFT
NT MERCURY AIRCRAFT
NT LH-262 AIRCRAFT
NT S-61 HELICOPTER
NT SH-3 HELICOPTER
NT SHORT Haul AIRCRAFT
NT SPALDIER HELICOPTER
NT TANKER AIRCRAFT
NT UH-60A AIRCRAFT
NT US-61A HELICOPTER
NT VISCOUNT AIRCRAFT
NT VC-14 AIRCRAFT

THE NASA-Langley 7-lasch transonic cascade wind tunnel at the Deutsche Versuchsanstalt für Luft- und Raumfahrt and first test results

Wind tunnel real-time data acquisition system

Calibration of the AEDC/FTW 16-foot transonic tunnel aerodynamic test section at various Reynolds numbers

Large transonic wind tunnels

The injector driven tunnel

Hydraulic compressor for a wind tunnel

The priming of a wind tunnel with a hydraulic compressor

The design of models and their supports, the Evans clean-flow tunnel: A review of some of the various proposals --- the design of high Reynolds number, transonic wind tunnels

Experimental studies in a Ludwieg tube transonic tunnel

Wall interference effects

European transonic wind tunnel project for high Reynolds number --- cryogenic proposal

Improvements on the Ch/Verne wind tunnel --- transonic operation

Construction problems specific to models for high Reynolds number wind tunnels --- scale models

Model diffuser investigation for propulsion wind tunnel M6T

Some remarks on the design of transonic tunnels with low levels of flow unsteadiness

Wall corrections in transonic wind tunnel: Equivalent porosity

Review of design and operational characteristics of the 0.3-meter transonic cryogenic tunnel

An experimental investigation of the acoustic characteristics of a variety of slot baffle configurations for transonic wind tunnel walls

TRANSONICS

U TRANSONIC FLOW

TRANSPARENCY

Aerospace Transparent Materials and Enclosures

Helicopter transparent enclosures. Volume 2: A general specification

TRANSPARENT MATERIALS

TRANSPARENCY

TRANSPARATION

Performance and design of transpiration-cooled turbine blading

NT A-300 AIRCRAFT
NT BAC 111 AIRCRAFT
NT BOEING 707 AIRCRAFT
NT BOEING 727 AIRCRAFT
NT BOEING 737 AIRCRAFT
NT BOEING 747 AIRCRAFT
NT C-5 AIRCRAFT
NT C-118 AIRCRAFT
NT C-130 AIRCRAFT
NT C-135 AIRCRAFT
NT C-141 AIRCRAFT
NT CARGO AIRCRAFT
NT CH-46 HELICOPTER

NT CH-47 HELICOPTER
NT CH-56 HELICOPTER
NT CONCORD HELICOPTER
NT DC 3 AIRCRAFT
NT DC 8 AIRCRAFT
NT DC 9 AIRCRAFT
NT DC 10 AIRCRAFT
NT EUROPEAN AIRBUS
NT P-27 AIRCRAFT
NT H-53 HELICOPTER
NT VH-320 AIRCRAFT
NT L-1011 AIRCRAFT
NT MERCURY AIRCRAFT
NT LH-262 AIRCRAFT
NT S-61 HELICOPTER
NT SH-3 HELICOPTER
NT SHORT Haul AIRCRAFT
NT SPALDIER HELICOPTER
NT TANKER AIRCRAFT
NT UH-60A AIRCRAFT
NT US-61A HELICOPTER
NT VISCOUNT AIRCRAFT
NT VC-14 AIRCRAFT
The cost situation in the material maintenance of large lighter-than-air vehicles.

SELECTING THE GEOMETRICAL PARAMETERS AND LOCATION

Technology requirements and readiness for very large wing-in-ground effect transport aircraft.

Analyzing technology potential for strategic airlift (DGLR PAPER 79-0541).

The evaluation of the weight of engine bonding and durability --- for airframe structures.

Use of AIDS recorded data for assessing service application to transport aircraft model.

New paths for the development of aircraft equipment opened up by the use of modern computer technology --- digital systems for civil aviation.

Survey of the cost estimation process used during the transporter design stage --- military aviation

Lighter-than-air craft for strategic mobility.

Airship potential in strategic airlift operations.

ILYUSHIN 'Candid' --- Soviet transport for enhanced air mobility and logistical support.

The evaluation of the weight of engine installations on transport aircraft.

Westland unveils 8G30 transport helicopter.

Energy conservation aircraft design and operational procedures.

Evaluation of a commercial Omega navigation system installed in the C-118 aircraft.

Nonlinear parameter identification and its application to transport aircraft.

Gust-vehicle parameter identification by dynamic simulation in wind-tunnels.

Evaluation of laminar flow control system concepts for subsonic commercial transport aircraft (NASA-CH-158976).


Active controls for civil transports.


Preliminary feasibility assessment of Multi-Function Inertial Reference Assembly (MIRA) --- using the Y-15 and a transport aircraft.

An analysis of fuel conserving operational procedures and design modifications for bomber/transport aircraft, volume 2.

Damage tolerance analysis of redundant structures --- transport aircraft structures.

Design of redundant structures --- structural design criteria and fracture mechanics of large commercial transport aircraft.

Evaluation of laminar flow control system concepts for subsonic commercial transport aircraft.

Behavior of a transport aircraft with a high aspect ratio wing at a high angle of incidence.

Low-speed wind-tunnel investigation of a large-scale STOL lift-fan transport model.

Use of AIDS recorded data for assessing service load experience --- aircraft integrated data system.

Aerodynamic development of a small horizontal tail for an active control relaxed stability transport application.

Decoupled longitudinal controls for shear penetration in the terminal area environment --- during approach and landing engine jet transport.

4-D helical approach of a transport aircraft in an ASC environment.

All electric subsystems for next generation transport aircraft.

The aerial relay system --- An energy-efficient solution to the airport congestion problem --- using cruise liner aircraft for in-air passenger transfer.

Electrical power system for new-technology transport power-by-wire airplane.

What the FAA would like in airworthiness standards.

Impact of noise generated by supersonic transports on the environment.

Selecting the geometric parameters and positioning of a nose flap on the root profile of a swept wing using tunnel test data. II.

An overview of the PARST program --- Primary Adhesively Bonded Structure Technology for aircraft.
Transport Properties

Aluminum alloys for advanced structural applications in transport aircraft  [NL-EN-17023-U]  p0709 A79-3234

Transport Properties


Transportation

Aircraft design and analysis of airport ground transport systems  [GAS PAPER 780519]  p0004 A79-10395
Aerostat NDEA technical report series  p0076 A79-16158
The 1980 system characteristics and engineering design  p0588 A79-27113

Transportation Energy

Role of fuel management  ---  for airlines  p0127 A79-18521
In-flight refueling and the world of the eighties  /Second Sir Alan Cobban Memorial Lecture/  p0186 A79-20790
Utilization of alternative fuels for transportation  Proceedings of the Symposium, University of Santa Clara, Santa Clara, Calif., June 19-23, 1978  p0235 A79-69376
JT90-70/59 improved high pressure turbine active clearance control system  ---  for specific fuel consumption improvement  [NASA-CP-159061]  p0670 A79-31208

Transverse Oscillation

Response of plate to nonstationary random load  p0407 A79-34604

Transverse Vibration

U Transverse Oscillation

Trussoidal Wings

The method of discrete vortexes  ---  for steady flow past finite-span wing  p0316 A79-28806
Investigation of aerodynamic characteristics of subsonic wings  [NASA-CS-158661]  p0481 A79-23921

Trees (Mathematics)

Application of the fault tree in fault testing and design improvement  ---  of aircraft components  p0082 A79-16585

Triangular Wings

U Delta Wings

Triangulation

Design, fabrication, and testing of a brassboard model ofc658s based surface trilateration data acquisition subsystem  [AD-A0575933]  p0161 A79-14065

Triggers

U Actuators

Truss (Balance)

U AERODYNAMIC BALANCE

Tug Aircraft

U T-28 Aircraft

Tropical Regions

Intensive tropic function testing  [AD-A056416]  p0039 A79-10440

Tropics

U Tropical Regions

Tropopause

Design specifications for the capped balloons with special reference to their survival in the equatorial tropopause  [AIAA 79-0426]  p0262 A79-26635

Troubleshooting

U Maintenance

Truncation (Mathematics)

U Approximation

Trusses (Links)

U Traversing LINKS

Turnbuckles

U Shafts (Machine Elements)

Turbines

Highly survivable truss type tail booms  [AD-A056430]  p0036 A79-10052
Highly survivable truss tail boom  [AD-A068181]  p0420 A79-22079

Tungsten Gas Welding

U Gas Tungsten Arc Welding

Turbine Blades

Determination of the aerodynamic damping of turbine blade vibrations with allowance for the pitch, exit blade angle, and blade curvature  p0066 A79-10568
An axial compressor end-wall boundary layer calculation method  p0007 A79-10767
Performance and design of transpiration-cooled turbine blading  [ASME PAPER 78-GT-164]  p0010 A79-10805
Influence of geometric effects on the aspect ratio optimization of axial turbine bladings  [ASME PAPER 78-GT-175]  p0010 A79-10809
Aerodynamic force and moment on oscillating airfoils in cascade  [ASME PAPER 78-GT-181]  p0011 A79-10812
Dynamic stall of an airfoil with leading edge bubble separation involving time dependent re-attachment  [ASME PAPER 78-GT-194]  p0011 A79-10817
A probability estimate of the long-term strength of aviation gas-turbine rotor blades  p0059 A79-13955
Influence of some factors on GTE turbine blade vibrational energy dissipation  p0059 A79-118085
On calculating the temperature state of film-cooled turbine vanes  p0068 A79-14849
Applications of OS composites in aircraft gas turbines  ---  directional solidification  [OPRA, TP NO. 1978-73]  p0081 A79-16512
Influence of the pitch/chord ratio of a subsonic cascade of turbine blades  p0083 A79-16792
Operation of long-service-life gas-turbine engines  as a function of the technical state  p0083 A79-16806
Application of the method of alternating directions to the numerical analysis of the thermal states of a bladed turbine disk  p0083 A79-16807
Predicted inlet gas temperatures for tungsten fiber reinforced superalloy turbine blades  p0111 A79-17029
Tungsten fiber reinforced FeCrAlY: A first generation composite turbine blade material  [AIAA 79-0430]  p0039 A79-22079
Influence of the pitch/chord ratio of a subsonic cascade of turbine blades  p0083 A79-16792
Operation of long-service-life gas-turbine engines  as a function of the technical state  p0083 A79-16806
Application of the method of alternating directions to the numerical analysis of the thermal states of a bladed turbine disk  p0083 A79-16807
Predicted inlet gas temperatures for tungsten fiber reinforced superalloy turbine blades  [AIAA 79-0430]  p0039 A79-22079
Tungsten fiber reinforced FeCrAlY: A first generation composite turbine blade material  p0039 A79-32190
Highly survivable truss type tail booms  [AD-A056430]  p0036 A79-10052
Highly survivable truss tail boom  [AD-A068181]  p0420 A79-22079
TURBINE ENGINES

Impact of soft bodies on jet engine fan blades [AD-A058194]
p0094 A79-12091
Research on aerelastic phenomena in thin airfoil cascades [AD-A059718]
p0158 A79-14029
Small laminar axial turbine hot-rig test program [AD-A056062]
p0234 A79-16856
Turbojet blade vibration data acquisition design and feasibility testing [NASA-Cr-159505]
p0304 A79-18976
Turbojet blade cooling [VII-LECTURE-SERIES-83]
p0304 A79-18979
Turbojet turbine blade cooling p0304 A79-18980
Alternative turbine cooling technology p0304 A79-18984
The aerodynamic penalties associated with turbine blade cooling p0304 A79-18986
Nonlinear equations of equilibrium for elastic helicopter or wind turbine blades undergoing moderate deformation [NASA-Cr-159478]
p0309 A79-19418
An oxide dispersion strengthened alloy for gas turbine blades [NASA-TM-79098]
p0369 A79-20160
Tungsten fiber reinforced FeCrAlY: A first generation composite turbine blade material [NASA-TM-79094]
p0369 A79-20187
Evaluation of an advanced directionally solidified gamma/gamma’-alpha Mo eutectic alloy [NASA-Cr-159416]
p0369 A79-20222
Introduction to cooling of gas turbine blades p0422 A79-22090
Aerodynamic problems in cooled turbine blading design for small gas turbine p0422 A79-22091
Design, fabrication, and evaluation of GATIZED (trade name) ceramic-wrought alloy attachment concepts — for gas turbine engines [AD-A045971]
p0423 A79-22102
Turbine blades: Erosion and Corrosion. Citations from the NTIS data base [NTIS/PS-79/0146/2]
p0425 A79-22111
p0425 A79-22112
The confluence of two supersonic jets at the trailing edge of transonic turbine blades p0443 A79-23426
Internally coated air-cooled gas turbine blading [NASA-Cr-155754]
p0497 A79-25018
A contribution on thermal fatigue in cooled turbine blading p0552 A79-27153
Three-dimensional finite-element techniques for gas turbine blade life prediction p0552 A79-27156
Some theoretical and experimental investigations of stresses and vibrations in a radial flow rotor [AD-A059338]
p0553 A79-27158
Determining the dynamic response due to an imbalance at the attachments of a motor on a pod --- caused by rotor blade loss p0556 A79-27171
Unstable flow regimes, including rotating stall, surge, distortions, etc. p0587 A79-28560

TURBINE ENGINES

WT IROD FAN ENGINES
WT GAS TURBINE ENGINES
WT J-5 ENGINE
WT J-55 ENGINE
WT J-79 ENGINE
WT J-95 ENGINE
WT JET ENGINES
WT KET ENGINE
WT KETJET ENGINES
WT SUPERSONIC COMBUSTION KET ENGINE
WT T-53 ENGINE
WT T-63 ENGINE
WT TF-30 ENGINE
WT TF-41 ENGINE
WT Turbofan ENGINES
WT TURBOJET ENGINES
WT TURBOJET PROP ENGINES
A method for assessing turbine engine run-up noise impact on airport neighbors [SAE PAPER 780522]
p0004 A79-10397

TURBINE ENGINES

Turbine engines in light aircraft p0024 A79-12380
Advanced turbine powerplants for future helicopter systems p0078 A79-16228
New technological advances in the development of helicopter turbine powerplants for the 1980’s p0078 A79-16222
Screening properties of silicon-base ceramics for turbine engine applications [SAE PAPER 78/07-12]
p0150 A79-19799
Suction fuel supply systems for turbine powered general aviation aircraft p0214 A79-24304
Applying design-to-life cycle cost methods during engine advanced development [SAE PAPER 78/07-10]
p0257 A79-25902
Turbine engine cost reduction using Life Cycle Cost techniques p0257 A79-25903
The balance of flexible rotors and their possible use in aero engines p0328 A79-23389
High-freezing-point fuels used for aviation turbine engines [AIAA 78-1280]
p0381 A79-30555
The GATE studies: Assessing the potential of future small general aviation turbine engines p0342 A79-30560
New opportunities for future small civil turbine engines - Overviewing the GATE studies [SAE PAPER 79/07-14]
p0457 A79-36747
General aviation turbine engine /GATE/ concepts [AIAA PAPER 79-1157]
p0467 A79-38964
What small turbine engine does the small helicopter need, or The road to hell is paved with good intentions --- fuel consumption, performance, environmental and engine reliability and acceptability considerations subordinating advanced turbine engine development for small helicopters [AIAA PAPER 79-1149]
p0471 A79-39032
Further test results with the airjet distortion generator - A new tool for aircraft turbine engine testing [AIAA PAPER 79-1185]
p0510 A79-40752
Computer aided design of mixed flow turbines for turbocarbons [AIAA PAPER 78-07-011]
p0563 A79-44794
Advanced composites for turbines p0691 A79-53889
Computer-aided analysis and design of the shape rolling process for producing turbine engine airfoils [NASA-CR-159555]
p0904 A79-12087
Advanced fault detection and isolation methods for aircraft engines [AD-A058891]
p1048 A79-13053
A thermal investigation of the AFAPL turbine engine heat transfer test facility [NASA-CR-159517]
p1077 A79-14117
The NASA high pressure facility and turbine test rig [NASA-TM-790514]
p1074 A79-15050
High freezing point fuels used for aviation turbine engines [NASA-TM-790915]
p1081 A79-15199
The gate studies: Assessing the potential of future small general aviation turbine engines [NASA-CR-159705]
p1220 A79-15958
New opportunities for future small civil turbine engines: Overviewing the GATE studies [NASA-TM-790733]
p2333 A79-16849
The feasibility of controlling turbine engine test cell particulate emissions with a baghouse [AD-A061120]
p2336 A79-16855
Briefs of accidents involving turbine powered aircraft, US general aviation, 1977 [WTS-AMM-78-16-14]
p2809 A79-17830
p2922 A79-17859
Composite seal for turboachinery --- backings for turbine engine shrouds [NASA-CAPS-LW-12131-1]
p2928 A79-18318
Failure studies of a third stage fan disk from a T-39 turbine engine A-488
TURBINE EXHAUST NOZZLES

TURBINE INSTRUMENTS

TURBINE PUMPS

Measuring the moment imparted by a liquid pump in a

TURBINE WHEELS

Influence of stator vane canting on alternating stress level in turbine rotor blades

Application of the method of alternating directions to the numerical analysis of the thermal states of a bladed turbine disk

Fracture mechanics problems for gas turbine engine structures

Numerical investigations on the generation and development of rotating stalls

A cumulative fatigue damage model for gas turbine engine disks subjected to complex mission loading

Jet cooling at the rim of a rotating disk

Forecasting engine life

Tapered roller bearing development for aircraft

Small turbines: Experiences with disk ruptures

Turbine engine particulate emission characterization

Reclamation of synthetic turbine engine oil mixtures

111 scanning camera measurements of an exhaust nozzle emission sample

TURBINE WHEELS

Influence of stator vane canting on alternating stress level in turbine rotor blades

Application of the method of alternating directions to the numerical analysis of the thermal states of a bladed turbine disk

Fracture mechanics problems for gas turbine engine structures

Numerical investigations on the generation and development of rotating stalls

A cumulative fatigue damage model for gas turbine engine disks subjected to complex mission loading

Jet cooling at the rim of a rotating disk

Forecasting engine life

Tapered roller bearing development for aircraft

Small turbines: Experiences with disk ruptures

Small turbines: Experiences with disk ruptures

Numerous considerations on the service life design of turbine disks

Damage tolerant design - An approach to reducing the life cycle cost of gas turbine engine disks

The strainrange partitioning behavior of an advanced gas turbine disk alloy, WG10A

Methodological considerations on the service life design of turbine disks

Computer calculation of steady-state temperature fields in cooled turbine disks

Use of the method of variable directions for numerical study of the temperature states of a turbine disk with blades

TURBINES

MT AXIAL FLOW TURBINES

MT GAS TURBINES

MT SHROUDED TURBINES

MT SUPERSONIC TURBINES

MT TWO STAGE TURBINES

A discussion of turbine and compressor sealing devices and systems

The Netherlands experimental vertical axis wind turbine

Fluid dynamics of diffuser-augmented wind turbines

Engine demonstration test of a cooled laminated axial turbine

The monorotor gas turbine

Alternative turbine cooling technology

TURBOCHARGERS

U SUPERCHARGERS

U TURBOCOMPRESSORS

TURBINE PUMPS

Measuring the moment imparted by a liquid pump in a

A-449
An axial compressor end-wall boundary layer calculation method
[ASME PAPER 78-GT-81] p0007 A79-10767

Representation of compressor characteristics in coordinates convenient for computer calculation of GTE parameters
p0068 A79-14044

Technology evolution in the Allison Model 250 engine
--- for helicopter propulsion
p0134 A79-19681

Operation of a multistage axial compressor with nonbladed blades fea viewpoint of three-dimensional axisymmetric flow theory
p0134 A79-19382

Numerical investigations on the generation and development of rotating stalls
p0149 A79-19793

Periodically unsteady flow in an intedstage of a multistage, axial-flow turbomachine
p0195 A79-22328

Propagation of inlet flow distortions through an axial compressor stage
p0196 A79-22335

Effect of compressor geometry on the unsteady regimes of a low speed compressor
p0213 A79-24219

A fundamental criterion for the application of rotor casing treatment --- in axial flow compressors
p0213 A79-29220

An experimental study of pulsating flow in a three stage axial flow compressor
p0213 A79-29221

Turbulence characteristics in the near wake of a compressor rotor blade
[ASIA PAPER 78-05280] p0260 A79-26584

Axial compressor operation with radially nonuniform inflow
p0280 A79-27743

Effect of hub and tip annular flow blockage on the performance of a single-stage axial-flow compressor
[ATA 79-7001] p0327 A79-29377

Asymmetric distortion generation in a variable height annular flow - for compressor inlet flow
[ATA 79-7002] p0327 A79-29378

Effects of inlet distortions on a multi-stage transonic flow compressor flow pressure distortion
[ATA 79-7003] p0327 A79-29379

An extension of the classical cascade model to a 3D model for blade-rib and blade-casing interaction - Experiments and calculations
[ATA 79-7029] p0329 A79-29401

Aerodynamic deslock and performance of the CF6-6LM2500 compressor
[ATA 79-7030] p0329 A79-29402

Study of the flow field behind a transonic axial compressor rotor using laser-anemometry and unsteady pressure measurements
[ATA 79-7032] p0330 A79-29405

Blade-to-blade pressure, temperature, and velocity profiles downstream of a single rotor row at high subsonic speed
[ATA 79-7032] p0331 A79-29419

Experimental and analytical investigation of the effects of Reynolds number and blade surface roughness on multistage axial flow compressors
[ASME PAPER 79-GT-2] p0339 A79-30501

Axial-flow compressor turning angle and losses by inviscid-viscous interaction blade-to-blade computation
[ASME PAPER 79-GT-5] p0339 A79-30504

Mean velocity and decay characteristics of the guideway and stator blade wake of an axial flow compressor
[ASME PAPER 79-GT-9] p0339 A79-30507

Computaion of supercritical compressor and turbine cascades with a design method for transonic flows

Influence of freely rotating inlet guide vanes on the return flows and stable operating range of an axial flow fan
[ASME PAPER 79-GT-31] p0340 A79-30516

Experimental validation of the effect of inlet distortion on compressor blade vibrations
[ASME PAPER 79-GT-31] p0341 A79-30558

Study of compressor aerelastic instabilities in a linear cascade wind tunnel

A-450

[ASNE PAPER 79-GT-31] p0390 A79-32296

An off-design correlation of part-span speed losses through transonic axial flow fans
[ASME PAPER 79-GT-6] p0390 A79-32329

Design and testing of two superfrcritical compressor cascades

Unsteady upwash effects in axial-flow supersonic compressor stages
[ASME PAPER 79-GT-55] p0391 A79-32350

The influence of the blading surface on the aerodynamic behavior and characteristic of an axial compressor
[ASME PAPER 79-GT-102] p0392 A79-32378

Forced vibrations of a single stage axial compressor rotor
[ASME PAPER 79-GT-125] p0392 A79-32383

Optimization for rotor blades of tandem design for axial flow compressors
[ASME PAPER 79-GT-125] p0393 A79-32394

The prediction of steady, circumferential pressure and temperature distortions in multistage axial flow compressors
[ASME PAPER 79-GT-184] p0396 A79-32443

Wind tunnel model study of the hot exhaust plume from the compressor research facility at Wright-Patterson Air Force Base, Ohio
[ASME PAPER 79-GT-186] p0396 A79-32485

Selected problems concerning unstable operation of aircraft turbine engine compressors
[ASME PAPER 79-GT-186] p0397 A79-32589

Preliminary studies using photom correlation velocimetry in turbomachinery and combustion systems
p0405 A79-34314

Allowing for the wall boundary layer in an axial compressor stage
p0411 A79-36586

Selection of aircraft turbocharger systems
[SAY PAPER 790608] p0416 A79-36739

Effects of air injection on a turbocharged Teledyne Continental Motors 750-360-C engine
[SAY PAPER 790607] p0419 A79-36760

Combined pressure and temperature distortion effects on internal flow of a turbine engine
[ASME PAPER 79-1309] p0471 A79-39031

Experimental studies of axial and radial compressors by means of new measurement techniques
p0512 A79-41277

Computer aided design of mixed flow turbines for turbocchargers
[ASME PAPER 78-GT-191] p0563 A79-44794

Laser velocimeter applied to the study of circular distortion effects in a low speed compressor

Apparatus and method for reducing thermal stress in a turbine rotorn

Performance of single-stage axial-flow transonic compressor with rotor and stator aspect ratios of 1.19 and 1.26, respectively, and with design pressure ratio of 1.62
[NASA-TP-1338] p0377 A79-10060

Analysis, design, fabrication and testing of the Mini-Brayton rotating unit (MINI-980). Volume 1: Figures and drawings
p0049 A79-11409

Analysis of superersonic stall bending flutter in axial-flow compressor by actuator disc theory
[NASA-TP-1338] p0059 A79-13003

A new blade element method for calculating the performance of high and intermediate solidity axial flow fan blades
[NASA-TP-13063] p0103 A79-13097

Analysis of water ingestion effects in axial flow compressors
[AD-A059025] p0103 A79-13052

Comparison between flows in cascades and rotors in the transonic range. 3: Comparison of experimental and theoretical results of flow studies on blade-to-blade surfaces in an axial compressor rotor
p0305 A79-19902

Aerodynamic and Mechanical factors affecting the surge line: Inlet flow distortion influences on axial flow compressors
p0307 A79-19386

Industrial Centrifugal Compressors, Volume 2
[VEH-LECTURE-SERIES-95-VOL-2] p0309 A79-19389
afterburner

Gearbox casings of fibre-reinforced plastic for aero engines

Coaxial flow noise - Isothermal flow for turbojet engine exhaust

Recent General Electric engine development testing for improved service life

Life cycle cost in preliminary engine design

Influence of bypass ratio on jet engine weight

Comparison of BEUBS and TJE characteristics in supersonic cruise flight

Characteristics of aerelastic instabilities in turbomachinery - NASA full scale engine test results

Evaluation of a vibration damping treatment for inlet guide vanes

The multiple application core engine - Sizing and usage criteria

Effect of shocks on film cooling of a full scale turbojet exhaust nozzle having an external expansion surface

Evaluation of turbo-propulsion simulators as a testing technique for fighter aircraft

Error localization in turbojet engines through determination of the characteristics of structural members

A new class of engine, a path towards the aeronautics of tomorrow

A pneumatic distributor for the control system of a turboshaft engine

Characteristics of afterburning bypass turbojet engines with oxygen injection into the afterburner chamber

An advanced technology engine family for general aviation

Iceing tests on turbojet and turbofan engines using the NGTE engine test facility

An experimental study of a catalytic combustor for an expendable turbojet engine

ATC accommodation of fuel conservative turbojet operations

An experimental investigation of turbojet test cell augmentors

Experimental evaluation of the effect of inlet distortion on compressor blade vibrations

Characteristics of aerelastic instabilities in turbomachinery - NASA full scale engine test results

Turbojet blade vibration data acquisition design and feasibility testing

Parametric performance of a turbojet engine consumer using jet A and k diesel

Low cost expendable engine

Guide to in-flight thrust measurement of turbosjets and fan engines

Fundamentals of thrust measurement in flight

Experimental investigation of turbojet test cell augmentors

Identification and dual adaptive control of a turbojet engine

Effect of shocks on film cooling of a full scale turbojet exhaust nozzle having an external expansion surface

Alternate subsonic low-cost engine

Conceptual study of a turbojet/ramjet engine

Handling problems resulting from compressor deterioration

A low cost blade design for a Darrieus-type vertical-axis wind turbine

Automation of blade design for aircraft turbomachines

Design and development of a rotating water table for flow studies in turbomachine stages

A procedure for axial blade optimization

Impact behavior of filament-wound graphite/epoxy fan blades

Computer programs of flow calculation on relative stream surfaces S1 and S2 employing non-orthogonal curvilinear coordinates and their application to the design of turbomachinery blades based on three-dimensional flow calculations

Small disturbance swirl flow in turbomachinery blading

Aerodynamic and aerelastic characteristics of oscillating loaded cascades at low Mach number

Effect of interblade phase angle and incidence angle on cascade pitching stability

Problems associated with flows in aerodynamic wakes of blade cascades

Aerodynamic excitation forces of blade vibrations in axial turbomachinery as a result of interference from nearby cascades

Model tests on cooling of gas turbine blades

Is the Weis-Fogh principle exploitable in turbomachinery - aerodynamic lift generation without vortex shedding

Characteristics of aerelastic instabilities in turbomachinery - NASA full scale engine test results

Turbojet Blade Cooling

Research on the flutter of axial turbomachinery blading

High turning blading for axial turbomachinery

Introduction and summary of the problems

A low cost blade design for a Darrieus-type vertical-axis wind turbine

Aerodynamic and aerelastic characteristics of oscillating loaded cascades at low Mach number

Aerodynamic excitation forces of blade vibrations in axial turbomachinery as a result of interference from nearby cascades

Model tests on cooling of gas turbine blades

A low cost blade design for a Darrieus-type vertical-axis wind turbine
SUBJECT INDEX

[TURBINES]

[TURBOCOMPRESSORS]

[TURBOPANES]

[TWO STAGE TURBINES]

An experimental study of three-dimensional turbulent boundary layer and turbulence characteristics inside a turbomachinery rotor passage
[ASME PAPER 78-GT-114] p0001 A79-10266

High efficiency fluid film thrust bearings for turbomachinery
[p0028 A79-12371]

The application of foil air bearing turbomachinery in aircraft environmental control systems
[ASME PAPER 78-EM-50] p0027 A79-12567

High speed smoke flow visualization for the determination of cascade shock losses
[AIAG PAPER 79-0082] p0130 A79-19499

Viscous flow analysis in mixed flow rotors --- in turbomachinery
[ASME PAPER 78-RA/GT-3] p0149 A79-19792

Aerodynamics of fluid flow engines
[DOLPH PAPER 78-226] p0183 A79-29043

An integrated finite element calculation program for turbomachinery flows
[ASME PAPER 78-GT-56] p0196 A79-22336

An alternating direction explicit method for computing three-dimensional viscous flow fields in turbomachines
[SAE PAPER 781001] p0256 A79-25884

The finite element method for turbomachinery analysis --- subsonic compressible flow
[ASME PAPER 79-CT-49] p0286 A79-29840

Plastomer mounted rotors - An alternative for smoother running turbomachinery
[ASME PAPER 79-GT-149] p0394 A79-32414

Radial equilibrium in axial turbomachines
[p0461 A79-37828]

The role of three-dimensional flow analysis in the design of turbomachinery
[AIAG PAPER 79-1231] p0470 A79-38995

Experimental analysis methods for unsteady flows in turbomachines
[OMERA, TP NO. 1979-59] p0476 A79-39095

Computer-assisted high-speed balancing of T53 and T55 power turbines
[ASH 79-36] p0631 A79-49088

Use of coatings in turbomachinery gas path seals
[p0648 A79-11058]

Turbomachinery flutter: Introductory concepts
[2007] 1979-19353

Identification of various flutter regimes and discussion of dynamic stall
[p0607 A79-19354]

Proceedings of the Seminar on Advanced Problems in Turbomachinery, part 1

Restrictive assumptions and range of validity of Schlichting's cascade analysis
[p0682 A79-21058]

High turning blade for axial flow machine
[2007] 1979-21058

Introduction and summary of the problems
[2007] 1979-21068

Extensions to the tested range of a cascade flow calculation method
[2007] 1979-21070

Summary of applied research programs being conducted on miniature turbomachines for producing cryogenic temperatures operating on gas bearings and turbo-expander utilizing helium and nitrogen as working fluids
[p0383 A79-21072]

The effects of design and operating variables on the response of an axial flow fan to inlet flow distortions
[NASA-N-158522] p0421 A79-22087

Design problems in small turbomachines
[p0422 A79-22097]

Sample calculation 4: Phi = 9 deg 5'
[p0427 A79-22490]

The effects of design and operating variables on the response of an axial flow fan to inlet flow distortions
[AD-4058955] p0437 A79-23094

Transonic flows in turbomachinery. Volume 1: Theory, part 2


Centrifugal-reciprocating compressor

Design of shock-free transonic flow in turbomachinery
[NASA-REX-70-106770] p0551 A79-27148

A three dimensional flow computing system applicable to axial and radial flow turbomachines
[p0587 A79-28558]

Unstable flow regimes, including rotating stall, surge, distortions, etc.
[p0587 A79-28560]

An experimental study of the response of a turbomachine rotor to a low frequency inlet distortion
[p0716 A79-33203]

TURBOPROP AIRCRAFT

[TURBOSHAFTS]

NIT 10 AIRCRAFT

NIT 2-AIRCRAFT

NIT F-27 AIRCRAFT

NIT F-22 AIRCRAFT

NIT T-55 AIRCRAFT

NIT VISCOMPT AIRCRAFT

Optimization of jet distribution along the blade for VTOL jet propelled rotor
[p0129 A79-10821]

Prop-fan propulsion - Its status and potential
[SAA PAPER 780995] p0255 A79-25880

Noise transmission - Turboprop problem
[AIAG PAPER 79-0685] p0271 A79-26933

Aerodynamic data development for the turboprop T-54A Operational Flight Trainer
[AIAG 79-1637] p0567 A79-45317

The aeroacoustics of advanced turbopropellers
[p0643 A79-50236]

Wind tunnel performance of four energy efficient propellers designed for each 0.8 cruise --- Lewis 8x6 foot wind tunnel studies for noise reduction in high speed turboprop aircraft
[AIAG-79-79124] p0359 A79-20069

Interference effects of aircraft components on the local blade angle of attack of a wing-soused propeller
[AIAG 79-7585] p0498 A79-25021

Driftdown calculations for the 74/227D aircraft
[SAND-78-1308] p0653 A79-30182

TURBOPROP ENGINES

NIT T-53 ENGINE

Evolution of the turboprop for high speed air transportation
[ASME PAPER 78-GT-201] p0003 A79-10821

Certain problems which had to be solved between the prototype stage and mass production stage in the development of an engine --- turboprop engine tests
[p0026 A79-12532]

Modern engines development test techniques --- for helicopters
[p0134 A79-14860]

Turboprop interior noise studies
[AIAG PAPER 79-0647] p0271 A79-26931

Vibration measurements on planetary gears of aircraft turbine engines
[AIAG 79-7012] p0328 A79-29387

The growth and evolution of the TP331
[AIAG PAPER 79-07-164] p0395 A79-32426

Wind tunnel performance of four energy efficient propellers designed for each 0.8 cruise
[SAA PAPER 790571] p0659 A79-36759

Tone noise of three supersonic helical tip speed propellers in a wind tunnel
[p0748 A79-39801]

Energy efficient aircraft engines
[AIAG 79-1961] p0699 A79-47918

TURBOPUMPS

O TURBOPUMPS

O TURBOGAMPS

O TURBINE WHEELS

TURBOSHAFTS

Maintainability by design --- turboshaft engine management

Advanced turbine powerplants for future helicopter systems

The Rolls-Royce Gas turbine engine for helicopters and its future developments

800 shaft horsepower advanced technology demonstrator engine --- turboshaft for military
TURBULENCE

Helicopters
[ARS 78-47] p0124 A79-18170
Modern engine development test techniques --- for helicopters
p0134 A79-18680
Rotor-shaft torque meter --- principles and applications
[ARS 79-18] p0631 A79-49090
Application of finite-element and holographic techniques in the design of turboshaft engine components
[ARS 79-61] p0631 A79-49093
Development of a 'no adjustment' turboshaft engine control system
[ARS 79-42] p0632 A79-49094
An advanced technology engine family for general aviation
[AIAA PAPER 79-1161] p0685 A79-51705
Infrared suppressor effect on T63 turboshaft engine performance
Dynamic behaviour and control of single-shaft closed-cycle gas turbines
p0422 A79-22055
Design problems of small turbomachinery
p0422 A79-22097
Performance estimation for a highly loaded eight-blade propeller combined with an advanced technology turboshaft engine
Assessment of augmented electronic fuel controls for modular engine diagnostics and condition monitoring
[AE-A065126] p0436 A79-23091
TURBULENCE

ATMOSPHERIC TURBULENCE

BT CLEAR AIR TURBULENCE

BT GUSTS

BT ISOTROPIC TURBULENCE

BT LOW LEVEL TURBULENCE

Improvement of the aerodynamic circuit in the Brequet-Telly low speed wind tunnel
[AAAP-WT-78-11] p0441 A79-23121
Turbulence characteristics of compressor discharge flows --- J79D engine tests
p0496 A79-24995
Turbulence measurements in the compressor exit flow of a General Electric CP6-50 engine
p0496 A79-24996
Identification of aircraft parameters in turbulence with non-rational spectral density
p0504 A79-28182
TURBULENCE EFFECTS

An experimental study of the influence of flight-stream turbulence on jet mixing noise
[AIAA PAPER 79-0617] p0271 A79-26935
Heat transfer to turbo-jet turbine blades, with special reference to the effects of mainstream turbulence
[ASME PAPER 79-GT-26] p0339 A79-30514
Anomalous effects of film for predicting film cooling effectiveness in gas turbine combustors
[ASME PAPER 79-GT-200] p0397 A79-32457
Lifting surface approach to the estimation of gust response of finite wings
p0407 A79-34596
The influence of turbulence on drag
p0563 A79-44874
Stability of the perturbed longitudinal motion of a lift-controlled aircraft
p0667 A79-52146
Interaction of the supersonic flow below a wing and a supercritical free jet (two-dimensional situation)
[VTH-LE-268] p0288 A79-17819
Effects of turbulence on laminar separation on aerodynamic surfaces such as airfoil and compressor blading
[NASA-319-15040] p0816 A79-22036
The effect of surface imperfections on the aerodynamic performance of an airfoil at moderate Reynolds numbers
[PB-2171] p0431 A79-23048
Effect of atmospheric turbulence on the stability of a lifting rotor blade
p0684 A79-26183
TURBULENCE METERS

Laser velocimetry measurements on high temperature round and rectangular twin-jet flows

EXPERIMENTAL clean combustor program: Phase 3
Turbulence measurement addendum
TURBULENT BOUNDARY LAYER

An experimental study of three-dimensional turbulent boundary layer and turbulence characteristics inside a turbomachinery rotor passage
[ASME PAPER 78-GT-114] p0001 A79-10266
Measurements in three-dimensional turbulent boundary layer on a yawed flat plate induced by leading edge vortex
p0052 A79-13150
Measurements in an axisymmetric turbulent boundary layer with weak and strong three-dimensional disturbances
p0052 A79-13151
Development of turbulence through non-steady boundary layer
p0053 A79-13155
Distribution of the intermittency factor along the transition region between laminar and turbulent boundary layers
p0190 A79-21421
On sound radiation from the trailing edge of an isolated airfoil in a uniform flow
[AIAA PAPER 79-0653] p0268 A79-26907
Reduction of rotor-turbulence interaction noise in static fan disk testing
[AIAA PAPER 79-0656] p0270 A79-26925
Transonic boundary layer on compressor stator blades as calculated and measured in wind tunnel testing
Considerations regarding velocity distribution and wall friction in incompressible axisymmetric turbulent boundary layers with transverse curvature
p0334 A79-29694
A method for the calculation of 3D boundary layers on practical wing configurations
p0466 A79-38906
Split-film anemometer measurements on an airfoil with turbulent separated flow
p0515 A79-42029
The influence of turbulence on drag
p0563 A79-44874
Investigation of three-dimensional shock/boundary layer interactions at swept compression corners
Adverse pressure gradients effects on supersonic boundary layer transition in a wind tunnel
[AIAA PAPER 79-1563] p0577 A79-46730
The effect of short regions of high surface curvature on turbulent boundary layers
p0687 A79-52273
An experimental investigation into the influence of acoustic disturbances on the development of a turbulent boundary layer
[ARC-R/M-3825] p0226 A79-16238
Inverse boundary-layer technique for airflow design
p0358 A79-20054
Mechanics of boundary layer transition, part 2: Instability and transition to turbulence
[WI-LECTURE-SERIES-3-PH-2] p0676 A79-31530
TURBULENT DIFFUSION

Turbulence characteristics of compressor discharge flows --- J79D engine tests
p0496 A79-24999
TURBULENT FLOW

BT CAVALIERE FLOW

Propeller unsteady thrust due to operation in turbulent inflows
[ASME PAPER 78-079-9] p0007 A79-10762
Weak extinction limits of turbulent flowing mixtures
--- Flame stabilization
[ASME PAPER 79-02-148] p0010 A79-10798
Experimental study of an asymmetric thermal wake
p0503 A79-13158
Density changes and turbulence production in the transition of expansion or compression of a turbulent flow at supersonic speed
Computation of three-dimensional turbulent separated flows at supersonic speeds
[AIAA PAPER 79-0092] p0138 A79-19471
On the laminar separation, transition, and turbulent reattachment of low Reynolds number flows near the leading edge of airfoils
SUBJECT INDEX

[TURBULENT WAKES]

- Effects of turbulence model selection on the prediction of complex aerodynamic flows
- Experimental investigation of the effect of surface discontinuity on step-backward flow
- Laser anemometer measurements at the exit of a T63-C20 combustor
- Numerical solution of the Navier-Stokes equations
- Two-frequency-range theory of unstable turbulent combustion oscillations in a jet engine
- The prediction of the turbulent flow field about a stalled airfoil
- Numerical solution of the Navier-Stokes equations for arbitrary two-dimensional multi-element airfoils
- Laser velocimetry measurements on high temperature turbine blades
- Indirect measurement of turbulent skin friction
- The development and structure of turbulent plane jets
- The influence of longitudinal pressure gradient and turbulence of the flow upon heat transfer in turbine blades
- The prediction of the turbulent flow field about an isolated airfoil
- A study of turbulent flows about oscillating airfoils
- An experimental study of the influence of surface discontinuity on step-backward flow
- The generation and propagation of sound in turbulent jets
- The development and structure of turbulent plane jets
- Some low speed experimental results on the effects of swirl and velocity distribution on axisymmetric jet
- Laser velocimetry measurements on high temperature round and rectangular twin-jet flows
- The influence of longitudinal pressure gradient and turbulence of the flow upon heat transfer in turbine blades
- The prediction of the turbulent flow field about an isolated airfoil
- A study of turbulent flows about oscillating airfoils
- Experimental investigation of the subsonic tip and its vortex structure
- Evaluation of two inflow control devices for the design and optimization of large-scale turbine-vane passage
- Experimental investigation of the effect of surface discontinuity on step-backward flow
- Two-frequency-range theory of unstable turbulent combustion oscillations in a jet engine
- The prediction of the turbulent flow field about an isolated airfoil
- Numerical solution of the Navier-Stokes equations for arbitrary two-dimensional multi-element airfoils
- Structure of the turbulent separated flow around a stalled airfoil
- Effects of flow turbulence and noise on aerodynamic phenomena and measured quantities
- Effects of turbulence model selection on the prediction of complex aerodynamic flows
- Experimental investigation of the effect of surface discontinuity on step-backward flow
- Laser anemometer measurements at the exit of a T63-C20 combustor
- Numerical solution of the Navier-Stokes equations
- Two-frequency-range theory of unstable turbulent combustion oscillations in a jet engine
- The prediction of the turbulent flow field about a stalled airfoil
- Numerical solution of the Navier-Stokes equations for arbitrary two-dimensional multi-element airfoils
- Structure of the turbulent separated flow around a stalled airfoil
- Effects of flow turbulence and noise on aerodynamic phenomena and measured quantities

[TURBULENT JETS]

- The plane turbulent impinging jet
- Some low speed experimental results on the effects of swirl and velocity distribution on axisymmetric jet
- Laser velocimetry measurements on high temperature round and rectangular twin-jet flows
- The influence of longitudinal pressure gradient and turbulence of the flow upon heat transfer in turbine blades
- The prediction of the turbulent flow field about an isolated airfoil
- A study of turbulent flows about oscillating airfoils
- Experimental investigation of the subsonic tip and its vortex structure
- Evaluation of two inflow control devices for the design and optimization of large-scale turbine-vane passage
- Experimental investigation of the effect of surface discontinuity on step-backward flow
- Two-frequency-range theory of unstable turbulent combustion oscillations in a jet engine
- The prediction of the turbulent flow field about an isolated airfoil
- Numerical solution of the Navier-Stokes equations for arbitrary two-dimensional multi-element airfoils
- Structure of the turbulent separated flow around a stalled airfoil
- Effects of flow turbulence and noise on aerodynamic phenomena and measured quantities

[TURBULENT BLENDS]

- Jet mixing noise - Comparison of measurement and theory
- Interaction of the supersonic flow below a wing and a supersonic free jet (two-dimensional situation)
- The development and structure of turbulent plane jets
- Turbulence characteristics in the near wake of a compressor rotor blade
- An experimental study of the influence of flight-stream turbulence on jet mixing noise
- Unsteady stator response to upstream rotor wakes
- Numerical solution of a body-propelled turbulent jet flow including swirl and comparisons with data

[TURBULENCE HEAT TRANSFER]

- Heat transfer to turbine blades, with special reference to the effects of mainstream turbulence
- Experimental investigation of the influence of surface discontinuity on step-backward flow
- Two-frequency-range theory of unstable turbulent combustion oscillations in a jet engine
- The prediction of the turbulent flow field about a stalled airfoil
- Numerical solution of the Navier-Stokes equations for arbitrary two-dimensional multi-element airfoils
- Structure of the turbulent separated flow around a stalled airfoil
- Effects of flow turbulence and noise on aerodynamic phenomena and measured quantities

[TURBULENT BLOOD]

- Effects of turbulence model selection on the prediction of complex aerodynamic flows
- Experimental investigation of the effect of surface discontinuity on step-backward flow
- Laser anemometer measurements at the exit of a T63-C20 combustor
- Numerical solution of the Navier-Stokes equations
- Two-frequency-range theory of unstable turbulent combustion oscillations in a jet engine
- The prediction of the turbulent flow field about a stalled airfoil
- Numerical solution of the Navier-Stokes equations for arbitrary two-dimensional multi-element airfoils
- Structure of the turbulent separated flow around a stalled airfoil
- Effects of flow turbulence and noise on aerodynamic phenomena and measured quantities

[TURBULENT WAKES]

- Effects of turbulence model selection on the prediction of complex aerodynamic flows
- Experimental investigation of the effect of surface discontinuity on step-backward flow
- Laser anemometer measurements at the exit of a T63-C20 combustor
- Numerical solution of the Navier-Stokes equations
- Two-frequency-range theory of unstable turbulent combustion oscillations in a jet engine
- The prediction of the turbulent flow field about a stalled airfoil
- Numerical solution of the Navier-Stokes equations for arbitrary two-dimensional multi-element airfoils
- Structure of the turbulent separated flow around a stalled airfoil
- Effects of flow turbulence and noise on aerodynamic phenomena and measured quantities

[TURBULENT BLENDS]

- Jet mixing noise - Comparison of measurement and theory
- Interaction of the supersonic flow below a wing and a supersonic free jet (two-dimensional situation)
- The development and structure of turbulent plane jets
- Turbulence characteristics in the near wake of a compressor rotor blade
- An experimental study of the influence of flight-stream turbulence on jet mixing noise
- Unsteady stator response to upstream rotor wakes
- Numerical solution of a body-propelled turbulent jet flow including swirl and comparisons with data

[TURBULENT BLOOD]

- Effects of turbulence model selection on the prediction of complex aerodynamic flows
- Experimental investigation of the effect of surface discontinuity on step-backward flow
- Laser anemometer measurements at the exit of a T63-C20 combustor
- Numerical solution of the Navier-Stokes equations
- Two-frequency-range theory of unstable turbulent combustion oscillations in a jet engine
- The prediction of the turbulent flow field about a stalled airfoil
- Numerical solution of the Navier-Stokes equations for arbitrary two-dimensional multi-element airfoils
- Structure of the turbulent separated flow around a stalled airfoil
- Effects of flow turbulence and noise on aerodynamic phenomena and measured quantities

[TURBULENT WAKES]

- Effects of turbulence model selection on the prediction of complex aerodynamic flows
- Experimental investigation of the effect of surface discontinuity on step-backward flow
- Laser anemometer measurements at the exit of a T63-C20 combustor
- Numerical solution of the Navier-Stokes equations
- Two-frequency-range theory of unstable turbulent combustion oscillations in a jet engine
- The prediction of the turbulent flow field about a stalled airfoil
- Numerical solution of the Navier-Stokes equations for arbitrary two-dimensional multi-element airfoils
- Structure of the turbulent separated flow around a stalled airfoil
- Effects of flow turbulence and noise on aerodynamic phenomena and measured quantities

[TURBULENT BLENDS]

- Jet mixing noise - Comparison of measurement and theory
- Interaction of the supersonic flow below a wing and a supersonic free jet (two-dimensional situation)
- The development and structure of turbulent plane jets
- Turbulence characteristics in the near wake of a compressor rotor blade
- An experimental study of the influence of flight-stream turbulence on jet mixing noise
- Unsteady stator response to upstream rotor wakes
- Numerical solution of a body-propelled turbulent jet flow including swirl and comparisons with data

[TURBULENT BLOOD]

- Effects of turbulence model selection on the prediction of complex aerodynamic flows
- Experimental investigation of the effect of surface discontinuity on step-backward flow
- Laser anemometer measurements at the exit of a T63-C20 combustor
- Numerical solution of the Navier-Stokes equations
- Two-frequency-range theory of unstable turbulent combustion oscillations in a jet engine
- The prediction of the turbulent flow field about a stalled airfoil
- Numerical solution of the Navier-Stokes equations for arbitrary two-dimensional multi-element airfoils
- Structure of the turbulent separated flow around a stalled airfoil
- Effects of flow turbulence and noise on aerodynamic phenomena and measured quantities

[TURBULENT WAKES]

- Effects of turbulence model selection on the prediction of complex aerodynamic flows
- Experimental investigation of the effect of surface discontinuity on step-backward flow
- Laser anemometer measurements at the exit of a T63-C20 combustor
- Numerical solution of the Navier-Stokes equations
- Two-frequency-range theory of unstable turbulent combustion oscillations in a jet engine
- The prediction of the turbulent flow field about a stalled airfoil
- Numerical solution of the Navier-Stokes equations for arbitrary two-dimensional multi-element airfoils
- Structure of the turbulent separated flow around a stalled airfoil
- Effects of flow turbulence and noise on aerodynamic phenomena and measured quantities

[TURBULENT BLENDS]

- Jet mixing noise - Comparison of measurement and theory
- Interaction of the supersonic flow below a wing and a supersonic free jet (two-dimensional situation)
- The development and structure of turbulent plane jets
- Turbulence characteristics in the near wake of a compressor rotor blade
- An experimental study of the influence of flight-stream turbulence on jet mixing noise
- Unsteady stator response to upstream rotor wakes
- Numerical solution of a body-propelled turbulent jet flow including swirl and comparisons with data

[TURBULENT BLOOD]

- Effects of turbulence model selection on the prediction of complex aerodynamic flows
- Experimental investigation of the effect of surface discontinuity on step-backward flow
- Laser anemometer measurements at the exit of a T63-C20 combustor
- Numerical solution of the Navier-Stokes equations
- Two-frequency-range theory of unstable turbulent combustion oscillations in a jet engine
- The prediction of the turbulent flow field about a stalled airfoil
- Numerical solution of the Navier-Stokes equations for arbitrary two-dimensional multi-element airfoils
- Structure of the turbulent separated flow around a stalled airfoil
- Effects of flow turbulence and noise on aerodynamic phenomena and measured quantities
Development of turbulence through non-steady boundary layer
p0023 A79-12366

Unsteady calculation of vortex sheets emitted by highly inclined lifting surfaces
[ONERA, TP NO. 1978-83] p0127 A79-18551

20 simulation of unsteady phenomena on a rotor --- helicopter design
p0129 A79-18646

Calculation of transonic aileron buzz
[AAIA PAPER 79-0134] p0142 A79-19553

Transit edge conditions for unsteady flows at high reduced frequency --- application of Kutta-Joukowsky condition
[AAIA PAPERS 79-0152] p0143 A79-19567

Unsteady thin airfoil theory for transonic flows
with embedded shocks
[AAIA PAPER 79-0204] p0143 A79-19597

Aerodynamic characteristics of an unsteady separated flow
[AAIA PAPER 79-0283] p0144 A79-19683

Maximum likelihood identification of aircraft parameters with highly aerodynamic modelling
[AAIA PAPER 79-0400] p0148 A79-19710

Unsteady flows --- subsonic and supersonic aeroelasticity oscillating airfoils and displacement bodies
[DGLR PAPER 78-222] p0183 A79-20480

Periodically unsteady flow in an inbedded stage of a multistage, axial-flow turbomachine
[ASME PAPER 78-GT-6] p0195 A79-22238

Experimental investigation of unsteady phenomena
in vaneless radial diffusers
[ASME PAPER 78-GT-23] p0195 A79-22329

Some features of the unsteady pressure field in transonic airfoil buffeting
[AAIA PAPER 79-0351] p0201 A79-23550

Longitudinal motion of an aircraft in unsteady flow
p0212 A79-24194

Numerical predictions of the unsteady lift
development on airfoils in a viscous fluid
p0212 A79-24216

Drag on an oscillating airfoil in a fluctuating free stream --- helicopter rotor blade application
p0213 A79-24217

Effect of compressor geometry on the unsteady regimes of a low speed compressor

Numerical study of unsteady flows of viscous incompressible fluids about airfoils by a combined method of order O(h^2) and O(h^4)
p0240 A79-24289

Nonsteady flow of an incompressible liquid over slender permeable profiles
p0273 A79-27062

Instability of fluid flow in centrifugal injectors
p0279 A79-27131

An analysis of unsteady transonic flow in wind tunnels in subresonant frequency range
[AAIA 79-0764] p0320 A79-29018

Unsteady airloads in supercritical transonic flows
[AAIA 79-0767] p0321 A79-29021

Experiments in unsteady transonic flow
[AAIA 79-0769] p0321 A79-29022

A refined prediction method for supersonic unsteady aerodynamics with AGARD partition scheme --- Aerodynamic Influence Coefficient
[AAIA 79-0770] p0321 A79-29023

Aerohydroelastic opening of a shell in unsteady flow
p0325 A79-29151

Density distribution in a non-stationary bow wave
in a transonic flow
p0333 A79-29660

Goertler vortices in the nonlinear region --- unsteadiness development and onset in blowdown and tunnels
p0333 A79-29684

The effect of chordwise flexibility on the lift of a rapidly accelerated airfoil
p0343 A79-30923

Facility for studying the action of unsteady supersonic gas streams on the blades of a plane cascade
p0344 A79-31143

Unsteady effects on a stalled wing in pulsed flow --- Comparison with back-and-forth oscillating case
p0389 A79-32288

Implementation of unsteady oscillatory flows in a transonic wind tunnel
p0389 A79-32290

Review of problems of unsteady aerodynamics of helicopters
p0389 A79-32293

Experimental studies of unsteady aerodynamics on wind tunnel models of helicopter rotors
p0389 A79-32295

Unsteady upstream effects in axial-flow supersonic compressor stages
[ASME PAPER 79-GT-55] p0391 A79-32350

The analysis of propellers including interaction effects --- for general aviation aircraft
[SAA PAPER 790576] p0453 A79-36712

Analysis of an unsteady aerodynamic force on a blade due to ununiform amplitude gusts
p0673 A79-39059

Experimental analysis methods for unsteady flows in turbomachines
[ONERA, TP NO. 1979-59] p074 A79-39095

Unsteady hypersonic gas flow past a thin finite-span wing
p0513 A79-41573

Nonlinear mathematical simulation of unsteady flow past a helicopter rotor
p0513 A79-41573

Experiments on an aerfoil at a high angle of incidence in longitudinal oscillations
p0566 A79-45312

Fully conservative numerical solutions for unsteady irrotational transonic flow about airfoils
[AAIA PAPER 79-1555] p0602 A79-47382

Theoretical flap-lag damping with various dynamic inflow models
p0628 A79-50073

Numerical solution of the problem of unsteady supersonic flow around the front part of the wings with a detached shock wave
p0636 A79-49956

Improved sonic-box computer program for calculating transonic aerodynamic loads on oscillating wings with thickness
[ASA/CR-15/806] p0843 A79-10599

Technical evaluation report on the Fluid Dynamics Panel Symposium on Unsteady Aerodynamics
[AGARD-R-128] p0867 A79-12028

The use of sound absorbing walls to reduce dynamic interference in wind tunnels
[JJ1050] p0805 A79-13062

Nonlinear interaction between mean and unsteady flowfields near Mach 1,
[AD-060789] p0170 A79-15010

Identification of unsteady effects in lift buildup
p0178 A79-15083

Effect of flow separation vortices on aircraft unsteady aerodynamics
p0178 A79-15084

A new two-dimensional oscillating wing apparatus for unsteady aerodynamics research
p0352 A79-20008

Unsteady viscous thin airfoil theory
[AGARD-P-6671] p0361 A79-20087

Notes concerning testing time requirements in steady and unsteady measurements
p0369 A79-23112

Some remarks on the design of transonic tunnels with low levels of flow steadiness

An exploratory study of a finite difference method for calculating unsteady transonic potential flow
[ASA/CR-30/0105] p0547 A79-27096

Unsteady rotor blade loading in an axial compressor with steady-state inlet distortions
p0555 A79-27176

Distortions, rotating stall and mechanical solicitations
p0555 A79-27177

Aeromechanics --- unsteady flow, aeroelasticity, flutter, and servocellor
p0579 A79-28121

A program to compute three-dimensional subsonic unsteady aerodynamic characteristics using the
doublet lattic method, 1216 (DOEFL). Volume 1: Engineering and usage

UNSWEEP WINGS
MT INFINITE SPAN WINGS
MT RECTANGULAR WINGS
MT PING WINGS
Amplification factors at transition on an unswept wing in free flight and on a swept wing in wind tunnel - aircraft stability analysis
[AIAA PAPER 79-0267] p0203 179-23564

UPDRAFTS
MT VERTICAL AIR CURRENTS
UPPER ATMOSPHERE
MT THERMOSPHERE
MT UPPER SURFACE BLOW FLAPS
Calculation of the longitudinal aerodynamic characteristics of upper-surface-blown wing-flap configurations
[AIAA PAPER 79-0102] p0142 179-19545
Pressure and velocity measurements in a three-dimensional wall jet -- high lift V/STOL wing-flap
[AIAA PAPER 79-0352] p0146 179-19683
Ground effect on USB configurations - Upper Surface Blowing
p0191 179-21525
An experimental study of USB flap noise reduction through mean flow modification - Upper Surface Blown
[AIAA PAPER 79-0677] p0268 179-26908
Analysis of some aerodynamic characteristics due to wing-jet interaction
Longitudinal aerodynamic characteristics of a vectored-engine-over-wing configuration at subsonic speeds -- Langley V/STOL tunnel tests
[NASA TP-1533] p0072 179-33164

UPWASH
Effect of nozzle spacing on ground interference forces for a two jet V/STOL aircraft
[AIAA PAPER 79-1856] p0635 179-89339

URBAN PLANNING
Meeting airport ground access demands for the 1980's at Los Angeles International Airport
p0063 179-14139

URBAN RESEARCH
The total energy cost of freight transport
p0065 179-14322
Experimental investigation of helicopter flight modes on helicopter-generated noise
p0604 179-47873

URBAN TRANSPORTATION
Meeting airport ground access demands for the 1980's at Los Angeles International Airport
p0063 179-14139
Role of helicopters in airport access
p0128 179-18574
Planning for airport access: An analysis of the San Francisco Bay area
[NASA-CP-2044] p0042 179-10942
Planning for airport access: An analysis of the San Francisco Bay area. Introduction and conclusions
p0042 179-10943
Planning for airport access: An analysis of the San Francisco Bay area. The setting
p0042 179-10948
Components of the airport access system
p0042 179-10948
Planning for airport access: An analysis of the San Francisco Bay area. Existing studies
p0052 179-10946
Planning for airport access: An analysis of the San Francisco Bay area. Technological options
p0042 179-10947
Planning for airport access: An analysis of the San Francisco Bay area. Three subsytem designs
p0063 179-10948

USA (UNITED STATES)
D UNITED STATES OF AMERICA
USER MANUALS (COMPUTER PROGRAMS)
An automated procedure for computing the three-dimensional transonic flow over wing-body combinations, including viscous effects. Volume 2: Program users manual and code description
[AD-A059987] p0087 179-12027
General aviation airplane structural crashworthiness programmers manual

UTILITY AIRCRAFT
[FAA-BO-78-120] p0229 179-16814
General purpose computer program for interacting supersonic configurations. Users manual - determining unsteady aerodynamic forces
Airport vicinity air pollution model. Abbreviated version users guide
[FAA-BO-78-111] p0298 179-18475
Users manual for linear Time-Varying Simulation (Program TVSRS)
[NASA-CR-159020] p0375 179-20769
Users guide to data preparation: Photogrammetric navigation analysis program Fotoplot
[AD-A056414] p0419 179-22070
Users manual for steady state and transient thermal analysis of a shaft-bearing system (SHABTH)
[AD-A064150] p0427 179-22523
Future VSTOL rocketed antenna code: Users manual
[AD-A065587] p0469 179-24215
Users guide: Computer program with interactive graphics for analysis of plane frame structures (CPFRAE)
[AD-A067349] p0503 179-25428
Maintenance improvement. An analysis approach, including inferential techniques. Volume 4: Software manual
[AD-A068838] p0580 179-28131
Digital Avionics Information System (DAIS):
Reliability and maintainability model users guide, volume 2 --- life cycle costs
[AD-A068826] p0593 179-29182
A users manual for a computer program to generate fatigue spectrum loading sequences
p0668 179-31198
A program to compute three-dimensional subsonic transonic aerodynamic characteristics using the doublet lattice method. L216 (DOEFL). Volume 1: Engineering and usage
Modal interpolation program, L215 (JETPRO). Volume 1: Engineering and usage
Research Aircraft Measurement System (RAMS) graphic system user guide
[FA-296345/7] p0722 179-33901

USER REQUIREMENTS
Principle of operation of Navstar and system characteristics
p0063 179-14193
Texas Instruments Phase I GPS user equipment
p0063 179-14190
Performance enhancements of GPS user equipment
p0063 179-14191
Test and evaluation procedures for the GPS user equipment
p0063 179-14192
GPS Phase I user equipment field tests
p0063 179-14193
An analysis of the new construction regulations for military and civil aircraft construction with respect to the demonstration of serviceability
[DGLR PAPER 78-200] p0164 179-20494
Future VSTOL requirements for omnidirectional low range airspeed
p0331 179-29480
Can Europe choose a common fighter
p0512 179-41209
User requirements for future combat search and rescue vehicles
p0620 179-48663
Can avionic testability requirements be enforced
p0620 179-48887
Advanced Scout Helicopter flying qualities requirements - How realistic are they
[AR--78-23] p0629 179-49080

UTILITY AIRCRAFT
MT BO-105 HELICOPTER
MT BO-105 HELICOPTER
MT P-33 HELICOPTER
MT Y-39 HELICOPTER
MT U-2 AIRCRAFT
MT UH-1 HELICOPTER
MT OH-6A HELICOPTER
MT OH-6A HELICOPTER

Analysis of the economic benefits of utility helicopter safety design features
p0072 179-15373
<table>
<thead>
<tr>
<th>SUBJECT INDEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ASME PAPER 78-gt-121] Aspects of short-takeoff aircraft -- optimization of aircraft, airports and flight regimes</td>
</tr>
<tr>
<td>[ASME PAPER 78-gt-122] The sizing of a V/STOL aircraft for multilevel application</td>
</tr>
<tr>
<td>[ASME PAPER 78-gt-123] An innovative technique for static and dynamic V/STOL testing</td>
</tr>
<tr>
<td>[ASME PAPER 78-gt-124] Composite wing technology on the NV-8B advanced aircraft</td>
</tr>
<tr>
<td>[ASME PAPER 78-gt-126] The value of various technology advances for several V/STOL configurations</td>
</tr>
<tr>
<td>[ASME PAPER 78-gt-128] XV-15 tilt rotor research aircraft and preliminary design of a larger aircraft for the U.S. Navy subsonic V/STOL mission</td>
</tr>
<tr>
<td>[AIAA PAPER 79-0332] Critical considerations for wind-tunnel testing V/STOL aircraft models for hover/wingborne flight transition</td>
</tr>
<tr>
<td>[AIAA PAPER 79-0335] Transition aerodynamics for close-coupled wing-canard configuration V/STOL operations</td>
</tr>
<tr>
<td>[AIAA PAPER 79-0336] Pressure and velocity measurements in a three dimensional wall jet high lift V/STOL wing-flap evaluation</td>
</tr>
<tr>
<td>[AIAA PAPER 79-0337] Some basic test results of V/STOL jet induced lift effects in hover</td>
</tr>
<tr>
<td>[AIAA PAPER 78-GT-121] Development of V/STOL aircraft</td>
</tr>
<tr>
<td>[AIAA PAPER 78-GT-123] Low speed testing techniques for V/STOL aircraft in the Princeton dynamic model tracking</td>
</tr>
<tr>
<td>[AIAA PAPER 78-GT-125] V/STOL aircraft engine and mechanical drive component integration</td>
</tr>
<tr>
<td>[AIRPAPER 781038] Use of radio controlled models in the conceptual development of V/STOL aircraft</td>
</tr>
<tr>
<td>[AIRPAPER 781039] Avionics systems needed to optimize V/STOL potential</td>
</tr>
<tr>
<td>[AIRPAPER 781040] Ski-jump -- a great leap for tactical airpower V/STOL jet launching from upward-inclined ramp</td>
</tr>
<tr>
<td>[AIRPAPER 790696] Evaluation of IFR handling qualities of helicopters using the RAE airborne V/STOL simulator</td>
</tr>
<tr>
<td>[AIRPAPER 790702] Ship motion effects on landing impact loads V/STOL landing on aircraft carrier</td>
</tr>
<tr>
<td>[AIRPAPER 790697] V/STOL all weather HUD landing simulation Status report</td>
</tr>
<tr>
<td>[AIRPAPER 790701] Design benefits from V/STOL control/display simulation program at Lockheed</td>
</tr>
<tr>
<td>[AIRPAPER 790702] Future VSTOL requirements for omnidirectional low range airspeed</td>
</tr>
<tr>
<td>[AIRPAPER 790703] An X-22A flight experiment to investigate control-display requirements for the XV-8B VTOL aircraft</td>
</tr>
<tr>
<td>[AIRPAPER 790704] Augmented vectored thrust engines and the problem of avoiding hot gas recirculation</td>
</tr>
<tr>
<td>[ASME PAPER 79-gt-105] Propulsion system considerations for the subsonic V/STOL</td>
</tr>
<tr>
<td>[ASME PAPER 79-gt-57] [ASME PAPER 79-gt-57]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>UTILIZATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sikorsky 5-76 stresses performance</td>
</tr>
<tr>
<td>Environmental factors affecting the installation and operation of gas turbine engines in aircraft</td>
</tr>
<tr>
<td>Interactional aerodynamics of the single rotor helicopter configuration. Volume 5: One-third octave band spectrograms of wake split-films data, fairings and surface devices utility aircraft</td>
</tr>
<tr>
<td>Interactional aerodynamics of the single rotor helicopter configuration. Volume 6: C One-third octave band spectrograms of wake single film data, hubcaps and air ejectors utility aircraft</td>
</tr>
<tr>
<td>Interactional aerodynamics of the single rotor helicopter configuration. Volume 7: D Frequency analyses of wake split-films data, buildup to baseline utility aircraft</td>
</tr>
<tr>
<td>Interactional aerodynamics of the single rotor helicopter configuration. Volume 7: E Frequency analyses of wake split-films data, solid hubcaps utility aircraft</td>
</tr>
<tr>
<td>Interactional aerodynamics of the single rotor helicopter configuration. Volume 7: F Frequency analyses of wake split-films data, open hubcaps utility aircraft</td>
</tr>
<tr>
<td>Interactional aerodynamics of the single rotor helicopter configuration. Volume 7: G Frequency analyses of wake split-films data, open hubcaps --- utility aircraft</td>
</tr>
<tr>
<td>Preliminary airworthiness evaluation BO-21 N Viking helicopter</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>V BAND EXTREMELY HIGH FREQUENCIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>V/STOL AIRCRAFT</td>
</tr>
</tbody>
</table>
The British Aerospace Harrier: Case study in aircraft design --- Book

Investigation of a laser Doppler velocimeter system to measure the flow field of a large scale V/STOL aircraft in ground effect

AIAA PAPER 79-1184

Methodology for prediction of V/STOL propulsion induced forces in ground effect

AIAA PAPER 79-1281

The impact of operational requirements on V/STOL propulsion concept selection

AIAA PAPER 79-1283

V/STOL aircraft configuration effects on exhaust gas ingestion

AIAA PAPER 79-1284

V/STOL performance comparisons with variable pitch and variable inlet guide vane fans --- A report on experimental data

AIAA PAPER 79-1286

Type A V/STOL propulsion system development

AIAA PAPER 79-1287

Flight test of a V/STOL digital autoland system along complex trajectories

AIAA 79-1703

Fuel-continuous guidance system for powered-lift aircraft

AIAA 79-1709

Design criteria for optimal flight control systems

AIAA 79-1785

Aerodynamic effects of an attitude control vane on a V/STOL Type B aircraft

AIAA 79-1785

Performance of a V/STOL tilt nacelle inlet with blowing boundary layer control

AIAA 79-1785

Development of V/STOL aircraft -- 1950 to 1970

AIAA 79-1785

Recent V/STOL aircraft designs

AIAA 79-1785

The characteristics of a lift cruise fan V/STOL configuration in near proximity to a small deck with fine pitch and variable inlet guide vane fans

AIAA 79-1785

Aerodynamic effects of an attitude control vane on a tilt-nacelle V/STOL propulsion system

AIAA 79-1785

Blown wings from Kiev --- short takeoff and landing through wing-overblowing

AIAA 79-1785

Effect of nozzle spacing on ground interference forces for two tilt/STOL aircraft approaches

AIAA PAPER 79-1856

Recent applications of theoretical analysis to V/STOL inlet design

AIAA 79-1785

Flight demonstration of the AV-8B V/STOL concept

AIAA 79-1785

Study of aerodynamic technology for V/STOL fighter/attack aircraft: Horizontal attitude concept

AIAA-CR-152130

Study of aerodynamic technology for V/STOL fighter/attack aircraft: Vertical attitude concept

AIAA-CR-152131

Implementation of an optimum profile guidance system on STOLAND

A-463

VALUE ENGINEERING

An examination of the factors affecting the thrust requirements and the hover and short takeoff performance of several jet V/STOL fighter concepts

AD-A058128

A nonlinear trajectory command generator for a digital flight-control system

NASA-TP-12211

Lift system induced aerodynamics of V/STOL aircraft in a moving deck environment. Volume 1: Technical discussion

AIAA 79-10438

Configuration and automatic control of an augmentor wing aircraft with vectored thrust

AIAA 79-17872

Lift system induced aerodynamics of V/STOL aircraft in a moving deck environment. Volume 2: Static and dynamic jet-induced force and moment data

AIAA 79-10438

Theoretical fan velocity distortions due to inlets and nozzles --- in V/STOL aircraft

NASA-TM-79150

Thrust and mass flow characteristics of four 36 inch diameter tilt shop fan thrust vectoring systems in and out of ground effect

NASA-CR-152239

Investigation of a laser Doppler velocimeter system to measure the flow field of a large scale V/STOL aircraft in ground effect

NASA-CR-152212

Performance of a V/STOL tilt nacelle inlet with blowing boundary layer control

NASA-CR-152176

Aerodynamical research into vertical problems in V/STOL aircraft approach landing

NASA-CR-152176

Aerodynamics of a tilt-nacelle V/STOL propulsion system

NASA-CR-152176

A comparison of the V/STOL handling qualities of the V/STOL with the requirements of AGARD report 577 and MIL-F-3300

NASA-TM-1898

Low speed wind tunnel test of ground proximity and deck edge effects on a lift cruise fan V/STOL configuration, volume 2

NASA-CR-152248

Recent applications of theoretical analysis to V/STOL inlet design

NASA-TM-79211

A unique facility for V/STOL aircraft hover testing --- Langley Impact Dynamics Research Facility

NASA-TM-1473

The Guidance and control of Helicopters and V/STOL aircraft at night and in poor visibility

AGARD-CP-258

High performance composites and adhesives for V/STOL aircraft

NASA-AER-691

Theoretical and experimental investigation of ground-induced effects for a low-aspect-ratio highly swept arrow-wing configuration

NASA-TP-1908

VACUUM "WETS"

Experimental measurements of the rotating frequencies and node shapes of a full scale helicopter rotor in a vacuum and correlations with calculated results

AIAA 79-3938

VACUUM TUBES

NY CATHODE TUBE TUBES

VACUUM TUBES

NY CATHODE TUBE TUBES

VALIDITY

Restrictive assumptions and range of validity of Schlichting's cascade analysis

AIAA 79-21058

Validation of aircraft noise prediction program

NASA-CR-150047

Development of criteria for monitoring of airport ground pollution. Volume 1: Study

NASA-AD-1067242

Development of criteria for monitoring of airport ground pollution. Volume 2: Data validation procedures

AIAA 79-29197

The application of computer aided techniques to
Variable cycle engine technology program planning and definition study
Analytical derivatives
[AD-064944] p0836 N79-23090
Regression simulation of turbine engine performance: Accuracy improvement (task 4)
[AD-066398] p0999 N79-25027

VARIABLE GEOMETRY STRUCTURES
Development of gas turbine performance seeking logic
[ASME PAPER 78-GT-13] p0001 N79-10257
Aerodynamic design of fixed and variable geometry nozzles: Turbine casings
[ASME PAPER 79-GT-87] p0391 N79-32264
Partially variable area turbine nozzle
[ASME PAPER 79-1227] p0669 N79-39592
A general method for the layout of ailerons and elevators of gliders and motorplanes
[p0545 N79-27076

VARIABLE LIFT
U LIFT

VARIABLE PITCH PROPELLERS
Effect of forward speed on noise emission and thrust of small aircraft propellers
[ADG-3 PAPER 78-127] p0061 N79-10400
On methods for application of harmonic control — helicopter vibration reduction by blade pitch variation
[p0131 N79-16657
Free-feathering rotor — helicopter applications
[p0131 N79-16661
Effect of forward velocity and crosswind on the reverse-thrust performance of a variable-pitch fan engine
[ASIA PAPER 79-1005] p0200 N79-23512
V/STOL performance comparisons with variable pitch and variable inlet guide vane fans - A report on experimental data
[ASIA PAPER 79-1286] p0509 N79-40487
Aerodynamic performance of 1.38-pressure-ratio, variable-pitch fan stage

VARIABLE SWEEP WINGS
Soviet swing-wings — Mig-23 fighter family characteristics
[p0112 N79-17125
Dynamics of controlled longitudinal motion of an airplane with a variable-geometry wing
[AD-10614944] p0251 N79-25517
Calculation of wings of variable sweep
[AD-10614944] p0251 N79-25517
Aeroelastic stability analysis of the A-1 manned oblique-wing aircraft
[p0663 N79-38136
Fundamentals of design. III — V-G for combat aircraft
[p0536 N79-43725
High-performance wings with significant leading-edge thrust at supersonic speeds
[ASIA PAPER 79-1871] p0518 N79-47924
Subsonic and transonic flows on a variable sweep wing
[UKEM, TP NO. 1979-102] p0623 N79-48849
Structural analysis of variable-sweep wings
[p0696 N79-54051
Skin and Spar Interface Program (SASIP)
[p0547 N79-38136
— sweepback and variable sweep wings
[AD-0077115] p0716 N79-33199

VARIABLE THRUST
Propeller unsteady thrust due to operation in turbulent inflow
[ASIA PAPER 79-GT-94] p0007 N79-10762

VARIANCE (STATISTICS)
MT ANALYSIS OF VARIANCE
MT REGRESSION ANALYSIS

VARIATIONS
VARIABLE WIND VARIATIONS
VARIATIONS

VARIABILITY
Variability of annoyance response due to aircraft noise

VARIABLE AREA WINGS
U SMALL-EDGE FLAPS

VARIABLE CYCLE ENGINES
Projected aircraft systems development
[AD-10614944] p0189 N79-21278
Multi-variable control altitude demonstration on the YJ00 turboprop engine
[ASIA PAPER 79-1204] p0875 N79-30914
General Electric Company variable cycle engine technology demonstrator program
[AD-10614944] p0875 N79-10762
Programs on variable Cycle Engines
[AD-10614944] p0875 N79-10762
Multi-variable control design principles applied to a variable cycle turboprop engine
[p0511 N79-41113
Preliminary study of optimum duct burning turbofan engine cycle design parameters for supersonic cruising
Definitive study for variable cycle engine tested engine and associated test program
Operating and performance characteristics of a duct burning turbofan engine with variable area turbines
[AD-066398] p0234 N79-16857

VARIABLE CYLINDER ENGINE
Variable cycle engine technology program planning and definition study
Analytical derivatives
[AD-064944] p0836 N79-23090
Regression Simulation of turbine engine performance: Accuracy improvement (task 4)
[AD-066398] p0999 N79-25027

VARIABLE CYLINDER ENGINE
Variable cycle engine technology program planning and definition study
Analytical derivatives
[AD-064944] p0836 N79-23090
Regression Simulation of turbine engine performance: Accuracy improvement (task 4)
[AD-066398] p0999 N79-25027

VATOL AIRCRAFT
The impact of operational requirements on V/STOL propulsion concept selection
[ASIA PAPER 79-1227] p0871 N79-39018

VECTOR ANALYSIS
MT COLLINARITY

A-464
VECTOR CONTROL
U DIRECTIONAL CONTROL

VECTOR SPACES
MT VECTORS (MATHEMATICS)
MT EIGENVALUES
MT EIGENVECTORS
MT MATRICES (MATHEMATICS)
MT STATE VECTORS
MT STIFFNESS MATRIX
MT VORTICITY

VECTORS (MATHEMATICS)
MT VECTORS (MATHEMATICS)
MT EIGENVECTORS
MT STATE VECTORS
MT VORTICITY

VEHICLE WHEELS
MT ROSE WHEELS

Airplane takeoff from unpaved airfields
p0069 A79-19874

VELOCITY
NT ACOUSTIC VELOCITY
NT AIRSPEED
NT ANGULAR VELOCITY
NT CRITICAL VELOCITY
NT EXHAUST VELOCITY
NT FLOW VELOCITY
NT GROUND SPEED
NT HIGH SPEED
NT HYPERSONIC VELOCITY
NT LOW VELOCITY
NT PROPAGATION VELOCITY
NT RADIANT VELOCITY
NT MOTOR VELOCITY
NT SUBSONIC VELOCITY
NT SUPersonic VELOCITY
NT TIP VELOCITY
NT TRANSVERSE VELOCITY
NT WIND VELOCITY

VELOCITY DISTRIBUTION
Experimental study of an asymmetric thermal wake
[ASME PAPER 78-976-6] p0195 A79-22328

Mechanism of determination of the shedding frequency of vortices behind a cylinder at low Reynolds numbers
p0137 A79-18845

Some low speed experimental results on the effects of swirl and velocity distribution on an axisymmetric jet
p0194 A79-21999

Periodically unsteady flow in an embedded stage of a multistage, axial-flow turbomachine
[ASME PAPER 78-976-6] p0195 A79-22328

Characteristics of the wake of a lightly loaded compressor or fan rotor
[ASME PAPER 79-0550] p0253 A79-25861

A jet exhaust noise prediction procedure for inverted velocity profile coaxial exhaust nozzles
[ASME PAPER 79-0633] p0317 A79-28964

Blade-to-blade pressure, temperature, and velocity profiles downstream of a single rotor row at high subsonic speed
[ASME 79-7033] p0331 A79-29419

Considerations regarding velocity distribution and wall friction in incompressible axisymmetric turbulent boundary layers with transverse curvature
p0334 A79-29694

Studies of mean- and turbulent-velocity fields in a large-scale turbine-vane passage
[ASME-CR-3067] p0234 A79-16853

Theoretical fan velocity distortions due to inlets and nozzles --- in V/STOL aircraft
[ASME-FM-79150] p0481 A79-23911

Studies of the acoustic transmission characteristics of coaxial nozzles with inverted velocity profiles: Comprehensive data report --- nozzle transfer functions

Effect of rotor azimuthal velocity ratio on response to inlet radial and circumferential distortion
[ASME-TP-1278] p0563 A79-28177

Aerodynamic and acoustic investigation of inverted velocity profile coaxial exhaust nozzle models and development of aerodynamic and acoustic prediction procedures, comprehensive data report, volume 1
[ASME-CR-159515] p0653 A79-30185

Aerodynamic and acoustic investigation of inverted velocity profile coaxial exhaust nozzle models and development of aerodynamic and acoustic prediction procedures, comprehensive data report, volume 2
[ASME-CR-159516] p0653 A79-30186

Aerodynamic and acoustic investigation of inverted velocity profile coaxial exhaust nozzle models and development of aerodynamic and acoustic prediction procedures

VELOCITY ERRORS

Reading and speed errors for x, y tracking filters
p0349 A79-32169

VELOCITY FIELDS
U VELOCITY DISTRIBUTION

VELOCITY MEASUREMENT
NT WIND VELOCITY MEASUREMENT

Pressure and velocity measurements in a three dimensional wall jet --- high lift V/STOL wing-flap
[AINA PAPER 79-0352] p0146 A79-19683

Aircraft velocity and altitude measurements using a tunable diode laser
p0281 A79-28139

Study of mean- and turbulent-velocity fields in a large-scale turbine-vane passage
[ASME PAPER 79-073-3] p0340 A79-30519

Preliminary studies using photon correlation velocimetry in turbomachinery and propulsion systems
p0405 A79-38301

Turbulent wake measurements with a laser velocimeter
[AI AA PAPER 79-1087] p0462 A79-38056

Laser velocimetry measurements on high temperature round and rectangular twin-jet flows
p0516 A79-42061

Multidisciplinary tracking system using radial velocity measurements
p0538 A79-49608

Velocity measurement about a NACA 0012 airfoil
with a laser velocimeter
[AD-A056447] p0034 A79-10029

Evaluation of a wake vortex upset model based on simultaneous measurements of wake velocities and probe-aircraft accelerations
[ASME-FM-78561] p0302 A79-18960

Aircraft velocity and altitude measurements using a tunable diode laser

VELOCITY PROFILES
U VELOCITY DISTRIBUTION

VENTILATION

The T-76 environmental control system

Jet exhaust noise measurement in a small jet engine
[AD-A056447] p0034 A79-10029

Evaluation of a wake vortex upset model based on simultaneous measurements of wake velocities and probe-aircraft accelerations
[ASME-FM-78561] p0302 A79-18960

Aircraft velocity and altitude measurements using a tunable diode laser

VENTURe TUBES

Effect of swirlur-mounted mixing venturi on emissions of flame-tube combustor using jet fuel
[ASME-TP-1393] p0164 A79-16999

VERTICAL AXES
NT VERTICES

VELOCITIES

VELOCITY AIR CURRENTS

Calibration and use of a sailplane variometer to measure vertical velocity fluctuations
p0036 A79-30112

A wind shear/downdraft drift angle warning system
p0464 A79-38477

Minimum altitude-loss soaring in a specified vertical wind distribution
p0545 A79-27071

VERTICAL ATITUDE TAKEOFF-LANDING AIRCRAFT
U VERTICAL AIRCRAFT

VERTICAL DISTRIBUTION

Vertical cutoof rigidity and the intensity distribution of cosmic rays near Cape Town
p0616 A79-37468

VERTICAL FINS
U FINS
The characteristics of the spray generated by the efflux of various aircraft propulsors impinging normally on water.

An experimental investigation of control-display requirements for a jet-lift VTOL aircraft in the terminal area.

Description of the VTOL Approach and Landing Technology (VALT) CH-47 research system. Volume I: Technical discussion for surface to surface cruise missiles.

Environmental requirements for a jet-lift VTOL aircraft in the terminal area.


Effect of lip and centerbody geometry on aerodynamic performance of inlets for tilting-nacelle VTOL aircraft.

Aerodynamic and thermodynamic characteristics of flow fields below VTOL vehicles in ground proximity.

Effect of lip and centerbody geometry on aerodynamic performance of inlets for tilting-nacelle VTOL aircraft.
VERIFICATION

VOR ORBITAL NAVIGATION
A simple integrated navigation system on VOR-DME basis

VOR - Its past, present, and future
Can low-cost VOR and Omega receivers suffice for NAVA - a new computer-based navigation technique
Wide-aperture digital VOR
Low profile polarization cage for VOR-S antennas
Navigation at high latitudes

VIBRATION DAMPERS

Determination of the aerodynamic damping of turbine blade vibrations with allowance for the pitch, exit blade angle, and blade curvature
Synthesis and analysis of systems for active control and suppression of flutter of flying craft
Influence of some factors on GTE turbine blade, vibrational energy dissipation
Comparative study between two different active flutter suppression systems
The role of rotor impedance in the vibration analysis of rotorcraft
On methods for application of harmonic control --- helicopter vibration reduction by blade pitch variation
Analysis of free torsional rotor blade oscillations under special consideration of asymmetric wash-plate support
Master Plan for prediction of vehicle interior noise
Reduction of cabin noise during cruise conditions by stringer and frame damping
Adaptive control of wing store flutter - a feasibility study
Design, development, and testing of an active flutter margin augmentation system for a commercial transport airplane
Decoupler pylon - A simple, effective wing/store flutter suppressor --- in fighter/attack aircraft
Recent progress in active controls applied to flutter suppressors
Friction damping of resonant stresses in gas turbine engine airfoils
Oil squeeze film dampers for reducing vibration of aircraft gas turbine engines
Engine evaluation of a vibration damping treatment for inlet guide vanes
Evaluating the capacity of paired shrouded turbine blades in relation to shroud contact conditions
Evaluating the aerodynamic damping of the oscillations of turbine blades with a view to pitch, stagger angle, and curvature of blades
Designing with damping materials to reduce noise and structural fatigue --- of aircraft components
A method of reducing aircraft turbine blade vibrations
Demonstration of aircraft wing/store flutter suppression systems
Dynamics requirements for an Advanced Scout Helicopter /ASB/ (ARS 79-19)
Evaluation of the practical aspects of vibration reduction using structural optimization techniques

VIBRATION ISOLATORS

Vibration damping

Technical evaluation report on the 52nd Symposium of the Propulsion and Thermodynamics of Pressures, Vibrations, Structural Integration and Engine Integrity (Including Aeroelasticity and Flutter) (AGARD-AR-133)
The promise of multi-cyclic control --- to control fatigue blade loads and rotor vibrations (NASA-TP-78621)
Radiation pattern sidelobes and null filling produced by aircraft vibration (AD-A704772)

VERIFICATION

Vertical takeoff and landing
Vertical takeoff and landing
Vertical takeoff
Boeing aircraft
Very high frequencies

Very high frequency radio equipment

Very high frequency radio equipment

VHF omnirange navigation

A simple integrated navigation system on VOR-DME basis
Bearing errors in the VHF omnirange due to scattering from wires --- in aircraft receiver
VOR - Its past, present, and future
Can low-cost VOR and Omega receivers suffice for NAVA - a new computer-based navigation technique
Wide-aperture digital VOR
Low profile polarization cage for VOR-S antennas
Navigation at high latitudes

VIBRATION DAMPERS

Vibration dampers

VIBRATION DAMPERS

VERIFICATION

Vibratory ice protection for helicopter rotor blades (AD-A057329)
Correlation study between vibrational environmental and failure rates of civil helicopter components (NASA-TP-159033)
Prediction of the angular response power spectral density of aircraft structures (AD-A066141)
Helicopter transmission vibration and noise reduction program, Volume 3: Evaluation of fiber PP metal-matrix housing specimens (AD-A066794)
Some theoretical and experimental investigations of stresses and vibrations in a radial flow rotor
VIBRATION EFFECTS

- Development of noise and vibration ride comfort criteria
- Engine-induced structural-borne noise in a general aviation aircraft
- Active control of rotor vibration
- Evaluation of stiffness and damping coefficients for fluid film bearings
- Flutter suppression and gust alleviation using active controls
- Design and development of a motion compensator for the RSRA active isolation/rotor balance system
- An investigation of vibration dampers in gas-turbine engines
- Investigations on the design of active vibration isolation systems for helicopters with rigid and elastic modeling of the fuselage
- Performance of two-stage fans with a first-stage rotor redesigned to account for the presence of a part-span damper
- Evaluation of pylon focusing for reduced helicopter vibration
- Design implications of recent gearbox noise and vibration studies
- Vibration measurements on planetary gears of aircraft turbine engines
- Model verification of force determination for measuring vibratory loads
- An approach for estimating vibration characteristics of nonuniform rotor blades
- Experimental evaluation of the effect of inlet distortion on compressor blade vibrations
- Turbojet blade vibration data acquisition design and feasibility testing
- Dynamic data analysis for gas turbine engine vibration transducers
- Analysis of longitudinal natural vibrations of deformable aircraft by the finite-element method
- Mathematical model of the oscillatory cycle associated with nonsteady interaction of a supersonic jet with a barrier
- The analysis of engine vibrations
- Vibration protection of aircraft components
- Vibration simulators
- Vibration testing machines
- Vibration tests
- Fatigue blade loadings and rotor vibration
- Flutter-suppression control system
- Flutter suppression control laws using results of optimal control theory
- The promise of multicyclic control to control fatiguing blade loads and rotor vibration
- An investigation of vibration dampers in gas-turbine engines
- Investigations on the design of active vibration isolation systems for helicopters with rigid and elastic modeling of the fuselage
- Performance of two-stage fans with a first-stage rotor redesigned to account for the presence of a part-span damper
- Evaluation of pylon focusing for reduced helicopter vibration
- Design implications of recent gearbox noise and vibration studies
- Vibration measurements on planetary gears of aircraft turbine engines
- Model verification of force determination for measuring vibratory loads
- An approach for estimating vibration characteristics of nonuniform rotor blades
- Engine demonstration test of a cooled laminated axial turbine
- Computer-assisted high-speed balancing of 753 and 755 power turbines
- Helicopter component environmental vibration testing - The poor man's fatigue test
- The role of rotor impedance in the vibration analysis of rotorcraft, part 1
- The analysis of engine vibrations
VIBRATIONAL STRESS
Influence of rotor vane casting on alternating stresses level in turbine rotor blades
p0068 A79-14848
Friction damping of resonant stresses in gas turbine engine airfoils
[ASME PAPER 79-GT-109] p0392 A79-32384
VIBRATORY LOADS
Aerodynamic and aeroelastic characteristics of oscillating loaded cascades at low Mach number
[ASME PAPER 79-GT-112] p0393 A79-32387
Model verification of force determination for measuring vibratory loads --- of rotors on helicopters
p0450 A79-36379
VIBROMETERS
VISUALIZATION METHODS
VIDEO COMMUNICATION
Global services systems - Space communication
p0608 A79-34761
VIDEO EQUIPMENT
General principles of automatic video trackers. II - area trackers
p0071 A79-15159
Airborne video recording system
p1114 A79-17608
VISCOELASTIC DAMPING
Rotor blade lag plane frequency optimisation using visco-elastic damping --- for helicopters
p1013 A79-18652
Reduction of cabin noise during cruise conditions by stringer and frame damping
[AIAS PAPER 78-504] p0315 A79-28611
VISCOELASTIC FLOW
VISCOELASTICITY
Research conducted by ONERA on the relationship between the behavior and cumulative damage of materials and structures
VISCOSITY
VISCOUS FLOW
VT BODY FLOW
Effect of viscosity on wind-tunnel wall interference for airfoils at high lift
p0577 A79-19675
An artificial viscosity method for the design of supercritical airfoils
[NASA CR-158440] p0580 N79-28136
VISCOUNT AIRCRAFT
Temperature measurements on the Vickers Viscount stabilizer in flight under icing conditions
Ultrasonic inspection of wing spar attachment joints and laps in viscous aircraft
[REPT-7610.910] p0558 W79-27523
VISCOSITY DAMPING
IN VISCOSITIC DAMPING
Significance of disk flexing in viscous-damped jet engine dynamics
[ASME PAPER 78-GT-107] p0001 A79-10263
VISCOSITY FLOW
VT BOUNDARY LAYER FLOW
VT BOUNDARY LAYER SEPARATION
VT REATTACHED FLOW
VT SECONDARY FLOW
VT SEPARATED FLOW
VT STROES FLOW
Effect of viscosity on nonseparated transonic flow past a profile
p0211 A79-12205
Calculation of effect of viscosity on nonseparated subsonic flow past a wing with flap
p0022 A79-14240
Viscous transonic flows about 3-D wings
p0058 A79-12396
Comparative study of the convergence rates of two numerical techniques
p0606 A79-13989
Viscous flow analysis in mixed flow rotors --- in turbomachinery
[ASME PAPER 78-WA/GT-3] p0149 A79-19792
Computation of supersonic viscous flows over ogive-cylinders at angle of attack
[AIAS PAPER 79-0131] p0200 A79-23517
Numerical predictions of the unsteady lift development on airfoils in a viscous fluid
p0212 A79-24216
A shock capturing application of the finite element method --- to viscous compressible flow problems
p0247 A79-24771
Numerical study of unsteady flows of viscous incompressible fluids about airfoils by a combined method of order O(h2) and O(h4)
p0246 A79-24829
An alternating direction explicit method for computing three-dimensional viscous flow fields in turbomachines
[SAI PAPER 781001] p0256 A79-25884
H-1/ least squares method for the Navier-Stokes equations --- numerical simulation of separated viscous flows around wings and airfoils
p0335 A79-29804
Parabolized Navier-Stokes solutions for supersonic viscous flows over blunt cones at large angles of attack
p0335 A79-29806
Axial-flow compressor turning angle and loss by inviscid-viscous interaction blade-to-blade computation
[ASME PAPER 79-GT-5] p0339 A79-30504
An application of 3-D viscous flow analysis to the design of a low-aspect-ratio turbine
[ASME PAPER 79-GT-53] p0391 A79-32384
Hypersonic viscous shock layer on infinite-span arrow wings at angle of attack
p0410 A79-35158
A numerical solution of supersonic and hypersonic viscous flow fields around thin planar delta wings
p0032 W79-10018
Compressible viscous flowfields and a frame forces induced by two-dimenional lift jets in ground effect
[AD-055231] p0086 W79-12022
An automated procedure for computing the three-dimensional transonic flow over wing-body combinations, including viscous effects.
Volume 2: Program user's manual and code description
[AD-054598] p0087 W79-12027
Viscid/inviscid interaction analysis of thrust augmenting ejectors
[AD-055956] p0175 W79-15055
Inverse transonic airfoil design methods including boundary layer and viscous interaction effects
[NASA CR-158136] p0286 W79-17805
Calculation of supersonic viscous flow over delta wings with sharp subsonic leading edges
p0030 W79-18909
Viscous flows in centrifugal compressors
p008 W79-19387
Upgraded viscous flow analysis of multi-element airfoils
p0356 W79-20040
Wake curvature and trailing edge interaction effects in viscous flow over airfoils
p0357 W79-20045
Unsteady viscous thin airfoil theory
[AGARD R-671] p0361 W79-20087
Viscous-inviscid flow matching: Numerical method and applications to two-dimensional, transonic and supersonic flows
p0376 W79-20977
Semidirect computation of three-dimensional viscous flows over suction holes in laminar flow control surfaces
[NASA CR-159017] p0378 W79-21005
A viscous/potential flow interaction analysis for circulations-controlled airfoils
[AD-067913] p0039 W79-26030
Finite element methods for inviscid and viscous flow problems
p0586 W79-28474
Multi-element airfoil viscous-inviscid interactions
[NASA CR-159125] p0701 W79-32157
A viscous flow analysis for the tip vortex generation process
[NASA CR-3184] p0712 W79-33162
VISIBILITY
VT LOW VISIBILITY
Automating prevailing visibility --- airport videograph sensor assessments
p0346 A79-24871
Visibility modelling for a landing simulator with special reference to low visibility
p0223 W79-15902
Realization of threshold and prethreshold lights for medium intensity approach lighting systems
[FAA NA 79-44] p0237 W79-16878
**VISUAL RADIATION**

- Visibility in aviation
- Summary report of the Visibility Committee
- Advances in helicopter cockpit technology
- Forward scatter meter measurements of silent visual range
- A study of smoke movement in an aircraft fuselage
- A report on atmospheric obstructions to visibility. Volume 2: Results of literature search --- bibliographies

**VISUAL FLIGHT**

- Effects of visual and motion simulation cueing systems on pilot performance during takeoffs with engine failures
- Visually induced motion in flight simulation
- Motion versus visual cues in piloted flight simulation

**VISUAL DISPLAYS**

- Visual pockets: A design parameter for helicopter instrument panels

**VISUAL SIGNALS**

- Effects of visual and motion simulation cueing systems on pilot performance during takeoffs with engine failures
- Visually induced motion in flight simulation

**VISUAL TASKS**

- Synthetic image generation for visual simulation in training simulators using the Tornado visual simulator as an example

**VISUAL TRACKING**

- Visual tracking in optical tracking

**VISUALIZATION OF FLOW**

- Visual representation of ground-air and air-ground communications links

**CONNECTIVE**

- Subject index

**VON THEIS**

- Notion versus visual cues in piloted flight
- Visually induced motion in flight simulation
- Visual pockets: A design parameter for helicopter instrument panels
- Visual tasks

**VOLUME COMMUNICATION**

- Ground-air and air-ground communications links
- Voice communication

**VOLATILIZATION**

- Photochemistry

**VOLTAGE**

- Voltage breakdown
- Voltage measurement
- Voltage analysis

**VOLUME**

- Volume of flow
- Visual simulation systems --- for vehicle operator training

**VOLATILIZATION**

- Visual tasks
- Visual tracking in optical tracking

**VORTEX GENERATION**

- Ground-based measurements of the wake vortex

**VORTEX FLOW**

- Flow past a small-aspect-ratio delta wing with vortex filament breakdown
- Flow around small-aspect-ratio delta wing with vortex 'bursting'
- Flow in a vortex with breakdown above sharp edged delta wings

**VORTEX SYSTEMS**

- Visual tasks
- Visual tracking in optical tracking

**VORTEXES**

- Visual tasks
- Visual tracking in optical tracking

**VORTEX CHARACTERISTICS**

- Visual tasks
- Visual tracking in optical tracking

**VORTEX GENERATORS**

- Visual tasks
- Visual tracking in optical tracking

**VORTEX-dependent**

- Visual tasks
- Visual tracking in optical tracking

**VORTEX SYSTEMS**

- Visual tasks
- Visual tracking in optical tracking

**VORTEXES**

- Visual tasks
- Visual tracking in optical tracking

**VOLUME PERCEPTION**

- Visual tasks
- Visual tracking in optical tracking
SUBJECT INDEX

VORTEX SHEETS
VORTEX INJECTORS
VORTEX STREETS
VORTICES

aircraft landing

Benefits of aerodynamic interaction to the three surface configuration

[AIAA PAPER 79-1830]
p0607 A79-47904

Subsonic and transonic flows on a variable sweep wing

[ONERA, TP NO. 1979-102]
p0623 A79-48849

A viscous flow analysis for the tip vortex generation process

[NASA-CR-3184]
p0712 A79-33162

VORTEX SHEETS

Unsteady calculation of vortex sheets emitted by highly inclined lifting surfaces

[ONERA, TP NO. 1978-63]
p0127 A79-18551

Recent advances in the solution of three-dimensional flow over wings with leading edge vortex separation

[AIAA PAPER 79-0262]
p0203 A79-23562

The 'cloud-in-cell' technique applied to the roll up of vortex sheets

p0861 A79-37725

An iterative lifting surface method for thick bladed hovering helicopter rotors

[AIAA PAPER 79-1077]
p0576 A79-46705

Water tunnel flow visualization - Insight into complex three-dimensional flow fields --- around a fighter aircraft

[AIAA PAPER 79-1530]
p0576 A79-46712

The calculation of non-linear aerodynamic characteristics of wings and their wakes in subsonic flow

p0602 A79-47099

Synthesis of the thickness effect in the case of flow past a slender delta wing with leading edge vortices

p0687 A79-52268

Vortex effects for canard-wing configurations at high angles of attack in subsonic flow

[AIAA TM-78563]
p0158 A79-4022

Non-conical flow past slender wings with leading edge vortex sheets

[ARC-R/M-3814]
p0216 A79-15920

Application of vortex lattice method for the evaluation of the aerodynamic characteristics of wings with and without strakes

p0580 A79-28145

Theoretical estimation of non-linear aerodynamic characteristics of wings with small and moderate aspect ratio by the vortex-lattice method in incompressible flow

[DLR-FB-78-26]
p0650 A79-30161

VORTEX STREETS

NT KARNAN VORTEX STREET

Onset of leading edge separation effects under dynamic conditions and low Mach number

[AIR 78-63]
p0126 A79-18184

Mechanism of destabilisation of the shedding frequency of vortices behind a cylinder at low Reynolds numbers

p0137 A79-18845

Sound absorption caused by vorticity shedding, demonstrated with a jet flow

[AIAA PAPER 79-0575]
p0268 A79-26905

Modeling of turbulent wakes in ideal fluids

p0277 A79-42806

Interference of vortices with shocks in air scoops - Dissipation of vortices

p0688 A79-52445

VORTEX TUBES U VORTICITIES

WING TIP VORTICITIES

Experimental method for investigating preintake vortex circulation --- in engine air intakes

p0166 A79-11367

Recent theoretical developments and experimental studies pertinent to vortex flow aerodynamics - With a view towards design

p0107 A79-11549

Approximate calculation of the velocity field and the motion of vortices in the wake of a low-flying biplane

p0201 A79-12198

Vortex system at the nose part of a fuselage model at supercritical angles of attack and different Reynolds numbers

p0021 A79-12199

Problems in the method of discrete vortices for solving linear wing theory problems

p0022 A79-12224

Measurements in three-dimensional turbulent boundary layer on a paved flat plate induced by leading edge vortex

p0057 A79-13150

Influence of liquid oscillations in fuel line on head of pump operating in regimes without reverse flow

p0068 A79-14893

Vortex pattern at the upper surface of a swept wing with a high angle of attack

[AEREA, TP NO. 1978-126]
p0128 A79-18554

The plane turbulent impinging jet

p0137 A79-18841

Experimental results on boundary layers and detached flows

[DGLR PAPER 78-220]
p0183 A79-20479

Formation of a trailing vortex

p0284 A79-28377

The method of discrete vortices --- for steady flow past finite-span wing

p0316 A79-28846

Goertler vortices in the nonlinear region --- unsteadiness development and onset in blowdown wind tunnels

p0334 A79-29684

Study of some characteristics of helicopter rotor wake vortex pattern at the upper surface of a swept wing with a high angle of attack

p0128 A79-18554

The plane turbulent impinging jet

p0137 A79-18841

Experimental results on boundary layers and detached flows

[DGLR PAPER 78-220]
p0183 A79-20479

Formation of a trailing vortex

p0284 A79-28377

The method of discrete vortices --- for steady flow past finite-span wing

p0316 A79-28846

Goertler vortices in the nonlinear region --- unsteadiness development and onset in blowdown wind tunnels

p0334 A79-29684

A study of some characteristics of the operation of a lifting propeller by numerical experiment

p0694 A79-53728

Is the Wels-Fogh principle exploitable in turbomachinery --- aerodynamic lift generation without vortex shedding

p0697 A79-54362

Axial flow in trailing line vortices

[AD-A057075]
p0304 A79-10034

Experimental investigation of wing fin configurations for alleviation of vortex wakes of aircraft

[AIAA TM-78520]
p0986 A79-12018

Analytical studies of separated vortex flow on highly swept wings

[AIAA CR-3022]
p0999 A79-13006

Aircraft wake vortex characteristics from data measured at John F. Kennedy International Airport

[AIAA TM-4055059]
p0158 A79-14026

Presentations of the Aircraft Wake Vortices Conference [AD-A0551010]
p0159 A79-14031

Vortex-lift roll-control device

[AIAA CASE L-11868-2]
p0166 A79-14108

Effect of flow separation vortices on aircraft unsteady aerodynamics

p0178 A79-15084

Jet noise radiation from discrete vortices

[ARC-R/M-3626]
p0227 A79-16652

Vortex models on missile configurations --- computer program for determining aerodynamic coefficients and flow deflections

[484-FP77-77-27]
p0287 A79-17618

Vortex pattern development on the upper surface of a swept wing at high angle of attack

[AIAA TM-75377]
p0300 A79-18914

Evaluation of a wake vortex upset model based on simultaneous measurements of wake velocities and probe-aircraft accelerations

[AIAA TM-785611]
p0302 A79-18960

Secondary-flow-related vortex cavitation

p0376 A79-21003

Vortex pattern developing on the upper surface of a swept wing at high angle of attack

p0416 A79-22007

Subcritical drag minimization for highly swept wings with leading edge vortices

p0416 A79-22021

A-471
An experimental investigation of the entrainment of a leading-edge vortex

Low-speed wind-tunnel parametric investigation of flight spoilers as trailing-vortex-alleviation devices on a transport aircraft model

[AD-A051479]

Rotary-wing aerodynamics. Volume 1: Basic theories of rotor aerodynamics with application to helicopters --- momentum, vortices, and potential theory

[NASA-CR-3082]

Performance of a vortex-controlled diffuser in an annular swirl-can combustor at inlet Mach numbers up to 0.53

[NASA-CP-1452]

Development of a viscous vortex/wing interaction program for thick wings with bounded leading edge

[AD-A0551818]

AirCraft wake vortices. A bibliography with abstracts

(WI/CP-79/0166/3)

Low-speed wind-tunnel investigation of wing fins as trailing-vortex-alleviation devices on a transport airplane model

[AD-A0499651]

Ground-based measurements of the wake vortex characteristics of a F-747 aircraft in various configurations

[NASA-TR-804747]

The computation of vortex flows by panel methods

[AD-A0579-28482]

Rotary balance data for a single-engine general aviation design for an angle-of-attack range of 8 deg to 90 deg --- conducted in a large scale turbulent wind tunnel

[NASA-CR-3097]

A vortex lattice technique for computing ventilated wind tunnel wall interference

[AD-A0704855]

Vorticity

Aerodynamic field induced by a jet penetrating a cross flow at subsonic velocities

[ONWB, TP NO. 1978-61]

A new approach for solving the vorticity and continuity equations in turbomachinery ducts

[AIAA PAPER 79-00467]

Near field problems in three-dimensional panel methods --- mathematical modeling of flow characteristics

[AD-A0536-87779]

Prediction and measurement of the aerodynamic forces and pressure distributions of wing-tail configurations at very high angles of attack

[AD-A051479]

Vorticity

U Aircraft

U Helicopter

VTOL

U Vertical Landing

U Vertical Takeoff

VTOL Aircraft

U Vertical Takeoff Aircraft

Vulnerability

NT Nuclear Vulnerability

Vulnerability assessment of aircraft systems to indirect lightning effects

[AD-A0615142]

Total environment survivability methodology

[AD-A061479]

NOVA-2S, a stiffened panel extension of the NOVA-2 computer program

[AD-A066386]

Advanced risk assessment of the effects of graphite fibers on the electronic and electrical equipment, phase 1 --- simulating vulnerability to airports and communities from fibers released during aircraft fires

[NASA-CR-159027]

A simulation model of attack helicopter vulnerability to hostile artillery fire

[AD-A0667531]

Experimental methods for aircraft design qualifications in an exploding warhead environment

[AD-A0703817]

Wall Jets

Pressure and velocity measurements in a three-dimensional wall jet --- high lift V/STOL wing-flap

[AIAA PAPER 79-0252]

Calculation of laminar wall jet in a wake

[AD-A0580-19683]

W Wings

U Variable Sweep Wings

Wakes

NT Aircraft Wakes

NT Helicopter Wakes

NT Turbulent Wakes
WALL PRESSURE  
Transonic assessment of two-dimensional wind tunnel wall interference using measured wall pressures  
Estimation of tunnel blockage from wall pressure signatures: A review and data correlation  
[WASA CR-152241] p0351 N79-19991  
[WASA CR-152241] p0707 N79-32219

WALL TEMPERATURE  
The stability of the boundary layer on a swept wing with wall cooling  

WALLS  
MT BULKHEADS  
MT POROUS WALLS  
MT THICK WALLS  
MT WIND TUNNEL WALLS  
Wind tunnels with adapted walls for reducing wall interference  
[WASA TN-75-501] p0673 N79-31230

WANKEL ENGINES  
A review of Curtiss-Wright rotary engine developments with respect to general aviation potential  
[SASE PAPER 70626] p0657 A79-36769  
An overview of NASA research on positive displacement type general aviation engines  
[WASA TN-79254] p0670 N79-31210

WARFARE  
MT COMBAT  
Performance of current radar systems in an EW environment --- Electronic Warfare  
[TAD-10600297] p0674 N79-31235

WARFARE SIGNALS  
U WARNING SYSTEMS  
U WARNING SIGNALS  
U WARNING SYSTEMS

WARFARE SYSTEMS  
MT EARLY WARNING SYSTEMS  
Considerations on the design of warning systems --- for aircraft flight malfunctioning  
Collision avoidance in the integrated system. II - Characteristics  
The wake Vortex Advisory System --- used for safe aircraft landing  
Autoaccident failure detection systems in commercial aircraft  
[DGLR PAPER 78-140] p0625 A79-14089  
The effectiveness of pilot warning instruments - An engineering model based upon flight test data  
[p0655 N79-14081  
Preventing helicopter mid-air collisions with the proximity warning device  
[p0655 N79-14013  
Conflict warning for the radar controller in air traffic control  
[p0116 A79-17685  
Experimental evaluation of a wind shear alert and energy management display  
[DGLR PAPER 78-153] p0116 A79-20016  
Joint aircraft-ground systems automation: Real time data transmission requirements --- for wind hazard warning  
[p0205 A79-23592  
En route minimum safe altitude warning  
/E-NKAW/ p0205 A79-23594  
Flight deck alert system  
[p0252 A79-25541  
Conflict alert for the air traffic control system  
[p0803 A79-33605  
Multichannel infrared receiver performance --- for airborne detection of antiaircraft sirens  
[p0410 A79-35210  
A wind shear/downdraft drift angle warning system  
[p0666 A79-38077  
Evaluation of the Ryan Stormscope as a severe weather avoidance system for aircraft  
[p0297 N79-18229

WAVE DRAG  
MT INTERFERENCE DRAG  
Improved wave drag predictions using modified linear theory  
[p0191 A79-21523

WAVE EQUATIONS  
Aerodynamic noise theory --- lighthill method, turbulent flow, sound pressure, and wave equations  
[p0443 N79-23270

WAVE PROPAGATION  
WAVE PROPAGATION  
WAVE PROPAGATION

WAVE ATTENUATION  
MT ACOUSTIC ATTENUATION  
MT SHOCK WAVE ATTENUATION

WAVE DISPERSION  
A study of the radiation characteristics of antennas on complicated structures in the high frequency case. Principle of the geometrical theory of diffraction  
[DDEV-PB-78-02] p0226 N79-16182  
Applications of diffraction theory to aeroacoustics  
[WASA TN-79-0053] p0259 N79-18684

WAVE EQUATIONS  
Aerodynamic noise theory --- lighthill method, turbulent flow, sound pressure, and wave equations  
[p0191 A79-21523

WAVE PROPAGATION  
WAVE PROPAGATION  
WAVE PROPAGATION

WAVE ATTENUATION  
MT ACOUSTIC ATTENUATION  
MT SHOCK WAVE ATTENUATION

WAVE DISPERSTION  
A study of the radiation characteristics of antennas on complicated structures in the high frequency case. Principle of the geometrical theory of diffraction  
[DDEV-PB-78-02] p0226 N79-16182  
Applications of diffraction theory to aeroacoustics  
[WASA TN-79-0053] p0259 N79-18684

WAVE EQUATIONS  
Aerodynamic noise theory --- lighthill method, turbulent flow, sound pressure, and wave equations  
[p0191 A79-21523

WAVE PROPAGATION  
WAVE PROPAGATION  
WAVE PROPAGATION

WAVE ATTENUATION  
MT ACOUSTIC ATTENUATION  
MT SHOCK WAVE ATTENUATION

WAVE DISPERSTION  
A study of the radiation characteristics of antennas on complicated structures in the high frequency case. Principle of the geometrical theory of diffraction  
[DDEV-PB-78-02] p0226 N79-16182  
Applications of diffraction theory to aeroacoustics  
[WASA TN-79-0053] p0259 N79-18684

WAVE EQUATIONS  
Aerodynamic noise theory --- lighthill method, turbulent flow, sound pressure, and wave equations  
[p0191 A79-21523

WAVE PROPAGATION  
WAVE PROPAGATION  
WAVE PROPAGATION

WAVE ATTENUATION  
MT ACOUSTIC ATTENUATION  
MT SHOCK WAVE ATTENUATION

WAVE DISPERSTION  
A study of the radiation characteristics of antennas on complicated structures in the high frequency case. Principle of the geometrical theory of diffraction  
[DDEV-PB-78-02] p0226 N79-16182  
Applications of diffraction theory to aeroacoustics  
[WASA TN-79-0053] p0259 N79-18684

WAVE EQUATIONS  
Aerodynamic noise theory --- lighthill method, turbulent flow, sound pressure, and wave equations  
[p0191 A79-21523

WAVE PROPAGATION  
WAVE PROPAGATION  
WAVE PROPAGATION

WAVE ATTENUATION  
MT ACOUSTIC ATTENUATION  
MT SHOCK WAVE ATTENUATION

WAVE DISPERSTION  
A study of the radiation characteristics of antennas on complicated structures in the high frequency case. Principle of the geometrical theory of diffraction  
[DDEV-PB-78-02] p0226 N79-16182  
Applications of diffraction theory to aeroacoustics  
[WASA TN-79-0053] p0259 N79-18684

WAVE EQUATIONS  
Aerodynamic noise theory --- lighthill method, turbulent flow, sound pressure, and wave equations  
[p0191 A79-21523

WAVE PROPAGATION  
WAVE PROPAGATION  
WAVE PROPAGATION

WAVE ATTENUATION  
MT ACOUSTIC ATTENUATION  
MT SHOCK WAVE ATTENUATION

WAVE DISPERSTION  
A study of the radiation characteristics of antennas on complicated structures in the high frequency case. Principle of the geometrical theory of diffraction  
[DDEV-PB-78-02] p0226 N79-16182  
Applications of diffraction theory to aeroacoustics  
[WASA TN-79-0053] p0259 N79-18684

WAVE EQUATIONS  
Aerodynamic noise theory --- lighthill method, turbulent flow, sound pressure, and wave equations  
[p0191 A79-21523

WAVE PROPAGATION  
WAVE PROPAGATION  
WAVE PROPAGATION

WAVE ATTENUATION  
MT ACOUSTIC ATTENUATION  
MT SHOCK WAVE ATTENUATION

WAVE DISPERSTION  
A study of the radiation characteristics of antennas on complicated structures in the high frequency case. Principle of the geometrical theory of diffraction  
[DDEV-PB-78-02] p0226 N79-16182  
Applications of diffraction theory to aeroacoustics  
[WASA TN-79-0053] p0259 N79-18684

WAVE EQUATIONS  
Aerodynamic noise theory --- lighthill method, turbulent flow, sound pressure, and wave equations  
[p0191 A79-21523

WAVE PROPAGATION  
WAVE PROPAGATION  
WAVE PROPAGATION
WAVE RADIATION

Wave propagation in ducts using the finite element method — for aircraft noise reduction
[AD-A0565551] p0382 W79-42130
The priming of a wind tunnel with a hydraulic compressor
[458 PAPER 78-17-167] p0163 W79-14015
Multipath propagation measurement by Doppler technique
[458 PAPER 78-17-167] p0163 W79-14015

WAVE HATION

U ELECTROMAGNETIC RADIATION

WAVE REFLECTION

WAVE RESISTANCE

WAVE SCATTERING

WT ACOUSTIC SCATTERING

WT ELECTROMAGNETIC SCATTERING

WAVEFORMS

Effects of lightning current waveforms on graphite/epoxy composite material — aircraft hazards
A new standard for lightning qualification testing of aircraft — Technical overview, definitions and basic waveforms

WAVEGUIDES

MT OPTICAL WAVESGUIDE

WEAPON SYSTEMS

MT GROUND OPERATIONAL SUPPORT SYSTEM

Time-phased development methodology — The key for reliable engines in future military aircraft weapons systems
[SAE PAPER 79-0409] p0365 W79-30035
Testing of the TOW missile-configured AH-1T helicopter — Tube-launched optically-tracked Wire guided
[AAH 78-43] p0123 W79-18166
Applied ECR. Volume 1 — Book
Applied ECR. Volume 1 — Book
Advanced weapons carriage concepts through integrated design — for aircraft
[SAE PAPER 79-0409] p0365 W79-30035
Strike Drone — A defense suppression concept using unmanned cruise/loiter/attack vehicle
[SAE PAPER 781017] p0256 W79-25994
New airborne armament systems — multimission design requirements
AAH 79-06977 p0276 W79-27362
Head-up Display and Weapon Aiming Computer /HUDWAC/ system for the Sea Harrier
[DGDB 79-022] p0322 W79-29482
New test concepts and their influence on maintenance
[DGDB 79-022] p0347 W79-31949
The TA-68 Weapon Systems trainer
[AAH 79-1732] p0350 W79-32246
Weapons for the black-box war
[DGDB 79-022] p0408 W79-34284
Reliability and maintainability contribution to Hudson mission success
[ELI-RISLEI-TN-3308-(9091.9F)] p0375 W79-28381
Guidance law design for tactical weapons with strapdown seekers
[AAH 79-1732] p0571 W79-45376
Avionics design for testability — An aircraft contractor's viewpoint
[AD-A066202] p0624 W79-48888
Measuring metres to the target
[AAH 79-1732] p0694 W79-53723
Analysis of the projected operational effectiveness of developmental weapon control avionics hardware
[AD-A0565551] p0382 W79-13040
The Avionics Laboratory Predictive Operations and Support (ALPOS) cost model, volume 3
[AD-A0555127] p0163 W79-14091
Development of a systematic technique for analyzing the effectiveness of aircraft class 4 modifications
[AD-A066202] p0172 W79-15033
Remotely piloted vehicles — aerodynamics and related topics, volume 2
Feasibility study of mini-RPT for attack

SUBJECT INDEX

Low budget simulation in weapon aiming
[NT GROUND OPEN ATICRAL SUPPORT] p0223 W79-15988
Stressed air combat simulation: A tool for design development and evaluation for modern fighter weapons systems and training of aircrews
[AGARD-GP-257] p0353 W79-20009
The Impact of Integrated Guidance and Control Technology on Weapons Systems Design
[AD-A0702503] p0382 W79-21050
Global positioning system tactical missile guidance
[AD-A0702503] p0353 W79-20013
F-16 advanced electro-optical pod field-of-view simulation study — target complexity during laser guided weapons delivery
[AD-A0635530] p0382 W79-21050
Adding the challenge of nap-of-the-earth flight test results of a virtual image, panto graph mounted, control and display station
[AD-A070290] p0382 W79-32207
Preliminary airworthiness evaluation AH-1S helicopter installed with enhanced Cobra armament system (AH-1S/ECAS)
[AD-A071343] p0716 W79-33198
WEAPONS

MT GUNS (ORDNANCE)

A brief review of air flight weapons
[NT GROUND OPEN ATICRAL SUPPORT] p0031 W79-23051
WEAPONS DELIVERY

Separation testing of large weapons from the E-1 bomber
[AD-A065524] p0645 W79-50429
Evaluation of F-111 weapon bay aero-acoustic and weapon separation improvement techniques
[AD-A0702503] p0353 W79-31203
WEAR

A decision theory model for health monitoring of aerocengines — metal particles in lubricating oils as wear indicator
[10-6066202] p0489 W79-24169
Wear of seal materials used in aircraft propulsion systems
[AAH 79-79003] p0297 W79-12204
Separation and investigation of wear particles from aero-engines
[ELI-KISLEY-PW-3308-(9091.9F)] p0292 W79-17856
Diagnostics of wear in aeronautical systems
[AAH 79-79085] p0490 W79-24350
Fiction and wear characteristics of wire-brush skids
[AAH 79-79085] p0492 W79-29171
Wear particle analysis of grease samples
[AD-A069114] p0597 W79-29344
WEAR INITIATORS

Static evaluation of surface coatings for compliant gas bearings in an oxidizing atmosphere to 650 C
[10-6071343] p0716 W79-33198
WEAR TESTS

Friction and wear of carbon-graphite materials for high-energy brakes
[10-6066202] p0489 W79-16679
Effects of extended oil changes on aircraft piston engine wear and oil characteristics
[SAE PAPER 790629] p0585 W79-36756
Diagnostics of wear in aeronautical systems
[AAH 79-79085] p0716 W79-39805
Factors associated with rub tolerance of compressor tip seals — self sustained combustion of titanium
[10-6071343] p0716 W79-11069
Airplane engine oil analysis by neutron activation techniques
[AD-A066202] p0849 W79-24169
WEATHER

Briefs of fatal accidents involving weather as a cause/factor, US general aviation, 1977
[AD-A0555127] p0163 W79-14091
An advanced guidance and control system for rescue helicopters
[AD-A066202] p0657 W79-30217
WEATHER CHARTS

WEATHER CONDITIONS

WEATHER CONTROL

WEATHER MODIFICATION

WEATHER DATA RECORDERS

Analysis of air motion measurements from aircraft
WEATHER RAPS
Summary report of the Weather Services Committee
p024 A79-17431

WEATHER STATIONS
Summary report of the Weather Services Committee
p024 A79-17431

WEATHERING
Environmental exposure effects on composite materials for commercial aircraft
[NASA CR-158938]
p0585 A79-28232

WEBS (SUPPORTS)
Integrated gas turbine engine-nacelle
[NASA-CASE-LEN-12389-3]
p0164 A79-14096

WEIGHT
Prospects of using wedge-shaped models for investigating thermal fatigue of turbine blades
p0398 A79-32825

WEIGHT (MASS)
Weight optimization with flutter constraints
[ARC-9-8-3623]
p0222 A79-15972

WEIGHT ANALYSIS
Weight and cost estimating relationships for heavy lift airships
[IAEA 79-1577]
p0522 A79-62383

Vehicle Design Evaluation Program (VSEP).
A computer program for weight sizing, economic, performance and mission analysis of fuel-conservative aircraft, multibodied aircraft and large cargo aircraft using both JP and alternative fuels
[NASA CR-145070]
p0100 A79-13026

A method to estimate weight and dimensions of large and small gas turbine engines
[NASA CR-159481]
p0173 A79-15046

WEIGHT FACTORS
p0144 A79-17610

WEIGHT INDICATORS
8-52 aircraft gross weight computational system
p0173 A79-15046

WEIGHT MEASUREMENT
A method to estimate weight and dimensions of large and small gas turbine engines
[NASA CR-159481]
p0173 A79-15046

WEIGHT REDUCTION
A glance at Soviet helicopter design philosophy
p0013 A79-10910

Application of gradient methods to the optimal design of components of load-bearing structures
--- for aircraft minimum weight design
p0200 A79-12144

Optimization of high-aspect-ratio multisection wing structure
p0070 A79-14876

Inertia welding of YAN-64 main rotor drive shaft
[ARS 78-32]
p0122 A79-18158

Filter weight minimization for rectified superconducting alternator power supplies
--- for aircraft
p0273 A79-26966

Influence of bypass ratio on jet engine weight
p0279 A79-27737

Combined strength and aeroelastic wing synthesis via constraint approximation

WELD STRENGTH
C-130 welded fuselage panel flight evaluation program
[AD-805928]
p0092 A79-12071

WELD TESTS
Application of electron-beam welding to aviation production --- tests of turbine engine parts welded by electron beam
p0491 A79-24940

WELDED JOINTS
C-130 welded fuselage panel flight evaluation program
[AD-805928]
p0092 A79-12071

Application of electron-beam welding to aviation production --- tests of turbine engine parts welded by electron beam
p0491 A79-24940

WELDED STRUCTURES
Ultrasonic welding /solid state bonding/ of aircraft structure --- Fact or fancy
p0015 A79-10921

WELDING
WHEEL BRAKES
[IAEA 79-0726]
p0263 A79-28290

Industry seeks lighter aircraft weight --- aircraft design performance
p0449 A79-36100

Composite applications at Bell Helicopter
[SAE PAPER 790578]
p0453 A79-36713

Impact of advanced technologies on aircraft design
p0460 A79-37065

Propulsion system sensitivities for a strategic aircraft
[IAEA PAPER 79-1121]
op666 A79-38952

Optimization of the weight of a wing with constraints on the static aeroelasticity
p0525 A79-24210

Design development of an advanced composite alleron --- graphite-epoxy structure for L-1011
[IAEA PAPER 79-1507]
op606 A79-7891

Power hybridization - Key to reducing avionics power supply weight and volume
p0617 A79-48652

Antennas for the Black Hawk helicopter
[ABS 78-32]
p0122 A79-18158

Ten years of Aerospatiale experience with the fenestron and conventional tail rotor
[IAEA 79-58]
op633 A79-49108

Power by wire for aircraft - The all-electric air vehicle
p0692 A79-53631

A minimum weight analysis of aerospace vehicle recovery systems
[AD-3058025]
op092 A79-12072

Aircraft engine nozzle
[ARC-R/M-3823]
p0222 N79-15972

A variational theorem for laminated composite plates of nonlinear materials and applications to postbuckling
p0494 A79-24977

C-130 welded fuselage panel flight evaluation program
[AD-805928]
p0092 A79-12071

Application of electron-beam welding to aviation production --- tests of turbine engine parts welded by electron beam
p0491 A79-24940

Application of electron-beam welding to aviation production --- tests of turbine engine parts welded by electron beam
p0491 A79-24940

A method to estimate weight and dimensions of large and small gas turbine engines
[NASA CR-159481]
p0173 A79-15046

A method to estimate weight and dimensions of large and small gas turbine engines
[NASA CR-159481]
p0173 A79-15046

Vehicle Design Evaluation Program (VSEP).
A computer program for weight sizing, economic, performance and mission analysis of fuel-conservative aircraft, multibodied aircraft and large cargo aircraft using both JP and alternative fuels
[NASA CR-145070]
p0100 A79-13026

Overestimates of entrainment from wetting of aircraft temperature sensors in cloud
p0249 A79-25296

Friction and wear of carbon-graphite materials for high-energy brakes
p0082 A79-16679
WIND EFFECTS

Dundaire study of aircraft diske brakes p045 A79-38016

WHEELS

MT ROSE WHEELS
MT TURBULAR WHEELS
MT TURBINEL WHEELS
MT VEHICLE WHEELS
MT WHEEL
MT ROTATION
MT ROTARY STABILITY
WHEELING
MT ROTATION
WHEELING TESTS
MT SPIN TESTS
WHITE NOISE

Response of plate to nonstationary random load p037 A79-46064

WHITE NOISE

Period of buzz saw noise in a nonuniform medium --- contoured jet engine inlets [AIAA PAPER 79-0639] p0268 A79-26896

WIDE ANGLE LENSES

Wide angle visual system developments p0204 A79-15988

WIDEBAND

WIDEBAND COMMUNICATION

Real-time onboard real-time receive wideband data links --- airborne reconnaissance systems p0112 A79-17146

WHEEL FILTERING

Radar system design for track-while-scan p0248 A79-25139

Real-time gravity filtering from on-board gradiometers [AIAA PAPER 79-1767] p0689 A79-52556

WIND FILTERING

Radar system design for track-while-scan p0248 A79-25139

Real-time gravity filtering from on-board gradiometers [AIAA PAPER 79-1767] p0689 A79-52556

WIND MEASUREMENT

MT WIND VELOCITY MEASUREMENT

Airspeed dropwindsonde system p0190 A79-21466

The Dulles Airport pressure-sensor array for gust-front detection - System design and preliminary results p0192 A79-21919

A comparison of temperatures and winds reported by the Concorde SST with data obtained from ravisonde and satellite p0194 A79-21991

Analysis of air motion measurements for aircraft p0194 A79-21992

Joint aircraft-ground systems automation: Real time data transmission requirements --- for wind hazard warning p0205 A79-23592

The Dulles International Airport wind-shear detection system Statistical results p0278 A79-27574

Wind study for high altitude platform design p0524 A79-42398

Wind shear indication systems p0687 A79-52349

WIND PROFILES

Commercial aircraft derived high resolution wind and temperature data for the tropics for FGGE: Implications for NASA p0370 A79-20621

WIND SHEAR

Possible near-term solutions to the wind shear hazard [SAF PAPER 780572] p0006 A79-10146

Comments on a proposed standard wind shear hazard environment and its use in real-time aircraft simulations [AIAA PAPER 79-0324] p0149 A79-19667

Experimental evaluation of a wind shear alert and energy management display [DGLR PAPER 78-153] p0151 A79-20016

An omnidirectional, tilt insensitive, wind speed threshold detector p0192 A79-21915

The Dulles International Airport wind-shear detection system Statistical results p0278 A79-27574

Stable boundary layer wind shear model for aircraft flight hazard definition p0278 A79-27574

A spectral analysis of thunderstorm turbulence and jet transport landing performance p0278 A79-27576

Detection of CAT and low altitude wind shear by on-board aircraft IR sensors - An update p0403 A79-33630

The effects of low-level wind shear on the approach and go-around performance of a landing jet aircraft [SAF PAPER 790568] p0452 A79-36708

A wind shear/downdraft drift angle warning system p0464 A79-38477

Missed approach of commercial aircraft regarding wind shear in the ground boundary layer [DGLR PAPER 79-028] p0518 A79-42355

Influence of delay time and dead time on wind shear landings [DGLR PAPER 79-029] p0518 A79-42356

Decoupled longitudinal controls for shear penetration in the terminal area environment --- during approach and landing engine jet transport [AIAA 79-1678] p0568 A79-45341

Pulsed laser Doppler measurements of wind shear p0686 A79-52046

Windshear indication systems p0687 A79-52349

Acquisition of control information in a wind shear p0245 A79-17518

Simulation study to evaluate a constant-groundspeed approach method in moderate and severe wind shears [NASA-TND-00260] p0362 A79-20009

The analysis of National Transportation Safety Board small single-engine fixed-wing aircraft accident/ incidental reports for the potential presence of low-level wind shear
WIND TUNNEL APPARATUS

Wind tunnel apparatus: Development and testing of models for high performance aircraft design.

Wind tunnel driven by a hydraulic compressor.

Wind tunnel balances: Precision testing of wind tunnel models.

Wind tunnel calibration: Calibration of wind tunnel models to ensure accurate aerodynamic testing.

Wind tunnel drives: Design and performance of wind tunnel drives.

Wind shear during approach: Simulation of wind shear for aircraft design.

Wind tunnel simulation of wind-structure interactions: Modeling of wind effects on structures.

Full-scale wind tunnel tests: Testing of full-scale aircraft models in wind tunnels.

Subject Index:

Wind tunnel apparatus: Development and testing of models for high performance aircraft design.

Wind tunnel driven by a hydraulic compressor.

Wind tunnel balances: Precision testing of wind tunnel models.

Wind tunnel calibration: Calibration of wind tunnel models to ensure accurate aerodynamic testing.

Wind tunnel drives: Design and performance of wind tunnel drives.

Wind shear during approach: Simulation of wind shear for aircraft design.

Wind tunnel simulation of wind-structure interactions: Modeling of wind effects on structures.

Full-scale wind tunnel tests: Testing of full-scale aircraft models in wind tunnels.

Subject Index:

Wind tunnel apparatus: Development and testing of models for high performance aircraft design.

Wind tunnel driven by a hydraulic compressor.

Wind tunnel balances: Precision testing of wind tunnel models.

Wind tunnel calibration: Calibration of wind tunnel models to ensure accurate aerodynamic testing.

Wind tunnel drives: Design and performance of wind tunnel drives.

Wind shear during approach: Simulation of wind shear for aircraft design.

Wind tunnel simulation of wind-structure interactions: Modeling of wind effects on structures.

Full-scale wind tunnel tests: Testing of full-scale aircraft models in wind tunnels.
WIND TUNNEL TESTS

WIND TUNNEL STABILITY TESTS

WIND TUNNEL NOZZLES

WIND TUNNEL STABILITY TESTS

Aerodynamic characteristics of combat aircraft at large angles of attack
[DGLR PAPER 78-113] p0061 A79-14071

Determination of the dynamic derivatives of lengthwise and side movement with the mobile oscillating derivative balance and systematic studies of the influence of several parameters on the results --- in low speed wind tunnel testing
[DGLR PAPER 78-115] p0061 A79-14073

Stability and pressure measurements in the Naval Surface Weapons Center hypervelocity tunnel
p0074 A79-15664

Amplification factors at transition on an unsuspect wing in free flight and on a swept wing in wind tunnel --- aircraft stability analysis
[ASA PAPER 78-0267] p0203 A79-23564

Wind-tunnel studies of the effects of simulated damage on the aerodynamic characteristics of airplanes and missiles
p0278 A79-27428

WIND TUNNEL TESTS

Propulsion test facilities technical capabilities and international use
[ASME PAPER 78-GT-194] p0011 A79-10913

Parachute canopy opening dynamics
p0015 A79-11008

Determination of the geometrical parameters and position of the nose flap at the root section of a swept wing on the basis of wind tunnel data, I
p0028 A79-12953

Development of turbulence through non-steady boundary layer
p0053 A79-13155

Experimental study of an asymmetric thermal wake
p0053 A79-13158

The proposed cryogenic European Transonic Wind Tunnel /ETW/

What are the lift and propulsive force limits at high speed for the conventional rotor
[ARS 78-02] p0112 A79-17118

Full-scale wind tunnel test of a modern helicopter main rotor - Investigation of tip Mach number effects and comparisons of four tip shapes
[ARS 78-03] p0119 A79-18128

Full-scale wind tunnel test of a modern helicopter main rotor - Correlation with model rotor test data and with theory
[ARS 78-035] p0119 A79-18129

Wind-tunnel test results of a full-scale multicyclic controllable twist rotor
[ARS 78-60] p0125 A79-18130

Experimental effects of tip shape on rotor control loads
[ARS 78-61] p0125 A79-18181

The design and testing of a vertical-axis wind turbine using sails
p0127 A79-18467

20 simulation of unsteady phenomena on a rotor --- helicopter design
p0129 A79-18468

A new approach to rotor blade stall analysis
p0129 A79-18469

Unsteady aerodynamics of a circulation controlled airfoil
p0129 A79-18468

Design and wind tunnel testing of 1.5 ft diameter model rotors
p0129 A79-18469

Hot-wire measurements of stall and separation on helicopter rotor blades
p0130 A79-18651

Flow around a circular cylinder near a plane boundary
p0137 A79-18848

High speed smoke flow visualization for the determination of cascade shock losses
[AIAA PAPER 79-0042] p0138 A79-19495

Supercritical wing design using numerical optimization and comparisons with experiment --- to improve C-141 cruise performance
[AIAA PAPER 79-0065] p0140 A79-19514

U.S. aerospace industry opinion of the effect of computer-aided prediction-design technology on future wind-tunnel test requirements for aircraft development programs
[AIAA PAPER 79-0107] p0141 A79-19534

Effect of spanwise blowing on the aerodynamic characteristics of the F-52
[AIAA PAPER 79-0118] p0141 A79-19534

Comparison of two flow surveys above stalled wings
[AIAA PAPER 79-0147] p0143 A79-19564

Critical considerations for wind-tunnel testing V/STOL aircraft models --- for hover/wingborne flight transition
[AIAA PAPER 79-0332] p0145 A79-19671

The role of wind tunnels in future aircraft development /Daniel and Florence Gugenheim International Memorial Lecture/

Development of a low-correction wind tunnel wall configuration for testing high lift airfoils
[AIAA PAPER 79-20108] p0154 A79-20485

Advances in aeroacoustic wind tunnel testing techniques for aircraft noise research
[AIAA PAPER 79-20114] p0155 A79-20481

Research and development in the areas of fluid mechanics and aerodynamics in the Federal Republic of Germany
[DGLR PAPER 78-229] p0184 A79-20485

The importance of experimenting in aerodynamics and fluid mechanics --- on-line wind tunnel-computer integration
[DGLR PAPER 78-229] p0184 A79-20485

Fluid dynamics of diffuser-augmented wind turbines
p0186 A79-20798

ONERA wind tunnels --- Faugé pressurized subsonic and CFT transonic induction operations
p0189 A79-21192

Aerodynamics of slender bodies at high angles of attack
p0197 A79-22379

Aerodynamic performance of scarf inlets
[AIAS PAPER 79-0380] p0200 A79-23510

Preliminary flight and wind tunnel comparisons
[AIAS PAPER 79-0102] p0200 A79-23513

Computational optimization and wind tunnel test of transonic wing designs
[AIAS PAPER 79-0080] p0200 A79-23526

Proportion of operation of a supersonic cruise strike-fighter
[AIAS PAPER 79-0100] p0201 A79-23534

Performance characteristics of nonaxisymmetric nozzles installed on the F-18 aircraft
[AIAS PAPER 79-0101] p0201 A79-23532

Some basic test results of V/STOL jet induced lift effects in hover
[AIAS PAPER 79-0339] p0202 A79-23553

Powered wind tunnel testing of the AS-65 --- A straightforward approach pays off
[AIAS PAPER 79-0333] p0202 A79-23557

Propeller airplane wind interactions at Mach no. 0.8
[SAE PAPER 780887] p0255 A79-25881

Flight effects on noise generated by the JT8D engine with installed primary/fan fins as measured in the NASA-Ashe 40' by 80' foot wind tunnel
[AIAS PAPER 79-0614] p0271 A79-26937

An investigation of model helicopter rotor blade slap at low tip speeds
[AIAS PAPER 79-0613] p0271 A79-26938

Transonic wing design for transport aircraft
[AIAS 79-0652] p0275 A79-27357

Some new approaches for wind-tunnel testing through the use of computers
[AIAS 79-0707] p0277 A79-27367

XV-15 Tilt Rotor Research Aircraft - Program report
[AIAS 79-0708] p0277 A79-27371

Influence of bypass ratio change on fan aerodynamic characteristics
p0280 A79-27744
SUBJECT INDEX

Airframe noise component interaction studies
[AIAA PAPER 79-0668]
p0310 A79-28969
Experiments in unsteady transonic flight
[AIAA 79-0769]
p0321 A79-29022
Transonic boundary layer on compressor stator
blades as calculated and measured in wind tunnel
[ONERA, TP NO. 1979-25]
p0329 A79-29397
A wind-tunnel investigation into the effect of errors in blade setting on the stalling performance of a compressor cascade
[AIAA 79-7031]
p0330 A79-29403
Initial wind tunnel tests at Mach 0.8 and hydrogen-burning, airframe-integrated scramjet
[AIAA 79-7045]
p0330 A79-29413
Aerodynamic development of the 727-100 Learjet Longhorn Wing
p0333 A79-29594
An experimental study of a jet issuing from a lifting wing --- vertical-horizontal flight transitions in V/STOL aircraft
p0338 A79-30881
Subsonic base pressure fluctuations
p0342 A79-30610
Selecting the geometrical parameters and location of the nose flap at the wing root profile of a swept wing on the basis of wind tunnel test data, II
p0348 A79-32038
Aircraft response to lateral gusts: Exploratory study
p0389 A79-32278
Implementation of unsteady oscillatory flows in a transonic wind tunnel
p0389 A79-32290
Computer-aided design - Aerodynamics
p0399 A79-33456
In-flight capture store loads compared with wind-tunnel and mathematical simulations
p0407 A79-34595
Full-scale wind-tunnel investigation of an Ayres S2R-800 Thrush Agricultural Airplane
[SAE PAPER 790516]
p0457 A79-36764
Wind tunnel performance of four energy efficient propellers designed for Mach 0.8 cruise
[SAE PAPER 790573]
p0459 A79-36759
Control considerations for CCV fighters at high angles of attack
p0461 A79-37295
Experimental data on the dynamic properties of several propeller vanes --- turbulence measurement in wind tunnel
p0466 A79-38943
Evaluation of an ejector-powered engine simulator at transonic Mach numbers
[AIAA PAPER 79-1038]
p0467 A79-38967
A parametric study of support system interference effects on nozzle/afterbody throatledependent drag in wind tunnel testing
[AIAA PAPER 79-1168]
p0467 A79-38968
V/STOL aircraft configuration effects on exhaust gas ingestion
[AIAA PAPER 79-1284]
p0471 A79-39019
Tone noise of three supersonic helical tip speed propellers in a wind tunnel
p0474 A79-39081
Evaluation of a turbo-propulsion simulators as a testing technique for fighter aircraft
[AIAA PAPER 79-1149]
p0508 A79-40980
Effects of Reynolds number and other parameters on the throttle-dependent, nozzle/afterbody drag of an 0.1 scale single-engine aircraft model
[AIAA PAPER 79-1167]
p0508 A79-40891
Application of a laminar lighting device to the smoke visualization of aerodynamic flows in wind tunnels
[ONERA, TP NO. 1979-82]
p0513 A79-41304
Autorotating flat-plate wings - The effect of the moment of inertia, geometry and Reynolds number
p0513 A79-41418
Measurement of heat transfer rate to turbine blades and nozzle guide vanes in a transonic cascade
p0527 A79-42891
Wind tunnel simulation of the firing of missiles carried under aircraft
[ONERA, TP NO. 1979-65]
p0535 A79-43622
Axisymmetric calculations of transonic wind tunnel interference in slotted test section
p0573 A79-46060
Demonstration of aircraft wing/store flutter suppression systems
p0574 A79-46238
Evaluation of flow quality in two NASA transonic wind tunnels
[AIAA PAPER 79-1532]
p0576 A79-46718
Selection of geometric parameters and location of nose flap on swept wing root profile from tunnel test data, I
p0601 A79-46959
Experimental measurements of shock/boundary-layer interaction of a supercritical airfoil
[AIAA PAPER 79-1499]
p0603 A79-47345
Full-scale wind tunnel study of nacelle shape on cooling drag
[AIAA PAPER 79-1820]
p0607 A79-47900
A cheap, effective icing detector for general aviation aircraft
[AIAA PAPER 79-1823]
p0608 A79-47902
Engine-aircraft afterbody interactions - Recommended testing techniques based on TF-17 experience
[AIAA PAPER 79-1829]
p0608 A79-47905
Winglet toe out angle optimization for the Gates Learjet Longhorn Wing
[AIAA PAPER 79-1831]
p0608 A79-47905
Aerodynamic effects of an attitude control valve on a tilt-nacelle V/STOL propulsion system
[AIAA PAPER 79-1855]
p0609 A79-47914
Boundary layer control on wings using sound and leading edge serrations
[AIAA PAPER 79-1875]
p0610 A79-47926
Experimental study of the turbulent wake downstream of a fan jet
p0613 A79-48507
Subsonic and transonic flows on a variable sweep wing
[AIAA PAPER 79-1929]
p0623 A79-48849
LDV measurements on propellers
p0625 A79-49052
The influence of sweep on the aerodynamic loading of an oscillating NACA 0012 airfoil
[AMS 79-4]
p0626 A79-49057
An integrated analytical and experimental investigation of helicopter hub drag
[AMS 79-5]
p0626 A79-49058
The circulation control rotor flight demonstrator test program
[AMS 79-51]
p0633 A79-49103
Wind tunnel and flight test of the XV-15 Tilt Rotor Research Aircraft
[AMS 79-58]
p0633 A79-49105
XV-15 flight test results compared with design goals
[AMS 79-1039]
p0636 A79-49336
Effect of nozzle spacing on ground interference forces for a two jet V/STOL aircraft
[AIAA PAPER 79-1856]
p0637 A79-49339
Characterization of a swept-duct hydrogen fuel-injector for scramjet applications
p0635 A79-49345
Aerodynamic interaction on a close-coupled canard-wing configuration
[AIAA PAPER 79-1167]
p0637 A79-49563
An investigation of the rolling stability derivatives of a T-tail fighter configuration at high angles-of-attack
p0642 A79-50165
The aeroacoustics of advanced turbopropellers
p0643 A79-50236
The evolution of the high-angle-of-attack features of the F-16 flight control system
p0664 A79-50438
Test technique development in interference free testing, flow visualization, and remote control model technology at Langley's Unitary Plan wind tunnel
p0699 A79-51093
Selecting the geometric parameters and position of a nose flap on the root profile of a swept wing using tunnel test data, II
p0699 A79-51093
Wind tunnel tests of the GA(W)-2 airfoil with 20% aileron, 25% slotted flap, 30% Fowler flap and 10% slot-lip spoiler
[NASA- CR-145139]
p0033 A79-10021
Design and test of an annular sting support concept for aftbody nozzle wind tunnel testing
[AIAA 79-1960]
p0008 A79-10063
The influence of aerodynamic interference on high angle of attack wind tunnel testing
[AIAA 79-056045]
p0008 A79-11002
Aerodynamic characteristics of a 1/24-scale F-111 aircraft with various external stores at Mach numbers from 0.5 to 1.3

Wind tunnel tests of a blade subjected to Mach chord torsional oscillation at high subsonic stall flutter conditions

NASA-TP-76999

p006 79-9-12016

Aerodynamic characteristics of forebody and nose strakes based on V-16 wind tunnel test experience. Volume 2: Data base

NASA-CP-158922

p009 79-12066

Effects of thickness on the aerodynamic characteristics of an initial low-speed family of airfoils for general aviation applications

NASA-TN-I-72943

p0098 79-13000

Investigation of steady and fluctuating pressure associated with the transonic buffetting and wing rock of a one-seventh scale model of the Y-5A aircraft

NASA-CP-3061

p0099 79-13000

Aerodynamic characteristics of a supersonic cruise airplane configuration at Mach numbers of 2.30, 2.35, and 2.40 - Langley Unitary Plan wind tunnel tests

NASA-TP-768792

p0158 79-14025

Effect of cross-flow velocity and crosswind on the reverse-thrust performance of a variable-pitch fan engine

NASA-TP-790595

p0176 79-15049

Dynamic Stability Parameters

AGARD-CP-235

p0175 79-15061

Techniques for dynamic stability testing in wind tunnels

p0176 79-15062

New NASA-lane wind-tunnel techniques for studying airplane spin and two-dimensional unsteady aerodynamics

p0176 79-15064

Wind tunnel testing of dynamic derivatives in West Germany

p0176 79-15066

Some factors affecting the dynamic stability derivatives of a fighter-type model

p0176 79-15071

Aerodynamic interactions on the Fliether CCV test aircraft

p0177 79-15076

Gust-vehicle parameter identification by dynamic simulation in wind-tunnels

p0180 79-15097

A study of canard-wing interference using experimental pressure data at transonic speeds

NASA-TP-1355

p0215 79-15092

On the application of certain statistical methods to wind-tunnel testing

ARC-CP-1390

p0216 79-15199

Experimental investigation of effects of blade tip geometry on loads and performance for an articulated rotor system

NASA-TP-1391

p0218 79-15188

Detection of the transitional layer between laminar and turbulent flow areas on a wing surface --- using an accelerometer to measure noise levels during wind tunnel tests

NASA-CAS2-LAR-7226-1-1

p0228 79-16605

Study of mean- and turbulent-velocity fields in a large-scale turbine-vane passage

NASA-CP-3067

p0234 79-16653

An analytical technique for predicting the characteristics of a flexible wing equipped with an active flutter-suppression system and comparison with wind-tunnel data

NASA-TP-1367

p0242 79-17264

Aerodynamic properties of a flat plate with cavity for optical-propagation studies

NASA-TP-78487

p0205 79-17796

Summary report of the second wind tunnel test of the Boeing LPH model

NASA-CP-157792

p0205 79-17799

Wind tunnel investigation of the thrust augmentor performance of a large-scale swept wing model in the 80 by 80 foot wind tunnel

NASA-TP-I-73239

p0206 79-17804

An experimental wind tunnel investigation of a car-air-spoiler roll-control device on a forward-control missile at supersonic speeds

NASA-TP-1353

p0287 79-17809

Space shuttle afterbody aerodynamics/plume simulation data summary

NASA-TP-1380

p0287 79-17810

Boundary layer transition measurements on the ABEC 10 deg cone in three RAE wind tunnels and their implications

ARC-B-7-M-3821

p0288 79-17817

Research on self-correcting wind tunnels

p0351 79-19993

Analytical design of a contoured wind-tunnel liner for supercritical testing

p0351 79-19993

Advanced Technology Airfoil Research, volume I, part 1 --- conference on development of computational codes and test facilities

NASA-CP-2045-VOL-1-PT-1

p0355 79-20030

Wind tunnel performance of four energy efficient propellers designed for Mach 0.8 cruise --- Levin 8x6 foot wind tunnel studies for noise reduction in high speed turboprop aircraft

p0359 79-20069

Icing testing in the large NASA wind-tunnel on full-scale and reduced scale models

p0363 79-20102

Studies of self streamlining wind tunnel real and imaginary flows

NASA-T-15080

p0368 79-20112

Effects of vertical tail flexibility on the aerodynamic characteristics of a 0.3-scale NASA Space Shuttle Orbiter at Mach numbers from 0.90 to 1.55

NASA-TP-20377

p0369 79-20175

Design guidelines for the application of nose and strakes to a fighter aircraft based on V-16 wind tunnel testing experience

NASA-TP-1398

p0413 79-22000

Wind tunnel test at low speeds of a dorsal air intake on a fighter configuration

NASA-TP-722029

A survey of recent high angle of attack wind tunnel testing at Aeritalia

NASA-TP-722034

Low-speed wind-tunnel investigation of a large-scale STOL lift-air transport model

NASA-TP-78560

p0416 79-22035

Experimental investigation of three helicopter rotor airfoils designed analytically --- in the Langley 6 by 15 inch and 6 by 28 inch transonic wind tunnels

NASA-TP-1396

p0416 79-22017

Low-speed wind-tunnel parametric investigation of flight spoilers as trailing-vortex-alleviation devices on a transport aircraft model

NASA-TP-1419

p0416 79-22038

Surface pressure data for a supersonic-cruise airplane configuration at Mach numbers of 2.30, 2.96, 3.30 --- NASA full-scale and reduced scale models

NASA-T-11-78560

p0416 879-22035

Wind tunnel correlations for STOL models

p0429 79-22998

Review of large low speed wind tunnel requirements for STOL testing

p0429 79-22999

Comparison of store trajectory and aerodynamic loads, and model flow-field characteristics obtained in the ABEC PWT/87 and VFK/A wind tunnels at Mach number 1.63

AD-A065137

p0341 79-23017

Effect of number of probes and their orientation on the calculation of several compressor face distortion descriptors

NASA-TP-72859

p0345 79-23087

Wind-tunnel smooth-tube simulation and evaluation of blast effects on an engine inlet

NASA-TP-72859

p0346 79-23092

Buffeting measurements in flight and in a wind tunnel --- 7-33 aircraft

NASA-TP-76-17

p0348 79-23104

Effects of flow turbulence and noise on aerodynamic phenomena and measured quantities --- wind tunnel tests and boundary layer transition

NASA-TP-72859

p0349 79-23109

Experimental studies in a Ludwig tube transonic tunnel

NASA-TP-72859

p0349 79-23111

Notes concerning testing time requirements in steady and unsteady measurements

NASA-TP-72859

p0349 79-23112
Two dimensional anemometric probe --- two dimensional flow wind tunnel tests  
[AAAP-WT-78-07]  
Optical flow measurements: Applications to wind tunnels on rotor bench tests  
[AAAP-WT-78-08]  
Effect of the model vertical position in a slotted wind tunnel  
[AAAP-WT-78-05]  
Similitude, manufacturing, identification, and instrumentation of test models --- aircraft models  
[AAAP-WT-78-21]  
Modernization of the low speed wind tunnel at Breguet de Velizy; Measuring system modernization --- minicomputer T 1 980A  
[AAAP-WT-78-12]  
Introduction to the aerocontrol arc wing  
[AD-406723]  
Bertelson effect for positive pitch stability and control  
[p0580 W79-23095]  
Low-speed wind-tunnel investigation of wing films as trailing-vorter-alleviation devices on a transport airplane model  
[AAAP-WT-1401]  
The computation of transonic flow in wind tunnels at inlets and cascades using the finite element method  
[THS-DF-E-1971]  
Tone noise of three supercritical helical tip speed propellers in a wind tunnel  
[AAAP-TM-79167]  
An experimental investigation of the effect of rotor tip shape on helicopter blade-slap noise --- in the langley V/stol wind tunnel  
[AAAP-TM-80066]  
Wind-tunnel investigation of highly maneuverable supercrtical V STOL fighter  
[AAAP-TM-78959]  
Effects of wind leading-edge deflection on low-speed aerodynamic characteristics of a low-aspect-ratio highly swept arrow-wing configuration --- wind tunnel tests  
[AAAP-TP-1434]  
Effect of nose bluntness and afterbody shape on aerodynamic characteristics of a monoplane missile concept with bodies of circular and elliptical cross sections at a Mach number of 2.50  
[AAAP-WN-60055]  
A wind-tunnel investigation of tilt-rotor gust alleviation systems  
[AAAP-CR-15226A]  
A feasibility study for a nuscrical aerodynamic simulation facility: Summary  
[AAAP-CR-15228]  
A simple method of adapting a wind tunnel  
[AAAP-WN-78073]  
Wind tunnel tests of four flexible wing ultralight gliders  
[AAAP-WN-76079]  
An exploratory investigation of the effect of a plastic coating on the profile drag of a practical-jet-construction sailplane airfoil  
[AAAP-WT-80002]  
Wind tunnel measurements of dynamic derivatives in the German Federal Republic  
[THP-5-78]  
Investigations of interference effects in a wind tunnel caused by a model support strut on a reflection plane mounted half model  
[PPA-TP-AP-1335:2]  
Small turbine engine integration in aircraft installations  
[p0554 W79-27170]  
Study in a straight cascade wind tunnel of aerelastic instabilities in compressors  
[p0555 W79-27178]  
Aeropropulsion systems test facility rake calibration test in tunnel A  
[AD-406979]  
Scalving effects on shock-induced separation  
[p0579 W79-28122]  
Scaling effects on drag prediction --- wind tunnel tests  
[p0573 W79-28123]  
Aerodynamic characteristics of large-engine semispan model with a swept wing and an augmented jet flap with hypermixing nozzles --- 80-481 by 80-foot Wind Tunnel and Static Test Facility  
[AAAP-WT-73236]  
A theoretical and experimental investigation of the effect of nonmetric over-the-wing nacelles on wing-body aerodynamics  
[p0590 W79-29146]  
Wind tunnel test of ACES 2 ejection seat with anthropometric dummy in asymmetric configurations  
[AD-406864]  
The effect of winglets on the KC-135A aircraft tests in the Langley 8 ft transonic pressure tunnel  
[AD-406832]  
Analysis of wind tunnel data pertaining to high angle of attack aerodynamics. Technical discussion and analysis of results  
[AD-106966]  
Analysis of wind tunnel data pertaining to high angle of attack aerodynamics. Volume 2: Data base  
[AD-106964]  
Similitude requirements and scaling relationships as applied to model testing  
[AAAP-TP-1435]  
Evaluation of pylon focusing for reduced helicopter vibration  
[p0555 W79-30196]  
Wall connections in transonic wind tunnel: Equivalent porosity  
[AAAP-TM-565]  
A comparison of predictions obtained from wind tunnel tests and the results from cruising flight: Airbus and Concord --- conferences  
[AAAP-TM-75238]  
Subsonic wind-tunnel investigation of leading-edge devices on delta wings (data report) --- conducted in Langley 7- by 10-foot subsonic wind tunnel  
[p0663 W79-31134]  
Wind-tunnel investigation of an armed mini remotely piloted vehicle --- conducted in Langley V-STOL tunnel  
[p0664 W79-31151]  
A force and moment test of a 1/24-scale F-111 model at Mach numbers from 0.7 to 1.3  
[AD-4070192]  
Experimental data base for computer program assessment: Report of the Fluid Dynamic Panel Working Group 08  
[AGAAD-WT-138]  
Experimental investigation of the aerodynamic characteristics of a wing in a jet flow --- wind tunnel tests  
[MLB-TP-377009:0]  
Aeroservoelastic tests in Langley 8 by 10 ft supersonic wind tunnel  
[p0703 W79-32175]  
Experimental investigation of the aerodynamic characteristics of a wing in a jet flow --- wind tunnel tests  
[MLB-TP-377001:1]  
Wind tunnel tests on cambered wings of silent glider planform. Part 1: Further low speed tests. Part 2: Transonic tests  
[ARC-RM-8827]  
The design and aerodynamic characteristics of an 16% thick shock-free airfoil (ML 7501)  
[MLR-RM-378014:0]  
Tunnel 167T performance: Two-and three-stage compressor performance  
[AD-4070195]  
Flight determined lift and drag characteristics of an F-6 airplane modified with a supercritical wing with comparison to wind-tunnel results  
[AAAP-WN-13250]
WIND TUNNEL WALLS

Longitudinal aerodynamic characteristics of a vectored-engine-over-wing configuration at subsonic speeds --- Langley V/STOL wind tunnel tests [NASA-TN-15533] p0712 T79-33164
Wind-tunnel investigation of a large-scale VTOL aircraft model with wing root and wing thrust augmentors --- Ames 40 by 90 foot wind tunnel [NASA-TM-785589] T79-33167
Wind-tunnel investigation of the free-wing/free-triangle concept [NASA-CN-162351] p0718 T79-33216

WIND TUNNEL WALLS

A general correction method of the interference in 2-dimensional wind tunnels with ventilated walls p0912 T79-10967
Numerical study of the induction of porous walls of the working section of a low-velocity wind tunnel p0022 T79-12228
A similarity rule for compressibility and sidewall-boundary-layer effects in 2-dimensional wind tunnels [AIAA PAPER 79-0108] p0141 T79-19535
A transonic wind tunnel interference assessment - axisymmetric flows [AIAA PAPER 79-0203] p0143 T79-19596
Development of a low-correction wind tunnel wall configuration for testing high lift airfoils p0158 T79-20108
Effect of viscosity on wind-tunnel wall-interference for airfoils at high lift [NASA-79-1534] p0577 T79-46715
La Recherche Aéronautique. Bi-monthly Bulletin No. 1979-1
The use of sound absorbing walls to reduce dynamic interference in wind tunnels [J11050] p0105 T79-13052
Transonic assessment of two-dimensional wind tunnel wall interference using measured wall pressures p0351 T79-19991
Design and calibration of slotted walls for transonic airfoil wind tunnels p0356 T79-20058
Research on adaptive wall wind tunnels [AD-A062110] p0368 T79-20144
Wall interference effects p0389 T79-23113
User guide for STILM: A boundary-layer program for controlled wind-tunnel liner design [NASA-CN-159058] p0439 T79-23114
Effect of the model vertical position in a slotted wind tunnel [AIAA-WK-78-05] p0494 T79-23119
A vortex lattice technique for computing ventilated wind tunnel wall interference [AD-A070845] p0707 T79-32220

WIND TUNNELS

NT BLOWDOWN WIND TUNNELS
NT CASCADE WIND TUNNELS
NT CYCLIC WIND TUNNELS
NT HYPERSONIC WIND TUNNELS
NT HIGH SPEED WIND TUNNELS
NT SHOCK TUNNELS
NT SLOTTED WIND TUNNELS
NT SUBSONIC WIND TUNNELS
NT SUPersonic WIND TUNNELS
NT TRANSONIC WIND TUNNELS
Construction of a refrigerated wind tunnel with a supercooled droplet production system for research on icing p0114 T79-17595
Experimental investigation of the effect of surface discontinuity on step-backward flow p0273 T79-27000
Making fluid flows visible p0449 T79-36373
On the test procedures of the derivative balances used in West Germany p0176 T79-15067

SUBJECT INDEX

Effects of a military cargo pod and tail fins on the aerodynamic characteristics of a large wide-body transport model [NASA-TM-80052] p0363 T79-21001
Feasibility study of transit photon correlation anemometer for Ames Research Center unitary wind tunnel plan [NASA-CN-152238] p0367 T79-20140
Design and characteristics of high Reynolds number test facilities: The Ludwig tube p0377 T79-20994
Boundary layer effects on pressure variations in Ludwig tubes p0377 T79-20995
A simple method of adapting a wind tunnel Schlieren system for interferometry [ARL-AFRO-NOTE-378] p0385 T79-21098
The application of spanwise blowing for high angle of attack spin recovery p0414 T79-22004
Special Ground testing facilities and testing techniques for STOL aircraft p0430 T79-23007
Influence of optimized leading-edge deflection and geometric anhedral on the low-speed aerodynamic characteristics of a low-aspect-ratio highly swept arrow configuration --- Langley 7 by 10 foot tunnel [NASA-TM-80063] p0567 T79-27095
Contributions to experimental fluid mechanics --- development of aerodynamics test facilities in Germany following World War 2 p0673 T79-31229
Wind tunnels with adapted walls for reducing wall interference [NASA-TM-79-1041] p0673 T79-31230
Estimation of tunnel blockage from wall pressure signatures: A review and data correlation [NASA-CN-152241] p0729 T79-32219
Construction problems for high Reynolds number wind tunnel models [FORBA-MT-1978-6] p0720 T79-32224

WIND VEANS

Experimental data on the dynamic properties of several propeller vanes --- turbulence measurement in wind tunnel p0466 T79-38943
WIND VARIATIONS

Windshear indication systems p0687 T79-52389

WIND VELOCITY

Theoretical study of the effect of wind velocity gradients on longitudinal stability and control in climbing and level flight [NASA-TM-1332] p0166 T79-14110
Wind estimates from cloud motions: Result of an in situ aircraft verification experiment p0376 T79-20616
A 2-low-velocity airflow calibration and research facility [TR-29401/2] p0674 T79-31237

WIND VELOCITY MEASUREMENT

Response and other characteristics of a flat-bladed, dual pitch propeller anemometer p0192 T79-21914
An omnidirectional, tilt insensitive, wind speed threshold detector p0192 T79-21915
Calibration and use of a sailplane variometer to measure vertical wind velocity fluctuations p0336 T79-30112
Experimental data on the dynamic properties of several propeller vanes --- turbulence measurement in wind tunnel p0466 T79-38943
Pulsed laser Doppler measurements of wind shear p0686 T79-52046

WINDING

STRAIGHT WINDING
WINDMILLING
AUTOMATIC WINDMILLS (WINDPOWERED MACHINES)
The design and testing of a vertical-axis wind turbine using sails p0127 T79-18467
Selection of geometric parameters and location of nose flap on swept wing root profile from tunnel test data. I

A method of the theory of airfoil profiles with a jet flap

Approximation of the aerodynamic characteristics of a wing with a double-slotted flap

Selecting the geometric parameters and position of a nose flap on the root profile of a swept wing using tunnel test data. II

A study of the Sheriff's wing

WING FLOW METHOD TESTS

Method of calculating potential flows of an incompressible fluid past a wing with a high-lift device

The high-lift characteristics in the case of the T-wing concept

Stability of three-dimensional compressible boundary layers over wings with suction

Characteristic aerodynamic coefficients at high Reynolds numbers

Investigation of wing shielding effects on CTOL engine noise

Analog simulation and its defining similarity criteria in the analysis of supersonic flows past wings

Recent progress in active controls applied to flutter suppressors

Unsteady effects on a stalled wing in pulsed flow - Comparison with back-and-forth oscillating case

Unsteady pressure measurements on rotor blade tips with incidence

Unsteady pressure measurements on rotor blade tips

Investigation of wing shielding effects on CTOL engine noise

WING LOADING

Method for determining maximum allowable stress for preliminary aircraft wing design

A method of solving multicriterial optimization problems for load-bearing structures --- for large aspect ratio wings

Longitudinal distribution of hydrodynamic load on a gliding flat-bottomed plate with heel

Iterative method of aircraft wing strength calculation taking into account the effect of deformations on distribution of aerodynamic forces

Processing a random loading process by computer to obtain life information --- in-flight critical stress measurements in aircraft wing structures

A comparison of predicted and experimental rotor loads to evaluate flap-lag coupling with blade pitch

Aerodynamics of wing-alongstream interaction especially for V/STOL configurations

Effect of spanwise blowing on the aerodynamic characteristics of the F-15

Explanation of the useful life of the lower chord of the girder of the PC-7 'Turbo-Trainer'

A-483
WING OSCILLATIONS

Elevated-temperature effects on strain gages on the TF-124 wing
p0259 A79-26400

Design maneuver loads for an airplane with an active control system
[AIAA 79-0738] p0323 A79-29049

Lifting surface approach to the estimation of gust response of finite wings
p0507 A79-38596

The 'cloud-in-cell' technique applied to the roll-up of vortex sheets
p0461 A79-37275

Results of an improved version of LTBA#2 for computing unsteady airloads on airfoils oscilating in transonic flow
[AIAA PAPER 79-1553] p0577 A79-46726

Wing aerodynamic loading caused by jet-induced lift associated with STOL-OW configurations
[AIAA PAPER 79-1664] p0603 A79-47346

An investigation of the rolling stability of a T-tail fighter configuration at high angles-of-attack
p0642 A79-59165

Thrust vectoring applied to aircraft having high-wing loading
[AIAA PAPER 79-1812] p0684 A79-51246

Calculation of the pressure distribution over a slender wing in supersonic flow
p0677 A79-52117

Formulas for spanwise distribution of lift on aircraft wings
p0694 A79-53871

Feasibility of combining linear theory and impact theory methods for the analysis and design of high-speed configurations
[NASA-CP-3069] p3157 W79-14016

Effects of laminar flow control on the performance of a large span-distributed-load flying-wing cargo airplane concept
[AIAA-TP-78715] p0292 W79-17851

Wing aerodynamic loading caused by jet-induced lift associated with STOL-OW configurations
[AIAA-TP-79218] p0281 W79-28146

WING OSCILLATIONS

Blown wings from flow --- short takeoff and landing through wing-overflowing
p0634 A79-49232

Interference effects of aircraft components on the longitudinal angle of attack of a wing-mounted propeller

Assessment at full scale of nozzle/wing geometry effects on OTW aero-acoustic characteristics --- short takeoff aircraft noise

Wing aerodynamic loading caused by jet-induced lift associated with STOL-OW configurations
[NASA-TP-79216] p0581 W79-28146

An experimental and theoretical investigation of the effect of nonmetric over-the-wing nacelles on wing-body aerodynamics
[NASA-TP-79213] p0550 W79-29146

Longitudinal aerodynamic characteristics of a vectored-engine-over-wing configuration at subsonic speeds --- Langley V/STOL tunnel tests
[NASA-TP-1533] p0712 W79-33164

WING PANELS

Numerical-analytical solution of the problem of the constrained torsion of a cantilever wing
p0021 A79-12195

Approximate solution of some boundary value problems on aircraft structural integrity
p0022 A79-12234

Harmonic vibrations of an annular wing in the steady flow of an ideal fluid
p0028 A79-12963

Airplane wing self-oscillatory bending-torsion vibrations
p0069 A79-14865

Rotor blade lag plane frequency optimisation using visco-elastic damping --- for helicopters
p0130 A79-18652

Unsteady thin airfoil theory for transonic flows with embedded shocks
[AIAA PAPER 79-0204] p0183 A79-19597

Aerodynamic characteristics of an unsteady separated flow
[AIAA PAPER 79-0283] p0144 A79-19643

Unsteady flows --- subsonic and supersonic aeroelectricity oscillating airfoils and displacement bodies
[DGLR PAPER 78-222] p0183 A79-20480

Effect on an oscillating airfoil in a free stream --- helicopter rotor blade application
p0213 A79-24217

Adaptive control of wing store flutter --- a feasibility study
[AIAA 79-0789] p0322 A79-29033

Effect of chordwise forces and deformations and deformations due to steady lift on wing flutter
[AIAA 79-0794] p0322 A79-29037

Flutter speed degradation of damaged, optimized flight vehicles
[AIAA 79-0795] p0323 A79-29038

An elementary explanation of the flutter mechanism with active feedback controls
p0338 A79-30480

The effect of chordwise flexibility on the lift of a rapidly accelerated airfoil
p0434 A79-30923

Recent progress in active controls applied to flutter suppression
p0389 A79-32277

Unsteady pressure measurements on rotor blade tips with incidence
p0406 A79-38534

Some observations on the mechanism of aircraft wing rock
p0463 A79-38135

Aeroelastic stability analysis of the AD-1 manned oblique-wing aircraft
p0463 A79-38136

On the transonic-dip mechanism of flutter of a sweptback wing
p0514 A79-41763

Experiments on an aerofoil at high angle of incidence in longitudinal oscillations
p0529 A79-43223

Results of an improved version of LTBA#2 for computing unsteady airloads on airfoils oscillating in transonic flow
[AIAA PAPER 79-1553] p0577 A79-46726

Harmoic oscillations of annular wing in steady ideal fluid flow
p0601 A79-47009

Sonic-box method employing local Mach number for oscillating wings with thickness

An experimental study of the dynamic forces acting on an aerofoil
[AD-A064122] p0085 W79-12000

A study of turbulent flows about oscillating airfoils
[AD-A060911] p0170 W79-15011

The Influence of sweep on the aerodynamic loading of an oscillating WAC0012 airfoil. Volume 2: Data report
[NASA-CP-163550] p0227 W79-16801

A slender delta wing oscillating in a fluctuating free stream --- helicopter application
[VPR-LR-257] p0208 W79-17818

Investigation of torsion free wing trend flutter models
[AD-A061942] p0302 W79-18957

A new two-dimensional oscillating wing apparatus for unsteady aerodynamics research
p0352 W79-20004

Some calculations of transonic potential flow for the WAC 64A006 airfoil with oscillating flap
p0352 W79-20005

Transonic flow over the WAC 64A006 with an oscillating flap-calculations based on the Euler equations
p0353 W79-20007

The Influence of sweep on the aerodynamic loading of an oscillating WAC0012 airfoil. Volume 1: Technical report

Lateral stability at high angles of attack, particularly wing rock
p0658 W79-30226

WING PANELS

Optimization of high-aspect-ratio multiweb wing structure
p0070 A79-14876

Defects experienced in the production of advanced composite outer wings for the A-7D attack aircraft
p0115 A79-17066

SUBJECT INDEX
Composite wing technology on the AV-8B advanced aircraft

Recent advances in the solution of three-dimensional flow over wings with leading edge vortex separation

Advanced composite cover to substructure attachment technology --- for aircraft wing skin

Method for studying experimentally the aerodynamic interference of small secondary structures with a lifting surface

Optimization of wing structures to satisfy strength and frequency requirements

Fabrication of thick graphite/epoxy wing surface structure --- for subsonic transport aircraft

Hybrid Wing Box structure

Preparation of double-curvature planking by rolling --- for aircraft structures

Wing center section optimization with stress and local instability constraints

Fabrication and evaluation of advanced titanium structural panels for supersonic cruise aircraft

Study of the application of superplastically formed and diffusion bonded (SPF/DC) titanium structure to laminar flow control (LFC) wing design

Design of redundant structures --- structural design criteria and fracture mechanics of large commercial transport aircraft

Bumblebee Program: Aerodynamic Data. Part 4: Wing loads at Mach numbers 1.5 and 2.0 --- missile configurations

Evaluation of composite wing for F-15-12A airplane, appendix C

A vector-continuous loading concept for aerodynamic panel methods

WING PLANFORMS

NT ARROW WINGS

NT DELTA WINGS

NT INFINITY SPAN WINGS

NT SWEPT FORWARD WINGS

NT SWEPTBACK WINGS

NT TRAPEZOIDAL WINGS

NT VARIABLE SWEEP WINGS

Recent theoretical developments and experimental studies pertaining to vortex flow aerodynamics - With a view towards design

Calculation of the transient aerodynamic characteristics of a supersonic flight vehicle

Optimum two dimensional wings in supersonic flows

Analytic investigation of advancing blade drag reduction by tip modifications

Full-scale wind tunnel test of a modern helicopter main rotor - Investigation of tip Mach number effects and comparisons of four tip shapes

Numerical study of the supersonic flow around wings

Experimental verification of annular wing theory

A surface source and vorticity panel method --- for potential flow in arbitrary and wing/body geometries

Fundamentals of design. I - 'Why's' and 'wherefore's' of wings

Helicopter rotor radius optimization

A note on yawed slender wings

First flight imminent for new technology wing

Wing geometry effects on leading-edge vortices

Investigation of torsion free wing trend flutter models

Minimization theory of induced drag subject to constraint conditions

Summary of past experience in natural laminar flow and experimental program for resilient leading edge

Application of vortex lattice method for the evaluation of the aerodynamic characteristics of wings with and without strakes

Flow visualization studies of a general research fighter model employing a strake-wing concept at subsonic speeds --- in the Langley high speed 7-by 10-ft wind tunnel

Wind tunnel tests on cambered wings of mild gothic planform. Part 1: Further low speed tests.

WIND PROFILES

WING SPAN

Numerical solution of a linear integral equation of the first kind in the inverse problem of symmetric flow past a wing

Investigation of the profile drag and the mean and pulsation velocities in the wake of wings by means of a laser Doppler anemometer

Effect of viscosity on nonseparated transonic flow past a profile

Solution of the inverse problem of aerodynamics by a random search technique

Nonlinear unsteady potential flow calculations for three-dimensional oscillating wings

Aerodynamic forces in finite wings in oscillatory flow - an experimental study

An efficient transonic shock-free wing redesign procedure using a fictitious gas method

Comparison of two flow surveys above stalled wings

Transition aerodynamics for close-coupled wing-canard configuration - V/STOL operations

Evaluation and analysis of computations and experiments for transonic wing body configurations

Calculation of the non linear aerodynamic coefficients of wings of various shapes and their wakes, including canard configurations

Computational optimization and wind tunnel test of transonic wing design

Transonic wing design for transport aircraft

The wing section theory of Kutta and Zhukovski and experimental program for resilient leading edge

Flutter suppression on an aeroelastic wind tunnel models

Allowable notch effectivity criterion for aircraft structures

Wave propagation associated with wings --- three dimensional unsteady flow analysis for supersonic aircraft

Three-dimensional coordinates about wings

Application of two synthesis methods for active flutter suppression on an aerelastic wing
tunnel model

Recent progress in finite-volume calculations for wing-fuselage combinations --- transonic potential flow

Technique for developing design tools from the analysis methods of computational aerodynamics

Analytic formulas for wing profile aerodynamic characteristics in incompressible flow

Solution of the inverse aerodynamics problem by the random search method

Design of the circulation control wing STL demonstrator aircraft

Numerical solution of the problem of unsteady supersonic flow around the front part of the wings with a detached shock wave

Calculation of the planar supercritical flow over a NASA supercritical profile

An improved system for use in conducting wake investigation for a wing in flight --- differential pressure measurements for drag investigations

Interaction of the supersonic flow below a wing and a supersonic free jet (two-dimensional situation)

Section drag coefficients from pressure probe transverses of a wing wake at low speeds

Development of a viscous vortex/wing interaction program for thick wings with bounded leading edge

Wing shape optimization for maximum cross-country speed, with mathematical programming

An annular wing

Wind tunnel investigation of the free-wing/free tunnel model

Wind tunnel measurements on the interference between a jet and a wing located outside the jet. Part 1: Text, tables, and figures

Selecting the geometrical parameters and location of the nose flap at the wing root profile of a swept wing on the basis of wind tunnel data

Selecting the geometrical parameters and position of a nose flap on the root profile of a swept wing using tunnel test data. II

Winglet toe out angle optimization for the Gates Learjet Longhorn wing

Winglet toe out angle optimization for the Gates Learjet Longhorn wing --- tests in the Langley 8 ft transonic pressure tunnel

The method of discrete vortices --- for steady flow past finite-span wing

Design maneuver loads for an airplane with an active control system

Second approximation in theory of a finite-span thin wing in a hypersonic gas flow

Formulas for spanwise distribution of lift on aircraft wings

Effects of spanwise blowing on the surface pressure distribution and vortex-lift

WING ROOTS

WING SPAN

WING SLOTS

WING SLATS

WING BOOTS

WING TIPOSTORIES

WING TIPS

WING TIPS

WINGFUSELAGE STORES

WINGED VEHICLES

WINGLETS

WINGLETS

WINGLETS

WINGLETS

WINGLETS

WINGLETS

WINGLETS

WINGLETS

WINGLETS

WINGLETS

WINGLETS

WINGLETS

WINGLETS

WINGLETS
SUBJECT INDEX

NT LOW ASPECT RATIO WINGS
NT OBLIQUE WINGS
NT PARALLELOGRAMS
NT RECTANGULAR WINGS
NT RIGID ROTORS
NT ROTARY WINGS
NT SLENDER WINGS
NT SUPERCRITICAL WINGS
NT SWEEP FORWARD WINGS
NT SWEEP WINGS
NT SWEEPBACK WINGS
NT THIN WINGS
NT TILTING MOTORS
NT TIP DRIVER MOTORS
NT TRAPEZOIDAL WINGS
NT TWISTED WINGS
NT UNCAMBERED WINGS
NT UNSCRIPT WINGS
NT VARIABLE SWEEP WINGS

Problems in the method of discrete vortices for solving wing theory problems

Program BPV - A wing structural optimization computer program for preliminary design of fighter aircraft

The smooth approximation method and its application to the mathematical description of the aerodynamic characteristics of a wing

Positive tail loads for minimum induced drag of subsonic aircraft

Design study results of a supersonic cruise fighter wing

Ground effects on USB configurations - Upper Surface Blowing

Pressure-controlled thermal expansion molding of advanced composite BPV wing structure

Application of the isotherm square bend process to F14 wing beams

An aerelastic optimization procedure for composite high aspect ratio wings

Wing rock due to aerodynamic hysteresis

Formation of a trailing vortex

On the role of shocks in the 'sub-transonic' flutter phenomenon

Decoupler pylon - A simple, effective wing/store flutter suppressor - in fighter/attack aircraft

An experimental study of a jet issuing from a lifting wing --- vertical-horizontal flight transitions in WOL aircraft

A computational scheme for structural influence coefficients of certain planar wings

Britain's better airbus wing - A-310 aircraft wing design

Parameters of three-dimensional flow past a wing near the free surface of a ponderable fluid

Effect of forward acceleration on aerodynamic characteristics of wings

A method for the calculation of 3D boundary layers on practical wing configurations

Assessment at full scale of nozzle/wing geometry effects on CCT aerocoustic characteristics - Over The Wing STC engine configurations

On a smooth approximation method and its application to mathematical description of wing aerodynamic characteristics

Exploratory study of the influence of wing leading-edge modifications on the spin characteristics of a low-wing single-engine general aviation airplane

Boundary layer control on wings using sound and leading edge serrations

Flow patterns and aerodynamic characteristics of wing with strake

Stability of the perturbed longitudinal motion of a lift-controlled aircraft

Optimal design of wing structures with substructuring

Experimental investigation of wing fin configurations for alleviation of vortex wakes of aircraft

Free wing assembly for an aircraft

A laser velocimeter flow survey above a stalled wing

Detection of the transitional layer between laminar and turbulent flow areas on a wing surface -- using an accelerometer to measure noise levels during wind tunnel tests

Wings

Turbomachinery flutter: Introductory concepts

Prediction of in-depth gap heating ratios from wing glove model test data -- space shuttle orbiter

Aircraft energy efficiency laminar flow control
glove Flight conceptual design study

A study on the utilization of advanced composites in commercial aircraft wing structure

Executive summary

Pressure and thermal distributions on wings and adjacent surfaces induced by eleven deflections at Mach 6

Aeroelastic and performance characteristics of wing lift augmentation schemes

Computer program to calculate three-dimensional boundary layer flows over wings with wall mass transfer

Aerodynamics of low aspect ratio wings

The effect of disturbance on a wing

Introduction to the acceptor arc wing and the Bertelsen effect for positive pitch stability and control

Numerical optimization techniques for bound circulation distribution for minimum induced drag of nonplanar wings: Basic formulations

Low-speed wind-tunnel investigation of wing fins as trailing-vortex-alleviation devices on a transport airplane model

A general method for the layout of elevators and elevators of gliders and motorplanes

Experimental investigation into the feasibility of an extruded wing

Improvement of hang glider performance by use of ultralight elastic wing

Ultrasonic inspection of wing spar attachment joints and lugs in viscount aircraft

An aerodynamic analysis of deformed wings in subsonic and supersonic flow

Special investigation report: Wing failure of Boeing 747-131 near Madrid, Spain, 9 May 1976

Correlation of data related to shock-induced trailing-edge separation and extrapolation to

A-487
VINE

flight Reynolds number
[NASA-CR-3178]
p0668 N79-31195

Experimental investigation of the aerodynamic characteristics of a wing in a jet flow --- wind tunnel tests
[NASA-PD-77057-1]
p0702 N79-32177

HiMAT structural development design methodology --- aerelastic tailoring of the canard and wing box and distributed load tests
[NASA-CR-145886]
p0705 N79-32197

Transonic wing redesign using a generalized fictitious gas method
[AD-A0700132]
p0705 N79-32202

Multifrequency eddy current inspection for cracks under fasteners, phase 2
[AD-A0711022]
p0711 N79-32560

VINE

VT ELECTRIC VINE

WERING

CAD for electric systems design --- in aircraft production
p0374 N79-20765

VIVING SYSTEMS

VT WING

VT PHYSICAL WORK

WORK FUNCTIONS

Aerodynamic investigation of the mixer for noise reduction based on the work availability function 'exergy' --- of bypass jet engine gas turbine
[AIAA 79-7017]
p0328 A79-29390

WORKING FLUIDS

Fuels, lubricants and other fluids used in aviation

--- Russian book
p0603 A79-67433

Closed power cycles' analysis
p0422 N79-22094

WORKLOADS (PSYCHOPHYSIOLOGY)

Integrated ATC development - The next decade: The controller's viewpoint
p0204 A79-23583

Selective calling procedure in air traffic --- flight stress reduction in aircraft-ground voice communication
p0250 A79-25369

The influence of the amount of automation in a flight path guidance system on flight path deviation and pilot work load
[DLR PAPER 78-044]
p0520 A79-42370

Development of a control wheel steering mode and suitable displays that reduce pilot workload and improve efficiency and safety of operation in the terminal area and in windshear
[AIAA 78-1587]
p0573 A79-65414

Impact of area navigation on controller productivity and ATC system capacity
[FAA-RT-78-51]
p0231 N79-16825

Two-segment approach investigation on a moving-base piloted flight simulator
[VT-LR-250]
p0295 N79-17880

Advancements in helicopter cockpit technology
[AD-A065072]
p0310 N79-17625

Flight evaluation MK 2 integrated controller installed in an OH-58A helicopter
[AD-A065072]
p0438 N79-23103

The time budget as a criterion for the workload of air traffic controllers
[MHR-OPF-1353-0]
p0483 N79-23943

WRAPAROUND CONTACT SOLAR CELLS

G SOLAR CELLS

WU-2 AIRCRAFT

U N-2 AIRCRAFT

WYOMING

Aircraft accident report: Rocky Mountain Airways, Inc., DeHavilland DHC-6-300, N248M, Cheyenne, Wyoming, 27 February 1979
[NTSE-AIR-79-10]
p0591 N79-29157

WZP AIRCRAFT

U P-2 AIRCRAFT

I BAND

U SUPERHIGH FREQUENCIES

I BAY INSPECTION

Automatic scanning inspection of composite helicopter structure using an advanced technology fluoroscopic system

[ANS 79-35]
p0631 A79-49087

The contribution of dynamic X-ray to gas turbine air sealed technology
p0447 N79-11065

I BAY SPECTROGRAPHY

U I BAY SPECTROGRAPHY

I BAY SPECTROMETRY

U I BAY SPECTROGRAPHY

Failure analysis of aerospace components
p0213 A79-24235

I BAY STRESS MEASUREMENT

X-ray determination of internal stress states due to surface treatment of Ti16V4 and Ti16V6S2a
p0447 N79-36003

I-22A AIRCRAFT

An X-22A flight experiment to investigate control-display requirements for the AV-8B V/STOL aircraft
p0332 A79-29480

I-24 AIRCRAFT

Configuration development study of the X-24C hypersonic research airplane, phase 1
[NASA-CR-145032]
p0216 N79-15939

Configuration development study of the X-24C hypersonic research airplane
[NASA-CR-145074]
p0216 N79-15940

Configuration development study of the X-24C hypersonic research airplane, phase 2
[NASA-CR-145074]
p0232 N79-16839

Configuration development study of the X-24C hypersonic research airplane, phase 3
[NASA-CR-145103]
p0232 N79-16940

I-24 AIRCRAFT

X-15 TILT ROTOR AIRCRAFT

X-15 tilt rotor research aircraft and preliminary design of a larger aircraft for the U.S. Navy subsonic V/STOL mission
p0133 A79-18678

An acoustical study of the X-15 Tilt Rotor Research Aircraft
[AIAA PAPER 79-0612]
p072 A79-26939

X-15 Tilt Rotor Research Aircraft - Program report
[AIAA 79-0704]
p0277 A79-27371

Wind tunnel and flight test of the X-15 Tilt Rotor Research Aircraft
[ANS 79-54]
p0633 A79-49105

X-15 flight test results compared with design goals
[AIAA PAPER 79-1839]
p0634 A79-49336

IAG LASERS

Assembly and repair of aircraft engine parts using pulsed IAG lasers
p0771 A79-15205

IAY

A laser yaw alignment system for wind tunnels
p0743 A79-17592

Pitot-tubes at 90 and 180 degrees of yaw
p0186 A79-20793

A note on yawed slender wings
p0315 A79-28429

Modeling the sensitivity of a linear system to a decrease in its order by the method of infinitesimal transformation in the problem of yaw control
p0348 A79-32040

On modeling sensitivity of a linear system to reduction of its order by the infinitesimal transformation method in the yaw motion control problem
p0655 A79-54044

An introduction to dynamic derivatives. 2: The equations of motion for wind tunnel pitch-yaw oscillation rigs
[AIAA Aero-Rot-.377]
p0488 A79-23982

YAWING ROBOTS

Application of the local momentum theory to the aerodynamic characteristics of tandem rotor in yawed flight
p0128 A79-18640

YAWNEES

U ATTITUDE INDICATORS

U YAW

A-468
<table>
<thead>
<tr>
<th>A-889</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ZERO LIFT</strong></td>
</tr>
<tr>
<td>Analysis of the zero-lift wave drag measured on delta wings</td>
</tr>
</tbody>
</table>
### PERSONAL AUTHOR INDEX

**AERONAUTICAL ENGINEERING / A Continuing Bibliography**

1979 Cumulative Index

**Typical Personal Author Index Listing**

<table>
<thead>
<tr>
<th>PERSONAL AUTHOR</th>
<th>TITLE</th>
<th>REPORT NUMBER</th>
<th>PAGE NUMBER</th>
<th>NASA ACCESSION NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABDELBABID, A. N.</td>
<td>Experimental investigation of unsteady phenomena</td>
<td>p0092 W79-12073</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABDALLAH, S.</td>
<td>A new approach for solving the vorticity and continuity equations in turbomachinery ducts</td>
<td>p0199 A79-19499</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABDULLAH, A. B.</td>
<td>Experimental investigation of unsteady phenomena in incompressible radial diffusers</td>
<td>p0155 A79-22329</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABDULLAH, B. R.</td>
<td>Computer calculations of steady-state temperature fields in an air-cooled turbine rotor blade</td>
<td>p0262 A79-27167</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABDULLAH, I.</td>
<td>Application of two synthesis methods for active flutter suppression on an aerelastic wind tunnel model</td>
<td>p0566 A79-45314</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Listings in this index are arranged alphabetically by personal author. The title of the document provides the user with a brief description of the subject matter. The report number helps to indicate the type of document listed (e.g., NASA report, translation, NASA contractor report). The page and accession numbers are located beneath and to the right of the title.**

*The report number helps to indicate the typeof document listed (e.g. NASA report, translation, NASA contractor report). The page and accession numbers are located beneath and to the right of the title. Under any one author's name the accession numbers are arranged in sequence with the IAA accession numbers appearing first.*
ADAMS, N. T.

Digital data acquisition system for use in aircraft engine condition monitoring

ADAMS, R. R.

Implementation and testing of numerical analysis techniques in avionics applications

ADAMS, B. L.

Helicopter icing research

ADAMS, W. E., JR.

SPING: A program for determining aircraft equilibrium spin characteristics including stability

ADAMS, A. F.

Integrated gas turbine engine-nacelle

ADAMS, B. I.

Analysis of base-flow problems during powered supersonic flight

ADAMS, B. A.

Numerical representation of aircraft geometry

ADAMS, B. T.

Integrated gas turbine engine-nacelle

ADAMS, B. T.

Prop-Fan propulsion - Its status and potential

ADAMS, B. L.

Overview of helicopter ice protection system developments

ADAMS, B. T.

Computation of supersonic viscous flows over ogive-cylinders at angle of attack

ADAMS, B. T.

Prop-Fan propulsion - Its status and potential

AGARHL, B.

Use of the Omega Navigation System in the North Atlantic in the framework of the Navigation Minimum Performance Specifications / O4NPS/

AGIRRAL, B.

Helicopter rotor radius optimization

AGACREY, B. S.

Aerodynamic characteristics of a large-scale semispan model with a swept wing and an augmented jet flap with hypertapering nozzles

AGBON, M.

Optimal thermogasdynamic design of gas turbine engines using element prototypes.

AGAL, B.

Full-scale aircraft simulation with cryogenic tunnels and status of the Rational Transonic Facility

AGAB, B.

Review of design and operational characteristics of the 0.3-meter transonic cryogenic tunnel

AGAB, B.

Basic problem of aircraft gas turbine engine performance

AGRELL, N.

Analysis of fuel conserving operational procedures and design modifications for bomber/transport aircraft. Volume 1: Executive summary

AGRELL, N.

A basic problem in the analytical designing of aircraft gas turbine engines. I

AGIULYET, E. W.

Optimal thermogasdynamic design of gas turbine engines.

AGS, B. N.

Benefits of aerodynamic interaction to the three aircraft cable parameter study

AGS, B. N.

Investigation of the transonic drag characteristics for non-slower wing-body combinations and their equivalent axisymmetric bodies at zero lift

AGT, D.

Evaluation and analysis of computations and experiments for transonic wing body configurations

AGT, D.

Are today's specifications appropriate for tomorrow's airplanes?

AGHES, G.

Response of plate to nonstationary random load

AGHES, M. J.

Experimental verification of program KEBAF - A mathematical model for general aviation structural crash dynamics

AGI, B. C.

Helicopter rotor radius optimization

AGI, B. C.

The annoyance of multiple noisy events

AGI, B. C.

A low cost blade design for a Darrieus-type vertical-axis wind turbine

AGI, T.

Investigation of air stream from combustor-liner air entry holes

AGI, T.

Goertler vortices in the nonlinear region

AGI, T.

Aerodynamic characteristics of a large-scale semispan model with a swept wing and an augmented jet flap with hypertapering nozzles

AGI, T.

Wind-tunnel investigation of a large-scale V20 aircraft model with wing root and wing thrust augmentor

AGI, W. W.

Measurements of heat transfer in circular, rectangular and triangular ducts, representing
AKAI, J. T.
Aerodynamic and aeroelastic characteristics of oscillating loaded cascades at low Mach number
[ASME PAPER 79-GT-115] p0393 A79-32387

AKAI, T. J.
Aerodynamic force and aerodynamic forces on oscillating airfoils in cascade
[ASME PAPER 78-GT-181] p0011 A79-10612

AKMIDJANOVA, P. A.
An approximate method for calculating laminar boundary layer in micronozzles
p0526 A79-42559

AKHENDJANOVA, A. M.
Parametric method for diagnosing the state of aircraft engines on the basis of limited information
p062 A79-16781

ALKI, R.
Low cost inertial aiding for NAVSTAR/GPS receivers in naval ship navigation
p0617 A79-48656

ALKERMAN, J. W.
Hydrazine monopropellant reciprocating engine development
p0427 A79-22540

ALKOSEK, H. V.
Detached flow about an opening canopy
p0115 A79-11006

ALKEROY, T. P.
Theory of this wing in a supersonic flow with consideration of the non-equilibrium state of excitation of oscillating degrees of freedom
[AD-0065952] p0462 A79-23928

ALAKI, R.
Survey report of the Data Acquisitio and Utilization
p0244 A79-17432

ALAND, C.
Correlation study between vibrational environmental and failure rates of civil helicopter components
[NASA CR-150033] p0432 A79-23064

ALBANEZ, R. A.
Military fiber optics applications
p0280 A79-28040

ALBANY, W. B.
Motion and force cueing requirements and techniques for advanced tactical aircraft simulation
[AD-0066911] p0438 A79-23102

ALBRECHT, C.
Developments in gear analysis and test techniques for helicopter drive systems

ALBRECHT, C. G.
Structural development of the Modernized Chinook helicopter transmission gear
[AIAG 79-0716] p0282 A79-28260

ALCOFFE, G.
A reliable and survivable data transmission system for avionics processing
p0354 A79-20025

ALDEBETE, T. S.
Piloted simulator investigation of helicopter control system effects on handling qualities during instrument flight
[USN PAPER 79-044] p0520 A79-02370

ALLI, P.
[AD-A065992] p0432 A79-16781

ALDERER, G. J.
In-flight measurement of aerodynamic loads on captive stores, description of the measurement equipment and comparison of results with data from other sources
[MLD-TR-77029-0] p0229 A79-16812

ALDEBETE, T. S.
Three-dimensional finite-element techniques for gas turbine blade life prediction
p0552 A79-27156

ALEXANDROV, V. G.
Engineer's handbook of flight and radio equipment of airplanes and helicopters
p0345 A79-31486

ALEXANDER, V. L.
External radio-navigation
p0563 A79-41878

ALEXANDER, T.
Interactive multi-node blade impact analysis
[NASA CR-159462] p0292 A79-17858

ALEXANDER, R. M.
Definition and analytical evaluation of a power management system for tilt-rotor aircraft
[ARS-48] p0124 A79-16171

ALEXANDER, W. T., JR.
Advanced technology helicopter landing gear
p0174 A79-10518

ALFANO-BOSI, E.
NASA general aviation crashworthiness seat development
[SAE PAPER 790591] p0654 A79-36725

ALILY, J. A.
Fretting fatigue, with reference to aircraft structures
[SAE PAPER 790612] p0456 A79-36741

ALJABRI, A. S.
The analysis of propellers including interaction effects
[SAE PAPER 790576] p0453 A79-36712

ALKB, G. L.
Test implementation through support software - A FIT translator
p0620 A79-48687

ALLARD, P. M.
Topics in fluid film bearing and rotor bearing technology demonstrator programs
[AIAG PAPER 79-1311] p0510 A79-40758

ALLARD, P.
Helicopter crashworthy fuel systems and their effectiveness in preventing thermal injury
p0312 A79-19660

ALLEW, C. G.
Canard-body-tail missile test at angles of attack to 30 deg in the Ames 11-foot transonic wind tunnel
[NASA TN-78461] p0068 A79-12021

ALLEW, J. D.
Aerospace usage versus commercial utilization of graphite fiber reinforced epoxy composites
p0387 A79-20961

ALLEW, E.
Certification of composites in civil aircraft
[SAE 79-43] p0632 A79-40995

ALLEW, S. G.
Navstar user equipment for civil and military applications
p0638 A79-49567

ALLEW, T.
Reliability based quality /BBQ/ technique for evaluating the degradation of reliability during manufacturing
p0205 A79-23631

ALLEW, W.
The influence of the amount of automation in a flight path guidance system on flight path deviation and pilot work load
[MLD-TR-79-044] p0520 A79-02370

ALLI, P.
Present fatigue analysis and design of helicopters
p0629 A79-09978
PERSONAL AUTHOR INDEX

ATASSI, N.
Aerodynamic and aeroelastic characteristics of oscillating airfoils in cascade
[ASME PAPER 78-GT-181] p0011 A79-10812
Aerodynamic and aeroelastic characteristics of oscillating loaded cascades at low Mach number.
I - Pressure distribution, forces, and moments
[ASME PAPER 79-GT-111] p0393 A79-32386
Aerodynamic and aeroelastic characteristics of oscillating loaded cascades at low Mach number
[ASME PAPER 79-GT-112] p0393 A79-32387

ATTENCO, A., JR.
Flight effects on noise generated by the JT8D engine with inverted primary/fan flow as measured in the NASA Ames 40- by 80-foot wind tunnel
[ATIA PAPER 79-0614] p0271 A79-26537

ATTIRAS, R.
Simulation evaluation of combined 4D ENAV and airborne traffic situation displays and procedures applied to terminal aerial maneuvers
[NASA-CS-158474] p0300 A79-21033
Investigation of the Multiple Method Adaptive Control (MMAC) method for flight control systems
[NASA-CS-3095] p0437 A79-23099
ATTA, E. N.
Nonlinear steady and unsteady aerodynamics of wings and wing-body-couplings
p0085 A79-12010

ATTWOOD, V. W.
An estimate of the economic benefit from a communication satellite to oceanic air traffic
p0112 A79-17901

AUBREY, B.
Holographic lens for pilot's head up display, phase 4
[AD-0058660] p0102 A79-13043

AUBREY, G. P.
Standard Avionics Modules (SAM) for existing models
[AD-406529] p0435 A79-23083

AUBRY, B.
Canadair Challenger
p0507 A79-40313

AULAT, G. M.
Composites emerging for aeropropulsion applications
p0653 A79-53720

AUSMAN, J. S.
Target marker placement for dive-toss deliveries with wings non-level
p0358 A79-20023

AVITZER, R.
Digital simulation of the Operational Loads Survey flight tests
[ANS-78-58] p0125 A79-18179

AWARD, N.
Light propeller aircraft noise
[OERA, TP NO. 1975-56] p0409 A79-34980

AWARD, B.
Experimental study of an axisymmetric thermal wake
p0053 A79-13158

AWATA, M. K.
Forecast of future aviation fuels. Part 1: Scenarios
[NASA-CS-158971] p0557 A79-29354

AWAGA, A.
Application of the local momentum theory to the aerodynamic characteristics of tandem rotor in yawed flight
p0128 A79-18640

B

BAEFUL, N.
Two-segment approach investigation on a two-segment piloted flight simulator
[VFW-18-250] p0295 A79-17880

BABB, C. D.
Pressure distributions on three different crucifers aft-tail control surfaces of a wingless missile at Mach 1.60, 2.36, and 3.70
Volume 1: Trapezoidal tail

BACCOCK, D. F.
Joint aircraft-ground systems automation: Real time data transmissions requirements
p0205 A79-23592

BAHME, V. S.
Visual simulation devices for flight training simulators

BAILEY, B. E.
Characteristics of the advanced supersonic technology XST-105-1 configured for transpacfic range with Pratt and Whitney variable area thrust control engines

BAKER, A. W.
Aircraft longitudinal motion at high incidence
p0612 A79-48052

BACHALO, R. J.
Transonic flow past a symmetrical airfoil at high angle of attack
[ATAIA PAPER 75-1500] p0575 A79-46694

BACCIARDI, J.
Holography and LDV techniques, their status and use in airfoil research
p0351 A79-19999

BACON, J.
Finite element analysis of fatigue crack growth in aircraft components
p0075 A79-15794

BADAKHSH, A. F.
A system which uses a laser beam to control the regime of vibration tests with turbine and compressor blades
p0316 A79-28638

BADIA, A.
The ellipticity of the inlet section of an S-shaped air intake on the uniformity of the outward flow
p0636 A79-52128

BADEDDIN, I. Y.
Simulation correlation, and analysis of the structural response of a CH-47A to crash impact
[AD-4062643] p0363 A79-26094

BABB, R. W.
F-15 flight simulator: Development and ana lis of computer stochastic analyzer
[AD-8067765] p0556 A79-27188

BABST, C. V.
Alternate subsonic low-cost engine
[AD-8067277] p0542 A79-26058

BAGDONY, A. G.
The determination of parameters of a chemically active magnetogasdynamic medium in the proximity of a wave. II
p0316 A79-28721

BABLEY, B. W.
Experimental Clean Combustor Program (ECCP), phase 3
[NASA-CS-153384] p0670 A79-31207

BAILES, R. W.
AH-1G helicopter main rotor flow survey
[AD-4057643] p0092 A79-12078

BAILEY, R. W.
TS-2A air tanker evaluation, phase 2
[AD-4060940] p0172 A79-15039

BAILING, J.
Preliminary airworthiness evaluation AH-16 helicopter equipped with a Garrett infrared radiation suppressor and an AH-60/64 Janssen
[AD-4067757] p0541 A79-26047

BAILING, J.
Limited airworthiness and flight characteristics evaluation model 2148 helicopter with fiberglass main rotor blades
[AD-4071721] p0716 A79-33197

BAILEY, L. V.
Study of mean- and turbulent-velocity fields in a large-scale turbine-vane passage
[ASME PAPER 79-GT-33] p0300 A79-35019

BAILEY, L. V.
Study of mean- and turbulent-velocity fields in a large-scale turbine-vane passage
[NASA-CS-3067] p0234 A79-16853

BAILEY, R. B.
Infrared suppressor effect on T63 turboshaft engine performance

BAILEY, F. A.
Numerical aerodynamic simulation facility
p0039 A79-10450

BAILEY, G. L.
Hybrid Wing Box structure
p0532 A79-43331

BAILEY, G. N.
Engine/aircraft structural integration: An overview
p0554 A79-27167

BAILEY, H. B.
Calculation of transonic aileron buzz
[ATAIA PAPER 79-0174] p0412 A79-19553

BAILEY, L. B.
Prospects for computing airfoil aerodynamics with Reynolds averaged Navier-Stokes codes
p0356 A79-20038
BAILEY, P. G.
Supercritical knife edge seal repair
[AD-0057269] p0046 79-11055

BAILEY, R. G.
Evaluation of turbo-propulsion simulators as a testing technique for fighter aircraft
[AIAA PAPER 79-11969] p0508 79-04080

BAILEY, R. W.
Visual pockets: A design parameter for helicopter instrument panels
p0311 79-19664

BAILEY, W. N.
Navigation planning - Need for a new direction
p0076 79-16157

BAIER, R. C.
Computer aided design of air-cooled flow turbines for turbochargers
[ASAE PAPER 78-GT-101] p0563 79-04794

BAIR, G. L.
Sensor signal processing development for application of THZI
p0618 79-48664

BAKER, A. A.
Kerf reinforcement of cracked aircraft structures
p0078 79-15540

BAKER, D. A.
Kerf reinforcement of cracked aircraft structures thermal-stress and thermal-fatigue studies
p0111 79-17018

BAKER, G. R.
Study of hydrogen recovery systems for gas vented wing folding liquid-hydrogen fueled aircraft
[NASA-CR-158991] p0097 79-0006

BAKER, G. R.
The 'cloud-in-cell' technique applied to the roll up of vortex sheets
p0861 79-37725

BAKER, P. D.
Recent developments in sensors for the gas turbine engine
[ASME PAPER 78-GT-52] p0007 79-10760

BAKER, R. R.
Brittle materials, high temperature gas turbine: Ceramic turbine rotor technology
[AD-0067176] p0499 79-25029

BAKHTYEV, V. K.
Correlation-extremal direction finding of extended point sources of electromagnetic oscillations
p0811 79-35506

BAKKE, V. H.
Electrification of woven and film materials
p0348 79-32042

BAKOS, P.
Quasi-autonomous navigation system
p0533 79-43505

BAKOW, L.
Comparison of engineering properties of 7050-T7E73 and 7075-T6510 extrusions for potential 9-3 engine/airframe/drive train dynamic interface applications
[AD-0058002] p0067 79-12207

BAKULSKII, V.
Representation of compressor characteristics in coordinates convenient for computer calculation of GTB parameters
p0568 79-14184

BAKULSKII, V. E.
Analytical representation of turbine characteristics in a form convenient for computer-aided computation of gas-turbine engine parameters
p0083 79-16602

BALLABAS, R.
The F-16 BIV program
p0476 79-39688

BALABUKH, Y. A.
Combined-excitation ac generators for aviation
p0126 79-18200

BALAHAY, V. A.
Determination of the aerodynamic damping of turbine blade vibrations with allowance for the pitch, exit blade angle, and blade curvature
p0006 79-10568

BALAHAY, V. A.
Evaluation of the aerodynamic damping of the oscillations of turbine blades with a view to pitch, stagger angle, and curvature of blades
p0398 79-32286

BALAKIN, B. A.
Experimental investigation of the aerodynamic drag of simple bodies in two-phase flow

BAILEY, C. J.
Integrated Avionics Control System (IACS)
[AD-0056476] p0037 79-10056

BALL, R. H.
Full-scale wind tunnel tests of a modern helicopter main rotor - Correlation with model rotor test data and with theory
[AHS 70-036] p0119 79-18130

BALLBIES, T.
Towards a realistic structural analysis/design system
p0199 79-22246

BALDWIN, R. S.
Numerical solution for supersonic flow near the trailing edge of a flat plate
p0514 79-41771

BALDWIN, T. T.
Fabrication research for supersonic cruise aircraft
p0529 79-43243

BALDWIN, B. W.
Engine/airframe/drive train dynamic interface documentation
[AD-0063237] p0382 79-21047

BALL, R. G. J.
Icing tests on turbojet and turbofan engines using the NWS engine test facility
p0032 79-10013

BALLAL, D. R.
Weak excitation limits of turbulent flowing mixtures
[ASME PAPER 78-GT-164] p0010 79-10798

BALLEDO, J. D.
Ignition of fuel sprays by hot surfaces and stabilization of aircraft fires
[AD-0065153] p0041 79-23181

BALLEDO, J. D.
State-of-the-art in transonic flow computations: Future advanced technology rotorcraft
[AD-0059151] p0301 79-18946

BALLEDO, D. E.
Future advanced technology rotorcraft
[AIAA 79-0705] p0276 79-23766

BANERJEE, K.
The influence of the blade surface roughness on the aerodynamic behavior and characteristic of an axial compressor
[ASME PAPER 79-GT-102] p0392 79-32378

BANIK, D.
Optimization for rotor blades of tandem design for axial flow compressors
[ASME PAPER 79-GT-125] p0393 79-32394

BANIK, D.
Dynamic behavior and control of single-shaft closed-cycle gas turbines
[10-11056237] p0382 1179-21047

BANDA, S. S.
A model for unsteady effects in lateral dynamics for use in parameter estimation
[AIAA 79-1638] p0567 79-45318

BAUER, D.
Parameter identification applied to analytic hingeless rotor modeling
p0397 79-22475

BAWAN, D.
Engine/airframe/drive train dynamic interface documentation
[AD-0056956] p0030 79-10064

BANKER, R. D.
Implementation of flight control in an integrated guidance and control system
p0657 79-30215

BANKER, R. D.
Section drag coefficients from pressure probe transverses of a wing wake at low speeds
p0352 79-20000

BANKER, R. D.
An investigation into the transient aerodynamics associated with a spoiler emerging into a uniform airstream
[111111 78-1631] p0010 79-10198

BANKER, R. D.
Wind-tunnel impellers in fiber-composite design
[110-11065153] p0441 79-23181
PERSONAL AUTHOR INDEX

BECK, C. B.
A modular approach to airborne research instrumentation
p0192 A79-21963

BECKER, A.
EXILCN - An integrated navigation and air traffic control system for the future needs of international aviation
[DOGL PAPER 78-136]
p0652 A79-14086
The new microwave landing systems and their growth potential
p0116 A79-17606
Investigation of different system configurations for a TMA navigation system taking special account of traffic load and channel requirements
[DOGL PAPER 79-039]
p0119 A79-62365

BECK, B. E.
Exhaust emissions characteristics for a general aviation light-aircraft Avco Lycoming 10-360-156R piston engine
[AD-A066565]
p0503 A79-25544
Exhaust emissions characteristics for a general aviation light-aircraft Avco-Lycoming 10-360-154D piston engine
[AD-A066569]
p0503 A79-25545
Exhaust emissions characteristics for a general aviation light-aircraft Teledyne Continental Motors TSIO-360-C piston engine
[AD-A070016]
p0670 A79-31211

BECK, W.
Presentation of thermal or residual-light TV images on head-up displays for night or all-weather operations
p0079 A79-16240

BECKETT, A. J.
Analysis of the mechanical properties of rigid foam with particular consideration of a rigid polyether structural foam [80-229]
p0481 A79-23227

BECKETT, P.
Mission simulation as an aid to display assessment
p0355 A79-20028

BECK, M. C.
Expanding the region of convergence for TITAN through improved modelling of terrain nonlinearities
p0619 A79-48678

BEARD, A. J., JR.
An omnidirectional, tilt insensitive, wind speed threshold detector
p0192 A79-21915
The Dulles Airport pressure-sensor array for gust-front detection - System design and preliminary results
p0192 A79-21919
The Dulles International Airport wind-shear detection system Statistical results
p0278 A79-27754

BEDDERS, T. S.
Oscill of leading edge separation effects under dynamic conditions and low Mach number
[AHS 78-63]
p0126 A79-18184

BEKKER, G. G.
Definitions, description, and interfaces of the FAA's developmental programs. Volume 2: ATC facilities and interfaces
[AD-A066401]
p0549 A79-27118

BEELER, D., E.
High tip speed/TOD resistant boron-aluminum fan blades
p0532 A79-43332

BEELER, E. F.
1.82500 condition and performance monitoring system
p0680 A79-16442

BEGLAULT, J. T.
Onboard navigation and flight control integrated system architecture
p0655 A79-13251

BEGGS, B. E.
Avionics technology for tactical data handling
p0605 A79-25979

BEER, H.
Stability and control aspects of the CCY-F104C
p0659 A79-30234

BEHNE, H. A.
Executive summary of Aircraft Icing Specialists Workshop
p0461 A79-23914

BEKHOV, V. I.
Application of gradient methods to the optimal
BENDOB, G.-A.  
Enhanced fighter mission effectiveness by use of helicopter flight simulation for A spectral analysis of thunderstorm turbulence and

BENNET, N. S.  
Some calculations of transonic potential flow for the NACA 64A006 airfoil with oscillating flap

BENNET, V. A.  
A comparison of predictions obtained from wind tunnel tests and the results from cruising flight: Airbus and Concorde

BENNETT, N. N.  
Technical evaluation report on the Fluid Dynamics Panel Symposium on Unsteady Aerodynamics [AGARD-AR-128]

BENNETT, C. L.  
An exploratory study of a finite difference method for calculating unsteady transonic potential flow [NACA-TN-60105]

BENNET, W. A.  
Wake induced time-variant aerodynamics including rotor-stator axial spacing effects

BENNET, W. S.  
Time-variant aerodynamic response of a stator row including the effects of airfoil camber [SAE PAPER 79-02-110]

BENNET, E. S.  
Enhanced fighter mission effectiveness by use of integrated flight systems

BENSON, G.  
Use of helicopter flight simulation for height-velocity test predictions and flight test height-velocity test predictions and flight test
atmosphere to 650 C

BILLENBERG, K. P.
Fluidics: Feasibility study
electro/hydraulic/fluidic direct drive servo valve
[AD-A067429]
p0254 A79-31925

BILLENBERG, K. P.
Applications of DS composites in aircraft gas turbine engines
[ONERA, TP NO. 1978-73]
p0081 A79-16512

BICKEL, R. H.
Dynamic behavior of aircraft materials
[AD-A064592]
p0420 W79-22078

BEECKEL, G.
Small signal compensation of magnetic fields resulting from aircraft maneuvers
p0638 A79-49605

BEECH, W.
Engine requirements for the next generation of fighter aircraft
[ERG LE7-123]
p0061 A79-14077

BEHRBAUS, C.
Evolving methods for reducing avionics data in an EISF environment
p0618 A79-14671

BEGERT, G.
Reliability and maintainability growth of a modern, high performance aircraft, the F-14A
p0205 A79-23062

BEGLEY, R. P., II
The effect of operations on the ground noise footprints associated with a large multibladed, nonbanging helicopter
p0040 A79-10851

BEEKE, W. J.
Design charts and boundaries for identifying departure resistant fighter configurations
[AD-A058043]
p0092 W79-12073

BEEKE, P. P.
An improved system for use in conducting wake investigations for a wing in flight
[NASA-CR-11024-1]
p0252 W79-17797

Section drag coefficients from pressure probe transverse of a wing wake at low speeds
[AD-A065098]
p0649 W79-30145

BEEKE, J. E.
Pulsed laser Doppler measurements of wind shear
p0667 A79-52046

BEJIAX, J. R.
Estimation of reliability from multiple independent grouped censored samples with failure times known
p0206 A79-23663

BEELE, F. D.
The circulation control rotor flight demonstrator test program
[AVS 78-51]
p0633 A79-49103

Driveline alignment indicator
[AD-A065998]
p0487 A79-23973

BELL, R. C.
Friction and wear of carbon-graphite materials for high-energy brakes
p0082 A79-16679

Development of sprayed ceramic seal system for turbine gas path sealing
[ASME PAPER 78-8A-CET-7]
p0199 A79-19705

Wear of seal materials used in aircraft propulsion systems
[NASA-TR-79003]
p0057 W79-12204

Development of sprayed ceramic seal systems for turbine gas path sealing
[NASA-TR-79002]
p0057 W79-12223

Composite seal for turbomachinery
[NASA-CR-13N-12131-1]
p0298 A79-18318

BELL, E., L.
Secondary-flow-related vortex cavitation
p0378 A79-21003

BEIL, W. W.
The solid state remote power controller - Its status, use and perspective
p0012 A79-10986

BEIL, W. W.
Air traffic control/full beacon collision avoidance system Chicago simulation
[AD-A066524]
p0713 A79-31178

BEIL, W. W.
Beacon-based collision avoidance system - Experimental results
p0081 A79-33606

BELOW, W.
Phosphorylated epoxy adhesives
p0088 A79-12042

BEHD, S.
Advanced technology applied to the CB-77D drive system
[SAR PAPER 781040]
p0256 A79-25908

BEHR, G. L.
Experimental investigation of three helicopter rotor airfoils designed analytically
[NASA-TL-1396]
p0416 W79-22037

BEHM, J. M.
Helicopter rotor airfoil
[NASA-CG-1396-1]
p0492 A79-29456

BEHAN, L. W., JR.
A new light twin using bonded metal construction
[SAR PAPER 790603]
p0551 A79-36735

BEHAN, R. W.
Electromechnical actuation for business aircraft
[SAR PAPER 790622]
p0557 A79-36750

BEHAN, R. W.
Development of the integrated flight trajectory control concept
p0353 A79-20015

BEHAN, J.
Alternative hydrocarbon fuels: Combustion and chemical kinetics; SQUID Workshop, Loyola College, Columbia, Md., September 7-9, 1977, Technical Papers
p0051 A79-12977

BEHAN, R. W.
Alternative hydrocarbon fuels: Combustion and chemical kinetics
[AD-A061050]
p0239 A79-17011

BEHAN, J.
The prediction of lightning-induced voltages on metallic and composite aircraft
p0243 A79-17422

BEHAN, R. W.
Aircraft turbine engine monitoring experience: Implications for the F100 engine diagnostic system program
[AD-A065062]
p0671 A79-31217

BISHOP, R. M.
Calculation of the three-dimensional flow field in supersonic inlets at angle of attack using a bicharacteristic method with discrete shock wave fitting
[IAIAA PAPER 79-0379]
p0147 A79-19698

A computer program for the calculation of the flow field in supersonic mixed-compression inlets at angle of attack using the three-dimensional method of characteristics with discrete shock wave fitting
[NASA-TP-78997]
p0033 A79-10023

BISHOP, J. A.
Artificial icing test photic coatings on 0-18 helicopter rotor blades
[AD-A058975]
p0220 A79-15959

BISSEKER, R. C.
Dynamic pressure loads in the induction system of the tornado fighter aircraft
p0554 A79-27166

BITE, C.
Overestimates of entrainment from wetting of aircraft temperature sensors in cloud
p0249 A79-25296

BISHOP, R. H.
Investigation of notion base drive techniques
[AD-A062630]
p0105 A79-13066

BLACK, G. T.
Proceedings of AFPL Flying Qualities Symposium
p0494 A79-29482

BLACK, J. A.
Effects of vertical tail flexibility on the aerodynamic characteristics of a 0.03-scale NASA Space Shuttle Orbiter at Mach numbers from 0.90 to 1.55
[AD-A062377]
p0369 A79-20175
PERSONAL AUTHOR INDEX

BLACK, L. N.
In-house exploratory development program on microstrip antennas
[AD-A058899]
p0107 79-13233

BLACK, E. A.
Ship motion effects on landing impact loads
[ASNA 79-0742]
p0320 79-29014

BLACKBURN, J. R.
Preliminary design study of a composite main rotor blade for the X-20 aircraft
Trade analysis and preliminary design study of composite GH-58 main rotor blade
[AD-A068159]
p0420 79-22800

BLACKBURN, B. L.
Application of advanced technologies to improve wind tunnel performance
[AIAA PAPER 79-0066]
p0140 79-27096

BLACKEY, B. P.
Wind tunnel and flight test of the XV-15 Tilt Rotor Aircraft
[ABS 79-54]
p0633 79-49105

BLACKWELL, R. B.
Scale effects on supercritical airfoils
[NASA-TP-1384]
p0287 879-17809

BLACKWELL, D. P.
The generation, radiation and prediction of supersonic jet noise. Volume 2, appendix:
Computer program listing
[AD-A064668]
p0428 79-22854

BLANCHARD, D. R.
A shock capturing application of the finite element method
[AD-070036]
p0701 79-32153

BLANCO, T. A.
Technology trends and maintenance workload requirements for the A-7, F-8, and F-15 aircraft
[AD-A070036]
p0701 79-32153

BLANKEUSBIP, B. L.
Ship motion effects on landing impact loads
[AD-A068159]
p0420 79-22800

BLAHA, B.
Application of advanced technologies to improve wind tunnel performance
[AIAA PAPER 79-0066]
p0140 79-27096

BLAICK, D. B.
Analysis of longitudinal natural vibrations of deformable aircraft by the finite-element method
[ASNE PAPER 79-GI-32]
p0340 879-30518

BLAIR, B. P.
Research on centrifugal effects on turbine rotor blade film cooling
[AD-A060218]
p0544 79-26224

BLAIR, A. B., JR.
Wind tunnel performance of four energy efficient propellers designed for Mach 0.8 cruise
[SAE PAPER 790573]
p0549 79-36759

BLAIR, J. D.
Dual digital flight control redundancy management system development program
[AD-A070113]
p0554 79-25880

BLAIR, R. K.
An experimental investigation of a ram-air-spoiler rcll-control device on a forward-control missile at supersonic speeds
[NASA-TP-1353]
p0227 79-17099

BLANEY, J. B.
An experimental test of the effects of stresses and vibrations in a radial flow rotor
[ASME PAPER 79-GT-22]
p0247 79-49587

BLANTON, B. P.
Navstar user equipment for civil and military applications
[PB-283470/3]
p0050 79-11580

BLANTON, B. K.
Improved method of predicting helicopter control response and gust sensitivity
[ASNA 79-25]
p0629 79-49077

BLASZCZTK, J.
A shock capturing application of the finite element method
[AD-A070036]
p0701 79-32153

BLASCHKE, G.
A spectral analysis of thunderstorm turbulence and jet transport landing performance
[AD-060218]
p0278 79-27575

BLOKPOEL, B.
A research study into the reliability of various fuel, hydraulic and air conditioning components of military aircraft
[AD-006468]
p0400 79-33859

BLOCH, S.
A self contained collision avoidance system for helicopters
[AD-060218]
p0656 79-30206

BLOEDEL, A. W.
Experimental verification of program KRASS - A mathematical model for general aviation structural crash dynamics
[SICL PAPER 790578]
p0545 79-36223

BLOOMER, B. B.
Development of linear and non-linear hub springs for two-bladed rotors
[AD-A060218]
p0344 79-31218

BLOMINER, B. L.
Some theoretical and experimental investigations of stresses and vibrations in a radial flow rotor
[AD-A070113]
p0554 79-27158

BLOOM, S. J.
Fuel tank survivability for hydrodynamic ram induced by high velocity fragments. Part 1: Experimental Results and Design summary
[AD-A060218]
p0544 79-26224

BLOOM, S. J.
Cost and operational effectiveness of R&M improvements
[AD-A060218]
p0573 79-15403

BLOOM, A.
Canopy glint screening investigation
[AD-A060218]
p0571 79-15028

BLOOM, R. E.
Small hovercraft design - Evolution to simplicity
[AD-A060218]
p0640 79-69906

BLOOM, R. E.
A spectral analysis of thunderstorm turbulence and jet transport landing performance
[AD-A060218]
p0278 79-27575

BLOOMER, B. B.
Small turbine engine integration in aircraft installations
[AD-A060218]
p0535 79-27575

BLOOMER, B. B.
Investigation of wing shielding effects on CTOL engine noise
[AD-A060218]
p0640 79-29359

BLOOMER, B. B.
The performance of R&M improvements for two-bladed rotors
[AD-A060218]
p0535 79-27575

BLOOMER, B. B.
A self contained collision avoidance system for helicopters
[AD-A060218]
p0656 79-30206

BLOOMER, B. B.
Experimental verification of program KRASS - A mathematical model for general aviation structural crash dynamics
[SICL PAPER 790578]
p0545 79-36223

BLOOMER, B. B.
The use of falcons to disperse nuisance birds at Canadian airports - An update
[AD-A060218]
p0325 79-29359

BLOOMER, B. B.
Investigation of wing shielding effects on CTOL engine noise
[AD-A060218]
p0640 79-29359

BLOOMER, B. B.
The performance of R&M improvements for two-bladed rotors
[AD-A060218]
p0535 79-27575

BLOOMER, B. B.
A self contained collision avoidance system for helicopters
[AD-A060218]
p0656 79-30206

BLOOMER, B. B.
Experimental verification of program KRASS - A mathematical model for general aviation structural crash dynamics
[SICL PAPER 790578]
p0545 79-36223

BLOOMER, B. B.
The use of falcons to disperse nuisance birds at Canadian airports - An update
[AD-A060218]
p0325 79-29359

BLOOMER, B. B.
Investigation of wing shielding effects on CTOL engine noise
[AD-A060218]
p0640 79-29359
Lo-frequency augmentor instability investigation computer program user's manual  
[AD-0665774] p0436 A99-23093

BRENT, R.  
B-52 aircraft gross weight computational system  
[AD-A0697714] p0114 A99-17610

BRENNER, N.  
Investigation of a laser Doppler velocimeter system to measure the flow field of a large scale VTOL aircraft in ground effect  
[AD-A1059593] p0168 A99-39974

BRENNER, N.  
Laser Doppler velocimeter measurements of B-747 wake vortex characteristics  
[AD-A069775] p0159 A99-14034

BRENNER, N.  
Ground-based measurements of the wake vortex characteristics of a B-747 aircraft in various configurations  

BRENNER, N.  
Investigation of a laser Doppler velocimeter system to measure the flow field around a large scale VTOL aircraft in ground effect  

BRENNER, N.  
The contribution of dynamic X-ray to gas turbine air sealed technology  
[AD-A066173] p0485 A99-23954

BRENNER, N.  
Evaluation of a digital computer program for simulating VTOL aircraft launch and recovery from small ships. Volume 1: Program description  
[AD-A0661712] p0485 A99-23954

BRENNER, N.  
Evaluation of a digital computer program for simulating VTOL aircraft launch and recovery from small ships. Volume 2: Appendices  
[AD-A066173] p0485 A99-23955

BRENNER, N.  
Evaluation of airfield pavement materials based on synthetic polysers  
[AD-A066173] p0485 A99-23955

BRENNER, N.  
A brief review of air flight weapons  
[AD-A066173] p0485 A99-23955

BRENNER, N.  
Weapon/aircraft interactions  
[AD-A066173] p0485 A99-23955

BRENNER, N.  
Test cases on convective storms. Case study 2, 22 June 1976: First echo case  
[PB-295753/8] p0722 A99-33758

BRENNER, N.  
Test cases on convective storms. Case study 1, 22 June 1976: First echo case  
[PB-295754/8] p0722 A99-33759

BRENNER, N.  
Comparative study of flare control laws  

BRENNER, N.  
Evaluation of a method to extract performance data from dynamic maneuvers for a jet transport aircraft  

BRENNER, N.  
Treatment of the control mechanisms of light airplanes in the flutter clearance process  
[AD-A066173] p0485 A99-23955

BRENNER, N.  
Informativeness and effectiveness of digital command-generating devices  
[AD-A066173] p0485 A99-23955

BRENNER, N.  
Axial compressor operation with radially

PIA PERSONAL AUTHOR INDEX
BULL, D. A.
Aerial isolation - a study of the interaction between co-aligned aerials
p0574 N79-06240

BULL, J. S.
Flight investigation of helicopter IFR approaches to oil rigs using airborne weather and mapping radar
[AD-8079-52] p0633 N79-09104

BUL chaos, C.
The quiet revolution in aerae construction
p0240 N79-31236

BURLINGTON, L.
Survivability in aircraft fires - New standards are needed
p0462 N79-38091

BURLIG, L.
Predictions of gas-turbine alloy creep characteristics
p0266 N79-26984

BURSTAD, E.
Use of helicopter flight simulation for height-velocity test predictions and flight test risk reduction
p0123 N79-18164

BUN," R.
Influence of thermomechanical treatment on microstructure and mechanical properties of high strength aluminum alloys [DLR-PE-77-50]
p0048 N79-11203

BUNDE, B. H.
Cargo logistics Airlift Systems Study (CLASS). Volume 2: Case study approach and results [NASA-CS-159913]
p0494 N79-24978

BUNCH, R. E.
Preliminary airworthiness evaluation ON-56C helicopter
[AD-1077699] p0715 N79-33196

BUNCH, R. E., JR.
Measurements and predictions of flow and static noise of an afterburning turbofan engine in an F-111 airplane [AIAA-79-7018]
p0328 N79-29391

BUNCH, R. E.
Measurements and predictions of flow and static noise of a TF33 afterburning turbofan engine [NASA-TP-1372]
p0102 N79-13085

BÜRCHER, G. G.
A force and moment test of a 1/26-scale F-111 model at Mach numbers from 0.7 to 1.3 [AD-1076192]
p0665 N79-31156

BUDKA, S.
Linearization in the recursive estimation of navigation parameters
p0315 N79-28604

BURGESS, E. P.
Experimental measurements of shock-boundary-layer interaction of a supercritical airfoil [AIAA PAPER 79-1069]
p0603 N79-47345

BURGESS, E. P.
Analysis of a theoretically optimized transonic airfoil [NASA-Ch-3055]
p0088 N79-13001

BURK, J. D.
Study of blade aspect ratio on a compressor front stage aerodynamic and mechanical design report [NASA-Ch-159535]
p0435 N79-23085

BURNS, E. B.
Tactical performance characterization basic methodology [AD-1069927]
p0674 N79-31235

BURNS, R. E.
Study of aerodynamic technology for VSTOL fighter attack aircraft [NASA-Ch-152129]
p0034 N79-10027

BURNS, R. E.
Radio-controlled model design and testing techniques for stall/spin evaluation of general-aviation aircraft [NASA-TM-80510]
p0651 N79-30173

BURNS, J.
A system for survival
p0066 N79-14426

BURNS, J. J.
Application of fracture mechanics to design
p0273 N79-26980

PERSONAL AUTHOR INDEX

BURNHAM, H.
An aerodynamic analysis of deformed wings in subsonic and supersonic flow [AD-8067586]
p0581 N79-28189

BURNARD, G. L.
Nondestructive evaluation of fiber reinforced epoxy composites: A state-of-the-art survey [AD-8071973]
p0719 N79-33263

BURN, R. D.
Effect of lip and centerbody geometry on aerodynamic performance of inlets for tilting-nacelle VTOL aircraft [AIAA PAPER 79-0381]
p0199 N79-23509

BURN, R. D.
Effect of lip and centerbody geometry on aerodynamic performance of inlets for tilting-nacelle VTOL aircraft [NASA-TM-79056]
p0169 N79-14999

BURN, R. D.
Sea Harrier night and low visibility approach development
p0332 N79-29483

BURN, R. D.
Application of aircraft wakes at 250-meter altitude with a 10.6-micron CW laser Doppler velocimeter
p0691 N79-53517

BURN, R. D.
Pulsed laser Doppler measurements of wind shear
p0686 N79-52046

BURN, R. D.
Ground-based measurements of the wake vortex characteristics of a B-747 aircraft in various configurations [NASA-TP-80474]
p0537 N79-26016

BURN, R. D.
All weather cockpit canopies. I - The F-16
p0006 N79-10619

BURN, R. D.
All weather cockpit canopies. II - The Challenger
p0006 N79-10620

BURNS, A.
The development of a parametric method of measuring fus fatigue loads based on flight measurements on a lightning Mk.11 [ARC-NP-2828]
p0112 N79-24516

BURNS, R. A.
Fundamentals of design. I - 'Whys' and 'wherefores' of wings
p0251 N79-25456

BURNS, R. A.
Supersonic combat aircraft design [AIAA-79-0699]
p0276 N79-27363

BURNS, R. A.
Fundamentals of design. II - VTO for combat aircraft
p0355 N79-03724

BURNS, R. A.
Fundamentals of design. III - V-S for combat aircraft
p0536 N79-03725

BURNS, R. A.
Fundamentals of design. IV - Weapon carriage and delivery
p0667 N79-52530

BURNS, R. A.
Transonic/supersonic lateral aerodynamic derivatives
p0276 N79-15913

BURNS, R. A.
Control-configured combat aircraft
p0236 N79-16868

BURNS, R. A.
Predesign of the second generation comprehensive helicopter analysis system [AD-1064299]
p0821 N79-22004

BURNS, R. A.
Analysis of an interactive graphics system for the design and optimization of aircraft lifting surfaces
p0025 N79-12436

BURNS, R. A.
Users manual for Linear Time-Varying Helicopter Simulation (Program TVHS) [NASA-Ch-159020]
p0375 N79-20769

BURNS, R. C.
The results of synthesizing and evaluating potential solutions for Multi-Function Inertial Reference Assembly /MIRA/ candidate configurations
p0488 N79-36052

BURNS, R. C.
Preliminary feasibility assessment of Multi-function Inertial Reference Assembly (MIRA)
p0353 N79-20017

BURNS, R. D.
High frequency surface current and charge densities induced on aircraft by a plane electromagnetic wave [AD-8059810]
p0168 N79-14298

High frequency near field scattering by an elliptic disk
PERSONAL AUTHOR INDEX

BURROUGHS, B. A.
Fuselage-mounted antenna code: User's manual
[AD-A065586] p0489 N79-24214
Wing-mounted antenna code: User's manual
[AD-A065587] p0489 N79-24215
An iterative approach for computing an antenna aperture distribution from given radiation pattern data
[AD-A065590] p0490 N79-24217
BABBURGES, B. A.
Superplastic forming diffusion bonding of titanium helicopter airframe components
[ABS 79-33] p0630 A79-49005
BURTON, B. A.
Laboratory tests for undesired conducted currents and surge voltages caused by lightning /Qualification test /
[AD-A065586] p0489 N79-24214
Tests on actual aircraft for electromagnetic effects /Engineering tests /
[AD-A065587] p0489 N79-24215
Composite forward fuselage systems integration, volume 2
[AD-A065560] p0494 N79-24217
BURTON, R. V., JR.
Aerodynamic problems in cooled turbine blade design for small gas turbine
[AD-A065586] p0489 N79-24214
BUTTERWORTH, P. J.
Wind tunnel tests on cambered wings of mild gothic planform. Part 2: Transonic tests
[ABC-R/AD-3827] p0703 N79-32179
BUTLER, B. N.
Electronic control for helicopter engines
[ABS 79-21] p0124 A79-18174
Evaluation of the practical aspects of vibration reduction using structural optimization techniques
[ABC-R/AD-3827] p0703 A79-29270
CALHOUN, G. L.
Bute, H. F.
Wide range operation of advanced low NOx aircraft gas turbine combustors
[ASME PAPER 78-GT-126] p0009 A79-10792
Parametric performance of a turbojet engine combustor using Jet A and a diesel fuel
HYASS, B.
Engine fuel control systems as a determining factor on modern helicopters
[AD-A066137] p0011 A79-19682
HYRAE, D. C.
Aeronautical design for testability - A vendor's viewpoint
[ABC-R/AD-3827] p0703 A79-29270
HYBA, T. R.
The effect of surface imperfections on the aerodynamic performance of an airfoil at moderate Reynolds numbers
[AD-A065586] p0489 N79-24214
HYRIS, A. P.
Numerical study of the induction of porous walls of the working section of a low-velocity wind tunnel
[AD-A066137] p0011 A79-19682
C
CACCETE, T.
The effects of ambient conditions on gas turbine emissions - Generalized correction factors
[ASME PAPER 78-GT-87] p0001 A79-10262
CABY, R. R.
Intensive tropic function testing
[AD-A056416] p0039 A79-10440
CAPPERT, J. C.
Digital Avionics Information System (DAIS) serial I/O exercise
[AD-A062646] p0382 A79-21040
CABELL, B.
Non-destructive evaluation systems for the naval aviation maintenance environment technology assessment
[AD-A058146] p0085 A79-12003
CAPELL, J. F.
Correlation of data related to shock-induced trailing-edge separation and extrapolation to flight Reynolds number
[NASA-CE-3178] p0668 A79-31995
CAHN, C. R.
Design of a spread-spectrum navigation receiver /Avistar /
[AD-A061378] p0241 A79-17178
CAIGN, R. T.
The 5 ft pressure F-5A aircrew control environment test
[AD-A068872] p0596 A79-29270
CAINE, D. A.
Electronic control for helicopter engines
[ABS 78-51] p0124 A79-18174
CAIROS, B.
Investigation of the crush impact characteristics of composite airframe structures
[ABS 78-51] p0124 A79-18174
CALIPODAS, N. J.
Evaluation of the practical aspects of vibration reduction using structural optimization techniques
[AD-A062646] p0382 A79-49074
CALABRESE, W.
Mass injection and jet flow simulation effects on transonic afterbody drag
[AD-A066137] p0011 A79-19682
CALCOTE, H. P.
Diffusion bonding of titanium helicopter airframe components
[AD-A065587] p0489 A79-49005
CALDOR, B. N.
Thermoelectric applications in seals
[AD-A065560] p0494 A79-24217
CALDWELL, B. N.
Thermoclastic and dynamic phenomena in seals
[AD-A061754] p0309 A79-19396
CALDOWNE, G.
Development of anti-G valves for high performance aircraft
[AD-A065586] p0489 A79-24214
CALF, B. B.
Fuel tank sealant requirements for advanced high performance aircraft
[AD-A065560] p0494 A79-24217
CALGER, B.
Facility for studying the action of unsteady supersonic gas streams on the blades of a plane cascade
[AD-A065586] p0489 A79-24214
BUSTED, J. F.
Navigational systems requirements via collision risk model
[AD-A065587] p0489 A79-24215
BUSS, J. J.
New devices for digital communications in avionics
[AD-A065560] p0494 A79-24217
BUSSCHE, D. N.
Application of stability theory to laminar flow control
[AD-A065560] p0494 A79-24217
BUSCHUVE, A. E.
System for stabilizing the vertical overload of an aircraft
[AD-A065586] p0489 A79-24214
BUTLER, B. N.
Definition of requirements for a performance measurement system for C-5 aircrew members
[AD-A063202] p0462 A79-22119
BUTLER, R. N.
Sensitivity of aircraft spinning motion to dynamic cross-coupling and acceleration derivatives
[AD-A065586] p0489 A79-24214
BUTTERWORTH, P. J.
Wind tunnel tests on cambered wings of mild gothic planform. Part 1: Further low speed tests
[AD-A065586] p0489 A79-24214
CALICCHIA, L. V.

Feasibility study of GPS-inertial navigation for helicopters and study of advanced GPS signal processing techniques, volume 3 (AD-A057569) p0090 N79-12059

CALLIS, J. A.

A nonlinear approach to the design of jet engine control systems

Singular perturbation techniques for on-line optimal flight path control

[AG-79-1620] p0565 N79-45303

A new pure of operational procedures and design

modifications for aircraft fuel conservation

[AG-79-1656] p0568 N79-45328

CALLENS, R. E.

Effect of surface imperfections on the performance of a cracked lug

[CONF-790142-1] p0532 N79-43436

Analysis of plane rise from jet aircraft

Analysis of plane rise from jet aircraft

[CONF-790142-1] p0569 N79-31204

CALAFOSAS, J. J.

Development of a multibarrel spar composite main rotor blade

p0015 N79-10919

CALVER, J. W.

A new stage stacking technique for axial-flow compressor performance prediction

[SABE-PAPF 76-87-139] p0002 N79-10268

CARABANHO, E.

Generation of body-fitted coordinates for turbine cascades using multigrid

[AG-79-7849] p0331 N79-29417

CARBELLIN, L.

Technological evolution of inertial navigation for aircraft

p0334 N79-29760

CARE, R. J.

The effect of surface imperfections on the aerodynamic performance of an airfoil at moderate Reynolds numbers

[AG-20-217] p0831 N79-23048

CARRON, A.

Head-up Display and Weapon Aiming Computer for automation of weapon systems for the Sea Barrier

p0322 N79-29482

CARP, D. W.

Stable boundary layer wind shear model for aircraft flight hazard definition

p0278 N79-27575

CARP, E. T., Jr.

The effective acoustic environment of helicopter crewmen

p0040 N79-10865

CARRIE, D. A.

Gas turbine disc sealing system design

p0048 N79-11072

CARRIE, D. B.

Configuration development study of the X-20C hypersonic research airplane

[AGA-CR-145274] p0210 N79-15904

CARRIE, G. F.

Effects of spanwise blowing on the surface pressure distributions and vortex-lift characteristics of a tapered wing-strake configuration

[AGA-TD-1290] p0220 N79-16803

CARRIE, J. P.

Development of V/STOL aircraft - 1950 to 1970

p0604 N79-47606

CARRIE, F. P.

Turbine engine particulate emission characterization

[AD-A073198] p0717 N79-33208

CAMPBELL, P. B.

Planning and control of bird hazard reduction at airports in the Transport Canada system

p0325 N79-29356

CAMPBELL, E. M. E.

New technology in commercial aircraft design for minimization of operating cost

[AGA-79-6050] p0275 N79-27356

CAMPBELL, D. D.

Duralumin turbine design system

[AD-8460692] p0487 N79-23974

CAMPBELL, D. G.

Development of a control wheel steering mode and suitable displays that reduce pilot workload and improve efficiency and safety of operation in the terminal area and in windshear

[AGA-79-1867] p0573 N79-45414

CAMPBELL, E. J.

Minimise expected cost control of linear systems with uncertain parameters - Application to remotely piloted vehicle flight control systems

[AGA-79-1745] p0571 N79-45387

CAMPBELL, G. C.

Ignition of liquid fuel jets in a supersonic airstream

[AGA-PAPER 79-1238] p0670 N79-38997

CANDLER, B.

Impulse measurements on a spinning model helicopter rotor

[ARC-CF-1389] p0220 N79-15955

CART, R. J.

Rolls-Royce RB-419-07 turbofan engine for business aircraft in the 1980's

[SAE-PAPER 790620] p0557 N79-36748

CARP, D. R.

The flying hot wire and related instrumentation

[AGA-CR-3066] p0694 N79-11352

CARP, E.

Some factors affecting the dynamic stability derivatives of a fighter-type model

p0176 N79-15071

CAPPELLUPO, J. P.

The FY-18 challenge - Readiness and low total cost

p0073 N79-15402

CAPONE, F. J.

Performance characteristics of nonaxisymmetric nozzles installed on the F-18 aircraft

[AGA-PAPER 79-3010] p0301 N79-23532

Performance characteristics of a wedge nozzle installed on an F-18 propulsion wind tunnel model

[AGA-PAPER 79-1164] p0511 N79-41774

The nonaxisymmetric nozzle - It is for real

[AGA-PAPER 79-1810] p0607 N79-47893

CARRIE, R.

A critical-review of performance monitoring systems on the basis of the experience obtained from routine applications

[AGA-79-7006] p0327 N79-29381

Transient temperature distribution in cooled turbine blades

[AGA-79-7045] p0330 N79-29414

CAPPE, R.

Characteristics of an Air Cushion Landing System consisting of an inelastic trunk

p0640 N79-49909

Carré, C.

Characteristics and testing of an Air Cushion Landing System


CARRIE, R.

Gust alleviation feasibility study for 6911

p0659 N79-30230

CARRIE, D.

The influence of the transonic flow field on high-speed helicopter impulse noise

[AGA-CR-1917] p0135 N79-18690

CARRIE, R.

Wind tunnel corrections for STOL models

p0429 N79-22998

CARRIE, R.

Investigation of the feasibility of using the discrete address beacon system data link for non-ATC communications

[AD-A058453] p0010 N79-13023

CARRIE, R. B.

NASA/F/A general aviation crash dynamics program - An update

p0689 N79-52694

Improvements to the PATOLA computer program

p0689 N79-52694

including nonevolved steering: Supplemental
CARRIERE, P.

CARRICOTT, J. A., B.

CARE, J.

CALICO, R.

CARROOOS, J. A.

CABRILLO, J. G.

CARRILLO, R.

CARRIGAN, T. F.

CARRIER, L. S.

CAPRI, H.

CARE, H.

CARRELL, B. L.

CARBON, N.

CARLSOW, W. A.

CARLSON, L. A.

CARLSOH, W. G.

CARLSON, D. B.

CARLOCK, O.

CABRISO, B. J.

[AD-A062290] p0364 879-20105

[NTIS/PS-79/0312/3] p0485 879-23959

(NASA-CB-15227) p0538 879-26024

[NASA-TM-80113] p0491 879-24955

[NASA-TP-79-00113] p0451 879-24955

[NASA-CR-159136] p0266 879-17805


CARELSON, W. A.

Evaluation of an AC/DC range measurement system for VTOL landing p0448 879-36086

CAREMCRAFT, B. N.


CAREON, R.

Effects of geometric variables on stress intensity factors for crack gages [AD-006631] p0558 879-27533

CAREL, B. L.

Crash survivability of the UH-60A helicopter p0312 879-19663

CARE, R.

The combustion of a range of distillate fuels in small gas turbine engines [ASME PAPER 79-CT-175] p0395 879-32435

CARE, R.

Transonic/supersonic lateral aerodynamic derivatives p0216 879-15913

CARBETOLO, J. A., JR.

Microcomputer control of a test facility p0618 879-48672

CARBET, R.

The effects of lightning and nuclear electromagnetic pulse on the composite aircraft p0207 879-24077

CAREBRO, L. M.

An overview of the Space Shuttle Orbiter Communication and Tracking System p0150 879-19853

CARETTER, P.

The injector driven tunnel p0438 879-23100

CARREON, B.


CARRILLO, G.

An automated system for phosphoric acid anodizing of aluminum alloys p0210 879-24107

CARRILLO, J. G.

Formulas for takeoff performance P3-A, B and C airplanes [AD-0062290] p0364 879-20105

CARREROS, J. A.

Airworthiness and certification aspects of civil aircraft for STOL p0429 879-22997

CARRER, R. L.

Impact of cruise speed on productivity of supersonic transports [ASME PAPER 79-0231] p0203 879-23570

CARRIL, J. L.

Investigation of stress-strain/hysteretic modeling at stress times, phase 2- [AD-069162] p0586 879-28620

CARRIL, J. W.

Application of bifurcation analysis and catastrophe theory methodology to aircraft stability problems at high angles-of-attack p0611 879-47943

CARRER, S. J.

A study of the application of singular perturbation theory [NASA-CR-3107] p0454 879-30194

CASTA, P. O.

Effect of interblade phase angle and incidence angle on cascade pitchling stability [ASME PAPER 79-CT-153] p0394 879-32418


CARTOFLY I: Introductory concepts p0307 879-19353

Identification of various flutter regimes and discussion of dynamic stall p0307 879-19354

Some steady and oscillating airfoil test results, including the effects of sweep, from the tunnel spanning wing p0359 879-20059


CARER, J. E.

A new boundary-layer interaction techniques for separated flows [NASA-TR-76890] p0228 879-16802

CARER, B. V.

Omega and VLF aircraft installations [IEEE-TR-81-156] p0217 879-15930

CARER, D. V.

New materials for future commercial aircraft [ASME PAPER 79-1604] p0606 879-47889

CARTWRIGHT, D. J.

Stress intensity factors, for collinear cracks in a stiffened sheet p0150 879-20077

CARSO, H.

The perils and pitfalls of low-cost vibration alternatives - practical experience with pneumatic exciters for production screening p0075 879-16807

CARSO, H. J.

CERT technology applied to an airborne radar p0476 879-39893

CARTE, R. B.

Some novel techniques for avoiding antenna obstructions and E.H.C. effects p0003 879-10363

CARTE, G.

Testing of the TOW missile-configured AR-1T helicopter [AIAA PAPER 79-15161] p0576 879-46704

CARTE, R. B.

Some novel techniques for avoiding antenna obstructions and E.H.C. effects p0003 879-10363

CARTE, G.

Testing of the TOW missile-configured AR-1T helicopter [AIAA PAPER 79-15161] p0576 879-46704

CARTE, R. B.

Some novel techniques for avoiding antenna obstructions and E.H.C. effects p0003 879-10363

CASSARIBO, S. J.

CASSARINO, S. J.

CRAB, J. R.

CRABO, B. J.

CRAIG, L.

Carson, J. R.

CRAIG, R. C.

CRAIG, H. W.

CRAIG, L. S.

CRAIG, L. S.

CRAIG, L. S.

CRAIG, L. S.

CRAIG, L. S.

CRAIG, L. S.

CRAIG, L. S.

CRAIG, L. S.
PERSONAL AUTHOR INDEX

CHARLES, E. A.
Flight investigation of piloting techniques and crosswind limitations using a research type crosswind landing gear
[WASHINGTON T-1423] p0430 N79-23012

CHAN, W. T.
The inner regions of annular jets
[0603 A79-47520

CHAN, Y.
Overview of the small package air carrier industry
- A study of the operations in Federal Express
[SAA PAPER 780500] p0005 A79-10406
A graph-theoretic method to quantify the airline route authority
p0657 A79-54280

CHANDLER, A. L.
Turbine blade tip clearance measurement utilizing borescope photography

CHANDLER, R. F.
Seat/column crash dynamic analysis verification test program
[SAA PAPER 790590] p0854 A79-36724

CHANG, L. S.
Experimental study on the burning out of flameholders
[AIAA 79-7021] p0329 A79-29394
Analytical and scale model research aimed at improved boattail design
p0546 N79-27081

CHANG, T. T.
Noise transmission - Turboprop problem
[AIAA PAPER 79-0665] p0271 A79-26933

CHAPRA, D. B.
Computational aerodynamics development and outlook
/Odyssey Lecture in Research for 1979/
[AIAA PAPER 79-0129] p0200 A79-23515

CHAPMAN, G. Z.
Overview of two-dimensional airfoil research at Ames Research Center
p0355 N79-20033

CHAPPELL, D. P.
Monitoring of fatigue loading on rotor system and related components
p0136 A79-18966

CHAPPELL, F. B.
Aerodynamic design of fixed and variable geometry nozzleless turbine casings
[ASME Paper 75-GT-87] p0391 A79-32364

CHAPUT, J. C.
Spread spectrum modulation. II - Characteristics
p0508 A79-13275

CHARGIN, S. E.
Investigation of flexible nozzle wall-flutter incidents in the NASA-Ames Research Center 11-by-11-foot transonic wind tunnel
[AIAA 79-0797] p0323 A79-29040

CHAVEZ, R.
A new method for testing free models in the laboratory to determine aerodynamic characteristics
p0176 N79-15063

CHAYTEN, P.
Icing testing in the large Modane wind-tunnel on full-scale and reduced scale models
[WASHINGTON T-75373] p0363 N79-20102

CHASE, R. S.
Environmental fog/rain visual display system for aircraft simulators
[SAA-CASE-ARC-11158-1] p0719 N79-32220

CHATUR, J. D.
Calculation of transonic flows around wings
[OMERA TP NO. 1978-125] p0015 A79-11132

CHAUSSE, J. S.
Improved transonic nose drag estimates for the NSWC missile aerodynamic computer program
[AD-A059795] p0034 N79-10030

CHAVIAN, J.
Proceedings of the Seminar on Advanced Problems in Turbomachinery, part 1
[VTI-LECTURE-SERIES-1-P1-1] p0382 A79-21053
High turning blading for axial flow machines. Introduction and summary of the problems
p0383 N79-21068
Aerodynamic problems in cooled turbine blading design for small gas turbine
p0422 N79-22091

Cheevers, G. A.
Shock-boundary layer interaction in compressor cascades: A review of available data
p0439 N79-23428

Cheevers, L. C.
Improvements in rotor performance by rotor tip blowing
p0130 A79-18650

Chehabov, L. W.
Linearization in the recursive estimation of navigation parameters
p0315 A79-28604

Chen, I.
Applications of diffraction theory to aeroacoustics
[WASHINGTON T-80053] p0299 A79-10666

Chen, C. C.
Practical considerations for manufacturing high-strength Ti-10V-2Fe-3Al alloy forgings
p0517 A79-42245

Chen, L.
Minimum landing-approach distance for a sailplane
p0338 A79-30483
Minimum altitude-loss soaring in a specified vertical wind distribution
p0545 N79-27071

Chen, J. N.
Grime morphologies on aluminum prepared for adhesive bonded aircraft structures
p0210 A79-24106

Chen, R. T.
Calculation of transonic inlet flowfields using generalized coordinates
An analysis of thermal stress and gas bending effects on vibrations of compressor rotor stages

Chen, R. T. W.
A piloted simulator investigation of augmentation systems to improve helicopter nap-of-the-earth handling qualities
[APS 78-29] p0122 A79-16155
Piloted simulator investigation of helicopter control system effects on handling qualities during instrument flight
[APS 79-26] p0629 A79-9978
A piloted simulator study on augmentation systems to improve helicopter flying qualities in terrain flight
[JAMS-79-10] p0437 N79-23908
A simplified rotor system mathematical model for piloted flight dynamics simulation

Chen, S. S.
Axial flow in trailing line vortexes
[AD-8057075] p0038 N79-10033

Chen, W. S.
Study of aerodynamic technology for VSTOL fighter/attack aircraft: Vertical altitude concept

Cheng, H. H.
Lifting-line theory of oblique wings
Lifting-line theory of oblique wings in transonic flows
p0191 A79-21520
Theory of oblique wings of high aspect ratio
[AD-A055798] p0159 A79-10044
The oblique wing as a lifting-line problem in transonic flow
[AD-A0470232] p0702 A79-32166

Chenborn, H. B.
Aircraft structural reliability prediction based on dynamic loads and ultimate strength test data
p0076 A79-16111

Chenborn, G. A.
Determination of the geometrical parameters and position of the nose flap at the root section of a swept wing on the basis of wind tunnel data. I
p0028 A79-12953
Selecting the geometrical parameters and location of the nose flap at the wing root profile of a swept wing on the basis of wine tunnel data. II
p0348 A79-32038
Flow past a small-aspect-ratio delta wing with vortex filament breakdown
p0349 A79-32054
Selection of geometric parameters and location of nose flap on swept wing root profile free tunnel test data.
l
PERSONAL AUTHOR INDEX

Fuljy conservative numerical solutions for unsteady irrotational transonic flow about airfoils
[AIAA PAPER 79-1555] p0602 A79-47342

CHRISTAKIS, N. I.
Electromagnetic of woven and foil materials
p0349 A79-32042

CHRIS, E. T.
Fracture mechanics for structural adhesive bonds, part 2, phase 2
[AD-808105] p0310 A79-19418

CHRISTENH, V. L.
Theoretical fundamentals of radio altimetry
p0463 A79-38145

CHRNG, K. E.
The integration of airport planning and environmental assessment - A focus on air quality analysis
p0075 A79-16922

CHO, T. C.
Sound radiation from hyperboloidal inlet ducts
p0267 A79-26885

An experimental study of sound radiation from hyperboloidal inlet ducts

CHRISBAND, J.
Light propeller aircraft noise
[CHERE, TP NO. 1979-56] p0409 A79-34980

CHRISTOF, T.
The piloting of a wind tunnel with a hydraulic compressor
p0439 A79-23108

CHOW, C. S.
Large plastic deformation analysis of impulsively loaded curved frames
[AIAA 79-0784] p0322 A79-29028

CHOPRA, J.
Flap-lag-torsion aerelastic stability of circulation-controlled rotors in hover
[NASA CR-152244] p0126 A79-18185

Calculated hovering helicopter flight dynamics with a circulation-controlled rotor
p0212 A79-26179

Flap-lag-torsion flutter analysis of a constant life rotor
p0363 A79-20099

CHRISLEY, R. A.
Display monitoring problems
p0507 A79-40315

CHUBBUT, R. H.
Geometric scaling and performance of dump combustors with vortex amplification and swirl generation by gas jets
[AIAA PAPER 79-0932] p0147 A79-19699

CHOWN, R.
An optical-fiber multiterminal data system for aircraft
p0450 A79-36488

CHRISTENSEN, J. V.
Flight controls/avionics research - Impact on future civil helicopter operating efficiency and mission reliability
p0692 A79-53627

CHRISTENB, N. E.
Fluid mechanical refracting gas prism and aerodynamic characteristics of three-dimensional bodies
p0526 A79-43166

CHEMNAK, Y. V.
Measuring the moment imparted by a liquid pump in startup regime
p0525 A79-42550

CHEMBRE, J. C.
Fracture toughness in titanium alloys
[AD-A067775] p0543 A79-26176

CHEMBRE, J. E.
Some theoretical considerations of a stall proof airplane
[GEA PAPER 790504] p0856 A79-36736

CHELYAM, I. A.
Effectiveness of the antioxidation additive ionol in jet fuels
p0324 A79-29121

CHE, S. H.
An analysis of unsteady transonic flow in wind tunnels in subsonic frequency range
[AIAA 79-0764] p0320 A79-29018

CHEIRIPPA, K. J.
Defeatable mirror surface control - Hardware, algorithms
[ACES 79-1757] p0571 A79-45393

CHEARIFY, F.
Theory and experiments on pressure L-band DME
p0056 A79-13241

CHEIRI, J.
Theory and experiments on precision L-band DME

CHEIRABER, R. S.
Jet curtain flameholder for aircraft afterburners
[ASME PAPER 78-07-95] p0007 A79-10761

CHEN, R. T.
Architecture of an intelligent cockpit monitoring system - SECURE

CHEM, W. C.
On the design of thin subsonic airfoils
p0224 A79-29052

Nonlinear interaction between mean and unsteady flowfields near Mach 1
[AD-A060795] p0170 A79-15010

The transonic oscillating flap
[AD-A070022] p0705 A79-32200

CHEIROB, N.
Research of the YF-1 turbofan engine
[ASME PAPER 78-07-199] p0011 A79-10819

CHEPHAN, N.
Numerical computation of aerodynamically corrected transonic loads
[AIAA 79-0766] p0320 A79-29020
COAKLEY, B. E.
Dynamic loads analysis system (DILOFLX) summary.
Volume 1: Engineering formulation
[NASA-TP-2864-1]
Volume 2: Supplemental system design information
[NASA-TP-2864-2]
Equation modifying program, L219 (EQMOD), volume 2: Supplemental system design and maintenance document
[NASA-TP-2860]
Time history solution program, L225 (TEV126), volume 2: Supplemental system design and maintenance document
[NASA-TP-2860]
COLE, J. D.
Effects of turbulence model selection on the prediction of complex aerodynamic flows
[ATAA PAPER 79-0070]
COLE, H. V.
The principle and practice of 'clutch' radar operation
[COMMUNICATIONS FOR THE PERIOD 1978-1980]
COLE, S. A.
A slender delta wing oscillating in surface waves
[VTH-EN-257]
COLE, B. I.
The airport capacity increasing potential of angled runway exit designs
[SAE PAPER 78-0567]
COLE, B. I.
Aerofoil modelled using a simplified two-dimensional rotor
[AD-1071814]
COLE, B. J.
Three-dimensional wing-body combinations
[1111 PAPER 79-0459]
COLE, J.
Effects of turbulence model selection on the prediction of complex aerodynamic flows
[ATAA PAPER 79-0070]
COLE, J. D.
Computational transonic design procedure for three-dimensional wings and wing-body combinations
[COMMUNICATIONS FOR THE PERIOD 1978-1980]
<table>
<thead>
<tr>
<th>Author</th>
<th>Title</th>
<th>Pages</th>
<th>Conference/Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>COLE, P.</td>
<td>Wind tunnel real-time data acquisition system</td>
<td>A79-23552</td>
<td>NASA-TR-80001</td>
</tr>
<tr>
<td>COLLIER, J. M.</td>
<td>Management of test program development for 5-3A</td>
<td>A79-21097</td>
<td></td>
</tr>
<tr>
<td>COLEMAN, D.</td>
<td>The flying hot wire and related instrumentation</td>
<td>A79-12319</td>
<td></td>
</tr>
<tr>
<td>COLLETT, R. E.</td>
<td>Review of low speed wind tunnel requirements for STOL testing</td>
<td>A79-22999</td>
<td></td>
</tr>
<tr>
<td>COLLETT, R. A.</td>
<td>Hazard criticality analysis</td>
<td>A79-10621</td>
<td></td>
</tr>
<tr>
<td>COLLINS, W. G.</td>
<td>Boundary layer control on wings using sound and leading edge serrations</td>
<td>A79-20055</td>
<td>AIAA Paper 79-1875</td>
</tr>
<tr>
<td>COLLINS, D.</td>
<td>Surface pressure data for a supersonic-cruise airplane at Mach numbers</td>
<td>A79-23090</td>
<td>AD-8065048</td>
</tr>
<tr>
<td>COLLIER, R. B.</td>
<td>A study of the method of Garabedian and Kays for the calculation of transonic flow past an aerofoil to include the effects of a boundary layer and wake</td>
<td>A79-29328</td>
<td>ARS-R-W-3628</td>
</tr>
<tr>
<td>COLF, J.</td>
<td>Propagation of inlet flow distortions through an axial compressor stage</td>
<td>A79-22335</td>
<td>ASRE Paper 78-GT-34</td>
</tr>
<tr>
<td>COLF, J.</td>
<td>Aerodynamic and mechanical factors affecting the surge line: Inlet flow distortion influences on axial flow compressors</td>
<td>A79-19363</td>
<td>ARS Paper 78-GT-34</td>
</tr>
<tr>
<td>COLLINS, W. G.</td>
<td>Structural analysis of a gas turbine impeller using finite-element and holographic techniques</td>
<td>A79-21499</td>
<td>AIAA Paper 79-1875</td>
</tr>
<tr>
<td>COLN, L. L., JR.</td>
<td>State-of-the-art of nondestructive inspection of aircraft engines</td>
<td>A79-25413</td>
<td></td>
</tr>
<tr>
<td>CONRAD, R. H.</td>
<td>Trade-off studies with an interactive engine/airframe life-cycle-cost model</td>
<td>A79-25055</td>
<td>ASH Paper 781033</td>
</tr>
<tr>
<td>CONVERSE, G. W.</td>
<td>Time optimal control of a jet engine using a quasi-Hermite interpolation model</td>
<td>A79-25019</td>
<td>NASA-CR-156711</td>
</tr>
<tr>
<td>CONWYLL, J.</td>
<td>Propulsion test facilities technical capabilities and international use</td>
<td>A79-10813</td>
<td>ASRE Paper 78-GT-184</td>
</tr>
<tr>
<td>CORBIN, R. E.</td>
<td>Evaluation of a flight simulator (device 2824) for maintaining instrument proficiency among instrument-rated array pilots</td>
<td>A79-15102</td>
<td>AD-8065057</td>
</tr>
<tr>
<td>CONDOR, G. W.</td>
<td>Flight research capabilities of the NASA/Army Rotor Systems Research Aircraft</td>
<td>A79-25040</td>
<td>AIAA Paper 78-GT-184</td>
</tr>
<tr>
<td>CONWAY, J. E.</td>
<td>Impact of operational issues on design of advanced composite structures for Army helicopters</td>
<td>A79-10907</td>
<td>ASME Paper 78-GT-184</td>
</tr>
<tr>
<td>CONNER, N. L., JR.</td>
<td>Coherent optical processing for missile guidance</td>
<td>A79-31660</td>
<td>ASME Paper 78-GT-184</td>
</tr>
<tr>
<td>CONRAD, G. E.</td>
<td>Configuration development study of the X-24C hypersonic research airplane, phase 1</td>
<td>A79-15939</td>
<td>NASA-CR-150532</td>
</tr>
<tr>
<td>CONLAY, C. G.</td>
<td>Configuration development study of the X-24C hypersonic research airplane</td>
<td>A79-15940</td>
<td>NASA-CR-150274</td>
</tr>
</tbody>
</table>
PERSONAL AUTHOR INDEX

CONRAD, B.
Correlation of data related to shock-induced trailing-edge separation and extrapolation to flight Reynolds number
[NASA-CP-3178] p068 A79-31195

CONRAD, B. W.
Turbine engine altitude chamber and flight testing with liquid hydrogen

CONSTANTIDES, N. J.
Echo tracker/range finder for radars and sonars

CONIFER, G. L.
Analytical derivatives
[AD-4065948] p0436 A79-23090

COOK, A. R.
Effects of visual and motion simulation cueing systems on pilot performance during takeoffs with engine failures
[NASA-TR-1365] p0162 A79-10482

COOK, C. R.
Advanced forging process for gas turbine engine fan blades
[AIAA PAPER 79-1269] p0471 A79-39013

COOK, C. V.
A review of tail rotor design and performance
[AD-4069428] p0344 A79-31170

COOK, G.
A performance measure for evaluating aircraft landing trajectories
p0017 A79-11694

COOK, L. G.
Holographic lens for pilot's head up display, phase 4
[AD-4058660] p0102 A79-13063

COOK, L. P.
Lifting-line theory for a swept wing at transonic speeds
p0604 A79-47750

COOK, R. W.
Some aspects of the design and development of the maritime autopilot modes for the Westland Lynx helicopter
p0655 A79-30201

COOK, R.
Induced effects of lightning on an all composite aircraft
p0297 A79-18242

COOK, R. B.
RIM coupling to a composite aircraft
p0249 A79-25321

COOK, C. R.
A shock capturing application of the finite element method
p0247 A79-24771

COONS, F. J.
Possible near-terminal solutions to the wind shear hazard
[SAY PAPER 780572] p006 A79-10416

COOPER, D. E.
The influence of engine/fuel control design on helicopter dynamics and handling qualities
[ARS 79-37] p0631 A79-45098

COOPER, G. E.
Summary report of the Human Factors Committee
p0244 A79-17429

COOPER, J. R.
Dynamic test techniques - Concepts and practices
p0642 A79-50164

COOPER, L. P.
Effect of degree of fuel vaporization upon emissions for a premixed vaporized combustion system
[NASA-TP-79154] p0486 A79-23965

CORFELAND, D.
Predesign of the second generation comprehensive helicopter analysis system
[AD-4064209] p0421 A79-22084

COPPOLA, A.
Lessons learned from the AN/ARC-164 test program
p0115 A79-17665

CORNISH, J. L.
Recent experience in the development and application of ECC models
p0502 A79-25410

CORN, P. B.
Vulnerability assessment of aircraft systems to indirect lightning effects
p0682 A79-51142

Protection/hardening of aircraft electronic systems against the indirect effects of lightning
p0463 A79-51146

Protection/hardening of aircraft electronic systems against the indirect effects of lightning
p0297 A79-18238

CORR, T. R.
Assessment of software development and maintenance costs due to retrofit of embedded avionics computer
[AIAA 79-1906] p0697 A79-54383

CORNILETT, W. C.
Evaluation of airfield pavement materials based on synthetic polymers
p0635 A79-49348

CORNILETT, W. A.
Test technique development in interference free testing, flow visualization, and remote control model technology at Langley's Unitary Plan wind tunnel
p0679 A79-51093

Surface pressure data for a supersonic-cruise airplane configuration at Mach numbers of 2.30, 2.50, 3.30

CORNISH, G.
Compromise between economic concerns and application of new technologies in the definition of a new airplane project
p0276 A79-27358

Supersonic transport vis-a-vis energy savings
[NASA-TR-75466] p0665 A79-31163

CORNILETT, W. R.
Overstress testing of helicopter transmissions
[ARS 78-75] p0124 A79-18173

Helicopter drive system R and S design guide
[AD-4069835] p0652 A79-30180

Helicopter drive system R and S design guide
[AD-4069691] p0652 A79-30181

CORN, R. P.
Lightning hazards to aircraft
p0243 A79-74720

Lightning hazards overview: Aviation requirements and interests
p0662 A79-30876

CORNEL, H. R.
Advanced risk assessment of the effects of graphite fibers on electronic and electric equipment, phase 1
[NASA-CP-159027] p0586 A79-28419

CORNELL, B. W.
Structural design and analysis of prop-fan blades
[AIAA PAPER 79-1116] p0685 A79-51704

Test methodology correlation for foreign object damage
[AD-4057322] p0095 A79-12093

Interactive multi-node blade impact analysis

CORNISH, J. L., III.
The application of spanwise blowing for high angle of attack spin recovery
p0144 A79-22004

CORN, R. I.
Electrostatic bonding problems in aircraft
p0690 A79-52689

COSLIGA, V. M.
Full-scale wind tunnel study of nacelle shape on cooling drag
[AIAA PAPER 79-1820] p0607 A79-07900

CRAFT, S. E.
The prediction of helicopter crew information requirements
p0132 A79-18665

COSGROVE, B. V.
Effects of air injection on a turbocharged Teledyne Continental Motors TSIO-360-C engine
[SAE PAPER 790597] p0419 A79-36760

Effects of air injection on a turbocharged Teledyne Continental Motors TSIO-360-C engine

COSTA, L. J.
Tooling and assembly procedures, serviceability program elements
p0209 A79-24900

COSTE, J.
Wind tunnel simulation of the firing of missiles carried under aircraft
[ONERA, TP NO. 1979-65] p0535 A79-03622
COSTES, J.-J. Application of the lifting line concept to helicopter composites [ASME Paper 79-GT-31].

COTTA, B. Fly-by-light.

COTTINGBONE, C. The 214 fiberglass blade - Design for inspectability [AD-059704].

COUTON, B. Time marching finite area method.

COWL!!., V. D. Progress on the ENSIP approach to improved system identification [AD-0676737].

COTT, P. J. A design review of ceramic components for turbine engines [ASME Paper 79-GT-183].

COURTNEY, G. B. Development of a research plan for the improvement of aircraft icing tests [AD-0677357].

COULTER, B. L. Sodar and aircraft measurements of turbulence parameters within cooling tower plumes [AD-0799989].

COURTES, G. Jr. Simultaneous measurements of turbulence in the lower atmosphere using sodar and aircraft [AD-0799989].

COULON, G. Identification of unsteady effects in lift buildup [AD-0799989].

COULOMB, J. V. D. Burn - A recent life case history.

COULONNET, C. D. Enclosure fire modeling.

COULOS, J. 2D simulation of unsteady phenomena on a rotor [AD-0799989].

COULOMBIER, C. Calculation of transonic flows around wings [ONERA, TP No. 1978-125].

COULONNET, R. Jr. Standard avionic module study [AD-0661349].

COUPERT, G. Jr. New airborne display concepts [AD-0799989].

COUSIN, G. Time marching finite area method.

COUVER, G. The 274 fiberglass blade - Design for inspectability [AHS 78-37].


COX, C. B. Helicopter noise rules - Are they appropriate and reasonable.


COX, J. Jr. Integration of GPS with inertial navigation systems [AD-0661349].

COX, J. Jr. Functional requirements of the interface between the NASA Navstar GPS receiver model X and the airborne GPS receiver model I-A.

COWD, C. B. The MIS approach and landing system [AD-0661349].

CRAWFORD, C. B. FAA remote terminal system frequency assignment [NASA-CE-152129].

CRAIG, B. B. Failure modes and redundancy analysis for the Multifunction Inertial Reference Assembly (MIRA) [AD-0661349].

CRAIG, B. J. The effect of swirl on a ramjet dump combustor [AIAA 79-7042].

CRAIG, G. C. FAA remote terminal system frequency assignment model.

CRAWFORD, C. B. Engineering and development test techniques for the 1980's [NASA-CE-152129].

CRAWFORD, C. B. Modern engine development test techniques.

CRAWFORD, C. B. Integration of GPS with inertial navigation systems.

CRAWFORD, C. B. Functional requirements of the interface between the NASA Navstar GPS receiver model X and the airborne GPS receiver model I-A.

CUBB, D. The influence of geometric asymmetry on the flow downstream of row of jets discharging normally into a free stream.

CULEB, R. Chemical analysis of structural adhesives and resins for composites.

CUTL, V. Jr. Study of aerodynamic technology for VSTOL fighter aircraft [NASA-CE-152129].

CUTL, V. Jr. NASA gear research and its probable effect on rotocraft transmission design.

CRABE, D. The influence of geometric asymmetry on the flow downstream of row of jets discharging normally into a free stream.

CRABER, R. Jr. Chemical analysis of structural adhesives and resins for composites.

CRABER, R. Jr. A versatile approach to cockpit management.

CRABER, R. Jr. Modern engine development test techniques.

CRABER, R. Jr. Integration of GPS with inertial navigation systems.

CRABER, R. Jr. Functional requirements of the interface between the NASA Navstar GPS receiver model X and the airborne GPS receiver model I-A.

CRABER, R. Jr. Modern engine development test techniques.

CRABER, R. Jr. Integration of GPS with inertial navigation systems.

CRABER, R. Jr. Functional requirements of the interface between the NASA Navstar GPS receiver model X and the airborne GPS receiver model I-A.

CRABER, R. Jr. Modern engine development test techniques.

CRABER, R. Jr. Integration of GPS with inertial navigation systems.
CREWS, S. T.

Parameters identification applied to analytic hingeless rotor modeling

CREWS, S. T.

Helicopter component environmental vibration testing - The poor man’s fatigue test

CHILL, W.

General purpose computer program for interacting supersonic configurations. User’s manual

CRORVICH,

CRIST, D.

CRIBBBING,

CRIBBRING, W.

CROOK, D. B.

CROOK, V. G.

CROTBEB, C. A.

CROSS, K. D.

CROSS, B. J., JR.

CROSBY, V. A.

CROSBY, J. V.

CROUCH, S. T.

General purpose computer program for interacting fossil fuel heat pumps for domestic, commercial and industrial space heating

CROSBE, W. H.

Simulation study of the operational characteristics of a two/three-dimensional multiwaypoint area navigation (BNAV) system

CRUST, D.

Model 206L composite litter door

CrittBR, J. D.

Crosby Program. Aerodynamic data. Part I: Supersonic flow field, pressure field, and local load data for validation of computational methods

CRUISE, U. R.

Investigation of the crash impact characteristics of composite airframe structures [AMS 78-51] p0129 N79-18174

CROUSE, J. B.

Crash simulation of composite and aluminum helicopter fuselages using a finite-element program

CROUSE, B. K.

Cruise Program. Aerodynamic data. Part 4: Wing loads at Mach numbers 1.5 and 2.0

CROUSE, T. A.

Cruise Program. Aerodynamic data. Part 5: Wing loads at Mach numbers 1.5 and 2.0

CROUCH, B. K.

CROUCH, N. A.

CROUCH, R. E.

CROUCHER, I. B.

CROUSHER, I. B.

CROUSE, T. A.

CROSS, T. A.

CUFFEL, B. P.

CUFFEL, B. P.

CUFFEL, B. P.

CUT, D. G.

CULT, D. G.

CRUDY, D. G.

CULPEPPER, B. G.

CULLINS, C. A.

CULLINAN, C. A.

CULLO!, B. B.

CULLOR, B. B.

CULLO!, B. B.

CULLOR, R.

CULLIAN, C. A.

CULLER, V. B.

CULLY, J. B., JR.

CULLEY, W. N.

CULLEY, W. N.

CULLY, J. B., JR.

CULLY, J. B., JR.

CULLY, J. B., JR.

CULLY, J. B., JR.

CULPEPPER, B. G.

CULPEPPER, B. G.

CULPEPPER, B. G.

CULPEPPER, B. G.

CULPEPPER, B. G.

CULPEPPER, B. G.

CULPEPPER, B. G.

CULPEPPER, B. G.

CULPEPPER, B. G.

CULPEPPER, B. G.

CULPEPPER, B. G.

CULPEPPER, B. G.

CULPEPPER, B. G.

CULPEPPER, B. G.

CULPEPPER, B. G.

CULPEPPER, B. G.

CULPEPPER, B. G.

CULPEPPER, B. G.
PERSONAL AUTHOR INDEX

DEPPEX, R. D.
Stabilizing electro-optical systems on helicopters
p0562 A79-44460

DEPPEX, R. D.
Global positioning system tactical missile guidance
p0353 A79-20013

DEPPRE, R. L.
A survey of recent high angle of attack; wind tunnel testing at Arlitaria
p0416 A79-22034

DEPPRE, R. L.
Crankworthy aerodynamic crescent for the UH-60A Black Hawk
[AHS 79-10] p0627 A79-90602

DEPPRE, R. L.
Crankworthy helicopter seats and occupant restraint systems
p0312 A79-19568

DEPEX, R. J.
A summary of NASA/Air Force Full Scale Engine Research programs using the F100 engine
[ASA PAPER 79-0001] p0509 A79-90498

DEPPRE, R. L.
A summary of NASA/Air Force Full Scale engine research programs using the F100 engine
[ASA PAPER 79-0002] p0513 A79-30198

DEPPRE, R. L.
Three years use of Mercury - Technical balance sheet
p0118 A79-17771

DEPPRE, R. L.
Recent progress in active controls applied to flutter suppressors
p0369 A79-32277

DEPPRE, R. L.
Flutter suppressor for transonic flight
p0376 A79-20983

DEPPRE, R. L.
Structural aspects of active controls
p0658 A79-30221

DEPPRE, R. L.
Dynamic of the dynamic derivatives of lengthwise and side movement with the mobile oscillating derivative balance and systematic studies of the influence of several parameters on the results
[DGLR PAPER 78-115] p0661 A79-19073

DEPPRE, R. L.
Wind tunnel measurements of dynamic derivatives in the German Federal Republic
[IFP-5-78] p0548 A79-27107

DEPPRE, R. L.
Recent advances in fire resistant materials in aircraft construction
p0530 A79-03269

DEPPRE, R. L.
Pressure and heat-transfer distributions in a simulated wing-elevon cove with variable leakage at a free-stream Mach number of 6.9
[NASA-TR-780995] p0257 A79-18284

DEPPRE, R. L.
Propulsion system considerations for the subsonic V/STOL
[ASA PAPER 78-GT-57] p0358 A79-32334

DEPPRE, R. L.
Ultrasonic welding/solid state bonding of aircraft structure - fact or fancy
p0015 A79-10921

DEPPRE, R. L.
Ultrasonic bonding arrives - 75% cost savings seen
p0000 A79-32586

DEVINE, J.
ATAMI/ATC simulation tests with site-adaptation logic
[AAIA-RA-78-0042] p0237 A79-16679

DEVINE, J.
Systems integration analysis for future tower cab configurations/systems
[AD-805006] p0161 A79-14066

DEPTUNG, R.
Minimization theory of induced drag subject to constraint conditions
[NASA-CE-31100] p0482 A79-23923

DEPUY, R. E.
Subsonic wind-tunnel investigation of leading-edge devices on delta wings (data report)
[NASA-CE-159120] p0663 A79-31143

DIAMOND, V. L.
New devices for digital communications in avionics
p0675 A79-31481

DIATLIV, R. E.
Study of the nonuniformity of the temperature field of a homogeneous combustion chamber as the parameters of the primary zone vary
p0525 A79-42549

DIESTL, J. A.
Energy conservation in general aviation and operation and maintenance of Avco Lycoming piston engines
p0024 A79-12381

DICARLO, D. J.
Spin flight research summary
[AAIA PAPER 79-0005] p0482 A79-36706

DICARLO, D. J.
Exploratory study of the influence of wing leading-edge modifications on the spin characteristics of a low-wing single-engine general aviation airplane
[AAIA PAPER 79-1837] p0608 A79-47506

DICCARO, R.
Rotary balance data for a single-engine trainer design for an angle-of-attack range of 8 deg to 90 deg
[NASA-CE-3099] p0665 A79-31152

DICKESSON, J. W.
Testing of avionics display systems
p0223 A79-12309

DICKESSON, J. W.
Feasibility study of mini-RPV for attack
p0219 A79-15953

DICKESSON, J. W.
Radar track data correlation or reachable sets revisited: The reachable state
[AD-1065045] p0483 A79-23318

DICKERMAN, J. R.
An approach to optimum subsonic inlet design
[ASA PAPER 79-GT-51] p0291 A79-30527

DICKERMAN, J. R.
An approach to optimum subsonic inlet design

DICKERMAN, J. R.
Engine design test 1, Hughes EAB-64, advanced attack helicopter
[AD-1063535] p0482 A79-22077

DIEGERS, G.
A European view on gas turbine engine monitoring of present and future civil aircraft
[AAIA PAPER 79-1200] p0486 A79-38982

DIEGERS, G.
Front formation on an airfoil: A mathematical model

DIEGERS, D. L.
Digital Avionics Information System (DAIS): Training requirements analysis model (TRANOD), volume 1
[AD-1068474] p0716 A79-33202

DIEGERS, D. L.
Total pressure recovery of flared fan nozzles used as inlets
p0211 A79-24178

DIEGERS, D. L.
A vortex lattice technique for computing vented wind tunnel wall interference
[AD-0706454] p0707 A79-32220

DIEGERS, D. L.
Comments on a proposed standard wind hazard environment and its use in real-time aircraft simulations
[AAIA PAPER 79-0328] p0145 A79-19667

Verification and validation of the NASA Terminal Configured Vehicle's (TV/CV) Wind tunnel analysis program using real-time digital simulation
PERSONAL AUTHOR INDEX

from B-1 flight flutter test data
[NASA-CR-31352]

DOBBIE, P. L.
Analysis, design, fabrication and testing of the Mini-Brayton rotating unit (MINI-DRU). Volume 2: Figures and drawings
[NASA-CR-159447-VOL-2]
p0049 N79-11405

DOBRO-HUBER, S.
Validation of MIL-F-9490D: General specification for flight control system for piloted military aircraft. Volume 1: Summary of TF-17 and C-5A validations
[AD-806807]
p0306 N79-19006

DOBRO-HUBER, S.
Validation of MIL-F-9490D: General specification for flight control system for piloted military aircraft. Volume 2: TF-17 lightweight fighter validation
[AD-8062006]
p0306 N79-19009

DOBRESKEV, W.
Noise generation by jet-engine exhaust deflection
[DLR-78-78-21]
p0064 N79-30192

DOBRESKEV, W. N.
A comprehensive review of airframe noise research
[p0152 A79-20080]

DODD, A. E.
Design and development of a rotating water table test for flow studies in turbomachine stages
[ASH PAPERS 78-WA/D-16]
p0148 A79-19762

DODD, W. J.
Advanced low emissions catalytic combustor program at General Electric
[p0047 N79-25011]

DODGE, P. O.
Definition, description, and interfaces of the FAA's developmental programs. Volume 2: ATC facilities and interfaces
[AD-1068401]
p0549 N79-27118

DODGE, P. E.
Transonic 3-D flow analysis of compressor cascade with splitter vanes
[AD-1057504]
p0044 N79-11004

DODSON, R. W.
Life cycle cost analysis concepts and procedures
[p0502 N79-25008]

DODFILL, G.
Methods for the validation of synthesized images in visual flight simulation
[p0354 A79-20021]

DOLBEAUX, R. T.
Integrated Thermal Avionics Design (ITAD)
[AD-1061227]
p0292 N79-17855

DOLBERG, G. W.
Strain gage system evaluation program
[NASA-CR-159686]
p0307 N79-19314

DOLLYHUN, S. N.
Theoretical evaluation of high-speed aerodynamics for arrow-wing configurations
[NASA-TP-1358]
p0158 N79-14023

DONELSON, W. H.
Experimental aerodynamic characteristics at Mach numbers from 0.60 to 2.70 of two supersonic cruise fighter configurations
[NASA-78-87630]
p0359 N79-20062

DONHOFF, R. L.
Innovative developments in demonstrative evidence techniques and associated problems of admissibility
[p0691 A79-53555]

DOBRIC, R. J.
State of the art in aircraft loads monitoring
[p0561 A79-44453]

DOBREKWAR, V. N.
Factors controlling stability of swirling flames at diffusers in gas turbines
[p0643 A79-50209]

DOBESAK, L. P.
U.S. Navy developments in crushworthy seating
[p003 A79-33623]

DOCT, T. C.
Helicopter Icing Symposium
[AD-1067981]
p0581 N79-26048

DODGYE, P.
Design and development of an helicopter rotor hub and elastomeric bearing
[STI No. 79-0815]
p0293 A79-28289

DOHLE, S. Y.
Flight test verification of the ASSST system
[AD-1077455]
p0616 A79-48622

DOHLE, R. L.
Monitoring stratospheric winds with...
Concorde-generated infrasound

DOUVAN, P.
The effects of ambient conditions on gas turbine emissions - Generalized correction factors

[ASA PAPER 78-019-97] p0001 A79-10262

DOUVAN, R. H.
Parts tracking and engine history recording for on-condition maintenance

[ATAA PAPER 79-1280] p0509 A79-40846

DOWDELL, L. W.
Development of linear and non-linear hub springs for two-bladed rotors

p0344 A79-31171

Effect of operational envelope limits on teetering rotor flapping

[AD-059187] p1001 N79-13030

Flight test evaluation of the high inertia rotor system

[AD-071646] p0715 N79-33195

DORR, T. P.
An active noise reduction system for aircrew helmets

p0040 N79-10853

DORR, R. J.
Superplastic forming/diffusion bonding technology in the USAF/McDonnell BLATS program

p0208 N79-24082

DOTER, V. S.
Artificial icing test phobic coatings on Uh-1H helicopter rotor blades

[AD-050875] p0220 N79-15594

PRELIMINARY AIRWINDNESS EVALUATION 80-21 H quad-craft 8 aircraft

p0593 N79-29178

AIR-16 helicopter, 19-round lightweight airborne launcher setion envelope determination

[AD-065820] p0652 N79-30176

DOUGHERTY, J. F.
Recognition of damage-tolerance in civil airworthiness standards

[ASA PAPER 781019] p0256 N79-25895

DOUGHERTY, W. S., Jr.
An experimental investigation of the acoustic characteristics of a variety of slot baffle configurations for transonic wind tunnel walls

[AD-070261] p0708 N79-32233

DOUGLAS, C. A.
Lighting and marking of exit taxways

[AD-060259] p0180 N79-15098

Approach light aising criteria

[SARC-911] p0237 N79-16890

DOUGLAS, C. A.
Visibility in aviation

p0243 N79-17419

DUPPE, G. S.
Performance of a pulse-decode circuit in the presence of interference

p0622 A79-08713

DOUX, R.
Collision avoidance in the integrated system. II - Characteristics

p0056 A79-12359

DOULL, L. H.
Turboexpand interior noise studies

[ATAA PAPER 79-0647] p0271 A79-26931

Master Plan for prediction of vehicle interior noise

[ATAA PAPER 79-0585] p0272 A79-26932

An explanation of the flutter mechanism with active feedback controls

p0338 A79-30400

DOWING, D. R.
Flight test of a VTOI digital autoland system along complex trajectories

[ATAA PAPER 79-1703] p0570 A79-45758

NASA/Princeton digital avionics flight test facility

p0435 A79-49344

A real-time simulation facility for advanced digital guidance and control system research

p0679 A79-51090

DOWNS, B. D.
Engine/airframe/drive train dynamic interface documentation

[AD-065337] p0382 N79-21047

DOWSTRE, F. H.
Recent advances in radome design

p0637 A79-48570
DROUGGE, G.  
Computer-aided design at Israel Aircraft Industries  
p0127 A79-18424

DROUGGE, G.  
Evaluation and analysis of computations and experiments for transonic wing body configurations  
p0154 A79-20105

DULU, J.  
Construction of a refrigerated wind tunnel with a supercooled droplet production system for research on icing  
p0114 A79-17595

DUMFORD, J. F.  
Numerical investigation of the perpendicular injector flow field in a hydrogen fueled scramjet [AIAA PAPER 79-1482]  
p0257 A79-46686
Compressor modelling for scramjet engines  
p0669 A79-52675

DURBACHER, D. C.  
The effects of aircraft engine pollutant emission measurement variability on engine certification policy  
[AAS PAPER 78-6T-86]  
p0011 A79-10261

DUGGAR, A. H.  
Pressure measurement in air data instrumentation  
p0253 A79-25850

DUDEZ, H.  
Balance and sting design for cryogenic wind tunnels  
[OMER, TP No. 1979-40]  
p0473 A79-39089

DUDEZ, H. J.  
Chemical analysis of advanced composite prepregs and resins  
p0530 A79-43264

DUC, J. N.  
Controlled vehicle design philosophy  
p0236 A79-16866

DUCREY, J. H.  
Application of aerodynamic design techniques to process compressor design  
p0309 N79-19388

DULLY, R. E.  
A novel technique for obtaining aerodynamic data using simple, free flight trajectory measurements  
p0612 A79-88051

DUNEY, R.  
The application of low cost manufacturing technology to a turbine gas generator  
[AAS PAPER 78-6T-202]  
p0012 A79-10822

DURCE, B. G.  
The finite element method for turbomachinery analysis 
Finite-element approach to compressor blade-to-blade cascade analysis  
p0514 A79-41752

DOFFY, J. W.  
Polyurethane foams for aircraft shock mounts. 1: Polyether based foams  
[AD-4051482]  
p0239 N79-16599

Polyurethane foams for aircraft shock mounts. 2: Polybutadiene based foams  
[AD-4058888]  
p0481 N79-23219

DOFFY, R. A.  
The dynamics of a general aviation pilot promotion campaign  
p0466 A79-38886

DOGAN, B. C.  
A piloted simulator investigation of augmentation systems to improve helicopter nap-of-the-earth handling qualities  
[AAS 78-28]  
p0122 A79-18155

A piloted simulator study on augmentation systems to improve helicopter flying qualities in terrain flight  
[NASA-TM-70851]  
p0437 N79-23098

DOGAN, J. F., Jr.  
Prop-fan propulsion - its status and potential  
[SAA PAPER 780995]  
p0255 A79-25880

DUGGAR, J. A.  
An analysis of thermal stress and gas bending effects on vibrations of compressor rotor stages  
[AIAA PAPER 79-0005]  
p0139 A79-19498

DUGGAR, J. J., Jr.  
Cost effective improvement of the timeless C-130 Hercules airlifter  
p0073 A79-15404

DUKEF, W. G.  
Static electricity hazards in aircraft fuel systems  
[AD-4051480]  
p0240 N79-17012

DOUGHERTY, J. L.  
Handbook of flight communication and radio equipment  
p0564 A79-48996

DOKIYAMA, T. Y.  
A procedure for axial blade optimization  
[AAS PAPER 78-6T-15]  
p0150 A79-19902

DOLSKAVICH, D. S.  
Numerical calculation of inviscid transonic flow through rotors and fans  
p0680 N79-23906

DOLOV, V. G.  
Optimization of hypersonic three-dimensional shapes  
p0711 A79-35584

DOLPHIN C. J.  
Theoretical model of the oscillating cycle associated with nozzle interaction of a supersonic jet with a barrier  
p0515 A79-42007

DORNBUSC, L. Z.  
Experimental techniques for transonic testing in shock tubes  
p0377 N79-20998

DORNER, H. H.  
Crashworthy armored crew seat for the UN-60A Black Hawk  
[AAS 79-10]  
p0627 A79-49062

DORNER, H. J.  
Method of determining non-steady-state force characteristics and flywheel effect of turbine blades from the streamline pattern  
p0473 A79-39071

DORREGAN, K. L.  
Nondestructive inspection of aircraft structures and materials via acoustic emission  
p0015 A79-10991

DORNER, H.  
Comparison between results in cascades and rotors in the transonic range. 3: Comparison of experimental and theoretical results of flow unsteadiness on blade-to-blade surfaces in an axial compressor rotor  
p0305 N79-19002

DORREY, A. J.  
The study of the flow field behind a transonic axial compressor rotor using laser-anemometry and unsteady pressure measurements  
[AAS PAPER 79-1730]  
p0330 A79-29005

DONALD, W. J., Jr.  
Cascade - Queue model of airport users  
[SAA PAPER 780518]  
p0004 A79-10394

Airport improvement task force delay study: Data collection, reduction and analysis  
[AD-8062901]  
p0096 N79-12299

DONALD, D.  
The effect of oblique angle of sound incidence, realistic edge conditions, curvature and in-plane panel stresses on the noise reduction characteristics of general aviation type panels  
p0599 N79-29958

DONAHUE, H. J.  
Application of two synthesis methods for active flutter suppression on aeroelastic wind tunnel model  
[AAS PAPER 79-1633]  
p0566 A79-45314

DONAHUE, J.  
An AP compatible lightning diverter strip  
p0297 N79-18237

DONAHUE, J. L.  
Testing the F-18 at the U.S. Naval Air Test Center  
p0646 A79-50444

Testing the F-18 at the US Naval Air Test Center  
[AD-8050836]  
p0082 N79-12076

DONEN, K. P.  
Investigation of the Multiple Method Adaptive Control (MMAC) method for flight control systems  
[NASA-CP-3089]  
p0437 N79-23099

DONEN, S. C.  
Application of shock-tube technology to the measurement of heat-transfer rate to gas turbine components  
p0722 A79-15111

Measurement of heat-transfer rate to a gas turbine stator  
[AAS PAPER 78-6T-119]  
p0399 A79-32935
Blade induced distortion experiments on an engine inlet  
[AD-806811]  
p0499 N79-25026

DUNNING, S. J.  
Multichannel infrared receiver performance  
p0810 A79-35210
EBBELE, B. E.

Aircraft wake vortex characteristics from data measured at John F. Kennedy International Airport [AD-A0550559]

P0358 79-14026

EBEBL, G. C.

Escape system trajectory sensitivity analysis [AD-A062429]

P0362 79-20092

EERS, R. S.

Ship motion effects on landing impact loads [AIAA 79-0742]

P0220 79-29014

EBERT, V.

Inertial measuring unit for strapdown application [S0068 79-14663]

P0655 79-30202

ECKARD, G. J.

Airplane responsive engine selection (ARES) guide [AD-A05792]

P0089 79-12090

ECKELS, E. E.

High energy NHD fuels development program [AD-A060156]

P0168 79-14239

ECKERESLY, R. B.

A study of the Sheriff's wing [30-215]

P0433 79-23072

ECKERT, K. D.

Heat transfer problems in advanced gas turbines for naval applications [AD-A062866]

P0365 79-20121

ECKERT, E. B.

DAS for TMA navigation [DGLR PAPER 78-137]

P0662 79-14087

The economic superiority of integrated navigation systems, represented for MILCSS [AD-A116 79-17687]

P0116 79-17687

ECKLUND, R.

Application oriented simulation as a tool for the planning of radio beacon systems [DGLR PAPER 79-942]

P0519 79-42368

EECKERT, R.

Development of an aircraft composite propeller [S0065 79-36714]

P0463 79-36714

EDE, R.

An electric control for an electrohydraulic active control aircraft landing gear [NASA-CR-13113]

P0864 79-23948

EDWARDS, A. C.

Damage tolerant design of the YAR-64 drive system [AER 78-64]

P0123 79-18169

EDWARDS, D. D.

Helicopter internal noise control: Three case histories [AIAA 79-0072]

P0041 79-10858

Engine/airframe/drive train dynamic interface documentation [AD-A063237]

P0362 79-21047

ENGERD, E.

Flight deck alarm systems [SAE PAPER 790579]

P0453 79-21047

ENGERD, A.

An off design shock capturing finite difference approach for caret waverider configurations

P0655 79-30202

ECHEID, B. E.

A procedure for analyzing transonic flow over harmonically oscillating airfoils [AD-A066819]

P0581 79-28156

EVERHURST, L. L.

Nonsteady flow of an incompressible liquid over slender permeable profiles

P0273 79-27962

EGLESTON, B.

Development of modern airfoil sections for high subsonic cruise speeds [AIAA 79-5067]

P0275 79-27353

EGURO, M.

Choice of a fuselage for a passenger aircraft

P0028 79-12968

Selecting the passenger airplane fuselage

P0601 79-47014

ELBERZ, P. H.

A study of the Sheriff's wing

P0497 79-25014

EL-BRAY, A. N.

Asymmetric distortion generation in a variable height annulus [AIAA 79-7002]

P0327 79-29378

A general solution for distorted flows in cascades of aerfoils [AD-1057309]

P0037 79-10059


P0038 79-10065

ELDER, B. L.

Three-dimensional coordinates about wings [AIAA 79-1461]

P0565 79-45265

ELDER, J. A.

A hybrid technique for combining the moment method treatment of wire antennas with the GTD for curved surfaces [AD-A058495]

P0108 79-13241

ELFORD, T. T.

Pool fire radiation through a door in a simulated aircraft fuselage [AF/NA-79-38]

P0295 79-17966

ESTEBNE, B. F.

LB, presized, preporvedorized combustor conceptual design study

P0497 79-25014

EL-ATTAR, B. A.

Asymmetric distortion generation in a variable height annulus [AIAA 79-7002]

P0327 79-29378

A general solution for distorted flows in cascades of aerfoils [AD-1057309]

P0037 79-10059


P0038 79-10065

EL-PARZ, R. N.

A system which uses a laser beam to orient and control the aircraft [AD-A1073204]

P0714 79-33183

ELDREDGE, D.

The application of system dynamics to a managerial model of aeronautical systems division [AD-A059372]

P0169 79-14919

ELDER, R. L.

Preliminary studies using photons correlation velocimetry in turbomachinery and combustion systems [AD-A065655]

P0316 79-28638

ELDER, R. L.

Summary report of the Turbulence Committee

P0243 79-17624

ELDER, R. L.

Cockpit displays for advanced navigation - Circa 2000

P0277 79-16174

An evaluation of turn anticipation techniques and offset flying procedures using a single-voyagepoint RNAV system [AD-A066555]

P0493 79-24974

Simulation study of the operational characteristics of a two/three-dimensional multivoyagepoint area navigation (MNAV) system [AD-A073204]

P0714 79-33183

ELLENBERGER, D. S.

A system which uses a laser beam to control the regime of vibration tests with turbine and compressor blades

P0316 79-28638
characteristics of the F-52
[AIAA PAPER 79-0118]
p0161 A79-19543
Water tunnel flow visualization – Insight into complex three-dimensional flow fields
[AIAA PAPER 79-1539]
p0576 A79-46712
Effects of spanwise blowing on the surface pressure distribution and vortex-lift characteristics of a trapezoidal wing-strake arrangement
[NASA-TP-1290]
p0228 A79-16803

ERICKSON, J. B.
Aircraft and avionic related research required to develop an effective high-speed runway exit system
[NASA-CH-159075]
p0556 A79-27185
Research on self-correcting wind tunnels
[NASA-TP-67095]
p0531 A79-19992
Three basics of design for civil certification
p0662 A79-53629
Performance of graphite epoxy as an antenna ground plane
[AD-0058346]
p0108 A79-13247
Investigation of flexible nozzle wall-flutter incidents in the NASA-Ames Research Center 11- by 11-foot transonic wind tunnel
[AIAA 79-0797]
p0323 A79-29040
Dynamic stall at high frequency and large amplitude
[AIAA PAPER 79-0211]
p0193 A79-19599
Engineering analysis of dynamic stall
p0212 A79-24215
Steady and unsteady vortex-induced asymmetric loads – Review and further analysis
[AIAA PAPER 79-1531]
p0576 A79-46713
Effect of flow separation vortices on aircraft unsteady aerodynamics
p0178 A79-15084
Technical evaluation report on the Fluid Dynamics Panel Symposium on Dynamic Stability parameters (AGARD-AR-137)
p0488 A79-23581
A summary of AGARD FDP meeting on dynamic stability parameters
p0658 A79-30220

ERICKSEN, E. B.
An analysis of long and medium-haul air passenger demand, volume 1
[NASA-CH-152156]
p0418 A79-22062
Testing the feasibility of Differential Omega for airborne use
[AD-005329]
p0160 A79-14059
The use of panel methods with a view to problems in aircraft dynamics
[NLB-97-77000-0]
p0216 A79-15016
Highly survivable truss type tail booms
[AD-0506380]
p0036 A79-10052
Highly survivable truss type tail booms
[AD-064181]
p0420 A79-22079
Engineering studies of aircraft hydraulic drives
p0185 A79-20671
Direction finders in the service of safety for air and sea traffic
p0117 A79-17692
Navstar/GPS /Global Positioning System/ and electronic counter measures
p0251 A79-25492
Low-frequency augmentor instability investigation
[AD-065774]
p0436 A79-23093
Measuring the moment imparted by a liquid pump in startup regime
p0525 A79-42550
Preparation of double-curvature planking by rolling
p0662 A79-52130
Axial compressor operation with radially nonuniform inflow
p0280 A79-27743

PERSONAL AUTHOR INDEX

Influence of bypass ratio change on fan aerodynamic characteristics
p0280 A79-27744

EVLONA, T. G.
Future tactical fighter requirements – A propulsion technology update
[ASME PAPER 79-CT-06]
p0340 A79-30523
Strategic ‘time-based’ ATC
p0026 A79-12473
Fuel-conservative guidance system for powered-lift aircraft
[AIAA 79-1709]
p0570 A79-45363
Fuel-conservative guidance system for powered-lift aircraft
[NASA-TP-780595]
p0537 A79-26009

ESCOR, D.
Research on self-correcting wind tunnels
[NASA-TP-67095]
p0531 A79-19992

Fauls, R. J.
Thrust and mass flow characteristics of four 36 inch diameter tip turbine fan thrust vectoring systems in and out of ground effect
[NASA-CH-152239]
p0542 A79-26056

FARRELL, E. B.
Development of a blast simulator for testing simulated aircraft fuel tanks
p0101 A79-13034
Experimental methods for aircraft design qualifications in an exploding warhead environment
[AD-0703801]
p0706 A79-32203

ESPER, D.
Multiplex system for the Hughes advanced attack helicopter – TAB-64
[ANS 78-14]
p0120 A79-18140

ESSENGER, P.
Materials problems in gas turbine engine technology: Colloquium, Munich, West Germany, October 27, 28, 1977, Report
p0599 A79-40676
Development of materials and processes for engine components – Current and future points of interest
p0599 a79-40680

ETTER, A.
Design-to-cost and Aerospalite’s Aircraft Division
p0342 A79-30583

ETTINGER, R. C.
F-16 high angle of attack testing
p0259 A79-26527
F-16 high angle of attack testing
p0299 A79-18886

EUKLICH, B. J.
Cust alleviation using direct turbulence measurements
[AIAA 79-1674]
p0568 A79-65339

EVANS, D. C.
Computer generated images for aircraft use
p0165 A79-20792

EVANS, D. J.
Application of hot isostatic pressing to aircraft gas turbines
p0564 A79-05067

EVANS, D. E.
Gas turbine combustor cooling by augmented backside convection
[ASME PAPER 78-91-33]
p0196 A79-22334

EVANS, D. W.
F-15 flight simulator: Development and analysis of computer scoring algorithms
[AD-0657465]
p0556 A79-27188

EVANS, J. C.
Reliability growth on B-52 FLIR systems
p0248 A79-24958

EVANS, J. S.
Critical influence of finite rate chemistry and unmixing on ignition and combustion of supersonic H2-air streams
[AIAA PAPER 79-0355]
p0146 A79-19686
Combustor modelling for scramjet engines
p0689 A79-52675

EVANS, J. R.
Radar system design for track-while-scan
Measurements in an axisymmetric turbulent-boundary layer with weak and strong three-dimensional disturbances

Considerations regarding velocity distribution and wall friction in incompressible axisymmetric turbulent boundary layers with transverse curvature

Evaluation of the pulsed acoustic Doppler with comparisons of turbine engine combustor exhaust axial position in a combustor exhaust flow passage of throttling device with vane-type turning element

Static electricity hazards in aircraft fuel systems

Optical in situ versus probe measurements of advanced flight control actuation system

Release-rate calorimetry of multilayered materials

Fire resistant aircraft seat program

Turbine blade tip clearance measurement utilizing an oscillating airfoil. Volume 1: Technical report

Turbine blade tip clearance measurement utilizing borescope photography

Preliminary evaluation of several nozzle-ductative- and evaluation techniques for silicon nitride gas-turbine rotors

Lean, preformed, prevaporized combustor conceptual design study

Optimization of jet distribution along the blade for VTOL jet propelled rotor

Wide range operation of advanced low NOx aircraft gas turbine combustors

Test and evaluation of modified high performance jet aircrew life preserver

Electric charging of helicopters

Aerosporial information data subsystems /AIDS/

System capacities of the approach- and landing aid system

Initial flight test of a Loran-C receiver/data collection system

Loran-C time difference calculations

Preliminary study of optimum ductburning turbofan engine cycle design parameters for supersonic cruising

Computerized systems analysis and optimization of aircraft engine performance, weight, and life cycle costs
FLINT, B. B.

FISHER, B. B.

FISHER, B. B.

FLANGEELLY, N. C.

FLANAGAN, P. F.

FLANET, H.

FLATER, J.

FLAVELL, N.

FLUESS, A.

FLUESS, B. D.

FLUDEN, B. D.

FLYCHNEB, B.

FLYNN, P. F.

FLYNN, P. F.

F. A.

F. A.

FAM, P.

FENCHE, B. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.

F. D.
<table>
<thead>
<tr>
<th>PERSONAL AUTHOR INDEX</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GALWAY, B. T.</strong></td>
</tr>
<tr>
<td>Flight testing and simulator flight fidelity</td>
</tr>
<tr>
<td><strong>GALWAY, R. T.</strong></td>
</tr>
<tr>
<td>Subjective evaluation of helicopter blade slap noise</td>
</tr>
<tr>
<td><strong>GALWAY, W. J.</strong></td>
</tr>
<tr>
<td>Subjective evaluation of helicopter blade slap noise</td>
</tr>
<tr>
<td><strong>GALWAY, P. F.</strong></td>
</tr>
<tr>
<td>Combined-excitation AC generators for aviation</td>
</tr>
<tr>
<td><strong>GARNO, N. A.</strong></td>
</tr>
<tr>
<td>Airplane dynamic wheel loads during ground maneuvering</td>
</tr>
<tr>
<td><strong>GARDNER, B. G.</strong></td>
</tr>
<tr>
<td>Unsteady upstream effects in axial-flow supersonic compressor stages</td>
</tr>
<tr>
<td><strong>GARDNER, E. K.</strong></td>
</tr>
<tr>
<td>Energy efficient engine flight propulsion system preliminary analysis and design report</td>
</tr>
<tr>
<td><strong>GARDNER, J. B.</strong></td>
</tr>
<tr>
<td>Evaluation of new bonding systems for depot-level maintenance of aircraft honeycomb panels</td>
</tr>
<tr>
<td><strong>GARDNER, P. A.</strong></td>
</tr>
<tr>
<td>The Lockheed C-5: Case study in aircraft design</td>
</tr>
<tr>
<td><strong>GARRO, N.</strong></td>
</tr>
<tr>
<td>The Cessna-207 aircraft turbulence and temperature measuring system</td>
</tr>
<tr>
<td><strong>GARRISON, J. E.</strong></td>
</tr>
<tr>
<td>The Bell Model 222</td>
</tr>
<tr>
<td><strong>GATES, R. B.</strong></td>
</tr>
<tr>
<td>Aircraft canopy ozone measurements on B747-SP aircraft: Correlations with atmospheric ozone and ozone encounter statistics</td>
</tr>
<tr>
<td><strong>GATES, R. W.</strong></td>
</tr>
<tr>
<td>Aerodynamic and thermodynamic characteristics of supercritical wing planforms</td>
</tr>
<tr>
<td><strong>GATES, R. E.</strong></td>
</tr>
<tr>
<td>Evaluation of new bonding systems for depot-level maintenance of aircraft honeycomb panels</td>
</tr>
<tr>
<td><strong>GATES, R. L.</strong></td>
</tr>
<tr>
<td>Summary report of the Visibility Committee</td>
</tr>
<tr>
<td><strong>GATES, R. K.</strong></td>
</tr>
<tr>
<td>Dynamics of gust spectra prediction for fatigue damage</td>
</tr>
<tr>
<td><strong>GATES, R. S.</strong></td>
</tr>
<tr>
<td>Prop-fan propulsion - Its status and potential</td>
</tr>
<tr>
<td><strong>GATLING, C. N.</strong></td>
</tr>
<tr>
<td>STAR flight control system</td>
</tr>
<tr>
<td><strong>GAUGE, R. B.</strong></td>
</tr>
<tr>
<td>The effect of variances and manufacturing tolerances on the design strength and life of mechanically fastened composite joints</td>
</tr>
<tr>
<td><strong>GAYLOR, G. H.</strong></td>
</tr>
<tr>
<td>Thermal-thermal mission analyses of air-cooled gas turbine blades</td>
</tr>
<tr>
<td><strong>GAYLOR, G. E.</strong></td>
</tr>
<tr>
<td>Some aspects of the structural and dynamic behaviour of composite materials</td>
</tr>
<tr>
<td><strong>GERBER, J. B.</strong></td>
</tr>
<tr>
<td>The DC-9 Super 80 - Much more than a simple stretch</td>
</tr>
<tr>
<td><strong>SFE PAPER 790589</strong></td>
</tr>
<tr>
<td><strong>GERTLER, J. B.</strong></td>
</tr>
<tr>
<td>Methods of gust spectra prediction for fatigue damage</td>
</tr>
<tr>
<td><strong>GERTZ, R. B.</strong></td>
</tr>
<tr>
<td>Density changes and turbulence production in the expansion or compression of a turbulent flow at supersonic speed</td>
</tr>
<tr>
<td><strong>GERHARD, R. C.</strong></td>
</tr>
<tr>
<td>The Lockheed C-5: Case study in aircraft design</td>
</tr>
<tr>
<td><strong>GERHARD, W. C. J.</strong></td>
</tr>
<tr>
<td>Evaluation of new bonding systems for depot-level maintenance of aircraft honeycomb panels</td>
</tr>
<tr>
<td><strong>GERHARDT, L. J.</strong></td>
</tr>
<tr>
<td>Proper aircraft tire size selection - Optimus performance with minimum maintenance</td>
</tr>
</tbody>
</table>
The feasibility of controlling turbine engine test
Determination of inspection intervals for aircraft
Critical assessment of emissions from aircraft
Nonlinear unsteady potential flow calculations for
Forward scatter meter measurements of slant visual
Reducing air pollutant emissions at airports by
Internal aerodynamics and heat transfer problems
The FAA's airport landside model: Analytical
Research on helicopter rotor noise
The application of rapid solidification rate
Summary report of the second wind tunnel test of
Development and flight test evaluation of fuel
tank sealant requirements for advanced high
Influence of bypass ratio change on fan
cell particulate emissions with a baghouse
the cost effectiveness of condition monitoring systems
Flight control safety - A total systems approach

A piloted simulator investigation of augmentation
A pilot study on augmentation systems to improve
Financial evaluation of gas turbine combustion
Geometric deviations of the Advanced High

Aircraft Control Systems Design

A correlation of the design of advanced high
A family of air traffic control radars
Generalization of analytical tools for
The prediction of the turbulent flow field about an
Control considerations for CVT fighters at high

A multiple objective optimization approach to

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve

A piloted simulator investigation of helicopter
A pilot study on augmentation systems to improve
GLASGOW, G.
GLADYSE, I.
GLASGOW, G.
GITTIER, G.
GIRVAN, G.
GINSBERG, N.
GIRDER, B. B.
GINNESTAD, D.
GILWEE, N.
GILNOR!, D. B., JR.
GILIER, R. 0.
GILLESPIE, G. P.
GILLEBLAIN, J. 0.,
GILL, J. C.
GILEWICZ, A. B.
GILBERT, G. A.
GILBERT, N. P.
GILBERT, B. L.
GIGLIOTTI, N. P.
GORETZ, P. V.
GOBERT, J. L.
GLTNN, GLUSBKO, V. P..
GLOWINSKI, GLUEN, D. P.
GLEASON, C. C.
GLAZER, B. G.
GLASTRIS,
GLASIER, J. N.
GLASGOW, T. A..

PERSONAL AUTHOR INDEX

GIGLIOTTI, R. F. I.
Evaluation of an advanced directionally solidified gamma/gamma-alpha 80 eutectic alloy
[NASA-CS-150616] p0369 879-20222

GILBERT, N. P.
Field dynamics of diffuser-augmented wind turbines
p010 879-20798

GILBERT, G. A.
Helicopter navigation goals
p0076 879-16160

GILBERT, N. P.
Steady state behaviour of a cable used for suspending a monor body from a helicopter
[ARL/AERO-REPT-193] p0372 879-20400

GILBERT, R. P.
Use of piloted simulation for studies of fighter
departure/spin susceptibility
Similitude requirements and scaling relationships
as applied to model testing
[NASA-TP-1435] p0652 879-30176

GILBERT, R. P.
Results of piloted simulator studies of fighter
aircraft at high angles of attack
p0179 879-15993

GILWEE, N.
Assessment of the benefits of aircraft
crashworthiness
p0312 879-19657

GILL, J. C.
Study of an advanced General Aviation Turbine
Engine (GATE)
[NASA-CS-150558] p0383 879-21073

GILDEBAUM, J. D., JR.
Pin-cone interference flow field
[AIAPAPER 79-0200] p0143 879-19595

GILDESBURG, R.
A unique facility for V/STOL aircraft hover testing
[NASA-TP-1473] p0595 879-29199

GILDESBURG, G. F.
A systemized approach to helicopter safety
p0066 879-14418

GILDER, R. G.
A small aircraft gust-probe system for studies of
boundary layer convection and transport
p0193 879-21972

GILDER, R. G., JR.
Assessment of augmented electronic fuel controls
for modular engine diagnostics and condition
monitoring
[AD-A065128] p0436 879-23091

GILLED, P. J., JR.
Thermal/fluid characterization of some thermally
stable thermoplastic and thermoset polymers
p0198 879-22774

Thermal response of composite panels
p0250 879-25530

GIPPISTAD, D.
An aerelastic optimization procedure for
composite high aspect ratio wings
[AIAPAPER 79-0726] p0282 879-28258

GIBBS, R. B.
Considerations for the design of inlet flow
conditioners for static fan noise testing
[AIAPAPER 79-0657] p0269 879-26909

GINSBERG, W.
Coherent optical processing for missile guidance
p0684 879-51460

GIRAN, W.
Sikorsky S-76 analysis, design, and development
for successful dynamic characteristics
[AMS 78-23] p0121 879-18149

GITTER, G.
Kleibitz Do 34 - The German contribution to the
AGOS program
p0150 879-19897

GLADYSS, I. S.
Airport power supply
p0647 879-50499

GOLDENBERG, G. A.
Bolted field repair of composite structures
[AD-A067923] p0585 879-28238

GOLDENBERG, G. A.
Type A V/STOL propulsion system development
[AIAPAPER 79-1287] p0510 879-40755

GOLDENBERG, B.
Evaluation of synthetic turbine engine oil mixtures
[AD-A071813] p0718 879-33211

Glasgow, T. L.
An oxide dispersion strengthened alloy for gas
turbine blades
[NASA-79-79088] p0369 879-20180

GLASNER, J. N.
Digital Avionics Information System (DAIS):
Reliability and maintainability model users
guide, volume 2
[AD-00568826] p0593 879-29182

Glassen, D. K.
The effect of fuel sprays on emissions from a gas
turbine combustor
[AIAPAPER 79-1321] p0472 879-39037

GLAETINS, L. C.
BHC content of turbine engine exhaust
p0138 879-19358

GLEAN, B. G.
GPS receiver operation
p0063 879-14189

GLADSON, C. C.
Experimental Clean Combustor Program (ECCP), phase 3
[NASA-CS-13538A] p0670 879-31207

GLENN, R. A.
A method for estimating takeoff and landing
performance of V/STOL aircraft in shipboard
environments
p0133 879-18675

GLENN, R. A.
Optimizing gas turbine engine flexible rotor
balancing by the LP-search method
p0280 879-27785

Glick, D. D.
Visual pockets: A design parameter for helicopter
instrument panels
p0311 879-19641

GLEDWELL, R.
IR scanning camera measurements of an exhaust
plume from an axisymmetric nozzle afterbody
model at transonic Mach numbers
p0261 879-28097

GLEDWELL, R. A.
Effects of Reynolds number and other parameters on the
throttle-dependent, nozzle/afterbody drag of an 0.11 scale single-engine aircraft model
p0088 879-40481

GLEDWELL, R.
Diagnostic evaluation of jet noise suppression
mechanisms
[AIAPAPER 79-06747] p0269 879-26912
The effect of throttling on forward radiated fan
deside
[AIAPAPER 79-0640] p0269 879-26917

GLOYD, J. L.
Airship potential in strategic airlift operations
p0523 879-42392

GLOCKER, R.
Control of the location of the center of gravity
of loaded aircraft
p0250 879-25370

GLOSS, B. E.
Effect of canard vertical location, size, and
deflection on canard-wing interference at
subsonic speeds
[NASA-78-78790] p0157 879-16013
A study of canard-wing interference using
experimental pressure data at transonic speeds
[NASA-TP-1355] p0215 879-15902

GLOVER, K. B.
Some results from the use of a control
augmentation system to study the developed spin
of a light plane
[AIAPAPER 79-17901] p0269 879-14064

GLOWINSKI, R.
LB/1/ least squares method for the Navier-Stokes
equations
p0335 879-29804

GLUSHKO, V. P.
Path in rocket technology - Selected works,
1924-1946
p0278 879-27599

GLYN, R.
Experimental RCAS performance results
[AD-A045936] p0160 879-14064

GOBERT, J. L.
Implementation of unsteady oscillatory flows in a
transonic wind tunnel
p0389 879-32290

GOETZ, F. W.
Study of future world markets for agricultural
### PERSONAL AUTHOR INDEX

<table>
<thead>
<tr>
<th>Author</th>
<th>Title</th>
<th>Page Numbers</th>
<th>Volume Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRADL, W.</td>
<td>Rotor prediction with different downwash models</td>
<td>p032 W79-10015</td>
<td></td>
</tr>
<tr>
<td>GRAFTON, S.</td>
<td>Control considerations for CTF fighters at high angles of attack</td>
<td>p0461 A79-37295</td>
<td></td>
</tr>
<tr>
<td>GRAHAMS, A. D.</td>
<td>Reliability analysis for optimum design</td>
<td>p0691 A79-53070</td>
<td></td>
</tr>
<tr>
<td>GRAHAMS, C. G.</td>
<td>Shock boundary layer interaction on high turning transonic turbine cascades</td>
<td>p0309 A79-22342</td>
<td></td>
</tr>
<tr>
<td>GRAHAMS, N. A.</td>
<td>Naval architectural considerations in the design of a helicopter</td>
<td>p0692 A79-53622</td>
<td></td>
</tr>
<tr>
<td>GRAHAM, J. Jr.</td>
<td>Aircraft and avionic related research required to develop an effective high-speed runway-exit system</td>
<td>p0556 A79-27105</td>
<td></td>
</tr>
<tr>
<td>GRAHAM, G. D.</td>
<td>Performance of graphite epoxy as an antenna ground plane</td>
<td>p1008 A79-13247</td>
<td></td>
</tr>
<tr>
<td>GRANDCHAMP, L. W.</td>
<td>Composite structural materials study</td>
<td>p1016 W79-13083</td>
<td></td>
</tr>
<tr>
<td>GRANT, B. L.</td>
<td>Turbulence characteristics of compressor discharge flows</td>
<td>p0496 W79-24995</td>
<td></td>
</tr>
<tr>
<td>GRANT, R. L.</td>
<td>The prediction of supercritical pressure distributions on blade tips of arbitrary shape over a range of advancing blade axial angles</td>
<td>p0129 A79-16639</td>
<td></td>
</tr>
<tr>
<td>GRANT, R. L.</td>
<td>An investigation of the influence of fuselage flow field on rotor loads, and the effects of vehicle configuration</td>
<td>p0129 A79-16644</td>
<td></td>
</tr>
<tr>
<td>GRANDE, A. L.</td>
<td>Ultrasonic method of gun gas detection</td>
<td>p0642 A79-50166</td>
<td></td>
</tr>
<tr>
<td>GRASSE, C. L.</td>
<td>JTIDS modular design to use SAR devices</td>
<td>p0664 A79-14247</td>
<td></td>
</tr>
<tr>
<td>GRASSO, A.</td>
<td>Some theoretical and experimental investigations of stresses and vibrations in a radial flow rotor</td>
<td>p0553 W79-27158</td>
<td></td>
</tr>
<tr>
<td>GRAUER, A.</td>
<td>Holographic lens for pilot's head up display, phase 4</td>
<td>p1002 W79-13043</td>
<td></td>
</tr>
<tr>
<td>GRAY, D. B.</td>
<td>Aerodynamic models for cryogenic wind tunnels</td>
<td>p0473 A79-39088</td>
<td></td>
</tr>
<tr>
<td>GRAY, E. B.</td>
<td>Effect of nose bluntness and afterbody shape on aerodynamic characteristics of a monoplane sindle concept with bodies of circular and elliptical cross sections at a Mach number of 2.50</td>
<td>p0538 W79-26203</td>
<td></td>
</tr>
<tr>
<td>GRAY, R. A. Jr.</td>
<td>Comparative study of the convergence rates of two numerical techniques</td>
<td>p0660 A79-13999</td>
<td></td>
</tr>
<tr>
<td>GRAY, D. A.</td>
<td>Energy efficient engine preliminary design and integration study</td>
<td>p0993 W79-12088</td>
<td></td>
</tr>
<tr>
<td>GRAY, D. W.</td>
<td>Weight and cost estimating relationships for heavy lift airships</td>
<td>p0522 A79-42383</td>
<td></td>
</tr>
</tbody>
</table>

**Sample calculation 4**: \[ \phi = 9 \text{ deg} 57 \]
An iterative lifting surface method for thick bladed hovering helicopter rotors

[AIAA PAPER 79-1517] p0576 $\text{#79-45705}$

Gray, B. B.

Gray, S.

Graziani, D.

Graziani, B. A.

Greco, C. A.

Greek, D. C.

Green, D. L.

Green, C. S.

Green, B.

Manufacturing technology for fiber optic bundle cabling

[AD-1058954] p0109 $\text{#79-18361}$

Airborne fiber optics manufacturing technology.

Aircraft installation processes

[AD-1062683] p0370 $\text{#79-20303}$

Greeb, A. A.

Grebwell, J.

Greb, D. E.

Greeb, G. D.

Greeb, R. B.

Navstar user equipment for civil and military applications

p0636 $\text{#79-49507}$

Greeb, V. N.

High frequency near field scattering by an elliptic disk

[AD-1065856] p0489 $\text{#79-24214}$

Gregoire, J. B.

Unconstrained supersonic cruise and maneuvering configuration concepts

[AIAA PAPER 79-0220] p0144 $\text{#79-19606}$

Gregoruk, G. C.

The 727-200 development

p0333 $\text{#79-29597}$

Gregoriou, G.

Aircraft installation processes

[10-4062683] p0370 $\text{#79-29597}$

Gregoruk, P. O.

Aircraft laser displays

p0071 $\text{#79-15178}$

Greene, D. L.

Future V/STOL requirements for omni directional low range airspeed

Review of airworthiness standards for certification of helicopters for instrument flight rules (IFR) operation

[AD-A0639797] p0549 $\text{#79-27127}$

Greene, B.

Aircraft hydraulic systems dynamic analysis

[AD-A067549] p0550 $\text{#79-27129}$

Greene, J. B.

The effects of low-level wind shear on the approach and go-around performance of a landing jet aircraft

[SAE PAPER 790568] p0452 $\text{#79-36708}$

A wind shear downwind warning system

p0464 $\text{#79-38477}$

Greene, W.

Lean, premixed, prevaporized fuel combustor conceptual design study

[NASA-CH-15907] p0707 $\text{#79-32211}$

Greene, C. S.

Advanced risk assessment of the effects of graphite fibers on electronic and electric equipment, Phase 1

[NASA-CH-159027] p0586 $\text{#79-28419}$

Greene, W. B.

Nondestructive inspection of aircraft structures and materials via acoustic emission

p0015 $\text{#79-10991}$

GREENSPOON, J. A.

Investigation of the Multiple Method Adaptive Control (MMAC) method for flight control systems

[NASA-CR-3089] p0437 $\text{#79-23099}$

Greenwood, F.

Aircraft installation processes

[10-1056195] p0096 $\text{#79-23099}$

Greenwood, J. B.

Experiences with an airborne digital computer system for general aviation flight testing

[AD-10668381] p0644 $\text{#79-51248}$

Flight test techniques for low speed aircraft evaluation

p0352 $\text{#79-20001}$

Greenwood, M. C.

An evaluation of four single element airfoil analytic methods

p0356 $\text{#79-20039}$

Gregory, J. A.

Vortex models on missile configurations

[EMVG-PHTT-77-27] p0287 $\text{#79-19714}$

Gregory, D.

Towards a realistic structural analysis/design system

p0199 $\text{#79-22946}$

Greter, P. H.

Non-rotor casing treatment

[ASH! PAPER 78-GT-1091] p0001 $\text{#79-10260}$

A fundamental criterion for the application of rotor casing treatment

p0213 $\text{#79-24220}$

Green, J. L.

Literature review-elastic constants for aircraft structural materials

[AD-A056195] p0056 $\text{#79-12100}$

Green, W. W.

SIFT - Design and analysis of a fault-tolerant computer for aircraft control

p0252 $\text{#79-25718}$

Green, R. M.

Non-destructive methods for the early detection of fatigue damage in aircraft components

p0502 $\text{#79-25417}$

Greenberg, M. S.

Stability analysis of relative navigation systems

p0449 $\text{#79-36090}$

Greene, R. M.

Aircraft hydraulic systems dynamic analysis

[AD-A067549] p0550 $\text{#79-27129}$

Greene, R. A.

The effects of low-level wind shear on the approach and go-around performance of a landing jet aircraft

[SAE PAPER 790568] p0452 $\text{#79-36708}$

Greene, W.

Lean, pressurized, prevaporized fuel combustor conceptual design study

[NASA-CH-15907] p0707 $\text{#79-32211}$

Greenstone, B.

Advanced risk assessment of the effects of graphite fibers on electronic and electric equipment, Phase 1

[NASA-CH-159027] p0586 $\text{#79-28419}$

Greenwell, R. A.

Manufacturing technology for fiber optic bundle cabling

[AD-1058954] p0109 $\text{#79-18361}$
Influence of the flow angle on the characteristics [AIAA PAPER 79-0577] p0606 A79-97691

Investigation of the profile drag and the mean and [FAS! PAPER 79-2278] p0062 A79-32304

Jet cooling at the rim of a rotating disk [AS! PAPER 78-GT-25] p0190 A79-21350


Impact of fuel properties on aircraft engines and fuel system [NASA-CE-158753] p0537 A79-26018

Impact of fuel properties on aircraft engines and fuel system [AIAA PAPER 79-0238] p0144 A79-19613


Impact of fuel properties on aircraft engines and fuel system [NASA-CE-158753] p0537 A79-26018

Impact of fuel properties on aircraft engines and fuel system [NASA-TH-79168] p0504 A79-25861

Impact of fuel properties on aircraft engines and fuel system [NASA-TN-79218] p0504 A79-25861

Impact of fuel properties on aircraft engines and fuel system [NASA-CE-159125] p0701 A79-32157

Impact of fuel properties on aircraft engines and fuel system [NASA-TH-79168] p0504 A79-25861

Impact of fuel properties on aircraft engines and fuel system [NASA-CE-159125] p0701 A79-32157

Impact of fuel properties on aircraft engines and fuel system [NASA-TH-79168] p0504 A79-25861

Impact of fuel properties on aircraft engines and fuel system [NASA-CE-159125] p0701 A79-32157

Impact of fuel properties on aircraft engines and fuel system [NASA-TH-79168] p0504 A79-25861

Impact of fuel properties on aircraft engines and fuel system [NASA-CE-159125] p0701 A79-32157

Impact of fuel properties on aircraft engines and fuel system [NASA-TH-79168] p0504 A79-25861

Impact of fuel properties on aircraft engines and fuel system [NASA-CE-159125] p0701 A79-32157

Impact of fuel properties on aircraft engines and fuel system [NASA-TH-79168] p0504 A79-25861

Impact of fuel properties on aircraft engines and fuel system [NASA-CE-159125] p0701 A79-32157

Impact of fuel properties on aircraft engines and fuel system [NASA-TH-79168] p0504 A79-25861

Impact of fuel properties on aircraft engines and fuel system [NASA-CE-159125] p0701 A79-32157

Impact of fuel properties on aircraft engines and fuel system [NASA-TH-79168] p0504 A79-25861

Impact of fuel properties on aircraft engines and fuel system [NASA-CE-159125] p0701 A79-32157

Impact of fuel properties on aircraft engines and fuel system [NASA-TH-79168] p0504 A79-25861

Impact of fuel properties on aircraft engines and fuel system [NASA-CE-159125] p0701 A79-32157

Impact of fuel properties on aircraft engines and fuel system [NASA-TH-79168] p0504 A79-25861

Impact of fuel properties on aircraft engines and fuel system [NASA-CE-159125] p0701 A79-32157

Impact of fuel properties on aircraft engines and fuel system [NASA-TH-79168] p0504 A79-25861

Impact of fuel properties on aircraft engines and fuel system [NASA-CE-159125] p0701 A79-32157

Impact of fuel properties on aircraft engines and fuel system [NASA-TH-79168] p0504 A79-25861

Impact of fuel properties on aircraft engines and fuel system [NASA-CE-159125] p0701 A79-32157

Impact of fuel properties on aircraft engines and fuel system [NASA-TH-79168] p0504 A79-25861

Impact of fuel properties on aircraft engines and fuel system [NASA-CE-159125] p0701 A79-32157

Impact of fuel properties on aircraft engines and fuel system [NASA-TH-79168] p0504 A79-25861

Impact of fuel properties on aircraft engines and fuel system [NASA-CE-159125] p0701 A79-32157

Impact of fuel properties on aircraft engines and fuel system [NASA-TH-79168] p0504 A79-25861

Impact of fuel properties on aircraft engines and fuel system [NASA-CE-159125] p0701 A79-32157

Impact of fuel properties on aircraft engines and fuel system [NASA-TH-79168] p0504 A79-25861

Impact of fuel properties on aircraft engines and fuel system [NASA-CE-159125] p0701 A79-32157

Impact of fuel properties on aircraft engines and fuel system [NASA-TH-79168] p0504 A79-25861

Impact of fuel properties on aircraft engines and fuel system [NASA-CE-159125] p0701 A79-32157

Impact of fuel properties on aircraft engines and fuel system [NASA-TH-79168] p0504 A79-25861

Impact of fuel properties on aircraft engines and fuel system [NASA-CE-159125] p0701 A79-32157

Impact of fuel properties on aircraft engines and fuel system [NASA-TH-79168] p0504 A79-25861

Impact of fuel properties on aircraft engines and fuel system [NASA-CE-159125] p0701 A79-32157

Impact of fuel properties on aircraft engines and fuel system [NASA-TH-79168] p0504 A79-25861

Impact of fuel properties on aircraft engines and fuel system [NASA-CE-159125] p0701 A79-32157

Impact of fuel properties on aircraft engines and fuel system [NASA-TH-79168] p0504 A79-25861

Impact of fuel properties on aircraft engines and fuel system [NASA-CE-159125] p0701 A79-32157

Impact of fuel properties on aircraft engines and fuel system [NASA-TH-79168] p0504 A79-25861

Impact of fuel properties on aircraft engines and fuel system [NASA-CE-159125] p0701 A79-32157

Impact of fuel properties on aircraft engines and fuel system [NASA-TH-79168] p0504 A79-25861

Impact of fuel properties on aircraft engines and fuel system [NASA-CE-159125] p0701 A79-32157

Impact of fuel properties on aircraft engines and fuel system [NASA-TH-79168] p0504 A79-25861

Impact of fuel properties on aircraft engines and fuel system [NASA-CE-159125] p0701 A79-32157

Impact of fuel properties on aircraft engines and fuel system [NASA-TH-79168] p0504 A79-25861

Impact of fuel properties on aircraft engines and fuel system [NASA-CE-159125] p0701 A79-32157

Impact of fuel properties on aircraft engines and fuel system [NASA-TH-79168] p0504 A79-25861

Impact of fuel properties on aircraft engines and fuel system [NASA-CE-159125] p0701 A79-32157

Impact of fuel properties on aircraft engines and fuel system [NASA-TH-79168] p0504 A79-25861

Impact of fuel properties on aircraft engines and fuel system [NASA-CE-159125] p0701 A79-32157

Impact of fuel properties on aircraft engines and fuel system [NASA-TH-79168] p0504 A79-25861

Impact of fuel properties on aircraft engines and fuel system [NASA-CE-159125] p0701 A79-32157

Impact of fuel properties on aircraft engines and fuel system [NASA-TH-79168] p0504 A79-25861

Impact of fuel properties on aircraft engines and fuel system [NASA-CE-159125] p0701 A79-32157
The incidence of bird strikes by aeroplanes at Entebbe Airport

Forecast of future aviation fuels. Part 1: Scenarios

Recent results in navigation systems utilizing signal aiding from Navstar satellites.

Sea behaviour prediction of helicopters through free model tests.

Effect of rotor tip clearance and configuration on overall performance of a 12.77-centimeter tip diameter axial-flow turbine

Investigation of the crash impact characteristics of composite airframe structures

Traffic background level and signal duration effects on aircraft noise judgment

The finite element method for turbomachinery aeroacoustic research

Air traffic control simulation models, volume 1. A bibliography with abstracts

Air traffic control simulation models, volume 2. A bibliography with abstracts

Airfield pavement evaluation, volume 4. A bibliography with abstracts

Turbine blades: Erosion and Corrosion. Citations from the NTIS data base

Wind tunnel testing of dynamic derivatives in West Germany

Wind tunnel measurements of dynamic derivatives in the German Federal Republic

Numerical evaluation of transonic equivalence rule

Nondestructive testing of adhesive bonded structures

Flight evaluation of anmk 2 integrated controller installed in an oh-58a helicopter

Preliminary airworthiness evaluation or-58c helicopter

Spinoz [NASA-TN-80041]

Map of the earth communication program for US Army helicopters

An introduction to co-kill probability estimation in the m vs m encounter

A augmented mission analysis program for low and high speed aircraft. Volume 3: Demonstration problems

Stability and imbalance response of centrally preloaded rotors mounted in journal and squeeze film bearings

Excitation and analysis technique for flutter tests

Computer-aided design - Aerodynamics
HAIRLINE, L. C.
The evolving air transport avionics p0052 A79-13084
HAIR, L. H.
Space shuttle afterbody aerodynamics/flow
HAISLEP, D. T.
Internationalization of CRERA p0447 A79-36069
HAJEN, T. J.
A new approach to rotor blade stall analysis p0129 A79-18647
HAJRA, D.
Accuracy of an approximate static structural
analysis technique based on stiffness matrix
eigenvalues [AIAA 19-0748] p0282 A79-28263
HAJAR, F. G.
Aerodynamics and heat transfer of transonic
turbine blades at off-design angles of incidence p0214 A79-24295
HALABANDAS, A.
Microcomputer applications in strapdown heading
and attitude reference systems p0614 A79-48606
HALLE, H. G.
Model diffuser investigation for propulsion wind
tunnel 167 [AD-A065522] p0488 A79-23984
HALFORD, G. B.
The strainrange partitioning behavior of an
HALL, A. D.
Helicopter fatigue evaluation. The UK approach p0434 A79-23076
HALL, C. L.
Jet-induced aerodynamics of V/STOL aircraft over a
moving deck [AIAA PAPER 79-0337] p0202 A79-23556
V/STOL aircraft configuration effects on exhaust
gas ingestion [AIAA PAPER 79-1284] p0471 A79-39019
Lift system induced aerodynamics of V/STOL
aircraft in a moving deck environment. Volume 1: Technical discussion
[AD-A060206] p0159 A79-14038
Lift system induced aerodynamics of V/STOL
aircraft in a moving deck environment. Volume 2: Static and dynamic jet-induced force and
moment data [AD-A062057] p0361 A79-20084
HALL, D. W.
HALL, G. W.
A piloted simulator investigation of helicopter
precision decelerating approaches to hover to
determine single-pilot IFR/STIFR/ requirements
[AIAA 79-1866] p0573 A79-45413
HALL, J. B.
Rotsen versus visual cues in piloted flight
simulation p0224 A79-15990
HALL, J. W., JR.
Nondestructive evaluation procedure for military
airfields [AD-A057736] p0106 A79-13067
HALL, R. H.
Full-scale aircraft simulation with cryogenic
tunnels and status of the National Transonic
Review of design and operational characteristics
of the 0.3-meter transonic cryogenic tunnel
HALL, W. R.
Aircraft aerodynamic coefficient estimation p0670 A79-14974
HALL, W. R., JR.
Rotorkraft system identification techniques for
handling qualities and stability and control
evaluation [AHS 78-30] p0122 A79-18156
Optimal control of turbine engines
[AIAA PAPER 78-89/ESC-3] p0148 A79-19772
HALL, W. S.
Extensions to the tested range of a cascade flow
 calculation method p0383 A79-21070
HALLIWEILL, D. G.
The effect of intake conditions on supersonic
flutter in turbofan engines [AIAA PAPER 79-0047] p0139 A79-19497
The effect of intake conditions on supersonic
flutter in turbofan engines p0555 A79-27175
HALL, J.
Measurement of aircraft wakes at 250-meter
altitude with a 10.6-micron CW laser Doppler
Doppler p0691 A79-53517
HALL, J. N.
The wake Vortex Advisory System
Pulsed laser Doppler measurements of wind shear
proceedings of the Aircraft Wake Vortices Conference
[AD-A055510] p0159 A79-14031
Ground-based measurements of the wake vortex
characteristics of a B-747 aircraft in various
HALPIN, H. H., JR.
Composites tooling speeds fabrication - Energy,
labor cost cut sharply p0400 A79-33587
HALVERSON, L. G.
Terminal area delay and fuel consumption analysis
[FAA-RD-78-61] p0291 A79-17841
HALSA, R. N.
TRACT - Interactive test data analysis p0645 A79-50430
HALTO, R.
Development of a digital guidance and control law
for steep approach automatic landings using
modern control techniques [NASA-CR-3074] p0230 A79-16824
HAM, R. E.
Review of engine/airframe/drive train dynamic
interface development problems [AD-A057932] p0095 A79-12092
HAM, R. D.
Cass response and its alleviation for a hingeless
helicopter rotor in cruising flight
Green's function method for the computational
aerodynamic analysis of complex helicopter
configurations [AIAA PAPER 79-0307] p0186 A79-19680
A wind-tunnel investigation of tilt-rotor gust
HAMBURG, G. W.
Ceramic mainshaft roller bearing performance in a
gas turbine engine [AD-A067904] p0557 A79-27516
HANDEL, A.
A new approach for solving the vorticity and
continuity equations in turbomachinery ducts
[AIAA PAPER 79-0066] p0139 A79-19499
Vicous flow analysis in mixed flow rotors
[AIAA PAPER 78-88/STP-3] p0149 A79-19792
HANDEL, P.
Military-technology-related flight testing in the
framework of DFVLR/BWE cooperation - Status and
perspectives p0512 A79-01233
HANDEL, R. G.
Dynamic windtunnel simulation of active control
systems p0659 A79-30233
HANSEN, K. C.

BABBLE, S.

HANPE, H.

HANSEN, H. C.

HANLOSER, K. J.

HANKE, D.

HANDRICH, B.

HANCOCK, JR.

HAMPTON, B.

HAmMOND, C. B.

BARNES, P.

BANK, N.

HAMILTON, N. T.

BAKER, N.

BAHER, J. S.

HANSEN, B.

BARING, B.

BANE!, B. P.

BARDERSBN, G. H.

HARDY, H.

HARDING, H.

BARBER?, K. B.

HANSON, P. N.

HANSON, H. I.

HAHSYOBD, B. H.

B-64

HARDIN, H. V.

HARDER, H. L.

HARDER, L. W.

HARDIN, L. W.

HARDING, R.

HARDY, P. W.

HARDY, C. E.

HARDIN, I.

BARD, G. H.

HARDIN, D. B.

HARDIN, M. T.

HARDIN, B. J.

HARDIN, W.

HARDIN, I.

HARDIN, L. W.

HARDIN, L. W.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.

HARDIN, D. B.
persontext
<table>
<thead>
<tr>
<th>Personal Author Index</th>
<th>Henderson, H. B.</th>
</tr>
</thead>
<tbody>
<tr>
<td>[AD-1071102]</td>
<td>p0711 A79-32560</td>
</tr>
<tr>
<td>Heacock, R. M.</td>
<td>Advanced Scout Helicopter flying qualities requirements - How realistic are they [NASA 79-28] p0629 A79-40080</td>
</tr>
<tr>
<td>Head, R. M.</td>
<td>Development of a multitubular spar composite main rotor blade p0015 A79-10919</td>
</tr>
<tr>
<td>Healy, J. V.</td>
<td>An inverse problem of vertical-axis wind turbines p0166 A79-20800</td>
</tr>
<tr>
<td>Hebb, P. A.</td>
<td>The impact of low cost microprocessors on airborne navigation systems p0679 A79-51048</td>
</tr>
<tr>
<td>Heelslip, T. W.</td>
<td>Failure analysis of aerospace components p0213 A79-24235</td>
</tr>
<tr>
<td>Hecht, C.</td>
<td>Predictive guidance for interceptors with time delays p0611 A79-47939</td>
</tr>
<tr>
<td>Hecor, R.</td>
<td>A computer program for aircraft identification and derivative extraction p0644 A79-50306</td>
</tr>
<tr>
<td>Hedden, J. C.</td>
<td>Investigation of a low-cost servoactuator for HTAS [AD-1059100] p0104 A79-13059</td>
</tr>
<tr>
<td>Hedman, S.</td>
<td>Evaluation and analysis of computations and experiments for transonic wing body configurations p0154 A79-21005</td>
</tr>
<tr>
<td></td>
<td>Calculation of pressure distribution for a wing-body combination at subsonic Mach numbers p0588 A79-27110</td>
</tr>
<tr>
<td>Heddon, D.</td>
<td>The integrity of aircraft jet engines under the impact of foreign bodies p0554 A79-27174</td>
</tr>
<tr>
<td>Heidelberg, L. J.</td>
<td>Full-scale engine tests of bulk absorber acoustic inlet treatment [AI A PAPER 79-0600] p0267 A79-26681</td>
</tr>
<tr>
<td></td>
<td>Full-scale engine tests of bulk absorber acoustic inlet treatment [NASA-TR-79079] p0227 A79-16685</td>
</tr>
<tr>
<td>Heidrich, R.</td>
<td>A stress and strain analysis of industrial radial compressor impellers using the framework method p0309 A79-19391</td>
</tr>
<tr>
<td>Heidbhawn, N. F.</td>
<td>Analysis of radiation patterns of interaction tones generated by inlet rods in the JT15D engine [AI A PAPER 79-0581] p0272 A79-26944</td>
</tr>
<tr>
<td>Heimbach, W.</td>
<td>The NASA-Langley 7-inch transonic cascade wind tunnel at the Deutsche Versuchsanstalt fuer Luft- und Raumfahrt and first test results p0383 A79-21067</td>
</tr>
<tr>
<td>Heinbold, R. L.</td>
<td>Flight and propulsion control integration for selected in-flight thrust vectoring modes [AESE PAPER 78-GT-79] p0008 A79-10768</td>
</tr>
<tr>
<td>Heintz, B. L.</td>
<td>Determination of the flap size in turbine rotors by ultrasonics - A necessary requirement for fracture-mechanics test evaluation p0337 A79-30281</td>
</tr>
<tr>
<td>Heiring, B. G.</td>
<td>Aerodynamics and performance of a gliding parachute with landing brakes p0602 A79-07302</td>
</tr>
<tr>
<td></td>
<td>On the status of experimental stress analysis of parachute canopies p0666 A79-14668</td>
</tr>
<tr>
<td>Heitz, M. E.</td>
<td>High-performance reinforced plastic structures for civil aviation p0602 A79-47302</td>
</tr>
<tr>
<td>Held, V.</td>
<td>Application of a north seeking heading and attitude reference for the autonomous navigation of helicopters p0606 A79-14668</td>
</tr>
<tr>
<td>Heide, R. H.</td>
<td>A comprehensive review of airframe noise research p0152 A79-20080</td>
</tr>
<tr>
<td>Hellam, A. S.</td>
<td>A systematized approach to helicopter safety p0666 A79-14418</td>
</tr>
<tr>
<td>Heimsley, C. W., Jr.</td>
<td>Power by wire for aircraft - The all-electric air vehicle p0692 A79-53631</td>
</tr>
<tr>
<td>Heimsley, F. L.</td>
<td>Wing/store flow-field measurements at transonic speeds using a laser velocimeter [AD-1066228] p0590 A79-29109</td>
</tr>
<tr>
<td></td>
<td>A vortex lattice technique for computing ventilated wind tunnel wall interference [AD-1070445] p0707 A79-32220</td>
</tr>
<tr>
<td>Helwig, G.</td>
<td>Wing shape optimization for maximum cross-country speed, with mathematical programming p0480 A79-23899</td>
</tr>
<tr>
<td>Heimemah, R. H.</td>
<td>Performance enhancements of GPS user equipment p0603 A79-14691</td>
</tr>
<tr>
<td>Heimely, B. A.</td>
<td>Design of the circulation control wing STOL demonstrator aircraft [AI A PAPER 79-1842] p0609 A79-47909</td>
</tr>
<tr>
<td></td>
<td>An investigation of the performance of a J52-8A engine operating under the influence of high bleed flow extraction rates [AD-1057305] p0086 A79-11054</td>
</tr>
<tr>
<td>Herbog, P. G.</td>
<td>Flutter speed degradation of damaged, optimized flight vehicles p0323 A79-29038</td>
</tr>
<tr>
<td>Hendrof, M. C.</td>
<td>Making turbofan engines more energy efficient [AIAA PAPER 78-02-198] p0011 A79-10818</td>
</tr>
<tr>
<td>Henderson, R. E.</td>
<td>The effect of operations on the ground noise footprints associated with a large multitudes, nonmaching helicopter p0040 A79-10851</td>
</tr>
</tbody>
</table>
HIRST, R.

program of the NASA-Levis SBR approach to high-temperature LCP life prediction
p0555 N79-27179

HIRST, R.

Longboards into service
p0212 N79-24183

Computers on the airliner flight deck
p0340 N79-31157

Simulators cutting the fuel bill
p0598 N79-32750

Boeing 757/767 — on-the-spot report
p0850 N79-36374

HIRTL, W. A.

Advanced braking controls for business aircraft
p0455 N79-36731

HITCH, R.

Active controls for civil transports
p0236 N79-16873

HITCHCOCK, L.

Digital Avionics Information System /DAIS/ and Advanced Integrated Display System /AIDS/ cockpit programs
p0332 N79-29845

HITT, R. P.

Assessment of software development and maintenance costs due to retrofit of embedded avionics computer
[AIAA 1979-1906]
N6677 N79-58383

HO, F. T.

Combustion noise prediction update
[AIAA PAPER 79-0058]
N272 N79-26942

HOB, O. R.

Comparison of two flow surveys above stalled wings
[AIAA PAPER 79-0167]
N0143 N79-19564

Critical considerations for wind-tunnel testing /STOL aircraft models
[AIAA PAPER 79-0332]
N0145 N79-19571

Turbulent wake measurements with a laser velocimeter
[AIAA PAPER 79-1087]
N0362 N79-38058

Velocity measurement about a NACA 0012 airfoil with a laser velocimeter
[AD-A056447]
N0364 N79-10029

A laser velocimeter flow survey above a stalled wing
[NASA-29-1266]
N157 N79-14019

Application of the laser velocimeter to airfoil research
N0351 N79-19957

An experimental investigation of the effect of rotor tip shape on helicopter blade slap noise
[AIAA-TE-80066]
N0506 N79-25844

HOBKSTBA, T.

Flight test techniques for low speed airfoil evaluation
[AIAA PAPER 79-1834]
N0684 N79-51248

HODAN, N. C.

Experiences with an airborne digital computer system for general aviation flight testing
[NASA-CE-158905]
N0364 N79-20112

HODAN, J. B.

Calculation of the three-dimensional flow field in supersonic mixed-compression inlets at angle of attack using a bicharacteristic method with discrete shock wave fitting
[AIAA PAPER 79-0379]
N0161 N79-19466

Aerodynamic effects simulator
N0402 N79-33417

HODAN, R.

Tower airport statistics handbook, calendar year 1977
[AD-A060117]
N0180 N79-15009

HODAN, V. J.

System integration analysis for future tower cab configurations/systems
[AD-A050006]
N0161 N79-14866

ROCK, W. J. Jr.

Aerodynamic effects simulator
N0402 N79-33417

HODAN, R. L.

On the aerodynamics of hypersonic cruise vehicles at off-design conditions
N0153 N79-20088

HODAN, R. N.

Planning, design and construction of the Queen Alia International Airport
[FAE PAPER 780531]
N0005 N79-10001

HODAN, D. H.

An aeromechanical stability analysis for bearingless rotor helicopters
[AHS 78-21]
N0211 N79-18147

An experimental study of coupled rotor-body aeromechanical instability of hingeless rotors in hover
N0130 N79-18656

HODES, J.

An experimental investigation into the influence of acoustic disturbances on the development of a turbulent boundary layer
[FAR-89-30-325]
N0226 N79-16238

HODES, J.

Initial results of an inflight simulation of augmented dynamics in fighter approach and landing
[AIAA 79-1783]
N0052 N79-45810

Are today's specifications appropriate for tomorrow's airplanes?
N0660 N79-30239

HODES, E. N.

Analysis of aircraft fuels and related materials
[AD-1070739]
N0270 N79-33338

HODES, F.

The new P3C Orion aircraft with the BARP
N0349 N79-32231

HODES, R.

Infrared landing system for a mini remotely-piloted vehicle
N0019 N79-12093

HODGIE, J. O.

Exploratory development of an overhaul coating process for gas turbine components
[AD-1061270]
N0234 N79-16854

HODGSON, C. R.

Determination of subcritical frequency and damping from 5-1 flight flutter test data
N0503 N79-25246

HODGSON, G.

Considerations on the airborne use of DME interrogators or SSR transponders for ground-derived landing and surveillance systems
N0055 N79-13247

A self contained collision avoidance system for helicopters
N0656 N79-30206

HODGSON, T.

Qualification tests for helicopters to be used on board ships
N0706 N79-32204

HOFFMANN, K. B.

Pitot properties of adhesive-bonded laminated sheet material of aluminum alloys
[LR-276]
N0598 N79-29543

HOFFMAN, A. C.

Application of digital controls on the quiet clean short haul experimental engines
[AIAA PAPER 79-1203]
N0469 N79-38980

HUFFMAN, B. J.

Environmental exposure effects on composite materials for commercial aircraft
[NASA-CR-158838]
N0585 N79-28232

HUFFMAN, R. L.

Fabrication research for supersonic cruise aircraft
N0529 N79-43243

HUFFMAN, J. B.

Windshield technology demonstrator program—canopy detail design options study
[AD-A070376]
N0669 N79-31201

HUFFMAN, J. D.

Calculation of the three-dimensional flow field in supersonic inlets at angle of attack using a bicharacteristic method with discrete shock wave fitting
[AIAA PAPER 79-0379]
N0147 N79-19698

A computer program for the calculation of the flow field in supersonic mixed-compression inlets at angle of attack using the three-dimensional method of characteristics with discrete shock wave fitting
[NASA-TR-780947]
N0333 N79-10023

HUFFMAN, W. C.

Display/control requirements for automated VTOL aircraft
[NASA-CR-158905]
N0364 N79-20112

HUFFMAN, R.

Experiences with an airborne digital computer system for general aviation flight testing
[AIAA PAPER 79-1834]
N0684 N79-51248

Flight test techniques for low speed airfoil evaluation
N0352 N79-20001

HUFFMAN, W.

Implementation of flight control in an integrated
H抱怨, J. P.

HOSING, H. B.

HOSSETTER, L. D.

HOTOP, H. J.

HOURIE, J. A.

HOBGILL, C. C.

HOBSTHAW, C. C.

HOBERT, C. H.

HOBRO, N. H.

HORLOCK, J. H.

HOBBO, N. P.

HORLICK, J. H.

HOOG, V. R.

HOOGVE, E. R.

HOOGHE, E. R.

HOOGHE, H. G.

HOOD, V. R.

HOPKINS, H. B.

HOPPING, R.

HOPKINS, T. L.

HOPKINS, T. A.

HOPKINS, K. N.

HOPPE, H. E.

HOPPE, H. H.

HOUSH, V. H.

HOUS, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.

HORR, V. R.
HUNSFORD, P. E.  
A-10 static structural test program  
[AD-A071782]  
p0715 A79-33192

HUTCHE, E. J.  
Investigation of turbo-dyne energy chamber (G8): value trademark: An air bleed device  
[PB-205381/0]  
p0168 A79-14397

HUTCHESON, C.  
Realization of a helicopter-oriented real-time data system for research, experimental, and prototype flight testing  
[AHS 79-50]  
p0632 A79-49102

HUTCHESON, C. S.  
The Omega navigation system - An overview  
[p0026 A79-12525

HUTCISON, R. E.  
Fibre composite reinforcement of cracked aircraft structures  
[p007A A79-15540

HUTT, R.  
An analysis of the new construction regulations for military and civil aircraft construction with respect to the demonstration of serviceability  
[DGLR PAPER 78-198]  
p1048 A79-20494

HUTTENBERG, H.  
Economical processing for the fabrication of CFEP components  
[DGLR PAPER 78-009]  
p0040 A79-33600

HUTTO, A. J.  
Use of helicopter flight simulation for height-velocity test predictions and flight test risk reduction  
[AHS 69-41]  
p0123 A79-18168

HUTTO, P. E.  
Develop the application of a digital memory acoustic emission system to aircraft flaw monitoring  
[PM-2973]  
p0721 A79-33486

HUXJORD, W. T.  
Manufacture of ring rolled components for gas turbine engines  
p0189 A79-20888

HWA, C.  
Aircraft wake flow effect and horizontal tail buffet  
[p0038 A79-30482

Some observations on the mechanism of aircraft wing rock  
[p0043 A79-3013S

Demonstration of aircraft wing/store flutter suppression systems  
p0047 A79-46238

Investigation of steady and fluctuating pressures associated with the transonic buffetting and wing rock of a one-seventh scale model of the F-8A aircraft  
[NASA-CR-3061]  
p0099 A79-13008

HYJIN, M.  
Validation of MIL-F-9490D: General specification for flight control system for piloted military aircraft. Volume 1: Summary of YF-17 and C-5A validations  
[AD-A0618807]  
p3036 A79-19008

HYJIN, J. H.  
An analysis of the low cycle fatigue behavior of the superalloy Rene 95 by strainrange partitioning  
[AD-A0682525]  
p596 N79-29295

IACCARINO, R.  
Towards a realistic structural analysis/design system  
p0129 A79-22946

IAGUELY, V. P.  
Twisting of the blades of an axial turbine stage during tangential inclination of the nozzle blades  
p5027 A79-42569

IAGHEL, L. L.  
Ductive heat exchange of gas-particle streams in flow passage of throttling device with valve-type turning element  
p280 A79-27742
PERSONAL AUTHOR INDEX

TAKUSHIB, V. S.
Representation of compressor characteristics in coordinates convenient for computer calculation of CTS parameters
p0068 A79-16844

TALOVICH, B. D.
Analytical representation of turbine characteristics in a form convenient for computer-aided computation of gas-turbine engine parameters
p0083 A79-16802

TANBROG, B. E.
Formulation of empirical formulas for calculating the hydraulic resistance of networks
p0451 A79-36593

TANINO, N. A.
On some methods for the numerical simulation of flows with complex structure
p0468 A79-36591

TANI, I.
The wing section theory of Kutta and Zhukovskii
p0334 A79-29701

TANKSIVC, V. I.
The Yak-18T aircraft: construction and operation
p0126 A79-18297

TANKOCSI, Y. N.
Study of the nonuniformity of the temperature field of a homogeneous combustion chamber as the parameters of the primary zone vary
p0525 A79-42549

TANNO, N.
Study of mass transfer between the primary zone and secondary air jets in gas turbine engine combustion chambers
p0526 A79-42558

TAPIS, L. F.
Aerodynamics of flame jets
p0259 A79-26355

ICEIMINIC, P. J., Jr.
How to add satellite navigational accuracy and stability to existing offshore NAV systems
p0277 A79-27388

ICHIHAMA, A.
Effect of forward acceleration on aerodynamic characteristics of wings
p0462 A79-39124

IDIAULLIN, M. S.
Convective heat exchange of gas-particle stream in flow passage of throttling device with vane-type turning element
p0280 A79-27742

IGAWAY, S. G.
Numerical solution of a linear integral equation of the first kind in the inverse problem of symmetrical flow past a wing
p0019 A79-12138

IGORE, H. B.
Full-scale aircraft simulation with cryogenic tunnels and status of the National Transonic Facility (NASA-TF-80005)

IIBEJ, R.
Observation of atmospheric interactions at aeroplane altitude
p0461 A79-37573

IIJIMA, E.
Japanese lighter-than-air mission studies [AIAA 79-1587]
p0522 A79-42387

IKU, T.
Fast-acting valves for use in shock tubes. II - Formation of shock waves
p0528 A79-43153

ILCEFY, V. D.
Time-frequency method of solving large problems in the dynamics of elastic structures with local nonlinearities
p0020 A79-12155

ILIEF, K. V.
Considerations in the analysis of flight test maneuvers
p0045 A79-50433

Effect of sampling rate and record length on the determination of stability and control derivatives (NASA-TM-72058)
p0095 A79-12096

Important factors in the maximum likelihood analysis of flight test maneuvers (NASA-TF-1459)
p0425 A79-22113

ILISEZ, W. W.
Handbook of flight communication and radio equipment
p0564 A79-48894

ILIUSKEI, V. V.
Optimal selection of the geometrical characteristics of the reversing channel of a small-scale turbine with readmission of the gas
p0450 A79-36583

Effectiveness of readmission of the gas in high-pressure-ratio small-scale turbines
p0450 A79-36584

ILLG, W.
Fatigue and fracture
p0661 A79-30315

INBER, M. H.
Integration of nondestructive testing methods into design for structural integrity assurance
p0336 A79-18504

INGOE, C. F.
Self-contained grease lubrication systems for aircraft applications
[ARS 79-39]
p0631 A79-49091

INGUNI, N. W.
Simulation of helicopter powerplant performance
[ARS PAPER 78-GT-51]
p0008 A79-10774

INOUE, T.
Small perturbation analysis of nonuniform rotating disturbances in a vaneless diffuser
[ARS PAPER 78-GT-154]
p0002 A79-10270

INOUE, S.
The effect of slot configuration and arrangement on the characteristics of jet flow
[WA-78-195]
p0337 A79-30377

INOU, T.
On the balancing convergence of flexible rotors, with special reference to asymmetric rotors
p0395 A79-31390

INOZI, M.
Crashworthiness tests on model aircraft fuselage structures
[AIAA 79-0688]
p0275 A79-27354

INOZI, J.
Problems raised by the application of the natural stability reduction concept to transport aircraft
p0055 A79-20117

Results related to simulated and in-flight experimentation with an electric flight control system that can be generalized
p0658 A79-30224

INUBA, M.
Self-contained grease lubrication systems for aircraft applications
[ARS 79-39]
p0631 A79-49091

IREY, Y. V.
Determination of the geometrical parameters and position of the nose flap at the root section of a swept wing on the basis of wind tunnel data. I
p0028 A79-12953

Selecting the geometrical parameters and location of the nose flap at the wing root profile of a swept wing on the basis of wind tunnel data. II
p0348 A79-32038

Selection of geometric parameters and location of nose flap on swept wing root profile from tunnel test data. I
p0601 A79-46999

Selection of the geometrical parameters and position of a nose flap on the root profile of a swept wing using tunnel test data. II
p0695 A79-54042

IREY, L. J.
F-16 Avionics Intermediate Shop self-test
p0023 A79-12302

ISHIGAKI, T.
Research of the XF3-1 turbofan engine
[ARIES PAPER 78-GT-199]
p0011 A79-10819

ISHIBARA, K.
Analysis of an unsteady aerodynamic force on a blade due to ununiform amplitude gusts
p0473 J79-39005

ISHIBIRI, K. II.
On mechanics of gyroscopes in global suspension
p0064 A79-14209

ISOMI, T.
Structural analysis of hollow blades: Torsional stress analysis of hollow fan blades for aircraft jet engines
[WA-78-533]
p0281 A79-17261

ISOGAI, K.
On the transonic-dip mechanism of flutter of a sweptback wing
p0514 A79-01763

B-75
JABLOKI, B. J.

JACKSON, B. N.

JACKSON, C. B.

JACOBS, P. P.

JACOBS, P. A.

JACOBI, N.

JACKSON, R.

JACKSON, L. R.

JACKSON, N. N.

JACKSON, U. C.

JACOBY, V. B.

JACOBI, 0. 0.

JACOBSON, L. J.

JACOBSEN, B. A.

JACOBS, P. A.

JACOBI, N.

JACKSON, N. 2., JR.

JACKSON, B. N.

JACOBSON, S.

JACOBS, P. A.

JACOBI, W. A.

JACOBSEN, L. J.

JACOBS, J. A.

JACOBSON, L. J.

JACOBSEN, B. A.

JACOBS, P. P.

JACOBI, N.

JACKSON, R.

JACKSON, L. R.

JACKSON, N. N.

JACKSON, U. C.

JACOBY, V. B.

JACOBI, 0. 0.

JACOBSON, L. J.

JACOBS, P. A.

JACOBI, N.

JACKSON, R.

JACKSON, L. R.

JACKSON, N. N.

JACKSON, U. C.

JACOBY, V. B.

JACOBI, 0. 0.

JACOBSON, L. J.

JACOBS, P. A.

JACOBI, N.

JACKSON, R.

JACKSON, L. R.

JACKSON, N. N.

JACKSON, U. C.

JACOBY, V. B.

JACOBI, 0. 0.

JACOBSON, L. J.

JACOBS, P. A.

JACOBI, N.

JACKSON, R.

JACKSON, L. R.

JACKSON, N. N.

JACKSON, U. C.

JACOBY, V. B.

JACOBI, 0. 0.

JACOBSON, L. J.

JACOBS, P. A.

JACOBI, N.

JACKSON, R.

JACKSON, L. R.

JACKSON, N. N.

JACKSON, U. C.

JACOBY, V. B.

JACOBI, 0. 0.

JACOBSON, L. J.

JACOBS, P. A.

JACOBI, N.

JACKSON, R.

JACKSON, L. R.

JACKSON, N. N.

JACKSON, U. C.

JACOBY, V. B.
JAEGER, C.  
Implementation of the Omega system for air navigation  
p0050 A79-13244

JAEGER, D.  
Lightning protection for aircraft  
p0062 A79-14105

JAL, A. R.  
Systems development of a stall/spin research facility using remotely controlled/augmented aircraft models. Volume 1: Systems overview  

JATISWAL, N. K.  
Behaviour of a two-dissimilar unit imperfect standby system with connected switching and priority repair  
p0690 A79-52274

JAMES, R.  
A system for providing an integrated display of instantaneous information relative to aircraft attitude, heading, altitude, and horizontal situation  
[NASA-CAS-72-11005-1]  p0495 N79-24988

JAMES, R. N.  
A new approach to the solution of large, full matrix equations: A two-dimensional potential flow feasibility study  

JAMES, B. N.  
Recent progress in finite-volume calculations for wing-fuselage combinations  
[AD-A065915]  p0488 979-14105

JANNETTA, T.  
The electro-impulse de-icing method  
[CONF-771204-3]  p00314 979-10036

JANETZKB, D. C.  
Water absorption of fluids/oils  
[CONF-771204-3]  p0062 479-14105

JANCOVICB, S. G.  
The computation of vortex flows by panel methods  
[AIAA PAPER 79-1856]  p0635 A79-28185

JANISON, B. G.  
Design and development of a notion compensator for the RSRA main rotor control  
[AIAA PAPER 79-22541]  p0414 479-22541

JANONSKA G.  
Effect of flight loads on turbofan engine performance deterioration  
[AIAA 79-27904]  p0327 A79-29380

JAPPS, S. A.  
The computation of vortex flows by panel methods  
[AIAA 79-28482]  p0587 A79-28482

JARVINEN, N. A.  
Numerical calculation of transonic flow past a wing-fuselage combinations  
[NASA-CAS-31773]  p0676 979-31533

JARVIS, C. R.  
Digital fly-by-wire flight control validation experience  

JABIGBO, A.  
Effect of flight loads on turbofan engine performance deterioration  
[AIAA 79-7004]  p0327 A79-29380
PERSONAL AUTHOR INDEX

Performance of a V/STOL tilt nacelle inlet with blowing boundary layer control [NASA-TR-79-27093]

JOHNSON, R. L.

Conditioning and geometry effects on low-frequency afterburner combustion instability in a turbofan at altitude [AIAA PAPER 79-1675]

JOHNSON, R. L.

Particle trajectories near an airfoil with a film-cooled leading edge [NASA-TR-79-22052]

JOHNSON, C. B.

High speed interference heating loads and pressure distributions resulting from eleven deflections [AIAA PAPER 79-0185]

JOHNSON, C. B.

Pressure and thermal distributions on wings and adjacent surfaces induced by eleven deflections at Mach 6 [NASA-TP-1356]

JOHNSON, C. E.

Full-scale aircraft simulation with cryogenic tunnels and status of the National Transonic Facility [NASA-TR-80065]

JOHNSON, C. E.

Texas Instruments Phase I GPS user equipment [NASA-TR-79-14190]

JOHNSON, D.

Visibility modeling for a landing simulator with special reference to low visibility [NASA-TR-79-15982]

JOHNSON, D. L.

Transonic flow past a symmetrical airfoil at high angle of attack [AIAA PAPER 79-1500]

JOHNSON, D. L.

Holography and LDV techniques, their status and use in airfoil research [NASA-TP-78229]

JOHNSON, D. L.

Visibility modeling for a landing simulator with special reference to low visibility [NASA-TR-79-15982]

JOHNSON, D. L.

Ground winds for Kennedy Space Center, Florida, 1979 revision [NASA-CR-78229]

JOHNSON, D. L.

20 hp mini-BPF demonstrator engine program [NASA-CP-79-0200]

JOHNSON, B. E.

Recent advances in the solution of three-dimensional flow over wings with leading edge vortex separation [AIAA PAPER 79-0282]

JOHNSON, B. E.

Development of aircraft lavatory compartments with improved fire resistance characteristics [NASA-CP-79-0200]

JOHNSON, B. E.

Development of aircraft lavatory compartments with improved fire resistance characteristics, phase 1: Fire containment test of a wide body aircraft lavatory module [NASA-TR-79-12157]

JOHNSON, B. E.

Conference on Fire Resistant Materials: A compilation of presentations and papers [NASA-CP-79-0200]

JOHNSON, B. E.

Firemen program [NASA-TR-79-13166]

JOHNSON, B. E.

Development of aircraft lavatory compartments with improved fire resistance characteristics, phase 2: Sandwich panel resin system development [NASA-CP-79-0200]

JOHNSON, B. E.

Cloud physics observations inside hailstorms with an airborne aircraft data system [NASA-TR-79-12157]

JOHNSON, B. E.

The survivability of helicopters to rotor blade ballistic damage [NASA-TR-79-12157]

JOHNSON, B. E.

Application of advanced technologies to improve C-141 cruise performance [NASA-TR-79-0200]

JOHNSON, B. E.
KATINSKY, F.

KATINSKY, E. A.

KAVASBIMA, S.

KAY, B.

KAVAMURA, R.

KANACHI, K.

KATERIN, A.

KAUFMAN, L.

KAUFMAN, fl.

KAUFFMAN, C. N.

KATZ, F.

KATZ, J.

KATSOKI, B.

KATINSKY, E. A.

PERSONAL AUTHOR INDEX

Kavansbima, S.

Kawasbima, S.

Kato, K.

A calculation of rotor impedance for hovering articulated-rotor helicopters

The role of the backside parameter in height control

Calculation of rotor impedance for articulated-rotor helicopters in forward flight

A numerical prediction of typical articulated rotor impedance

Katsuki, N.

Theoretical approach to spray combustion in gas turbine combustor

Katz, J.

Hydrodynamic propulsion by large amplitude oscillation of an airfoil with chordwise flexibility

The effect of chordwise flexibility on the lift of a rapidly accelerated airfoil

Full-scale wind tunnel study of nacelle shape on cooling drag

Katsppf, N. E.

U.S. Navy developments in crashworthy seating

Kaufman, C. W.

The effect of fuel sprays on emissions from a gas turbine combustor

Kaufman, A.

Thermal structural mission analyses of air-cooled engine turbine blades

Kaufman, R. L., II

Pressure and thermal distributions on wings and adjacent surfaces induced by elbow deflections at Mach 6

Kaufman, L. G., III

High speed interference heating loads and pressure distributions resulting from elbow deflections

Kavesh, A. X.

Optimizing linear flight vehicle stabilization systems with orthogonal filters

Kazemian, H.

Application of the local momentum theory to the aerodynamic characteristics of tandem rotor in yawed flight

Kawamura, K.

Laminar boundary layer with foreign gas injection on a conical body

Kawara, H. Y.

Red and quality criteria validation/pilot performance study: Flight test results

Kawashima, S.

Aerodynamic response for the airfoil experiencing sudden change in angle of attack

Kay, R. F.

Helicopter transparent enclosures. Volume 2: A general specification

Helicopter transparent enclosures. Volume 1: Design handbook

Kaye, R. W.

Evaluation of MOSTAS computer code for predicting dynamic loads in two-bladed wind turbines

Kaziemiersa, Z.

Tachystoscopic testing of onboard instruments

Kaziemersk, O.

Determination of the suitability of soils for the construction of dirt runways

Keates, R. H.

Fatigue acceleration in box beams under mechanical and thermal stress (second series)

Keller, F. L.

Definition, description, and interfaces of the FAA's developmental programs. Volume 2: ATC facilities and interfaces

Keefe, L.

Interior noise path identification in light aircraft using multivariate spectral analysis

Kelle, D. Y.

Corporate avariage in the 1980's

Keeh, D. W.

Operational experience with the AH/AVN-131 Omega Navigation Set

Keres, J. E.

Aerodynamic characterics of an unsteady separated flow

Keith, J. S.

Turbine design system

Keith, T. G., Jr.

Total pressure recovery of flared fan nozzles used as inlets

Keldish, V. V.

Lift and longitudinal moment of a small-aspect-ratio wing in the proximity of a body of revolution

Keller, G. B.

Fatigue toughness in titanium alloys

Keller, R.

Application of the fault tree in fault testing and design improvement

Keller, J. D.

Vector processor algorithms for transonic flow calculations

Keller, R. D.

Pilot night vision system /PNVS/ for advanced attack helicopter /AAN/

Kelle, W. W.

Simulation study to evaluate a constant-goundspeed approach method in moderate and severe wind shears

Kelle, K.

Jet engine test cells: Emissions and control measures, phase 2

Kelle, J. R.

Description of the VTOL Approach and Landing

Katsuki, N.

U.S. Navy developments in crashworthy seating

Katz, J.

Hydrodynamic propulsion by large amplitude oscillation of an airfoil with chordwise flexibility

Katz, J.

Hydrodynamic propulsion by large amplitude oscillation of an airfoil with chordwise flexibility

Katsu, K.

U.S. Navy developments in crashworthy seating

Kanter, J.

Theoretical approach to spray combustion in gas turbine combustor

Kaufman, L.

The effect of fuel sprays on emissions from a gas turbine combustor

Kaufman, R. L., II

Pressure and thermal distributions on wings and adjacent surfaces induced by elbow deflections at Mach 6

Kaufman, L. G., III

High speed interference heating loads and pressure distributions resulting from elbow deflections

Kavesh, A. X.

Optimizing linear flight vehicle stabilization systems with orthogonal filters

Kazemian, H.

Application of the local momentum theory to the aerodynamic characteristics of tandem rotor in yawed flight

Kawamura, K.

Laminar boundary layer with foreign gas injection on a conical body

Kawara, H. Y.

Red and quality criteria validation/pilot performance study: Flight test results

Kawashima, S.

Aerodynamic response for the airfoil experiencing sudden change in angle of attack

Kay, R. F.

Helicopter transparent enclosures. Volume 2: A general specification

Helicopter transparent enclosures. Volume 1: Design handbook

Kaye, R. W.

Evaluation of MOSTAS computer code for predicting dynamic loads in two-bladed wind turbines

Kaziemiersa, Z.

Tachystoscopic testing of onboard instruments

Kaziemersk, O.

Determination of the suitability of soils for the construction of dirt runways

Keates, R. H.

Fatigue acceleration in box beams under mechanical and thermal stress (second series)

Keller, F. L.

Definition, description, and interfaces of the FAA's developmental programs. Volume 2: ATC facilities and interfaces

Keefe, L.

Interior noise path identification in light aircraft using multivariate spectral analysis

Kelle, D. Y.

Corporate avariage in the 1980's

Keeh, D. W.

Operational experience with the AH/AVN-131 Omega Navigation Set

Keres, J. E.

Aerodynamic characterics of an unsteady separated flow

Keith, J. S.

Turbine design system

Keith, T. G., Jr.

Total pressure recovery of flared fan nozzles used as inlets

Keldish, V. V.

Lift and longitudinal moment of a small-aspect-ratio wing in the proximity of a body of revolution

Keller, G. B.

Fatigue toughness in titanium alloys

Keller, R.

Application of the fault tree in fault testing and design improvement

Keller, J. D.

Vector processor algorithms for transonic flow calculations

Keller, R. D.

Pilot night vision system /PNVS/ for advanced attack helicopter /AAN/

Kelle, W. W.

Simulation study to evaluate a constant-goundspeed approach method in moderate and severe wind shears

Kelle, K.

Jet engine test cells: Emissions and control measures, phase 2

Kelle, J. R.

Description of the VTOL Approach and Landing
application of LEC models

Koche, P. G.

Koch, C. C.

Koch, M.

Koch, R.

Koch, A.

Koch, P.

An improved supersonic, three-dimensional, external, inviscid flow field code
[NASA-CR-3108]
p0286 A79-17807

Koch, L. C.

High heat flux actively cooled honeycomb sandwich structural panel for a hypersonic aircraft
[NASA-CR-2959]
p0502 W79-25410

Koch, W.

Design and fabrication of a radiatively actively cooled honeycomb sandwich panel
[p0387 W79-21433

Hypersonic airframe structures: Technology needs and flight test requirements
[NASA-CB-3130]
p0582 A79-28168

Koch, W.

On the attenuation of sound by three-dimensionally sequenced acoustic liners in a rectangular duct
[NASA-TN-80118]
p0558 W79-27932

Koczen, J. P.

The PLP moving-base flight simulator
[FAA-EH-78-5-3-A]
p0231 A79-16830

Koden, D. G.

Vertical cutoff rigidity and the intensity distribution of cosmic rays near Cape Town
[ASNE PAPER 79-GT-42]
p0340 A79-30521

Koffy, B. L.

Aircraft engine design using experimental stress analysis techniques
[NASA PAPER 79-1793]
p0468 A79-38978

Kopf, W. L.

Aircraft engine design using experimental stress analysis techniques
[p0552 W79-27158

Kopf, W. L.

Effect of rotor tip clearance and configuration on overall performance of a 12.77-centimeter tip diameter axial-flow turbine
[ASNE PAPER 79-GT-42]
p0340 A79-30521

Koga, T.

Effect of rotor tip clearance and configuration on overall performance of a 12.77-centimeter tip diameter axial-flow turbine
[NASA-TM-79025]
p0085 A79-12015

Koga, T.

Cold-air performance of free power turbine designed for 112-kilowatt automotive gas-turbine engine 1: Effect of stator-vane end clearances on performance
[NASA-TN-78056]
p0103 A79-13049

Koga, T.

Cold-air performance of free power turbine designed for 112-kilowatt automotive gas-turbine engine. 2: Effects of variable stator-vane-chord setting angle on turbine
<table>
<thead>
<tr>
<th>Personal Author Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance estimation of partial admission turbines</td>
</tr>
<tr>
<td>Microprocessor-based digital autopilot development for the FBMR-106 Mini-SFV</td>
</tr>
<tr>
<td>Research of the XF3-1 turbofan engine</td>
</tr>
<tr>
<td>Application of Lagrange Optimization to the drag polar utilizing experimental data</td>
</tr>
<tr>
<td>The MIS approach and landing system</td>
</tr>
<tr>
<td>Investigations of the feasibility of using the discrete address beacon system data link for non-ATC communications</td>
</tr>
<tr>
<td>Near-set-shape engine methods emerge</td>
</tr>
<tr>
<td>Aspects of short-takeoff aircraft</td>
</tr>
<tr>
<td>High level mission below sea level</td>
</tr>
<tr>
<td>Second approximation in theory of a finite-span thin wing in a hypersonic gas flow</td>
</tr>
<tr>
<td>Unsteady hypersonic gas flow past a thin finite-span wing</td>
</tr>
<tr>
<td>A method for calculating the potential flow around a system of aerodynamic profiles in an incompressible fluid</td>
</tr>
<tr>
<td>The influence of feedback on the aeroelastic behavior of tilt proprotor aircraft including the effects of crossplane motion</td>
</tr>
<tr>
<td>Validation of scramjet exhaust simulation technique at Mach 6</td>
</tr>
<tr>
<td>Allowing for the wall boundary layer in an axial compressor stage</td>
</tr>
<tr>
<td>An axial compressor end-wall boundary layer calculation method</td>
</tr>
<tr>
<td>Blade-to-blade pressure, temperature, and velocity profiles downstream of a single rotor row at high subsonic speed</td>
</tr>
<tr>
<td>Viscous transonic flows about 3-d wings</td>
</tr>
<tr>
<td>Performance estimation of partial admission turbines</td>
</tr>
<tr>
<td>Operation of long-service-life gas-turbine engines as a function of the technical state</td>
</tr>
<tr>
<td>Long-Life GTE operation based on technical condition</td>
</tr>
<tr>
<td>Fundamentals of the electrical equipment of flight vehicles. Parts 1 &amp; 2</td>
</tr>
<tr>
<td>Aerodynamic improvement of the inlet pipe of a gas turbine</td>
</tr>
<tr>
<td>Theoretical principles of long range navigation systems. I</td>
</tr>
<tr>
<td>Stability and control aspects of the CCY-P104C</td>
</tr>
<tr>
<td>Control and stabilization in aerodynamics</td>
</tr>
<tr>
<td>An analysis of air intaken in the boundary layer</td>
</tr>
<tr>
<td>Fundamental problems and methods for improving systems for planning the development of civil aviation</td>
</tr>
<tr>
<td>Airborne fiber optics manufacturing technology</td>
</tr>
<tr>
<td>Aircraft installation processes</td>
</tr>
<tr>
<td>Inverse mixed problem for a profile with a prescribed velocity distribution on one of its sides and a known thickness distribution</td>
</tr>
<tr>
<td>Influence of the transverse curvature of the lower surface on the conical supersonic flow field on a delta vehicle</td>
</tr>
<tr>
<td>Solution of navigation problems in aircraft onboard systems equipped with digital computer</td>
</tr>
<tr>
<td>Determination of the probability of consequences of aircraft-system malfunctions in the evaluation of flight safety levels</td>
</tr>
<tr>
<td>Determination of the deflection angle of a jet impinging on a reflector with an end plate</td>
</tr>
<tr>
<td>Determination of turning angle of a jet impinging on a bucket with vesor</td>
</tr>
<tr>
<td>Thermal response of composite panels</td>
</tr>
<tr>
<td>Thermochemical characterization of some thermally stable thermoplastic and thermostet polymers</td>
</tr>
<tr>
<td>Thermal response of composite panels</td>
</tr>
</tbody>
</table>
Evaluation of a simplified gross thrust calculation technique using two prototype turbine engines in an altitude facility [NASA TP-1462] p0542 A79-26507


KURYHALS, P. E. Active controls in aircraft design [AGARD-AG-234] p0235 A79-16684
Active controls in aircraft design. Executive summary p0235 A79-16685
Systems implications of active controls p0658 A79-20219

KUTCHER, R. E. Superalloy knife edge seal repair [AD-1057269] p0046 A79-11055

KUTLER, P. A two-dimensional unsteady Euler-equation solver for flow regions with arbitrary boundaries [AGARD-AG-234] p0565 A79-65269

KUTSABA, Z. The chemical stability of kerosene fractions [NASA-TP1482] p0542 1179-26057

KUTTF, I. I. Experimental study of the gasdynamic characteristics of a nozzle guide vane row with air ejection onto the vane surface p0082 A79-16707
Experimental study of the gasdynamic characteristics of a stator cascade with cooling air discharge through the vane surface p0613 A79-84898

KUVANE, C. Optima operating techniques of two-state hypersonic gas tunnel p0060 A79-13982

KUZHERKO, V. A. Installation for studying fatigue strength of materials in acoustic loading p0473 A79-39070

KUZIECHICK, T. Dynamic stability of a flight vehicle laying out an uncollining line p0398 A79-32919

KUZNETSOV, IU. E. Investigation of the profile drag and the mean and pulsation velocities in the wake of wings by means of a laser Doppler anemometer p0020 A79-12151
Approximate calculation of the velocity field and the motion of vortices in the wake of a low-flying biplane p0021 A79-12198
Profile of a nozzle shaping the free-molecule flow intended to investigate air-intakes and cascades p0449 A79-26122
Thermal cycling endurance problems in gas-turbine parts p0266 A79-26838

KUZNETSOV, V. G. The thermal oxidation stability of E-39 lubricant p0068 A79-52500

KUZNETSOV, V. I. Operational reliability of climate and pressure control equipment for passenger aircraft p0012 A79-10850


KYASNAIA, L. V. Accuracy of determination of aromatic hydrocarbon content in jet fuels by the sulfuric acid method p0324 A79-29120

KYSEN, A. C. The aerial relay system - An energy-efficient solution to the airport congestion problem [AIAA PAPER 79-1065] p0610 A79-67921

LABORIE, C. Experimental study of the flight envelope and research of safety requirements for hang-giders p0546 A79-27083


LACEY, T. B. Powered wind tunnel testing of the AF-88 - A straightforward approach pays off [AIAA PAPER 79-0333] p0020 A79-23557
Flight demonstration of the AF-88 V/STOL concept [AIAA PAPER 79-1841] p0684 A79-51249

LADDERAN, A. J. Adverse pressure gradients effects on supersonic boundary layer turbulence [AIAA PAPER 79-1563] p0577 A79-46730

LADSB, C. A. A new airfoil research capability p0359 A79-20057
Review of design and operational characteristics of the 0.3-meter transonic cryogenic tunnel [NASA TP-80123] p0701 A79-32159

LADSEG, R. E. Effects of diffusion factor, aspect ratio and solidity on overall performance of 14 compressor middle stages [NASA TP-1523] p0717 A79-33210

LAFON, P. Experimental studies of unsteady aerodynamics on wind tunnel models of helicopter rotors p0389 A79-32295

LAFRENC, P. Performance of a TAP-2 hydrofoil [AD-8065102] p0443 A79-23261

LAFFER, D. L. AC aircraft electrical systems with rare earth permanent magnet machines p0686 A79-51914
The 150 KVA fan-cooled brushless starter with a safety switch for aircraft systems [AD-8070078] p0710 A79-32868

LAGHME, J. B. Terrain-following radar - Key to low-altitude flight p0620 A79-48686


LABOTTI, G. D. Computer-aided analysis and design of the shape rolling process for producing turbine engine test program [SAE PAPER 790550] p0854 A79-36724

Cranworthy armored crew seat for the UH-60A Black Hawk [AHS 79-10] p0627 A79-49062


LABORG, E. F. C. Guidance accuracy considerations for the microwave landing system L-band precision one p0621 A79-48692

LABRODRE, E. Research conducted by ONERA on the relationship between the behavior and cumulative damage of materials and structures [ONERA TP No. 1978-50] p0156 A79-20121

LABROJER, R. E. The use of panel methods with a view to problems in aircraft dynamics [MLB-NP-77009-0] p0216 A79-15916
Multi-element airfoil design by optimization [MLB-TR-76135-0] p0703 A79-32181

LABOC, T. The powered glider, SZD-45A Ogier p0397 A79-32504

LABROHNE, C. Experimental study of the flight envelope and research of safety requirements for hang-giders p0546 A79-27083

LABOTI, G. D. Computer-aided analysis and design of the shape rolling process for producing turbine engine test program [SAE PAPER 790550] p0854 A79-36724

Cranworthy armored crew seat for the UH-60A Black Hawk [AHS 79-10] p0627 A79-49062


LABORG, E. F. C. Guidance accuracy considerations for the microwave landing system L-band precision one p0621 A79-48692

LABRODRE, E. Research conducted by ONERA on the relationship between the behavior and cumulative damage of materials and structures [ONERA TP No. 1978-50] p0156 A79-20121

LABROJER, R. E. The use of panel methods with a view to problems in aircraft dynamics [MLB-NP-77009-0] p0216 A79-15916
Multi-element airfoil design by optimization [MLB-TR-76135-0] p0703 A79-32181

LABOC, T. The powered glider, SZD-45A Ogier p0397 A79-32504

LABROHNE, C. Experimental study of the flight envelope and research of safety requirements for hang-giders p0546 A79-27083
LAMBERT, E.

Ground effects on USB configurations

LANE, B. B.

Pilot's view of the evolving air transport

LAFFRAY, A. C.

An experimental study of three-dimensional turbulent boundary layer and turbulence characteristics inside a turbomachinery rotor passage

LANCASHIRE, R. W.

Turbulence characteristics in the near wake of a compressor rotor blade

LAMBERT, L.

Mean velocity and decay characteristics of the eddycurrent and stator blade wake of an axial flow compressor

LAM, J. J.

Recent theoretical developments and experimental studies pertinent to vortex flow aerodynamics - With a view towards design

LAMBERT, E. G.

Aerodynamic characteristics at Mach numbers of 1.5, 1.8, and 2.0 of a blended wing-body configuration with and without integral canards

LANDEMA, R. E.

Pressure distributions on three different cruciform aft-tail control surfaces of a wingless missile at Mach 1.60, 2.36, and 3.70

LANE, J. A.

The analysis of engine vibrations

LANCASTER, J. V.

Vortex-lift roll-control device

lanes, B. E.

Theoretical and experimental investigations of stall and separation in the presence of crosswinds

LANE, A. D.

The influence of flow variability on crack growth tracking procedures for transport/bomber aircraft

LANETT, L.

Direct experimental verification of the theoretical model predicting rotor noise generation

LANEWALD, H. G.

Development of a control wheel steering mode and suitable displays that reduce pilot workload and improve efficiency and safety of operation in the terminal area and in windshear

LANZ, J.

The effect of oblique angle of sound incidence, realistic edge conditions, curvature and in-plane panel stresses on the noise reduction characteristics of general aviation-type panels

LARGENT, J.

Operational aspects of remote sensing from aircraft

LAPPERT, L.

Microprocessor-based digital autopilot development for the XSBM-105 Mini-BVP

SIFT - Design and analysis of a fault-tolerant computer for aircraft control

LANE, B. B.

Personnel author index

LAMBERT, E.

Ground effects on USB configurations

LANE, B. B.

Pilot's view of the evolving air transport

LAMBERT, E. G.

Aerodynamic characteristics at Mach numbers of 1.5, 1.8, and 2.0 of a blended wing-body configuration with and without integral canards

LANDEMA, R. E.

Pressure distributions on three different cruciform aft-tail control surfaces of a wingless missile at Mach 1.60, 2.36, and 3.70

LANE, J. A.

The analysis of engine vibrations

LANCASTER, J. V.

Vortex-lift roll-control device

lanes, B. E.

Theoretical and experimental investigations of stall and separation in the presence of crosswinds

LANZ, J.

The effect of oblique angle of sound incidence, realistic edge conditions, curvature and in-plane panel stresses on the noise reduction characteristics of general aviation-type panels

LARGENT, J.

Operational aspects of remote sensing from aircraft

LAPPERT, L.

Microprocessor-based digital autopilot development for the XSBM-105 Mini-BVP

SIFT - Design and analysis of a fault-tolerant computer for aircraft control

LANE, B. B.

Personnel author index
PERSOII AL AUTHOR INDEX

LATTICE, J. P.
[NASA-CP-159603]
p0497 N79-25017

LATTICE, J. P.
Advanced nuclear systems for large aircraft
[AI/A 79-0562]
p0405 N79-33835

LUCAS, G. B.
A gas path performance diagnostic system to reduce
J75-F-17 engine overhaul costs
[ASME P-87-195]
p0602 N79-10267

LUCAS, L. P.
Optoelectronic devices for flight vehicle control
systems
p0185 N79-20665

LUCAS, L. V.
Optoelectronic devices for flight vehicle control
systems
p0185 N79-20665

LATURIE, P. S.
Flight dynamics /2nd revised and enlarged edition/
p0365 N79-31491

LASSER, L.
Research and development activities in Italy in
the field of aerospace structures and materials
[THORD-SP-675]
p0869 N79-24202

LEAGUE, B.
A critical-review of performance monitoring
systems on the basis of the experience obtained
from routine applications
[AI/A 79-7006]
p0327 N79-29381

Transonic temperature distribution in cooled
turbine blades
[AI/A 79-7046]
p0330 N79-29414

LE BOY, F.
Effect of compressor geometry on the unsteady
regimes of a low speed compressor
[ORDA, TP NO. 1978-68]
p0213 N79-24219

LEBOY, B.
Aerodynamic field induced by a jet penetrating a
cross flow at subsonic velocities
[ORDA, TP NO. 1978-81]
p0060 N79-13991

Internal aerodynamics and heat transfer problems
associated to film cooling of gas turbines
[ASME PAPERS 79-07-57]
p0341 N79-30528

LE BRUN, R. H.
Airworthiness of helicopters /Cierra Memorial
Lecture/
p0118 N79-18004

LEACH, J. E., Jr.
Inertia welding of YAR-64 main rotor drive shaft
[AHS 79-32]
p0122 N79-18158

LEACTY, A. C.
Airborne Early Warning Nirolod /Cierra Memorial
Lecture/
p0189 N79-20886

LEAHY, J.
An investigation into the noise interference
problems at Logan Airport, Boston
[AD-4072057]
p0710 N79-32417

LEATMAN, A. L.
E-X combat search and rescue avionics study results
p0620 N79-48684

LEATHERWOOD, J. D.
Development of noise and vibration ride comfort
criteria
p0198 N79-22921

Physical and subjective studies of aircraft
interior noise and vibration
[NASA-TR-80084]
p0445 N79-23754

LEAVITT, L. D.
Longitudinal aeroacoustic characteristics of a
vectored-engine-over-wing configuration at
subsonic speeds
[NASA-TP-5253]
p0712 N79-33164

LEBAUD, J. V.
An X-22A flight experiment to investigate
control-display requirements for the XV-8B VTOL
aircraft
p0332 N79-29488

A review of helicopter control-display
requirements for deaccelerating instrument approach
[AI/A 79-1683]
p0569 N79-45355

Survey of helicopter control/display
investigations for instrument deaccelerating
approach
[NASA-TP-78565]
p0366 N79-20111

An experimental investigation of control-display
requirements for a jet-lift VTOL aircraft in the
terminal area
[AD-4068918]
p0563 N79-28175

LIEBALBERG, J. C.
Viscous-inviscid flow matching: Numerical method
and applications to two-dimensional, transonic
and supersonic flows
p0376 N79-20977

LEBOVITZ, H. A.
AIRA takeoff performance flight test program
p0466 N79-50837

LACIE, R.
Glosotoc aerodynamics: A different perspective:
Description - Applications
[AI/A 79-1650]
p0567 N79-45326

LECNEER, W.
Problems of onboard determination of wind
relationships with optimal filters
[DGMA PAPERS 79-048]
p0520 N79-42374

LECNY, R.
Unsteady rotor blade loading in an axial
compressor with steady-state inlet distortions
p0555 N79-27176

LECRAK, P. R.
A general aviation flight test application of the
on-board computer
[SAE PAPERS 79-0581]
p0453 N79-36718

LECOMTE, R.
Adaptation for the economy or adaptation for
energy conservation
[AI/A 79-77-23]
p0444 N79-23537

LECOPITON, J. C.
Ice protection systems of the Puma
p0134 N79-18684

LEDZ, A. J.
Composite forward fuselage systems integration,
Volume 2
[AD-S065669]
p0494 N79-24998

LEYD, J. P.
Effect of spanwise blowing in the angle-of-attack
regime alpha equals 0 plus 90 deg
[CHERB, TP NO. 1978-80]
p0512 N79-20083

Aerodynamic characteristics of a fighter-type
configuration during and beyond stall
p0613 N79-22003

LEZ-HECHTEL, S.
Thermodynamics of organic compounds
[AD-406564]
p0442 N79-23232

LEZ, A.
An acoustical study of the YV-15 Tilt Rotor
Research Aircraft
[AI/A 79-0612]
p0272 N79-26593

An experimental study of high frequency noise from
serial rotors - Prediction and reduction
p0533 N79-43500

Technology trends and maintenance workload
requirements for the A-7, P-4, and P-14 aircraft
[AD-4070036]
p0701 N79-32153

LEZ, A. C.
Tilt design studies for a Mach 2.2 advanced
supersonic cruise vehicle
[AI/A 79-1814]
p0664 N79-51247

LEZ, B. L.
Experimental measurements of the rotating
frequencies and mode shapes of a full scale
helicopter rotor in a vacuum and correlations
with calculated results
[AI/A 79-16
p0628 N79-49071

LEZ, B.
Study of blade aspect ratio on a compressor front
stage aeroacodynamic and mechanical design report
[NASA-CR-159555]
p0435 N79-23085

LEZ, B. J.
Some observations on the local instability of
orthotropic structural sections
p0800 N79-33861

LEZ, B. R.
Advanced Simulator for Pilot Training (ASPT):
Aerial refueling visual simulation-engineering
[AD-4063203]
p0626 N79-22118

LEZ, J.
Analysis of plume rise from jet aircraft
p0532 N79-43636

Analysis of plume rise from jet aircraft
[CORB-790142-1]
p0669 N79-31204

LEZ, J. B.
A design review of ceramic components for turbine
engines
[ASME PAPERS 79-07-101]
p0396 N79-32462

LEZ, J. D.
Evaluation of interference in the OS9 6 in. by 22
in. transonic airfoil tunnel

D-94
LENG, P. J.

Helicopter transmission vibration and noise reduction program. Volume 3: Evaluation of fiber PF metal-matrix bonding specimens [AD-A066794] p0494 A79-24983

LENG, P. J.

Digital simulation of a three-phase generator p0616 A79-48618

LEPSTER, R.

Two dimensional anemometic probe [AAAP-M7-00-09] p0440 A79-23116

LESBORCH, L. B.

Evaluation of a Low Fidelity Simulator (LFS) for instrument training [AD-A056129] p0346 A79-31902

LESHBERG, I. B.

Development of a 'no adjustment' turboshaft engine [AD-A056739] p0295 A79-17879

LEVY, R. J.

Aircraft hydraulic systems dynamic analysis [AD-A067549] p0550 A79-27129

LEWENTON, J. W.

Design implications of recent gearbox noise and vibration studies p0135 A79-18688

LEWIS, B. T.

Rating helicopter noise p0040 A79-10855

LEVIN, V. A.

Theoretical and experimental investigation of the aerodynamic characteristics of three-dimensional bodies p0528 A79-83166

LEVINE, A. R.

Development of a 'no adjustment' turboshaft engine control system [AHS 79-42] p0632 A79-89094

LEVINE, L. S.

A practical approach to helicopter internal noise prediction p0041 A79-10857

LEVINE, P. H.

Automated OMEGA/VLF monitoring and forecasting for air traffic safety enhancement - A progress report p0077 A79-16164

LEVINSKY, R. S.

Supercritical tests of a self-optimizing, variable-Camber wind tunnel model p0357 A79-20048

LEVITT, K. N.

Integrated Thermal Avionics Design (ITAD) [AD-A061227] p0252 A79-17855

LEVITT, K. M.

SISP - Design and analysis of a fault-tolerant computer for aircraft control p0252 A79-25718

LEVY, L. L., Jr.

On turbulence modeling for unsteady transonic flows [AIAA PAPER 79-0071] p0201 A79-23542

LEWENDORF, J. H.

Flight test techniques for a transonic aircraft p0377 A79-20597

LEWIS, A.

Future aviation fuels fuel suppliers view p0106 A79-13194

LEWIS, C. H.

Parabolized Navier-Stokes solutions for hypersonic viscous flows over blunt cones at large angles of attack p0335 A79-29806

LEWIS, C. J. G.

Helmet mounted display and sight development [AHS 79-17] p0628 A79-49070

LEWIS, D. Z.

Changing criteria in military aircraft design /The 67th Wilbur and Orville Wright Memorial Lecture/ [AIAA PAPER 79-0075] p0135 A79-20432

LEWIS, K. L.

An innovative technique for static and dynamic Y/OTOL testing [AHS 78-42] p0123 A79-18165

LEWIT, G. M.

Turbo-fan design for general aviation - The
LLOYD, A. J. P.

Inertial navigation - a historical account with a description of a modern system

LLOYD, A. J. P.

Integration of air cushion landing system technology into the JINDIVIK remotely piloted vehicle

[AD-A058004]

p0335 A79-29762

LOBODA, L.

Calculation of flow past conical bodies with supersonic leading edges

p0022 A79-12227

LOBODINA, L. F.

Numerical solution of a linear integral equation of the first kind in the inverse problem of symmetric flow past a wing

p0019 A79-12138

LOC, T. P.

Numerical study of unsteady flows of incompressible fluids about airfoils by a combined method of order O(h^2) and O(h^4)

p0248 A79-24829

LOCKE, M. C.

Phosphoric acid non-tank anodize/PANTIE process for repair bonding

p0187 A79-20815

A cyclic load test for environmental durability evaluation of bonded honeycomb structure

p0209 A79-24089

Repair of bonded primary structure

[AD-A0595945]

p0162 A79-13086

LOCKERT, L. B., JR.

High performance composites and adhesives for V/STOL aircraft

[AD-A049611]

p0661 A79-30332

LOCKET, W.

Stability and control aspects of the CV-2/104C

p0659 A79-30234

LOCKSER, R.

System configuration and algorithms design of the inertially aided JTDIS Relative Navigation function

p0622 A79-48716

LOMBARD, C. A.

Directionally solidified blades - Greater strength

p0485 A79-36248

LONG, J. A.

The production function and airframe cost estimation

[AD-A068570]

p0485 A79-23952

LONG, W. S.

Numerical solution of the Navigier-Stokes equations for arbitrary two-dimensional multi-element airfoils

p0295 A79-2004

LOMNER, G.

A status report on the advanced FIREFLY assessment program

[ASME PAPER 78-WA/GT-61]

p0149 A79-19794

LONGWELL, J. P.

Alternative aircraft fuels

p0012 A79-10826

LOPEZ, B.

Advanced braking controls for business aircraft

[SAP PAPER 7906599]

p0555 A79-26371

LOPEZ, B.

The selection of glide slope antenna patterns for use in the frequency assignment process

[AD-A0773167]

p0716 A79-33184

LORD, Y.

Aerodynamics and performance characteristics of wing lift augmentation schemes for use in the frequency assignment process

[AD-A0773167]

p0716 A79-33184

LOPEZ, B.

The selection of glide slope antenna patterns for use in the frequency assignment process

[AD-A0773167]

p0716 A79-33184

LOPPMANN, B.

The Effect of Winglets on the KC-135A Aircraft

[AD-A068324]

p0505 A79-29777

LOREY, L.

Three-dimensional lifting-surface theory for an annular blade row
PERSONAL AUTHOR INDEX

[ASME PAPER 79-GT-182] p0356 A79-32481
A study of inlet conditions for three-dimensional transonic compressor flows
[AD-4062688] p0361 A79-20086

LOWES, R. E.
Supercritical wing design using numerical optimization and comparisons with experiment
[ASIA PAPER 79-0065] p0140 A79-19514
Analysis of a theoretically optimized transonic airfoil
[NASA CR-3065] p0058 A79-13001

LORENZI, G.
Water tunnel visualization of the vortex flows of the F-15
[ sanity 79-25624] p0567 A79-45325
A water tunnel flow visualization study of the F-15
[NASA CR-444878] p0256 A79-18256

LOTTA, J.
Active external store flutter suppression in the T-35 flutter model
p0639 A79-09866
On single-degree-of-freedom flutter induced by activated controls
p0640 A79-09867

LOTTER, K. V.
Intake design and intake/airframe integration for a post-stall fighter aircraft concept
p0415 A79-22027
Aerodynamic problems in engine airframe integration on fighter airplanes
[NASAHF-1359-O] p0483 A79-23936
Dynamic pressure loads in the air induction system of the tornado fighter aircraft
p0554 A79-27168

LOZS, R.
Research and development in the area of fluid mechanics and aerodynamics in the Federal Republic of Germany
[NASA PAPER 78-223] p0183 A79-20481

LONGERBACH, J. A.
Hybrid packaging of integrated circuits for engine inspection
[AD-4062125] p0370 A79-20326

LOUIS, J. F.
Aerodynamics and heat transfer of transonic airfoil blades at off-design angles of incidence
p0214 A79-2495

LOUISER, R. A.
A study of the effect of different can designs on Mark 7 mod 1 arresting gear performance
[AD-405466] p0238 A79-16882

LOTTER, J. R.
Propulsion cycle and configuration commonality considerations for supersonic V/STOL design
[ASME PAPER 78-GT-88] p0070 A79-10764

LOVE, D.
Aircraft wake vortex characteristics from data measured at John F. Kennedy International Airport
[AD-405509] p0158 A79-14026

LOVE, J. A.
Configuration development study of the X-24C hypersonic research airplane
[NASA CR-145274] p0218 A79-15940

LOWELL, D. B.
New materials for future commercial aircraft
[ASIA PAPER 79-1904] p0606 A79-47869
LOWELL, R. A.
Evaluation of a long-endurance-surveillance remotely-piloted vehicle with and without laminar flow control
[NASA CR-159006] p0252 A79-17852

LOWRY, R.
Design and development of the Agusta A109 helicopter
p0639 A79-49815

LOWY, R. J.
Some aspects of helicopter communications
p0311 A79-19464

LOWRY, R. A.
An alternative to pseudo-tone microphones for aircraft flyover noise testing
p0114 A79-17609
An airborne reference noise source for studying airplane flyover noise propagation and measurement
[ASIA PAPER 79-0650] p0270 A79-26258

LOWELL, C. R.
Effect of a chromium-containing fuel additive on hot corrosion
p0261 A79-26586

Aircraft cooling hole plugging by combustion gas impurities of the type found in coal derived fuels
[NASA CR-79076] p0370 A79-20265

LOWT, D. N.
A study of structural concepts for low radar cross section /LRCS/ fuselage configurations
p0013 A79-10908

LOWT, R. S., III
Optical in situ versus probe measurements of nitric oxide concentration as a function of axial position in a combustor exhaust
p0988 A79-25025

LOWSON, J. V.
Future advanced technology rotorcraft
[ASIA 79-070S] p0276 A79-27366

LOY, S. L.
Research on visual display integration for advanced fighter aircraft
[AD-4069065] p0653 A79-30184

LO, P.
Recent advances in the solution of three-dimensional flow over wings with leading edge vortex separation
[ASIA PAPER 78-02826] p0020 A79-23562

LO, P.-J.
Simplified calculation method for subsonic loads on wing-body combinations
p0507 A79-60200

LOB tess, J. F.
Characteristics of aeroelastic instabilities in turboachinery - NASA full scale engine test results
[ASIA 79-7811] p0326 A79-29386
Experimental evaluation of the effect of inlet distortion on compressor blade vibrations
p0361 A79-30558
Experimental evaluation of the effect of inlet distortion on compressor blade vibrations

Lucas, E. J.
Engine-aircraft afterbody interactions - Recommended testing techniques based on 77-17 experience
[NASA PAPER 79-1829] p0608 A79-47903

Lucas, J. P.
The technology of aeroelastic instabilities in turbomachinery - NASA full scale engine test results
[NASA TR-79085] p0226 A79-16300
Characteristics of aeroelastic instabilities in turboachinery - NASA full scale engine test results

Lucas, J. L.
Establishment of manufacturing method and technology for the fabrication of helicopter main rotor blade spars by continuous seam diffusion bonding titanium sheet material
p0582 A79-28170

Lucx, J. W.
Investigation of the use of ceramic material in aircraft engine bearings
[AD-4070631] p0718 A79-33214

Lucx, E.
Operational evaluation of an optical infrared Airborne Proximity Warning Indicator (APWI)
[AD-4073178] p0718 A79-33181

Lucx, J.
Longitudinal dynamic stability of a hovering helicopter with a sling load
p0561 A79-44094

Lucx, R.
Recent theoretical developments and experimental studies pertinent to vortex flow aerodynamics - With a view towards design
p0017 A79-11599

Subsonic longitudinal and lateral aerodynamic characteristics for a systematic series of strike-wing configurations
[NASA TM-1648] p0359 A79-20063
Flow visualization studies of a general research fighter model employing a strike-wing concept at subsonic speeds
[NASA TM-80057] p0649 A79-30147

Ludington, D.
Real time compression of video signals
p0622 A79-49712
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LUDWIG, E. P.</td>
<td>A rotating stall control system for turbojet engines [ASME PAPER 78-GT-115] p0007 79-10757</td>
</tr>
<tr>
<td>LUEBCKE, B. H.</td>
<td>Wind tunnel model study of the hot exhaust plane from the compressor research facility at Wright-Patterson Air Force Base, Ohio. [ASME PAPER 79-GT-166] p0296 79-32405</td>
</tr>
<tr>
<td>LUDWIG, E. P.</td>
<td>Gas path sealing in turbine engines p0046 79-11057</td>
</tr>
<tr>
<td>LUEBCKE, B. H.</td>
<td>Self-acting shaft seals p0047 79-11070</td>
</tr>
<tr>
<td>LUEBCKE, B. H.</td>
<td>Wear of seal materials used in aircraft propulsion systems p0076 79-27103</td>
</tr>
<tr>
<td>LUES, J.</td>
<td>Effect of tip shape on blade loading characteristics for a two-bladed rotor in hover [AHS 79-1] p0625 79-49054</td>
</tr>
<tr>
<td>LUES, J.</td>
<td>Dynamic response of lift fans subject to various backpressures [AD-1057292] p0160 79-14047</td>
</tr>
<tr>
<td>LUTHERING, G.</td>
<td>Influence of thermomechanical treatment on microstructure and mechanical properties of high-strength aluminum alloys [DLR-FB-77-50] p0048 79-11203</td>
</tr>
<tr>
<td>LUDMINS, B. E.</td>
<td>An approach to optimum subsonic inlet design [ASME PAPER 79-GT-51] p0341 79-30527</td>
</tr>
<tr>
<td>LUDIK, T. J.</td>
<td>An approach to optimum subsonic inlet design [NASA-79-97051] p0365 79-12020</td>
</tr>
<tr>
<td>LUKASHEVIC, A. B.</td>
<td>Dynamic response of lift fans subject to various backpressures [AD-1057292] p0160 79-14047</td>
</tr>
<tr>
<td>LUDWIG, E. P.</td>
<td>Parameters of three-dimensional flow past a wing near the free surface of a ponderable fluid [NASA CP-3129] p0426 79-22706</td>
</tr>
<tr>
<td>LUDWIG, E. P.</td>
<td>Fibre-composite reinforcement of cracked aircraft structures: Thermal-stress and thermal-fatigue studies p0111 79-17018</td>
</tr>
<tr>
<td>LUND, G. C.</td>
<td>Acoustic efficiency of boundary-layer transition [AD-1062171] p0361 79-22085</td>
</tr>
<tr>
<td>LUNDEN, C. D.</td>
<td>High powered UHF slide screw tuner for antenna breakdown measurements p0299 79-32190</td>
</tr>
<tr>
<td>LUNDBERG, D. A.</td>
<td>Low efficiency control measures for jet engine test cells [AD-8062665] p0384 79-21071</td>
</tr>
<tr>
<td>LUNDBERG, D. A.</td>
<td>Realization of a helicopter-oriented real-time data system for research, experimental, and prototype flight testing [AHS 79-50] p0632 79-49102</td>
</tr>
<tr>
<td>LUPOFF, J.</td>
<td>Four jets for short-haul work BAE 146 p0408 79-34922</td>
</tr>
<tr>
<td>LUSCHNITZ, B.</td>
<td>New approaches concerning the implementation of radar target extractors with the aid of very fast microprogrammable data processors p0265 79-26574</td>
</tr>
<tr>
<td>LUSCHNITZ, B.</td>
<td>Aerodynamic noise theory p0434 79-23378</td>
</tr>
<tr>
<td>LUSTY, A. E., JR.</td>
<td>Jet noise: A status report p0434 79-23379</td>
</tr>
<tr>
<td>LUTHER, E. H.</td>
<td>A simulator study of aircraft ground-run handling in the Pomis Research Simulator – Some results and experiences p0259 79-26498</td>
</tr>
<tr>
<td>LUTHER, E. H.</td>
<td>Application of an extended Kalmus filter to an advanced fire control system p0070 79-15018</td>
</tr>
<tr>
<td>LUTZ, D. A.</td>
<td>Influence of jet fuel on permeation and flammability characteristics of graphite epoxy composites [AD-8068586] p0585 79-28245</td>
</tr>
<tr>
<td>LUTZ, B. B.</td>
<td>Environmental vibration testing of helicopter stores and equipment to the procedures outlined in MIL-STD-810C [AHS 78-20] p0121 79-18146</td>
</tr>
<tr>
<td>LUTZ, B. B.</td>
<td>In-flight three-dimensional boundary layer and wake measurements from a swept supercritical wing p0352 79-20002</td>
</tr>
<tr>
<td>LUST, M.</td>
<td>Applicability of certain plastics in aviation industry from viewpoint of toxicology p0212 79-24195</td>
</tr>
<tr>
<td>LUX, D. P.</td>
<td>Auxiliary gas turbine engines for aircraft p0185 79-20672</td>
</tr>
<tr>
<td>LYN, L. I.</td>
<td>Minimum expected cost control of linear systems with uncertain parameters – Application to remotely piloted vehicle flight control systems [AIAA 79-1785] p0157 79-45387</td>
</tr>
<tr>
<td>LYNCH, B. G.</td>
<td>Cockpit displays and the growing role of the pilot in the ATC system p0266 79-26875</td>
</tr>
<tr>
<td>LYNCH, B. G.</td>
<td>Recent applications of advanced computational methods in the aerodynamic design of transport aircraft configurations p0153 79-20100</td>
</tr>
<tr>
<td>LYNCH, B. G.</td>
<td>Helicopter technology for the year 2000 p0070 79-16229</td>
</tr>
<tr>
<td>LYNCH, B. G.</td>
<td>Helicopter noise standards – Another point of view: A national approach to rotorcraft noise regulation p0135 79-18667</td>
</tr>
<tr>
<td>LYNCH, B. G.</td>
<td>New concepts in aircraft journal bearings [AD-A066819] p0598 79-29520</td>
</tr>
<tr>
<td>LYNCH, B. G.</td>
<td>Advanced technology fuel mass flowneter [AD-8063963] p0424 79-22108</td>
</tr>
<tr>
<td>LYNCH, B. G.</td>
<td>Boundary layer induced secondary flows due to wing-body interference [AIAA PAPER 79-0140] p0349 79-17451</td>
</tr>
<tr>
<td>LYNCH, B. G.</td>
<td>Parameters of three-dimensional flow past a wing near the free surface of a ponderable fluid [NASA CP-3129] p0426 79-22706</td>
</tr>
<tr>
<td>LYNCH, B. G.</td>
<td>Fibre-composite reinforcement of cracked aircraft structures: Thermal-stress and thermal-fatigue studies p0111 79-17018</td>
</tr>
<tr>
<td>LYNCH, B. G.</td>
<td>Study of aerodynamic technology for VSTOL fighter/attack aircraft, volume 1 [NASA-79-152128] p0103 79-10025</td>
</tr>
<tr>
<td>LYNCH, B. G.</td>
<td>Acoustic efficiency of boundary-layer transition [AD-1062171] p0361 79-22085</td>
</tr>
<tr>
<td>LYNCH, B. G.</td>
<td>High powered UHF slide screw tuner for antenna breakdown measurements p0299 79-32190</td>
</tr>
<tr>
<td>LYNCH, B. G.</td>
<td>Low efficiency control measures for jet engine test cells [AD-8062665] p0384 79-21071</td>
</tr>
<tr>
<td>LYNCH, B. G.</td>
<td>Realization of a helicopter-oriented real-time data system for research, experimental, and prototype flight testing [AHS 79-50] p0632 79-49102</td>
</tr>
<tr>
<td>PERSONAL AUTHOR INDEX</td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td></td>
</tr>
<tr>
<td>HABBSINGH, E. A.</td>
<td>EXPERIMENTAL INVESTIGATION OF THE AERODYNAMIC CHARACTERISTICS OF A WING IN A JET FLOW</td>
</tr>
<tr>
<td>HABIT, W. G.</td>
<td>THE USE OF SOUND ABSORBING WALLS TO REDUCE DYNAMIC INTERFERENCE IN WIND TUNNELS</td>
</tr>
<tr>
<td>HABERDIES, B.</td>
<td>NUMERICAL ESTIMATION OF CORRECTED TRANSONIC LOADS</td>
</tr>
<tr>
<td>HACK, E. D.</td>
<td>THE ROLE OF THREE-DIMENSIONAL FLOW ANALYSIS IN THE DESIGN OF TURBOMACHINERY</td>
</tr>
<tr>
<td>HACKER, R. D.</td>
<td>AERODYNAMICS OF SPINNER CONTROL DEVICES</td>
</tr>
<tr>
<td>HACKER, R. J.</td>
<td>SOME EFFECTS OF APPLYING SONIC BOOM MINIMIZATION TO TRANSONIC CRUISE AIRCRAFT DESIGN</td>
</tr>
</tbody>
</table>

2-101
NARROW, R. G.

estimation for USAF aircraft systems
[AD-A064333]

NARROW, R. G.
Flight Dynamics Laboratory at SLL
[SAND-78-8240]

NARROW, J.
Airport project Munich II - Aspects on the
economic utilization of the airport area under
consideration of the bird strike problem
p0325 A79-29357

NARB, P. B.
Visual simulation systems
p0071 A79-15153

NARB, R.
Wind tunnel and flight test of the IV-15 Tilt
Rotor Research Aircraft
[AEROSPACE PAPER 79-0576]
p0633 A79-49105

NARQER, D. J.
The development of high lift, single-component
airfoil sections
p0343 A79-30922

NARQER, J.
Longhorns into service
p0212 A79-24183

NARQ, D.
Bird strike on medium/large civil fan engines
p0326 A79-29364

NARQ, J. L.
Evaluation of aircraft equipment monitoring
devices, procedures, and techniques
[AD-A055986]
p1613 A79-10492

NARQ, W. B.
An analysis of bolter-hole spacing in aircraft
carrier landings
[AEROSPACE PAPER 78-0845]
p0593 A79-29176

NARQSH, G. F.
Jet flow interactions
p0153 A79-20089

NARTILLER, J. K.
20 hp mini-EP demonstrator engine programs
[ASME PAPER 78-07-200]
p0011 A79-10820

NARTSM, R.
An integrated analytical and experimental
investigation of helicopter hub drag
[ADM 79-53]
p0626 A79-89058

NARTSM, R.
Heat transfer to turbine blades, with special
reference to the effects of mainstream turbulence
[AEROSPACE PAPER 79-07-26]
p0339 A79-30514

NARTSM, C. J.
The development and evaluation of a q seat for a
high performance military aircraft training
simulator
p0225 A79-15999

NARTSM, C. J.
The design impact of power-augmented ram
technology on large energy efficient aircraft
[AIAA PAPER 79-1564]
p0684 A79-51025

NARQ, D. W.
The calculation of optimal aircraft trajectories
[NPL-PNACS-11/18]
p0541 A79-26051

NARTSM, E. B.
Design of a spread-spectrum navigation receiver
/Havstar/
p0055 A79-13208

NARTSM, E. L.
Contributions of platform motion to simulator
training effectiveness. Study 1: Basic contact
[AD-A0508376]
p0105 A79-10366

NARTSM, E. L.
Contributions of platform motion to simulator
training effectiveness. Study 2: Aerobatics
[AD-A064305]
p0488 A79-23985

NARTSM, G. L.
Aerodynamic design and analysis of the AST-200
supersonic transport configuration concept
[NASA CB-159501]
p0417 A79-22046

NARTSM, H. S.
Z-3a neytry /AWACS/ ATPG
p0623 A79-48873

NARTSM, H.
Smoke hazards from aircraft materials
p0187 A79-20856

NARTSM, W. C.
High altitude altimeter flight test
[AD-A066904]
p0542 A79-26054

NARTSM, W. L.
A case study of computer evolution in air defense,
command and control, and air traffic control
[AIAA 79-1914]
p0658 A79-54389

HARTMANN, G.
Some theoretical and experimental investigations
of stresses and vibrations in a radial flow rotor
p0553 A79-27158

HARTZEL, J., III
Grating lobe control in limited scan arrays
p0337 A79-18714

HARTISOVIC, E. N.
The analysis of propellers including interaction
effects
[SAT PAPER 700576]
p0553 A79-36712

HARKAPIEC, J.
Dynamics of controlled longitudinal motion of an
airplane with a variable-geometry wing
p0251 A79-25517

HARP, J. G.
On turbulence modeling for unsteady transonic flows
[AIAA PAPER 79-0071]
p0201 A79-23542

HARPY, J.
Dynamic stability of a flight vehicle laying out
an uncoiling line
p0398 A79-32919

HARE, E. J.
Helicopter internal noise reduction research and
development application to the SA 360 and SA 365
Dauphinch
p0041 A79-10861

HARE, K. W.
Habitation correction factors for aircraft gas
turbine idle emissions
[AD-A069240]
p0672 A79-31218

HARTSO, B. N.
Preliminary noise tradeoff study of a Mach 2.7
air-cruise aircraft
[NASA-TP-78732]
p0388 A79-21868

HARQ, J. G.
Noise and performance calibration study of a Mach
2.2 supersonic cruise aircraft
[NASA-TP-80043]
p0388 A79-21869

HARQ, J.
Jet noise and performance comparison study of a
Mach 2.55 supersonic cruise aircraft
p0569 A79-28982

HARQ, J.
The equipment-system interface in an antiaircraft
helicopter at night
p0657 A79-30211

HARQ, E. H.
Lateral noise-attenuation results from flyovers of
three transport aircraft
[AIAA PAPER 79-0651]
p0318 A79-28966

HARQ, E.
Theoretical prediction of dynamic stall on
oscillating airfoils
[AMS 79-62]
p0125 A79-18183

HARQ, E.
Application of the AMI C sub 1 sub max prediction
method to a number of airfoils
p0358 A79-20052

HARQ, E.
Helicopter flow field analysis
[AD-A065942]
p0702 A79-32174

HARQ, L. A.
Effect of inertia of blower on stability of air-
chuff vehicle
p0561 A79-40483

HARQ, R. A.
Recent developments in sensors for the gas turbine
engine
[ASME PAPER 78-07-200]
p0007 A79-10760

HARQ, J.
Aerospace and military - Progress in space
structure research, aircraft landing systems,
integrated optics, and digital communications
p0185 A79-20559

HARQ, P.
Towards a realistic structural analysis/design
system
p0199 A79-22946

HARQ, E.
Digital Avionics Information System (DAIS):
development and demonstration
[AD-A058438]
p0593 A79-29181

HARQ, R. A.
Opportunities for supersonic performance gains
through non-linear aerodynamics
[AIAA PAPER 79-1527]
p0576 A79-46710

HARQ, W. B.
An automated procedure for computing the
three-dimensional transonic flow over wing-body
combinations, including viscous effects.
Volume 2: Program users manual and code
description
[AD-A054996]
p0087 A79-12027
An appraisal of models used in life cycle cost estimation for USAF aircraft systems

Separation of core noise and jet noise

Directions for developing an air cargo system planning model

Precision controllability of the F-15 airplane

Asymmetric stator interaction noise

Manned air combat simulation: A tool for design development and evaluation for modern fighter weapon systems and training of aircrews

Experimental study of an asymmetric thermal wake

Jet cooling at the rim of a rotating disk

The Rockwell International Sabreliner-65: Case study in aircraft design

Determination of the geometrical parameters and position of the nose flap at the root section of a swept wing on the basis of wind tunnel data. I

Selecting the geometrical parameters and location of the nose flap at the wing root profile of a swept wing on the basis of wind tunnel data. II

Selection of geometric parameters and location of nose flap on swept wing root profile from tunnel test data. I

Selection of the geometrical parameters and position of a nose flap on the root profile of a swept wing using tunnel test data. II

Experimental investigation of the endurance of airplane fin sections in acoustic loading

Installation for studying fatigue strength of materials in acoustic loading

Method for design and manufacture of the stage of a radial compressor

Oil squeeze film dampers for reducing vibration of aircraft gas turbine engines

On the balancing convergence of flexible rotors, with special reference to asymmetric rotors

Linear boundary layer with foreign gas injection on a conical body

Post-acting valves for use in shock tubes. II - Format of shock waves

In-flight captive store loads compared with wind-tunnel and mathematical simulations

In-flight measurements of captive loads on a store as compared with wind tunnel and mathematical simulations

The development and evaluation of a g meat for a high performance military aircraft training simulator

A summary report on store heating technology

Investigation of the transonic drag characteristics for non-slender wing-body combinations and their equivalent axisymmetric bodies at zero lift

Analytical designing of flight-vehicle hydraulic systems

Depinning capacity of paired shrouded turbine blades in relation to shroud contact conditions

Evaluation of an ejector-powered engine simulator at transonic Mach numbers

Nondestructive evaluation of fiber reinforced polymer composites: A state-of-the-art survey

A comparison of the aerodynamic characteristics of eight sailwing airfoil sections

Design development of the 727-100

Recent advances in indirect lightning effects research

Identification of voltage transients on aircraft cabling under LTA excitation

Aerodynamic development of a high pressure leading edge blowing boundary layer control system

A multi microprocessor flight control system design principles

A multi microprocessor flight control system - Architectural concepts

Propulsion system and airframe integration consideration for advanced air-to-surface aircraft

Repair of bonded primary structure
PERSONAL AUTHOR INDEX

HAVER, H. J.
- environment of Army aircraft
- Large lighter-than-air vehicles
- [AIAA 79-0097]

HAYES, T. C.
- Helicopter bearing failure detection utilizing shock pulse techniques
- [AD-A057308]

HAYEK, J. R.
- Composite rotor hub, I, II
- Design, fabrication and laboratory testing of a helicopter composite main rotor hub
- [AD-A060313]

HAYFIELD, J.
- Manufacturers developing fuel-efficient engines
- Optimum tailplane design for sailplanes
- p0450 A79-36180

HAYES, T. B.
- An experimental study of endwall and airfoil surface heat transfer in a large scale turbine blade cascade
- p0352 A79-32375

HAYMON, J. A.
- Feasibility study of transit photon correlation anemometer for Ames Research Center unitary wind tunnel plan
- [NASA-Ch-152238]
- p0367 A79-20180

HAYS, J. A.
- A three-channel high-resolution TV image generation system
- p0281 A79-28160

HAYS, J. C.
- Small laminated axial turbine hot-rig test program
- [AIAA-10662]
- p0234 A79-16856

HEIM, L. L.
- Overall aerodynamic characteristics of conical and delta wings at supersonic speeds
- Investmentigation of the regimes of flow past the upper surfaces of delta wings with shock waves separated from the leading edges
- [NASA-Ch-159110]
- p0410 A79-35110
- Overall aerodynamic characteristics of conical and delta wings at supersonic speeds
- p0601 A79-67012

HEIZHUB, J. T.
- Analysis of visual detection performance: Fall 1978 experiment
- [AD-A065116]
- p0322 A79-23361

HEZAR, N. J.
- Strain gage system evaluation program
- [NASA-Ch-159486]
- p0307 A79-19314

HELEN, V. V.
- Iterative method of aircraft wing strength calculation taking into account the effect of deformations on distribution of aerodynamic forces
- p0622 A79-12213

HESTER, R. S.
- A fundamental criteria for the application of rotor casing treatment
- Surge-induced structural loads in gas turbines
- [ASME PAPER 79-GT-91]
- p0392 A79-32368

HEMMs, F. R.
- Integrated ATC development - The next decade: A Safety Board viewpoint
- p0204 A79-23587

HECMOS, B. W.
- Air Force applications for optical rotation rate sensors
- p0261 A79-28122

HECLLESTER, J. D.
- Design guide for fighter CCV flight evaluations
- p0659 A79-30235

HECZELL, J. G.
- Measured and predicted noise of the AVCO-Lycoming TF-102 turbofan engine
- [AIAA PAPER 79-0654]
- Evaluation of two inflow control devices for flight simulation of fan noise using a JT15 engine
- [AIAA PAPER 79-0654]
- Analysis of radiation patterns of interaction tones generated by inlet cowl in the JT15 engine
- [AIAA PAPER 79-0581]
- p0272 A79-26594

HEIDDAY, N. C.
- Measurement and predicted noise of the AVCO-Lycoming TF-102 turbofan engine
- [NASA-TM-79069]
- Evaluation of two inflow control devices for flight simulation of fan noise using a JT15 engine
- [NASA-TM-79072]

HEKLOW, J. J.
- Integration of air cushion landing system technology into the JHMIVII remotely piloted vehicle
- [AD-A0558004]
- p0092 A79-12075

HEKLAIT, R. B.
- Standard avionic module study
- [AIAA 106149]
- p0233 A79-16846

HEKNO, R. J.
- Bifurcation point of A/D converters - Present approaches and recommendations for improved BIT effectiveness
- p0616 A79-48621

HEKIN, R. A.
- Analysis and evaluation of current MIL-STD-1553 digital avionics architecture as the basis for advanced architectures using MIL-STD-1553B
- p0616 A79-48629

HEKIN, T. R., J.
- Exploring team avionics systems by simulation
- p0665 A79-38882

HEKIN, J. E.
- A spectral analysis of thunderstorm turbulence and jet transport landing performance
- p0278 A79-27576

HEKIN, J. E.
- Repair of bonded primary structure
- [AD-A055985]
- p0162 A79-14086

HEKLESHALL, D. K., J.
- Composite applications at Bell Helicopter
- p0453 A79-36713

HEKLISTON, C. W.
- Autoignition of hydrogen injected transverse to a supersonic airstream
- [NASA PAPER 79-1239]
- p0475 A79-39818

HEKLOD, J. L., D.
- Wind-tunnel test results of a full-scale multicyclic controllable twist rotor
- [AHS 78-60]
- p0412 A79-18181
- The promise of multicyclic control
- [NASA-TM-78621]
- p0663 A79-31137

HEKLOSER, L. L.
- Techniques for fault isolation ambiguity reduction
- p0255 A79-08991

HEKLOUG, J. B.
- A design perspective on new technologies for general aviation
- p0636 A79-49486

HEKEL, P.
- Construction of a refrigerated wind tunnel with a supercooled droplet production system for research on icing
- p0118 A79-17595

HEKET, R. D.
- AN route design-terminal area design procedures and transition area design guidelines
- [PAA-BD-78-61]
- p0291 A79-17941

HEKEL, R. D.
- Digital flight control redundancy management system development program
- [NASA 79-1701]
- p0569 A79-45356
- Digital flight control reliability - Effects of redundancy level, architecture and redundancy management technique
- [NASA 79-1893]
- p0573 A79-45418

HEKEL, R. B.
- The analysis of propellers including interaction effects
- [AIAA PAPER 790576]
- p0534 A79-36712
- Aerodynamics, aeronautics, and flight mechanics
- [NASA-CR-158111]
- p0233 A79-16851
- A computer model for determining weapon release parameters for a helicopter in non-accelerated flight
- [AD-A062155]
- p0364 A79-20106
<table>
<thead>
<tr>
<th>Author</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mccomb, J. E.</td>
<td>In-flight refuelling and the world of the eighties /Second Sir Alan Cobham Memorial Lecture/</td>
</tr>
<tr>
<td>Mccomb, R. S.</td>
<td>The analysis and identification of flux-induced voltage transients on aircraft lines with application to the Lightning-Transient/Analysis/LTA/ problem</td>
</tr>
<tr>
<td>Mccomb, V. S.</td>
<td>The estimation of induced-voltage peak magnitude and energy level under LTA/EMP excitation of low-loss aircraft cabling</td>
</tr>
<tr>
<td>Mccomb, G. A.</td>
<td>Design and development of a hybrid composite rotor blade for the circulation control rotor system</td>
</tr>
<tr>
<td>Mccomb, C. H.</td>
<td>Impact of advanced technologies on aircraft design</td>
</tr>
<tr>
<td>Mccomb, T. B.</td>
<td>Early identification of high-maintenance helicopters</td>
</tr>
<tr>
<td>Mccomb, D. L.</td>
<td>A new light twin using bonded metal construction</td>
</tr>
<tr>
<td>Mccomb, D. L.</td>
<td>Effects of duration and other noise characteristics on the annoyance caused by aircraft-flyover noise</td>
</tr>
<tr>
<td>Mccomb, E. H.</td>
<td>The future - Airs III</td>
</tr>
<tr>
<td>Mccomb, J. E.</td>
<td>The approach to crew protection in the crash environment for the YAH-64</td>
</tr>
<tr>
<td>Mccomb, A. B.</td>
<td>Ejection systems in the year 2000</td>
</tr>
<tr>
<td>Mccomb, M. J.</td>
<td>F-15 flight simulator: Development and analysis of computer scoring algorithm</td>
</tr>
<tr>
<td>Mccomb, D. J.</td>
<td>The application of a design verification system and accelerated simulations testing to gas turbine engine development</td>
</tr>
<tr>
<td>Mccomb, R. L.</td>
<td>Bonding and durability</td>
</tr>
<tr>
<td>Mccomb, K. W.</td>
<td>An advanced guidance and control system for rescue helicopters</td>
</tr>
<tr>
<td>Mccomb, J. F.</td>
<td>Escape system trajectory sensitivity analysis</td>
</tr>
<tr>
<td>Mccomb, D. P.</td>
<td>Build 1 of an accelerated mission test of a TP41 with block 76 hardware</td>
</tr>
<tr>
<td>Mccomb, G.</td>
<td>A computer-aided design method for axial flow pumps and fans</td>
</tr>
<tr>
<td>Mccomb, G. B.</td>
<td>An artificial viscosity method for the design of supercritical airfoils</td>
</tr>
<tr>
<td>Mccomb, K. R.</td>
<td>A small aircraft gust-probe system for studies of boundary layer convectics and transport</td>
</tr>
<tr>
<td>Mccomb, J. E.</td>
<td>The F/A-18 challenge - Readiness and low total cost</td>
</tr>
<tr>
<td>Mccomb, Y. R.</td>
<td>Reliability and maintainability contribution to Hornet mission success</td>
</tr>
<tr>
<td>Mccomb, J. E.</td>
<td>Improvements to the PATOLA computer program including nosewheel steering: Supplemental instruction manual</td>
</tr>
<tr>
<td>Mccomb, R. G.</td>
<td>Smoke hazards from aircraft materials</td>
</tr>
<tr>
<td>Mccomb, E. H.</td>
<td>Characterizing expansive soils for airport</td>
</tr>
</tbody>
</table>
MENDEHALL, B. B.
PERSONAL AUTHOR INDEX

Design, development, and testing of an active
Casualty evacuation by helicopter

Making fluid flows visible

Recent progress in aircraft sink rate measurement

Identification and adaptive control of a
Subsonic base pressure fluctuations

Evaluation of the navigation performance of
Design of a flexible aircraft data acquisition

Low-cost inertial navigation for moderate-g missions

Identification of unsteady effects in lift buildup

LED instrument approach instruction display

NOVA-2S, a stiffened panel extension of the NOVA-2
Lifting-line theory of oblique wings in transonic flow

Most rational linearization of nonlinear unsteady
heat conduction problems

The aeroelastically conformable rotor concept

Identification and dual adaptive control of a
turboshaft engine

Design of a flexible aircraft data acquisition

Recent progress in aircraft sink rate measurement

Evalution of the navigation performance of
shipboard-UTOL-landing guidance systems

Subsonic base pressure fluctuations

Making fluid flows visible

Casualty evacuation by helicopter

Design, development, and testing of an active
flatter margin augmentation system for a
commercial transport airplane

Design and fabrication of advanced titanium
structures

Application of the isothermal square bend process

to F14 wing beams

A study of smoke movement in an aircraft fuselage

Low cost expendable engine

Implementation of flight control in an integrated
guidance and control system

Synthetic image generation for visual simulation
in training simulators using the Tornado visual
simulator as an example

Jet cooling at the rim of a rotating disk

Aerocoustic design of the Prop Pan

Heat treatment studies of aluminum alloy forgings
of the AE 70.61 type. Fatigue crack propagation performance under maneuver spectrum loading

Determination of the flax size in turbine rotors
by ultrasonics - A necessary requirement for
fracture-mechanics test evaluation

Eurosimiele - An example of cooperation with
respect to missiles

A design review of ceramic components for turbine engines

A cumulative fatigue damage model for gas turbine -
enumerical approach. Fatigue analysis in aero engine disks subjected to complex- mission loading

Structural life prediction and analysis technology

Concepts for reducing exhaust emissions and fuel
consumption of the aircraft piston engine

Turbojet wake measurements with a laser velocimeter

A cumulative fatigue damage model for gas turbine engine disks subjected to complex mission loading

A laser velocimeter flow survey above a stalled wing

Eurorissile - An example of cooperation with
respect to missiles

Aerospace-vehicle design (IPAD) : Reference
design process

Aeroacoustic design of the Prop Pan

Implementation of flight control in an integrated
guidance and control system

Guidance and control system

Numerical study of the induction of porous walls
of the working section of a low-velocity wind
tunnel

Implementation of flight control in an integrated
guidance and control system

Eurorissile - An example of cooperation with
respect to missiles

Aerospace-vehicle design (IPAD) : Reference
design process

Numerical study of the induction of porous walls
of the working section of a low-velocity wind
tunnel

Aerospace-vehicle design (IPAD) : Reference
design process
<table>
<thead>
<tr>
<th>PERSONAL AUTHOR INDEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>NIEBECK, B. R.</td>
</tr>
<tr>
<td>Female surface pressure measurements of</td>
</tr>
<tr>
<td>a helicopter wind-tunnel model with a 3.15-meter diameter single rotor</td>
</tr>
<tr>
<td>[AIAA PAPER 79-1043]</td>
</tr>
<tr>
<td>NIECHOWIC, B. M.</td>
</tr>
<tr>
<td>Optical excitation of amplitude-direction-finder antennas operating on the basis of the comparison method</td>
</tr>
<tr>
<td>[AIAA PAPER 79-2400]</td>
</tr>
<tr>
<td>NISANDOL, L. R.</td>
</tr>
<tr>
<td>Laminar flow stabilization by surface cooling on hydrogen fueled aircraft</td>
</tr>
<tr>
<td>[AIAA PAPER 79-1063]</td>
</tr>
<tr>
<td>NISANDRE, J.</td>
</tr>
<tr>
<td>Vortex pattern at the upper surface of a swept wing with a high angle of attack</td>
</tr>
<tr>
<td>[ONERA, TF N°. 1976-124]</td>
</tr>
<tr>
<td>Vortex pattern development on the upper surface of a swept wing at a high angle of attack</td>
</tr>
<tr>
<td>[NASA-Th-75377]</td>
</tr>
<tr>
<td>Vortex pattern developing on the upper surface of a swept wing at high angle of attack</td>
</tr>
<tr>
<td>[AIAA PAPER 79-19914]</td>
</tr>
<tr>
<td>NISERBOV, A. L.</td>
</tr>
<tr>
<td>Optimization of body shape at small Reynolds numbers</td>
</tr>
<tr>
<td>[AIAA PAPER 79-13944]</td>
</tr>
<tr>
<td>NISERNO, W.</td>
</tr>
<tr>
<td>Critical assessment of emissions from aircraft piston engines</td>
</tr>
<tr>
<td>[AIAA PAPER 79-0646]</td>
</tr>
<tr>
<td>NISRIDGE, V. F.</td>
</tr>
<tr>
<td>Introduction to the computer-aided design of flight vehicles</td>
</tr>
<tr>
<td>[AIAA PAPER 79-7810]</td>
</tr>
<tr>
<td>NISHEV, V. F.</td>
</tr>
<tr>
<td>Optimal control of helicopter longitudinal motion on the basis of an operational algorithm</td>
</tr>
<tr>
<td>[AIAA PAPER 79-10678]</td>
</tr>
<tr>
<td>MITCHELL, A. R.</td>
</tr>
<tr>
<td>Direct force mode flight control for a vectored lift fighter</td>
</tr>
<tr>
<td>[AIAA PAPER 79-1744]</td>
</tr>
<tr>
<td>MITCHELL, C. M.</td>
</tr>
<tr>
<td>The F-18 challenge - Readiness and low total cost</td>
</tr>
<tr>
<td>[AIAA PAPER 79-15402]</td>
</tr>
<tr>
<td>MITCHELL, J. G.</td>
</tr>
<tr>
<td>A new facility for structural engine testing</td>
</tr>
<tr>
<td>[AIAA PAPER 79-27173]</td>
</tr>
<tr>
<td>MITCHELL, R.</td>
</tr>
<tr>
<td>CRF Vehicle design and performance objectives</td>
</tr>
<tr>
<td>[AIAA PAPER 79-33612]</td>
</tr>
<tr>
<td>MITCHELL, W. S.</td>
</tr>
<tr>
<td>Application of nonseries airfoil design technology to highly loaded turbine exit guide vanes</td>
</tr>
<tr>
<td>[AIAA PAPER 79-10787]</td>
</tr>
<tr>
<td>MITCHELL, W. J.</td>
</tr>
<tr>
<td>Ground-air and air-ground communications links - Voice and data link in different systems</td>
</tr>
<tr>
<td>[AIAA PAPER 78-0512]</td>
</tr>
<tr>
<td>MITCHELL, W. S.</td>
</tr>
<tr>
<td>Spread spectrum modulation - I - Benefit resulting from application to an integrated system</td>
</tr>
<tr>
<td>[AIAA PAPER 79-21222]</td>
</tr>
<tr>
<td>MITCHELL, W. S.</td>
</tr>
<tr>
<td>Spread spectrum modulation - II - Characteristics</td>
</tr>
<tr>
<td>[AIAA PAPER 79-21222]</td>
</tr>
<tr>
<td>MITCHELL, W. S.</td>
</tr>
<tr>
<td>Integrated navigation, traffic control, collision avoidance and communication system - SIFNAC-C2</td>
</tr>
<tr>
<td>[AIAA PAPER 79-12267]</td>
</tr>
<tr>
<td>MITCHELL, W. S.</td>
</tr>
<tr>
<td>Transient regime of a swept wing with a high angle of attack</td>
</tr>
<tr>
<td>[AIAA PAPER 79-1043]</td>
</tr>
<tr>
<td>MITSUBOSHI, T.</td>
</tr>
<tr>
<td>Cold weather environmental ground starting test using JPT-8 in 8071 climatic chamber</td>
</tr>
<tr>
<td>[AIAA PAPER 79-13237]</td>
</tr>
<tr>
<td>MITSUBOSHI, T.</td>
</tr>
<tr>
<td>Cold weather environmental ground starting test using JPT-8 in 8071 climatic chamber</td>
</tr>
<tr>
<td>[AIAA PAPER 79-13237]</td>
</tr>
<tr>
<td>MITTEN, E.</td>
</tr>
<tr>
<td>Modeling the I-band radar augmentation system of a high altitude supersonic target</td>
</tr>
<tr>
<td>[AIAA PAPER 79-2400]</td>
</tr>
<tr>
<td>MITZSCH, W. G.</td>
</tr>
<tr>
<td>The electro-impulse de-icing method  [EE-227]</td>
</tr>
<tr>
<td>[AIAA PAPER 79-23073]</td>
</tr>
<tr>
<td>MIZUNO, T.</td>
</tr>
<tr>
<td>Cold weather environmental ground starting test using JPT-8 in 8071 climatic chamber</td>
</tr>
<tr>
<td>[AIAA PAPER 79-13237]</td>
</tr>
<tr>
<td>MIZUTANI, R.</td>
</tr>
<tr>
<td>Modeling the I-band radar augmentation system of a high altitude supersonic target</td>
</tr>
<tr>
<td>[AIAA PAPER 79-2400]</td>
</tr>
<tr>
<td>MIZUKO, J.</td>
</tr>
<tr>
<td>Characteristics of propeller noise on an aircraft fuselage related to interior noise transmission</td>
</tr>
<tr>
<td>[AIAA PAPER 79-0646]</td>
</tr>
<tr>
<td>A theoretical investigation of noise reduction through the cylindrical fuselage of a twin-engine, propeller-driven aircraft</td>
</tr>
<tr>
<td>[NASA-TF-1325]</td>
</tr>
<tr>
<td>MIZUKO, T.</td>
</tr>
<tr>
<td>Oil squeeze film dampers for reducing vibration of aircraft gas turbine engines</td>
</tr>
<tr>
<td>[AIAA PAPER 79-0613]</td>
</tr>
<tr>
<td>MIZUI, Y.</td>
</tr>
<tr>
<td>An alternative approach to the high aspect ratio wing with jet flap by matched asymptotic expansions</td>
</tr>
<tr>
<td>[NASA-CR-2856]</td>
</tr>
<tr>
<td>NILLER, B. J.</td>
</tr>
<tr>
<td>Flight and propulsion control integration for selected in-flight thrust vectoring modes</td>
</tr>
<tr>
<td>[AIAA PAPER 78-0791]</td>
</tr>
<tr>
<td>NILLER, B. J.</td>
</tr>
<tr>
<td>Definition of requirements for a performance measurement system for C-5 aircrew members</td>
</tr>
<tr>
<td>[AD-A066202]</td>
</tr>
<tr>
<td>NILLER, S. C.</td>
</tr>
<tr>
<td>The B211-535 - New member of the family</td>
</tr>
<tr>
<td>[AIAA PAPER 79-0791]</td>
</tr>
<tr>
<td>NILLER, W. J.</td>
</tr>
<tr>
<td>Ionic mechanisms of carbon formation in flames</td>
</tr>
<tr>
<td>[AD-A066202]</td>
</tr>
<tr>
<td>NILLER, W. J.</td>
</tr>
<tr>
<td>Principle of operation of Navstar and system characteristics</td>
</tr>
<tr>
<td>[AIAA PAPER 79-10183]</td>
</tr>
<tr>
<td>NILLS, C. S.</td>
</tr>
<tr>
<td>Demonstration of aircraft wing/store flutter suppression systems</td>
</tr>
<tr>
<td>[AIAA PAPER 79-46238]</td>
</tr>
<tr>
<td>NILLS, C. S.</td>
</tr>
<tr>
<td>Research on visual display integration for advanced fighter aircraft</td>
</tr>
<tr>
<td>[AD-A066205]</td>
</tr>
<tr>
<td>NILSSONIC, L.</td>
</tr>
<tr>
<td>Stochastic Resonance Secondary Surveillance Radar</td>
</tr>
<tr>
<td>[S.B.S.R.E.]</td>
</tr>
<tr>
<td>NILLS, C. S.</td>
</tr>
<tr>
<td>Collision avoidance in an integrated system - I - Advantages of the capability</td>
</tr>
<tr>
<td>[AIAA PAPER 79-1402]</td>
</tr>
<tr>
<td>NILLS, C. S.</td>
</tr>
<tr>
<td>Collision avoidance in the integrated system - II - Characteristics</td>
</tr>
<tr>
<td>[AIAA PAPER 79-1402]</td>
</tr>
<tr>
<td>NILLS, C. S.</td>
</tr>
<tr>
<td>Integrated navigation, traffic control, collision avoidance and communication system - SIFNAC-C2</td>
</tr>
<tr>
<td>[AIAA PAPER 79-12267]</td>
</tr>
<tr>
<td>NILLS, C. S.</td>
</tr>
<tr>
<td>Spread spectrum modulation - I - Benefit resulting from application to an integrated system</td>
</tr>
<tr>
<td>[AIAA PAPER 79-13274]</td>
</tr>
<tr>
<td>NILLS, C. S.</td>
</tr>
<tr>
<td>Spread spectrum modulation - II - Characteristics</td>
</tr>
<tr>
<td>[AIAA PAPER 79-13274]</td>
</tr>
<tr>
<td>NILLS, C. S.</td>
</tr>
<tr>
<td>Transient regime of a swept wing with a high angle of attack</td>
</tr>
<tr>
<td>[AIAA PAPER 79-1043]</td>
</tr>
<tr>
<td>MITSUBOSHI, T.</td>
</tr>
<tr>
<td>Cold weather environmental ground starting test using JPT-8 in 8071 climatic chamber</td>
</tr>
<tr>
<td>[AIAA PAPER 79-13237]</td>
</tr>
<tr>
<td>MITSUBOSHI, T.</td>
</tr>
<tr>
<td>Cold weather environmental ground starting test using JPT-8 in 8071 climatic chamber</td>
</tr>
<tr>
<td>[AIAA PAPER 79-13237]</td>
</tr>
<tr>
<td>MITSUBOSHI, T.</td>
</tr>
<tr>
<td>Modeling the I-band radar augmentation system of a high altitude supersonic target</td>
</tr>
<tr>
<td>[AIAA PAPER 79-2400]</td>
</tr>
<tr>
<td>MITSUBOSHI, T.</td>
</tr>
<tr>
<td>Oil squeeze film dampers for reducing vibration of aircraft gas turbine engines</td>
</tr>
<tr>
<td>[AIAA PAPER 79-0613]</td>
</tr>
<tr>
<td>MITSUBOSHI, T.</td>
</tr>
<tr>
<td>Oil squeeze film dampers for reducing vibration of aircraft gas turbine engines</td>
</tr>
<tr>
<td>[AIAA PAPER 79-0613]</td>
</tr>
<tr>
<td>Personal Author Index</td>
</tr>
<tr>
<td>------------------------</td>
</tr>
<tr>
<td>MOORE, R. F.</td>
</tr>
<tr>
<td>MOORE, E. E.</td>
</tr>
<tr>
<td>MOORE, D. S.</td>
</tr>
<tr>
<td>NOOEROUSE, V. J.</td>
</tr>
<tr>
<td>MOORE, V. H.</td>
</tr>
<tr>
<td>MONAVSKI, S.</td>
</tr>
<tr>
<td>MORAN, M. S.</td>
</tr>
<tr>
<td>MOORE, B. L.</td>
</tr>
<tr>
<td>MOORE, B. D.</td>
</tr>
<tr>
<td>MOORE, S. V.</td>
</tr>
<tr>
<td>MOORE, D. B.</td>
</tr>
<tr>
<td>MOORE, A. H.</td>
</tr>
<tr>
<td>MOORE, C.</td>
</tr>
<tr>
<td>MOOR, D. A.</td>
</tr>
<tr>
<td>MOOMAW, B. P.</td>
</tr>
<tr>
<td>MOOMAW, N. P.</td>
</tr>
<tr>
<td>User's guide to data preparation: Photogrammetric navigation analysis program Potonap</td>
</tr>
<tr>
<td>Kalman filtering and smoothing in Potonap for orbit determination using GPS measurements</td>
</tr>
<tr>
<td>MOORE, E.</td>
</tr>
<tr>
<td>Aerospace applications of oscillators</td>
</tr>
<tr>
<td>MORE, R.</td>
</tr>
<tr>
<td>Experimental study of an asymmetric thermal wake</td>
</tr>
<tr>
<td>MOORE, T.</td>
</tr>
<tr>
<td>Theoretical lower limits of forebody drag</td>
</tr>
<tr>
<td>Effect of base cavities on the aerodynamic drag of an axisymmetric cylinder</td>
</tr>
<tr>
<td>MOOREL, P.</td>
</tr>
<tr>
<td>Experimental investigation into the feasibility of an extruded wing</td>
</tr>
<tr>
<td>MORRIN, C. L.</td>
</tr>
<tr>
<td>The sound power spectra of shock-free jets</td>
</tr>
<tr>
<td>MORR, G.</td>
</tr>
<tr>
<td>ATANS/ATC simulation tests with site-adaptation logic</td>
</tr>
<tr>
<td>MORR, C. J.</td>
</tr>
<tr>
<td>Longitudinal oscillation damping for fully-inflated parachute canopies</td>
</tr>
<tr>
<td>MORR, R.</td>
</tr>
<tr>
<td>A technical review of the radar systems implemented by Eurocontrol</td>
</tr>
<tr>
<td>MORR, T.</td>
</tr>
<tr>
<td>MORRAN, R. A.</td>
</tr>
<tr>
<td>Review of aircraft bearing rejection criteria and causes</td>
</tr>
<tr>
<td>MORRAN, T.</td>
</tr>
<tr>
<td>Air traffic control/full beacon collision avoidance system Chicago simulation</td>
</tr>
<tr>
<td>MORRAN, T. E., JR.</td>
</tr>
<tr>
<td>Beacon-based collision avoidance system - Experimental results</td>
</tr>
<tr>
<td>MORING, L.</td>
</tr>
<tr>
<td>Unsteady subsonic and supersonic potential aerodynamics for complex configurations</td>
</tr>
<tr>
<td>Green's function method for compressible unsteady potential aerodynamic analysis of rotor-fuselage interaction</td>
</tr>
<tr>
<td>Green's function method for the computational aerodynamic analysis of complex helicopter configurations</td>
</tr>
<tr>
<td>RORSENBURG, J.</td>
</tr>
<tr>
<td>Analysis of the functional requirements for an intelligent airborne computer system</td>
</tr>
<tr>
<td>RORSENBURG, J.</td>
</tr>
<tr>
<td>OMEGA wind tunnels</td>
</tr>
<tr>
<td>Dassault-Breguet - The Mirage 2000</td>
</tr>
<tr>
<td>The European Airbus has definitively penetrated the world market</td>
</tr>
<tr>
<td>RORUSE, R. E.</td>
</tr>
<tr>
<td>Axial compressor stall</td>
</tr>
<tr>
<td>HOMKOVIN, M. V.</td>
</tr>
<tr>
<td>Effects of periodic changes in free stream velocity on flows over airfoils near stall</td>
</tr>
<tr>
<td>Mechanics of boundary layer transition, part 2: Instability and transition to turbulence</td>
</tr>
</tbody>
</table>
Lift and drag of sail aerofoil p0515 A79-41945

NEWHAW, J. C., JR.
Stress-intensity factors for a wide range of semi-elliptical surface cracks in finite-thickness plates p0316 A79-28890

NEWHAW, R.
Some main points about general-aviation design practice p0460 A79-37047

Utilization of alternative fuels for transportation; Proceedings of the Symposium, University of Santa Clara, Santa Clara, Calif., June 19-23, 1978 p0635 A79-49376

NEWHAW, P. A.
Analytical design of a contoured wind-tunnel liner for supercritical testing p0351 A79-19993

NEWKUN, J. B.

NEWKUN, J. B.

NEWTON, D. W.
A review of the icing situation from the standpoint of general aviation p0481 A79-23918

NEWTON, C. C.
Strategic airlift vehicle concepts [AIAA 79-0850] p0405 A79-33833

NEWTON, R. C., JR.
Power hybridization - Key to reducing avionics power supply weight and volume p0617 A79-88652

NEWTON, B. R.
The near-tens potential of Doppler location [AD-0636145] p0362 A79-21081

NGABO, T. E.
The design and testing of a vertical-axis wind turbine using sails p0127 A79-18467

NGUTEN, D. T.
Fail-safe optimal design of structures with substructuring [AD-0605936] p0864 A79-23950

Dynamic structural analysis with substructures [AD-0605937] p0850 A79-24378

NGUTEN, L. T.
Control considerations for CV fighters at high angles of attack p0661 A79-37295

Results of piloted simulator studies of fighter aircraft at high angles of attack p0179 A79-15093

One of piloted simulation for studies of fighter departure/spin susceptibility p0225 A79-15999

NELETT, L. T.
Weight optimisation with flutter constraints [ARC-R-M-8283] p0222 A79-15972

NECA, A.
Analytical-kinetic models for the evaluation of polluting emissions from aircraft gas turbines - Limiting techniques p0689 A79-52758

NECHOLAS, E. B.
Laboratory fire testing of cabin materials used in commercial aircraft p0211 A79-24177

NECHOLAS, J. C.
The influence of tilting pad bearing characteristics on the stability of high speed rotor-bearing systems p0275 A79-16012

NECHOLAS, T.
The charpy impact test as a method for evaluating impact resistance of composite materials [AD-085967] p0508 A79-12965

NECHOLAS, J. A.

Critical assessment of emissions from aircraft piston engines [AD-A071002] p0654 A79-30190

NECHOLAS, J. D.
Initial flight test of a Loran-C receiver/data collection system [NASA CR-157626] p0100 A79-13018

NECHOLAS, L. N.
Changing requirements in aircraft design p0860 A79-37044

NECHOLAS, J.-J.
Internal aerodynamics and heat transfer problems associated with film cooling of gas turbines [ASME PAPER 79-GT-57] p0341 A79-30528

NEAP, C.
Simplicity S-76 analysis, design, and development for successful dynamic characteristics [AHS 78-23] p0121 A79-18409

NEAPB, C. P.
Experimental effects of tip shape on rotor control loads p0125 A79-18182

NED, R. A.

NEEREHAM, C. J.
British civil airworthiness requirements for airships [AIAA 79-1600] p0853 A79-42394

NEEREHANAI, A.
On the loudness of sonic booms and other impulsive sounds [STIAAS-236] p0245 A79-17658

NELSON, J. P.

NELSON, J. P.
Characterizing expensive soils for airport pavement design [AD-A059765] p0168 A79-14247

NEEB, J. B.
Practical airworthiness evaluation BU-21 B guardrail V aircraft p0859 A79-29178

Airworthiness and flight characteristic test, OV-1C takeoff performance p0652 A79-30178

Practical airworthiness evaluation CR-47C with fiberglass rotor blades with T55-L-712 engines [AD-065951] p0705 A79-32199

NEEBERG, B. H.
An evaluation of the bird/aircraft strike hazard (BASH) at area C-62, Eglin AFB, FL [AD-066513] p0230 A79-18620

An evaluation of the bird/aircraft strike hazard at Hill AFB, Utah (AFPL) [AD-A070859] p0667 A79-31184

NEESS, F. R.
Filtering technique based on high-frequency plant modelling for high-gain control [NASA CASE-LAR-12315-1] p0637 A79-23097

Description of the FVCL Approach and Landing Technology (FVCL) CR-47 research system [NASA TP-1436] p0595 A79-29195

NEHURSKA, R. J.
A versatile approach to cockpit management [AHS 78-17] p0120 A79-18413

NEIFEEK, P. R.
Parameter and state estimation applicable to aircraft identification problem p0561 A79-45346

NEIN, A. L.
Construction of electronic models of microwave landing systems p0689 A79-51266

NEISKEN, J. P.
A fundamental criterion for the application of rotor casing treatment p0213 A79-24220

NEIKOLAV, A. V.
Interference of vortexes with shocks in airscoops - Dissipation of vortexes p0688 A79-52445

NEIKOLITSCHE, D.
Vortex models on missile configurations [EMG-PWT-77-27] p0287 A79-17818
Normal force and pitching moment of wing-body combinations in the nonlinear angle-of-attack range at subsonic speeds  p0414 N79-22022

NILSON, E. N.
Engineering and manufacturing communication via the computer data base  [IAA PAPER 79-1645]  p0609 N79-47911

NILSSON, R.-A.
Ellipsoidal modeling of aircraft targets for evaluation of electronic fuses  p0637 N79-49580

NISSENBORG, E.
The effect of slot configuration and arrangement on the characteristics of jet flow  [NASL-TH-195]  p0337 N79-30377

NISSEWORTHE, G.
Aircraft noise identification system by correlation technique  p0138 N79-19362

NISSEWORT, G.
Mechanics of determination of the shedding frequency of vortices behind a cylinder at low Reynolds numbers  p0137 N79-18845

NISBY, H. L.
Modelling of turbulent wakes in ideal fluids  p0527 N79-42806

NISB, G.
The Swedish approach to escape system testing  p0644 N79-50427

NIST, P.
Comparative study between two different active flutter suppression systems  p0061 N79-16495

Flutter suppression and gust alleviation using active controls - Review of developments and applications based on the aerodynamic energy concept  p0156 N79-20128

Active external store flutter suppression in the TF-17 flutter model  p0639 N79-49866

On single-degree-of-freedom flutter induced by activated controls  p0640 N79-49967

NITSCHEN, V.
Aerodynamical research into vertical problems in V/STOL aircraft approach landing  [IDP-4-78]  p0550 N79-27134

NIXON, E.
Design of transonic airfoil sections using a similarity theory  [IAA PAPER 79-0076]  p0140 N79-19521

The transonic integral equation method with curved shock waves  p0513 N79-41407

Direct numerical solution of the transonic perturbation integral equation for lifting and nonlifting airfoils  [NASL-TH-78518]  p0035 N79-10045

NIXON, E. W.
The application of system dynamics to a managerial model of aeronautical systems division  [AD-A059312]  p0169 N79-14919

NIXON, E. W.
An operational research investigation of the ice-detection capability and utility of the surface condition analyzer (SCA) system and its applicability to Navy-wide use  [AD-A067174]  p0539 N79-26037

NOBACE, E.
Aircraft design loads due to non-stationary atmospheric turbulence patches  [KML-TH-78073-D]  p0707 N79-32216

NOBLE, E. L.
Gas turbine combustor cooling by augmented backside convective  [AEMT PAPER 78-07-33]  p0196 N79-22339

NOGGLE, L. W.
The potential of liquid hydrogen as a military aircraft fuel
Large-vehicle concepts  p0186 N79-20773

p0338 N79-30485

NOLL, E. L.
Green's function method for the computational aerodynamic analysis of complex helicopter configurations  p0146 N79-19680

NOLL, T. E.
Demonstration of aircraft wing/store flutter suppression systems  p0574 N79-46238

NOLIN, W. E.
LOASS: a computer program for determining the shear, bending moment and axial loads for fuselage type structures  [NASA-CR-151905]  p0242 N79-17262

NOMAN, F. W.
Low-speed aerodynamic characteristics of a 16-percent-thick variable-geometry airfoil designed for general aviation applications  [NASA-TN-D-1328]  p0157 N79-14018

Experimental investigation of three helicopter rotor airfoils designed analytically  [NASA-TS-1396]  p0416 N79-22037

NORD, D. L.
Fuel conservative aircraft engine technology  p0152 N79-20078

NORDAN, J. D.
Cargo/Logistics Airlift System Study (CLASS), volume 1  [NASA-CR-158915]  p0289 N79-17822

Cargo/Logistics Airlift System Study (CLASS), volume 2  [NASA-CR-158916]  p0289 N79-17823


NORR, W. W.
The application of structured design and distributed techniques to avionics information processing architectures  p0505 N79-25991

NORSKER, R. R.

NORSKOG, R. E.
A new high product rate 10 nanosecond, 256 point correlator  p0805 N79-34305

NORTH, D. B.
Industry seeks lighter aircraft weight  p0449 N79-36100

NORTH, E. J.
The European transonic wind-tunnel project  p0343 N79-31021

NORTHAN, D. L.
Characterization of a swept-strut hydrogen fuel-injector for scramjet applications  p0635 N79-49345

NORTON, B. A.


NORTH, W. A.
Preliminary airworthiness evaluation R9-21 H guardrail V aircraft  [AD-A066347]  p0593 N79-29178

NORUM, T. D.


Applications of diffraction theory to aeroacoustics  [NASA-TM-803531]  p0299 N79-18686

NORSKOG, R. E.
Operating and performance characteristics of a duct burning turbofan engine with variable area turbines  [AD-A061026]  p0324 N79-16857

NORWOOD, D. L.
Rapid cost estimating handbook  [AD-A056991]  p0594 N79-29186

NOSSE, R.
A two-dimensional cascade test of an air-cooled turbine nozzle  p0337 N79-30379

NOYAKA, E. M.
Millimeter airborne radar target detection and selection techniques  p0140 N79-18642
OCH, G.

Factors influencing runway capacity as typified by the Munich-Fles airport
[DOLE PAPER 79-030]
p0518 A79-82357

The time budget as a criterion for the workload of air traffic controllers
[SBE-DF-1353-0]
p0483 A79-23943

ODONNELL, R. W.

Design, development, and testing of an active flutter margin augmentation system for a commercial transport airplane
[ATAA 79-0790]
p0322 A79-29034

ODONNELL, E. L.

F-16 EEU test programs - A system approach
p0023 A79-12321

ODETH, E. L.

Mission environment simulation for Army ro- rocraft development: Requirements and capabilities
p0222 A79-15977

ODOR, R. C.

Development of a structural design procedure for rigid air- port pavements
AD-A069548

OOGATO, F.

Automeated tracking for aircraft surveillance radar systems
p0638 A79-49604

OOGATO, R. W.

Digital fly-by-wire flight control validation experience
[NASA-TN-72860]
p0166 A79-14109

OSTERLIND, E. W.

A flyable suspended model helicopter for the investigation of the human pilot behaviour
p0412 A79-35923

OSTERLIND, F. A.

Construction using carbon fiber composite materials and aluminum: A cost comparison
[POA-C-20280-P9]
p0956 A79-29248

OSTERLIND, P. F.

F-16 high angle of attack testing
p0259 A79-26527

F-16 high angle of attack testing
p0299 A79-18886

OGATO, T.

Observation of atmospheric interactions at aeroplane altitude
p0861 A79-37573

OGAWA, A.

Structural analysis of hollow blades: Torsional stress analysis of hollow fan blades for aircraft jet engines [SAL-TR-533]
p0241 A79-17261

OGI, E.

Standard Avionics Modules (SAM) for existing models
[AD-A065629]
p0435 A79-23083

ODONNELL, R. W.

Effect of variances and manufacturing tolerances on the design strength and life of mechanically fastened composite joints
[AD-A069170]
p0557 A79-27518

OH, L. L.

High power UHF slide screw tuner for antenna breakdown measurements
p0349 A79-32190

OHARES, P. J.

360-deg non-programmed visual display
p0671 A79-15152

OHLY, G. Y.

Advanced composite 727 elevator and 737 stabilizer programs
p0788 A79-20873

OCH, S.

Lightweight hydraulic system development
p0686 A79-51917

OHNABU, T.

Separation and collision risk in air traffic control
p0207 A79-23858

OKITA, T.

Theoretical approach to spray combustion in gas turbine combustor
p0517 A79-42207

OKHAF, D. A.

Accelerated basic loads analysis
[ATAA 79-0737]
p0224 A79-29051

OKKEF, D.

Designing with damping materials to reduce noise and structural fatigue
[SBE PAPER 790631]
p0458 A79-36758

OKIGAKI, T. R.

Periodically unsteady flow in anDateid stage of a multistage, axial-flow turbine
[AD-1069548]
p0492 A79-37573

The influence of compressor inlet guide vane/motor relative circumferential positioning on blade wake transport and interaction
[AD-1067969]
p0543 A79-26060

OKCOLA, J. Y.

Formulation of empirical formulas for calculating the hydraulic resistance of networks
p0451 A79-36993

OKRESH, E. C.

Solar thermal aeroheat research station /STARS/ [SBE PAPER 79-35]
p0651 A79-53261

OKOBO, S.

Lifting surface approach to the estimation of gust response of finite wings
p0407 A79-34596

OLDFIELD, E. L. G.

On-line computer for transient turbine cascade instrumentation
p0317 A79-11488

Measurement of heat transfer rate to turbine blades and nozzle guide vanes in a transient cascade
p0527 A79-42899

OLIN, S. I.

Substitution of defects in the case of nonisothermal programmed loads
p0220 A79-12164

OLSEN, J. J.

Transonic flutter analysis of a rectangular wing with conventional airfoil sections
p0566 A79-45313

OLSEN, J. E.

Optimization of multi-element airfoils for maximum lift
p0357 A79-20084

OLSEN, P. C.

Theoretical analysis of transonic flow past unsteady cascading cascades
[AD-A0630833]
p0492 A79-24963

OLSEN, M.

Leading-edge noise data with comparison to theory
[NASA-TN-79208]
p0558 A79-27930

OLGQ, D. E.

Tonic mechanisms of carbon formation in flames
[AD-A068872]
p0596 A79-29270

OLGQ, W. E.

Performance modelling methods
p0642 A79-50167

OLAN, R. E.

Vehicle Design Evaluation Program (VDEP). A computer program for weight sizing, economic, performance and mission analysis of fuel-conservative aircraft, multimodified aircraft and large cargo aircraft using both JP and alternative fuels
[NASA-CR-185070]
p100 A79-13026

OLAN, R. A.

Fluid dynamics of diffuser-augmented wind turbines
p0186 A79-20798

OLASS, S. C.

Relative pavement bearing strength requirements of aircraft
[SBE PAPER 780568]
p0006 A79-10415

OLAY, B.

A method to estimate weight and dimensions of large and small gas turbine engines
[ATAA-CR-159481]
p0173 A79-15046

OKEE, R.

Failure detection in signal processing and sensing in flight control systems
p0612 A79-47971

OKEFRENO, E. I.

Theoretical fundamentals of radio altimetry
p0843 A79-36145

ODEN, G. JR.

The effect of a sample lot of fuel on emissions levels of a small gas turbine
[SBE PAPER 79-GT-165]
p0395 A79-32427

D-122

PERSONAL AUTHOR INDEX
PADILLA, V. E.
Bolted field repair of composite structures
[AD-4067923] p0565 A79-28238

PARE, C. A.
Present and future developments in aerospace materials and structures
p0268 A79-24081

PAREDES, G. B.
Design and fabrication of advanced titanium structures
[AlAA 79-0757] p0283 A79-28272

PAEZ, C. A.
Nonlinear oscillations at high incidence
normally on water
p0541 A79-26049

PAPAITOS, L.
Aerodynamic problems in cooled turbine blading
design for small gas turbine
p0422 A79-22091

PAPAILIOU, K. D.
Viscous flows in centrifugal compressors
p0308 A79-19387

PAPALIAS, J. M.
Development of calorimetric fatigue gauge
[AD-4070844] p0720 A79-33453

PARAJEP, F. A.
Jet curtain failheboard for aircraft afterburners
[ASME PAPER 78-GT-95] p0007 A79-10761

PARDIBI, S.
Track-while-scan algoriths in a clutter environment
p0017 A79-11492

PARDOS, J. L.
Multifiber tracking system using radial velocity measurements
p0638 A79-49608

PARKER, J. A.
Influence and availability of maritime satellite and communications and navigation
p0538 A79-49590

PARKER, J. J.
Design and analysis of an active jet control system for helicopter sling loads
[AlAA-79-1397] p0221 A79-59790

PARKET, K. L.
Antennas for the Black Hawk helicopter
[ANS 79-15] p0627 A79-49068

PARKER, R. L.
Engine evaluation of a vibration damping treatment for inlet guide vanes
[ASME PAPER 79-GT-163] p0395 A79-32425

PARKER, J. D.
Probability that the propagation of an undetected fatigue crack will not cause a structural failure
[AD-4075335] p0049 A79-11439

PARKER, B. W.
Numerical computation of optimal evasion maneuvers for a realistically modeled airplane pursued by a missile with proportional guidance
[AlAA 79-1624] p0566 A79-45306

PARKER, C. B.
High resolution radiography in the aero-engine industry
p0502 A79-25416

PARKER, G. B.
A feasibility study for development of structural aluminum alloys from rapidly solidified powders for aerospace structural applications
[AD-A0614216] p0238 A79-16558

PARKER, D. B.
An exploratory investigation of quasi-free flying models in a supersonic short-duration wind tunnel
p0412 A79-35925

PAN, G. A.
Forecast of future aviation fuels. Part 1: Scenario

PANDOLFI, N.
Numerical investigations on the generation and development of rotating stalls
[ASME PAPER 78-GT-1] p0149 A79-19793

PANOLOVICH, W. B.
Calculation of the working process in a piston-type 'slow' compression wind tunnel
p0525 A79-42546

PARCHUBS, R. V.
The investigation of aircraft interference problems
p0690 A79-52888

PAPADOE, J. A.
Effect of inertia of blower on stability of air-cushion vehicle
p0561 A79-44038

PAPADOPOULOS, P.
Rotary balance data for a single-engine trainer design for an angle-of-attack range of 8 deg to 90 deg

PAPADAKIS, P. S.
A correlation of mixing noise from conacular jets with inverted flow profiles

PAPADOPOULOS, P.
Thermochemical characterization of some thermally stable thermoplastic and thermoset polymers
p0756 A79-22774

PAPADOPOULOS, P.
Thermal response of composite panels
p0250 A79-25350

PAPADOPOULOS, P.
Release-rate calorimetry of layered materials for aircraft seats

PAPADOPOULOS, P.
Influence and availability of maritime satellite communications and navigation
p0111 A79-17090

ACM/1 system
Appropimation of the aerodynamic characteristics of a wing with a double-slotted flap  

On modeling sensitivity of a linear system to reduction of its order by the infinitesimal transformation method in the yaw motion control problem

PAVLAYI, V. P.

Instability of fluid flow in centrifugal injector

PAWYI, A. C.

Reliability analysis for optimum design

PEDERSEN, N. P.

Fabrication research for supersonic cruise aircraft

PEAK, L. L.

Fabrication and evaluation of advanced titanium structural panels for supersonic cruise aircraft

PEAK, L.

Wind tunnel test of ACE 2 ejection seat with anthropometric dummy in asymmetric configurations

PEACOCK, R. N.

An experimental study of pulsating flow in a three-stage axial flow compressor

PEOTH, A. E.

A pilots simulator investigation of helicopter precission landing to determine single-plot IFE /SPIRE/ requirements

PEACH, R. M.

An experimental study of pulsating flow in a three-stage axial flow compressor

PEACH, L. R.

Asymmetrical distortion generation in a variable height annulus

PEACOCK, W. R.

A general solution, for distorted flows in cascades of aerfoils

PEAVY, J. C.

Unsteady effects of cirsferential pressure distorted inlet flows in compressors

PENEN, N. B.

Adaptive approximations in finite element structural analysis

PEARSON, B. S.

Pump design

PEARSON, D. S.

Dynamic data analysis

PEARCE, C. B.

Dynamic testing of gas turbines

PECH, P.

The basic geometric shapes and position lines

PECH, W. D.

The value of various technology advances for several V/STOL configurations

PEDEZIER, G. B.

Turbine engine cost reduction using Life Cycle Cost techniques

PEDEZIER, R. B.

Advanced technology fuel mass flowmeter

PEDEZIER, A. P.

A developmental computer model for investigations of air traffic management problems: - A case investigating two decision strategies

PEDEZIER, C. R.

Tests to determine the flight envelope tolerance of helicopter fuel tanks

PEEL, C. J.

An analysis of a programmed load fatigue failure

PEER, H.

Flight testing the KFIR

PENLIEE, D. G.

The effect of fuel sprays on emissions from a gas turbine combustor

PERSONAL AUTHOR INDEX

[IAIA PAPER 79-1321] p0472 A79-39037

PHELPS, C. H.

Problems raised by the application of the natural stability reduction concept to transport aircraft 

p0155 A79-20117

PHELPS, C. H.

An active noise reduction system for aircraft helmets

p0090 A79-10283

PHELPS, C. H.

A design method with application to prefilers and sampling-rate selection in digital flight control systems

p0095 A79-12095

PHELPS, A.

Determining the contour of helicopter rotor blades automatically using electro-optical techniques

p0630 A79-49084

PHELPS, A. L.

Fuselage-mounted antenna code: User's manual

p0809 A79-24215

PHELPS, A. L.

An iterative approach for computing an antenna aperture distribution from given radiation pattern data

p0890 A79-24217

PHELPS, P. E.

Advanced turbine powerplants for future helicopter systems

p0078 A79-16228

PEEL, R. L.

Quieter short and medium haul aircraft

p0408 A79-34921

PENNIX, B. C.

Policy impacts of ATC automation: Human factors considerations

p0160 A79-14060

PENNIX, X. B.

An aircraft simulation using a product of exponentials as inatrizant

p0666 A79-38885

PENNIX, Y. L.

Airplane takeoff from unpaved airstrips

p0069 A79-14874

PENNIX, Y. I.

Stability of the perturbed longitudinal motion of a lift-controlled aircraft

p0687 A79-52146

PEPER, W. R.

Overtotal results for the 7.3-a 2/4-ft/ diameter hybrid kevlar-29/nylon ribbon parachute

p0191 A79-21520

PEPER, W. R., JR.

Design and development of the 24-foot diameter hybrid kevlar-29/nylon ribbon parachute

p0263 A79-26641

PENMAN, E. M.

EMP coupling to a composite aircraft

p0289 A79-25321

PENMAN, E. M.

Surface current injection techniques - A theoretical investigation

p0336 A79-30155

PENMAN, E. M.

Induced effects of lightning on an all composite aircraft

p0297 A79-16242

PENMAN, R. J.

A new dimension in 'SAR'

p0067 A79-18427

PENMAN, R. J.

The results of synthesizing and evaluating potential solutions for Multi-Function Inertial Reference Assembly (MIRA) candidate configurations

p0448 A79-36082

PENMAN, R. J.

Preliminary feasibility assessment of Multi-Function Inertial Reference Assembly (MIRA)

p0353 A79-20017

PENMAN, R. J.

Testing of the blades of an axial turbine stage during tangential inclination of the nozzle blades

p0527 A79-42569

PENMAN, R. S.

A numerical study of jet entrainment effects on the subsonic flow over nozzle afterbodies

p0142 A79-19554

PENMAN, R. J.

H/1 least squares method for the Navier-Stokes equations

p0335 A79-29604

PENMAN, R. J.

Visualisations and calculations of air intakes at high angles of attack and low Reynolds number

p0815 A79-22030
PETIT, B. U.
Airport plan based on the FITE concept proposal for a remodelled Catania-Fontanarossa
p0023 A79-12319

PETIT, J. E.
Performance characteristics of a wedge nozzle installed on a R-10 propulsion wind tunnel model
[ AIAA PAPER 79-1164]
 p0587 A79-52300

PETRACCA, J. N.
Reduction of computer usage costs in predicting unsteady aerodynamic loadings caused by control
flap surface motions: Analysis and results
[AIAA-CR-3009]
p0360 A79-20072

PETURES, D. W.
Predicted inlet gas temperatures for tungsten fiber reinforced FeCraloy - A first
generater composite turbine blade material
p0337 A79-30397

PETIT, J. E.
A surface source and vorticity panel method
p0369 A79-20187

PETIT, J. A. B.
Near field problems in three-dimensional panel methods
p0536 A79-43779

PETIT, S. L.
Unsteady pressures on a NASA 64A010 airfoil - Experimental and theoretical results
[AIAA PAPER 79-0330]
p0261 A79-26545

PETRO, D.
Suction fuel supply systems for turbine powered general aviation aircraft
p0214 A79-24304

PETRO, A. Y.
Some types of separated flow past slotted wings
Features of flow past slotted wings
p0020 A79-12148 p0022 A79-12236

PETRO, P. G.
Study of the dispersity of oil droplets which form in the oil-system mains of gas-turbine engines
p0527 A79-42571

PETROV, V. S.
Application of the method of alternating directions to the numerical analysis of the
thermal states of a bladed turbine disk
p0083 A79-16807

Auxiliary gas turbine engines for aircraft
p0185 A79-20672

Nonstationarity of heat transfer in the blade cascade of an axial-flow turbine during engine start-up
p0527 A79-42572

Use of the method of variable directions for numerical study of the temperature states of a
turbo-disk with blades
p0613 A79-48518

PETROV, A. W.
Investigation of the profile drag and the mean and pulsation velocities in the wake of wings by
means of a laser Doppler anemometer
p0020 A79-12151

PFEIFFER, G. D.
Chief features of future helicopter avionics
p0079 A79-16238

PFEIFFER, G. D.
Aircraft engine icing, technical summary
p0031 A79-10011

PFEIFFER, K.
Sound absorption through flow separation - A new possibility for acoustic attenuation of engines
p0512 A79-41238

PFEIFFER, K.
HEB helicopters for the army
p0078 A79-16234

PFEIFFER, K.
Acceleration of unbalanced flexible rotors through the critical speeds
p0345 A79-31388

PHILIPPS, L.
Operational influences on maintainability
p0073 A79-15382

PHAM, C. L.
Construction of a refrigerated wind tunnel with a supercooled droplet production system for
research on icing
p0114 A79-17599

PHATI, A. V.
A piloted simulator investigation of helicopter precision deaccelerating approaches to hover to
determine single-pilot IFR /SPIFR/ requirements
[AIAA 79-1866]
p0573 A79-45413

PHILIPPS, N. W.
An integrated analytical and experimental investigation of helicopter hub drag
[AHS 79-5]
p0626 A79-49058

PHILIPPS, N. W., III
Wind-tunnel investigation of an armed mini remotely piloted vehicle
[AIAA-TR-80132]
p0666 A79-31151

PHILIPPS, N. L.
The application of state-of-the-art of in-service inspection methods for graphite epoxy composite
structures on commercial transport aircraft
[AIAA-CA-158669]
p0241 A79-17252

PHILIPPS, N.
Application of a laminar lighting device to the smoke visualization of aerodynamic flows in wind
tunnels
[ONERA, TP NO. 1979-82]
p0513 A79-41304

PHILIPPS, J. W.
An aircraft compatible laser induced fluorescence system - In situ and remote measurements of
trace gases
p0194 A79-21989

PHILIPPS, J. S.
Experimental studies of unsteady aerodynamics on wind tunnel models of helicopter rotors
p0389 A79-32295

PHILIPPS, J. D.
Flight investigation of helicopter IFR approaches to oil rigs using airborne weather and mapping
radar
[AHS 79-52]
p0633 A79-49104

PHILIPPS, J. W.
All electric subsystems for next generation transport aircraft
[AIAA PAPER 79-1832]
p0608 A79-47906

PHILIPPS, L. N.
The application of reinforced plastics to the emergency repair of aircraft
p0118 A79-17965

PHILIPPS, W.
The 214 fiberglass blade - Design for inspectability
[AHS 79-37]
p0123 A79-18163

PHT, V. T.
Program REY - A wing structural optimization computer program for preliminary design of
fighter aircraft
p0025 A79-12460

PI, W. S.
Aircraft wake flow effect and horizontal tail buffet
Some observations on the mechanism of aircraft wing rock
p0463 A79-38135

PI, W. S.
Investigation of steady and fluctuating pressures associated with the transonic buffetting and wing rock
des of a one-seventh scale model of the P-5A aircraft
[AIAA-CR-30661]
p0099 A79-13004

PIEZZI, J. J.
Escape system trajectory sensitivity analysis
AB-3062429
p0362 A79-20092

PIERRO, N.
Extension to the development of motor emission regulations
[ONERA, TP NO. 1979-43]
p0473 A79-39092

PIERRO, N.
A study of the evolution of noise exposure under different hypotheses of regulation
[ONERA, TP NO. 1979-48]
p0473 A79-39093

PIETT, M.
Uneven wing boundary layer energization
[AIAA 79-1631]
p0566 A79-45312

PIZZOLO, G.
Dynamical identification of light aircraft structures and flutter certification
[ONERA, TP NO. 1979-31]
p0390 A79-32302

PIZZOLO, G.
New methods for ground-testing aeronautical structures
[ONERA, TP NO. 1979-47]
p0538 A79-43620

AGARD flight test instrumentation series. Volume 9: Aerelastic flight test techniques and
for the 1980s within the province of the Federal Institute of Air Traffic Control [p0117 A79-17693]

PLECKAITIS, C. A.

Integrated Avionics Control System (IACS) [AD-A056476] p0087 A79-10056

PLESS, V. N.

Proceedings from the Government/Industry Workshop on the Reliability of Nondestructive Inspections (AD-A068223) p0599 A79-29531

PLETT, R.

Afterbody tests in the Modane hot gas bench (AAAF-FT-78-10) p0437 A79-23095

PLUMES, J. B.

Duct noise radiation through a jet flow p0642 A79-50110

POCINKI, L. S.


PODLAREVA, N. N.

Optimum design of the outer wall of a steel shell p0249 A79-25317

A new standard for lightning qualification testing of aircraft Technical overview, definitions and basic waveforms p0640 A79-51128

Laboratory test procedures to determine lightning attachment points on actual aircraft parts /A qualification test/ p0681 A79-51133

Laboratory tests to simulate lightning streamers at apertures /A qualification test/ p0682 A79-51138

Protection methods for hardware p0683 A79-51145

Summary report of the Lightning and Static Electricity Committee p0243 A79-17427

A new standard for lightning qualification testing of aircraft: Technical overview, definitions and basic waveforms p0297 A79-18246


POLMER, J. R.

Copter windshields made tougher - Special coating extends life, adds safety p0000 A79-33588

POCCHII, L. S.

An assessment of local risk p0426 A79-22207

Advanced risk assessment of the effects of graphite fibers on electronic and electric equipment, phase 1 [NASA-CR-159502] p0586 A79-28419

PODKAREVA, N. N.

Some possible applications of identification theory techniques in telemetry p0451 A79-36599

PODRAZOV, A. V.

Investigation of the electrification of an aircraft model by a humid airstream in a wind tunnel p0020 A79-12162

PODSCHANSKE, T.

Considerations regarding velocity distribution and wall friction in incompressible axisymmetric turbulent boundary layers with transverse curvature p0338 A79-29694

POFDEF, G. L.

Influence of the pitch/chord ratio of a subsonic cascade of turbine blades p0083 J79-16692

On the influence of relative pitch in the subsonic turbine cascade p0613 A79-48503

POGEB, G. B.

Some recent developments in solid propellant gas generator technology [AIAC-Papers 79-1127] p0511 A79-40761

POLIAKOV, A. H.

Evaluation of a Low Fidelity Simulator (LFS) for instrument training [AD-A058139] p0056 A79-12102

POISSON-QUINTON, P.


Efffect of spanwise blowing in the angle-of-attack regime alpha equals 0 plus 90 deg [ONERA, TP NO. 1978-80] p0152 A79-20083

Some new approaches for wind-tunnel testing through the use of computers [AIAC 79-0707] p0277 A79-27367


The new European subsonic aerodynamic testing facilities [ONERA, TP NO. 1979-97] p0516 A79-42066

Energy conservation aircraft design and operational procedures p0107 A79-13200

Some factors affecting the dynamic stability derivatives of a fighter-type model p0176 A79-15071

Aerodynamic characteristics of a fighter-type configuration during and beyond stall p0413 A79-22003

Special ground testing facilities and testing techniques for STOL aircraft p0430 A79-23007

POJETA, T. J.

Determing the countour of helicopter rotor blades automatically using electro-optical techniques [AHS 79-32] p0630 A79-49084

Computer-assisted high-speed balancing of T53 and T55 power turbines [AHS 79-36] p0631 A79-49088

POKORNY, V.

Longitudinal motion of an aircraft in unsteady flow p0212 A79-24194

POLAKROV, A. N.

Transfer function modeling of air traffic concentration p0128 A79-18635

Construction of an initial approximation for the solution of the integral equation of a lifting surface p0047 A79-35928

POLAKROV, A. N.

Application of the method of alternating directions to the numerical analysis of the thermal states of a blade disk p0083 A79-16607

Auxiliary gas turbine engines for aircraft p0185 A79-20672

Nonstationarity of heat transfer in the bladed cascade of an axial-flow turbine during engine start-up p0527 A79-42572

Use of the method of variable directions for numerical study of the temperature states of a turbine disk with blades p0613 A79-48518

POLINOVSKII, A. T.

Aviation centrifugal pump equipment /2nd revised and enlarged edition/ p0447 A79-35928

POLEB, D. W.

Injuries in air transport emergency evacuations p0641 A79-25317

Injuries in air transport emergency evacuations p0581 A79-28160

POLEB, D. W.

Demonstration of potential acoustic gains from conventional cabin soundproofing treatments p0135 A79-18692

POLEB, D. W.

A simple method of adapting a wind tunnel Schlieren system for interferometry /AHS-79B-058878/ p0238 A79-21099

A simple method of adapting a wind tunnel Schlieren systems for interferometry [AD-A067231] p0543 A79-26073

POLEB, D. W.

Extratnd radio-navigation p0563 A79-44878

POREMBNY, D. J.


B-130
<table>
<thead>
<tr>
<th>Author</th>
<th>Title</th>
<th>Conference/Reference</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>POURADIER, J. R.</td>
<td>Design and wind tunnel testing of 1.5 m diameter model rotors</td>
<td>[AIAA Paper 79-0540]</td>
<td>p0253, A79-25859</td>
</tr>
<tr>
<td>POVAROV, O. A.</td>
<td>Study of the dispercity of oil droplets which form in the oil-system mains of gas-turbine engines</td>
<td></td>
<td>p0129, A79-18649</td>
</tr>
<tr>
<td>POWELL, C. A.</td>
<td>Effects of duration and other noise characteristics on the annoyance caused by aircraft-flyover noise</td>
<td>[NASA-TP-1386]</td>
<td>p0375, A79-20832</td>
</tr>
<tr>
<td>POWERS, N. R.</td>
<td>On methods for application of harmonic control</td>
<td></td>
<td>p0131, A79-18657</td>
</tr>
<tr>
<td>POWERS, E. M.</td>
<td>A simulation of amphibious hovercraft overturning</td>
<td></td>
<td>p0640, A79-69904</td>
</tr>
<tr>
<td>PRASAD, B. A.</td>
<td>A simulation of amphibious hovercraft overturning</td>
<td></td>
<td>p0568, A79-28796</td>
</tr>
<tr>
<td>PRINCE, S. N.</td>
<td>A flow field study for top mounted inlets on fighter aircraft configurations</td>
<td>[AD-1069732]</td>
<td>p0650, A79-30151</td>
</tr>
<tr>
<td>PRESSLER, G. J.</td>
<td>The Yak-18T aircraft: Construction and operation</td>
<td></td>
<td>p0126, A79-18297</td>
</tr>
<tr>
<td>PRESSLY, J. R.</td>
<td>Performance of current radar systems in an EW environment</td>
<td></td>
<td>p0637, A79-49555</td>
</tr>
<tr>
<td>PRESKOLNII, V. L.</td>
<td>The Yak-18T aircraft: Construction and operation</td>
<td></td>
<td>p0126, A79-18297</td>
</tr>
<tr>
<td>PRESTEL, N. J.</td>
<td>The growth and evolution of the TPE331</td>
<td></td>
<td>p0395, A79-32426</td>
</tr>
<tr>
<td>PROCTON, R. S.</td>
<td>Atlanta center upgraded third generation enroute ATC system operations: A case study</td>
<td>[AD-1056103]</td>
<td>p0161, A79-18071</td>
</tr>
<tr>
<td>PROCTOR, D.</td>
<td>California airport monitor noise data</td>
<td></td>
<td>p0074, A79-15559</td>
</tr>
</tbody>
</table>
and description and usage guide
[AD-A062909]
p0381 879-21039
RIESS, J.
Sharjah - An airport out of Arabian Nights
[NASA-CH-150017]
p0536 879-43732
RITTOFF, R.
Air traffic control requirements from the
viewpoint of the airport
[DGLR PAPER 79-025]
p0518 879-42353.
RITTMUeller, R.
Review of the Rhein-Flugzeugbau Wankel powered
aircraft program
p0221 879-15966
RIVETT, J.
Goniometric aerodynamics: A different perspective:
Description - Applications
[AIAA 79-1650]
p0567 879-45326
RIFFEL, R. E.
Time-variant aerodynamics of oscillating airfoil
surfaces in a supersonic flowfield
p0406 879-34531
The unsteady aerodynamics of a cascade in
translation
p0555 879-27180
RIPPIOD, N.
System for confirming ILS or MLS for Cat III type
landing without decision height
p0056 879-13262
RIGTERIN!, P.
Monitoring stratospheric winds with
Concorde-generated infrasound
p0574 879-46225
RINED, J. L.
Direct drive control valve for fly-by-wire flight
control system actuators
[AD-A062030]
p0306 879-19007
RING, R. E.
Total environment survivability methodology
[AD-A063237]
p0382 879-21047
RIEGG, R.
The dynamic ice detector for helicopters
Icing test facilities in Canada
p0173 879-15043
RIE, R. A.
Turbine engine automated trim balancing and
vibration diagnostics
[ASME PAPER 78-GT-129]
p0009 879-10793
LSN1N laser balancing demonstration on a high-speed
flexible rotor
[ASME PAPER 78-GT-56]
p0391 879-32351
RIST, D.
Influence of geometric effects on the aspect ratio
optimization of axial turbine blades
[ASME PAPER 78-GT-173]
p0100 879-10809
RIVETT, J.
Structures for hypersonic aircraft breathing tactical
missiles
p0387 879-21437
RIVKIN, M. I.
Aircraft antenna systems
p0564 879-44892
RIZZETA, D. P.
The aeroelastic analysis of a two-dimensional
airfoil in transonic flow
[AD-A057605]
p0087 879-12023
RIZZETTA, A.
Shock waves around bodies travelling at slightly
greater than sonic speed
p0333 879-29659

PERSONAL AUTHOR INDEX
ROACHE, P. J.
Semidirect computation of three-dimensional
viscous flows over suction holes in laminar flow
control surfaces
[ASME PAPER 79-0042]
p0386 879-18837
ROBILLET, R.
Lynx reliability and maintainability design and
military service experience
p0079 879-16242
ROBB, J.
An IF compatible lightning diverter strip
p0297 879-18237
ROBB, M. D.
Laboratory tests to determine the possibility of
ignition of fuel vapors by lightning
p0681 879-51135
ROBBINS, B. R.
Limited airworthiness and flight characteristics
evaluation model 214A helicopter with fiberglass
main rotor blades
[AD-A077721]
p0716 879-33197
ROBBINS, D.
Digital symbology generator program
[AD-A060216]
p0166 879-14111
ROBERT, J.
Lift and drag of sail aerofoil
p0515 879-41945
ROBERTS, B. W.
Parachute inflation control using an attached apex
drogue
[AIAA 79-0044]
p0263 879-26653
ROBERTS, R. L.
Factors in evaluating the effectiveness of a
collision avoidance logic
p0401 879-33607
ROBERTS, L.
Recent progress in rotorcraft and powered-lift
research
p0133 879-18674
ROBERTS, L. A.
Thunderstorms turbulence investigations for
1973-1974 in support of the National Severe
storms laboratory (NSSL)
[CAP-AD-005943]
p0445 879-23604
ROBERTS, P.
Wide range operation of advanced low NOx aircraft
gas turbine combustors
[ASME PAPER 78-GT-120]
p0009 879-10792
ROBERTS, R. W.
A design point correlation for losses due to
part-span dampers on transonic rotors
[ASH! PAPER 78-GT-153]
p0100 879-10802
High speed smoke flow visualization for the
determination of cascade shock losses
[AIAA PAPER 79-0042]
p0138 879-19495
Calculation of laminar separation bubbles and
their effect on airfoil performance
[AIAA PAPER 79-0205]
p0144 879-19465
An off-design correlation of part span damper
losses through transonic axial fan rotors
[ASME PAPER 79-GT-6]
p0390 879-32329
Low-turbulence high-speed wind tunnel for the
determination of cascade shock losses
[ASME PAPER 79-GT-129]
p0394 879-32398
ROBERTSON, D. J.
IVC content of turbine engine exhaust
p0138 879-19358
ROBERTSON, J. E.
Advanced crew station concepts, displays, and
input/output technology for civil aircraft of
the future
p0679 879-51091
ROBERTSON, J. M.
Producing light aircraft - Three viability case
studies
p0450 879-36376
ROBERTSON, S.
A method for selecting a crashworthy fuel system
Design
p0312 879-19661
ROBLES, A. G.
The development and structure of turbulent plane
jets
p0137 879-16837
ROBINS, A. W.
High-performance wings with significant
leading-edge thrust at supersonic speeds
[AIAA PAPER 79-1671]
p0610 879-47928
Aerodynamic characteristics at Mach numbers of 1.5, 1.8, and 2.0 of a blended wing-body configuration with and without integral canards. [(NASA TP-10427) p0430 N79-23013]

ROBINSON, C. R.
Evaluation of an ejector-powered engine simulator at transonic Mach numbers. [(AIAA PAPER 79-1165) p0467 A79-38967]

ROBINSON, D. A.
The impact of alternate fuels on aircraft configuration characteristics. [(AD-A066983) p0501 N79-25244]

ROBINSON, E. B.
Aeroelastic addition to NASTRAN. [(AIAA PAPER 79-1186) p0277 A79-23730]

ROBINSON, F.
The development and in-flight evaluation of a tripleplex digital autostabilization system for a helicopter. [p0655 N79-30200]

ROBINSON, B. S.
Real-time/near real-time recce wideband data links. [p0112 N79-17746]

ROBINSON, S. N.
Multichannel infrared receiver performance. [p0410 N79-35210]

ROCHE, A. J., Jr.
The impact of operational requirements on TSTOL propulsion concept selection. [(AIAA PAPER 79-1293) p0471 A79-39018]

ROCHE, E. M.
Avionics design for testability - An aircraft system engineer's viewpoint. [p0624 A79-48888]

ROCHOLL, B. M.
Application of direct-inverse techniques to airfoil analysis and design. [p0355 N79-20035]

ROCH, R. S.
Multivariable control design principles applied to a variable cycle turbofan engine. [p0511 A79-41113]

RODAL, J. J. A.
Engine rotor burst containment/control studies. [p0553 N79-27162]

RODENKO, V. V.
Method of eliminating static and dynamic errors in the reproduction of motion of TV-simulator displays. [p020 A79-12153]

RODGI, W. P.
Aeroelastic addition to NASTRAN. [(NASA CR-3094) p0287 N79-17812]

ROYDGER, T. N.
Design and development of a monorotor gas turbine auxiliary power unit. [(AIAA PAPER 78-WA/GT-2) p0169 A79-19791]

ROYDGER, C.
The non-linear aerodynamic characteristics of wings and their wakes, including canard configurations. [p0154 A79-20106]

ROYDGER, B.
The calculation of the non-linear aerodynamic coefficients of wings of various shapes and their wakes, including canard configurations. [p020 A79-20106]

ROYDGER, B.
The calculation of the non-linear aerodynamic characteristics of wings and their wakes in subsonic flow. [p020 A79-17746]

ROYDGER, B.
A reliable and survivable data transmission system for avionics processing. [p0354 N79-20025]

ROMAN, J.
Behavior of adhesively bonded joints under cyclic loading. [p0444 A79-23453]

ROND, E. J.
Stability analysis of relative navigation systems. [p0409 A79-36090]
BOROEO, G.
Experimental investigation into the feasibility of an extruded wing
p0545 N79-27077

BOREO, N.
Provisions and experimental results in open balloon controlled descent
p0677 N79-31691

BORE, C. L.
Evaluation of materials for post-attack pavement repair
[AD-066516] p0502 N79-25251

BOVE, G. M.
Some aspects of helicopter communications
p0311 N79-19647

BOE, W.
Prediction of selected jet fuel test results using ASTM test method 22687 data with multiple linear regression analysis
[AD-055185] p0090 N79-12245

BOEHR, R. P.
Stress intensity factors, for collinear cracks in a stiffened sheet
p0150 A79-20007

BOECS, P. V.
Some features of the unsteady pressure field in transonic airfoil buffeting
[IAA PAPER 79-0351] p0201 A79-23550

BOECS, R.
The use of panel methods for stability derivatives
p0170 N79-15081

The use of panel methods with a view to problems in aircraft dynamics
[DLR-TR-77000-0] p0216 N79-15916

BOFELT, K. L.
Siokousy S-76 stresses performance
p0190 A79-22839

BOUEFELL, C.
Study of the structure of an integrated system of flight control, navigation and display
p0279 A79-27674

BOEHR, J. B.
Some steady and oscillating airfoil test results, including the effects of sweep, from the tunnel
p0359 N79-20059

BOECS, R.
Rotary balance data for a typical single-engine general aviation model design for an angle-of-attack range of 8 deg to 90 deg. 2: High-wing model A

BOECS, A.
Nonlinear equations of equilibrium for elastic helicopter or wind turbine blades undergoing moderate deformation

BOECS, G.
Evolution of the turboprop for high speed air transportation
[ASME PAPER 78-02-201] p0012 A79-10821

BOISENF, L. R.
An improved method for load survey flight testing
[IAA PAPER 79-1799] p0606 A79-47885

BOISFIELD, R. W.
An assessment of the c sewage presented by the use of carbon fiber composites as commercial aircraft. Volume 1: Final report. Volume 2: Supporting appendices

BOSENEF, J. W.
Airplane engine spar fire mitigation, phase 2

BOSEG, J.
Design description of a four-place business jet using two RB-19 engines
p0853 A79-36715

A comparison of hydraulic, pneumatic, and electro-mechanical actuators for general aviation flight controls
[SAE PAPER 790623] p0458 A79-36751

Summary of noise reduction characteristics of typical general aviation materials
[SAE PAPER 790627] p0458 A79-36755

Comparison of theoretical predicted and longitudinal aerodynamic characteristics with full-scale wind tunnel data on the N151 airplane

BOLESUK, G. S.
Gas flow in nozzles
p0347 A79-32025

BOSS, A. J.
Application of parameter identification techniques to analysis of flight data
p0461 A79-37735

Lateral stability at high angles of attack, particularly wing rock
p0658 N79-30226

BOSS, C. W.
A miniature air sonar altimeter
p0067 A79-18613

BOSS, R.
An electric control for an electrolytic active control aircraft landing gear

BOSS, R. C.
Evaluation of new bonding systems for depot-level maintenance of aircraft honeycomb panels
[AD-0665117] p0488 N79-24161

BOSSIC, A.
A piloted simulator investigation of helicopter precision decelerating approaches to hover to determine single-pilot IFR /SPIFR/ requirements
p0573 A79-48413

BOSSIS, R.
Research on the flutter of axial turbomachine blading
[AD-063102] p0366 N79-20126

BOSSIT, S. R.
Analytical simulation tests with site-adaptation logic
[FAA-R-78-42] p0237 N79-16879

BOSS, A. C.
Fasil integral fuel tank sealants, part 1
[AD-067885] p0585 N79-28329

BOSSHAW, R.
Gearbox casings of fibre-reinforced plastic for aero engines
p0111 A79-17058

BOSS, V. J.
Experimental investigation of wing fin configurations for alleviation of vortex wakes of aircraft
[NASA-78-78520] p0086 N79-12018

BOT, D. R.
Updated model assessment of pollution at major U.S. airports
p0206 N79-32745

Airport vicinity air pollution model. Abbreviated version user's guide
[FAA-R-78-79] p0298 N79-18475

BOT, G. W.
A computer system for identifying aircraft characteristics
p0642 A79-50168

BOT, R.
Economical processing for the fabrication of CFRP components
[DLR PAPER 79-009] p0041 A79-33600

BOT, W.
Cautions: electrical heating acrylic
[SAE PAPER 790600] p0855 A79-36732

BOUPHEAB, E.
A canister fuel pump for general aviation aircraft
[SAE PAPER 790624] p0458 A79-36752

BOUHAN, B. L.
Structural design and analysis of prop-fan blades
[IAA PAPER 79-1116] p0685 A79-51704

BOVHEE, D. B.
The unsteady aerodynamics of a cascade in translation
p0555 N79-27180

BOTHE, J.
Analysis of optimal loop and split-S by energy state modeling
p0602 A79-47098

BOUSEBON, R.
Previsions and experimental results in open balloon controlled descent
p0677 N79-31691

BOUSSEAU, J.
Basic for an objective evaluation of the paratrooper jumping reliability
p002 A79-33619

BOUSTAIN, N.
Application of aerodynamic design techniques to process compressor design
p0309 N79-19388
BOYD, J. A.
13 scanning camera measurements of an exhaust plume from an axisymmetric nozzle afterbody model at transonic Mach numbers

BOYD, W. S.
Reduction of computer usage costs in predicting unsteady aerodynamic loadings caused by control surface motions: Analysis and results

BOWLAND, C.
Conflict alert for the air traffic control system

BOY, J. A.
Unique environmental test facilities at Orlando Division of Martin Marietta Aerospace

BOYAL, A. C.
An analytical method for designing low noise helicopter transmissions

BOZDENDAL, H. L.
NORD: A segmented mission analysis program for low and high speed aircraft. Volume 3: Demonstration problems

BOZDENDAL, D.
The design and aerodynamic characteristics of an 18% thick shock-free airfoil (M_L 1.17) [NLR-NP-78016-U]

BOZDEKSTEVENS, K. V.
Motion of rectangular wing between parallel walls

BOZAN, B. I.
Contribution to the asymptotic theory of flows at the trailing edge of a slender wing

BUCKETT, P. E.
A comparison of panel methods for subsonic flow computation [AGARD-AR-244] Transonic wing redesign using a generalised fictitious gas method [AD-1070093]

BUCKETT, R. J.
The effect of standardization of avionics software quality assurance

BUCKETT, J.
Distributed time division multiple access /DTDMA/ - An advanced communication technique with application to CCC and integrated CAN [P0056 179-13367]

Distributed TDMA - An approach to JTIDS phase II

BUCKETT, L.
Applications of metal-matrix composites, the emerging structural materials

BUCKETT, S. G.
Boundary layer induced secondary flows due to wing-body interference [AIAA PAPER 78-0196]

BUCKETT, K. A.
Method of determining precipitates formed during use and storage of synthetic oils

BUCK, G. T.
Satellite interferometer as an advanced navigation/communication system

BUCK, R. A.
ATC accommodation of fuel conservative turbojet operations

BUDAKOV, Y. L.
Aircraft design and strength /2nd revised and enlarged edition/

BUD, R. J.
Aircraft velocity and altitude measurements using a tunable diode laser

BUDET, H. A.
Characteristics and combustion of future hydrocarbon fuels

Impact of future fuel properties on aircraft engines and fuel systems

BUDIS, V. I.
Semi-automatic control of aircraft: Systems of manual aircraft control

BUDICK, I.
Acoustic driving of rotor [NASA-CAES-820-E-14005-1]

BUE, T. O.
Composite girbal materials study

BURNERIE, J. E.
Wind-tunnel shock-tube simulation and evaluation of blast effects on an engine inlet

BURDOLD, J. G.
Tracker antenna location study

BURFORD, K. E.
Electronic control for helicopter engines

BURRIS, D. E.
Mechanical and thermophysical properties of graphite/polynide composite materials

BURDALL, T.
Survey of radar simulation training at ATC field facilities

BURNES, J. N.
Advanced environmental cooling concepts for supersonic aircraft

BURNET, A. N.
Decoupler pylon - A simple, effective wing/store flutter suppressor [AIAA 79-0791]

BURNET, L. J.
Amplification factors at transition on an unswept wing in free flight and on a swept wing in wind tunnel [AIAA PAPER 79-0267]

BURG, S. Y.
Improved sonic-box computer program for calculating transonic aerodynamic loads on oscillating wings with thickness

BURG, L. J.
Sonic-box method employing local Mach number for oscillating wings with thickness

BUSH, A. M.
Unloading the drive of gas distributor valves operating at high pressures

BUSCHN-CLERC, L.
Designing airport terminals for transfer passengers

BUSH, D.
Material developments for airline safety - Impact on the safety of ground maintenance employees

BUSH, P. L.
Lo-frequency augmentor instability investigation computer program user's manual

BUSH, K. L.
Effect of broadened-specification fuels on aircraft engines and fuel systems [AIAA 79-7008]

Characteristics and combustion of future hydrocarbon fuels

Impact of future fuel properties on aircraft engines and fuel systems

RUSSELL, P. Z.
Effect of broadened-specification fuels on aircraft engines and fuel systems

RUSSELL, P. Z.
Failure modes and redundancy analysis for the Multifunction Inertial Reference Assembly (MIRA)

RUSSELL, L. P.
Lo-frequency augmentor instability study

RUSSELL, P. Z.
Impact of future fuel properties on aircraft engines and fuel systems
PERSONAL AUTHOR INDEX

RUSSELL, V.
- Evaluation of new bonding systems for depot-level maintenance of aircraft honeycomb panels
  [AD-A0661177] p0488 N79-24161

RUSSELL, D. R.
- Recent advances in materials toxicology
  p0666 N79-31169

BUTTOWSKY, R. J.
- Aerelastic stability analysis of the AD-1 manned oblique-veing aircraft
  p0463 A79-38136

BYEK, J.
- The Sikorsky elasotonic rotor
  [NBS 78-68] p0632 A79-40100

BYCHEVKY, B. E.
- A parachute that goes up
  [CORP-771215-1] p0067 A79-14431
- Validation and quality assurance procedure to assure a symmetrical lifting parachute
  [ADAI 79-0427] p0262 A79-26636

BETZ, J.
- A study of requirements, model configurations, and test plans for air cushion system comparison tests
  [AD-A0690606] p0585 N79-28373

BETZ, D.
- Wing design, body design, high lift systems and flying qualities with introduction
  p0579 A79-28125

BYASKE, R.
- The Total In-Flight Simulator (TIPS) aerodynamics and systems: Description and analysis
  [NASA-CH-158695] p0766 N79-14113

BYASKE, R. G.
- Gust alleviation using direct turbulence measurements
  [AIAA 79-1676] p0568 A79-45339
- Gust alleviation - Criteria and control laws
  [AIAA 79-1676] p0568 A79-45340
- Design criteria for optimal flight control system
  [AIAA 79-1782] p0572 A79-54009
- The enhancement of aircraft parameter identification using linear transformations
  p0611 A79-47961
- Identification of the stability parameters of an aerostatic airplane
  p0777 A79-15077
- Active control for the Total-In-Flight Simulator (TIPS)
  [NASA-CH-3118] p0487 N79-23978

BYESKOV, O. S.
- On a property of the linearized boundary layer equations with self-induced pressure
  p0513 A79-41568

BRENNER, K.
- Technical characteristics and cost data for the Tl-62 and TI-62M aircraft and optimal flight conditions
  p0410 A79-35475

S

SABATIELI, J. A.
- The Tri-Port V/STOL propulsion/control concept
  [AIAA PAPER 79-0121] p0142 A79-19566

SABATIELI, J. A., JR.
- Regression simulation of turbine engine performance: Accuracy improvement (task 4)
  [AD-A0663538] p0499 N79-25027

SACHS, G.
- Stall behaviour evaluation from flight test results
  p0659 A79-30227

SADE, W. Z.
- Effects of turbulence on laminar separation on aerodynamic surfaces such as airfoils and compressor blades
  [NASA-CH-158888] p0416 A79-22036

SADLER, A. J.
- The 85 metre pressurised low speed wind tunnel
  p0155 A79-20113

SAPARIS, P.
- To the problem of starting and airfoil-shape optimization of the transonic supersonic cascade
  p0185 A79-20566
- The flow past a supersonic trailing edge in transonic turbine cascades
  p0398 A79-32670

SAFF, C. R.
- Environment load interaction effects on crack growth
  [AD-A0074660] p0721 N79-33504

SAFROV, V. I.
- Airplane wing self-oscillatory bending-torsion vibrations
  p0069 A79-6065

SAGERSE, D. A.
- Effect of forward velocity and crosswind on the reverse-thrust performance of a variable-pitch fan engine
  [AIAA PAPER 79-0105] p0200 A79-23512
- Effect of forward velocity and crosswind on the reverse-thrust performance of a variable-pitch fan engine
  A79-79-70597
- The influence of sweep on the aerodynamic loading of an oscillating NACA 0012 airfoil
  p0626 A79-49057

SAIF, N. E.
- Alternatives for jet engine control

SAINT HILAIRE, L. O.
- Effect of interblade phase angle and incidence angle on cascade pitching stability
  [NASA-CE-159628] p0558 N79-27933

SAITO, S.
- Application of the local momentum theory to the aerodynamic characteristics of tandem rotor in yaped flight
  p0128 A79-18640

SALAK, S.
- Application of singular perturbation techniques
  [JSPJ/ continuation methods for on-line aircraft trajectory optimization
  A79-79-47991
- A study of the application of singular perturbation theory

SALAMY, M. W.
- Fundamental problems and methods for improving systems for planning the development of civil aviation
  p0335 A79-29772

SAKAY, T.
- Experimental study on diffusers for mixed-flow machines
  [ASME PAPER 78-GT-120] p0399 A79-32936

SARKAKA, G. W.
- Flight comparison of the transonic agility of the F-111A airplane and the F-111 supercritical wing airplane
  [NASA-TP-1368] p0104 N79-13056

SALATA, K.
- Considerations of cooling method of turbine blade from view points of thermal stress and life
  p0337 A79-30378

SALAMA, M.
- A generalized modal shock spectra method for spacecraft loads analysis
  [AIAA 79-0745] p0320 A79-29017

SALAS, M. D.
- A careful numerical study of flowfields about external conical corners. I - Symmetric configurations
  [AIAA PAPER 79-1511] p0575 A79-66701

SALIMOV, R. F.
- An approximate method for calculating a laminar boundary layer in microozzles
  p0526 A79-62559

SALIY, B.
- Studies of the acoustic transmission characteristics of coaxial nozzles with inverted velocity profiles: Comprehensive data report
  [NASA-CH-159628] p0558 N79-27933

SALDEN, G. F.
- Causes of high pressure compressor deterioration in service
  [AIAA PAPER 79-1234] p0508 A79-40483

SAKAYA, A.
- An evaluation of some display parameters for an advanced landing display
  p0679 A79-51092

SALO, P. Y.
- Pilot program to develop operating time emission degradation factors for general aviation piston engines
  [AD-A008158] p0050 N79-11562
PERSONAL AUTHOR INDEX

SAWYER, N. C.
SAWYER, P. L.
SAWADA, H.
SAUNDERS,
SAULE, A. V.
SATTLEE, D. H.
SATTENTHUIT, N. L.
SITTER, 
SAEPKAYA, T.
SATE AN, D.
SATO, H.
SATHER, A.
SASAKI, F.
SARSTEDER, K. R.
SAROPIN, A. P.
SAROPIN, 
[Image]

SAWYER, N. C.
SAWYER, P. L.
SAWADA, H.
SAUNDERS,
SAULE, A. V.
SATTLEE, D. H.
SATTENTHUIT, N. L.
SITTER, 
SAEPKAYA, T.
SATE AN, D.
SATO, H.
SATHER, A.
SASAKI, F.
SARSTEDER, K. R.
SAROPIN, A. P.
SAROPIN, 

Volume 1: Trapezoidal tail
[NASA-TP-80009-VOL-1] p0547 A79-27099

SAFEN, L. S.
Effects of periodic changes in free stream velocity on flows over airfoils near static stall
p0212 A79-24214

SAYLOR, D. R.
Structural Integrity Recording System for helicopters
[HS 78-57] p0125 A79-18178

SAYLOR, F. G.
Complex quaternion notation in coordinate transformations
p0619 A79-48681

SCARDO, V. M.
Phosphoric acid non-tank anodize/PAN/Ty process for repair bonding
p0187 A79-20015

SCHEIBE, B. R.
System for the display of extracted radar data on the basis of minicomputer-controlled display devices /DENG-RC/ for an employment in Air Traffic Control
p0251 A79-25491

SCHEFFE, R. P.
Repair of directionally solidified airfoil components
p0211 A79-24134

SCHEFFE, R. G.
Design of helicopter rotors to noise constraints
p0040 A79-10854

SCHEFFLER, A.
Experimental and analytical investigation of the effects of Reynolds number and blade surface roughness on multistage axial flow compressors
[ASME PAPER 79-GT-2] p0339 A79-30501

SCHEFFLER, H.
Heat generation in cavities at high velocity flights
[EMG-PWN-77-28-28] p0288 A79-17015

SCHEFFLER, G.
Impact of new navigation methods on flight guidance in the terminal maneuvering area
[DGLE PAPER 78-135] p0061 A79-14085

SCHEFFER, L. C.
Quantification of the storage logistics thermal environment
p0195 A79-22162

SCHEFFER, R. T.
Air pollution from aircraft operations at San Jose Municipal Airport, California
[NASA-TP-790506] p0008 A79-12585

Effects of upper surface modification on the aerodynamic characteristics of the PAA 63 sub 2-215 airfoil section
[NASA-TP-790503] p0158 A79-14024

SCHELLING, P. M.
Flight simulation of a vehicle with a two-stage parachute system
[THB-PW-79-10-10] p0263 A79-26652

SCHENCK, J.
Design of VHF and UHF communications air/ground antennas
[FAA TR 87-7] p0240 A79-17078

SCHENCK, L.
A computer program for double sweep optimal smoothing
[AD-8065612] p0502 A79-25278

SCHENDEL, L.
Preventing fires in aircraft fuel systems
p0608 A79-34923

Preventing fires in aviation fuel storage and transport systems. II
p0536 A79-63734

SCHENDEL, D. C.
Engine induced structural-borne noise in a general aviation aircraft
[SAE PAPER 780626] p0858 A79-36758

Engine-induced structural-borne noise in a general aviation aircraft
[NASA CR-150095] p0699 A79-29957

SCHENDEL, H.
Special sandwich constructions for the interior of commercial aircraft
p0530 A79-43270

SCHENDEL, E. P.
BELSIM-A systems reliability simulation code
p0876 A79-39900

[Image]
A method of computing the pressure distribution on a single-bladed hovering helicopter rotor p0540 N79-26044

A laboratory study of the subjective response to helicopter blade-slap noise (NASA-CP-158973) p0110 N79-13819

Development and demonstration of manufacturing processes for fabricating graphite/PMR-15 polyimide structural elements p0661 N79-30301

Global services systems - Space communication [AIAA 79-0966] p0408 N79-34761

Skep, Z. Computer analysis of semi-monocoque shell sections p0689 N79-52718

Skepda, D. E. Aerodynamics of slender bodies at high angles of attack p0197 N79-22393


Interactional aerodynamics of the single rotor helicopter configuration. Volume 2-I: Harmonic analyses of airframe surface pressure data, runs 23-33, aft section [AD-A060969] p0170 N79-15006

Interactional aerodynamics of the single-rotor helicopter configuration, volume 1 [AD-A060969] p0170 N79-15008

Interactional aerodynamics of the single-rotor helicopter configuration. Volume 2-A: Harmonic analyses of airframe surface pressure data, runs 7-14, forward section [AD-A061359] p0228 N79-16807

Interactional aerodynamics of the single rotor helicopter configuration. Volume 2-C: Harmonic analyses of airframe surface pressure data, runs 7-14, aft section [AD-A061360] p0228 N79-16808


Interactional aerodynamics of the single rotor helicopter configuration. Volume 5-C: One-third octave band spectrograms of wake single film data, hubcaps and air ejectors [AD-A062140] p0360 N79-20075

Interactional aerodynamics of the single rotor helicopter configuration. Volume 7-C: Frequency analyses of wake split-film data, buildup to baseline [AD-A062639] p0360 N79-20076

Interactional aerodynamics of the single rotor helicopter configuration. Volume 7-C: Frequency analyses of wake split-film data, solid hubcaps [AD-A062640] p0360 N79-20077

Interactional aerodynamics of the single rotor helicopter configuration. Volume 7-D: Frequency analyses of wake split-film data, open hubcaps [AD-A062641] p0360 N79-20078

Interactional aerodynamics of the single rotor helicopter configuration, volume 7-F: Frequency analyses of wake split-film data, air ejectors [AD-A062691] p0360 N79-20079

Interactional aerodynamics of the single rotor helicopter configuration. Volume 7-F: Frequency analyses of wake split-film data, air ejectors with hubcaps [AD-A062117] p0361 N79-20080


Interactional aerodynamics of the single rotor helicopter configuration. Volume 8-D: Frequency analyses of wake single film data, buildup to baseline [AD-A062643] p0361 N79-20082

Interactional aerodynamics of the single rotor helicopter configuration. Volume 8-D: Frequency analyses of wake single film data, basic configuration wake explorations [AD-A063712] p0378 W79-21012

Interactional aerodynamics of the single rotor helicopter configuration. Volume 8-E: One-third octave band spectrograms of wake split-film data, buildup to baseline [AD-A063713] p0379 W79-21013

Interactional aerodynamics of the single rotor helicopter configuration. Volume 8-F: One-third octave band spectrograms of wake split-film data, basic configuration wake exploration [AD-A063243] p0379 W79-21015

Interactional aerodynamics of the single rotor helicopter configuration. Volume 8-H: One-third octave band spectrograms of wake split-film data, air ejectors with hubcaps, wings [AD-A063244] p0379 W79-21016

Interactional aerodynamics of the single rotor helicopter configuration. Volume 8-I: Harmonic analyses of hub wake [AD-A063245] p0379 W79-21017


Interactional aerodynamics of the single rotor helicopter configuration. Volume 8-K: Frequency analyses of wake single film data, basic configuration wake explorations [AD-A061861] p0382 W79-23931

Interactional aerodynamics of the single rotor helicopter configuration. Volume 8-L: Flow angle and velocity wake profiles in low frequency band, basic investigations and hub variations [AD-A061766] p0382 W79-23932

Interactional aerodynamics of the single rotor helicopter configuration. Volume 8-M: Flow angle and velocity wake profiles in low frequency band, air ejector systems and other devices [AD-A061767] p0383 W79-23933
Theoretical study of the effect of wind velocity gradients on longitudinal stability and control in climbing and level flight

Tests of beaded and tubular structural panels

Aircraft manufacturing quality assurance

Harmonic oscillations of an annular wing in the steady flow of an ideal fluid

Harmonic oscillations of an annular wing in steady ideal fluid flow

Aircraft manufacturing quality assurance

Theoretical study of the effect of wind velocity gradients on longitudinal stability and control in climbing and level flight

Tests of beaded and tubular structural panels

Aircraft manufacturing quality assurance
SKUPIN, W.  
Investigation of different system configurations for a TMA navigation system taking special account of traffic load and channel requirements  
[ASNE PAPER 79-029]  
p0516 A79-42365  
Investigation on information error caused by traffic loading in approach and landing systems  
[p0675 A79-31480

SKOBECKY, B. A.  
Optical selection of the geometrical characteristics of the reversing channel of a small-scale turbine with reedmisn of the gas  
p0450 A79-36583

SKUPIN, V.  
The technology of brazing and soldering is broad-based and vital to the industrial economy /1979 Adams lecture/  
p0665 A79-52856

SKVEIK, R. G.  
The impact of software in automatic test equipment  
p0629 A79-48691

SLAZAK, N.  
Noise transmission - Turboprop problem  
[AIAA PAPER 79-0645]  
p0271 A79-26933

SLIEN, D. J.  
A computer aided design and fabrication system adapted to the design of three dimensional objects  
p0374 A79-20762

SLINK, D. J.  
A study of course deviations during cross-country soaring  
p0545 A79-27072

SLIEN, S. N.  
Some flight data extraction techniques used on a general aviation spin research aircraft  
[AIAA PAPER 79-1802]  
p0606 A79-47887

A study of course deviations during cross-country soaring  
P0545 A79-27072

SLONE, R.  
A systemized approach to helicopter safety  
p0066 A79-14418

Inflatable survival systems for helicopters  
p0403 A79-33624

SLOVISKY, J. A.  
High speed smoke flow visualization for the determination of cascade shock losses  
[AIAA PAPER 79-0042]  
p0138 A79-19495

Low-turbulence high-speed wind tunnel for the determination of cascade shock losses in small-scale turbines  
p0450 A79-36583

SLUGGER, G. R.  
Emission sample probe investigation of a mixed flow JT91-11 turbofan engine  
[AD-A050038]  
p0505 A79-11561

Emission sample probe investigation of a mixed flow TP30 turbofan engine  
p0365 A79-20115

Exhaust emission traverse investigation of a JT3D-1 turbofan engine  
[AD-A072019]  
p0670 A79-31209

SMALLER, K. K.  
Causes of high pressure compressor deterioration in service  
[AIAA PAPER 79-1234]  
p0508 A79-40483

SMALLEY, A. J.  
Elastomer mounted rotors - An alternative for smoother running turbomachinery  
[AIAA PAPER 79-0145]  
p0394 A79-32484

SMALLEY, J. E.  
Aircraft dropwindsonde system  
p0190 A79-21466

SMART, A. E.  
Feasibility study of transit photon correlation anemometer for Ames Research Center unitary wind tunnel plan  
[NASA-CR-152238]  
p0367 A79-20140

SMART, P. B.  
Vertical cutoff rigidity and the intensity of distribution of cosmic rays near Cape Town  
p0461 A79-37468

SHEDLEY, R. D.  
An evaluation of the bird/aircraft strike hazard (BASH) at area C-62, Eglin AFB, FL  
[AD-A061371]  
p0230 A79-16820

SHEDLEY, R. J.  
The role of wind tunnels in future aircraft development /Daniel and Florence Guggenheim International Memorial Lecture/  
p0151 A79-20077

SHETTINA, P. O.  
Flight test evaluation of predicted light aircraft drag, performance, and stability  
[NASA-CR-158076]  
p0218 A79-15943

SHETTINA, P. W.  
Recent results obtained with a new method for measuring aircraft power and drag in flight  
[SAP PAPER 790616]  
p0457 A79-36744

SHETTLEY, R. W.  
Wind-tunnel shock-tube simulation and evaluation of blast effects on an engine inlet  
p0436 A79-23092

SHETTLE, D. G.  
Composite structure applications for commercial aircraft  
p0188 A79-20874

SHETTOYA, N. L.  
Flight simulators  
p0067 A79-18475

SHETTE, A. D.  
Considerations for the design of inlet flow conditioners for static fan noise testing  
[AIAA PAPER 79-0657]  
p0269 A79-26909

SHETE, R. I.  
Analysis of the impact of the use of broad specification fuels on combustors for commercial aircraft gas turbine engines  
[AIAA PAPER 79-1195]  
p0468 A79-38980

SHETTE, A. M.  
Omega possibilities: Limitations, options, and opportunities  
[AD-A065027]  
p0432 A79-23063

SHETTE, B. A.  
F-15 flight simulator: Development and analysis of computer scoring algorithms  
[AD-A067765]  
p0556 A79-27188

SHETTE, C. N.  
Availability and use of weather data  
p0148 A79-22711

SHETTE, C. N.  
American Airlines' operational and maintenance experience with aerodynamic seals and oil seals in turbofan engines  
p0047 A79-11061

SHETTE, C. N.  
Aerodynamic and thermodynamic characteristics of flow fields below VTOL vehicles in ground proximity  
[AIAA PAPER 79-0338]  
p0145 A79-19675

Aerodynamic characteristics of forebody and nose strakes based on F-16 wind tunnel test experience, Volume 2: Data base  
[NASA-CR-158922]  
p0091 A79-12066

The aerodynamic and thermodynamic characteristics of fountains and some far field temperature distributions  
[AD-A061335]  
p0232 A79-16843

Design guidelines for the application of forebody and nose strakes to a fighter aircraft based on F-16 wind tunnel testing experiment  
p0413 A79-22000

Aerodynamic characteristics of forebody and nose strakes based on F-16 wind tunnel test experience, Volume 1: Summary and analysis  
[NASA-CR-3053]  
p0069 A79-28143

SHETTE, D.  
Analysis of plane rise from jet aircraft  
p0532 A79-43436

Analysis of plane rise from jet aircraft  
[CONP-790142-1]  
p0669 A79-31204

SHETS, C. D.  
Preliminary studies using photon correlation velocimetry in turbomachinery and combustion systems  
p0405 A79-38314

B-154
Evaluation of an ejector-powered engine simulator at transonic Mach numbers [AIAA PAPER 79-1165]

SMITH, G. R.
The determination of margins of safety for critical aircraft systems

SMITH, J. D.
The investigation of aircraft interference problems

SMITH, K. P.
The determination of margins of safety for air carrier operations

SMITH, L. B.
Dynamics of complex structures—analysis and experiment: Damaged aircraft stabilators

SMITH, J. E. B.
Impact of fuel availability and other cost trends on air carrier operations

SMITH, H. S.
Strake-induced separation from the leading edges of wings of moderate sweep

SMITH, N. I.
Forecast of future aviation fuels. Part 1: NASA CF6 jet engine diagnostics program: Design and analysis of a plate-fin sandwich structure for the 20 hp mini-NPV demonstrator engine programs

SMITH, H. K.
Performance of a vortex-controlled diffuser in an annular swirl-can combustor at inlet Mach numbers up to 0.53

SMITH, P. B.
Aerodynamics for engineers

SMITH, B. C.
Analysis of a lateral pilot-induced oscillation experienced on the first flight of the YF-16 aircraft

SMITH, K. P.
20 hp mini-PPY demonstrator engine program [ASME PAPER 78-GT-200]

SMITH, L. N.
Design and analysis of a plate-fin sandwich actively cooled structural panel

SMITH, L. E.
The coming of age of digital electronics in commercial transports [AIAA 79-0686]

SMITH, R. L.
Aerodynamics for engineers

SMITH, H. S.
Experimental analysis of V.H.F. antennas for aerial isolation— a study of the interaction between co-sited aerials

SMITH, K. S.
The prediction of fatigue crack growth under flight-by-flight loading

SMITH, T. E.
Impact of digital computer technology on flight systems [AIAA 79-1641]

SMITH, R. W.
Aerial isolation—a study of the interaction between co-sited feeds on a hyperscral aircraft [AIAA-CR-3159]

SMITH, R. L.
The penetration of electromagnetic fields into aircraft from externally mounted HF antennas

SMITH, K. K.
Development in radar data processing at the London Air Traffic Control Centre

SMITH, D. R.
Basic avionics module design for general aviation aircraft [NASA-CR-158953]

SMITH, L. E.
Basic avionics module design for general aviation aircraft [NASA-CR-158953]

SMITH, R. E.
State of the art survey of technologies applicable to NASA's aeronautics, avionics and controls program [NASA-CR-159050]

SMITH, S. J.
CABN data handling from conceptual design through produce support [AIAA PAPER 79-1946]

SMITH, K. S.
Some aspects of the design and development of the maritime autopilot systems for the Westland Lynx
SNYDER, H. W.

SNOW, D. V.

SOBERHAN, B. K.

SOOKOL, P. R.

SOBIESZCZANSKI-SOBIESKI, J. T.

SOBIECZNIK, H.

SORENSEN, A. J.

SOXLEAU, J. P.

SOHEL, N. S.

SOFT, J. G.

SOOS, A. P.

SOOZA, A. P.

SOUSA, A. P.

SOUSLO, I. G. M.

SOUSEK, J.-V.

SOVBOO, P.

SO0BOO, P.

SOUTUV000, B. G.

SOUTHERN, V. B.

SOOTHALL, H. L.

SOUTH, 3. L.

SOUTH, J. C., JR.

SORENSON, N. B.

SORENSEN, J. A.

SORENSEN, P.

SORENSEN, J. A.

SO0BOO, P.

SONNLEITNER, V.

SONHEB0BI, V.

SOBERS, D. H.

SOKOLOV, L. A.

SOKOLOV, V. D.

SOLERON, B. D.

SONNLEITNER, V.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.

SOMERSON, D. M.
A nonlinear approach to the design of jet engine control systems

Configuration management and automatic control of an augmentor wing aircraft with vectored thrust

Jet curtain flameholder for aircraft afterburners

Evaluation of flow quality in two NASA transonic wind tunnels

Engine rotor burst containment/control studies

Effect of flight loads on turbofan engine performance deterioration

Aerodynamic and acoustic effects of eliminating core swirl from a full scale 1.6 stage pressure ratio fan (ONR-1A)

Effect of flight loads on turbofan engine performance deterioration

Comparison of the aerodynamic properties of an oscillating NACA 0012 airfoil. Volume 1: Technical report

Jet engine exhaust analysis by subtractive chromatography

A technique for engine maintenance cost forecasting

Aerodynamic characteristics of a fighter-type engine (GATE)

Optimization for rotor blades of tandem design for future trends in aircraft structural materials

Effect of spanwise blowing in the angle-of-attack derivatives of a fighter-type model

Nonlinear gust loads analysis - Monte Carlo vs. describing function analysis

Study of an advanced General Aviation Turbine Engine (GATE)

Some factors affecting the dynamic stability of a linear theory

Concurrent superplastic forming/diffusion bonding of B-1 components

A transonic wind tunnel interference assessment - Axisymmetric flows

Aerodynamic characteristics of a fighter-type model

Concurrent superplastic forming/diffusion bonding of B-1 components

A transonic wind tunnel interference assessment - Axisymmetric flows

A study of the effects of aircraft dynamic characteristics on structural loads criteria

Technical evaluation report on the Specialists' Meeting of the Flight Mechanics Panel on Piloted Aircraft Environment Simulation Technology (AFRD-AR-12-6)

Optimization for rotor blades of tandem design for future trends in aircraft structural materials

Study of an advanced General Aviation Turbine Engine (GATE)

Optimization for rotor blades of tandem design for axial flow compressors

Future trends in aircraft structural materials
PERSONAL AUTHOR INDEX

STERLIN, V. A.

- Variable cycle engine technology program planning and development

- An automated procedure for computing the three-dimensional transonic flow over wing-body combinations, including viscous effects. Volume 2: Program user's manual and code description
  [AD-A0549981] p0087 W79-12027

STEINBERG, R. J.

- Recent developments in helicopter noise reduction

STEVEN, A. H.

- Selection of geometric parameters and location of nose flap on the root profile of a swept wing using tunnel test data. I

- Selection of geometric parameters and location of nose flap on the root profile of a swept wing using tunnel test data. II

STEVENSON, E. N.

- Determination of the geometrical parameters and position of the nose flap at the root section of a swept wing on the basis of wind tunnel data. I

- Selection of geometric parameters and location of nose flap on swept wing root profile from tunnel test data. I

- Selection of geometric parameters and position of a nose flap on the root profile of a swept wing

STEVENSON, W. G.

- Internally coated air-cooled gas turbine blading

STEVENS, B. S.

- Study of design constraints on helicopter noise
  [NASA-CR-159541] p0435 879-23018

- Erosion resistant clad rotor blades - Boride coatings do the job

- Internally coated air-ccoled gas turbine blading

STEVENSON, C. H.

- Determining and improving labyrinth seal performance gas turbines
  [NASA-CR-159545] p0457 879-25148

- Design of helicopter rotors to noise constraints
  [NASA-CR-159546] p0141 879-19931

STEVENSON, D. J.

- A helicopter high definition rotor blade radar

STEVENSON, J. H.

- The potential role of airships for oceanography
  [AIAA 79-1574] p0521 W79-42831

STERLING, V. A.

- A new three-dimensional surveillance radar
  [NASA-CR-159516] p0653 879-30185

- Aerodynamic and acoustic investigation of inverted velocity profile coannular exhaust nozzle models and development of aerodynamic and acoustic prediction procedures, comprehensive data report, volume 1

- Aerodynamic and acoustic investigation of inverted velocity profile coannular exhaust nozzle models and development of aerodynamic and acoustic prediction procedures, comprehensive data report, volume 2

- Aerodynamic and acoustic investigation of inverted velocity profile coannular exhaust nozzle models and development of aerodynamic and acoustic prediction procedures

- Reynolds number, scale and frequency content effects on F-15 inlet instantaneous distortion
  [AIAA PAPER 79-0104] p0144 W79-19533

- Technology evolution in the Allison Model 500 engine
  [AIAA PAPER 79-25870] p0256 W79-30020

- Experimental design for real-time simulations of air traffic control concepts

- Effects of Reynolds number and other parameters on the throttle-dependent, nozzle/afterbody drag of an 0.11 scale single-engine aircraft model
  [AIAA PAPER 79-1167] p0508 W79-40481

- U.S. Navy helicopter technology initiatives

- Army outlook - flight control systems

- Internally coated air-cooled gas turbine blading

STEWART, D. J.

- New technology in commercial aircraft design for minimum operating cost
  [AIAA 79-0960] p0275 W79-27306

- Development of sprayed ceramic seal systems for turbine gas path sealing

- Development of sprayed ceramic seal systems for turbine gas path sealing

- The contribution of dynamic X-ray to gas turbine air sealed technology
  [NASA-CR-159574] p0607 W79-23125

- The characteristics of a lift cruise fan V/STOL configuration in near proximity to a small deck with finite edge positions

- Low speed wind tunnel test of ground proximity and deck edge effects on a lift cruise fan V/STOL configuration, volume 2
  [NASA-CR-159576] p0500 W79-28142

STEWART, L. J.

- Engine requirements for future general aviation aircraft

- Summary of applied research programs being conducted on miniature turbomachines for producing cryogenic temperatures operating on gas bearings turbo compressors and expanders utilizing helium and nitrogen as working fluids

STEWART, P. E.

- Advanced instrumentation and data evaluation techniques for flight tests

- Problems of onboard determination of wind relationships with optical filters

STEWART, V. N.

- Supercritical airfoil boundary-layer measurements

STEWART, V. L.

- Engine requirements for future general aviation aircraft

STEWART, D. J.

- New technology in commercial aircraft design for minimum operating cost
  [AIAA 79-0960] p0275 W79-27306

STEWART, P. E.

- The characteristics of a lift cruise fan V/STOL configuration in near proximity to a small deck with finite edge positions
  [AIAA PAPER 79-1856] p0699 W79-47913

STEWART, C. B.

- The contribution of dynamic X-ray to gas turbine air sealed technology
  [NASA-CR-159574] p0607 W79-23125

Stockham, J. D.

- Turbine engine particulate emission characterization
  [AD-A073198] p0777 W79-33208

B-160
STRAUCH, B.

rotary-wing aeroelasticity

STRAUCH, B.

System for confirming TIS or MLS for Cat III type

landing without decision height

STRAW, D. V.

Electromagnetic coupling analysis of a learjet

[AD-4062490] p0037 A79-20311

Investigation of penetration of electromagnetic

energy through joints in advanced composite

structures

[AD-4069589] p0070 A79-32041

STREET, T. D.

Finite element methodology results compared with experimental data for a severely deformed wing

in transonic flow

[AIAA Paper 79-0304] p0145 A79-19659

STREEL, H.

Analysis of free torsional rotor blade

oscillations under special consideration of asymmetric swash-plate support

p0131 A79-18660

STREEMER, C. W.

Tacon SIV program

p0072 A79-15359

STREKAAC, T. W.

Wind study for high altitude platforms design

[AIAA 79-1067] p0526 A79-42308

STRECKER, R.

Rotor prediction with different downwash models

p0129 A79-18642

STREICHLAND, D.

Adhesive sealing - A fuel leak deterrent

p0210 A79-24123

STREBBER, S.

Effect of viscosity on wind-tunnel wall interference for airfoils at high lift

[AIAA Paper 79-1526] p0077 A79-46715

STREIT, D.

Comparison between flows in cascades and rotors in the transonic range. 3: Comparison of experimental and theoretical results of flow studies on blade-to-blade surfaces in an axial compressor rotor

p0305 N79-19002

STREIT, E. G.

Flutter analysis of two-dimensional and two-degree-of-freedom airfoils in small-disturbance, unsteady transonic flow

[AIAA Paper 79-2923] p0665 N79-31157

STROKE, J. E.

Jet engine exhaust analysis by subtractive chromatography

[AD-4067090] p0583 N79-28170

STROCH, H. N.

Full-scale wind tunnel test of a modern helicopter main rotor - Investigation of tip Mach number effects and comparisons of four tip shapes

[AHS 78-03] p0119 A79-18129

Constant lift rotor for a heavier than air craft


STROUD, F. G.

Flight effects on noise generated by the J79 engine with inverted primary/fan flow as measured in the NASA-Ames 40- by 80-foot wind tunnel


STROESSER, R. A.

Influence of static vane cantiing on alternating stress level in turbine rotor blades

p0068 A79-14848

Gas turbines for flight vehicle engines: Theory, design, and calculation /Third review and enlarged edition/

p0648 A79-50421

STUART, J. W.

Global enclosure fire modeling with applications

p0584 A79-50421

Fuselage ventilation under wind conditions

p0667 N79-31177

Fuselage ventilation under wind conditions

p0667 N79-31175

STUART, R. M.

Filter weight minimization for rectified superconducting alternator power supplies

p0273 A79-26966

STUART, W. G.

Northrop F-5: Case study in aircraft design

p0332 A79-29574

STUCKAS, K. J.

Concepts for reducing exhaust emissions and fuel consumption of the aircraft piston engine

[SAP PAPER 790605] p0556 A79-36737

STUCKERBREDE, H.

Failure detection in signal processing and sensing in flight control systems

p0612 A79-47971

STUDEBAS, C. J.

Aerodynamic effects of surface cooling-flow injection on turbine transonic flow fields

[AIAA Paper 79-0904] p0139 A79-19501

STUKNIS, N.

Causes for the deterioration of splined connections in aircraft engines during service

p0249 A79-25249

STURP, C. W.

A technique for measuring an aircraft's speed and height

[NASA-CASE-LAB-12275-1] p0208 A79-18296

STURROCK, W. S.

Flight investigation of helicopter IFR approaches to oil rigs using airborne weather and mapping radar

[AHS 79-52] p0633 A79-49104

STURGES, G. J.

Account of wall turbulence for predicting film cooling effectiveness in gas turbine combustors

[ASME Paper 79-GT-200] p0397 A79-32457

Advanced low emissions catalytic combustor program at Pratt and Whitney

p0497 N79-25012

SUCC, G. P.

Design of quiet efficient propellers

[SAP PAPER 790584] p0454 A79-36747

Acoustic analysis of the propfan


SUDRAK, E.

Air-inlet engine matching problems of a jet aircraft


SUGIMOTO, N.

Observation of atmospheric interactions at aeroplane altitude

p0461 A79-37573

SUTHER, E.

Anemometry and cost effectiveness of airborne tire pressure indicating systems

[AD-4065513] p0094 A79-24961

SUTHERBOW, R. S.

Engineer's handbook of flight and radio equipment of airplanes and helicopters

p0345 A79-31486

SULGOSK, R. A.

Regression Simulation of Turbine Engine Performance (RSTEP), task 1

[AD-4071800] p0718 N79-33213

SULLIVAN, B. R., III

Evaluation of materials for post-attack pavement repair

[AD-4066516] p0502 A79-25251

SULLIVAN, R. M.

Commercial aircraft flight deck noise criteria

[AD-4072029] p0712 N79-32969

SULLIVAN, N. G.

A commercial airport noise environment: Measurement, prediction and control

[AIAA Paper 79-19018]

SULLIVAN, J. P.

LDV measurements on propellers

p0625 A79-49052

SULLIVAN, R. L.

The size and performance effects of high lift system technology on a modern twin engine jet transport


SULLIVAN, T. J.

Design study and performance analysis of a high-speed multistage variable-geometry fan for a variable cycle engine


SULLIVAN, T. L.

Evaluation of HOSTAS computer code for predicting dynamic loads in two-bladed wind turbines

[AIAA Paper 79-0733] p0319 A79-29007

SUMMA, J. B.

A lifting-surface method for hover/climb airloads

[AHS 79-3] p0626 A79-49056

SUMMA, T. M.

Helicopter flow field analysis
Flow of ideal gas in tapering nozzles
Theoretical study of simultaneous two-dimensional
A method for assessing turbine engine run-up noise
Method of assessment of the antistatic protection of aircraft

Method of assessment of the antistatic protection

Aircraft static charging testing
Method of assessment of the antistatic protection of aircraft
TAYLOR, J. L.
Experimental investigation of the subwing tip and its vortex structure
[NASA-CR-3058]
p0699 N79-13005

TAYLOR, R. E.
Effects of simulated forward flight on jet noise, shock noise and internal noise
[AIAA PAPERS 79-0615]
p0271 A79-26936
The generation, radiation and prediction of supersonic jet noise. Volume 2: appendix:
Computer program listing
[AD-A064685]
p0428 N79-22854

TANEK, A. E.
Development of crashworthy passenger seats for general-aviation aircraft
[NASA-CR-1591100]
p0666 N79-31164

TANNER, P. H.
Risk - Taken or controlled
p0679 N79-51049

TANNER, R. B.
Stability and control derivative estimates obtained from flight data for the Beech 99 aircraft
[AIAA 78-27063]
p0367 N79-20134

TARZININ, F.
Jet mixing noise - Comparison of measurement and theory

TESOBO, G. C.
Crashworthiness tests on model aircraft fuselage structures
[SAE PAPER 781029]
p0257 A79-25901

TEPPER, S.
Thermal-structural design study of an airfrane-integrated Scramjet
[AIAA 79-0688]
p0275 A79-27354

TESS, B.
Development and testing of a shipboard launched balloon system
[AIAA 79-0420]
p0262 A79-26631

T Gulfc, W. N.
Designing-in reliability - A new approach
p0072 A79-15369

TECZA, J. A.
Flushed mounted rotors - An alternative for smoother running turbomachinery
[AIAA 79-0420]
p0262 A79-26631

TEGARDEN, P. V.
Material and process control - Aircraft integral fuel tanks
p0210 A79-24122

TAYLOR, B. C.
A user's manual for a computer program to generate fatigue spectrum loading sequences
[AD-A064928]
p0666 N79-31198

TATOW, F. B.
Turbulence simulation mechanization for Space Shuttle Orbiter dynamics and control studies
[NASA-CR-1611944]
p0368 N79-20174

THOMSON, B. C.
Cranworthiness tests on model aircraft fuselage structures
[SAE PAPER 781029]
p0257 A79-25901

TAYLOR, R. E.
Impact of soft bodies on jet engine fan blades
[AD-A0581994]
p0377 N79-20996

TAYLOR, J. E.
An experimental study of endwall and airfoil surface heat transfer in a large scale turbine blade cascade
[ASME PAPER 79-GT-99]
p0392 A79-32375

EXPERIMENTAL CLEAN COMBUSTOR PROGRAM: PHASE 3:
Turbulence measurement addendum
[ NASA-CR-135422]
p0094 N79-12088

Turbulence measurements in the compression exit flow of a General Electric CF6-50 engine
p0496 N79-24996

Analytical evaluation of the impact of broad specification fuels on high bypass turbofan engine combustors
[NASA-CR-159641]
p0717 N79-33205

TAYLOR, L. Z.
An experimental study of a catalytic combustor for an expendable turbojet engine
[AD-A056512]
p045 N79-11048

TAYLOR, L. Z., JR.
Resource conservation through airborne electronics
p0502 A79-13079

TAYLOR, R. L.
Crashworthy armored crewseat for the AH-60A Black Hawk
[AHS 79-10]
p0627 A79-49062

TAYLOR, R. T.
Static electricity hazards in aircraft fuel systems
[AD-A061450]
p0240 N79-17012

Continuation study of alternate fuels nitrogen chemistry
[AD-A065011]
p0597 N79-29359

Jet Fuel Thermal Stability
[ NASA-TE-792331]
p0719 N79-33336

TALENBERG, J. A.
Analytical evaluation of the impact of broad specification fuels on high bypass turbofan engine combustors
[ NASA-CR-159641]
p0717 N79-33205

TAYLOR, R. E.
Impact of soft bodies on jet engine fan blades
[AD-A0581994]
p0377 N79-20996

TAYLOR, J. E.
An experimental study of endwall and airfoil surface heat transfer in a large scale turbine blade cascade
[ASME PAPER 79-GT-99]
p0392 A79-32375

Experimental clean combustor program: Phase 3:
Turbulence measurement addendum
[ NASA-CR-135422]
p0094 N79-12088

Turbulence measurements in the compression exit flow of a General Electric CF6-50 engine
p0496 N79-24996

Analytical evaluation of the impact of broad specification fuels on high bypass turbofan engine combustors
[NASA-CR-159641]
p0717 N79-33205

TAYLOR, L. Z.
An experimental study of a catalytic combustor for an expendable turbojet engine
[AD-A056512]
p045 N79-11048

TAYLOR, L. Z., JR.
Resource conservation through airborne electronics
p0502 A79-13079

TAYLOR, R. L.
Crashworthy armored crewseat for the AH-60A Black Hawk
[AHS 79-10]
p0627 A79-49062

TAYLOR, R. T.
Static electricity hazards in aircraft fuel systems
[AD-A061450]
p0240 N79-17012

Continuation study of alternate fuels nitrogen chemistry
[AD-A065011]
p0597 N79-29359

Jet Fuel Thermal Stability
[ NASA-TE-792331]
p0719 N79-33336

TALENBERG, J. A.
Designing-in reliability - A new approach
p0072 A79-15369

TECZA, J. A.
Flushed mounted rotors - An alternative for smoother running turbomachinery
[AIAA 79-0420]
p0262 A79-26631

TEGARDEN, P. W.
Life Cycle Cost in advanced technology engine development
[SAE PAPER 781029]
p0257 A79-25901

TEICHMAN, B.
Crashworthiness tests on model aircraft fuselage structures
[ AIAA 79-0688]
p0275 A79-27354

TENHOF, J. N.
Analysis of air motion measurements from aircraft
p0194 A79-21992

TELLER, C. S.
Nondestructive evaluation of fiber reinforced epoxy composites: A state-of-the-art survey
[AD-A071973]
p0719 N79-33263

TELES, R. C.
Crashworthiness tests on model aircraft fuselage structures
[ AIAA 79-0688]
p0275 A79-27354

TEPPER, S.
Thermal-structural design study of an airfrane-integrated Scramjet
[ NASA-CR-145368]
p0173 N79-15045

TESS, B.
Development and testing of a shipboard launched balloon system
[AIAA 79-0420]
p0262 A79-26631

TAYLOR, B. C.
The design of wind tunnel models for tests at transonic speeds and high Reynolds numbers
[AD-A070388]
p0710 N79-32420

TAYLOR, B. C.
The design of wind tunnel models for tests at transonic speeds and high Reynolds numbers
[AD-A070388]
p0710 N79-32420
TETELMAN, A. S.

The generation, radiation and prediction of supersonic jet noise. Volume 2, appendix: Computer program listing [N-046685] p0428 N79-22258

THIBISEN, [ ]

The role of metallurgy in aircraft accident investigation and litigation p0198 A79-22710

TETENUKOV, Ya. I.

Vortex system at the nose part of a fuselage model at supercritical angles of attack and different Reynolds numbers p0021 A79-12199

THANE, W. G. J.

Residual strength of the aluminum alloy 7475-T76 at low stresses [NR-I-76-103-0] p0238 N79-16566

THASEN, J. G.


THIELE, G. A.

A hybrid technique for combining the moment method treatment of wire antennas with the GID for curved surfaces [AD-058445] p0108 N79-13281

THIERRY, T.

New airborne sensor systems [AIAA 79-0697] p0276 A79-27362

THOMAN, D. C.

Adjustment diagnostics for gas turbine engine controls p0080 A79-16439

THOMAS, F. J.

General principles of automatic video trackers. II - area trackers p0071 A79-15159

THOMAS, G. T.

Design of an off-axis wide field-of-view visual display system for flight simulators [AD-056520] p0501 N79-25044

THOMAS, H. B. M.

Mathematical models of aircraft dynamics for extreme flight conditions (theory and experiment) p0179 N79-15087

THOMAS, B. W.

Manoeuvre handling in a multiradar, a.t.c. system p0512 A79-41176

THOMAS, J.

Investigation concerning an Airborne Terminal AT/ for pilot/controller communication over a ground/board/ground data link [ADGR PAPER 79-050] p0521 A79-42376

THOMAS, J. L.

Transition aerodynamics for close-coupled wing-cant configuration [AIAA Paper 79-0236] p0145 A79-19567

THOMAS, R.


THOMPSON, J. F.

Theoretical and experimental investigation of ground-induced effects for a low-aspect-ratio highly swept arrow-wing configuration [NASA-TP-1508] p0672 N79-31223

THOMPSON, R. W.

Development and evaluation of a helicopter-borne water-quality monitoring system p0071 A79-15085

THOMPSON, D. E.

Propeller unsteady thrust due to operation in turbulent inflows [ASME PAPERS 78-GT-94] p0007 A79-10762

THOMPSON, G. H.

The CH-46 rotor blade transition from metal-to-composite materials [ASME PAPERS 78-WA/AERO-9] p0148 A79-19723

THOMPSON, J. F.

Experimental study of the flow around a swept wing configuration. Volume 2, appendix: Computer program listing [ARC-MA-3824] p0220 N79-15956

THOMPSON, J. E.

Computer Monitor and control - A flexible, cost-effective implementation p0618 A79-48670

THOMPSON, R. E.

Computer program listing [NLR-TR-75080-0] p0242 879-17269

THOMPSON, N. B.

Identifying desirable design features for the C-XE aircraft - A systems approach [AIAA Paper 79-1756] p0605 A79-47883

THOMSON, B. G.

Nonlinear structural crash dynamics analyses [SAR PAPER 790568] p0517 A79-36722

THOMSON, B. G.

NASA/FAA general aviation crash dynamics program - An update p0689 A79-52694

THOR, N. A.

An investigation of the rolling stability derivatives of a T-tail fighter configuration at high angles-of-attack p0642 A79-50165

THORPE, E. L.

Evaluation of finite element formulations for transient conduction forced-convection analysis p0635 A79-49343

THORPE, J.

Thermostructural analysis of a scramjet fuel-injection strut p0386 A79-21427

THRANE, B. V.

Analysis of bird strikes reported by European airlines 1972 to 1975 p0325 A79-29352

THRANE, B. V.

Bird strikes to transport aircraft jet engines p0326 A79-29365

THRANE, B. V.

The use of lights in reducing bird strikes p0326 A79-29360

THRONBROD, B. C.

Application of the isostructural bend process to P14 wing beams p0209 A79-24099

THRAIL, M. W., JR.

The PABST program - A validation of bonding primary structure p0208 A79-24083

THRAIL, M. W., JR.

An overview of the PABST program p0697 879-54241

THRAIL, M. W., JR.

Failures in adhesively bonded structures p0444 879-23454

THRAIL, M. W., JR.

Effects of aircraft vibrations on mechanical structures [BDRE-77] p0419 879-22069

THRAIL, M. W., JR.

A yaw stabilised S.A.R. aerial p0003 A79-10364

THURB, J. W.

A method for selecting a crashworthy fuel system design p0312 A79-19661

THURB, J. W.

Microprocessor-based digital autopilot development for the EMB-106 Mini-BPW p0518 A79-48608

THURB, J. W.

Flowfield chemistry effects on stability of blunt slender cones
[AIAA PAPER 79-1630] p0688 A79-52547

A combined air-cushion and endless belt transportation system
p0641 A79-49911

Dynamic stability of a two-blade rotor
p0805 N79-11999

Demonstration of ceramic design methodology for a ceramic combustor liner
[ASME PAPER 78-GT-137] p0009 A79-10796

Trailing edge procedures for aircraft parameter identification and state estimation
[AIAA 79-1636] p0567 A79-45316

The impact of parallel computers on the design of nonlinear flight controllers

A critical-review of performance monitoring systems on the basis of the experience obtained in 5000 routine applications
[AIAA 79-7006] p0327 A79-29381

The influence of feedback on the aeroelastic behavior of tilt propeller aircraft including the effects of fuselage motion
[VAS G-CR-158778] p0549 N79-27125

Review of airworthiness standards for certification of helicopters for Instrument Flight Rules (IFR) operation
[AD-A065397] p0549 N79-27127

Death by misadventure
p0404 A79-33640

Three-dimensional finite-element techniques for gas turbine blade life prediction
p0640 A79-49905

Effect of number of probes and their orientation on the calculation of several compressor face distortion descriptors

Performance predictions for open ocean air cushion vehicles and surface effect ships
p0640 A79-49905

U.S. aerospace industry opinion of the effect of computer-aided prediction-design technology on future wind-tunnel test requirements for aircraft development programs
[AIAA PAPER 79-0107] p0141 A79-19534

Helicopter performance methodology at Bell Helicopter Textron
[FRS 79-2] p0626 A79-49055

Characterization of a swept-strut hydrogen fuel-injector for scramjet applications
p0635 A79-49345

Test simulation of fighter aircraft maneuver load spectra
p0563 A79-48463

The 150 KVA sanamius cobalt USCP starter generator electrical system
[AD-A070078] p0710 N79-32468

Unsteady pressure measurements on rotor blade tips with incidence
p0406 A79-34534

Analysis of free torsional rotor blade oscillations under special consideration of asymmetric over-plate support
p0131 A79-18660

Aeroelastic tailoring studies in fighter aircraft design
[AIAA 79-0725] p0282 A79-28257

Dynamic response analysis of an F-15 Fast Pack optical system installation

<table>
<thead>
<tr>
<th>Author</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSANGKIS, G. R.</td>
<td>The control of tolerances in an array antenna p0019 179-11934</td>
</tr>
<tr>
<td>TSENG, K.</td>
<td>Unsteady subsonic and supersonic potential aerodynamics for complex configurations p0023 179-12366</td>
</tr>
<tr>
<td>TSIGANOV, B. K.</td>
<td>Hydroelectric opening of a shell in unsteady flow p0120 179-18412</td>
</tr>
<tr>
<td>TSHEB, T.</td>
<td>Analysis of water ingestion effects in axial flow compressors p0103 179-13052</td>
</tr>
<tr>
<td>TUCK, R. C.</td>
<td>A note on yawed slender wings p0315 179-28429</td>
</tr>
<tr>
<td>TUCKER, J. R.</td>
<td>An investigation into the transient aerodynamics associated with a spoiler emerging into a uniform airstream [WJ-291] p0431 179-23046</td>
</tr>
<tr>
<td>TULLOCH, J. S.</td>
<td>Artificial icing test phobic coatings on UH-1 helicopter rotor blades [AD-4058800] p0220 179-15954</td>
</tr>
<tr>
<td>TURKOVAK, A. G.</td>
<td>Formation of sooty particles in combustion chambers with series injection of air into the combustion zone p0406 179-38550</td>
</tr>
<tr>
<td>TURNOV, V. F.</td>
<td>Parametric method for diagnosing the state of aircraft engines on the basis of limited information p0062 179-16781</td>
</tr>
<tr>
<td>TUNG, P. C. C.</td>
<td>Identification of aircraft parameters in turbulence with non-rational spectral density p0586 179-28182</td>
</tr>
<tr>
<td>TURVEY, S. A.</td>
<td>Problems in testing electrically conductive structural adhesives p0696 179-56240</td>
</tr>
<tr>
<td>TUPOLIN, L. A.</td>
<td>Impact of noise generated by supersonic transports on the environment p0685 179-51598</td>
</tr>
<tr>
<td>TURBINSKI, L.</td>
<td>Design of multistage compressors with consideration of the real behavior of gas and gas mixtures p0309 179-19390</td>
</tr>
<tr>
<td>TURCHANINOV, G. X.</td>
<td>Iterative method of aircraft wing strength calculation taking into account the effect of deformations on distribution of aerodynamic forces p0022 179-12213</td>
</tr>
<tr>
<td>TURRELL, B. C.</td>
<td>Recent General Electric engine development testing for improved service life [SAE Paper 780990] p0255 179-22557</td>
</tr>
<tr>
<td>TURKEVICH, E. L.</td>
<td>Numerical solution of the Navier-Stokes equations for arbitrary two-dimensional multi-element airfoils p0356 179-20401</td>
</tr>
<tr>
<td>TURRIN, V. E.</td>
<td>Response and other characteristics of a flat bladed, dual pitch propeller anemometer p0192 179-21914</td>
</tr>
<tr>
<td>TUTTLE, R. P.</td>
<td>Fire testing in the Boeing 707 cabin section p0078 179-12032</td>
</tr>
<tr>
<td>TUTTLE, W. A.</td>
<td>Calibration and use of a sailplane variometer to measure vertical velocity fluctuations p0336 179-30112</td>
</tr>
</tbody>
</table>
Validation of NIL-p-94905: General specification
Design of the circulatory control wing STOL
Measurements in an axisymmetric turbulent boundary
Loran C - Noise transmission - Turboprop problem
Extensive cost reduction studies: Composite
A simulator investigation of roll response
digital simulation of the Operational Loads Survey
Loran-C as an international aid to navigation
An operators viewpoint on future rotorcraft R & D
criteria
Results of an improved version of LTRAN2 for
computing unsteady airloads on airfoils
oscillating in transonic flow
Dutel, J. J. Propeller aircraft noise around general aviation airports
SAP PAPER 79-15094
S. R. Loran-C as an international aid to navigation
Loran C - Its future in the shadow of Navstar GPS
Gassho, J. R. Simulation of the Operational Loads Survey
flight tests
[AIAA Paper 79-78-58]
Gool, R. E. C. A simulator investigation of roll response
requirements for aircraft with rate-command attitude-hold flight control systems in the landing approach and touchdown
[AIAA 79-1579]
B. D. Extensive cost reduction studies: Composite
compagnie propulsif - L-1011 commercial airliner
B. E. Operator and technician tasks for the heads-up
display test set and versatile avionics shop test /VAST/
of a leading-edge vortex

VANDERVAART, J. C.

Worst case time-histories causing largest deviations from a desired flight path: An analytical approach

VANDERVAART, J. C.

Aircraft response to windshears and downdraughts

VANDERVAART, W. J.

Testing of coatings and materials for jet engine components in simulated operational environments

VANDERVAART, W. J.

A method to determine the time-history of landing aircraft with respect to runway capacity

VANDROUX, H.

Spread spectrum modulation. II - Characteristics

VANGROEND, J. J.

The design and aerodynamic characteristics of an 18% thick shock-free airfoil (NLR 7501)

VANDERVAART, J. C.

Worst case time-histories causing largest deviations from a desired flight path: An analytical approach

VANDERVAAT, N.

Fatigue properties of adhesive-bonded laminated sheet material of aluminum alloy [LR-78035-U]

VANGOOL, H. P. C.

Influence of motion wash-out filters on pilot tracking performance

VANGOOL, H. P. C.

The need of stick force stability for attitude-stabilized aircraft, Part 2

VANDERVELD, J. A.

The design and aerodynamic characteristics of an 18% thick shock-free airfoil (NLR 7501)

VANDERVAART, J. C.

Worst case time-histories causing largest deviations from a desired flight path: An analytical approach

VANDERVAART, J. C.

Aircraft response to windshears and downdraughts

VANDERVAART, W. J.

Testing of coatings and materials for jet engine components in simulated operational environments

VANDERVAART, W. J.

A method to determine the time-history of landing aircraft with respect to runway capacity

VANDROUX, H.

Spread spectrum modulation. II - Characteristics

VANGROEND, J. J.

The design and aerodynamic characteristics of an 18% thick shock-free airfoil (NLR 7501)

VANDERVAART, J. C.

Worst case time-histories causing largest deviations from a desired flight path: An analytical approach

VANDERVAART, J. C.

Aircraft response to windshears and downdraughts

VANDERVAART, W. J.

Testing of coatings and materials for jet engine components in simulated operational environments

VANDERVAART, W. J.

A method to determine the time-history of landing aircraft with respect to runway capacity

VANDROUX, H.

Spread spectrum modulation. II - Characteristics

VANGROEND, J. J.

The design and aerodynamic characteristics of an 18% thick shock-free airfoil (NLR 7501)

VANDERVAART, J. C.

Worst case time-histories causing largest deviations from a desired flight path: An analytical approach

VANDERVAART, J. C.

Aircraft response to windshears and downdraughts

VANDERVAART, W. J.

Testing of coatings and materials for jet engine components in simulated operational environments

VANDERVAART, W. J.

A method to determine the time-history of landing aircraft with respect to runway capacity

VANDROUX, H.

Spread spectrum modulation. II - Characteristics

VANGROEND, J. J.

The design and aerodynamic characteristics of an 18% thick shock-free airfoil (NLR 7501)
PERSONAL AUTHOR INDEX

.engine combustors
[8A-CE-159405]
p0103 N79-13050

Time-frequency method of solving large problems in the dynamics of elastic structures with local nonlinearities
p0020 N79-12155

Thermal-structural design study of an airframe-integrated Scramjet
[8A-CE-145368]
p0173 N79-15045

Aerodynamics of flame jets
p0259 N79-26355

The chemical stability of kerosene fractions
p0117 N79-42275

Evaluation of a Low Fidelity Simulator (LFS) for instrument training
[AD-0056119]
p0096 N79-12102

Contributions of platforms motion to simulator training effectiveness. Study 1: Basic contact
[AD-0058456]
p0105 N79-13066

Contributions of platforms motion to simulator training effectiveness. Study 2: Aerobatics
[AD-0064305]
p0480 N79-23985

Meteorological and operational aspects of 46 clear air turbulent sampling missions with an instrumented B-57B aircraft. Volume 2, appendix C: Turbulence missions
[8A-CE-80045]
p0558 N79-27772

The flying hot wire and related instrumentation
[8A-CE-13066]
p0049 N79-11352

Flying hot-wire study of two-dimensional turbulent separation on an NASA 4412 airfoil at maximum lift
p0033 N79-10019

Structure of the turbulent separated flow around a stalled airfoil
[8A-CE-152263]
p0378 N79-21010

A Hub operator's view of small aircraft operations
[8A-CE-700562]
p0006 N79-10412

Influence of fundamental parameters on the supersonic base flow problem in presence of an exhaust jet
[AIAA PAPER 79-0123]
p0204 N79-23578

Theoretical investigations of real gas effects in cryogenic wind tunnels
[AS-TP-76-505]
p0288 N79-17820

Combined environment reliability test of the common stratified Doppler system
p0644 N79-50368

Periodically unsteady flow in an embedded stage of a multistage, axial-flow turbine machine
[8A-CE-70-06-GT-6]
p0195 N79-22328

Experimental measurement of parachute canopy stress during inflation
[AD-0058474]
p0099 N79-13011

Crack speed and propagation resistance prediction for steels and Al. alloys helicopter components
p0136 N79-18700

A tire runway interface friction prediction model concept
p0863 N79-38137

Airplane brake-energy analysis and stopping performance simulation
p0654 N79-53870

Evaluation of an energy distribution system for helicopter landing gears during hard landing
[AD-0065298]
p0433 N79-23069

A high temperature turbine research module
[8A-CE-70-GT-73]
p0008 N79-10769

Hybrid technology cost reduction and reliability improvement study
[AD-0062297]
p0370 N79-20319

An alternating direction explicit method for computing three-dimensional viscous flow fields in turbomachines
[SAA PAPER 701001]
p0256 N79-25884

Aerodynamic behavior of fibres and sampling of respirable dust
[HSL-W5-11267]
p0298 N79-18470

Design, fabrication, and evaluation of GATORIZED (trade name) ceramic-wrought alloy attachment concepts
[AD-0064597]
p0423 N79-22102

Infrared suppressor effect on T63 turbocharged engine performance
[8A-CE-70-09770]
p0045 N79-11043

Trials of the doppler microwave landing system at Manchester International Airport, October/November 1977
[8A-CE-78-01404]
p0704 N79-32004

Parts tracking and engine history recording for on-condition maintenance
[AIAA PAPER 79-1280]
p0509 N79-40896

New versus existing engines for new helicopter systems - A life cycle cost view
[AIAA PAPER 79-1316]
p0603 N79-47348

An annular wing
[8A-CE-5011072-2]
p0892 N79-24959

Performance evaluation method for dissimilar aircraft designs
[8A-CE-1042]
p0649 N79-30139

F-16 high-alpha flight control characteristics and control system concept
[AIAA PAPER 78-0433]
p0203 N79-23577

The evolution of the high-angle-of-attack features of the F-16 flight control system
p0646 N79-50438

Aerodynamic design and analysis of the AST-200 supersonic transport configuration concept
[8A-CE-159051]
p0817 N79-22046

Recent advances in indirect lightning effects research
p0209 N79-22513

Lightning transient research on an F-111A aircraft
[AD-0063765]
p0618 N79-22066

Composite forward fuselage systems integration, volume 2
[AD-0066560]
p0894 N79-24984

Computer aided design of mixed flow turbines for turbochargers
[8A-CE-78-00191]
p0563 N79-44794

Development and evaluation of a helicopter-borne water-quality monitoring system
p0071 N79-15000

An evaluation of some display parameters for an advanced landing display
p0679 N79-51092

Analysis of the mechanical properties of rigid foams with particular consideration of a rigid polyether structural foam
[AR-209]
p0841 N79-23227

Flight test results
p0333 N79-29596

Engine technology for production turbofan engines
[AD-0062827]
p0234 N79-26827

Future avionics - Keeping capability up, costs down
p0273 N79-27093

Tactical performance characterization basic methodology
[AD-00629297]
p0674 N79-31235

WALSH, R. J.

B-175
WASSELL, A. B.
The effects of aircraft engine pollutant emission measurement variability on engine certification policy
[ASME PAPER 78-GT-86]
p0001 179-10261

The design and development of high performance combustors
[ASME PAPER 78-GT-86]
p0038 179-19380

WASSER, D. L.
Pressure distributions on three different cruciform aft-tail control surfaces of a wingspan simule at Mach 1.60, 2.36, and 3.70
[NASA-CP-80097-1]
p0547 179-27099

WATERS, C.
A numerical computation of aeroelastically corrected transonic loads
[AIMA 79-0766]
p0320 179-29200

WATTS, J. C.
A simulation of amphibious hovercraft overturning
[p0640 179-49904

WATKINS, N. L.
Identification of high payoff research for more efficient applicator helicopters in agriculture and forestry
[NASA-CS-152258]
p0419 179-22076

WATKINS, H.
The aerodynamic and thermodynamic characteristics of flow fields below VTOL vehicles in ground proximity
[AIMA PAPER 79-0338]
p1045 179-19765

WEATBEBILL, W. H.
The aerodynamic and thermodynamic characteristics of fountains and some far field temperature distributions
[AD-1061335]
p0232 179-16843

WEBB, B. C.
An advanced cockpit instrumentation system: The coordinated cockpit display
[NASA-TR-788559]
p0551 179-27136

WEBER, E. L.
Experience in the analysis of real and simulated collisions and dangerous encounters in German airspace
[DLRB PAPER 79-036]
p0519 179-42363

WEBER, E. L.
A study of smoke movement in an aircraft fuselage
[BAE-TR-EP-613]
p0540 179-26040

WEBER, L. D.
A procedure for analyzing transonic flow over harmonically oscillating airfoils
[p0352 179-20003

WEBER, A. C.
Pulsed laser Doppler measurements of wind shear
[p0868 179-52046

WEBB, D. B.
Development and initial test results of parachutes with automatic inflation modulation
[AIMA 79-0067]
p0265 179-26935

WEBB, D. E.
A feasibility study for development of structural aluminum alloys from rapidly solidified powders for aerospace structural applications
[AD-1061428]
p0238 179-16958

WEBB, L. D.
An experimental investigation into the influence of acoustic disturbances on the development of a turbulent boundary layer
[ARC-R/9-3818]
p0216 179-16238

WEBB, E. L.
Diagnostics of wear in aeronautical systems
[NASA-TN-79185]
p0452 179-28035

WEBER, L. D.
Evaluation of new bonding systems for depot-level maintenance of aircraft honeycomb panels
[AD-1066177]
p0468 179-24161

WEBB, G. J.
An experimental investigation into the influence of acoustic disturbances on the development of a turbulent boundary layer
[ARC-R/9-3825]
p0226 179-16238

WEBB, E. C.
Evaluating coating durability on helicopter propulsion system maintenance cost
[AIMA PAPER 79-1367]
p0472 179-39033

WEBB, K. A.
Testing the Y-55 VTOL tilt rotor aircraft
[AIMA PAPER 79-54]
p0633 179-49105

WEBER, J. P.
Structural concepts and experimental considerations for a versatile high-speed research airplane
[NASA-TR-78743]
p0162 179-14080
PERSONAL AUTHOR INDEX

WHITBONE, R. L.
- Stabilization techniques for improved response of the F-15 aircraft (J-AD-1050551) p0105 N79-13060

WHITFIELD, A.
- Computer aided design of mixed flow turbines for turbomachinery (J-AIAA PAPER 78-07-191) p0563 N79-44794

WHITLOCK, D. C.
- Oil sealing of aero engine bearing compartments p0047 N79-11062

WHITMAN, B. K.
- Effect of sampling rate and record length on the determination of stability and control derivatives (NASA-TM-72858) p0095 N79-12096

WHITMORE, S. A.
- Preliminary flight and wind tunnel comparisons of the inlet/airframe interaction of the F-15 airplane (AIAA PAPER 79-0102) p0200 N79-23513

WHITNER, R. A.
- Aerodynamic interactions on the fighter CCF test aircraft p0177 N79-15076

WHITNEY, B. B.
- Low budget simulation in weapon sizing p0223 N79-15984

WHITNEY, R.
- Composite structural materials (NASA-CR-158051) p0585 N79-20235

WHICKER, B. A.
- Recent advances in adiabate design p0637 N79-96574

WICKER, A. M.
- Chemical analysis of advanced composite prepregs and resins p0530 N79-33264

WICKS, A. L.
- Design and development of a rotating water table for flow studies in turbomachine stages (J-AIAA PAPER 78-04-02-16) p0148 N79-19762

WIDHOLM, B. M.
- Model fire tests on polyphosphazene rubber and polyvinyl chloride (PVC)/nitrile rubber foams p0888 N79-12047

WIDENHOFF, C. W.
- Study of design constraints on helicopter noise (NASA-CR-159118) p0677 N79-32054

WIDHORST, R. E., XIII
- The Avionics Laboratory Predictive Operations and Support (ALPOS) cost model, volume 3 (AD-0505524) p0163 N79-14091

WITTING, A.
- Recent advances in convectively cooled engine and airframe structures for supersonic flight p0153 N79-20087

WITTING, E. A.
- Evaluation of finite element formulations for transient conduction forced-convection analysis p0635 N79-40343

WITTING, E. A.
- Recent advances in convectively cooled engine and airframe structures for supersonic flight p0636 N79-21425

- Thermostructural analysis of a scramjet fuel-injection strut p0386 N79-21427

WIGGRENHAARD, J. F. M.
- A finite element model to study the buckling behavior of general orthotropic, thin-walled symmetric, elastic plates (NLE-TR-77062-0) p0711 N79-32594

WIGLE, G. B.
- Spares and test timing parameters in avionics computer system requirements (AD-0505521) p0036 N79-10055

WILBY, J. P.
- Characterization of propeller noise on an aircraft fuselage related to interior noise transmission (AIAA PAPER 79-06-066) p0271 N79-12632
- Helicopter cabin noise: Methods of source and path identification and characterization p0081 N79-10856

WILBY, P. G.
- An investigation of the influence of fuselage flow field on rotor loads, and the effects of vehicle configuration p0129 N79-18644

WILCOX, B. E.
- Quiet propulsive lift for commercial airlines (NASA-TR-78596) p0539 N79-26035

WILCOX, R. E.
- The alpha-beta-gamma tracking filter in the E-domain p0619 N79-48680

WILCOX, R. S.
- Cost effectiveness analysis of the proposed revisions in the exhaust emission standards for new and in-use gas turbine aircraft engines based on EPA's independent estimates (PB-286388/4) p0175 N79-15056

WILDER, J. C.
- Problems associated with flows in aerodynamic wakes of blade cascades p0534 N79-43607

WILDER, B. W.
- Ozone Contamination in Aircraft Cabin: Appendix B: Overview papers. Ozone destruction techniques p0380 N79-21031

WILDER, R. W.
- A theoretical and experimental means to predict ice accretion shapes for evaluating aircraft handling and performance characteristics p0173 N79-15041

WILEST, C. E.
- Digital Avionics Information System (DAIS): Development and demonstration (AD-0608328) p0593 N79-25181

WILEST, C. D.

WILEST, K. G.
- Compositeforward fuselage systems integration, volume 2 (AD-0465650) p0949 N79-24984

WILEST, M.
- Application of a north seeking heading and attitude reference for the autonomous navigation of helicopters p0068 N79-14668

WILEST, D. F.
- Factors affecting residual strength prediction of a cracked aircraft structure p0284 N79-28380

- Stress intensity analysis: analytical, finite element for surface flaws, holes p0372 N79-20413

- Analysis of aircraft structure using applied fracture mechanics p0373 N79-20419

WILESTSON, J. B.
- The circulation control rotor flight demonstrator test program (ABS 79-51) p0633 N79-49103

WILESTSON, J. B.
- Investigation of stress-strain history modeling at stress rifiers, phase 2 (AD-0465162) p0588 N79-28620

WILLIAMS, B. E.
- Exterior flow with an isoparametric Hermite cubic element p0697 N79-54290

WILLIAMS, C. D.
- Development of a low-correction wind tunnel wall configuration for testing high lift airfoils p0154 N79-20108

- Verification of operational flight programs by simulation p0618 N79-48667

WILLIAMS, D. M.
- Aircraft fire protection and rescue procedures /2nd edition/ p0252 N79-25750

WILLIAMS, E. W.
- New agents for the extinguishment of magnesium fires (AD-0461664) p0306 N79-19122

WILLIAMS, J.
- Helicopter flight-path and acoustic-signal repeatability for noise-diagnosis and noise-certification p0134 N79-18686

- Advances in aerosonics windtunnel testing techniques for aircraft noise research p0155 N79-20114

WILLIAMS, J. E. F.
- In the Weis-Fogh principle exploitable in turbomachinery p0697 N79-54362

WILLIAMS, P. W.
- Coast guard missions for lighter-than-air vehicles (AIAA 79-1570) p0524 N79-42403

D-180
WITHERS, C.-J.

Current work in materials and methods-of-construction research p0266 779-18115

WITHERS, B.

Advanced instrumentation and data evaluation techniques for flight tests p0332 779-22591

WITHERS, B.

Influence of the blading surface roughness on the aerodynamic behavior and characteristic of an axial compressor [ASME PAPER 79-07-102] p0372 779-32378

WITHERS, C. L.

Development of specifications for taxing guidance and control systems [DGMR PAPER 79-038] p0518 779-42361

WITTHAN, B. B.

WITTLICK, C.

WITTLIW, C. L.

BITTLIN, B.

BITT, B. B.

WITCOFSKI, B. D.

WINTER, G.

WINTER, C.-J.

PERSONAL AUTHOR INDEX

WOHLBERG, P. A.

Some basic test results of V/STOL jet induced lift effects in hover [AIAA PAPER 79-0339] p0202 779-23553

WOHLBERG, R. L.

Global services systems - Space communication p0408 779-34761

WOLF, J. A.


WOLF, Y. D.

Color display design guide [AD-A066630] p0495 779-24991

WOLF, J. S.

Improvement of hang glider performance by use of ultralight elastic wing p0546 779-27082

WOLFF, C. L.


YAH-64 (Advanced Attack Helicopter-2B) [AD-A066058] p0172 779-15032

WOLFE, A. J.

Dynamics requirements for an Advanced Scout Helicopter /ASBH/ [NASA-TP-1435] p0652 779-24992

ES Aircraft fatigue requirements and substantiation procedures p034 779-23075

WOLFE, R. V.

Dynamics of fatigue damage with uncertain parameters - Application to remotely piloted vehicle flight control systems p0287 779-27572

WOOD, D.

Test methodology correlation for foreign object damage [AD-1057322] p0095 779-12093

WOOD, E.

On methods for application of harmonic control [AD-A060057] p0137 779-18841

WOOD, B. B.


Simulation requirements and scaling relationships as applied to model testing [NASA-TP-1435] p0652 779-30176

WOOD, E. W.

Environmental models for moisture absorption by aircraft composites p0278 779-27572

WOOD, J. E.

Boundary-integral equation analysis of an advanced turbine disk rim slot p0553 779-27161

WOOD, K.

Test methodology correlation for foreign object damage [AD-1057322] p0095 779-12093

WOOD, F. A.

Some basic test results of V/STOL jet induced lift effects in hover [AIAA PAPER 79-0339] p0202 779-23553

WOOD, E.

Westland unveils WG30 transport helicopter p0462 779-38092

WOOD, B.

On methods for application of harmonic control [AD-A060057] p0137 779-18841

WOOD, L. J.

Minimum expected cost control of linear systems with uncertain parameters - Application to remotely piloted vehicle flight control systems p0313 779-18657
PERSONAL AUTHOR INDEX

articulated-rotor helicopters  p0191 A79-21521
Calculation of rotor impedance for articulated-rotor helicopters in forward flight  p0527 A79-42799
A numerical prediction of typical articulated rotor impedance  p0215 A79-15905

YAMARIO, R.
Analysis of plume rise from jet aircraft  p0032 A79-43846

YAMARIO, R. J.
Analysis of plume rise from jet aircraft  p0206 A79-23745

YAMASAKI, H.
Experimental study on flow in a supersonic centrifugal impeller  [ ASME paper 78-GT-2 ]  p0195 A79-22327

YANG, R. T.
Investigation of torsion free wing trend flutter models  [ AD-A061942 ]  p0302 A79-18957

YANG, J. H.

YANG, Y. T.
Flutter analysis of two-dimensional and two-degree-of-freedom airfoils in small-disturbance, unsteady transonic flow  [ AD-A069223 ]  p0665 A79-31157

YASUI, R.
Gust response and its alleviation for a hingeless helicopter rotor in cruising flight  p0131 A79-18662
Gust response and its alleviation for a hingeless helicopter rotor in cruising flight  [ AD-A061134 ]  p0235 A79-16862

YATES, R.
Prediction of selected jet fuel test results using ASTM test method D2887 data with multiple linear regression analysis  [ AD-A059185 ]  p0098 A79-12245

YATES, J. M.
Unsteady viscous thin airfoil theory  [ AGARD-R-671 ]  p0361 A79-20087

ZANGER, W. T., JR.
Analytical and experimental investigation of V-type empennage contribution to directional control in hover and forward flight  [ AMS 79-56 ]  p0631 A79-49106

ZAND, R. D.
Flight test evaluation of the high inertia rotor system  [ AD-A071648 ]  p0715 A79-33195

ZEED, B.
Meeting airport ground access demands for the 1980's at Los Angeles International Airport  p0063 A79-14139

ZENN, R.
A program for determining flight simulator field-of-view requirements  [ AD-A058932 ]  p0105 A79-13063

ZEB, C.-T.
Experimental study on the burning out of flameholders  [ AIAA 79-7021 ]  p0329 A79-29394

ZEN, K. B.
Flying NASA's Terminal Configured Vehicle against the Microwave Landing System  p0206 A79-26536
Development and validation of a piloted simulation of a helicopter and external sling load  [ NASA-TP-1285 ]  p0162 A79-14083
Flying NASA's terminal configured vehicle against the microwave landing system  p0300 A79-18894

ZI, C. J.
Flight and propulsion control integration for selected in-flight thrust vectoring modes  [ ASME paper 78-GT-79 ]  p0008 A79-10768
TIY, A. K. K.
Forecast of future aviation fuels. Part I: Scenarios
[SAGA-CE-156671] p0197 779-29354

TII, K. R.
The role of rotor impedance in the vibration analysis of rotorcraft
p0130 779-18653

TIP, Y. B.
Restrictive assumptions and range of validity of Schlichting's cascade analysis
p0362 779-21058

TOCHI, A. R., II
The effects of design and operating variables on the response of an axial flow fan to inlet flow distortions
[NASA-CE-158522] p0421 779-22097
The effects of design and operating variables on the response of an axial flow fan to inlet flow distortions
[AD-4058959] p0437 779-23094

TODD, J. B.
Development of criteria for monitoring of airport ground pollution. Volume 1: Study
[AD-4067242] p0595 779-29197
Development of criteria for monitoring of airport ground pollution. Volume 2: Date validation procedures
[AD-4067243] p0595 779-29198

TOKOYAMA, O.
The Cessna-207 aircraft turbulence and temperature measuring system p0194 779-21974

TOO, J. K.
Preprocessing for advanced image matching techniques p0614 779-68602

TOKHE, R. A.
Actuator and hydraulic survivability concepts for Hughes TAH-64 p0693 779-53636

TOSHIDA, T.
A two-dimensional cascade test of an air-cooled turbine nozzle p0337 779-30379

TOSHIKANA, H.
Calculation of the planar supercritical flow over a NASA supercritical profile
[NASA-CE-111866] p0215 779-15904
Subcritical drag minimization for highly swept wings with leading edge vortices p0414 779-22021

TOSHIBA, H.
Emergency position-indicating radio-beacon systems using 406 MHz band mobile-satellite service p0112 779-17095

TOYABI, G. W.
Jet discharge coefficient through openings for parallel flow [AIAA 79-7050] p0331 779-29418

YOUNG, A. B.
A review of methods for obtaining subsonic longitudinal aerodynamic derivatives p0215 779-15910

YOUNG, A. C.
The ILS glidepath - New designs for severe sites p0156 779-20232

YOUNG, A. D.
Some low speed experimental results on the effects of swirl and velocity distribution on an axisymmetric jet p0194 779-21999

YOUNG, A. F.
Enhancements of radar data-handling networks p0002 779-10299

YOUNG, C.
An investigation of the influence of fuselage flow field on rotor loads, and the effects of vehicle configuration p0129 779-18644

YOUNG, L. B.
Visually induced motion in flight simulation p0224 779-15989
Display/control requirements for automated VTOL aircraft
[NASA-CE-159005] p0364 779-20112

YOUNG, P. R.
The future shape of medium and long-range civil engines p0333 779-29607

YOUNG, S. G.
An experimental, low-cost, silicon slurry/aluminide high-temperature coating for superalloys [NASA-TM-79178] p0596 779-29292

YOUNG, S. T. B.
The effect of short regions of high surface curvature on turbulent boundary layers p0687 779-52273

YOUNG, W.
Advanced technology impact upon ATE self test p0023 779-12306

YOUNG, W. B., JR.
Comparison of two flow surveys above stalled wings [AIAA PAPER 79-0147] p0143 779-19564
Velocity measurement about a NASA 0012 airfoil with a laser velocimeter [AD-4056447] p0036 779-10029
A laser velocimeter flow survey above a stalled wing [NASA-TP-1266] p0157 779-14019

YOUNG, W. L.
Development of the integrated flight trajectory control concept p0353 779-20015

YOUNG, W. R.
Turbine airflow repair p0211 779-24444
Apparatus for measuring an aircraft's speed and height [NASA-CASE-LAR-12275-1] p0298 779-18296

YOUNG, N.
Generation of body-fitted coordinates for turbine cascades using multigrid [AIAA 79-7049] p0331 779-29417

YORK, D. C.
Performance of two-stage fan with a first-stage rotor redesigned to account for the presence of a part-span damper [NASA-TP-1483] p0654 779-30191

YU, C. L.
High frequency surface current and charge densities induced on aircraft by a plane electromagnetic wave [AD-405910] p0168 779-14298

YU, J. C.
On sound radiation from the trailing edge of an isolated airfoil in a uniform flow [AIAA PAPER 79-0603] p0268 779-26907
An experimental study of USB flap noise reduction through mean flow modification [AIAA PAPER 79-0607] p0268 779-26908

YU, R. J.
An efficient transonic shock-free wing redesign procedure using a fictitious gas method [AIAA PAPER 79-0075] p0140 779-19520
Transonic wing redesign using a generalized fictitious gas method [AD-4070013] p0705 779-32202

YU, T. H.
The influence of the transonic flow field on high-speed helicopter impulsive noise p0135 779-18690
Theoretical modeling of high-speed helicopter impulsive noise p0197 779-22474
Covering impulsive noise - Some measured and calculated results p0533 779-63999

YUBARA, K.
Infrared remote sensing on geothermal areas by helicopter p0197 779-22620

YUBAR, D.
Preliminary evaluation of several nondestructive-evaluation techniques for silicon nitride gas-turbine rotors [NRL-77-93] p0049 779-11418

YURKOVICh, M.
A sonic fatigue analysis of a cylindrical shell turbine engine inlet [AIAA 79-0780] p0320 779-29016

ZACHARAKIS, J. L.
An investigation into the pressure distributions

B-165
over a wing and store combination at low speeds [80-226]  p0451 A79-23047
ZHAN, L.
Grating lobe control in limited scan arrays p0137 A79-18714
ZHANES, N.
A method for calculating the potential flow around a system of aerodynamic profiles in an incompressible fluid p0665 A79-51684
ZHATSEV, N.
Aircraft design and strength /2nd revised and enlarged edition/ p0463 A79-38140
ZAKHABOV, V. A.
Preparation of double-curvature planking by rolling p0666 A79-52130
ZAKHOB, R. A.
Flight simulators p0067 A79-14475
ZAKKAT, A. D.
Investigation of a laser Doppler velocimeter system to measure the flow field of a large scale V/STOL aircraft in ground effect [AIAA PAPER 79-1164] p0468 A79-38974
ZAZARO, K. V.
Aircraft wake vortex characteristics data measured at John F. Kennedy International Airport [AD-00550] p0158 A79-14026
Zaker, D. J.
Laser Doppler velocimeter measurements of B-747 wake vortex characteristics p0159 A79-14034
ZAKHOB, R. A.
Investigation of a laser Doppler velocimeter system to measure the flow field around a large scale V/STOL aircraft in ground effect [NASA CR-15212] p0544 A79-26374
ZHAN, L.
Thermal stability of ribbed sheet systems p0019 A79-12137
ZHAN, L.
Experimental investigation of the aerodynamic characteristics of a wing in a jet flow [KIE-TR-77081-0] p0703 A79-32177
ZAKHAEV, B. E.
NASA gear research and its probable effect on fuels p0491 A79-24940
ZAKHOB, R. A.
Determination of inspection intervals for aircraft structures with allowance for the two-stage nature of fatigue damage p0197 A79-22439
ZAHN, L.
The effect of the aerodynamic resistance of the feeder line on the operation of safety valves
ZINBERG, H.
The survivability of helicopters to rotor blade ballistic damage
p0014 A79-10913

ZIMCZEK, M.
Development of the UH-60A helicopter
p0079 A79-16239
Advanced technology applied to the UH-60A and S-76 helicopters
p0304 A79-3172

KINN, B. T.
Wave propagation in ducts using the finite element method
[AIAB PAPERS 79-0659] p0267 A79-26079
Application of finite element techniques in predicting the acoustic properties of turboshaft inlets
p0375 A79-20831

ZIPKEN, B. A.
Making turboshaft engines more energy efficient
[ASME PAPERS 78-GT-198] p0011 A79-10818

LITTLE, W. D.
Echo interpretation of severe storms on airport surveillance radars
[AD-A061065] p0240 A79-17123

ZLOOZEB, B.-J.
Reliability of aircraft structures
p0082 A79-16583

ZLEDZINSKY, Z.
Aircraft electric power networks - Structures, I
p0016 A79-11369

ZOHER, E.-J.
Reliability of aircraft structures
p0082 A79-16583

ZOLEZI, B. A.
Study of an advanced General Aviation Turbine Engine (GATE)
[NASA-CP-159558] p0383 A79-21073

ZOLLER, C. J.
Principle of operation of Navstar and system characteristics
p0063 A79-14183

ZONICK, D. A.
The DG-800 - A rugged, high performance heading reference unit
p0619 A79-88677

ZORE, C.
Calculation of the non linear aerodynamic coefficients of wings of various shapes and their wakes, including canard configurations
p015A A79-20106

ZORE, C. B.
The calculation of non-linear aerodynamic characteristics of wings and their wakes in subsonic flow
p0602 A79-47099

ZAREL, V. N.
Influence of fuels on the reliability of jet engines and jet aircraft: Reliability with respect to fuel and lubricants
p0113 A79-17562
Accuracy of determination of aromatic hydrocarbon content in jet fuels by the sulfuric acid method
p0324 A79-29120
Method of determining mechanical-impurity contents in jet fuels
p0623 A79-88859

ZUBOV, N. N.
Influence of the flow angle on the characteristics of an elbow-shaped air intake
p0850 A79-36585

ZUCHOWICZ, K.
Aircraft lighting equipment
p0016 A79-11366

ZUHN, J.
Hardware and software structure of a coordination system for air traffic control on the basis of flight plan data
p0265 A79-26760

ZUHNKNEIT, G. W.
A new flow model for highly separated airfoil flows at low speeds
p0358 A79-20053

ZURAV, T. G.
A method of solving multicriteria optimization problems for load-bearing structures
p0020 A79-12163

ZUSIWA, B.-J.
A self contained collision avoidance system for helicopters
p0656 A79-30206

ZYSNA-ROLOZHEB, L. B.
The influence of longitudinal pressure gradient and turbulence of the flow upon heat transfer in turbine blades
p0528 A79-42892
Typical Corporate Source Index Listing

DEVELOPMENT, NEUILLY-SUB-SPIRE (PRANCE).

ADMINISTRATIVE SCIENCES CORP., ALEXANDRIA, VA.

ADVISORY GROUP FOR AEROSPACE RESEARCH AND ADVANCED TECHNOLOGY, INC., MCLEAN, VA.

ACURFI CORP., MOUNTAIN VIEW, CALIF.

1979

ADJUTANT GENERAL CENTER, WASHINGTON, D. C.

AERONAUTICAL ENGINEERING/AEROSPACE RESEARCH AND DEVELOPMENT, PARIS (FRANCE).

Typical Corporate Source Index Listing

The title of the document is used to provide a brief description of the subject matter. The page number and NASA accession number are included in each entry to assist the user in locating the abstract.

A

ACUREX CORP., MOUNTAIN VIEW, CALIF.

Jet engine test cells: Emissions and control measures, phase 1

[AGARD-CP-257] p0355 N79-20009

ADJUTANT GENERAL CENTER, WASHINGTON, D. C.

Identification of unsteady effects in lift buildup

[AD-A068175] p0178 N79-15083

ADMINISTRATIVE SCIENCES CORP., ALEXANDRIA, VA.

Naval aircraft operating and support cont-estimating model, FY 1977 revision

[AD-A0669175] p0645 N79-30140

ADVANCED TECHNOLOGY, INC., MCLEAN, VA.

Tower airport statistics handbook, calendar year 1977

[AD-A060217] p0180 N79-15099

ADVISORY GROUP FOR AEROSPACE RESEARCH AND DEVELOPMENT, PARIS (FRANCE).

Aircraft icing

[AGARD-AR-127] p0172 N79-15036

Dynamic Stability Parameters

[AGARD-CP-235] p0175 N79-15061

Piloted Aircraft Environement Simulation Techniques

[AGARD-CP-249] p0222 N79-15153

Active controls in aircraft design

[AGARD-AG-234] p0235 N79-16840

A comparison of panel methods for subsonic flow computation

[AGARD-AG-241] p0362 N79-20088

High angle of attack aerodynamics

[AGARD-LS-97] p0372 N79-20049

Fracture Mechanics Design Methodology

[AGARD-AR-134] p0367 N79-20139

Stability and control

[AGARD-CP-260] p0658 N79-30218

Experimental data base for computer program assessment: Report of the Fluid Dynamics Panel Working Group 04

[AGARD-AR-138] p0665 N79-31159

ADVISORY GROUP FOR AEROSPACE RESEARCH AND DEVELOPMENT, PARIS (FRANCE).

Icing testing for aircraft engines

[AGARD-AR-136] p0031 N79-10002

Seal Technology in Gas Turbine Engines

[AGARD-CP-237] p0046 N79-11056

Technical evaluation report on the Fluid Dynamics Panel Symposium on Unsteady Aerodynamics

[AGARD-AR-128] p0887 N79-12028

Technical evaluation report on the Specialists' Meeting of the Flight Mechanics Panel on Piloted Aircraft Environment Simulation Techniques

[AGARD-AR-126] p0093 N79-12080

Aircraft Engine Future Fuels and Energy Conservation

[AGARD-LS-96] p0105 N79-13192

The Impact of Integrated Guidance and Control Technology on Weapons Systems Design and Production

[AGARD-CP-257] p0353 N79-20009

Highlights

[AGARD-HIGHLIGHTS-79/1] p0355 N79-20029

Unsteady viscous thin airfoil theory

[AGARD-R-671] p0361 N79-20087

Guide to in-flight thrust measurement of turbojets and fan engines

[AGARD-AG-237] p0366 N79-20127

Principals of thrust measurement in flight

[AGARD-AG-237] p0366 N79-20128

Propulsion system thrust and drag book-keeping

[AGARD-AR-128] p0093 N79-12080

Thrust expressions, methodology, and options

[AGARD-AG-237] p0366 N79-20129

Propulsion system thrust and drag book-keeping

[AGARD-AR-128] p0093 N79-12080

Thrust expressions, methodology, and options

[AGARD-AG-237] p0366 N79-20129

Instrumentation

[AGARD-AR-128] p0093 N79-12080

Excitation and analysis technique for flutter tests

[AGARD-R-672] p0367 N79-20137

Technical evaluation report on the Flight Mechanics Panel Symposium on Stability and Control

[AGARD-AR-134] p0367 N79-20139

Stability and control

[AGARD-CP-260] p0658 N79-30218
Critical considerations for wind-tunnel testing

V/STOL aircraft models

Some results from the use of a control augmentation system to study the developed spin of a light plane

Army aircraft fire control system performance evaluations

Army training and doctrine command, abridge proving ground, Md.

Internal/external lighting (aviation materials)

Army air force control command, fort honor, Va.

Adding the challenge of nap-of-the-earth

Army tropic test center, apo, new york 09827.

Intensive tropic function testing

ARNO!D ENGINEERING DEVELOPMENT CENTER, ARNOLD AIR FORCE STATION, TENN.

A new facility for structural engine testing

ARNO!D, INC., ARNOLD AIR FORCE STATION, TENN.

Engine icing measurement capabilities at the AEDC

Aerodynamic characteristics of a 1/2-scale P-111 aircraft with various external stores at Mach numbers from 0.5 to 1.3

Three-plane thermodynamic effects on nonaxisymmetric nozzle afterbody performance in transonic flow

Correlation of experimental and theoretical steady-state spinning motion for a current fighter airplane using rotation-balance aerodynamic data

Sensitivity of aircraft spinning motion to dynamic cross-coupling and acceleration derivatives

Aircraft motion sensitivity to variations in dynamic stability parameters

Comparisons of turbine engine combustor exhaust emissions measurements using three gas-sampling probe designs

Computerized heat-transfer and stress analysis of wind tunnel model test rig liner

Effects of vertical tail flexibility on the aerodynamic characteristics of a 0.3-scale NASA space shuttle orbiter at Mach numbers from 0.90 to 1.55

Experimental studies in a Ludwig tube transonic tunnel

Model diffuser investigation for propulsion wind tunnel 16T

Optical in situ versus probe measurements of nitric oxide concentration as a function of axial position in a combustor exhaust

Aeropropulsion system test facility rake calibration in tunnel A

Wing/store flow-field measurements at transonic speeds using a laser velocimeter
A force and moment test of a 1/24-scale T-111 model at Mach numbers from 0.7 to 1.3. Energy conservation

A vortex lattice technique for computing ventilated wind tunnel wall interference. 

An experimental investigation of the acoustic characteristics of a variety of slot baffle configurations for transonic wind tunnel walls. 

European transonic wind tunnel project for high Reynolds numbers. 

Effect of the model vertical position in a slotted wall wind tunnel. 

Modernization of the low speed wind tunnel at Breguet de Velizy: Measuring system modernization. 

Construction problems specific to models for high Reynolds number wind tunnels. 

Adaptation for the ecnecy or adaptation for energy conservation. 

Aerofoil design, fabrication, and testing of brassboard model. 

An aerodynamic analysis of deformed wings in subsonic and supersonic flow. 

A structural analysis of a gas turbine impeller using finite-element and holographic techniques. 

Development of spiral-groove self-acting seals for helicopter engines. 

Operational requirements for flight control and navigation systems for short haul transport aircraft. 

Visualizations and calculations of air intake at high angles of attack and low Reynolds number. 

Determination of the dynamic response due to a balance at the attachments of a motor on a pod.
Introduction to the arcopter arc wing and the
Rotary balance data for a typical single-engine
general aviation design for an angle-of-attack
range of 8 deg to 90 deg. 1: High-wing model B
[NASA-CR-1099]
p6657 W79-31152
Rotary balance data for a typical single-engine
general aviation design for an angle-of-attack
range of 8 deg to 90 deg. 2: Low-wing model A
[NASA-CR-1099]
p6712 W79-33163
Rotary balance data for a single-engine trainer
design for an angle-of-attack range of 8 deg
Cast 90 deg
[NASA-CR-1099]
p6665 W79-31152
Design charts and boundaries for identifying
Factors influencing the accuracy of aerodynamic
information in a NATOPS manual
Upgraded viscous flow analysis of multi-element
airfoils
Electromagnetic coupling analysis of a Learjet
Engine/aircraft structural integration: An
overview
Investigation of penetration of electromagnetic
ergy through joints in advanced composite
structures
Load and dynamic assessment of B-52B-008 carrier
aircraft for finned configuration 1 space
shuttle solid rocket booster decelerator
subsystems drop test vehicle. Volume 1: Summary
[NASA-CR-150833]
p6036 W79-10049
Load and dynamic assessment of B-52B-008 carrier
aircraft for finned configuration 1 space
shuttle solid rocket booster decelerator
subsystems drop test vehicle. Volume 2:
Airplane flutter and load analysis results
[NASA-CR-150834]
p6036 W79-10049
Load and dynamic assessment of B-52B-008 carrier
aircraft for finned configuration 1 space
shuttle solid rocket booster decelerator
subsystems drop test vehicle. Volume 4:
Pylon load data method 1
[NASA-CR-150835]
p6036 W79-10050
Load and dynamic assessment of B-52B-008 carrier
aircraft for finned configuration 1 space
shuttle solid rocket booster decelerator
subsystems drop test vehicle. Volume 4:
Pylon load data
[NASA-CR-150836]
p6036 W79-10051
B-52B-008/DBV (Drop Test Vehicle) configuration
1 (with and without fins) flight test results -
captive flight and drop test missions
[NASA-CR-150855]
p6091 W79-12065
The influence of fleet variability on crack
growth tracking procedures for
transport/bomber aircraft
[AD-A665956]
p0503 W79-25433
Evaluation of a new format for ejection
hinge-moment prediction
table technology into the JINDIVIK remotely piloted
vehicle
Performance characteristics of a wedge nose
installed on an Y-18 propulsion wind tunnel
model
[AIWA PAPER 79-1164]
p6511 W79-41174
Casting Aluminum Structures Technology, Phase 3
(CAST)
[AD-A057422]
p0694 W79-11188
Integration of air landing system
technology into the JINDIVIK remotely piloted
vehicle
[AD-A058004]
p6092 W79-12075
Crew escape concepts for advanced high
performance aircraft
[AD-A066227]
p0017 W79-15016
Visual criteria for out of the cockpit visual
scenes
[AD-A066227]
p0222 W79-15976
Hybrid technology cost reduction and reliability
improvement study
[AD-A057422]
p0376 W79-20139
Subcritical drag minimization for highly swept
wings with leading edge vortices
[AD-A041422]
p2914 W79-22021
Factors influencing the accuracy of aerodynamic
hinge-sensor prediction
[AD-A064663]
p6042 W79-24965
Development and demonstration of manufacturing
processes for fabricating graphite/EPoxy-
polysilide structural elements
[AD-A070022]
p6661 W79-30301
The transonic oscillating flap
[AD-A070022]
p7005 W79-32200
Transonic wing redesign using a generalized
fictitious gas method
[AD-A070013]
p7005 W79-32202
Proposed advancements in simulation of
atmospheric phenomena for improved training
Repair of bonded primary structure
[AD-A059945]
p0162 W79-14086
A theoretical and experimental means to predict
ice accretion shapes for evaluating aircraft
handling and performance characteristics
[AD-A070022]
p7073 W79-15041
The continuity factor in aircraft development
Enhanced viscous flow analysis of multi-element
airfoils
Electromagnetic coupling analysis of a Learjet
Engine/aircraft structural integration: An
overview
Investigation of penetration of electromagnetic
ergy through joints in advanced composite
structures
Load and dynamic assessment of B-52B-008 carrier
aircraft for finned configuration 1 space
shuttle solid rocket booster decelerator
subsystems drop test vehicle. Volume 1: Summary
[NASA-CR-150833]
p6036 W79-10049
Load and dynamic assessment of B-52B-008 carrier
aircraft for finned configuration 1 space
shuttle solid rocket booster decelerator
subsystems drop test vehicle. Volume 2:
Airplane flutter and load analysis results
[NASA-CR-150834]
p6036 W79-10049
Load and dynamic assessment of B-52B-008 carrier
aircraft for finned configuration 1 space
shuttle solid rocket booster decelerator
subsystems drop test vehicle. Volume 4:
Pylon load data method 1
[NASA-CR-150835]
p6036 W79-10050
Load and dynamic assessment of B-52B-008 carrier
aircraft for finned configuration 1 space
shuttle solid rocket booster decelerator
subsystems drop test vehicle. Volume 4:
Pylon load data
[NASA-CR-150836]
p6036 W79-10051
B-52B-008/DBV (Drop Test Vehicle) configuration
1 (with and without fins) flight test results -
captive flight and drop test missions
[NASA-CR-150855]
p6091 W79-12065
The influence of fleet variability on crack
growth tracking procedures for
transport/bomber aircraft
[AD-A666596]
p0503 W79-25433
Effect of flight loads on turbine engine
performance deterioration
Nonlinear parameter identification and its
application to transport aircraft
Application of computational aerodynamics
methods to the design and analysis of
transport aircraft
Capabilities and applications of a computer
program system for dynamic loads analyses of
flexible airplanes with active controls
Design and performance of the propulsion system
for the quiet short-haul research aircraft
The size and performance effects of high lift
system technology on a modern twin engine jet
transport
Fire testing in the Boeing 707 cabin section
Development of lightweight, fire-retardant, low
smoke, high strength, thermally stable
aircraft floor paneling
Development of aircraft lavatory compartments
with improved fire resistance characteristics
Development of aircraft lavatory compartments
with improved fire resistance characteristics,
phase 1: Fire containment test of a wide body
aircraft lavatory module
Repair of bonded primary structure
A laboratory study of the subjective response to
helicopter blade-slap noise
An evaluation of a new format for ejection
information in a NATOPS manual
A theoretical and experimental means to predict
ice accretion shapes for evaluating aircraft
handling and performance characteristics
The continuity factor in aircraft development
Enhanced viscous flow analysis of multi-element
airfoils
Electromagnetic coupling analysis of a Learjet
Engine/aircraft structural integration: An
overview
Investigation of penetration of electromagnetic
ergy through joints in advanced composite
structures
Load and dynamic assessment of B-52B-008 carrier
aircraft for finned configuration 1 space
shuttle solid rocket booster decelerator
subsystems drop test vehicle. Volume 1: Summary
[NASA-CR-150833]
p6036 W79-10049
Nonlinear interaction between mean and unsteady flowfields near Mach 1, [AD-A060789] p0170 N79-15010


Inverse boundary-layer technique for airfoil design [NASA-CR-158969] p0518 N79-20054

Reduction of computer usage costs in predicting unsteady aerodynamic loadings caused by control surface motions: Analysis and results [NASA-CR-150999] p0360 N79-20072


Computer program to calculate three-dimensional boundary layer flows over wings with wall mass transfer [NASA-CR-158969] p0430 N79-23016


Design and evaluation of aircraft heat source systems for use with high-freezing point fuels [NASA-CR-158969] p0489 N79-24172


Environmental exposure effects on composite materials for commercial aircraft [NASA-CR-158969] p0555 N79-28232


Harmonic analyses of airframe surface pressure data, runs 23-31, forward section
[AD-A061361] p0229 N79-16811

Rotary-wing aerodynamics. Volume 7-A: Performance prediction of helicopters
[NASA-CH-3083] p0267 N79-17181

Interactional aerodynamics of the single rotor helicopter configuration. Volume 6-A: One-third octave band spectrograms of wake single film data, basic configuration wake exploration
[AD-A062012] p0302 N79-19056

Interactional aerodynamics of the single rotor helicopter configuration. Volume 6-B: One-third octave band spectrograms of wake single film data, build-up to baseline
[AD-A061994] p0302 N79-19058

Interactional aerodynamics of the single rotor helicopter configuration. Volume 8-C: Frequency analyses of wake single film data, hubcaps and air ejectors
[AD-A061995] p0302 N79-19059

Observations on the dynamic stall characteristics of advanced helicopter rotor airfoils
[AD-A063300] p0352 N79-20006

Interactional aerodynamics of the single rotor helicopter configuration. Volume 4G: One-third octave band spectrograms of wake split-film data, fairings and surface devices
[AD-A063300] p0360 N79-20007

Interactional aerodynamics of the single rotor helicopter configuration. Volume 7-C: Frequency analyses of wake split-film data, solid hubcaps
[AD-A062640] p0360 N79-20007

Interactional aerodynamics of the single rotor helicopter configuration. Volume 7-D: Frequency analyses of wake split-film data, open hubcaps
[AD-A062640] p0360 N79-20008

Interactional aerodynamics of the single rotor helicopter configuration. Volume 7-E: Frequency analyses of wake split-film data, air ejectors
[AD-A062590] p0361 N79-20009

Interactional aerodynamics of the single rotor helicopter configuration. Volume 7-F: Frequency analyses of wake split-film data, air ejectors with hubcaps
[AD-A062117] p0361 N79-20010

Interactional aerodynamics of the single rotor helicopter configuration. Volume 7-G: Frequency analyses of wake split-film data, fairings and surface devices
[AD-A062642] p0361 N79-20011

Interactional aerodynamics of the single rotor helicopter configuration. Volume 8-B: Frequency analyses of wake single film data, build-up to baseline
[AD-A062254] p0361 N79-20012

Simulation correlation, and analysis of the structural response of a CH-47A crash impact
[AD-A062643] p0363 N79-20012

Interactional aerodynamics of the single rotor helicopter configuration. Volume 6-C: One-third octave band spectrograms of wake split-film data, basic configuration wake exploration
[AD-A063712] p0378 N79-21012

Interactional aerodynamics of the single rotor helicopter configuration. Volume 6-D: One-third octave band spectrograms of wake split-film data, build-up to baseline
[AD-A063719] p0379 N79-21013

Interactional aerodynamics of the single rotor helicopter configuration. Volume 6-E: One-third octave band spectrograms of wake split-film data, basic configuration wake exploration
[AD-A063622] p0379 N79-21014

Interactional aerodynamics of the single rotor helicopter configuration. Volume 7-B: Frequency analyses of wake split-film data, basic configuration wake explorations
[AD-A063243] p0379 N79-21015

Interactional aerodynamics of the single rotor helicopter configuration. Volume 4F: One-third octave band spectrograms of wake split-film data, air ejectors with hubcaps, wings
[AD-A063246] p0379 N79-21016

Interactional aerodynamics of the single rotor helicopter configuration. Volume 5: Harmonic analyses of hub wake
[AD-A063245] p0379 N79-21017

Interactional aerodynamics of the single rotor helicopter configuration. Volume 4E: One-third octave band spectrograms of wake split-film data, air ejectors
[AD-A063653] p0379 N79-21018

Rotary-wing aerodynamics. Volume 1: Basic theories of rotor aerodynamics with application to helicopters
[NASA-CH-3082] p0416 N79-22039

Identification of high payoff research for more efficient applicant helicopters in agriculture and forestry

OH-58 composite main rotor blades preliminary design investigation
[AD-A065010] p0421 N79-22085

Interactional aerodynamics of the single rotor helicopter configuration. Volume 6-B: One-third octave band spectrograms of wake single film data, basic configuration wake explorations
[AD-A061861] p0482 N79-23931

Interactional aerodynamics of the single rotor helicopter configuration. Volume 3: Flow angle and velocity wake profiles in low frequency band, basic investigations and hub variations
[AD-A061766] p0482 N79-23932

Interactional aerodynamics of the single rotor helicopter configuration. Volume 3B: Flow angle and velocity wake profiles in low frequency band, air ejector systems and other devices
[AD-A061767] p0483 N79-23933

Interactional aerodynamics of the single rotor helicopter configuration. Volume 2B: Harmonic analyses of airframe surface pressure data, runs 7 - 14, midsection
[AD-A061800] p0483 N79-23934

Helicopter transmission vibration and noise reduction program. Volume 3: Evaluation of fiber PP metal-matrix housing specimens
[AD-A066798] p0494 N79-24983

Evaluation of pylon focusing for reduced helicopter vibration
[AD-A069712] p0655 N79-30196

Development of crushworthy passenger seats for general-aviation aircraft
[NASA-CH-159110] p0666 N79-31164

Study of design constraints on helicopter noise
[NASA-CH-305518] p0677 N79-32054

BOLT, BEHAN, AND NEWMAN, INC., CAMBRIDGE, MASS.

Subjective evaluation of helicopter blade slap noise
[AD-A061781] p0683 N79-32054

Helicopter cabin noise: Methods of source and path identification and characterization
[AD-A061814] p0683 N79-32054

BOLT, BEHAN, AND NEWMAN, INC., CANYON PARK, CALIF.

Characteristics of propeller noise on an aircraft fuselage related to interior noise transmission
[AIAA PAPER 79-0646] p0271 N79-26932

Computer-aided collection of demographic data within day-night level contours: Two test cases
[AD-A061567] p0306 N79-19010

Helicopter noise level functions for use in community noise analyses
[AD-A060455] p0600 N79-29964

BORG-WARNER CORP., DES PLAINES, ILL.

Sample calculation 4: \( \Phi = 9 \text{ deg} \)
[AD-A062140] p0427 N79-22490

BOUST (HENRY V.) AND ASSOCIATES, WAYNE, PA.

Aerodynamic design and analysis of propellers

Unsteady subsonic and supersonic potential aerodynamics of slender wings with leading edge camber

A new blade element method for calculating the performance of high and intermediate solidity axial flow fans

BRITISH AEROSPACE AIRCRAFT GROUP, WANTON (ENGLAND).

BRITISH AEROSPACE AIRCRAFT GROUP, PRESTO! (ENGLAND).

BRITISH AEROSPACE AIRCRAFT GROUP, BRISTOL (ENGLAND).

BRITISH AEROSPACE DYNAMICS GROUP, BRISTOL (ENGLAND).

BRITISH AIRCRAFT CORP., WEYBRIDGE (ENGLAND).

BRITISH AIRCRAFT CORP. (OPERATING) LTD., BRISTOL (ENGLAND).

Unsteady aerodynamics of oscillating containers

The effect of blockage in shear flow in the wind tunnel

The trajectories of spherical particles in flow through cascaded turning vanes

The effect of blockage in shear flow in the wind tunnel

A study of the Sheriff's wing

The electro-impulse de-icing method

The trajectories of spherical particles in flow through cascaded turning vanes

The effect of blockage in shear flow in the wind tunnel

A discussion of the mechanical properties of rigid foams with particular consideration of a rigid polyether structural foam

BRITISH AEROSPACE AIRCRAFT GROUP, BRISTOL (ENGLAND).

BRITISH AEROSPACE AIRCRAFT GROUP, PRESTON (ENGLAND).

BRITISH AEROSPACE AIRCRAFT GROUP, WARTON (ENGLAND).

BRITISH AEROSPACE AIRCRAFT GROUP, WEYBRIDGE (ENGLAND).

BRITISH AEROSPACE AIRCRAFT GROUP, BRISTOL (ENGLAND).

The panel method for subsonic aerodynamic flow: A survey of mathematical formulations and numerical models with an outline of the new British aerospace scheme

The computation of vortex flows by panel methods

Control-configured combat aircraft

Active controls for civil transport

An RSVP design study

Aerodynamics

Propulsion

Launch and Recovery

BRITISH COlumbIA UNIV., VANCOUVER.

Oscillatory aerodynamics and stability derivatives for airfoil spoiler motions

BRITISH LIBRARY LENDING DIV., BOSTON SPA (ENGLAND).

Comparison of the aerodynamic properties of an airplane with the tail-first configuration and with the conventional configuration

Separation and investigation of wear particles from aero-engines

Aerodynamic behavior of fibres and sampling of respirable dust

A two-stage supercharger nets: Efficiency and head distribution under full- and part-load conditions

Potentiating the quantitative characteristics of aircraft icing

A three dimensional flow computing system applied to the problem of dynamic response of lifting bodies. (Solution of three-dimensional basic thermo fluid dynamics equations with strong interacting attached and separated flow fields). (BVS-PW-78-46)

A gas turbine off-design computing system

HUBERER-RANC CORP., WEIGHT-PATTERSON AFB, OHIO.

Multifunction keyboard implementation study

CAP ELECTRONICS LTD., NORTHERN QUEBEC.

Recent advances in television visual systems

CALIFORNIA INST. OF TECH., PASADENA.

Flying hot-wire measurement of two-dimensional turbulent separation on an NACA 4412 airfoil at maximum lift

The flying hot wire and related instrumentation

Oscillatory aerodynamics and stability derivatives for airfoil spoiler motions

Unsteady small-gap ground effects

Optimal controller design methods for linear systems with uncertain parameters-development, evaluation, and comparison

CALIFORNIA RESEARCH AND TECHNOLOGY, INC., WOODLAND HILLS.

Fuel tank survivability for hydrodynamic gas induced by high velocity fragments. Part 2: Numerical analysis

CALIFORNIA UNIV., LIVERMORE. LAWRENCE LIVERMORE LAB.

Experimental investigation of the buckling characteristics of a beaded skin panel for a hypersonic aircraft - Including comparisons with finite element and classical analyses

CALIFORNIA UNIV., LOS ANGELES.

Application of the finite element method to rotary-wing aerelasticity

Formulation of the aerostatic stability and response problems of coupled rotor/support systems

Aerodynamics

C-12

The application of finite element techniques to gust alleviation - Criteria and control laws.

Gust alleviation using direct turbulence measurements.[NASA-CR-159878]

A study of inlet conditions for three-dimensional transonic compressor flows.[AD-A062688]

Effects of control system dynamics on fighter approach and landing longitudinal flying qualities, volume 1.[AD-A067550]

Theoretical studies of three-dimensional transonic flow through a compressor blade row.[AD-A071020]

The Total In-Flight Simulator (TIFS) aerodynamics and systems: Description and analysis.[NASA-CR-158965]

Total environment survivability methodology.[NASA-CR-159617]

Research on self-correcting wind tunnels.[AD-A062110]

Active control for the Total-In-Flight Simulator (ACTIFS).[NASA-CR-3118]

Blast induced distortion experiments on an engine inlet.[AD-A066611]

An operational research investigation of the ice-detection capability and stability of the surface condition analyzer (SCAN) system and its applicability to Navy-wide use.[AD-A067174]

An experimental investigation of control-display requirements for a jet lift VTO aircraft in the terminal area.[AD-A066818]

Survey and evaluation of potential real-time interactive flight test facilities for the P-1.[ADB-A070341]

The aerodynamic noise of a slot in an aerofoil.[ARC-R.3403]

Effects of turbulence on laminar separation on aeroelastic surfaces such as airfoils and compressor blades.[NASA-CR-158068]

Axial flow in trailing line vortices.[AD-A057075]

Noise transmission - Turboprop problem.[AIAA PAPER 79-0645]

Volume 2: Toxicity.[AIAA PAPER 79-0400]
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION (U.S. SENATE).
Propelled lighter-than-air vehicles

[AD-A062457]

Aircraft and airport noise reduction

[AD-A057505]

Aviation safety

[AD-A057967]

International Air Transportation Competition Act of 1978

[AD-A039-412]

COMMITTEE ON GOVERNMENT OPERATIONS (U.S. HOUSE).

COMPUTER AIDED DESIGN CENTRE, CAMBRIDGE (ENGLAND).

COMMITTEE ON SCIENCE AND TECHNOLOGY (U.S. HOUSE).

COMPUTER SCIENCES CORP., TREVOSE, PA.

COMPUTER INFORMATION SYSTEMS, CUPERTINO, CALIF.

CONNECTICUT UNIV., STORRS.

COSTRUZIONI AERONAUTICHE GIOVANNI AGOSTA S.p.A., GALLARATE (ITALY).

The search and rescue satellite (SARSAT) system

[AD-A1585847]

Aviation safety

[AD-A066-22082]

Central flow control software design document.

[AD-A0653917]

NASA authorization, 1980, volume 1, part 2

[AD-A078-22080]

Ozone Contamination in Aircraft Cabins.

[NASA-CF-152286]

Central flow control software design document.

[AD-A0663029]

A simplified growth thrust computing technique for an afterburning turbofan engine

[CONNECTICUT UNIV., STORRS.]

An information matrix approach for aircraft paragraph-insensitive control

[BERC/PPS-78/2]

CONSIGLIO NAZIONALE DELLE RICERCHE, ROME (ITALI).

Transatlantic Flights of stratospheric balloons

[AD-A070128]

Defence and Civil Inst. of Environmental Medicine.

[AD-A063959]

Defence Research Establishment, Ottawa (Ontario).

[AD-A069297]

DCV INDUSTRIES, STUDIO CITY, CALIF.

[AD-A060322]

DEPARTMENT OF ENERGY, HARRISONBURG, VA.

[AD-A059026]

Decision Science, Inc., San Diego, Calif.

[AD-A065297]

Defence and Civil Inst. of Environmental Medicine, Downsview (Ontario).

[AD-A0677-22080]

Defence Research Establishment, Ottawa (Ontario).

[AD-A068699]

Defence Research Establishment, Ottawa (Ontario).

[AD-A069199]

Dowresview (Ontario).

[AD-A0677-22080]

Dow Reseach Inst., Ohio.

[AD-A069199]

Dual purpose of engine fan blades

[AD-A058194]

Development of high performance military aircraft training simulators

[AD-A0679-15994]

Unsteady effects of circumferential pressure

[AD-A0662550]

Research on helicopter rotor noise

[AD-A057967]

Numerical calculation of inviscid transonic flow through rotors and fans

[AD-A060322]

Preliminary investigation of the seated height limit for safe through-the-capsule ejection from the C-47 aircraft

[AD-A0624603]

Test and Evaluation of Modified high performance jet aircrew life preserver

[AD-A0653559]

Tracker antenna location study

[AD-A059026]

Development of an 10 KA power conditioner unit, aircraft, 115/200 volt, 3-phase, 400 Hz

[AD-A065199]

Aviation engine potential

[AD-A0669-31200]

Behavior of nonmetallic materials in shale oil derived jet fuels and in high aromatic and high sulfur petroleum fuels

[AD-A065322]

Impact of soft bodies on jet engine fan blades

[AD-A069199]

Fuel tank survivability for hydrodynamic ram induced by high velocity fragments. Part 1:

[AD-A058194]

Prediction of crack repair costs for aircraft structures

[AD-A058999]

Fuel tank survivability for hydrodynamic ram induced by high velocity fragments. Part 2:

[AD-A070113]

Impact on soft bodies on jet engine fan blades

[AD-A069199]

Predicted crack repair costs for aircraft structures

[AD-A0669-31200]

Thermal performance characterization basic methodology

[AD-A069199]

Briefing for a numerical aerodynamic simulation facility: Summary

[ NASA-CR-152286]

Feasibility study for a numerical aerodynamic simulation facility: Summary

[ NASA-CR-152286]

Recent progress in finite-volume calculations for wing–fuselage configurations

[AD-A058830]

Research on helicopter rotor noise

[AD-A057967]

Numerical calculation of inviscid transonic flow through rotors and fans

[AD-A060322]

Preliminary investigation of the seated height limit for safe through-the-capsule ejection from the C-141 aircraft

[AD-A0625500]

Test and Evaluation of Modified high performance jet aircrew life preserver

[AD-A0653559]

Tracker antenna location study

[AD-A059026]

Development of an 10 KA power conditioner unit, aircraft, 115/200 volt, 3-phase, 400 Hz

[AD-A065199]

Aviation engine potential

[AD-A0669-31200]

Behavior of nonmetallic materials in shale oil derived jet fuels and in high aromatic and high sulfur petroleum fuels

[AD-A065322]

Impact of soft bodies on jet engine fan blades

[AD-A069199]

Predicted crack repair costs for aircraft structures

[AD-A0669-31200]

Thermal performance characterization basic methodology

[AD-A069199]
Stability characteristics of hydrocarbon fuels
from alternative sources [EBBC/87-23] p0489 W79-24178

DEPARTMENT OF ENERGY, WASHINGTON, D.C.

Detrimental combustion of B3-6 [AD-867576] p0555 W79-20307

DOUGLAS (CHARLES A.), CHEVY CHASE, MD

Scientific research, 1977 p0712 W79-33150

DEUTSCHE FORSCHUNGS- UND VERSUCHSANSTALT FUR LUFT- UND RAUMFAHRT, GOETTINGEN (WEST GERMANY).
Prediction of unsteady aerodynamic forces in high frequency oscillatory flow p0216 W79-15915

DOUGLAS (CHARLES A.), CHEVY CHASE, MD.

Visibility in aviation p0243 W79-17419
A new approach to the solution of large, full aircraft and avionic related research required

The 1990 direct support infrastructure

Cargo Logistics Airlift Systems Study (CLASS).

Failures in adhesively bonded structures

Damage tolerance analysis of redundant structures

Douglas Aircraft cabin fire tests

Fire resistant aircraft seat materials

Study to develop improved fire resistant aircraft and avionic related research required

A user's manual for a computer program to calculate compressible flow about calculating compressible flow about three-dimensional inlet no. 0.8

SAE Paper 780997)

Lateral noise-attenuation results from flyovers of three transport aircraft

Inlet design studies for a Mach 2.2 advanced supersonic cruise vehicle

Douglas Aircraft Paper 78-18161

...
Restrictive assumptions and range of validity of
Investigation of turbo-dyne energy chamber (G:B:
Cost effectiveness analysis of the proposed
Development and evaluation of a helicopter-borne
Investigations for the calculation of robust
A digital communication system as gateway
Analysis of plume rise from jet aircraft
Wall corrections in transonic wind tunnel:
Continuation study of alternate fuels nitrogen
Equivalent porosity
Wall corrections in transonic wind tunnel:
Operational evaluation of an optical infrared
The influence of the environment on the
development of new and in-use gas turbine aircraft
Effectiveness of air bleed devices
A review of certificated airport crash fire
Handling qualities of a simulated STOL aircraft
Experimental evaluation of the exhaust emission standards
Emergency procedures in the event of fire in an aircraft
Handling limitations of a simulated STOL aircraft
Better performance for aircraft tracking and
Flutter suppressor for transonic flight
Static electricity hazards in aircraft fuel
Pressure modeling of vertically burning aircraft
FIRE RESEARCH, INC., KEMP, WASH.
Pressure modeling of vertically burning aircraft
Some theoretical and experimental investigations of stress and vibrations in a radial flow
Some theoretical and experimental investigations of stress and vibrations in a radial flow

Engineering and development program plan:
Civilian control systems effects on handling qualities
Emergency procedures in the event of fire in an aircraft
Emergency procedures in the event of fire in an aircraft
Central flow control system
Master plan flight service station automation

Engineering and development program plan:
Civilian control systems effects on handling qualities
Emergency procedures in the event of fire in an aircraft
Emergency procedures in the event of fire in an aircraft
Civilian control systems effects on handling qualities
Emergency procedures in the event of fire in an aircraft
Emergency procedures in the event of fire in an aircraft
Central flow control system
Master plan flight service station automation


donates the你说的。
Developing a national airport system: Additional Congressional guidance needed
[PB-294082/3] p0565 N79-45273
Centralizing Air Force aircraft component repair in the field can provide significant savings
[PB-295320/6] p0704 N79-32154
If Army helicopter maintenance is to be ready for wartime, it must be made efficient and effective in peace time
[PB-295300/6] p0712 N79-33155

GENERAL DYNAMICS/CONVAIR, SAN DIEGO, CALIF.
Vehicle Design Evaluation Program (VDEP). A computer program for weight sizing, economic, performance and mission analysis of fuel-conservative aircraft, multibodied aircraft and large cargo aircraft using both JP-4 and alternative fuels
Boron/aluminum landing gear for Navy aircraft
[AD-1058981] p0101 N79-13028
Calculation of the planar supercritical flow over a NASA supercritical profile
The aerodynamic and thermodynamic characteristics of turbines and some far field temperature distributions
[AD-1061353] p0232 N79-16843
Transonic flow over the NASA 640406 with an oscillating flap-calculations based on the Euler equations
[AD-1061353] p0353 N79-20007
Supercritical tests of a self-optimizing, variable-canard wind tunnel model
[AD-1061353] p0357 N79-20048
Ultra-high-modulus graphite-epoxy conical shell development, supplement
[AD-1066795] p0662 N79-30315
GENERAL DYNAMICS CORP., PORT WASHINGTON, TEX.
P-16 advanced electro-optical pod field-of-view simulation study
[AD-1066795] p0302 N79-21050
Aerodynamic characteristics of forebody and nose strakes based on P-16 wind tunnel test experience. Volume 1: Summary and analysis
GENERAL DYNAMICS CORP., SAN DIEGO, CALIF.
P-16 high angle of attack testing
[AD-1066114] p0299 N79-18886
GENERAL DYNAMICS/FORT WORTH, TEX.
Design study results of a supersonic cruise fighter wing
[AD-1066114] p0139 N79-19512
Study of aerodynamic technology for VSTOL fighter/attack aircraft, volume 1
Aerodynamic characteristics of forebody and nose strakes based on P-16 wind tunnel test experience. Volume 2: Data base
P-16 multi-national fighter
Design guidelines for the application of forebody and nose strakes to a fighter aircraft based on P-16 wind tunnel testing experiment
[AD-1066795] p0302 N79-20007
Behavior of adhesively bonded joints under cyclic loading
[AD-1066795] p0313 N79-12700
Energy maneuverability display validation
[AD-1066795] p0344 N79-23453
Composite forward fuselage systems integration, volume 1
[AD-1066660] p0494 N79-29484
Enhanced fighter mission effectiveness by use of integrated flight systems
[AD-1066795] p0658 N79-30223

GENERAL ELECTRIC CO., SCHENECTADY, N.Y.
Direct drive control valve for fly-by-wire flight control system actuators
[AD-1062030] p0306 N79-19007
The 150 KVA samarium cobalt BSCF starter generator electrical system
[AD-1070078] p0310 N79-32468
GENERAL ELECTRIC CO., CINCINNATI, OHS.
Performance characteristics of monostatic antennas installed on the P-18 aircraft
[AD-1066114] p0201 N79-23532
Wave propagation in ducts using the finite element method
[IAIA PAPER 76-0659] p0267 A79-26879
Application of digital controls on the quiet clean (NASA-CP-79-1203) p0865 A79-38984
Superalloy knife edge seal repair [AD-005726] p0046 N79-11055
Definitive study for variable cycle engine tested engine and associated test program [NASA-CP-159549] p0103 N79-13048
Variable area exhaust nozzle [NASA-CASE-LZ-12376-1] p0164 N79-14097
Hybrid packaging of integrated circuits for engine controls [AD-0662125] p0370 N79-20326
Advanced composite engine rotor design [AD-063846] p0424 N79-22105
Regenerative simulation of turbine engine performance/aircraft regression model [AD-063975] p0424 N79-22106
Analytical derivatives [AD-064994] p0436 N79-23090
Turbine design system [AD-065252] p0487 N79-23794
State-of-the-art of nondestructive inspection of aircraft engines Aircraft engine design using experimental stress analysis techniques Experimental Clean Combustor Program (ECCP), phase 3 [NASA-CP-135384] p0670 N79-31207
Analytical evaluation of the impact of broad specification fuels on high bypass turbofan engine combustors [NASA-CP-159641] p0717 N79-33205
CF6 jet engine performance improvement program: Short runout stage performance improvement concept [NASA-CP-159564] p0717 N79-33206
Laboratory development of computer generated image displays for evaluation in terrain flight training [AD-070068] p0670 N79-31236
GENERAL ELECTRIC CO., EVERTHAL, OHIO. The effect of throttling on forward radiated fan noise [IAIA PAPER 79-0640] p0265 N79-26917
Analysis and preliminary design of an optical digital tip clearance sensor for propulsion control [NASA-CP-159434] p0174 N79-15053
GENERAL ELECTRIC CO., LYNB, MASS. Assessment of suspended electronic fuel controls for modular engine diagnostics and condition monitoring [AD-065128] p0436 N79-23091
GENERAL ELECTRIC CO., SCHENECTADY, N. Y. Reduction of rotor-turbulence interaction noise in static fan noise testing [IAIA PAPER 76-0656] p0270 N79-26925
Analysis and calculations of lightning interactions with aircraft electrical circuits [AD-062606] p0364 N79-20108
Evaluation of an advanced directionally solidified gamma/gamma' alpha No eutectic alloy [NASA-CP-159416] p0369 N79-20222
GENERAL ELECTRIC CO., UTICA, N. Y. Modular Avionics Packaging (MAP) [AD-005937] p0163 N79-14093
GENERAL ELECTRIC CO., WEST LEX, MASS. GCS92 - The key to future short-haul air transport [AD-065170] p0643 N79-50208
GENERAL RESEARCH CORP., SANTA BARBARA, CALIF. Exploratory development of an overhaul coating process for gas turbine propellers [AD-065170] p0338 N79-16854
GENERAL RESEARCH CORP., SANTA BARBARA, CALIF. Multifrequency signal analysis General RESEARCH CORP., SANTA BARBARA, CALIF. Multifrequency signal analysis General RESEARCH CORP., SANTA BARBARA, CALIF. Multifrequency signal analysis General RESEARCH CORP., SANTA BARBARA, CALIF. Multifrequency signal analysis
### Corporate Source Index

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Location</th>
<th>Relevant Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>HONEYWELL, INC., MINNEAPOLIS, MINN.</td>
<td></td>
<td>Flight test experience with an adaptive control using a maximum likelihood parameter estimation technique.</td>
</tr>
<tr>
<td>BOCBSCBULE DER BONDSWEHR, MUNICH, (WEST GERMANY).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HARTMAN (WILLIAM P.), KNOXVILLE, TENN.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HARRY DIAMOND LABS., ADELPHI, MD.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HARCO CORP., MEDINA, OHIO.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HAMILTON STANDARD, WINDSOR LOCKS, CT.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| GUTEHOFFNUNGSHUETTE STERKB AD! A.G. | | Corporate Source Index

### Study of aerodynamic technology for VTOL fighter aircraft
- [NASA-CR-152129] p0034 79-10027
- An automated procedure for computing the three-dimensional transonic flow over wing-body combinations, including viscous effects. Volume 2: Program user's manual and code descriptions [AD-A054998] p0097 79-12027
- HYDROE (hydraulic power sharing system) [AD-A064106] p0035 79-16863
- Induced effects of lightning on an all composite aircraft [AD-A056188] p0104 79-13059
- Program for the critical components of a fly-by-wire backup flight control system, part 1 [AD-A063947] p0063 79-31226
- HONEYWELL SYSTEMS AND RESEARCH CENTER, MINNEAPOLIS, MINN.
  - Helicopter high grain control [NASA-CR-15952] p0672 79-31221
  - HEL INDUSTRIES, INC., SANTA ANA, CALIF.
  - Applicability of fiber optics to aircraft fire detection systems [AD-A063974] p0426 79-22882
  - HUGHES AIRCRAFT CO., CANOGA PARK, CALIF.
  - Global positioning system tactical missile guidance [AD-A05533] p0353 79-20013
- HUGHES AIRCRAFT CO., CULVER CITY, CALIF.
  - Phosphorylated epoxy adhesives [AD-A059508] p0088 79-12042

### HUGUES HELICOPTERS, CULVER CITY, CALIF.
- On methods for application of harmonic control [AD-A051145] p0107 79-18657
- Parameter identification applied to analytic hingeless rotor modeling [AD-A066956] p0038 79-10064
- Application of higher harmonic blade feathering for helicopter vibration reduction [NASA-CR-158995] p0161 79-14079
- The approach to crew protection in the crash environment for the YAH-64 [AD-A055792] p0312 79-19664
- Evaluation of an energy distribution system for helicopter landing gears during hard landing [AD-A065298] p0433 79-23669
- HUGUES RESEARCH LABS., MALIBU, CALIF.
  - Holographic lens for pilot's head up display, phase 4 [AD-A066600] p0102 79-13083
- HUMAN ENGINEERING LABS., ABERDEEN PROVING GROUND, MD.
  - HEL participation in the plan for assisting in the analysis of Army helicopter electro-optical symbology [AD-A058730] p0102 79-13092
- Internal cockpit reflections of external point light sources for the model YAH-64 advanced attack helicopter [AD-A063147] p0371 79-20348
- HYDRAULIC RESEARCH, INC., BEDFORD, MASS.
- Test methodology correlation for foreign object damage [AD-A057321] p0095 79-12093
- Disassembly inspection and overhaul of gas turbine engine/airframe/drive train dynamic interface documentation [AD-A056956] p0038 79-10064
- Application of higher harmonic blade feathering for helicopter vibration reduction [NASA-CR-158995] p0161 79-14079
- The approach to crew protection in the crash environment for the YAH-64 [AD-A055792] p0312 79-19664
- Evaluation of an energy distribution system for helicopter landing gears during hard landing [AD-A065298] p0433 79-23669
- HUGUES RESEARCH LABS., MALIBU, CALIF.
  - Holographic lens for pilot's head up display, phase 4 [AD-A066600] p0102 79-13083
- HUMAN ENGINEERING LABS., ABERDEEN PROVING GROUND, MD.
  - HEL participation in the plan for assisting in the analysis of Army helicopter electro-optical symbology [AD-A058730] p0102 79-13092
- Internal cockpit reflections of external point light sources for the model YAH-64 advanced attack helicopter [AD-A063147] p0371 79-20348

### HUGUES HELICOPTERS, CULVER CITY, CALIF.
- On methods for application of harmonic control [AD-A051145] p0107 79-18657
- Parameter identification applied to analytic hingeless rotor modeling [AD-A066956] p0038 79-10064
- Application of higher harmonic blade feathering for helicopter vibration reduction [NASA-CR-158995] p0161 79-14079
- The approach to crew protection in the crash environment for the YAH-64 [AD-A055792] p0312 79-19664
- Evaluation of an energy distribution system for helicopter landing gears during hard landing [AD-A065298] p0433 79-23669

### HUGUES RESEARCH LABS., MALIBU, CALIF.
- Holographic lens for pilot's head up display, phase 4 [AD-A066600] p0102 79-13083
- HUMAN ENGINEERING LABS., ABERDEEN PROVING GROUND, MD.
  - HEL participation in the plan for assisting in the analysis of Army helicopter electro-optical symbology [AD-A058730] p0102 79-13092
- Internal cockpit reflections of external point light sources for the model YAH-64 advanced attack helicopter [AD-A063147] p0371 79-20348

### HYDRAULIC RESEARCH, INC., BEDFORD, MASS.
- Test methodology correlation for foreign object damage [AD-A057321] p0095 79-12093
- Disassembly inspection and overhaul of gas turbine engine/airframe/drive train dynamic interface documentation [AD-A056956] p0038 79-10064
- Application of higher harmonic blade feathering for helicopter vibration reduction [NASA-CR-158995] p0161 79-14079
- The approach to crew protection in the crash environment for the YAH-64 [AD-A055792] p0312 79-19664
- Evaluation of an energy distribution system for helicopter landing gears during hard landing [AD-A065298] p0433 79-23669

### HUGUES RESEARCH LABS., MALIBU, CALIF.
- Holographic lens for pilot's head up display, phase 4 [AD-A066600] p0102 79-13083
- HUMAN ENGINEERING LABS., ABERDEEN PROVING GROUND, MD.
  - HEL participation in the plan for assisting in the analysis of Army helicopter electro-optical symbology [AD-A058730] p0102 79-13092
- Internal cockpit reflections of external point light sources for the model YAH-64 advanced attack helicopter [AD-A063147] p0371 79-20348
ILLINOIS UNIV. AT URBANA-CHAMPAIGN, URBANA.
Can low-cost VON and Omega receivers suffice for
navigation? A new computer-based navigation technique
p0077 N79-16165
Feedback controlled aircraft sensitivity to	parameter variations
[AD-1057643] p0095 N79-12097
Control strategies for complex systems for use
in aerospace avionics
[AD-1059492] p0163 N79-14090
Analysis of base-flow problems during powered
supersonic flight
p0301 N79-18926

INSTITUTE OF SCIENCE AND TECHNOLOGY, LONDON
(ENGLAND).
Future fuels for aviation
p0106 N79-13193
The role of fundamental combustion in the future
aviation fuels program
p0107 N79-13195

INCOM, INC., CALABASA, CALIF.
Failure modes and redundancy analysis for the
multifunction inertial reference system
[AD-A061465] p0232 N79-16834

INDIANIST. OF TECH., ECHEL.
Application of vortex lattice method for the
evaluation of aerodynamic characteristics
of wings with and without strakes
p0580 N79-28145

INDIANAPOLIS CENTER FOR ADVANCED RESEARCH, IND.
Compressor research facility aerodynamics analysis
[AD-A070623] p0404 N79-30142

INDUSTRIEL-PROBEGSSELSCHAF R.B.N.,
OTTOSBUNN (WEST GERMANY).
Differences between simulation and real world at the
TARG air to air combat simulator with a wide
angle visual system
p0225 N79-15997
Fatigue crack growth
p0372 N79-20612
Design of heavy sections
p0372 N79-20616

INFORMATION SPECTRUM, INC., WARRINERST, PA.
Maintenance improvement: An analysis approach
including inferential techniques. Volume 1:
Overview
[AD-A068380] p0579 N79-28129
Maintenance improvement: An analysis approach
including inferential techniques. Volume 2:
Technical report
[AD-A068381] p0580 N79-28130
Maintenance improvement: An analysis approach
including inferential techniques. Volume 3:
Software manual
[AD-A068382] p0580 N79-28131
Maintenance improvement: An analysis approach
including inferential technical data
[AD-A068383] p0649 N79-30141

INGEWOOD CITY DEPT. OF PLANNING AND DEVELOPMENT,
CALIF.
LAX airport/land use planning study. Phase 1
report: Short term noise abatement
[PB-281622/1] p0038 N79-10071

INSTITUT D' AEROTECHNIQUE DE SAINT-CYB,
SAINT-CYB-LE-ECOLE (FRANCE).
Hydraulic compressor for a wind tunnel
p0399 N79-23107
The pricing of a wind tunnel with a hydraulic compressor
p0399 N79-23108

INSTITUT DE RECHERCHE D'INFORMATIQUE ET
D'AUTOMATISME, ROUEN-COURT (FRANCE).
Application of a finite element method to
transonic flow problems using an optimal
control approach
p0586 N79-28477

INSTITUT DE RECHERCEServes, ST. LOUIS
(FRANCE).
Optical flow measurements: Applications to wind
tunnels or motor bench tests
[AAAP-1T-78-07] p0400 N79-23117

INSTITUT FUR BRENnstoffe-GESELLSCHAFT R.B.N.,
ERZHE (WEST GERMANY).
The nature of adhesion mechanisms and the
influence of surface treatments on the
behaviour of bonded joints
p0448 N79-23855

INTERNATIONAL RESEARCH AND DEVELOPMENT CO. LTD.,
NEWCASTLE (ENGLAND).
Research to the tested range of a cascade flow
calculation method
p0303 N79-21070

IOWA STATE UNIV. OF SCIENCE AND TECHNOLOGY, AMES.
A two-dimensional unsteady Euler equation solver
for flow regions with arbitrary boundaries
[ADIA 79-1465] p0565 N79-45269
Calculation of supersonic viscous flow over
delta wings with sharp subsonic leading edges
p0300 N79-18909
The influence of compressor inlet guide
gate/latator relative circumferential
positioning on blade wake transport and
interaction
[AD-A067969] p0543 N79-26060
Minimum altitude-loss soaring in a specified
vertical wind distribution
p0545 N79-27071

IOWA UNIV., IOWA CITY.
Substructuring methods for design sensitivity
analysis and structural optimization
[AD-A065935] p0484 N79-23949
Fail-safe optimal design of structures with
substructuring
[AD-A065936] p0484 N79-23950
Dynamic structural analysis with substructuring
[AD-A065937] p0490 N79-28378

ISOVOLTA CO., WIENER NEUDOAF (AUSTRIA).
The flowmeters polyester ISO-FF of isovolta
Company, Austria
p0667 N79-31183

ISRAELI AIR FORCE, ZABAL.
Flight testing the FFB.
p0299 N79-18889

J
JAMES AND ASSOCIATES, LACESTER, CALIF.
A system for providing an integrated display of
instantaneous information relative to aircraft
attitude, heading, altitude, and horizontal
situation
[NASA-CASE-FRC-11005-1] p0495 N79-26988

JET PROPULSION LAB., CALIFORNIA INST. OF TECH.,
Pasadena.
A Mars Airplane. Oh really
[AIAA PAPER 79-0067] p0140 N79-19516
Hydrogen enrichment for low-emission jet
combustion
p0190 N79-21347
On the stability of the boundary layer on a
transonic swept wing
[AIAA PAPER 79-0264] p0203 N79-23563
Free oscillations of a large drop in space
[AIAA PAPER 79-0225] p0203 N79-23571
Twin jet shielding
[AIAA PAPER 79-0671] p0270 N79-26524
Separation of core noise and jet noise
[AIAA PAPER 79-0589] p0272 N79-26591
Flight effects on subsonic jet noise
[AIAA PAPER 79-0616] p0317 N79-28961

C-21
Lockheed-California Co.

Study of the application of hydrogen fuel to long-range subsonic transport aircraft.
Volume 1: Summary
[NASA-CE-102558] p0717 N79-33207

Accelerated development and flight evaluation of active controls concepts for subsonic transport aircraft
[NASA-CE-159160] p0718 N79-33217

ANOPP validation study: Lockheed L-1011
[NASA-CE-159138] p0722 N79-33968

Lockheed-California Co., Sunland.

Fabrication research for supersonic cruise aircraft
p0525 N79-82883

Lockheed-Georgia Co., Marietta.

Supercritical wing design using numerical optimization and comparisons with experiment
[AIAA PAPER 79-0065] p0140 N75-19514

Scale effects on supercritical airfoils
p0154 N79-20110

Effects of simulated forward flight on jet noise, shock noise and internal noise
[NASA-CE-159151] p0271 N79-26936

Improved sonic-box computer program for calculating transonic aerodynamic loads on oscillating wings with thickness
[NASA-CE-159126] p0043 N79-10998

Sonic-box method employing local Mach number for oscillating wings with thickness
[NASA-CE-159107] p0043 N79-10999

C-130 weldbonded fuselage panel flight evaluation program
[AD-A057928] p0692 N75-12071

Analysis of a theoretically optimized transonic airfoil
[NASA-CE-3065] p0096 N75-13001

Blown flap noise prediction
[NASA-CE-159184] p0227 N79-16648

C-5A load alleviation
[p0237 N79-16975

Cargo/Logistics Airlift System Study (CLASS), Volume I
[NASA-CE-158915] p0289 N79-17822

Cargo/Logistics Airlift System Study (CLASS), Volume 2
[NASA-CE-158916] p0289 N79-17823

Cargo/Logistics Airlift System Study (CLASS), executive summary
[NASA-CE-158959] p0289 N79-17824

Advanced system design requirements for large and small fixed-wing aerial application systems for agriculture
[NASA-CE-158980] p0291 N79-17848

The application of spanwise blowing for high angle of attack spin recovery
[p0214 N79-22004

The generation, radiation and prediction of supersonic jet noise. Volume 2, appendix
Computer program listing
[AD-A066865] p0428 N79-22854

Development of a viscous vortex/wing interaction program for thick wings with bounded leading edge
[AD-A066865] p0431 N79-23020

Studies of the acoustic transmission characteristics of coaxial nozzles with inverted velocity profiles: Comprehensive data report

Advantages and problems of large subsonic aircraft
p0579 N79-28120

Aeromechanics
p0579 N79-28121

Scaling effects on shock-induced separation
p0579 N79-28122

Scaling effects on drag prediction
p0579 N79-28123

Wing design, body design, high lift systems and flying qualities with introduction
[NASA-CE-159161] p0579 N79-28125

Advanced computer technology in aerodynamics.
Lecture 1: Computer-aided aircraft design

Investigation of stress-strain history modeling at stress risers, phase 2
[AD-A069126] p0586 N79-28620

Proceedings from the Government/Industry Workshop on the Reliability of Nondestructive Inspections
Corporate Source Index

MCDONNELL-DOUGLAS CORP., ST. LOUIS, MO.

C-25
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.

NASA plans and programs in support of integrated ATC development

Technology for future air transport

Cockpit displays and the growing role of the pilot in the ATC system

Research needs in aerospace structural dynamics

Large lighter-than-air vehicles

Flow-field in a vortex with breakdow above sharp-edged delta wings

New initiatives in high altitude aircraft

Hydrogen technology, 1900-1945

Vortex pattern development on the upper surface of a swept wing at high angle of attack

NASA research objectives and roles

ICing testing in the large Rosane wind-tunnel on full-scale and reduced scale models

Some aspects of aircraft jet engine fuels

NACA research on hydrogen for high altitude aircraft

NASA research on hydrogen for high altitude aircraft

NASA research on hydrogen for high altitude aircraft

NASA research on hydrogen for high altitude aircraft

NASA research on hydrogen for high altitude aircraft

NASA research on hydrogen for high altitude aircraft

NASA research on hydrogen for high altitude aircraft

Hydrogen technology, 1900-1945

Aircraft icing: Introduction

Advanced rotorcraft technology: Task force report

Spinoff 1979

Systems implications of active controls

A comparison of predictions obtained from wind tunnel tests and the results from cruise flight: Airbus and Concorde

Supersonic transport vis-a-vis energy savings

Investigation of air stream from combustor-liner air entry boles, 3

Wind tunnels with adapted walls for reducing wall interference

NATIONAL AERONAUTICAL AND SPACE ADMINISTRATION

Research Center, Edgewood Field, Calif.

Simulation study of the effect of fuel-conservative approaches on ATC procedures and terminal area capacity

Analytical investigation of advancing blade drag reduction by tip modifications

Full-scale wind tunnel test of a modern helicopter main rotor - Investigation of tip Mach number effects and comparisons of four tip shapes

Analytical design of a high performance stability and control augmentation system for a hingeless rotor helicopter

Resource conservation through airborne electronics

Technology for aircraft energy efficiency

Aeronautical test facilities capabilities and use

AIAA PAPER 79-0660

AIAA PAPER 79-0529

AIAA PAPER 79-0826

AIAA PAPER 79-0267

AIAA PAPER 79-33192

AIAA PAPER 79-21066

AIAA PAPER 79-75339

AIAA PAPER 79-19700

AIAA PAPER 79-19194

AIAA PAPER 79-20264

AIAA PAPER 79-29198

AIAA PAPER 79-29108

AIAA PAPER 79-30219

AIAA PAPER 79-21136

AIAA PAPER 79-2111

AIAA PAPER 79-23508
A piloted simulator investigation of augmentation systems to improve helicopter
nap-of-the-earth handling qualities
[ABS 79-29] p022 A79-18155
Wind-tunnel test results of a full-scale
multicyclic controllable twist rotor
[ABS 79-60] p0125 A79-18181
Planar-lag torsion aeroelastic stability of
circulation-controlled rotors in hover
[ABS 78-64] p0126 A79-18185
Role of helicopters in airport access
p0126 A79-18754
Recent progress in rotorcraft and powered-lift
research
p0133 A79-18674
Flight research capabilities of the NASA/Army
Rotor Systems Research Aircraft
p0137 A79-18703
Computation of three-dimensional turbulent
separated flows at supersonic speed
[AAA PAPER 79-0002] p0138 A79-19471
Supercritical wing design using numerical
optimization and comparisons with experiment
[AAA PAPER 79-0065] p014C A79-19518
Design of transonic airfoil sections using a
similarity theory
[AAA PAPER 79-0076] p0140 A79-19521
An efficient algorithm for numerical airfoil
optimization
[AAA PAPER 79-0079] p0140 A79-19523
U.S. aerospace industry opinion of the effect of
computer-aided prediction-design technology on
future wind-tunnel test requirements for
aircraft development programs
[AAA PAPER 79-1010] p0141 A79-19534
Calculation of transonic aileron box
[AAA PAPER 79-0134] p0142 A79-19553
Experimental evaluation of a wind shear alert
and energy management display
Thermochemical characterization of some
thermally stable thermoplastic and thermoset
polymers
p0156 A79-22774
Computational aerodynamics development and
outlook /Breden Lecture in Research for 1979/
[AAA PAPER 79-0129] p0200 A79-23515
Computation of supersonic viscous flows over
ogive-cylinders at angle of attack
[AAA PAPER 79-0131] p0200 A79-23517
Computational optimization and wind tunnel test
of transonic wing designs
[AAA PAPER 79-0080] p0200 A79-23526
Effects of turbulence model selection on the
prediction of complex aerodynamic flows
[AAA PAPER 79-0070] p0201 A79-23541
On turbulence modeling for unsteady transonic
flows
[AAA PAPER 79-0071] p0201 A79-23542
Dynamic simulation studies of fuel conservation
procedures used in terminal areas
p0204 A79-23581
Calculated hovering helicopter flight dynamics
with a circulation-controlled rotor
p0212 A79-24179
Thermal response of composite panels
p0250 A79-25350
Propeller slipstream wing interactions at Mach
number 0.8
[SAX Paper 780957] p0255 A79-25801
The noisiness of multiple noisy events
[AAA PAPER 79-0653] p0268 A79-26895
An acoustical study of the XV-15 Tilt Rotor
Research Aircraft
[AAA Paper 79-0612] p0272 A79-26939
XV-15 Tilt Rotor Research Aircraft — Progress
report
[AAA Paper 79-0606] p0277 A79-27371
Analysis of flight effects on noise radiation
from dual-flow coaxial jets
[AAA Paper 79-0615] p0317 A79-28662
Formulation of the aeroelastic stability and
response problem of coupled rotor/support
systems
[AAA Paper 79-0752] p0315 A79-29006
Experiments in unsteady transonic flow
[AAA Paper 79-0756] p0321 A79-29022
Investigation of flexible nozzle wall-flutter
incidents in the NASA-Ames Research Center 71-
by 11-foot transonic wind tunnel
[AAA Paper 79-0797] p0323 A79-29040
A demonstration Advanced Avionics System for
general aviation
[S P Paper 770069] p0452 A79-36709
Transient alleviation of Teflon in intense
radiative and convective environments
p0472 A79-38123
Effects of forward velocity on sound radiation
from convecting monopole and dipole sources in
jet flow
p0464 A79-38393
Evaluation of turbo-propulsion simulators as a
testing technique for fighter aircraft
[AAA Paper 79-1149] p0508 A79-40480
Design and performance of the propulsion system
for the quiet short-haul research aircraft
/QRSA/
[AAA Paper 79-1313] p0510 A79-40760
Numerical solution for supersonic flow near the
tailing edge of a flat plate
p0514 A79-41771
Simulation study of the operational effects of
fuel-conservative approaches
p0272 A79-42800
A fast, conservative algorithm for solving the
transonic full-potential equation
[AAA 79-1456] p0565 A79-45261
A two-dimensional unsteady Euler-equation solver
for flow regions with arbitrary boundaries
[AAA 79-1465] p0565 A79-45269
Computation of subsonic and transonic flow about
lifting rotor blades
[AAA 79-1667] p0568 A79-45333
A review of helicopter control-display
requirements for decelerating instrument
approach
[AAA 79-1683] p0569 A79-45345
Evaluation of the landing performance of
shipboard-VTOL-landing guidance systems
[AAA 79-1708] p0570 A79-45362
Fuel-conservative guidance system for
powered-lift aircraft
[AAA 79-1709] p0570 A79-45363
A piloted simulator investigation of helicopter
precision decelerating approaches to hover to
determine single-pilot IFR /SPIFR/ requirements
[AAA 79-1806] p0573 A79-45413
Transonic flow past a symmetrical airfoil at
high angle of attack
[AAA Paper 79-1500] p0575 A79-46694
Trailling-edge flows at high Reynolds number
[AAA Paper 79-1503] p0575 A79-46697
Effect of viscosity on wind-tunnel-wall
interference for airfoils at high lift
[AAA Paper 79-1534] p0577 A79-46715
Recent V/STOL aircraft designs
p0649 A79-47608
Full-scale wind tunnel study of nacelle shape on
cooling drag
[AAA Paper 79-1820] p0607 A79-47900
Aerodynamic effects of an attitude control vane on
a tilt-nacelle V/STOL propulsion system
[AAA Paper 79-1855] p0605 A79-47914
Effect of tip shape on blade loading
characteristics for a two-bladed rotor in hover
[ABS 79-1] p0625 A79-49054
Piloted simulator investigation of helicopter
control systems effects on handling qualities
during instrument flight
Flight investigation of helicopter IFR
approaches to oil rigs using airborne weather
and mapping radar
[ABS 79-51] p0633 A79-49104
Wind tunnel and flight test of the XV-15 Tilt
Rotor Research Aircraft
[ABS 79-54] p0633 A79-49105
XV-15 flight test results compared with design
goals
[AAA Paper 79-1639] p0634 A79-49336
Linearization of the boundary-layer equations of
the sinusoidal time-to-climb problem
p0640 A79-49589
Estimation of longitudinal aircraft characteristics
using parameter identification techniques
p0645 A79-50432
Flight controls/avionics research - Impact on future civil helicopter operating efficiency and mission reliability  
Direct numerical solution of the transonic perturbation integral equation for lifting and nonlifting airfoils  
Flight experience with advanced controls and displays during piloted curving decelerating approaches to a powered-lift STOL aircraft  
Numerical aerodynamic simulation facilities  
Aerocoustic research: An arey perspective  
Planning for airport access: An analysis of the San Francisco Bay area  
Planning for airport access: An analysis of the San Francisco Bay area. Introduction and conclusions  
Planning for airport access: An analysis of the San Francisco Bay area. The setting  
Components of the airport access system  
Planning for airport access: An analysis of the San Francisco Bay area. Existing studies  
Planning for airport access: An analysis of the San Francisco Bay area. Technological options  
Planning for airport access: An analysis of the San Francisco Bay area. Three subsystem designs  
Experimental investigation of wing-film configurations for alleviation of vortex wakes of aircraft  
Comprehensive helicopter analysis: A state of the art review  
[ NASA-TR-78253 ] p0086 N79-12019  
Canard-body-tail missile test at angles of attack to 50 deg in the Ames 11-foot transonic wind tunnel  
[ NASA-TR-78484 ] p0086 N79-12021  
Conference on Fire Resistant Materials (FIREMEN): A compilation of presentations and papers  
Overview of FIREMEN program at Ames Research Center  
Air pollution from aircraft operations at San Jose Municipal Airport, California  
[ NASA-TR-78056 ] p0088 N79-12040  
A nonlinear trajectory command generator for a digital flight-control system  
[ NASA-TP-1221 ] p0105 N79-13057  
Airfoil design by numerical optimization using a minicomputer  
Vortex effects for canard-wing configurations at high angles of attack in subsonic flow  
Effects of upper surface modification on the aerodynamic characteristics of the NAS-A3 sub 2-215 airfoil section  
Effects of visual and motion simulation cueing systems on pilot performance during takeoffs with engine failures  
[ NASA-TR-1365 ] p0162 N79-14082  
NASA aviation safety reporting system  
New NASA-USN wind-tunnel techniques for studying airplane spin and two-dimensional unsteady aerodynamics  
The role of time-history effects in the formulation of the aerodynamics of aircraft dynamics  
Flash-fire propensity and heat-release rate studies of improved fire resistant materials  
[ NASA-TR-78550 ] p0181 N75-15187  
Mission environment simulation for Army rotorcraft development: Requirements and capabilities  
Visual simulation requirements and hardware  
Active controls in aircraft design. Executive summary  
Summary report of the Human Factors Committee  
[ NASA-CP-20444 ] p0223 N79-15983  
Aerodynamic properties of a flat plate with cavity for optical-propagation studies  
[ NASA-TR-78487 ] p0285 N79-17796  
Wind-tunnel investigation of the thrust augmenter performance of a large-scale swept wing model  
Constant lift rotor for a heavier-than-air aircraft  
Configuration management and automatic control of an augmenter wing aircraft with vectored thrust  
[ NASA-TP-1222 ] p0294 N79-17872  
Approximation concepts for numerical airfoil optimization  
[ NASA-TR-1376 ] p0300 N79-18915  
Inertial dynamics of a general purpose rotor  
Some recent progress in transonic flow computation  
[ NASA-TR-78561 ] p0302 N79-18946  
Evaluation of a wake vortex upset model based on simultaneous measurements of wake velocities and probe-aircraft accelerations  
Holography and LDV techniques, their status and use in airfoil research  
[ NASA-TP-1222 ] p0351 N79-19999  
A new two-dimensional oscillating wing apparatus for unsteady aerodynamics research  
[ NASA-TR-20004 ] p0352 N79-20004  
Overview of two-dimensional airfoil research at Ames Research Center  
Prospects for computing airfoil aerodynamics with Reynolds averaged Navier-Stokes codes  
Optimization of multi-element airfoils for maximum lift  
[ NASA-TR-78653 ] p0357 N79-20049  
Application of numerical optimization to the design of advanced supercritical airfoils  
[ NASA-TR-78653 ] p0357 N79-20049  
Computation of turbulent near wake for asymmetric airfoils  
Survey of helicopter control/display investigations for instrument decelerating approach  
Prediction of aerodynamic characteristics for slender bodies alone and with lifting surfaces to high angles of attack  
[ NASA-TP-1222 ] p0410 N79-22023  
High angle of incidence implications upon air intake design and location for supersonic cruise aircraft and highly maneuverable transonic aircraft  
Low-speed wind-tunnel investigation of a large-scale VTOL lift-fan transport model  
Ames Research Center publications, 1977  
Computer formulations of aircraft models for simulation studies  
[ NASA-TP-1470 ] p0430 N79-23008  
A piloted simulator study on augmentation systems to improve helicopter flying qualities in terrain flight  
Aircraft engine nozzle  
[ NASA-CASE-ARC-11045 ] p0437 N79-23098  
A simplified rotor system mathematical model for piloted flight dynamics simulation  
Interference effects of aircraft components on the local blade angle of attack of a wing-mounted propeller  
[ NASA-TP-1222 ] p0437 N79-23098  

I. DEN FLIGHT RESEARCH CENTER, EDWARDS, CALIF.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION. CONTD

Fuel-conservative guidance system for powered-lift aircraft

Wind-tunnel investigation of highly maneuverable supersonic V/STOL fighter

Get proportional lift for computer airlines

Leading-edge slat optimization for maximum airfoil lift

[ NASA-TM-78566] p0047 W79-27100
An advanced cockpit instrumentation system: The coordinated cockpit display


A comparison of the V/STOL handling qualities of the NASA V/STOL with the requirements of AGARD report 577 and MIL-P-63300

[ NASA-TP-1494] p0055 W79-27182 Aerodynamic characteristics of a large-scale semi-span model with a swept wing and an augmented jet flap with high pressure nozzles

[ NASA-TP-75236] p0050 W79-29144 Upper-surface modifications for C sub 1 in a sub 1 max improvement of selected NASA 6-series airfoils


[ NASA-TP-78606] p0065 W79-30243 The promise of multicyclic control


[ NASA-CP-2094] p0066 W79-31166 Fire resistant aircraft seat program

[ NASA-TM-78601] p0070 W79-32185 Cockpit displays of traffic information: Airline pilots opinions about content, symbology, and format


[ NASA-TM-78594] p0070 W79-32265 Wind-tunnel investigation of a large-scale V/STOL aircraft model with wing root and wing thrust augmentors


[ NASA-CASE-FEC-11257-1] p0131 W79-33177 A review of some head-up display formats

[ NASA-TP-1499] p0176 W79-33201 Environmental fog/visual display system for aircraft simulators


Utilization of the wing-body aerodynamic analysis program


[ NASA-CASE-FEC-10092-1] p0090 W79-12061 Measurements and predictions of lift and drag characteristics of a transonic aircraft engine

[ NASA-TP-1372] p0102 W79-13045 Flight comparison of the static loads of the F-111A airplane and the F-111 supercritical wing airfoil

[ NASA-TP-1368] p0104 W79-13056 Digital fly-by-wire flight control validation experience

[ NASA-TM-72860] p0166 W79-14109 Estimation of aerodynamic characteristics from dynamic flight test data

F-117 active control

p0236 W79-16870 Highly maneuverable aircraft technology


An improved system for use in conducting wake investigation for a wing in flight

[ NASA-CASE-FEC-11024-1] p0285 W79-17779 Stability and control derivative estimates obtained from flight data for the Beech 99 airplane

[ NASA-TM-72863] p0367 W79-20134 Correlation of predicted and measured thermal stresses on an advanced aircraft structure with similar materials


[ NASA-TP-72136] p0376 W79-21365 Important factors in the maximum likelihood analysis of flight test maneuvers

[ NASA-TP-18459] p0425 W79-21213 Effect of number of probes and their orientation on the calculation of several compressor face distortion descriptors


[ NASA-TP-72861] p0437 W79-23979 An annular wing

[ NASA-CASE-FEC-11007-2] p0492 W79-24959 A system for providing an integrated display of instantaneous information relative to aircraft altitude, heading, altitude, and horizontal navigation

[ NASA-CASE-FEC-11005-1] p0495 W79-24988 Ground-based measurements of the wake vortex characteristics of a B-747 aircraft in various configurations

[ NASA-TM-80476] p0497 W79-26016 Experimental investigation of the wake vortex characteristics of the 44-15 inlet/airframe interaction of the 44-15 in various configurations

[ NASA-TM-78607] p0505 W79-26057 Correlation of predicted and measured thermal stresses on an advanced aircraft structure with dissimilar materials


[ NASA-RP-1042] p0669 W79-30139 Similitude requirements and scaling relationships as applied to model testing


[ NASA-TM-72867] p0672 W79-31220 Flight determined lift and drag characteristics of an F-8 airplane modified with a supercritical wing with comparison to wind-tunnel results


Reynolds number, scale and frequency content effects on F-15 inlet instantaneous distortion

[ AIAA PAPER 79-1004] p0141 W79-19533 Experimental investigation of the buckling characteristics of a beaded skin panel for a hypersonic aircraft - Including comparisons with finite element and classical analyses

[ ASME PAPER 78-WA/ARO-3] p0146 W79-19717 Preliminary flight and wind tunnel comparisons of the inlet/airframe interaction of the F-15 airplane

[ AIAA PAPER 79-0102] p0200 W79-23513 Elevated-temperature effects on strain gages on the YF-12A wing

[ NASA-TP-78607] p0259 W79-26400 Applications of Laplace transform methods to airfoil motion and stability calculations

[ AIAA 79-0772] p0324 W79-29050 Measurements and predictions of lift and drag characteristics of an afterburning turbofan engine in an F-111 airplane

[ AIAA 79-0718] p0328 W79-29391 Water tunnel visualization of the vortex flows of the F-15

[ AIAA 79-1649] p0567 W79-45325 Flight test experience with an adaptive control system using a maximum likelihood parameter estimation technique

[ AIAA 79-1702] p0570 W79-45357
Flight control systems development of highly maneuverable aircraft technology /MIAT/ vehicle

[ AIAA PAPER 79-1789 ]

Considerations in the analysis of flight test maneuvers

p0605 A79-07878

A simplified gross thrust computing technique for an afterburning turbofan engine

p0666 A79-50433

Effect of sampling rate and record length on the determination of stability and control derivatives


Comparison of calculated and altitude-pressure-controlled thrust and airflow of two prototype F100 turbofan engines

[NASA-TP-13737] p0102 N79-13048

Section drag coefficients from pressure probe transverses of a wing wake at low speeds

p0352 N79-20002

In-flight three-dimensional boundary layer and wake measurements from a swept supercritical wing

p0278 179-27424

National Aeronautics and Space Administration. Goddard Space Flight Center, Greenbelt, MD.

Hydrazine monopropellant reciprocating engine development

p0278 179-27424

Analytical modeling of the dynamics of brushless dc motors for aerospace applications: A conceptual approach

p0502 N79-25310

Airport flammability, full scale fire tests

p0666 N79-31167

Seating test program

p0666 N79-31168

Status of candidate materials for full-scale tests in the 737 fuselage

p0666 N79-31170

National Aeronautics and Space Administration. John F. Kennedy Space Center, Cocoa Beach, FLA.

Ground winds for Kennedy Space Center, Florida, 1979 revision

[NASA-TP-8044] p0502 179-22540

National Aeronautics and Space Administration. Langley Research Center, Hampton, VA.

Operational benefits from the Terminal Configured Vehicle

Recent theoretical developments and experimental studies pertinent to vortex flow aerodynamics—With a view towards design

p0017 A79-11549

Passenger ride quality in transport aircraft

p0025 A79-12396

Comparative study of the convergence rates of two numerical techniques

p0060 A79-13989

Alternate aircraft fuels prospects and operational implications

p0063 A79-14138

Information distributions in distributed microprocessor based flight control systems

p007C A79-14978

Development and evaluation of a helicopter-borne water-quality monitoring system

p007I A79-15085

A new approach to helicopter rotor blade research instrumentation

p0113 A79-17583

Rotor-sidewall flight investigation—Preliminary results

[AHS 78-05]

Rotor System Research Aircraft /HSRA/ Emergency Escape System

p0119 A79-18132

[AHS 78-12]

p0120 A79-18138

National Aeronautics and Space Administration. Contd

An innovative technique for static and dynamic V/STOL testing

[AHS 78-42]

Design study results of a supersonic cruise fighter wing

[AIAA PAPER 79-0062]

A similarity rule for compressibility and sidewall-boundary-layer effects in two-dimensional wind tunnels

[AIAA PAPER 79-0100]

A numerical study of jet entrainment effects on the subsonic flow over nozzle afterbodies

[AIAA PAPER 79-0135]

High speed interference heating loads and pressure distributions resulting from elevated reflections

[AIAA PAPER 79-0145]

Comparison of two flight surveys above stalled wings

[AIAA PAPER 79-0147]

The supersonic triplet—a new aerodynamic panel singularity with directional properties

[AIAA PAPER 79-0273]

Coments on a pseudo-random standard wind field environment and its use in real-time aircraft simulations

[AIAA PAPER 79-0324]

Critical considerations for wind-tunnel testing V/STOL aircraft models

[AIAA PAPER 79-0364]

Transition aerodynamics for close-coupled wing-canard configuration

[AIAA PAPER 79-0336]

Critical influence of finite rate chemistry and unsteadiness on ignition and combustion of supersonic H2-air streams

[AIAA PAPER 79-0355]

A model of transverse fuel injection applied to the computation of supersonic combustor flow

[AIAA PAPER 79-0359]

Numerical comparisons of panel methods at subsonic and supersonic speeds

[AIAA PAPER 79-0408]

Recent advances in convectively cooled engine and airframe structures for hypersonic flight

p0153 A79-20087

Development of noise and vibration ride comfort criteria

p0198 A79-22291

Performance characteristics of nonaxisymmetric nozzles installed on the F-18 aircraft

[ AIAA PAPER 79-0190 ]

A shock capturing application of the finite element method

p0247 A79-24771

Flying NASA's Terminal Configured Vehicle against the Microwave Landing System

p0260 A79-26534

A comparison of linear acoustic theory with experimental noise data for a small-scale hovering rotor

[AIAA PAPER 79-0608]

On sound radiation from the trailing edge of an isolated airfoil in a uniform flow

[AIAA PAPER 79-0603]

An experimental study of OSE flap noise reduction through mean flow modification

[AIAA PAPER 79-0607]

Airframe noise measurements on a small-scale model of a supersonic transport concept in an anechoic flow facility

[AIAA PAPER 79-0666]

Some effects of applying sonic boom maniulization to supersonic cruise aircraft design

[AIAA PAPER 79-0652]

Characteristics of propeller noise on an aircraft fuselage related to interior noise transmission

[AIAA PAPER 79-0646]

Advanced supersonic technology and its implications for the future

[AIAA PAPER 79-0694]

Wind-tunnel studies of the effects of simulated damage on the aerodynamic characteristics of airplanes and missiles

p0276 A79-27359

Accuracy of an approximate static structural analysis technique based on stiffness matrix eigenmodes

[AIAA 79-0788]
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION. CONTD

Flight test of a VTOC digital autoland system along complex trajectories

Preliminary study of pilot lateral control of two coplanar airplanes near the stall

Demonstration of aircraft wind/store flutter suppression systems

Numerical investigation of the perpendicular injector flow field in a hydrogen fueled scramjet

Application of stability theory to laminar flow control

A careful numerical study of flowfields about external conical corners. I - Symmetric configurations

Evaluation of flow quality in two NASA transonic wind tunnels

Experiments of shock associated noise of supersonic jets

The effects of configuration changes on spin and recovery characteristics of a low-wing general aviation research airplane

Some results from the use of a control augmentation system to study the developed spin of a light plane

Some flight data extraction techniques used on a general aviation plane research aircraft

A multiple objective optimization approach to aircraft control system design

A real-time simulation facility for advanced landing display

Experimental measurements of the rotating angles of attack structural vibration and interior noise

Numerical investigation of the perpendicular injector flow field in a hydrogen fueled scramjet

Demonstration of aircraft wind/store flutter suppression systems

Verification and validation of the NASA/FAA general aviation crash dynamics program for the solution to the airport congestion problem

A unique facility for V/STOL aircraft hover testing

Autoguidance of hydrogen injected transverse to a supersonic airstream

Performance characteristics of a wedge nozzle installed on an F-106 propulsion wind tunnel model

Fabrication research for supersonic cruise aircraft

Effects of boron and glass hybrid epoxy-composites on graphite-fiber release in an aircraft fire

Vector processor algorithms for transonic flow calculations

Application of two synthesis methods for active flutter suppression on an aerelastic wind tunnel model

Effects of spanwise blowing on two fighter airplane configurations

Decoupled longitudinal controls for shear penetration in the terminal area environment
LED instrument approach instruction display

[NASA-Th-78023]

Pressure and heat-transfer distributions in a simulated wing-elevator cove with variable leakage at a free-stream Mach number of 6.9

[NASA-Th-76096]

Apparatus for measuring an aircraft's speed and weight

[NASA-CASE-LAR-12275-1]

Applications of diffraction theory to aeroacoustics

[NASA-Th-80063]

Variability of annoyance response due to aircraft noise

[NASA-Th-1335]

Flying NASA's terminal configured vehicle against the microwave landing system

[NASA-Th-18094]

Transonic assessment of two-dimensional wind tunnel wall interference using measured wall pressures

[p0351 N79-19991

Analytical design of a contoured wind-tunnel liner for supercritical testing

[p0351 N79-19993

Application of the laser velocimeter to airfoil research

[p0351 N79-19997

Some calculations of transonic potential flow

For the NASA 64005 airfoil with oscillating flap

[p0352 N79-20005

Advanced Technology Airfoil Research, volume 1, part 1

[NASA-Cp-2045-Vol-1-ft-1]

Langley airfoil-research program

[p0355 N79-20030

Low speed airfoil design and analysis

[p0355 N79-20032

Langley's two-dimensional research facilities:

Capabilities and plans

[p0356 N79-20055

A new airfoil research capability

[p0356 N79-20057

Design and calibration of slotted walls for transonic airfoil wind tunnels

[p0356 N79-20058

Experimental aerodynamic characteristics at Mach numbers from 0.6 to 2.70 of two supersonic cruise fighter configurations

[NASA-Th-78764]

Subsonic longitudinal and lateral aerodynamic characteristics for a systematic series of strake-wing configurations

[NASA-Th-78642]

Determination of stability and control parameters of a light airplane from flight data using two estimation methods

[NASA-Tp-1306]

Simulation study to evaluate a constant-speeded approach method in moderate and severe wind shears

[NASA-Th-80060]

Aircraft energy efficiency laminar flow control
glove flight conceptual design study

[NASA-Th-80054]

Effects of a military cargo pod and tail fins on the aerodynamic characteristics of a large wide-body transport model

[NASA-Th-80052]

A pitch attitude stabilization system utilizing engine pressure ratio feedback signals

[NASA-Cas-LAR-12566-2]

A velocity vector control system augmented with direct lift control

[NASA-Cas-LAR-12566-1]

Pressure and thermal distributions on wings and adjacent surfaces induced by elevator deflections at Mach 6

[NASA-Tp-1356]

Effects of duration and other noise characteristics on the annoyance caused by aircraft-flyover noise

[NASA-Th-1386]

Wind tunnel

[NASA-Cas-LAR-10135-1]

Wind tunnel real-time data acquisition system

[NASA-Th-80067]

Recent Advances in Structures for Hypersonic Flight, part 1

[NASA-CP-2065-Pt-1]

Hypersonic structures: An aerodynamicist's perspective, or one man's dream in another man's nightmare

[p0385 N79-21082

Airframe-integrated propulsion system for hypersonic cruise vehicles

[p0385 N79-21024

Recent advances in convectively cooled engine and airframe structures for hypersonic flight

[p0386 N79-21045

Thermostructural analysis of a scramjet fuel-injection strut

[p0386 N79-21047

Radiative, actively cooled panel tests results

[p0387 N79-21034

Recent Advances in Structures for Hypersonic Flight, part 2

[NASA-Th-800725-
P0387 N79-21035

Tests of beaded and tubular structural panels

[p0387 N79-21036

Preliminary noise tradeoff study of a Mach 2.7 cruise aircraft

[NASA-Th-78732]

Noise and performance calibration study of a Mach 2.2 supersonic cruise aircraft

[p0388 N79-21068

Experimental investigation of three helicopter rotor airfoils designed analytically

[NASA-Tp-1396]

Low-speed wind-tunnel parametric investigation of flight spoilers as trailing-vortex-alleviation devices on a transport aircraft model

[NASA-Tp-14199]

Surface pressure data for a supersonic-cruise airplane configuration at Mach numbers of 2.30, 2.96, 3.30

[p0416 N79-22038

Carbon fibers and composites

[p0426 N79-22199

Source of released carbon fibers

[p0426 N79-22200

End-to-end testing

[p0426 N79-22204

Carbon Fiber Risk Analysis: Conclusions

[p0426 N79-22209

Evaluation applied to reliability analysis of reconfigurable, highly reliable, fault-tolerant, computing systems

[NASA-Th-80090]

A correlation of mixing noise from coannular jets with inverted flow profiles

[NASA-Tp-13041]

Flight investigation of piloting techniques and crosswind limitations using a research type crosswind landing gear

[NASA-Tp-1423]

Aerodynamic characteristics at Mach numbers of 1.5, 1.8, and 2.0 of a blended wing-body configuration with and without integral canards

[NASA-Tp-1427]

Composites of electrochemical and cathode-ray-tube display mediums for an instream approach display

[NASA-Th-80069]

Miniature flow-direction and airspeed sensor for airplanes and radio controlled models in spin studies

[NASA-Th-1467]

Filtering technique based on high-frequency plant modeling for high-gain control

[NASA-Cas-LAR-12215-1]

Physical and subjective studies of aircraft interior noise and vibration

[p0437 N79-23097

Characteristics of the advanced supersonic technology AST-105-1 configured for transpacific range with Pratt and Whitney

[p0445 N79-23754

C-34
Wing aerodynamic loading caused by jet-induced noise of three supersonic helical tip speed propellers in a wind tunnel.

Effect of flight loads on turbofan engine performance deterioration.

The GATE studies – Assessing the potential of future small general aviation turbine engines.

An off-design correlation of part-span damper losses through transonic axial fan rotors.

Laser balancing demonstration on a high-speed flexible rotor.

Preliminary CGGT program test results.

New opportunities for future small civil turbine engines – Overviewing the GATE studies.

Wind tunnel performance of four energy efficient propellers designed for Mach 0.6 cruise.

Effects of air injection on a turbocharged Teledyne Continental Motors TSIO-360-C engine.

Effect of shocks on file cooling of a full scale turbojet exhaust nozzle having an external expansion surface.

The strainrange partitioning behavior of an advanced gas turbine disk alloy, IAD-12A.

Analysis of the use of broad specification fuels on combustors for commercial aircraft gas turbine engines.

Test verification of a turboprop partial swirl expansion turbine.

The slurry sludge behavior of an advanced gas turbine disk alloy, IAD-12A.

Application of digital controls on the quiet clean short haul experimental engine.

Combined pressure and temperature distortion effects on internal flow of a turbofan engine.

Lean, premixed, vaporized combustion for aircraft gas turbine engines.

Assessment at full scale of nozzle/viging geometry effects on OTV aeracoacoustic characteristics.

An improved method for predicting the effects of flight on jet mixing noise.

Materials and structural aspects of advanced gas-turbine helicopter engines.

Diagnostics of wear in aeronautical systems.

Multivariable control altitude demonstration on the Y100 turbofan engine.

A summary of NASA/Air Force Full Scale Engine Research programs using the Y100 turbofan engine.

Wing aerodynamic loading caused by jet-induced lift associated with STOL-OTW configurations.

Performance of a V/STOL tilt nacelle inlet with blowing boundary layer control.

Energy efficient aircraft engines.

Recent applications of theoretical analysis to V/STOL inlet design.

Composites emerging for aero propulsion applications.

An overview of NASA research on positive displacement type general aviation engines.

Aerodynamic performance of a 1.35-pressure-ratio axial-flow fan stage.

A computer program for the calculation of the flow field in supersonic mixed-compression inlets at angle of attack using the three-dimensional method of characteristics with discrete shock wave fitting.

Effect of flight loads on turbofan engine performance.

Self-acting shaft seals.

Thermal-structural mission analyses of air-cooled gas turbine blades.

Effect of rotor tip clearance and configuration on overall performance of a 12.77-centimeter diameter axial-flow turbine.

Wind tunnel tests of a blade subjected to sideward torsional oscillation at high subsonic stall flutter conditions.

An approach to optimum subsonic inlet design.

Preliminary study of optimum ductbacking turbofan engine cycle design parameters for supersonic cruising.

Effect of flight loads on turbofan engine performance deterioration.

NASA research on general aviation power plants.

Wean of seal material used in aircraft propulsion systems.

Development of sprayed ceramic seal systems for turbine gas path sealing.

Analysis of supersonic stall bending flutter in axial-flow compressor by actuator disk theory.

Low-cycle fatigue of thermal-barrier coatings at 982 deg C.

Charactebistics and combustion of future hydrocarbon fuels.
Corporate Source Index

**Numerical calculation of transonic flow past a fighter aircraft**
[AD-A058128] (AIAA Paper 79-20034)

**Numerical design of shockless airfoils**
[NASA CR-158439] (AIAA Paper 79-20045)

**An artificial viscosity method for the design of supercritical airfoils**
[AD-A058404] (AIAA Paper 79-20136)

**Helicopter underwater escape trainer (9D5)**
[AD-A056720] (NRC-1238-12-VOL-7)

**Aeroelastic characteristics of the close-coupled canard configuration applied to low-to-moderate swept wings. Volume 1: General trends**
[AD-A057292] (AIAA Paper 79-19495)

**Calculation of the longitudinal aerodynamic characteristics of upper-surface-blowing wing-flap configurations**
[AD-A057481] (AIAA Paper 79-19545)

**A flow field study for top mounted inlets on fighter aircraft configurations**
[AD-A057932] (AIAA Paper 79-23329)

**Time degradation factors for the turbine engine exhaust emissions. Volume 1: Program description and results**
[NRC-1238-6-VOL-1] (NRC-1238-6-VOL-2)

**Time degradation factors for the turbine engine exhaust emissions. Volume 2: JT80-9 test data**
[NRC-1238-7-VOL-2] (NRC-1238-7-VOL-3)

**Time degradation factors for the turbine engine exhaust emissions. Volume 3: JT3D-7 test data**
[NRC-1238-8-VOL-3] (NRC-1238-8-VOL-4)

**Time degradation factors for the turbine engine exhaust emissions. Volume 4: JT3D-7 test data**
[NRC-1238-9-VOL-4] (NRC-1238-9-VOL-5)

**Time degradation factors for the turbine engine exhaust emissions. Volume 5: JT3D-8 test data**
[NRC-1238-10-VOL-5] (NRC-1238-10-VOL-6)

**Time degradation factors for the turbine engine exhaust emissions. Volume 6: JT9D-9 test data**
[NRC-1238-11-VOL-6] (NRC-1238-11-VOL-7)

**Time degradation factors for the turbine engine exhaust emissions. Volume 7: RB211-22B test data**
[NRC-1238-12-VOL-7] (NRC-1238-12-VOL-8)

**Time degradation factors for the turbine engine exhaust emissions. Volume 8: CT700-2B test data**
[NRC-1238-13-VOL-8] (NRC-1238-13-VOL-9)

**Time degradation factors for the turbine engine exhaust emissions. Volume 9: CT700-2B test data**
[NRC-1238-14-VOL-9] (NRC-1238-14-VOL-10)

**Performance characteristics of nonaxisymmetric nozzles installed on the P-18 aircraft**
A summary of NASA/Air Force Full Scale Engine Research programs using the F100 engine  
[AIAB PAPER 79-1305]  
p0505 79-04088

Evaluation of the cyclic behavior of aircraft turbine disk alloys  
[NASA-CH-159409]  
p0037 79-10058

Turbofoil guide vane program  
[AD-A060343]  
p0164 79-14101

Compartmental lubrication system  
[AD-A060172]  
p0165 79-14105

Design, fabrication, and evaluation of GATORIZED (trade name) ceramic-wrought alloy attachment concepts  
[AD-A064597]  
p0423 79-22102

Lo-frequency augmentor instability study  
[AD-A065184]  
p0423 79-22104

Lo-frequency augmentor instability investigation computer program user's manual  
[AD-A065774]  
p0436 79-23093

Hot salt stress corrosion studies  
[AD-A068002]  
p0596 79-29300

Nasa/turbomachinery engine design and fabrication  
[NASA-CH-159655]  
p0716 79-33204

Structural life prediction and analysis technology (NASA-CH-150730)  
p0721 79-33483

PRATT AND WHITNEY AIRCRAFT OF CANADA LTD., CORPORATE SOURCE INDEX  

A comparison of the aerodynamic characteristics of in-flight simulation with pilot-center of gravity offset and velocity mismatch  
p0554 79-27170

Unsteady thin airfoil theory for transonic flows with embedded shocks  
[AIAB PAPER 79-2004]  
p0143 79-19597

Turbofoil interior noise studies  
[AIAB PAPER 79-0647]  
p0271 79-26931

Master Plan for prediction of vehicle interior noise  
[AIAB PAPER 79-0582]  
p0272 79-26963

Unsteady loads in supercritical transonic flows  
[NASA-CH-79-0767]  
p0321 79-29021

NASA/Princeton digital avionics flight test facility  
p0635 79-69384

In-flight simulation with pilot-center of gravity offset and velocity mismatch  
p0635 79-69386

A study of longitudinal controllability and stability requirements for small general aviation airplanes  
[AD-A060467]  
p0175 79-15058

A comparison of the aerodynamic characteristics of eight sailing airfoil sections  
p0480 79-23897

The influence of feedback on the aerodynamic behavior of all propeller aircraft including the effects of fuselage motion  
[NASA-CH-150778]  
p0595 79-27125

An in-flight simulator investigation of roll and yaw control power requirements for STOL approach and landing: Development of capability and preliminary results  
[NASA-CH-152307]  
p0595 79-29196

POUDEOU UNIV., LAFAYETTE, IND.  

Calculation of the three-dimensional flow field in super sonic inlets at angles of attack using a bicharacteristic method with discrete shock wave fitting  
[AIAB PAPER 79-0379]  
p0167 79-19698

LDV measurements on propellers  
p0625 79-49052

Axial flow in trailing line vortices  
[AD-A057075]  
p0304 79-10034

Analysis of water ingestion effects in axial flow compressors  
[AD-A059025]  
p0103 79-13052

Alternative hydrocarbon fuels: Combustion and chemical kinetics  
[AD-A061050]  
p0235 79-17011

Investigation of torison free wing trend flutter models  
[AD-A061942]  
p0302 79-18957

Combustion in the gas turbine, parts 1, 2, 3  
[AD-A069223]  
p0665 79-31157

Ignition in the gas turbine  
p0308 79-19372

Control of air pollution from aircraft and aircraft engines  
p0308 79-19376

Ignition of fuel sprays by hot surfaces and stabilization of aircraft fires  
[AD-A065153]  
p0041 79-23181

Flutter analysis of two-dimensional and two-degree-of-freedom airfoils in small-disturbance, unsteady transonic flow  
[AD-A069223]  
p0665 79-31157

QUANTA SYSTEMS CORP., ROCKVILLE, Md.  

Lighting and marking of exit taxiways  
p0180 79-15098

Approach light aiming criteria  
[WADC-911]  
p0237 79-16880

R  

RAIL CO., BALTIMORE, MD.  

Maintenance cost study of rotary wing aircraft, phase 2  
p0649 79-30138

RANCO, INC., FIRAHA, VA.  

A report on atmospheric obstructions to visibility. Volume 2: Results of literature search  
[AD-A071742]  
p0722 79-33739

RAND CORP., SANTA MONICA, CALIF.  

Probabilty that the propagation of an undetected fatigue crack will not cause a structural failure  
[AD-A057355]  
p0045 79-14439

An appraisal of models used in life cycle cost estimation for USAF aircraft systems  
[AD-A064333]  
p0629 79-22964

Aircraft flight line engine monitoring experience: Implications for the F100 engine diagnostic system program  
[AD-A069223]  
p0671 79-31217

RANGE COMMANDERS COUNCIL, WHITE SANDS MISSILE RANGE, N. MEX.  

Flight termination receiver catalog  
[AD-A058656]  
p0181 79-15232

RAITHECO CO., WATKIND, NASS.  

Pulsed laser Doppler measurements of wind shear  
p0666 79-52046

RCA FLIGHT OPERATIONS, TRENTON, N. J.  

Civil Helicopter icing problems  
p0681 79-23917

REDHILL SATELLITE LTD., CRAWLEY (ENGLAND).  

A high resolution visual system for the simulation of in-flight refulsling  
p0226 79-15987

REKSELAND POLYTECHNIC INST., TOTN, N.  

Wing shape optimization for maximum cross-country speed, with mathematical programming  
p0480 79-23899

Composite structural materials  
p0565 79-28035

Transform domain processing for digital communication systems using surface acoustic wave devices  
p0675 79-31482

State of the art in digital signal processing with applications to multiple access systems  
p0676 79-31487

RESEARCH INST. OF NATIONAL DEFENCE, STOCKHOLM  

Introductory studies of SOFRA, a RAM engine with solid propellant  
[FOA-c-20229-D3]  
p0240 79-17022

Construction using carbon fiber composite materials and aluminium: A cost comparison  
[FOA-c-20260-P9]  
p0596 79-29248

RESEARCH TRIANGLE INST., RESEARCH TRIANGLE PARK, N. C.  

Development of a microwave multilateration facility using remotely controlled/gauged aircraft models. Volume 1: Systems overview  
[NASA-CH-145351]  
p0180 79-15101

C-48
Some remarks on the design of transonic tunnels with low levels of flow unsteadiness

Aerodynamic data for three supercritical aircrafts: RAE(NPL) 5515 and 9530, and RAE 9550. Parts 1 and 2

On the limits of steep helicopter approaches

Investigation into the effect of residual stresses on fatigue strength and measurement of residual stress, with special reference to aircraft construction

Mathematical models of aircraft dynamics for extreme flight conditions (theory and experiment)

The estimation of lateral-directional aerodynamic derivatives at subsonic speeds

On the application of certain statistical methods to wind-tunnel testing

Non-conical flow past slender wings with leading edge vortex sheets

Analysis of the zero-lift wave drag measured on delta wings

On the evaluation of wall interference in two-dimensional ventilated wind tunnels by subsonic linear theory

Omega and AFL aircraft installations

Emissivity measurements on a spinning model helicopter rotor

The development of a parametric method of measuring fan fatigue loads based on flight measurements on a lightning N.75

The response of aircraft to discrete ramp gusts

Weight optimization with flutter constraints

Visibility modelling for a landing simulator with special reference to low visibility

Low budget simulation in weapon alarming

Navstar aircraft aerial system. Some initial considerations

Fatigue acceleration in box beams with mechanical and thermal stress (second series)

Jet noise radiations from discrete vortices

Some aspects of helicopter communications

Rain-erosion resistant materials in air and space travel

Some UK research studies of the use of wing-body strakes on aircraft configurations at high angles of attack

Stroke-induced separation from the leading edges of wings of moderate sweep

A brief review of air flight weapons

An evaluation of coatings for steel and titanium alloy fasteners for aircraft applications

A study of smoke movement in an aircraft fuselage

Weapon/aircraft interactions

An extension to the method of Garabedian and Kors for the calculation of transonic flow past an aerofoil to include the effects of a boundary layer and wake

Environmental effects on the elastic-plastic properties of adhesives in bond metal joints

[RAE-LIB-TRANS-1979]

An analysis of a programmed load fatigue failure

[RRA-Th-78078]

Subjective assessment of a helicopter approach system for IPP conditions

Lateral stability at high angles of attack, particularly wing rock

Performance predictions and trials of a helicopter WHP data link

Wind tunnel tests on cambered wings of all Gothic planform. Part 1: Further low speed tests. Part 2: Transonic tests

Trials of the Doppler microwave landing system at London (Gatwick) Airport, August 1977

Trials of the Doppler microwave landing system at Manchester International Airport, October/November 1977

The dynamic stability in flight of spinning blunt body projectiles

Roya!l Netherland aircraft factories FOXER, SCHEHEL-OOST.

Operational experience with adhesive bonded structures

[UHRR UNIV., BOCHUM (WEST GERMANY).

A stress and strain analysis of industrial radial compressor impellers using the framework method

Finite element methods for inviscid and viscous flow problems

SAINT LOUIS UNIV., CAROlia. ILL.

Helicopter bearing failure detection utilizing shock pulse techniques

SANDIA CORP., LIVERMORE, CALIF.

Test plan for a one-half scale laboratory model of a rigid skirt hold-down system

SAN FRANCISCO UNIV., CALIF.

Ignition characteristics of some aircraft interior fabrics

SAN DIEGO AEROSPACE ENGINEERING, INC., CALIF.

SANDIA LABS., ALBUQUERQUE, N. MEX.

SANDIA LABS., LAS VEGAS, N. MEX.

SANDIA LABS., LIVERMORE, CALIF.

SANDIA LABS., LAS VEGAS, N. MEX.

FLIGHT DYNAMICS LABORATORY AT S.L.

SPACE APPLICATIONS, INC., HUNTSVILLE, ALA.

SCIENCE APPLICATIONS, INC., MCLEAN, VA.

SCIENCE APPLICATIONS, INC., LA JOLLA, CALIF.

SCIENCE APPLICATIONS, INC., MCLEAN, VA.

SCIENCE APPLICATIONS, INC., MCLEAN, VA.

SCIENCE APPLICATIONS, INC., MCLEAN, VA.
CRP 375-141 HIGH PERFORMANCE TRANSPORT ENGINEERING, LONDON, U.K.

SINGH, K. SINGLED HANS, W. B.

SINGLET, J. A.

SINGL, J. A.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.

SINGLETURBINE, MANHATTAN, N. Y.
Existing trends in aircraft control systems

H. L. G. S. A. (NASA CR-159022)

A new approach to the design of the P100 turbofan engine

[AD-A057938]

Some new airfoils

[AD-A068211]

A general method for the layout of ailerons and elevators of gliders and motorplanes

[AD-A069028]

A variational theorem for laminated composite plates of nonlinear materials and applications to postbuckling

[AD-A065180]

An investigation of vibration dampers in gas-turbine engines

[AD-A065399]

An asynchronous data transmission system with low error probability for the SETAC landing aid

[AD-A065959]

The status of rotor noise technology: One man's opinion

[AD-A071973]

Experimental methods for aircraft design qualifications in an exploding warhead environment

[AD-A057381]

Nondestructive evaluation of fiber reinforced epoxy composites: A state-of-the-art survey

[AD-A070793]

Transonic flow past a symmetrical airfoil at high angle of attack

[AD-A055058]

Feasibility study of transit photon correlation anemometer for Ames Research Center unitary wind tunnel plan

[AD-A055909]

Strategic Air Command, Offutt AFB, Neb.

GIANT IMAGE 2 reliability and maintainability

[AD-A059816]

Recommended for aircraft fuel tanks, part 2

[AD-A063102]

A new approach to the design of the P100 turbofan engine

[AD-A065959]

A general method for the layout of ailerons and elevators of gliders and motorplanes

[AD-A069028]

An investigation of vibration dampers in gas-turbine engines

[AD-A065399]

Experimental methods for aircraft design qualifications in an exploding warhead environment

[AD-A057381]

Nondestructive evaluation of fiber reinforced epoxy composites: A state-of-the-art survey

[AD-A070793]

Transonic flow past a symmetrical airfoil at high angle of attack

[AD-A055058]

Feasibility study of transit photon correlation anemometer for Ames Research Center unitary wind tunnel plan

[AD-A055909]

An investigation of vibration dampers in gas-turbine engines

[AD-A065399]

A general method for the layout of ailerons and elevators of gliders and motorplanes

[AD-A069028]
C-53

CORPORATE SOURCE INDEX

SYSTEMS RESEARCH LABS., INC., NEWPORT NEWS, VA.
Prediction and measurement of the aerodynamic forces and pressure distributions of wing-tail configurations at very high angles of attack p0415 N79-22025

SYSTEMS TECHNOLOGY, INC., HANOVER, CALIF.
Identification of key maneuver-limiting factors in high-angle-of-attack flight p0180 N79-15096

A study of the effects of aircraft dynamic characteristics on structural loads criteria [STC-1001] p0232 N79-16838


Piloted aircraft simulation concepts and overview [NASA-CH-152200] p0166 N79-14118


Powered-lift aircraft handling qualities in the presence of naturally-occurring and computer-generated atmospheric disturbances [AD-A072118] p0705 N79-32198

TACTICAL AIR WARFARE CENTER, POLK AFB, FLA.
Current deficiencies in simulation for training p0222 N79-15574

TECHNICAL UNIV. OF DENMARK, COPENHAGEN.

Current deficiencies in simulation for training p0222 N79-15574

Evaluation of stiffness and damping coefficients for fluid-film bearings p0585 N79-28367

TECHNION - ISRAEL INST. OF TECHN., HAIFA.

Comparative study between two different active flutter suppression systems p0081 N79-16495

Flutter suppression and gust alleviation using active controls - Review of developments and applications based on the aerodynamic energy concept p0156 N79-20128

Numerical solution for super sonic flow near the trailing edge of a flat plate p0514 N79-61771

Active external store flutter suppression in the T-77 flutter model p0635 N79-89666

On single-degree-of-freedom flutter induced by activated controls p0640 N79-89667

TECHNISCHE HOCHSCHULE, DARMSTADT (WEST GERMANY).

Boundary layer effects on pressure variations in Ludwig tubes p0377 N79-20995

Optimum tail plane design for sailplanes p0475 N79-23892

Wind tunnel measurements of dynamic derivatives in the German Federal Republic [IFP-5-76] p0548 N79-27107

Aeronautical research into vertical problems in closed-cycle aircraft approach landing [IFP-4-76] p0550 N79-27134

TECHNISCHE HOCHSCHULE, DELFt (NETHERLANDS).

Non-Gaussian structure of the simulated turbulent environment in a simulated flight simulation p0223 N79-15980

A slender delta wing oscillating in surface waves [VTH-LR-257] p0286 N79-17818

Interaction of the supersonic flow below a wing and a supersonic free jet (two-dimensional situation) [VTH-LR-268] p0286 N79-17819

Worst case time-histories causing largest deviations from a desired flight path: An analytical approach [VTH-LR-267] p0290 N79-17839

Two-segment approach investigation on a moving-base piloted flight simulator [VTH-LR-250] p0295 N79-17880

An experimental investigation of the entrainment of a leading-edge vortex p0416 N79-22033

Fatigue properties of adhesive-bonded laminated sheet material of aluminium alloys [LR-276] p0598 N79-29543

Aircraft response to windshears and downdrafts p0659 N79-30229

Prediction methods for fatigue crack growth in aircraft material [LR-282] p0721 N79-33498

TECHNISCHE HOGESCHOOL, DRIFT (NETHERLANDS).

Lee side flow field over slender delta wings of finite thickness [ILB-23] p0548 N79-27103

Study of the theoretical to real correspondence of an optimal control model and the significance of this model for the description of working methodology with partly automated aircraft guidance and control systems [SLK-35] p0556 N79-27184

TECHNISCHE UNIVERSITAT, BRUNSWICK (WEST GERMANY).

Multilayer propagation measurement by Doppler technique p0675 N79-31478

Investigation on information error caused by traffic loading in approach and landing systems p0675 N79-31480

TECHNISCHE UNIVERSITAT, DARMSTADT (WEST GERMANY).

Wind tunnel testing of dynamic derivatives in West Germany p0176 N79-15066

TECHNISCHE UNIVERSITAT, HAMBURG (WEST GERMANY).

Dynamical behaviour and control of single-shaft closed-cycle gas turbines p0422 N79-22095

TECHNISCHE UNIVERSITAT, MUNCH (WEST GERMANY).

Heat generation in cavities at high velocity flights [BFG-PEW-77-28] p0268 N79-17815

TECHNOLOGY/SCIENTIFIC SERVICES, INC., DAYTON, OHIO.

Atmospheric Electricity Hazard (ARE) [ILR-23] p0556 N79-27184

TECHNOLOGY, INC., DAYTON, OHIO.


TELDEC, INC., ARLINGTON, VA.

Analysis of the projected operational effectiveness of developmental weapon control avionics hardware [AD-A058555] p0102 N79-13040

TELEFONICOS, TOLEDO, OHIO.

Advanced T55F Engine Gas generator (MTFG) tractography of cast nickel base superalloys [AD-A067701] p0306 N79-15149

Ceramic airframe roller bearing performance in a gas turbine engine [AD-A067904] p0557 N79-27516

Advanced General Aviation Turbine Engine (GATE) study [NASA-CH-159624] p0594 N79-29419

TELEFONICOS CONTINENTAL MOTORS, MOBILE, ALA.

Concepts for reducing exhaust emissions and fuel consumption of the aircraft piston engine [SIE FISHER 79065S] p0566 N79-36737


TELEDYNE RYAN AERONAUTICAL CO., SAN DIEGO, CALIF.

HFP electric power system study. Phase 1: Technical assessment [AD-A060336] p0165 N79-18102

HFP electric power system study. Phase 2: Hot bench mockup development [AD-A065908] p024 N79-22110

TELEDYNE SYSTEMS CORP., HANOVER, CALIF.

Redundant strapsdown navigation, guidance, and control of a control configured vehicle p0353 N79-20016

TENNESSEE UNIV., KNOXVILLE.

A finite element approach to the problem of sound propagation and attenuation in jet engine air intakes p0108 N79-13818
Investigation of the aerodynamic and acoustic performance of a low-pressure ratio tandem-blade compressor

Stable boundary layer wind shear model for aircraft flight hazard definition

Some theoretical considerations of a stall proof airplane

A lifting surface performance analysis with circulation coupled wake for advanced configuration hovering rotors

Inverse transonic airfoil design methods including boundary layer and viscous interaction effects

Dynamics of complex structures-analysis and experiment: Damaged aircraft stabilizers

General purpose computer program for interacting superonic configurations. User's manual

Design and fabrication of a skin stringer discrete tube actively cooled structural panel

Air cushion landing gear applications study

A study of requirements, model configurations, and test plans for air cushion system comparison tests

Maritime patrol airship concept study

The role of rotor impedance in the vibration analysis of rotorcraft

Crash simulation of composite and aluminum helicopter fuselages using a finite-element program

Wind tunnel and flight test of the XV-15 Tilt Rotor Research Aircraft - Program report

Wind tunnel and flight test of the XV-15 Tilt Rotor Research Aircraft

Wind tunnel test results compared with design goals

Helicopter internal noise control: Three case histories

Effect of operational envelope limits on提振ing rotor flapping

Engine/airframe/drive train dynamic interface documentation

Correlation study between vibrational environmental and failure rates of civil helicopter components

System design requirements for advanced rotary-wing agricultural aircraft

Helicopter obstacle strike tolerance concepts analysis

Flight test evaluation of the high inertia rotor system

Tapered roller bearing development for aircraft
UNITED TECHNOLOGIES CORP., EAST HARTFORD, CT.

A review of engine/airframe/drive train dynamic interface development problems

(AD-A197942)

[General: p0303 N79-19973]

Helicopter transparent enclosures. Volume 2: A helicopter drive system and design guide

[AD-A069691]

[General: p0072 N79-30181]

UNITED TECHNOLOGIES CORP., WATSOOR LOCKS, CT.

Case-based pitch-change apparatus

[AD-A060202]

[General: p0025 N79-12396]

UNITED TECHNOLOGIES CORP., EAST HARTFORD, CT.

Review of engine/airframe/drive train dynamic interface development problems

(AD-A197942)

[General: p0303 N79-19973]

reported N79-18921

Patient ride quality in transport aircraft

[AD-A060202]

[General: p0072 N79-30181]

UNITED TECHNOLOGIES CORP., WATSOOR LOCKS, CT.

Case-based pitch-change apparatus

[AD-A060202]

[General: p0025 N79-12396]

UNITED TECHNOLOGIES CORP., EAST HARTFORD, CT.

Review of engine/airframe/drive train dynamic interface development problems

(AD-A197942)

[General: p0303 N79-19973]

Helicopter transparent enclosures. Volume 2: A helicopter drive system and design guide

[AD-A069691]

[General: p0072 N79-30181]

UNITED TECHNOLOGIES CORP., WATSOOR LOCKS, CT.

Case-based pitch-change apparatus

[AD-A060202]

[General: p0025 N79-12396]

UNITED TECHNOLOGIES CORP., EAST HARTFORD, CT.

Review of engine/airframe/drive train dynamic interface development problems

(AD-A197942)

[General: p0303 N79-19973]

Helicopter transparent enclosures. Volume 2: A helicopter drive system and design guide

[AD-A069691]

[General: p0072 N79-30181]
CORPORATE SOURCE INDEX

WESTINGHOUSE ELECTRIC CORP., HUNTS VALLEY, N.D.
The Avionics laboratory Predictive Operations and Support (ALPOS) cost model, volume 3
[AD-A059354] p0163 N79-14091
The Avionics Laboratory Predictive Operations and Support (ALPOS) cost model, volume 2
[AD-A059516] p0164 N75-14094

WESTINGHOUSE ELECTRIC CORP., LIMA, OHIO.
The solid state remote power controller - Its status, use and perspective
p0012 N79-10896

WESTLAND HELICOPTERS LTD., YEOWIL (ENGLAND).
Rating helicopter noise
p0040 N79-10895
The influence of the noise environment on crew communications
p0041 N79-10860
Helicopter fatigue evaluation. The UK approach
p0434 N79-23076

WICHITA STATE UNIV., KANS.
Split-film anemometer measurements on an airfoil with turbulent separated flow
p0515 N79-42029
Wind tunnel tests of the GA(W)-2 airfoil with 20% aileron, 25% slotted flap, 30% Fowler flap and 10% slot-lip spoiler
A new flow model for highly separated airfoil flows at low speeds
p0358 N79-20053

WILLIAMS RESEARCH CORP., WACELL LAKE, WASH.
General aviation turbine engine (GATE) concepts
[ATIA PAPER 79-1157] p0667 N79-38968
Low cost expendable engine
[AD-A062264] p0366 N79-20125
Advanced General Aviation Turbo Engine (GATE) concepts
[NASA-CR-159603] p0067 N79-25017

WORTHINGTON PUMP INTERNATIONAL, INC., DESIC (ITALY).
Prerotation in centrifugal pumps: Design criteria
p0568 N79-28574

WRIGHT STATE UNIV., DAYTCH, OHIO.
Maximum likelihood identification of aircraft parameters with unsteady aerodynamic modeling
[ATIA PAPER 79-0400] p0318 N79-28967
A model for unsteady effects in lateral dynamics for use in parameter estimation
[ATIA 79-1638] p0567 N79-45318
The relationship of unsteadiness in downwash to the quality of parameter estimates
[ATIA 79-1639] p0567 N79-45319

WYLE LABS., INC., HAMPTON, VA.
Acoustic duct liner optimization using finite elements
[ATIA PAPER 79-0662] p0318 N79-28967

C-57
## CONTRACT NUMBER INDEX

**January 1980**

### Typical Contract Number Index Listing

<table>
<thead>
<tr>
<th>CONTRACT NUMBER</th>
<th>PAGE NUMBER</th>
<th>NASA ACCESSION NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>AETE PROJ. 77/16-8</td>
<td>p0082</td>
<td>879-28169</td>
</tr>
<tr>
<td>AETE PROJ. 329A</td>
<td>p0075</td>
<td>79-33192</td>
</tr>
<tr>
<td>AETE PROJ. 4860</td>
<td>p0074</td>
<td>79-11168</td>
</tr>
<tr>
<td>AETE PROJ. 4860</td>
<td>p0044</td>
<td>79-22346</td>
</tr>
<tr>
<td>AETE PROJ. 1123</td>
<td>p0105</td>
<td>79-13066</td>
</tr>
<tr>
<td>AETE PROJ. 1123</td>
<td>p0426</td>
<td>79-22118</td>
</tr>
<tr>
<td>AETE PROJ. 1476</td>
<td>p0488</td>
<td>79-23985</td>
</tr>
<tr>
<td>AETE PROJ. 1979</td>
<td>p0087</td>
<td>79-12027</td>
</tr>
<tr>
<td>AETE PROJ. 1979</td>
<td>p0092</td>
<td>79-12072</td>
</tr>
<tr>
<td>AETE PROJ. 1979</td>
<td>p0542</td>
<td>79-26054</td>
</tr>
<tr>
<td>AETE PROJ. 2003</td>
<td>p0164</td>
<td>79-14994</td>
</tr>
<tr>
<td>AETE PROJ. 2003</td>
<td>p0485</td>
<td>79-23958</td>
</tr>
<tr>
<td>AETE PROJ. 2094</td>
<td>p0501</td>
<td>79-25646</td>
</tr>
<tr>
<td>AETE PROJ. 2094</td>
<td>p0593</td>
<td>79-25182</td>
</tr>
<tr>
<td>AETE PROJ. 2094</td>
<td>p0382</td>
<td>79-21048</td>
</tr>
<tr>
<td>AETE PROJ. 2094</td>
<td>p0593</td>
<td>79-29181</td>
</tr>
<tr>
<td>AETE PROJ. 2093</td>
<td>p0444</td>
<td>79-23595</td>
</tr>
<tr>
<td>AETE PROJ. 2103</td>
<td>p0165</td>
<td>79-14107</td>
</tr>
<tr>
<td>AETE PROJ. 2103</td>
<td>p0042</td>
<td>79-17361</td>
</tr>
<tr>
<td>AETE PROJ. 2103</td>
<td>p0424</td>
<td>79-22109</td>
</tr>
<tr>
<td>AETE PROJ. 2103</td>
<td>p0504</td>
<td>79-25550</td>
</tr>
<tr>
<td>AETE PROJ. 2104</td>
<td>p0107</td>
<td>79-13203</td>
</tr>
<tr>
<td>AETE PROJ. 2104</td>
<td>p0502</td>
<td>79-25251</td>
</tr>
<tr>
<td>AETE PROJ. 2104</td>
<td>p0508</td>
<td>79-28169</td>
</tr>
<tr>
<td>AETE PROJ. 2104</td>
<td>p0596</td>
<td>79-29220</td>
</tr>
<tr>
<td>AETE PROJ. 2104</td>
<td>p0651</td>
<td>79-30246</td>
</tr>
<tr>
<td>AETE PROJ. 2202</td>
<td>p0561</td>
<td>79-30169</td>
</tr>
<tr>
<td>AETE PROJ. 2202</td>
<td>p0651</td>
<td>79-31201</td>
</tr>
<tr>
<td>AETE PROJ. 2202</td>
<td>p0713</td>
<td>79-33173</td>
</tr>
<tr>
<td>AETE PROJ. 2303</td>
<td>p0489</td>
<td>79-24169</td>
</tr>
<tr>
<td>AETE PROJ. 2304</td>
<td>p0490</td>
<td>79-24220</td>
</tr>
<tr>
<td>AETE PROJ. 2305</td>
<td>p0586</td>
<td>79-28393</td>
</tr>
<tr>
<td>AETE PROJ. 2305</td>
<td>p0382</td>
<td>79-25243</td>
</tr>
<tr>
<td>AETE PROJ. 2305</td>
<td>p0710</td>
<td>79-32422</td>
</tr>
<tr>
<td>AETE PROJ. 2307</td>
<td>p0043</td>
<td>79-11002</td>
</tr>
<tr>
<td>AETE PROJ. 2307</td>
<td>p0044</td>
<td>79-11004</td>
</tr>
<tr>
<td>AETE PROJ. 2307</td>
<td>p0087</td>
<td>79-12023</td>
</tr>
<tr>
<td>AETE PROJ. 2307</td>
<td>p0022</td>
<td>79-18057</td>
</tr>
<tr>
<td>AETE PROJ. 2307</td>
<td>p0031</td>
<td>79-23028</td>
</tr>
<tr>
<td>AETE PROJ. 2307</td>
<td>p0099</td>
<td>79-25035</td>
</tr>
<tr>
<td>AETE PROJ. 2307</td>
<td>p0539</td>
<td>79-26029</td>
</tr>
<tr>
<td>AETE PROJ. 2307</td>
<td>p0581</td>
<td>79-28156</td>
</tr>
<tr>
<td>AETE PROJ. 2307</td>
<td>p0598</td>
<td>79-29550</td>
</tr>
<tr>
<td>AETE PROJ. 2307</td>
<td>p0665</td>
<td>79-31197</td>
</tr>
<tr>
<td>AETE PROJ. 2308</td>
<td>p0596</td>
<td>79-25270</td>
</tr>
<tr>
<td>AETE PROJ. 2308</td>
<td>p0489</td>
<td>79-24169</td>
</tr>
<tr>
<td>AETE PROJ. 2308</td>
<td>p0586</td>
<td>79-25270</td>
</tr>
</tbody>
</table>

### Listings in this index are arranged alphabetically by contract number. Under each contract number, the accession numbers denoting documents that have been produced as a result of research done under that contract are arranged in ascending order with the IAA accession numbers appearing first. Preceding the accession number is the page number where the citation may be found.
<p>| NAS1-12346 | p008 | A79-34761 |
| NAS1-12403 | p0060 | A79-34909 |
| NAS1-12407 | p0051 | A79-30175 |
| NAS1-12426 | p0035 | A79-20085 |
| NAS1-12806 | p0037 | A79-21430 |
| NAS1-12900 | p0034 | A9-19636 |
| NAS1-12910 | p0058 | A79-13273 |
| NAS1-12911 | p0067 | A79-31624 |
| NAS1-12919 | p0032 | A79-20397 |
| NAS1-12972 | p0017 | A79-33207 |
| NAS1-13034 | p0028 | A79-17812 |
| NAS1-13148 | p0031 | A79-25025 |
| NAS1-13205 | p0100 | A79-13026 |
| NAS1-13302 | p0036 | A79-21431 |
| NAS1-13500 | p0076 | A79-31628 |
| NAS1-13502 | p0014 | A79-19613 |
| NAS1-13599 | p0029 | A79-17852 |
| NAS1-13651 | p0035 | A79-22747 |
| NAS1-13707 | p0047 | A79-20143 |
| NAS1-13792 | p0058 | A79-12373 |
| NAS1-13916 | p0025 | A79-25718 |
| NAS1-13918 | p0032 | A79-29015 |
| NAS1-13919 | p0066 | A79-31114 |
| NAS1-13937 | p0064 | A79-31144 |
| NAS1-13938 | p0064 | A79-31147 |
| NAS1-13939 | p0065 | A79-31118 |
| NAS1-13940 | p0065 | A79-31153 |
| NAS1-13941 | p0066 | A79-31154 |
| NAS1-13942 | p0065 | A79-31155 |
| NAS1-13948 | p0072 | A79-32163 |
| NAS1-13958 | p0072 | A79-32165 |
| NAS1-13984 | p0073 | A79-15095 |
| NAS1-13986 | p0038 | A79-21426 |
| NAS1-14000 | p0017 | A79-20087 |
| NAS1-14010 | p0019 | A79-15025 |
| NAS1-14026 | p0014 | A79-15945 |
| NAS1-14056 | p0020 | A79-18242 |
| NAS1-14057 | p0030 | A79-20072 |
| NAS1-14152 | p0063 | A79-21044 |
| NAS1-14156 | p0026 | A79-17807 |
| NAS1-14180 | p0036 | A79-21428 |
| NAS1-14193 | p0028 | A79-17812 |
| NAS1-14222 | p0018 | A79-15959 |
| NAS1-14226 | p0018 | A79-15940 |
| NAS1-14227 | p0022 | A79-16839 |
| NAS1-14229 | p0022 | A79-16840 |
| NAS1-14246 | p0035 | A79-20047 |</p>
<table>
<thead>
<tr>
<th>Contract Number</th>
<th>Contract Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>518-51-01</td>
<td>p0301 W79-18916</td>
</tr>
<tr>
<td>518-21-01</td>
<td>p0663 W79-31137</td>
</tr>
<tr>
<td>743-03-01</td>
<td>p0583 W79-28176</td>
</tr>
<tr>
<td>743-53-01</td>
<td>p0491 W79-24955</td>
</tr>
<tr>
<td>791-40-03</td>
<td>p0285 W79-17801</td>
</tr>
<tr>
<td>791-40-11</td>
<td>p0058 W79-12585</td>
</tr>
<tr>
<td>791-40-13-01</td>
<td>p0157 W79-14015</td>
</tr>
<tr>
<td>791-40-19-01</td>
<td>p0649 W75-30138</td>
</tr>
<tr>
<td>791-40-41</td>
<td>p0418 W75-22062</td>
</tr>
<tr>
<td>791-40-43-01</td>
<td>p0547 W75-27097</td>
</tr>
<tr>
<td>992-21-01</td>
<td>p0042 W79-10942</td>
</tr>
<tr>
<td>REPORT/ACCESSION NUMBER</td>
<td>INDEX</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>NASA-CP-159624</td>
<td>p0087</td>
</tr>
<tr>
<td>NASA-TN-78550</td>
<td>p0035</td>
</tr>
<tr>
<td>NASA-TN-78540</td>
<td>p0158</td>
</tr>
<tr>
<td>NASA-TN-78506</td>
<td>p0670</td>
</tr>
<tr>
<td>NASA-T8-72863</td>
<td>p0086</td>
</tr>
<tr>
<td>NASA-T8-72858</td>
<td>p0297</td>
</tr>
<tr>
<td>NASA-T8-72859</td>
<td>p0590</td>
</tr>
<tr>
<td>NASA-T8-72861</td>
<td>p0367</td>
</tr>
<tr>
<td>NASA-T8-72867</td>
<td>p0375</td>
</tr>
<tr>
<td>NASA-T8-72869</td>
<td>p0199</td>
</tr>
<tr>
<td>NASA-T8-72870</td>
<td>p0103</td>
</tr>
<tr>
<td>NASA-CR-159456</td>
<td>p0233</td>
</tr>
<tr>
<td>NASA-CR-159455</td>
<td>p0230</td>
</tr>
<tr>
<td>NASA-CR-159454</td>
<td>p0286</td>
</tr>
<tr>
<td>NASA-CR-159453</td>
<td>p0301</td>
</tr>
<tr>
<td>NASA-CR-159452</td>
<td>p0370</td>
</tr>
<tr>
<td>NASA-CR-159451</td>
<td>p0594</td>
</tr>
<tr>
<td>NASA-CR-159450</td>
<td>p0389</td>
</tr>
<tr>
<td>NASA-CR-159449</td>
<td>p0376</td>
</tr>
<tr>
<td>NASA-CR-159448</td>
<td>p0411</td>
</tr>
<tr>
<td>NASA-CR-159447</td>
<td>p0421</td>
</tr>
<tr>
<td>NASA-CR-159446</td>
<td>p0557</td>
</tr>
<tr>
<td>NASA-CR-159445</td>
<td>p0537</td>
</tr>
<tr>
<td>NASA-CR-159444</td>
<td>p0549</td>
</tr>
<tr>
<td>NASA-CR-159443</td>
<td>p0518</td>
</tr>
<tr>
<td>NASA-CR-159442</td>
<td>p0598</td>
</tr>
<tr>
<td>NASA-CR-159441</td>
<td>p0549</td>
</tr>
<tr>
<td>NASA-CR-159440</td>
<td>p0549</td>
</tr>
<tr>
<td>NASA-CR-159439</td>
<td>p0518</td>
</tr>
<tr>
<td>NASA-CR-159438</td>
<td>p0598</td>
</tr>
<tr>
<td>NASA-CR-159437</td>
<td>p0597</td>
</tr>
<tr>
<td>NASA-CR-159436</td>
<td>p0369</td>
</tr>
<tr>
<td>NASA-CR-159435</td>
<td>p0364</td>
</tr>
<tr>
<td>NASA-CR-159434</td>
<td>p0494</td>
</tr>
<tr>
<td>NASA-CR-159433</td>
<td>p0289</td>
</tr>
<tr>
<td>NASA-CR-159432</td>
<td>p0091</td>
</tr>
<tr>
<td>NASA-CR-159431</td>
<td>p0355</td>
</tr>
<tr>
<td>NASA-CR-159430</td>
<td>p0341</td>
</tr>
<tr>
<td>NASA-CR-159429</td>
<td>p0291</td>
</tr>
<tr>
<td>NASA-CR-159428</td>
<td>p0019</td>
</tr>
<tr>
<td>NASA-CR-159427</td>
<td>p0013</td>
</tr>
<tr>
<td>NASA-CR-159426</td>
<td>p0006</td>
</tr>
<tr>
<td>NASA-CR-159425</td>
<td>p0004</td>
</tr>
<tr>
<td>NASA-CR-159424</td>
<td>p0002</td>
</tr>
<tr>
<td>NASA-CR-159423</td>
<td>p0001</td>
</tr>
<tr>
<td>NASA-CR-159422</td>
<td>p0000</td>
</tr>
<tr>
<td>NASA-CR-159421</td>
<td>p0036</td>
</tr>
<tr>
<td>NASA-CR-159420</td>
<td>p0035</td>
</tr>
<tr>
<td>NASA-CR-159419</td>
<td>p0034</td>
</tr>
<tr>
<td>NASA-CR-159418</td>
<td>p0033</td>
</tr>
<tr>
<td>NASA-CR-159417</td>
<td>p0032</td>
</tr>
<tr>
<td>NASA-CR-159416</td>
<td>p0031</td>
</tr>
<tr>
<td>NASA-CR-159415</td>
<td>p0030</td>
</tr>
<tr>
<td>NASA-CR-159414</td>
<td>p0029</td>
</tr>
<tr>
<td>NASA-CR-159413</td>
<td>p0028</td>
</tr>
<tr>
<td>NASA-CR-159412</td>
<td>p0027</td>
</tr>
<tr>
<td>NASA-CR-159411</td>
<td>p0026</td>
</tr>
<tr>
<td>NASA-CR-159410</td>
<td>p0025</td>
</tr>
<tr>
<td>NASA-CR-159409</td>
<td>p0024</td>
</tr>
<tr>
<td>NASA-CR-159408</td>
<td>p0023</td>
</tr>
<tr>
<td>NASA-CR-159407</td>
<td>p0022</td>
</tr>
<tr>
<td>NASA-CR-159406</td>
<td>p0021</td>
</tr>
<tr>
<td>NASA-CR-159405</td>
<td>p0020</td>
</tr>
<tr>
<td>NASA-CR-159404</td>
<td>p0019</td>
</tr>
<tr>
<td>NASA-CR-159403</td>
<td>p0018</td>
</tr>
<tr>
<td>NASA-CR-159402</td>
<td>p0017</td>
</tr>
<tr>
<td>NASA-CR-159401</td>
<td>p0016</td>
</tr>
<tr>
<td>NASA-CR-159400</td>
<td>p0015</td>
</tr>
<tr>
<td>NASA-CR-159399</td>
<td>p0014</td>
</tr>
<tr>
<td>NASA-CR-159398</td>
<td>p0013</td>
</tr>
<tr>
<td>NASA-CR-159397</td>
<td>p0012</td>
</tr>
<tr>
<td>NASA-CR-159396</td>
<td>p0011</td>
</tr>
<tr>
<td>NASA-CR-159395</td>
<td>p0010</td>
</tr>
<tr>
<td>NASA-CR-159394</td>
<td>p0009</td>
</tr>
<tr>
<td>NASA-CR-159393</td>
<td>p0008</td>
</tr>
<tr>
<td>NASA-CR-159392</td>
<td>p0007</td>
</tr>
<tr>
<td>NASA-CR-159391</td>
<td>p0006</td>
</tr>
<tr>
<td>NASA-CR-159390</td>
<td>p0005</td>
</tr>
<tr>
<td>NASA-CR-159389</td>
<td>p0004</td>
</tr>
<tr>
<td>NASA-CR-159388</td>
<td>p0003</td>
</tr>
<tr>
<td>NASA-CR-159387</td>
<td>p0002</td>
</tr>
<tr>
<td>NASA-CR-159386</td>
<td>p0001</td>
</tr>
<tr>
<td>NASA-CR-159385</td>
<td>p0000</td>
</tr>
</tbody>
</table>
USCAE-136 ........................ p0702 879-32166
USCG-D-03-79 ........................ p0432 879-23061
USNPS-T-1 ............................ p0303 879-18970
USNPS-T-3 ............................ p0046 879-11050
UTIAS-230 ............................ p0109 879-13822
UTIAS-236 ............................ p0245 879-17658
UTCN/B78-912944-7 ........................ p0165 879-18106
UTCN/B78-942517-13 ........................ p0423 879-23103
VKI-LECTURE SERIES-101-VOL-2 ........................ p0219 879-15949
VKI-LECTURE SERIES-1-PT-1 ........................ p0382 879-21053
VKI-LECTURE SERIES-3-PT-2 ........................ p0876 879-31530
VKI-LECTURE SERIES-16 ........................ p0579 879-28119
VKI-LECTURE SERIES-24 ........................ p0422 879-22093
VKI-LECTURE SERIES-92 ........................ p0376 879-20905
VKI-LECTURE SERIES-52 ........................ p0438 879-23105
VKI-LECTURE SERIES-59-1-PT-2 ........................ p0443 879-23425
VKI-LECTURE SERIES-60-VOL-1 ........................ p0429 879-22096
VKI-LECTURE SERIES-60-VOL-2 ........................ p0429 879-23002
VKI-LECTURE SERIES-83 ........................ p0304 879-18979
VKI-LECTURE SERIES-93 ........................ p0307 879-19365
VKI-LECTURE SERIES-95-VOL-1 ........................ p0308 879-19385
VKI-LECTURE SERIES-95-VOL-2 ........................ p0305 879-19389
VKI-LECTURE SERIES-99-VOL-2 ........................ p0216 879-15514
VKI-LECTURE SERIES-101-VOL-1 ........................ p0218 879-15944
VKI-TE-125 ............................ p0226 879-16241
VTH-LB-250 ............................ p0295 879-17880
VTH-LB-257 ............................ p0268 879-17618
VTH-LB-267 ............................ p0290 879-17839
VTH-LB-268 ............................ p0280 879-17819
VTH-456 ............................ p0280 879-17818
WES-INSTRUCTION-0-79-2 ........................ p0503 879-25628
WES-NP-S-78-7 ........................ p0106 879-13067
WES-TR-GL-79-4 ........................ p0584 879-28187
WORKING-PAPER-210-2 ........................ p0592 879-29163
WRC-78-113-15 ........................ p0497 879-25017
W0471-P51-PT-1 ........................ p0673 879-31226
## AERONAUTICAL ENGINEERING

### A Continuing Bibliography

Abstracts  
January—December 1979

### TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>SP-7037 Supplement</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>106</td>
<td>1</td>
</tr>
<tr>
<td>107</td>
<td>51</td>
</tr>
<tr>
<td>108</td>
<td>111</td>
</tr>
<tr>
<td>109</td>
<td>183</td>
</tr>
<tr>
<td>110</td>
<td>247</td>
</tr>
<tr>
<td>111</td>
<td>315</td>
</tr>
<tr>
<td>112</td>
<td>389</td>
</tr>
<tr>
<td>113</td>
<td>447</td>
</tr>
<tr>
<td>114</td>
<td>507</td>
</tr>
<tr>
<td>115</td>
<td>561</td>
</tr>
<tr>
<td>116</td>
<td>601</td>
</tr>
<tr>
<td>117</td>
<td>679</td>
</tr>
</tbody>
</table>
This bibliography is a cumulative index to the abstracts contained in NASA SP-7037 (106) through NASA SP-7037 (117) of Aeronautical Engineering: A Continuing Bibliography. NASA SP-7037 and its supplements have been compiled through the cooperative efforts of the American Institute of Aeronautics and Astronautics (AIAA) and the National Aeronautics and Space Administration (NASA). This cumulative index includes subject, personal author, corporate source, contract, and report number indexes.
PUBLIC COLLECTIONS OF NASA DOCUMENTS

DOMESTIC

NASA distributes its technical documents and bibliographic tools to eleven special libraries located in the organizations listed below. Each library is prepared to furnish the public such services as reference assistance, interlibrary loans, photocopy service, and assistance in obtaining copies of NASA documents for retention.

CALIFORNIA
University of California, Berkeley

COLORADO
University of Colorado, Boulder

DISTRICT OF COLUMBIA
Library of Congress

GEORGIA
Georgia Institute of Technology, Atlanta

ILLINOIS
The John Crerar Library, Chicago

MASSACHUSETTS
Massachusetts Institute of Technology, Cambridge

MISSOURI
Linda Hall Library, Kansas City

NEW YORK
Columbia University, New York

OKLAHOMA
University of Oklahoma, Bizzell Library

Pennsylvania
Carnegie Library of Pittsburgh

WASHINGTON
University of Washington, Seattle

NASA publications (those indicated by an "*" following the accession number) are also received by the following public and free libraries:

CALIFORNIA
Los Angeles Public Library
San Diego Public Library

COLORADO
Denver Public Library

CONNECTICUT
Hartford Public Library

MARYLAND
Enoch Pratt Free Library, Baltimore

MASSACHUSETTS
Boston Public Library

MICHIGAN
Detroit Public Library

MINNESOTA
Minneapolis Public Library

MISSOURI
Kansas City Public Library
St. Louis Public Library

NEW JERSEY
Trenton Public Library

NEW YORK
Brooklyn Public Library
Buffalo and Erie County Public Library
Rochester Public Library
New York Public Library

OHIO
Akron Public Library
Cincinnati Public Library
Cleveland Public Library
Dayton Public Library
Toledo Public Library

TENNESSEE
Memphis Public Library

TEXAS
Dallas Public Library
Fort Worth Public Library

WASHINGTON
Seattle Public Library

WISCONSIN
Milwaukee Public Library

An extensive collection of NASA and NASA-sponsored documents and aerospace publications available to the public for reference purposes is maintained by the American Institute of Aeronautics and Astronautics, Technical Information Service, 555 West 57th Street, 12th Floor, New York, New York 10019.

EUROPEAN

An extensive collection of NASA and NASA-sponsored publications is maintained by the British Library Lending Division, Boston Spa, Wetherby, Yorkshire, England. By virtue of arrangements other than with NASA, the British Library Lending Division also has available many of the non-NASA publications cited in STAR. European requesters may purchase facsimile copy of microfiche of NASA and NASA-sponsored documents, those identified by both the symbols "#" and "*", from: ESA - Information Retrieval Service, European Space Agency, 8-10 rue Mario-Nikis, 75738 Paris CEDEX 15, France.
### NASA CONTINUING BIBLIOGRAPHY SERIES

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>TITLE</th>
<th>FREQUENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>NASA SP–7011</td>
<td>AEROSPACE MEDICINE AND BIOLOGY</td>
<td>Monthly</td>
</tr>
<tr>
<td></td>
<td>Aviation medicine, space medicine, and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>space biology</td>
<td></td>
</tr>
<tr>
<td>NASA SP–7037</td>
<td>AERONAUTICAL ENGINEERING</td>
<td>Monthly</td>
</tr>
<tr>
<td></td>
<td>Engineering, design, and operation of</td>
<td></td>
</tr>
<tr>
<td></td>
<td>aircraft and aircraft components</td>
<td></td>
</tr>
<tr>
<td>NASA SP–7039</td>
<td>NASA PATENT ABSTRACTS BIBLIOGRAPHY</td>
<td>Semiannually</td>
</tr>
<tr>
<td></td>
<td>NASA patents and applications for patent</td>
<td></td>
</tr>
<tr>
<td>NASA SP–7041</td>
<td>EARTH RESOURCES</td>
<td>Quarterly</td>
</tr>
<tr>
<td></td>
<td>Remote sensing of earth resources by</td>
<td></td>
</tr>
<tr>
<td></td>
<td>aircraft and spacecraft</td>
<td></td>
</tr>
<tr>
<td>NASA SP–7043</td>
<td>ENERGY</td>
<td>Quarterly</td>
</tr>
<tr>
<td></td>
<td>Energy sources, solar energy, energy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>conversion, transport, and storage</td>
<td></td>
</tr>
<tr>
<td>NASA SP–7500</td>
<td>MANAGEMENT</td>
<td>Annually</td>
</tr>
<tr>
<td></td>
<td>Program, contract, and personnel management,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>and management techniques</td>
<td></td>
</tr>
</tbody>
</table>

Details on the availability of these publications may be obtained from:

**SCIENTIFIC AND TECHNICAL INFORMATION OFFICE**

**NATIONAL AERONAUTICS AND SPACE ADMINISTRATION**

Washington, D.C. 20546