SPECIAL NOTICE

The abstract sections of the monthly supplements of *Aeronautical Engineering* can be bound separately. Individual abstracts can be located readily by means of the page numbers given at each entry, e.g., p 0559 AB2-44940. To assist the user in binding Supplements SP-7037(145) through SP-7037(156), a title page is included in the back of this Cumulative Index.
A CUMULATIVE INDEX
TO
A CONTINUING BIBLIOGRAPHY ON
AERONAUTICAL ENGINEERING

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

WHAT THIS CUMULATIVE INDEX IS

This publication is a cumulative index to the abstracts contained in NASA SP-7037(145) through NASA SP-7037(156) of Aeronautical Engineering: A Continuing Bibliography, NASA SP-7037, and its supplements have been compiled through the cooperative efforts of the American Institute of Aeronautics and Astronautics (AIAA), and the National Aeronautics and Space Administration (NASA). Entries prepared by the two contributing organizations are identified as follows:

1. NASA entries by their STAR accession numbers (N82-10000 series).
2. AIAA entries by their IAA accession numbers (A82-10000 series)

HOW THIS CUMULATIVE INDEX IS ORGANIZED

This Cumulative Index includes a subject, personal author, and corporate source index.

HOW TO USE THE SUBJECT INDEX

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

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

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

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

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

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

HOW TO USE THE PERSONAL AUTHOR INDEX

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

   - EMELIANOV, M. D.
   and
   - YEMELYANOV, M. D.
HOW TO USE THE CORPORATE SOURCE INDEX

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

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

HOW TO USE THE CONTRACT NUMBER INDEX

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

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

HOW TO USE THE REPORT/ACCESSION NUMBER INDEX

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

TP-924
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IDENTIFICATION OF DESIRED SUPPLEMENT

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

Page 559 will be found in Supplement 156.

AVAILABILITY OF DOCUMENTS

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A prototype interface unit for microprocessor-based Loran-C receiver
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Investigation of air transportation technology at Ohio University, 1981 --- loran

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

A Loran-C prototype navigation receiver for general aviation

A Loran-C prototype navigation receiver for general aviation

Commutated automatic gain control system

A prototype interface unit for microprocessor-based Loran-C receiver

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Institute of Navigation, Annual Meeting, 37th, U.S. Naval Academy, Annapolis, MD, June 9-11, 1981, Proceedings

Loran for precise position location - The VINNAV system

PPDG Programmable pilot-oriented display --- air navigation

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SOLID STATE LASERS

NT CHIPS
NT LIGHT EMITTING DIODES
NT PHOTOVOLTAIC CELLS
NT SEMICONDUCTOR DEVICES
NT THERMISTORS
NT TAG LASERS

SOLID-SOLID”的内容和“SUBJECT INDEX”的内容混合在一起。其中“SOLID STATE LASERS”部分提到了一些与激光器相关的概念，如“Light Emitting Diodes”（光致发光二极管）和“Thermistors”（热敏电阻）。然而，“SUBJECT INDEX”部分似乎包含了各种科学和技术领域的主题，如“Analytical prediction of the interior noise for helicopter rotor low frequency broadband noise”（基于高斯假设和二次扩散的直升机低频宽带噪声的分析预测），“Impedance modeling of acoustic absorbing materials”（声学吸收材料的阻抗建模），以及“Experiments on propeller noise”（螺旋桨噪声的实验研究）等。这些主题的广泛性表明了内容的多样性和复杂性，可能需要进一步的阅读和理解来全面把握其意义。
An exploratory research and development program leading to specifications for aviation turbine fuel from whole crude shale oil. Part 1: Preliminary process analyses

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Flight testing the nonmetallic spline coupling
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GREATZ, R. Air Force Academy aeronautics digest: Spring/Summer 1981
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Formability of metallic materials - 2000 A.D.;
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Helicopter noise definition report VH-60A, S-76, k=1, 109, 2063 [NASA-CS-2572] p0574 A82-32083

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ROB, E. P.

ROBB, B. J.

ROBB, E. J.

ROBB, G. O.

ROBB, J. B.

ROBB, J. E.

ROBB, J. F.

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**References:**

- AEROSPACE PROPULSION CONTROL ANALYSIS - Phase I and II program status (AIAA Paper 81-2632)
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- A real time Peasars propulsion system model for VTOL piloted simulation evaluation (AIAA Paper 82-2570)
- A piecewise linear state variable technique for real time propulsion system simulation (NASA-TN-D-8291)
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- A review of different fighter aircraft load spectra.

- Measuring the flow properties of slotted test-section walls.

- Comparison of different fighter aircraft load spectra.

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- A digital simulation program describing the motion of an aircraft undergoing engine failure during its takeoff ground roll.
AEROSPACE MEDICAL RESEARCH LABS., WRIGHT-PATTERSON AFB, OHIO.

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Volume 166, F-37B in-flight crew noise
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Far-field acoustic data for the Texas A&M, Inc. back house
(A0-A115645) p0540 H82-30032

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USAF bioenvironmental noise data handbook.
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USAF bioenvironmental noise data handbook.
Volume 161: J-58A/42C, generator chaotic engine driven
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Volume 162: MD-80 generator noise
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USAF bioenvironmental noise data handbook.
Volume 163: GPC-28 compressor
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USAF bioenvironmental noise data handbook.
Volume 164: I-1 heater, duct type, portable
(A0-A116170) p0601 H82-33157

USAF bioenvironmental Noise Data Handbook.
Volume 165: EC-1 heater, duct type, portable
(A0-A116171) p0601 H82-33158

USAF bioenvironmental Noise Data Handbook.
Volume 167: RA-36 air conditioner
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USAF bioenvironmental noise data handbook.
Volume 158: F-106A aircraft, nose and 
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Air Force Academy aeronautics digest Fall/Guamer
1980
(A0-A108330) p0301 H82-20139

Air Force Academy aeronautics digest:
Spring/Guamer 1981
(A0-A112421) p0462 H82-27216

AIR FORCE ENGINEERING AND SERVICES CENTER, TYNDALL
APB, FLA.

The effect of fuel composition on groundfire
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The biological degradation of spilled jet fuels:
A literature review
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AIR FORCE FLIGHT DYNAMICS LAB., WRIGHT-PATTERSON
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A preliminary experimental investigation of the transonic potential flow around airplanes

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The principles and methods for shaping the wing root regions of a wing-body combination at transonic and lower supersonic speeds

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A theoretical analysis of the stress surface of revolution with supersonic inlet flow in a transonic axial compressor

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Aeronautical Information Data Subsystem (AIDS): A ground-based component of air navigation services systems
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Evaluation of hydrocracking catalysts for conversion of shale oil into high yields of jet fuels
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Terminal area automatic navigation, guidance, and control research using the Microwave Landing System (MLS). Part 4: Transition path reconstruction along a straight line path containing a glideslope change waypoint

ANALYTICAL MECHANICS ASSOCIATES, INC., MOUNTAIN VIEW, CALIF.
Analysis of in-trail following dynamics of CTDI-equipped aircraft
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Integration of controls and displays in U.S. Army helicopter cockpits
Synthesis of an integrated cockpit management system
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Army cold regions research and engineering laboratory.
In-service inspection methods for graphite-epoxy structures on commercial transport aircraft

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A comprehensive survey of the effect of composite materials on aircraft electrical power distribution systems

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The influence of closed-coupled, rear fuselage mounted nacelles on the design of an advanced high speed wing
The study of combat aircraft maneuverability by computer-assisted simulation of advanced technology and fighter cockpit design: Development of a convoluted intake seal for ramjet combustor by use of a sensitive time lag model.
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