NASA/(TM-1998-206936

NASA Langley Scientific and Technical Information Output—1997

Susan H. Stewart and Harriet B. Machie, Compilers
Langley Research Center, Hampton, Virginia

National Aeronautics and Space Administration
Langley Research Center
Hampton, Virginia 23681-2199

February 1998
Preface

This report contains a listing of the NASA Langley Research Center's publicly available scientific and technical research output for C.Y. 1997.

The intent of this report is to provide a greater awareness of the broad scope of results and the importance of the research and development work conducted by scientists and engineers at Langley. This current awareness is mandated by the National Aeronautics and Space Act of 1958, which provides for the widest practical dissemination of NASA research.

Introduction

The NASA Langley Research Center is one of the Nation’s leading laboratories for research and development in the sciences of aeronautics and space technology. Langley conducts basic and applied research in the areas of Airframe Systems, Aerodynamics, Atmospheric Science, and Structures and Materials.

This document contains a bibliography of Langley’s publicly available scientific and technical research output for 1997 which is processed through the Center’s Information Systems and Services Division, an integral part of NASA’s Agency-wide Scientific and Technical Information (STI) system. The results of Langley’s research are disseminated in a variety of NASA and non-NASA scientific and technical media and information systems. This document is intended to be a reference summary for researchers and a current awareness publication for the scientific, research, and academic community. Details of the availability of the research references in this document are found in the section, “Availability,” on page vii.


The citations are grouped by the Scientific and Technical Aerospace Reports (STAR) subject categories and listed alphabetically by author or innovator. The Langley organization to which the senior author or innovator is assigned and the Research and Technology Objectives and Plans (RTOP) number are noted below citations when appropriate and included in the indexes.

Patents listed are those which were issued in 1997 and owned by Langley Research Center.

Publication of some journal articles was not known at press time for the 1996 issue of this document. These articles are therefore listed in the 1997 issue.
## Availability

<table>
<thead>
<tr>
<th>Category</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>NASA Reports</td>
<td>NASA Center for AeroSpace Information (CASI)</td>
</tr>
<tr>
<td></td>
<td>800 Elkridge Landing Road</td>
</tr>
<tr>
<td></td>
<td>Linthicum Heights, MD 21090-2934</td>
</tr>
<tr>
<td></td>
<td>(301) 621-0390</td>
</tr>
<tr>
<td></td>
<td>National Technical Information Service (NTIS)</td>
</tr>
<tr>
<td></td>
<td>5285 Port Royal Road</td>
</tr>
<tr>
<td></td>
<td>Springfield, VA 22161-2171</td>
</tr>
<tr>
<td></td>
<td>(703) 487-4650</td>
</tr>
<tr>
<td>Patents:</td>
<td></td>
</tr>
<tr>
<td>Patent Application Specifications</td>
<td>NASA Center for AeroSpace Information (CASI)</td>
</tr>
<tr>
<td></td>
<td>National Technical Information Service (NTIS)</td>
</tr>
<tr>
<td>Printed Copies</td>
<td>Commissioner of Patents and Trademarks</td>
</tr>
<tr>
<td></td>
<td>U.S. Patent and Trademark Office</td>
</tr>
<tr>
<td></td>
<td>Washington, DC 20231</td>
</tr>
</tbody>
</table>
Contents

Preface .............................................................. iii
Introduction .......................................................... v
Availability .......................................................... vii

Aeronautics

Category 01 Aeronautics (General) .......................... 1
Category 02 Aerodynamics ...................................... 2
Category 03 Air Transportation and Safety ..................... 10
Category 04 Aircraft Communications and Navigation ........ 12
Category 05 Aircraft Design, Testing and Performance .... 12
Category 06 Aircraft Instrumentation ............................ 17
Category 07 Aircraft Propulsion and Power ..................... 18
Category 08 Aircraft Stability and Control ..................... 19
Category 09 Research and Support Facilities (Air) ............. 20

Astronautics

Category 13 Astrodynamics ....................................... 21
Category 15 Launch Vehicles and Space Vehicles ............. 22
Category 16 Space Transportation ............................... 22
Category 17 Space Communications, Spacecraft Communications, Command and Tracking 23
Category 18 Spacecraft Design, Testing and Performance ... 24

Chemistry and Materials

Category 23 Chemistry and Materials (General) .............. 27
Category 24 Composite Materials ............................... 27
Category 25 Inorganic and Physical Chemistry ................. 35
Category 26 Metallic Materials .................................... 35
Category 27 Nonmetallic Materials .............................. 40
Category 28 Propellants and Fuels .............................. 46
Category 29 Materials Processing .............................. 46

Engineering

Category 31 Engineering (General) ............................ 46
Category 32 Communications and Radar ......................... 47
Category 33 Electronics and Electrical Engineering ............ 48
Category 34 Fluid Mechanics and Heat Transfer ............... 50
Category 35 Instrumentation and Photography .......................... 58
Category 36 Lasers and Masers ........................................... 60
Category 37 Mechanical Engineering ................................. 61
Category 38 Quality Assurance and Reliability ..................... 61
Category 39 Structural Mechanics ..................................... 62

Geosciences

Category 43 Earth Resources and Remote Sensing ................. 67
Category 45 Environment Pollution .................................... 68
Category 46 Geophysics ................................................. 69
Category 47 Meteorology and Climatology ........................... 76

Life Sciences

Category 52 Aerospace Medicine ........................................ 83

Mathematical and Computer Sciences

Category 59 Mathematical and Computer Sciences (General) ........ 84
Category 60 Computer Operations and Hardware ..................... 85
Category 61 Computer Programming and Software .................... 89
Category 62 Computer Systems ......................................... 90
Category 63 Cybernetics .................................................. 91
Category 64 Numerical Analysis ........................................ 91
Category 65 Statistics and Probability ................................ 96
Category 66 Systems Analysis .......................................... 96

Physics

Category 70 Physics (General) .......................................... 96
Category 71 Acoustics ..................................................... 97
Category 72 Atomic and Molecular Physics .......................... 106
Category 73 Nuclear and High-Energy Physics ....................... 107
Category 74 Optics ....................................................... 108
Category 76 Solid-State Physics ........................................ 108

Social Sciences

Category 81 Administration and Management ........................ 111
Category 82 Documentation and Information Science ................ 111

x
Space Sciences

Category 92 Solar Physics ........................................... 114
Category 93 Space Radiation ........................................ 114

General

Category 99 General .................................................. 115

Author Index ............................................................. 117
Organization Index ...................................................... 133
RTOP Index .............................................................. 137
Scientific and Technical Publications

Aeronautics

Category 01 Aeronautics (General)

   Organization DS RTOP 522-32-21

   Organization DS RTOP 522-32-21

   Organization KC RTOP 538-08-11

   Organization KC RTOP 538-07-22

   Organization DA RTOP 242-80-01

   Organization KC RTOP 538-08-11

   Organization KC RTOP 538-08-11


Category 02 Aerodynamics


Organization DA RTOP 522-25-31

Organization DS RTOP 522-22-21

Organization DA RTOP 242-80-01

Organization DA RTOP 242-80-01

Organization DF RTOP 505-59-50

Organization DA RTOP 242-80-01

Organization DA RTOP 538-05-13

Organization DA RTOP 505-59-30

Organization DA RTOP 505-59-30
Organization: DF RTOP 522-31-11

Organization: DA RTOP 522-25-31

Organization: DF RTOP 505-70-62

Organization: DF RTOP 522-31-11

Organization: DA RTOP 538-05-14

Organization: DA RTOP 538-05-14

Organization: DA RTOP 505-59-53

Organization: DA RTOP 538-05-12

Organization: DF RTOP 522-31-11


Organization DF RTOP 505-59-10


Organization DA RTOP 242-20-08


64 Wilhite, A. W.; and Shaw, R. J.: HSCT Research Picks Up Speed. Aerospace America, August 1997, p. 24-29, and 41. Organization I RTOP 537-09-20
Organization DF RTOP 522-31-11

Organization DA RTOP 242-80-01

Organization DA RTOP 522-21-11

Organization DA RTOP 505-59-30

Organization DA RTOP 242-80-01

Organization DA RTOP 242-80-01

Organization DS RTOP 505-63-36
Category 03 Air Transportation and Safety

Organization DC RTOP 537-08-24

Organization DC RTOP 538-07-19

Organization DC RTOP 538-07-19

Organization DC RTOP 538-07-19

Organization DC RTOP 538-07-19

Organization A RTOP 282-10-01

Organization A RTOP 282-10-01

Organization DC RTOP 538-04-11
<table>
<thead>
<tr>
<th>Number</th>
<th>Title</th>
<th>Details</th>
</tr>
</thead>
</table>
88 Vicroy, D. D.; Brandon, J. M.; Greene, G. C.; Rivers, R. A.; Shah, G. H.; Stewart, E. C.; and
Stuever, R. A.: Characterizing the Hazard of a Wake Vortex Encounter. Presented at 35th
AIAA Aerospace Sciences Meeting and Exhibit, January 6-9, 1997, Reno, Nevada. AIAA
Paper No. 97-0055.
ftp://techrep_rts._arc.nasa.g_v/pub/techrep_rts/_arc/_ 997/aiaa/NASA-aiaa-97-__55.ps.Z
Organization DC RTOP 548-10-11

89 Zak, J. A.; and Rodgers, W. G., Jr.: Observed Changes in Atmospheric Boundary Layer
Properties at Memphis International Airport During August 1995. (NAS1-96014 Lockheed
Organization DC RTOP 538-04-11

Category 04 Aircraft Communications and Navigation

90 Fralick, D. T.: W-band Free Space Permittivity Measurement Setup for Candidate Radome
Materials. (NAS1-96014 Lockheed Martin Engineering & Sciences.) NASA CR-201720,
August 1997, 10 p.
Organization DI RTOP 522-33-11

Candidate Radome Materials. Presented at AMTA '97: Antenna Measurement Techniques
Association 19th Annual Meeting and Symposium, November 17-21, 1997, Boston,
Organization DI RTOP 522-33-11

92 Roberts, T. W.; Sidilkover, D.; and Swanson, R. C., Jr.: Relaxation Revisited—A Fresh Look
at Multigrid for Steady Flows. Presented at Thirty Years of Computational Fluid Dynamics
Organization DF RTOP 537-07-22

93 Warren, A. W.; Schwab, R. W.; Geels, T. J.; and Shakarian, A.: Conflict Probe Concepts
Analysis in Support of Free Flight. (NAS1-20267 Boeing Commercial Airplane Group.)
Organization BA RTOP 538-04-14

Category 05 Aircraft Design, Testing and Performance

94 Abel, I.: Research and Applications in Aeroelasticity and Structural Dynamics at the NASA
Langley Research Center. Presented at CEAS International Forum on Aeroelasticity and
p. 51-68.
Organization DS RTOP 522-32-21
Organization DS RTOP 522-32-21

Organization GK RTOP 505-68-30

Organization DA RTOP 505-59-36

Organization DA RTOP 581-10-11

Organization DA RTOP 581-10-11

Organization DA RTOP 581-10-11

Organization DS RTOP 522-32-21

Organization BA RTOP 537-09-20
Organization DA RTOP 505-59-36

Organization DS RTOP 522-32-21

Organization DS RTOP 505-63-50

Organization DS RTOP 505-63-10

Organization DS RTOP 505-63-50

Organization L RTOP 522-51-61

Organization DM RTOP 538-02-10

Organization DC RTOP 505-68-30


Organization DS RTOP 522-32-21

Organization DS RTOP 505-63-36

Organization DS RTOP 581-20-21


Organization DS RTOP 505-63-36

Organization DS RTOP 505-63-50

Organization DS RTOP 522-22-21

Organization DS RTOP 505-63-50

Organization DS RTOP 522-32-21


Organization DS RTOP 522-32-21


Organization DS RTOP 522-22-21


Organization D RTOP 509-10-31


Organization BC RTOP 538-05-13


Organization DS RTOP 505-63-36

Category 06 Aircraft Instrumentation


Organization DC RTOP 522-14-11


Organization DC RTOP 522-14-11
Category 07 Aircraft Propulsion and Power

Organization DM RTOP 242-20-07

Organization DA RTOP 522-51-31

Organization DA RTOP 522-51-31

Organization DM RTOP 522-51-31

Organization DA RTOP 522-51-31

Organization DA RTOP 522-51-31

Organization DM RTOP 522-51-31

Organization DA RTOP 522-51-31
Category 08 Aircraft Stability and Control

   Organization DC  RTOP 522-14-11

   Organization DC  RTOP 505-64-13

   Organization DC  RTOP 538-07-11

   Organization DC  RTOP 522-25-31

   Organization DC  RTOP 538-04-13

   Organization DC  RTOP 538-04-13

   Organization DC  RTOP 538-07-11

   Organization DC  RTOP 505-70-69
151 Klein, V.; Murphy, P. C.; Curry, T. J.; and Brandon, J. M.: Analysis of Wind Tunnel
Longitudinal Static and Oscillatory Data of the F-16XL Aircraft. NASA TM-97-206276,
Organization DC RTOP 522-33-11

152 Lin, G.-F.; Lan, C. E.; and Brandon, J. M.: A Generalized Dynamic Aerodynamic Coefficient
Model for Flight Dynamics Applications. Presented at 1997 AIAA Guidance, Navigation and
Organization DC RTOP 522-22-21

1997 IEEE International Conference on Systems, Man, and Cybernetics, October 12-15,
Organization DC RTOP 522-14-11

154 Waszak, M. R.: Robust Multivariable Flutter Suppression for the Benchmark Active Control
Technology (BACT) Wind-Tunnel Model. Presented at Eleventh Symposium on Structural
Organization DC RTOP 522-33-11

Organization DC RTOP 522-33-11

156 Yeager, J. C.: Pilot Evaluation Comments During Selected Maneuvers From Flight Tests of
the HARV NASA-1A Control Law. (NAS1-96014 Lockheed Martin Engineering &
Organization DC RTOP 522-21-31

(NAS1-96014 Lockheed Martin Engineering & Sciences Company.) NASA CR-201670,
Organization DC RTOP 522-21-31

Category 09 Research and Support Facilities (Air)

158 Baughman, J. A.; Micheletti, D. A.; Nelson, G. L.; and Simmons, G. A.: Magnetohydro-
dynamics Accelerator Research Into Advanced Hypersonics (MARIAH)—Final Report.
(AA5416D MSE Technology Applications, Inc.) NASA CR-97-206242/PT1, October 1997,
640 p.
Organization A


Category 15 Launch Vehicles and Space Vehicles

Organization CB RTOP 859-00-00

Organization CB RTOP 242-20-08

Organization CB RTOP 242-20-08

Organization CB RTOP 906-43-00

Organization CB RTOP 242-33-01

Category 16 Space Transportation

Organization CB RTOP 242-30-33

Organization CB RTOP 242-30-03
Organization M RTOP 297-90-00

Category 17 Space Communications, Spacecraft Communications, Command and Tracking

Organization DI RTOP 505-64-52

Organization DI RTOP 522-24-21

Organization DI RTOP 522-33-11

Organization DI RTOP 522-33-11

Organization DI RTOP 522-33-11

Organization DI RTOP 258-70-21
Category 18 Spacecraft Design, Testing and Performance

Organization GK RTOP 236-04-70

Organization GK RTOP 297-50-00

Organization GK RTOP 297-50-00

Organization CB RTOP 260-98-09

Organization CB RTOP 267-10-00

Organization CC RTOP 237-02-22

Organization DC RTOP 233-03-01

Organization DC RTOP 522-33-11
Organization CB RTOP 906-43-00

Organization CB RTOP 906-43-00

Organization DC RTOP 522-33-11

Organization DC RTOP 505-64-52

Organization DC RTOP 522-33-11

Organization DC RTOP 522-33-11

Organization DC RTOP 632-10-14

Organization DC RTOP 233-10-14
Organization DC RTOP 233-10-14

Organization DC RTOP 233-10-14

Organization DS RTOP 963-89-00

Organization DS RTOP 237-03-33

Organization DS RTOP 237-03-33

Organization CB RTOP 963-89-00

Organization DC RTOP 522-33-11

Organization DS RTOP 632-20-21

Organization DS RTOP 233-10-21

Chemistry and Materials

Category 23 Chemistry and Materials (General)


Organization GG RTOP 505-63-50


Organization E RTOP 243-50-01


Organization DF RTOP 522-31-21


Organization DM RTOP 505-63-50

Category 24 Composite Materials


Organization DS RTOP 538-10-11


Organization DS RTOP 505-63-50


Organization KC RTOP 538-10-11


Organization DM RTOP 538-02-10


Organization DM RTOP 538-10-11


Organization DS RTOP 233-20-21


Organization DM RTOP 505-63-87


Organization DS


Organization DS


Organization DS


Organization DM RTOP 522-32-11
Organization DM RTOP 537-06-33

Organization DM RTOP 505-63-50

Organization DM RTOP 522-32-11

Organization DM RTOP 538-13-11

Harris, C. E.; Newman, J. C., Jr.; Piascik, R. S.; and Starnes, J. H., Jr.: Analytical Methodology for Predicting the Onset of Widespread Fatigue Damage in Fuselage Structure. Presented at ICAF '97 19th Symposium (International Committee on Aeronautical Fatigue), June 16-20, 1997, Edinburgh, Scotland.
Organization DM RTOP 538-02-10

Organization DM RTOP 505-63-50

Organization DS RTOP 505-63-50

Organization DS RTOP 522-11-41

Organization DM RTOP 233-01-01


Organization DM RTOP 581-01-21


Organization DM RTOP 581-10-21


Organization DM RTOP 505-63-50


Organization DM RTOP 581-10-21


Organization DM RTOP 537-06-33


Organization DM RTOP 538-10-11


Organization DM RTOP 538-02-10
Organization DS RTOP 538-10-11

Organization DS RTOP 505-63-50

Organization DM RTOP 581-10-21

Organization DM RTOP 581-10-21

Organization DM RTOP 538-10-11

Organization DM RTOP 538-02-10

Organization DM RTOP 538-02-10

Organization DM RTOP 538-02-10

Organization DM
RTOP 538-02-10


Organization DM
RTOP 581-10-21


Organization DM
RTOP 581-10-21


Organization DM
RTOP 581-10-21


Organization DM
RTOP 632-20-21


Organization DM
RTOP 538-02-10


Organization DM
RTOP 538-02-10


Organization DM
RTOP 538-02-10


Organization DM
RTOP 538-10-11

33
Organization DS  RTOP 505-63-36

Organization DM  RTOP 242-03-30

Organization DM  RTOP 242-33-01

Organization DM  RTOP 581-10-21

Organization DM  RTOP 538-10-11

Organization DM

Organization DS  RTOP 510-02-12

Organization DS  RTOP 538-10-11

Organization DM  RTOP 538-02-10
Organization DM RTOP 538-10-11

Organization DS RTOP 233-20-21

Organization DM RTOP 537-06-33

Organization DM RTOP 505-63-50

Organization DM RTOP 538-02-10

Category 25 Inorganic and Physical Chemistry

Organization GK

Organization DS RTOP 505-70-63

Category 26 Metallic Materials

Organization DM RTOP 522-12-11


Organization DM
RTOP 522-12-11

Organization DM
RTOP 242-50-02

Organization DM
RTOP 538-02-10

Organization DM
RTOP 538-02-10

Organization DM
RTOP 538-02-10

Organization DM
RTOP 538-02-11

Organization DM
RTOP 538-02-11

Organization DM
RTOP 538-02-10

Organization DM
RTOP 538-02-10


Organization DM

Organization DM RTOP 242-30-05

Organization DM RTOP 538-02-10

Organization DM RTOP 537-06-31

Organization DM RTOP 538-10-11

Organization DM

Organization DM RTOP 538-02-11

Organization DM RTOP 538-02-11
Category 27 Nonmetallic Materials

   Organization DM RTOP 233-40-41

   Organization DM RTOP 505-63-50

   Organization DS RTOP 242-20-02

   Organization DM RTOP 522-24-11

   Organization DM RTOP 522-24-11

   Organization DM RTOP 505-63-50

   Organization DM

   Organization DM RTOP 505-63-50

   Organization DM RTOP 233-10-14


Organization DS RTOP 242-33-01

Organization DM RTOP 506-63-50

Organization DM

Organization DM RTOP 505-63-50

Organization DM

Organization DM RTOP 505-63-50

Organization DM

Organization DM RTOP 505-63-50

Organization DM RTOP 505-63-50

Organization DM RTOP 505-63-50
341 Jensen, B. J.: Copolyimides Prepared From 3,4'-Oxydianiline and 1,3-Bis(3-
Aminophenoxy)Benzene With 3,3',4,4'-Biphenylcarboxylic Dianhydride Having Reactive

Organization DM

342 Jensen, B. J.; and Chang, A. C.: Adhesive Properties of Cured Phenylethynyl Containing
Imides. Presented at 18th Annual Meeting of the Adhesion Society, February 23-26, 1997,

Organization DM RTOP 522-32-11

343 Jensen, B. J.; Lowther, S. E.; and Chang, A. C.: Blends of LARC™ PETI-5 With
Phenylethynyl Containing Reactive Additives. Presented at American Chemical Society

Organization DM RTOP 505-63-50

of High Performance Composites: An Overview of Research at the Langley Research Center.
Presented at ICCM-11 (International Conference on Composite Materials), July 14-18, 1997,

Organization DM RTOP 505-63-50

345 Kenner, W. S.; and Knight, N. F., Jr.: Cantilevered Soft Lattice Truss Structural Static
Structures, Structural Dynamics, and Materials Conference, April 7-10, 1997, Kissimmee,

Organization DS RTOP 591-22-21

346 McDaniel, P. R.; and St. Clair, T. L.: Morphology and Physical Properties of Polyimide-
Inorganic Hybrids. Presented at 1997 American Chemical Society National Meeting,

Organization DM RTOP 522-32-11

of LaRC Colorless Polyimide Resins on Casting Surfaces. Presented at 1997 American
Chemical Society National Meeting, April 13-17, 1997, San Francisco, California. In Polymer
Preprints, Volume 76, p. 381-382.

Organization DM RTOP 522-24-11

348 Newman, J. C., Jr.: Crack Growth Under Variable-Amplitude and Spectrum Loading in
2024-T3 Aluminum Alloys. Presented at International Symposium on High Cycle Fatigue of

Organization DM RTOP 538-02-10

Organization DM


Organization DM


Organization DM


Organization DM


Organization DS


Organization DM


Organization DM


Organization DM


Category 28 Propellants and Fuels


Category 29 Materials Processing


Engineering

Category 31 Engineering (General)


Organization DI RTOP 538-01-14

Organization DC RTOP 522-24-21

Organization DC RTOP 505-64-70

Organization DI RTOP 233-03-03

Category 32 Communications and Radar

Organization DI RTOP 505-64-52

Organization BA RTOP 522-24-21

Organization GL RTOP 538-04-11

Organization DI RTOP 548-10-41
Organization DI RTOP 522-33-11

Organization DI RTOP 522-11-41

Organization DI RTOP 522-33-11

Organization DI RTOP 522-33-11

Organization BA RTOP 522-24-21

Organization GL RTOP 522-14-31

Category 33 Electronics and Electrical Engineering

Organization DI RTOP 522-11-41

Organization DI RTOP 522-11-41
Organization DI RTOP 522-24-21

Organization DI RTOP 522-24-21

Organization DI

Organization DI RTOP 538-04-11

Organization DI RTOP 538-04-11

Organization DI RTOP 522-14-21

Organization DI RTOP 274-00-97

Organization DI RTOP 258-70-21
Category 34 Fluid Mechanics and Heat Transfer


Organization GH

RTOP 505-59-54

ftp://ftp.icase.edu/pub/techreports/97/97-54.ps

Organization A

RTOP 505-90-52

ftp://ftp.icase.edu/pub/techreports/97/97-42.ps

Organization A

RTOP 505-90-52


Organization A

RTOP 505-90-52


Organization DA

RTOP 242-80-01


Organization DA

RTOP 242-80-01


Organization DA

RTOP 242-20-08

52

Organization DA RTOP 505-70-62


Organization DS RTOP 242-33-01


Organization A RTOP 505-90-52


Organization DS


ftp://ftp.icase.edu/pub/techreports/97/97-49.ps

Organization A RTOP 505-90-52


Organization DA RTOP 242-80-01


Organization DA RTOP 242-80-01


Organization DF RTOP 522-31-11
Organization A RTOP 505-90-52

Organization DF RTOP 522-31-81

Organization DF RTOP 522-31-11

Organization DF RTOP 522-31-61

Organization RTOP 538-05-15

Organization GK RTOP 225-12-02

Organization A RTOP 282-10-01

Organization DA RTOP 242-80-01
Organization GM

Organization DA RTOP 522-51-31

Organization DA RTOP 522-51-31

Organization DA RTOP 242-80-01

Organization DA RTOP 242-80-01

Organization DA RTOP 242-80-01

Organization DA RTOP 242-80-01

Organization CA RTOP 665-25-30

Organization DF RTOP 522-31-61


<table>
<thead>
<tr>
<th>Reference</th>
<th>Author(s)</th>
<th>Title</th>
<th>Journal</th>
<th>Volume</th>
<th>Pages</th>
<th>Organization</th>
<th>RTOP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Organization DF</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>RTOP 505-59-50</td>
<td></td>
</tr>
<tr>
<td>452</td>
<td>Singh, D. J.; Carpenter, M. H.; and Drummond, J. P.</td>
<td>Thrust Enhancement in Hypervelocity Nozzles by Chemical Catalysis</td>
<td>Journal of Propulsion and Power</td>
<td>13, No. 4</td>
<td>July-August 1997, p. 574-576</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Organization A</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>RTOP 505-90-52</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Organization A</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>RTOP 505-90-52</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Organization DA</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>RTOP 242-80-01</td>
<td></td>
</tr>
</tbody>
</table>
Organization A RTOP 505-90-52

Organization DF RTOP 522-31-21

Organization A RTOP 505-90-52

Category 35 Instrumentation and Photography

Organization GH RTOP 519-20-21

Organization GH RTOP 519-20-21

Organization CB RTOP 274-00-97


Organization GH RTOP 519-20-21
Organization DI RTOP 233-20-24

Organization GH RTOP 519-20-21

ftp://techrep_rts._arc.nasa.g_v/pub/techrep_rts/_arc/_997/mtg/NASA-97-43isa-dmo.ps.Z
Organization GH RTOP 519-20-21

Organization GH RTOP 233-10-14

Organization DI RTOP 258-70-21

Organization DF RTOP 538-03-13

Organization GH RTOP 274-00-96

Organization GH RTOP 519-20-21
Category 36 Lasers and Masers

Organization DF RTOP 538-03-12

Organization DF RTOP 538-03-12

Organization DF RTOP 538-03-12

Organization DF RTOP 538-03-12

Organization DF RTOP 538-03-12

Organization DF RTOP 538-03-12

Organization DM RTOP 632-10-14

Organization DI RTOP 274-00-96

Organization GL RTOP 258-70-21

Organization DF  RTOP 581-10-11


Organization GM


Organization GL  RTOP 258-70-21

Category 37 Mechanical Engineering


Organization GH  RTOP 519-20-21


Organization CA  RTOP 274-00-96


Organization DS  RTOP 522-31-21


Organization DS  RTOP 522-31-21

Category 38 Quality Assurance and Reliability


Organization GK  RTOP 297-50-00
Organization DA RTOP 242-80-01

Organization E

Organization DM

**Category 39 Structural Mechanics**

Organization DS RTOP 505-63-53

Organization DC RTOP 233-10-14

Organization DS RTOP 537-06-21

Organization DS RTOP 505-63-50

Organization DM RTOP 323-78-01
Organization DS RTOP 237-03-02

Organization DS RTOP 237-08-02

Organization DS RTOP 522-31-21

Organization DS RTOP 505-63-50

Organization DS RTOP 538-10-11

Organization DS RTOP 233-10-14

Organization DS RTOP 632-20-21

Organization DS RTOP 632-20-21
Organization DS RTOP 522-11-41

Organization DS RTOP 233-01-21

Organization DS RTOP 233-01-01

Organization DS RTOP 538-10-11

Organization DS RTOP 505-63-35

Organization DS RTOP 538-07-14

Organization DS RTOP 505-63-50

Organization DS RTOP 505-63-50
Organization D RTOP 522-31-21

Organization DS RTOP 522-32-41

Organization DS RTOP 632-10-14

Organization DS RTOP 522-11-41

Organization DM RTOP 538-02-10

Organization DS RTOP 505-63-53

Organization DS RTOP 537-06-34

Organization DS RTOP 538-10-11
Organization DS RTOP 538-02-10

Organization DS RTOP 538-02-10

Organization DS RTOP 538-02-10

Organization DS RTOP 538-10-11

Organization DS RTOP 632-20-21

Organization DS RTOP 233-01-01

Organization DS RTOP 632-10-14

Organization DS RTOP 632-20-21
Geosciences

Category 43 Earth Resources and Remote Sensing

Organization CA RTOP 229-71-02

Organization CA RTOP 622-56-61

Organization CB RTOP 274-00-97

Organization GL RTOP 258-70-21

Organization GL RTOP 622-63-06

Organization GL RTOP 464-12-03


Category 45 Environment Pollution


Organization CA RTOP 622-63-13


Organization CA RTOP 537-09-23

Category 46 Geophysics


Organization CA RTOP 146-90-04


Organization CA RTOP 665-25-06


Organization CA RTOP 665-25-31


Organization CA RTOP 229-10-32


Organization CA RTOP 370-21-08


Organization CA RTOP 370-21-08


Delany, A. C.; et al.: On the Compliance of the Fluxes of Oxides of Nitrogen Determined by
Enclosure and by Micrometeorological Methodologies. Presented at 1997 Fall American
Geophysical Union Meeting, December 8-12, 1997, San Francisco, California. In EOS Trans.

Organization CA RTOP 146-90-04

Fairlie, T. D.; Pierce, R. B.; Grose, W. L.; and Lingenfelser, G. S.: Lagrangian Forecasting
During ASHOE/MAESA: Analysis of Predictive Skill for Analyzed and Reverse-Domain-
Dilled Potential Vorticity. Journal of Geophysical Research, Volume 102, No. D11, June 20,

Organization CA RTOP 579-21-17

Gordley, L. L.; Russell, J. M., III; Beaver, G. M.; and Remsberg, E. E.: HALOE Data—
Second Public Release (Internal Version 18): An Overview of Products and Remaining
Systematic Errors. Presented at UARS (Upper Atmosphere Research Satellite) Science Team

Organization CA RTOP 665-25-31

Gordley, L. L.; Thompson, R. E.; Remsberg, E. E.; Marshall, B. T.; and Bhatt, P. P.: The Limb
Infrared Monitor of the Stratosphere-Data Reprocessing. Presented at 1997 Fall American
Geophysical Union Meeting, December 8-12, 1997, San Francisco, California. In EOS

Organization CA RTOP 622-67-69

Grooss, J. U.; Pierce, R. B.; Crutzen, P. J.; Grose, W. L.; and Russell, J. M., III: Reformation

Organization CA RTOP 665-70-01

Grose, W. L.; Lingenfelser, G. S.; Russell, J. M., III; Pierce, R. B.; Fairlie, T. D.; and Proffitt,
M. H.: Intercomparison of Ozone Measurements in the Lower Stratosphere From the UARS
HALOE Experiment and the ER-2 UV Absorption Photometer. Journal of Geophysical

Organization CA RTOP 413-18-07

Herman, G. S.; and Sandford, S. P.: Investigations of High-Resistivity, Undoped GaP Crystal
for Quasi-Phasematched Difference Frequency Generation to Produce Terahertz Frequency
Local Oscillators. Presented at Eighth International Symposium on Space Terahertz

Organization GL RTOP 258-70-21

Levine, J. S.: Climate Change and Global Sources of Greenhouse Gases. Presented at White
House Satellite Conference on Climate Change: The Challenge of Global Warming,
October 6, 1997, Gloucester, Virginia.

Organization CA RTOP 146-90-04

Organization CA RTOP 146-90-04


Organization CA RTOP 146-90-04


Organization CA RTOP 146-90-04


Organization CA RTOP 146-90-04


Organization CA RTOP 146-90-04


Organization CA RTOP 146-90-04


Organization CA RTOP 146-90-04


Organization CA RTOP 665-45-20
Organization CA RTOP 665-45-20

Organization CA RTOP 665-25-31

Organization CA RTOP 344-16-50

Organization CA RTOP 579-21-51

Organization CA RTOP 579-21-17

Organization CA RTOP 665-25-31

Organization CA RTOP 665-45-20

Organization CA RTOP 665-25-31

73

Organization CA  RTOP 622-67-69


Organization CA  RTOP 665-70-01


Organization CA  RTOP 464-34-02


Organization CA  RTOP 665-70-01


Organization CA  RTOP 665-45-20


Organization CA  RTOP 665-45-53


Organization CA  RTOP 665-45-20


Organization CA  RTOP 665-45-20
Organization CA  RTOP 665-45-20

Organization CA  RTOP 665-45-20

Organization CA  RTOP 665-45-20

Organization CA  RTOP 665-45-20

Organization CA  RTOP 665-45-20

Organization CA  RTOP 229-02-06

Organization CA  RTOP 665-45-20

Organization CA  RTOP 665-45-20

75
Category 47 Meteorology and Climatology

   Organization CA RTOP 578-12-25

   Organization CA RTOP 229-01-02

   Organization CA RTOP 229-01-02

   Organization CA RTOP 148-65-41

   Organization CA RTOP 428-82-00

   Organization CA RTOP 148-65-41

   Organization CA RTOP 229-01-02
Organization CA RTOP 148-65-41

Organization CA RTOP 148-65-41

Organization CA RTOP 148-65-41

Organization CA RTOP 148-65-41

Organization CA RTOP 229-01-02

Organization CA RTOP 578-12-25

Organization CA RTOP 578-12-25

Organization CA RTOP 665-45-20

77
Organization DM
RTOP 505-63-50

Organization CA
RTOP 148-65-41

Organization CA
RTOP 146-90-04

Organization CA
RTOP 148-65-41

Organization CA
RTOP 428-82-00

Organization CA
RTOP 578-12-70

Organization CA
RTOP 148-65-41

Organization CA
RTOP 148-65-41

Organization CA RTOP 148-65-41


Organization CA RTOP 148-65-41


Organization CA RTOP 229-01-02


Organization CA RTOP 229-01-02


Organization CA RTOP 148-65-41


Organization CA RTOP 229-01-02


Organization CA RTOP 538-08-12


Organization CA RTOP 538-08-12
Organization CA RTOP 146-90-04

Organization CA RTOP 229-01-02

Organization CA RTOP 460-44-41

Organization CA RTOP 538-08-12

Organization CA RTOP 146-90-04

Organization CA RTOP 146-90-04

Organization CA RTOP 538-08-12

Organization CA RTOP 148-65-41

Organization CA \hspace{2cm} RTOP 148-65-41


Organization CA \hspace{2cm} RTOP 578-12-25


Organization CA \hspace{2cm} RTOP 578-12-25


Organization CA \hspace{2cm} RTOP 148-65-41


Organization CA \hspace{2cm} RTOP 229-01-02


Organization CA \hspace{2cm} RTOP 146-90-04


Organization CA \hspace{2cm} RTOP 146-90-04


Organization CA \hspace{2cm} RTOP 460-44-41

Organization CA


Organization CA


Organization CA


Organization CA


Organization CA


Organization CA


Organization CA


Organization CA


Organization CA
Organization DC RTOP 538-04-11

Life Sciences
Category 52 Aerospace Medicine

Organization DM RTOP 199-45-16

Organization DM RTOP 199-45-16

Organization DM RTOP 199-45-16

Organization DM RTOP 199-45-16

Organization DM RTOP 199-45-16

Organization DM
<table>
<thead>
<tr>
<th>Reference</th>
<th>Authors</th>
<th>Title</th>
<th>Details</th>
</tr>
</thead>
</table>

### Mathematical and Computer Sciences

#### Category 59 Mathematical and Computer Sciences (General)

<table>
<thead>
<tr>
<th>Reference</th>
<th>Authors</th>
<th>Title</th>
<th>Details</th>
</tr>
</thead>
</table>

http://shemesh.larc.nasa.gov/Lfm97/proceedings/

Organization DI RTOP 522-33-11


Organization DF RTOP 505-63-36


Organization DF RTOP 538-03-14


Organization DF RTOP 538-03-14

Category 60 Computer Operations and Hardware


Organization A RTOP 505-90-52


Organization A RTOP 505-90-52


Organization A RTOP 505-90-52


Organization A RTOP 505-90-52
ftp://ftp.icase.edu/pub/techreports/97/97-70.ps
Organization A          RTOP 505-90-52

Organization A          RTOP 505-90-52

Organization A          RTOP 505-90-52

Organization A          RTOP 505-90-52

Organization A          RTOP 505-90-52

Organization A          RTOP 505-90-52

ftp://ftp.icase.edu/pub/techreports/97/97-72
Organization A          RTOP 505-90-52
Organization A RTOP 505-90-52

Organization A RTOP 505-90-52

Organization A RTOP 505-90-52

Organization A RTOP 505-90-52

Organization A RTOP 505-90-52

Organization A RTOP 505-90-52

Organization A RTOP 505-90-52
Organization A RTOP 505-90-52

Organization A RTOP 505-90-52

Organization DI RTOP 522-14-21

Organization A RTOP 505-90-52

Organization A RTOP 505-90-52

Organization A RTOP 505-90-52

Organization A RTOP 505-90-52
Organization A RTOP 505-90-52

Category 61 Computer Programming and Software

Organization DI RTOP 505-64-50

Organization GM

Organization DI RTOP 522-33-11

Organization GM

Organization DI RTOP 519-50-11

Organization DF RTOP 509-10-11
Category 62 Computer Systems

Organization DI RTOP 522-14-21

Organization DI RTOP 538-01-14

Organization DI RTOP 519-30-31

Organization DI RTOP 522-14-21

Organization D RTOP 522-32-11

Organization D RTOP 522-32-11

Organization DI RTOP 519-30-31

Organization GL RTOP 258-70-21
Category 63 Cybernetics

Organization DC RTOP 274-00-97

Organization DC RTOP 505-64-52

Organization DC RTOP 522-33-11

Organization DC RTOP 505-64-52

Organization DI RTOP 274-00-96

Category 64 Numerical Analysis

Organization A RTOP 505-90-52

Organization A RTOP 505-90-52

Organization A RTOP 505-90-52

91
ftp://ftp.icase.edu/pub/techreports/97/97-57.ps
Organization A RTOP 505-90-52

Organization A RTOP 505-90-52

Organization A RTOP 505-90-52

ftp://ftp.icase.edu/pub/techreports/97/97-56.ps
Organization A RTOP 505-90-52

Organization A RTOP 505-90-52

ftp://ftp.icase.edu/pub/techreports/97/97-60.ps
Organization A RTOP 505-90-52

Organization A RTOP 505-90-52
Organization A RTOP 505-90-52

Organization A RTOP 505-90-52

Organization A RTOP 505-90-52

Organization A RTOP 505-90-52

Organization A RTOP 505-90-52

Organization A RTOP 505-90-52

Organization A RTOP 505-90-52


ftp://ftp.icase.edu/pub/techreports/97/97-34.ps


Organization A

Organization A

Organization A

Organization A

Organization A

94
Organization A RTOP 505-90-52

Organization A RTOP 505-90-52

Organization A RTOP 505-90-52

Organization A RTOP 505-90-52

Organization A RTOP 505-90-52

Organization A RTOP 505-90-52

Organization DA RTOP 242-80-01
Category 65 Statistics and Probability


Organization CB RTOP 906-43-00


Organization CB RTOP 906-43-00

Category 66 Systems Analysis


Organization CB RTOP 242-80-01

Physics

Category 70 Physics (General)


Organization DM RTOP 538-02-11


Organization DM RTOP 538-02-11


Organization DM RTOP 538-10-11


Organization DM RTOP 538-02-11
Organization DM
RTOP 538-02-11

Organization DM
RTOP 538-02-11

Category 71 Acoustics

Organization DF
RTOP 538-03-12

Organization DF
RTOP 538-03-12

Organization DF
RTOP 505-59-53

Organization DF
RTOP 505-59-53

Organization DF
RTOP 538-03-12

Organization DF
RTOP 505-63-50

97

Organization DF
RTOP 505-59-52


Organization DF
RTOP 505-59-52


Organization DF
RTOP 522-31-21


Organization DF
RTOP 581-20-21


Organization DF
RTOP 505-59-52


Organization DF
RTOP 505-59-52


Organization DF
RTOP 505-59-52


Organization DM
RTOP 522-13-21


Organization DM
RTOP 506-43-11

98


Organization DF
RTOP 522-31-21


Organization DF
RTOP 505-59-53


Organization DM
RTOP 522-32-11


Organization DF
RTOP 538-03-15


Organization KC
RTOP 538-03-12


Organization DF
RTOP 505-63-36


Organization DF
RTOP 538-07-14


Organization DF
RTOP 538-03-12


Organization GH
RTOP 537-02-22
Organization DF  
RTOP 538-03-12

Organization DF  
RTOP 538-03-12

Organization DF  
RTOP 581-20-31

Organization DF  
RTOP 538-07-15

Organization DF  
RTOP 538-03-14

Organization DF  
RTOP 538-03-14

Organization DF  
RTOP 505-63-50

Organization DF  
RTOP 505-63-50
<table>
<thead>
<tr>
<th>Number</th>
<th>Reference</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>3, p. 1109, SAE Paper No. 972011.</td>
</tr>
</tbody>
</table>
Organization DF RTOP 538-03-14

Organization DM RTOP 242-03-30

Organization DF RTOP 537-06-37

Organization DF RTOP 505-59-53

Organization DF RTOP 581-20-31

Organization DF RTOP 522-11-21

Organization DF RTOP 505-59-52

Organization DF RTOP 522-11-21

Organization DF RTOP 538-03-14

Organization DF RTOP 505-59-53


Organization DF RTOP 522-31-21


Organization DF RTOP 538-03-12


Organization DF RTOP 538-03-12


Organization DF RTOP 505-59-53


Organization DM RTOP 522-32-11


Organization DF RTOP 581-20-21


Organization GH RTOP 538-03-12
Category 72 Atomic and Molecular Physics

Organization DF RTOP 522-31-11

Organization CA RTOP 622-67-65

Organization CA RTOP 622-67-65

Organization CA RTOP 622-67-65

Organization CA RTOP 622-67-65

Organization CA RTOP 464-23-08

Organization CA RTOP 622-67-65

Organization DF RTOP 505-70-59


Organization DF RTOP 519-20-21


Organization CA RTOP 622-67-65


Organization CA RTOP 464-23-08


Organization CA RTOP 622-67-65


Organization DM RTOP 199-45-16

Category 73 Nuclear and High-Energy Physics


Organization DM RTOP 537-09-21


Organization DM RTOP 199-45-16
Category 74 Optics

   Organization GL  RTOP 297-50-00

   Organization DF  RTOP 505-59-54

Category 76 Solid-State Physics

   Organization GL  RTOP 548-10-31

   Organization GL  RTOP 548-10-31

   Organization GL  RTOP 258-70-21

   Organization GL  RTOP 233-20-21

   Organization GL  RTOP 258-70-21

   Organization GL  RTOP 233-20-21


110
Organization DM RTOP 632-20-21

Organization DM RTOP 233-01-01

Social Sciences

Category 81 Administration and Management

Organization CB RTOP 963-89-00

Organization CB RTOP 963-89-00

Organization E RTOP 243-10-01

Category 82 Documentation and Information Science

Organization GM
Organization AE

Organization AE

Organization AE

Organization GM

Organization GM

Organization GM

Organization GM

Organization GM
Organization GM

Organization GM

Organization AE RTOP 505-90

Organization AE RTOP 505-90

Organization AE RTOP 505-90

Organization AE RTOP 505-90

Organization AE RTOP 505-90

Organization AE RTOP 505-90
Organization GM

Organization AE RTOP 505-90

Space Sciences

Category 92 Solar Physics

Organization DM RTOP 199-45-16

Category 93 Space Radiation

Organization DM RTOP 199-45-16

Organization DM RTOP 199-45-16

Organization DM RTOP 199-45-16
Organization DM RTOP 199-45-16

Organization DM RTOP 199-45-16

Organization DM RTOP 199-45-16

Organization DM RTOP 199-45-16

Organization DM RTOP 199-45-16

General

Category 99 General

Organization DM RTOP 242-33-01

Organization DM RTOP 242-33-01
## Author Index

### A

<table>
<thead>
<tr>
<th>Author</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abbott, T. S.</td>
<td>72</td>
</tr>
<tr>
<td>Abedin, M. N.</td>
<td>493</td>
</tr>
<tr>
<td>Abel, I.</td>
<td>1, 2, 94, 95</td>
</tr>
<tr>
<td>Abu-Khajeel, H.</td>
<td>807</td>
</tr>
<tr>
<td>Adams, D. L.</td>
<td>886</td>
</tr>
<tr>
<td>Ade, P. A.</td>
<td>539</td>
</tr>
<tr>
<td>Ahmadi, G.</td>
<td>510</td>
</tr>
<tr>
<td>Ahuja, K. K.</td>
<td>765, 766</td>
</tr>
<tr>
<td>Akimoto, H.</td>
<td>546</td>
</tr>
<tr>
<td>Alberta, T. L.</td>
<td>604, 616, 621</td>
</tr>
<tr>
<td>Alderfer, D. W.</td>
<td>487</td>
</tr>
<tr>
<td>Aldridge, H. A.</td>
<td>369, 370, 371, 372, 375</td>
</tr>
<tr>
<td>Alexandrov, N.</td>
<td>41, 42, 725</td>
</tr>
<tr>
<td>Allan, B. G.</td>
<td>726</td>
</tr>
<tr>
<td>Alter, S. J.</td>
<td>11, 396</td>
</tr>
<tr>
<td>Ambur, D. R.</td>
<td>210, 211, 212, 235, 245, 268, 269, 511</td>
</tr>
<tr>
<td>Ambur, M. Y.</td>
<td>886</td>
</tr>
<tr>
<td>Amer, T. R.</td>
<td>487</td>
</tr>
<tr>
<td>Amundsen, R. M.</td>
<td>181</td>
</tr>
<tr>
<td>Anastasi, R. F.</td>
<td>213, 214</td>
</tr>
<tr>
<td>Anderson, B. E.</td>
<td>542, 543, 548</td>
</tr>
<tr>
<td>Anderson, C. J.</td>
<td>12, 887</td>
</tr>
<tr>
<td>Anderson, E. C.</td>
<td>407</td>
</tr>
<tr>
<td>Anderson, J.</td>
<td>602</td>
</tr>
<tr>
<td>Anderson, M. S.</td>
<td>246</td>
</tr>
<tr>
<td>Anderson, W. K.</td>
<td>13, 14, 727</td>
</tr>
<tr>
<td>Aneja, V. P.</td>
<td>549, 578</td>
</tr>
<tr>
<td>Anon.:</td>
<td>73, 74, 75, 76, 672, 673, 855</td>
</tr>
<tr>
<td>Antcliff, R. R.</td>
<td>840</td>
</tr>
<tr>
<td>Anthony, T. C.</td>
<td>203</td>
</tr>
<tr>
<td>Antill, C. W.</td>
<td>486</td>
</tr>
<tr>
<td>Applin, Z. T.</td>
<td>29</td>
</tr>
<tr>
<td>Arbaugh, J.</td>
<td>350</td>
</tr>
<tr>
<td>Arbuckle, P. D.</td>
<td>143</td>
</tr>
<tr>
<td>Arian, E.</td>
<td>728, 729</td>
</tr>
<tr>
<td>Asbury, S. C.</td>
<td>15</td>
</tr>
<tr>
<td>Atkins, H. L.</td>
<td>208, 767, 768</td>
</tr>
<tr>
<td>Atkinson, R. J.</td>
<td>579</td>
</tr>
<tr>
<td>Aurovillian, A.</td>
<td>730</td>
</tr>
<tr>
<td>Auslender, A. H.</td>
<td>367</td>
</tr>
<tr>
<td>Avery, D. E.</td>
<td>883, 884</td>
</tr>
<tr>
<td>Axelrad, P.</td>
<td>535, 756, 757</td>
</tr>
<tr>
<td>Ayers, J. K.</td>
<td>621, 634, 635, 641, 647</td>
</tr>
</tbody>
</table>

### B

<table>
<thead>
<tr>
<th>Author</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Babcock, D. A.</td>
<td>206</td>
</tr>
<tr>
<td>Babin, A.</td>
<td>397</td>
</tr>
<tr>
<td>Bacmeister, J. T.</td>
<td>591</td>
</tr>
<tr>
<td>Badavi, F. F.</td>
<td>852, 907, 909</td>
</tr>
<tr>
<td>Badhwar, G. D.</td>
<td>907</td>
</tr>
<tr>
<td>Bagwell, D. R.</td>
<td>542, 543</td>
</tr>
<tr>
<td>Bailey, M. C.</td>
<td>179, 180</td>
</tr>
<tr>
<td>Baker, D. J.</td>
<td>262</td>
</tr>
<tr>
<td>Bakos, R. J.</td>
<td>160</td>
</tr>
<tr>
<td>Balachandar, S.</td>
<td>413</td>
</tr>
<tr>
<td>Balas, G. J.</td>
<td>193</td>
</tr>
<tr>
<td>Balla, R. J.</td>
<td>847</td>
</tr>
<tr>
<td>Ballard, R. E.</td>
<td>668, 800</td>
</tr>
<tr>
<td>Banerjee, N. S.</td>
<td>731</td>
</tr>
<tr>
<td>Bar-Cohen, Y.</td>
<td>313</td>
</tr>
<tr>
<td>Barclay, R. O.</td>
<td>888, 897, 898, 899, 902</td>
</tr>
<tr>
<td>Barker, B. C.</td>
<td>85, 857, 858</td>
</tr>
<tr>
<td>Barker, H. W.</td>
<td>605</td>
</tr>
<tr>
<td>Barkstrom, B. R.</td>
<td>606, 615</td>
</tr>
<tr>
<td>Barnes, J. C.</td>
<td>859, 860, 872</td>
</tr>
<tr>
<td>Barnes, N. P.</td>
<td>859, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 874, 875, 876, 877, 878, 879</td>
</tr>
<tr>
<td>Bartels, R. E.</td>
<td>16</td>
</tr>
<tr>
<td>Bataille, F.</td>
<td>398</td>
</tr>
<tr>
<td>Bates, K.</td>
<td>347</td>
</tr>
<tr>
<td>Baty, R. S.</td>
<td>769</td>
</tr>
<tr>
<td>Baucke, R. C.</td>
<td>384</td>
</tr>
<tr>
<td>Baughcum, S. L.</td>
<td>548</td>
</tr>
<tr>
<td>Baugher, A. H.</td>
<td>314</td>
</tr>
<tr>
<td>Baugherman, J. A.</td>
<td>158, 159</td>
</tr>
<tr>
<td>Baum, B. A.</td>
<td>607, 608, 617, 638</td>
</tr>
<tr>
<td>Bavuso, S. J.</td>
<td>706</td>
</tr>
<tr>
<td>Bavikina, I.</td>
<td>100</td>
</tr>
<tr>
<td>Bayliss, A.</td>
<td>410, 770, 791, 792</td>
</tr>
<tr>
<td>Beaver, G. M.</td>
<td>566, 588</td>
</tr>
<tr>
<td>Beck, F. B.</td>
<td>175, 383, 386</td>
</tr>
<tr>
<td>Beer, R.</td>
<td>601</td>
</tr>
<tr>
<td>Belcastro, C. M.</td>
<td>712</td>
</tr>
<tr>
<td>Belvin, H. L.</td>
<td>332</td>
</tr>
<tr>
<td>Bement, L. J.</td>
<td>96, 182, 183, 276, 491</td>
</tr>
<tr>
<td>Bendura, R. J.</td>
<td>546</td>
</tr>
<tr>
<td>Benkner, S.</td>
<td>680</td>
</tr>
</tbody>
</table>
Benner, D. C.: 841, 842, 843, 844, 845, 846, 850, 851
Benson, S. V.: 485
Benton, E. V.: 909
Beran, P. S.: 125
Berry, J. D.: 97, 98, 99, 100, 103
Berry, S. A.: 17, 399, 400, 401, 405, 406, 433
Berry, V.: 262
Bertelrud, A.: 57
Bertin, J. J.: 401
Bertoglio, J-P.: 398
Bess, T. D.: 609, 610
Bettschart, N.: 98, 99
Bhatt, P. P.: 550, 567
Bianco, D. J.: 890
Bibb, K. L.: 18
Bichsel, H.: 852
Biedron, R. T.: 56
Bingham, J. G.: 186
Bird, R. K.: 278, 279
Bishop, A. P.: 898
Blackburn, C. L.: 495
Blackshire, J. L.: 475, 476, 477, 478, 479, 480
Blaisdell, G. A.: 447
Blake, D. R.: 545
Blanchard, A. E.: 19
Blanchard, R. C.: 20, 492
Blatherwick, R. D.: 590
Blosser, M. L.: 315
Blotter, J. D.: 484
Bodine, J. B.: 269
Bogan, S.: 215
Boggess, R. K.: 316, 352
Bokhari, S. H.: 681
Bonhaus, D. L.: 13
Boone, M. L.: 289
Boston, H. G.: 317
Boughner, R. E.: 555
Bouslog, S. A.: 17, 401
Bowers, A. H.: 456
Boyd, I. D.: 423
Brackett, V. G.: 534, 550
Bradshaw, J. D.: 544
Brandon, J. M.: 88, 144, 151, 152
Brauckmann, G. J.: 17, 49
Braun, R. D.: 48, 166, 168, 172, 173, 758
Brennan, M. C.: 101
Brentner, K. S.: 771, 772, 773, 774, 775, 776, 777, 785, 786, 789
Brewer, W. D.: 278, 279
Brieger, J. T.: 784
Briegleb, B.: 443
Brinberg, H. R.: 888
Brinson, L. C.: 230
Britt, C. L.: 85
Brockman, P.: 857, 871
Brooks, T. E.: 816, 838
Browell, E. V.: 544
Brown, M. C.: 822
Bruce, R. A.: 206
Buhl, C.: 551
Buchholz, P.: 682
Buchman, A.: 321
Buckley, J. D.: 321
Buckley, L. J.: 330
Bullock, A. M.: 552
Bullock, K. T.: 488
Buning, P. G.: 21
Burkett, C. G., Jr.: 469, 487
Burley, C. L.: 804, 812
Burn, M.: 3
Burner, A. W.: 462, 463, 466, 474
Burnham, D.: 858
Burns, J. A.: 732
Burnside, W. D.: 389
Bush, H. G.: 353, 504
Bush, L. B.: 885
Bushnell, D. M.: 77, 78, 402, 403
Buttrill, C. W.: 144

C

Cahoon, D. R., Jr.: 575, 576
Cai, Z.: 694
Calkins, F. T.: 733
Callis, L. B., Jr.: 553, 554, 555
Camarda, C. J.: 404
Campbell, C. H.: 405, 406, 433
Campbell, R. E.: 859
Campbell, R. L.: 31
Campbell, S. D.: 79
Campbell, T. G.: 387
<table>
<thead>
<tr>
<th>Name</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cano, R. J.</td>
<td>322</td>
</tr>
<tr>
<td>Cantrell, J. H., Jr.</td>
<td>667, 668, 671, 778, 779, 800, 837</td>
</tr>
<tr>
<td>Caplan, M. L.</td>
<td>356, 363</td>
</tr>
<tr>
<td>Caram, J. M.</td>
<td>17, 401, 405, 406</td>
</tr>
<tr>
<td>Carey, J.</td>
<td>3</td>
</tr>
<tr>
<td>Carli, B.</td>
<td>539</td>
</tr>
<tr>
<td>Carlson, A. B.</td>
<td>609, 611</td>
</tr>
<tr>
<td>Carlson, H. W.</td>
<td>102</td>
</tr>
<tr>
<td>Carlson, J. R.</td>
<td>22, 23</td>
</tr>
<tr>
<td>Carpenter, B. D.</td>
<td>80</td>
</tr>
<tr>
<td>Carpenter, M. H.</td>
<td>38, 452</td>
</tr>
<tr>
<td>Carzoo, S. W.</td>
<td>110</td>
</tr>
<tr>
<td>Cassidy, P. E.</td>
<td>317, 350</td>
</tr>
<tr>
<td>Castillo, V. K.</td>
<td>867</td>
</tr>
<tr>
<td>Castrogiovanni, A.</td>
<td>160</td>
</tr>
<tr>
<td>Cebe, P.</td>
<td>351</td>
</tr>
<tr>
<td>Chadwick, K.</td>
<td>407</td>
</tr>
<tr>
<td>Chaffin, M. S.</td>
<td>100, 103</td>
</tr>
<tr>
<td>Chambers, L. H.</td>
<td>612, 613, 614, 615</td>
</tr>
<tr>
<td>Chan, K. R.</td>
<td>548</td>
</tr>
<tr>
<td>Chang, A. C.</td>
<td>323, 342, 343</td>
</tr>
<tr>
<td>Chang, C. K.</td>
<td>669</td>
</tr>
<tr>
<td>Chang, H-C.</td>
<td>734</td>
</tr>
<tr>
<td>Chapman, B.</td>
<td>683</td>
</tr>
<tr>
<td>Chapman, J. J.</td>
<td>533</td>
</tr>
<tr>
<td>Charlock, T. P.</td>
<td>604, 616, 617, 645, 646</td>
</tr>
<tr>
<td>Cheatwood, F. M.</td>
<td>48, 49, 167, 172, 444, 458</td>
</tr>
<tr>
<td>Chen, F-J.</td>
<td>24</td>
</tr>
<tr>
<td>Childers, B. A.</td>
<td>915</td>
</tr>
<tr>
<td>Chin, D. K.</td>
<td>81</td>
</tr>
<tr>
<td>Chiou, E-W.</td>
<td>556</td>
</tr>
<tr>
<td>Chiueh, T-C.</td>
<td>684</td>
</tr>
<tr>
<td>Choi, S. H.</td>
<td>135, 481</td>
</tr>
<tr>
<td>Chokani, N.</td>
<td>27, 45</td>
</tr>
<tr>
<td>Chow, P. L.</td>
<td>780</td>
</tr>
<tr>
<td>Chu, H.</td>
<td>522</td>
</tr>
<tr>
<td>Chu, J.</td>
<td>102</td>
</tr>
<tr>
<td>Chu, W. P.</td>
<td>552, 556, 557</td>
</tr>
<tr>
<td>Chuang, C. W.</td>
<td>389</td>
</tr>
<tr>
<td>Ciardo, G.</td>
<td>682, 685, 686, 687</td>
</tr>
<tr>
<td>Clark, L. R.</td>
<td>781, 834, 835</td>
</tr>
<tr>
<td>Clark, R. L.</td>
<td>496</td>
</tr>
<tr>
<td>Claude, H.</td>
<td>551</td>
</tr>
<tr>
<td>Clendenin, C. G.</td>
<td>304</td>
</tr>
<tr>
<td>Cler, D. L.</td>
<td>25</td>
</tr>
<tr>
<td>Coats, T. W.</td>
<td>216</td>
</tr>
<tr>
<td>Cockburn, B.</td>
<td>735, 736</td>
</tr>
<tr>
<td>Cockrell, C. E., Jr.</td>
<td>26</td>
</tr>
<tr>
<td>Cockrell, C. R.</td>
<td>175, 383, 386</td>
</tr>
<tr>
<td>Cofer, W. R., III</td>
<td>542, 543, 575, 576</td>
</tr>
<tr>
<td>Cole, S. R.</td>
<td>104</td>
</tr>
<tr>
<td>Coleman, L. H.</td>
<td>617, 618</td>
</tr>
<tr>
<td>Collins, J. E., Jr.</td>
<td>548</td>
</tr>
<tr>
<td>Collis, S. S.</td>
<td>408</td>
</tr>
<tr>
<td>Connell, J. W.</td>
<td>324, 325, 326, 327, 334, 355, 782, 783</td>
</tr>
<tr>
<td>Conner, D. A.</td>
<td>784, 827</td>
</tr>
<tr>
<td>Connors, V. S.</td>
<td>558</td>
</tr>
<tr>
<td>Considine, G. D.</td>
<td>559, 560, 561</td>
</tr>
<tr>
<td>Conway, E. J.</td>
<td>481</td>
</tr>
<tr>
<td>Cook, A. L.</td>
<td>482</td>
</tr>
<tr>
<td>Cook, G. M.</td>
<td>497</td>
</tr>
<tr>
<td>Cooper, B. A.</td>
<td>384</td>
</tr>
<tr>
<td>Cooper, J. B.</td>
<td>328</td>
</tr>
<tr>
<td>Costen, R. C.</td>
<td>329, 619</td>
</tr>
<tr>
<td>Costulis, J. A.</td>
<td>860</td>
</tr>
<tr>
<td>Cox, B. N.</td>
<td>217</td>
</tr>
<tr>
<td>Cox, D. E.</td>
<td>187, 193, 496</td>
</tr>
<tr>
<td>Cox, J. S.</td>
<td>785, 786</td>
</tr>
<tr>
<td>Cramer, K. E.</td>
<td>759, 760, 764</td>
</tr>
<tr>
<td>Cravey, R. L.</td>
<td>82, 91, 176, 376, 388</td>
</tr>
<tr>
<td>Crawford, J. L.</td>
<td>53, 108</td>
</tr>
<tr>
<td>Credeur, L.</td>
<td>83</td>
</tr>
<tr>
<td>Crockett, T. W.</td>
<td>681, 699</td>
</tr>
<tr>
<td>Crookston, J. R.</td>
<td>186</td>
</tr>
<tr>
<td>Crottzen, P. J.</td>
<td>551, 568, 584</td>
</tr>
<tr>
<td>Curry, J. A.</td>
<td>560, 561</td>
</tr>
<tr>
<td>Curry, T. J.</td>
<td>151</td>
</tr>
<tr>
<td>Cutler, A. D.</td>
<td>141</td>
</tr>
<tr>
<td>Cvitkovich, M. K.</td>
<td>218, 219</td>
</tr>
<tr>
<td>Czech, J.</td>
<td>3</td>
</tr>
</tbody>
</table>

**D**

<table>
<thead>
<tr>
<th>Name</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dambach, M. L.</td>
<td>489, 490</td>
</tr>
<tr>
<td>Dasey, T. J.</td>
<td>79</td>
</tr>
<tr>
<td>Dash, S. M.</td>
<td>830</td>
</tr>
<tr>
<td>Daugherty, R. H.</td>
<td>105</td>
</tr>
<tr>
<td>Dausch, D. E.</td>
<td>881</td>
</tr>
<tr>
<td>Davidson, M. R.</td>
<td>297</td>
</tr>
<tr>
<td>Davidson, P. C.</td>
<td>485</td>
</tr>
</tbody>
</table>
Davies, C. B.: 433
Davila, C. G.: 212, 532
Davis, D. D., Jr.: 546
Davis, J. G., Jr.: 220
Davis, P. A.: 106
Davis, R. E.: 483
Davis, W. T.: 171
Dawicke, D. S.: 280, 281, 282, 283, 289, 290, 291
De Young, R. J.: 488, 562, 563
DeCoursey, R. J.: 603
Debnam, W. J., Jr.: 368
Del Rosario, R. C.: 737, 738
Delany, A. C.: 564
Delicano, R. C.: 737, 738
Dennis, J. E., Jr.: 725
Desai, P. N.: 166, 167
Deshler, T.: 581, 593
Deshpande, M. D.: 177, 178, 179, 376, 380, 381, 382, 383, 386
Devezeaux, D.: 439
Devi, V. M.: 841, 842, 843, 844, 845, 846, 850, 851
Dexter, H. B.: 222, 261
Dharamsi, A. N.: 552
Diffulvio, M.: 405
Dipasquale, R. C.: 620
Dibb, J. E.: 544
Dicello, J. F.: 662, 664, 665
Dodds, R. H., Jr.: 295
Doelling, D. R.: 621, 635, 636, 658
Doggett, G. P.: 27
Domack, M. S.: 298
Dominik, C. J.: 46
Donald, J. K.: 284
Donatelli, S.: 682
Dopker, B.: 269
Dougherty, R. P.: 781
Dow, M. B.: 222
Drayson, S. R.: 551
Drummond, J. P.: 44, 136, 137, 142, 452
Dubey, R. R.: 906, 914
Duck, P. W.: 409
Dudley, K. L.: 393
Duerksen, N.: 145
Dunn, H. J.: 41, 42
Dunn, M. H.: 787
Durham, M. H.: 126, 127
Dutson, J. D.: 186
Dyer, J.: 223, 272
Dyer, J. E.: 288
Eashoo, M.: 330
Ebeling, C. E.: 171
Eck, T. F.: 547
Edahl, R. A.: 285
Edgington, J. M.: 698
Edwards, B. D.: 784
Edwards, J. W.: 16, 107
Edwards, T.: 142
Edwards, W. C.: 859
Eklund, D. R.: 138
Elber, W.: 224
Eldred, C. H.: 169
Ellis, K. S.: 562
Engelund, W. C.: 51, 166
Erdos, J. I.: 160
Erlebacher, G.: 37
Ertur, E.: 859, 865
Esler, S. L.: 892, 894
Espe, M.: 314
Espy, P. J.: 582
Eure, K. W.: 788
Evans, D. S.: 554
Evans, K. F.: 539, 612, 613, 614
Everett, R. A., Jr.: 224
Ewing, J. J.: 872
Fairlie, T. D.: 565, 569, 584
Farassat, F.: 769, 775, 781, 789, 790, 834, 835
Farley, G. L.: 225, 226, 227
Farokhi, S.: 25
Fay, C. C.: 362
Fears, S. P.: 110
Feldl, E. K.: 627, 647
Fenno, C. C., Jr.: 410, 791, 792
Ferebee, M. J., Jr.: 184, 185
<table>
<thead>
<tr>
<th>Name</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groom, N. J.</td>
<td>373, 374</td>
</tr>
<tr>
<td>Grooss, J. U.</td>
<td>568, 584</td>
</tr>
<tr>
<td>Grosch, C. E.</td>
<td>693</td>
</tr>
<tr>
<td>Grose, W. L.</td>
<td>565, 568, 569, 584</td>
</tr>
<tr>
<td>Guattery, S.</td>
<td>688, 739</td>
</tr>
<tr>
<td>Gunzburger, M. D.</td>
<td>37</td>
</tr>
<tr>
<td>Gupta, I. J.</td>
<td>389</td>
</tr>
<tr>
<td>Gupta, R. N.</td>
<td>417</td>
</tr>
<tr>
<td>Gupta, S.</td>
<td>196, 618</td>
</tr>
<tr>
<td>Gupta, S. K.</td>
<td>623, 656</td>
</tr>
<tr>
<td>Gurda, Z.</td>
<td>519</td>
</tr>
<tr>
<td>Hadid, A. H.</td>
<td>41, 42</td>
</tr>
<tr>
<td>Haering, E. A., Jr.</td>
<td>456</td>
</tr>
<tr>
<td>Hafley, R. A.</td>
<td>287</td>
</tr>
<tr>
<td>Hahn, D. E.</td>
<td>150</td>
</tr>
<tr>
<td>Haimovitch, Y.</td>
<td>418</td>
</tr>
<tr>
<td>Haines, M.</td>
<td>683, 689</td>
</tr>
<tr>
<td>Halama, G. E.</td>
<td>465, 562</td>
</tr>
<tr>
<td>Hales, S. J.</td>
<td>287</td>
</tr>
<tr>
<td>Haley, P. J.</td>
<td>720, 724</td>
</tr>
<tr>
<td>Hall, I. K.</td>
<td>288</td>
</tr>
<tr>
<td>Hall, S. G.</td>
<td>6</td>
</tr>
<tr>
<td>Hamilton, H. H., II</td>
<td>416, 455</td>
</tr>
<tr>
<td>Hammond, D. P.</td>
<td>707</td>
</tr>
<tr>
<td>Hamner, M.</td>
<td>52, 161</td>
</tr>
<tr>
<td>Han, J.</td>
<td>87</td>
</tr>
<tr>
<td>Hannemann, K.</td>
<td>5</td>
</tr>
<tr>
<td>Hansen, J.</td>
<td>624</td>
</tr>
<tr>
<td>Hansen, M. G.</td>
<td>349</td>
</tr>
<tr>
<td>Hardin, J. C.</td>
<td>798, 799, 833</td>
</tr>
<tr>
<td>Hardy, R. C.</td>
<td>881</td>
</tr>
<tr>
<td>Hargens, A. R.</td>
<td>668, 800</td>
</tr>
<tr>
<td>Harmon, D.</td>
<td>231</td>
</tr>
<tr>
<td>Harris, C. E.</td>
<td>109, 216, 233, 253</td>
</tr>
<tr>
<td>Harrison, E. F.</td>
<td>657</td>
</tr>
<tr>
<td>Hart, R. C.</td>
<td>847</td>
</tr>
<tr>
<td>Hartley, P. J.</td>
<td>306</td>
</tr>
<tr>
<td>Harvey, J. K.</td>
<td>423</td>
</tr>
<tr>
<td>Hass, D. D.</td>
<td>419</td>
</tr>
<tr>
<td>Hassan, H. A.</td>
<td>440</td>
</tr>
<tr>
<td>Havens, S. J.</td>
<td>333</td>
</tr>
<tr>
<td>Hawkins, R.</td>
<td>50</td>
</tr>
<tr>
<td>Hayder, M. E.</td>
<td>208, 420, 690</td>
</tr>
<tr>
<td>Hayhurst, K. J.</td>
<td>676</td>
</tr>
<tr>
<td>Hays, P. B.</td>
<td>589</td>
</tr>
<tr>
<td>Hazlewood, R. N.</td>
<td>25</td>
</tr>
<tr>
<td>Hearn, C. P.</td>
<td>390</td>
</tr>
<tr>
<td>Heck, M. L.</td>
<td>170</td>
</tr>
<tr>
<td>Heck, P. W.</td>
<td>638, 640, 642</td>
</tr>
<tr>
<td>Heinrichs, R. M.</td>
<td>79</td>
</tr>
<tr>
<td>Hellbaum, R. F.</td>
<td>421</td>
</tr>
<tr>
<td>Helm, J. D.</td>
<td>289, 290, 302</td>
</tr>
<tr>
<td>Helmetsie, C. L.</td>
<td>891</td>
</tr>
<tr>
<td>Hemm, R. V.</td>
<td>7</td>
</tr>
<tr>
<td>Hendricks, H. D.</td>
<td>482</td>
</tr>
<tr>
<td>Hergenrother, P. M.</td>
<td>324, 325, 326, 327, 333, 334, 335, 355, 782, 783</td>
</tr>
<tr>
<td>Herman, G. S.</td>
<td>570</td>
</tr>
<tr>
<td>Herring, G. C.</td>
<td>847, 856</td>
</tr>
<tr>
<td>Hesthaven, J. S.</td>
<td>422, 740</td>
</tr>
<tr>
<td>Heyman, J. S.</td>
<td>493</td>
</tr>
<tr>
<td>Hillard, M. E., Jr.</td>
<td>856</td>
</tr>
<tr>
<td>Hinders, M. K.</td>
<td>213, 214</td>
</tr>
<tr>
<td>Hinkley, J. A.</td>
<td>228, 234, 265, 336, 337</td>
</tr>
<tr>
<td>Hinton, D. A.</td>
<td>86, 87</td>
</tr>
<tr>
<td>Hinton, P. O.</td>
<td>622</td>
</tr>
<tr>
<td>Hintsa, E.</td>
<td>585</td>
</tr>
<tr>
<td>Hoadley, S. T.</td>
<td>126, 127</td>
</tr>
<tr>
<td>Hodge, J. S.</td>
<td>139</td>
</tr>
<tr>
<td>Hoell, J. M., Jr.</td>
<td>546</td>
</tr>
<tr>
<td>Hoffler, K. D.</td>
<td>110</td>
</tr>
<tr>
<td>Holben, B. N.</td>
<td>547</td>
</tr>
<tr>
<td>Holden, M. S.</td>
<td>407, 423, 439</td>
</tr>
<tr>
<td>Holland, P. C.</td>
<td>776</td>
</tr>
<tr>
<td>Holloway, C. M.</td>
<td>676, 708</td>
</tr>
<tr>
<td>Holmes, B. J.</td>
<td>4</td>
</tr>
<tr>
<td>Holmes, C.</td>
<td>491</td>
</tr>
<tr>
<td>Holt, H. M.</td>
<td>713</td>
</tr>
<tr>
<td>Holt, M.</td>
<td>726</td>
</tr>
<tr>
<td>Hom, K. W.</td>
<td>377, 384</td>
</tr>
<tr>
<td>Hooker, J. R.</td>
<td>466</td>
</tr>
<tr>
<td>Hooker, M. W.</td>
<td>873, 882</td>
</tr>
<tr>
<td>Horonjeff, R. D.</td>
<td>801</td>
</tr>
<tr>
<td>Horta, L. G.</td>
<td>510</td>
</tr>
<tr>
<td>Horton, G.</td>
<td>41</td>
</tr>
<tr>
<td>Horvath, T. J.</td>
<td>5, 399, 405, 406, 423, 424, 433, 439, 440</td>
</tr>
<tr>
<td>Hou, T-H.</td>
<td>338, 339, 340</td>
</tr>
<tr>
<td>Houser, S. A.</td>
<td>6</td>
</tr>
<tr>
<td>Housner, J. M.</td>
<td>502</td>
</tr>
<tr>
<td>Howard, T. P.</td>
<td>883, 884</td>
</tr>
<tr>
<td>Howe, R. R.</td>
<td>821</td>
</tr>
</tbody>
</table>
Howell, C. T., III: 464
Hsiao, M-H.: 187
Hu, F. Q.: 420
Hu, Y.: 625
Huai, X.: 32, 425
Huang, J-K.: 187
Huebner, L. D.: 139
Humphreys, W. M., Jr.: 816
Hunt, J. L.: 33, 34
Hunter, W. W., Jr.: 816
Hussaini, M. Y.: 37, 409, 420
Hutcheson, R. L.: 865, 868, 874
Huttsell, L. J.: 125

I
Inman, D. J.: 701
Interrante, V.: 691, 692, 693
Ivanov, M.: 439

J
Jackson, K. E.: 236, 503
Jacobs, J. A.: 207
Jager, H.: 580
Jaghaighi, A. J.: 469
Jalink, A., Jr.: 421
Jambor, B.: 915
James, G. H., III: 199, 518
James, M. A.: 253, 291
Jameson, A.: 426
Jameson, L.: 740
Jani, M. G.: 866, 874, 875, 876
Jansen, B. J.: 830
Jarnot, R.: 529
Jaunky, N.: 235
Javeed, M. A.: 202
Jegley, D. C.: 504
Jobson, D. J.: 467, 471
Joffe, B.: 313
Johnson, A. F.: 236
Johnson, A. R.: 113, 489, 490
Johnson, J. P.: 10
Johnson, S. D.: 714
Johnston, P. H.: 242, 764
Johnston, W.: 229, 286
Jones, F. P.: 802
Jones, H. E.: 803, 804
Jones, J. E.: 694, 695
Jones, K. M.: 29
Jones, M. G.: 805
Jones, N. B.: 590
Jones, R. L., III: 483
Jones, S. M.: 375
Jones, T. D.: 669, 914
Jongen, T.: 427, 428, 429
Joppa, P. D.: 806
Jordan, F. L., Jr.: 144
Jordan, W.: 906, 914
Joshi, S. M.: 188, 721, 722, 723
Joslin, R. D.: 32, 35, 36, 37, 425, 430

K
Kalkhoran, I.: 131
Kallemeyn, P. H.: 173
Kaneko, H.: 742
Kangro, U.: 743
Kaplan, B. J.: 6
Kaplan, J. A.: 709
Kasdin, N. J.: 756, 757
Kaszubowski, M. J.: 883, 884
Katz, R.: 666
Katzberg, S. J.: 464
Kaushik, D. K.: 696
Kearney, M. E.: 883
Kelble, C. A.: 161
Kelly, J. J.: 807, 819
Kelly, K. K.: 587
Kemper, P.: 682
Kenakowski, D.: 830
Kennedy, C. A.: 38
Kennedy, J. M.: 897, 898, 902
Kenner, W. S.: 345
Kenney, P. S.: 709
Kenny, S. P.: 197
Kent, B. M.: 389
Kent, G. S.: 592, 651
Keyes, D. E.: 690, 696
Kiefer, R. L.: 237
Kiehl, J. T.: 443
Killough, B. D., Jr.: 431
Kim, M. Y.: 237, 905, 906, 912, 914
Kincaid, R. K.: 677, 678
Kindervater, C.: 236
King, B. B.: 732
Kizer, E. A.: 618
Klausmeyer, S. M.: 39
Kleb, W. L.: 40
Klein, V.: 117, 151
Kloeppep, P. K.: 485
Knight, N. F., Jr.: 235, 345, 508, 523
Ko, M. K.: 594, 603
Koch, G. J.: 85, 378, 857
Koch, M. R.: 536
Kogan, M. N.: 432
Kokta, M. R.: 876
Konradi, A.: 913
Koppen, D. M.: 715
Korte, J. J.: 41, 42, 43, 407
Kosmatka, J. B.: 123
Kostiuk, P. F.: 7
Kotler, M. L.: 899
Koutsavdis, E. K.: 777
Krato, D. P.: 626
Krishnamurthy, R.: 140
Kroo, I. M.: 168
Krueger, A. J.: 537
Kuchar, J. K.: 80
Kumar, A.: 44
Kumar, R. R.: 170
Kumft, G.: 697
Kvaternik, R. G.: 120, 121
Kwan, H. W.: 808

L

Laba, K. E.: 677
Lach, C. L.: 209, 288
Lachowicz, J. T.: 19, 45
Lake, M. S.: 509
Lamb, M.: 25
Lambeth, J. D.: 554, 555
Lan, C. E.: 152
Langston, C. W.: 132
Larman, K. T.: 627, 647
Laruelle, G.: 33
Lasseigne, D. G.: 409

Lawrence, R. W.: 395
Lay, R.: 205, 529
LeBeau, G. J.: 415, 492
LeCroy, S. R.: 627, 628, 629, 654
Lee, D. A.: 6, 7
Lee, E. W.: 238
Lee, J. H.: 481
Lee, R. B., III: 630, 631
Lee, S. M.: 238, 240
Lee-Glauser, G. J.: 510
Leighton, T.: 688
Leighty, B. D.: 469
Lepsh, R. A., Jr.: 758
Leznikov, V.: 100
Leutenegger, S. T.: 698
Levine, J. S.: 571, 572, 573, 574, 575, 576, 577, 578
Lewis, K.: 111
Lewis, R. M.: 725, 744, 745
Li, J.: 238, 239, 240, 241
Liceaga, C. A.: 189, 190
Liechty, D. S.: 509
Lih, S.-S.: 313
Lim, K. B.: 112, 191, 192, 193, 194, 203
Lin, B.: 632
Lin, G.-F.: 152
Lin, J. C.: 39, 46
Lin, Y.-L.: 87
Lindsay, D.: 262
Lingenfelser, G. S.: 565, 569, 584
Little, A. D.: 537
Liu, H.: 465
Liu, S. C.: 546
Liu, T.: 463
Lockard, G. E.: 877, 878, 879
Loncaric, J.: 746
Long, M.: 321
Loomis, M. P.: 406, 433
Lopez, M. A.: 698
Lotts, C. G.: 495
Lowther, S. E.: 343
Lui, J.: 579, 580, 602
Lucas, M. J.: 809, 810
Luck, W. S.: 562
Lyle, K. H.: 811, 812
Lyrintzis, A. S.: 777
Lytle, C. D.: 378
<table>
<thead>
<tr>
<th>Name</th>
<th>Pages References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remsberg, E. E.</td>
<td>550, 566, 567, 585, 588</td>
</tr>
<tr>
<td>Retina, N.</td>
<td>6</td>
</tr>
<tr>
<td>Reubush, D. E.</td>
<td>108</td>
</tr>
<tr>
<td>Rhodes, M. D.</td>
<td>223, 272</td>
</tr>
<tr>
<td>Rich, D. C.</td>
<td>351</td>
</tr>
<tr>
<td>Riddell, W. T.</td>
<td>301, 302</td>
</tr>
<tr>
<td>Riggs, H. R.</td>
<td>522</td>
</tr>
<tr>
<td>Riley, C. J.</td>
<td>18, 444, 455, 458</td>
</tr>
<tr>
<td>Rinsland, C. P.</td>
<td>590, 601, 841, 842, 843, 844, 845, 846, 850, 851</td>
</tr>
<tr>
<td>Ristorcelli, J. R.</td>
<td>414, 445, 446, 447</td>
</tr>
<tr>
<td>Ritchey, N. A.</td>
<td>644, 656</td>
</tr>
<tr>
<td>Ritter, P.</td>
<td>9</td>
</tr>
<tr>
<td>Rivera, J. A., Jr.</td>
<td>104</td>
</tr>
<tr>
<td>Rivers, R. A.</td>
<td>88</td>
</tr>
<tr>
<td>Rizzi, S. A.</td>
<td>818, 825</td>
</tr>
<tr>
<td>Roback, V. E.</td>
<td>399</td>
</tr>
<tr>
<td>Robarge, W. P.</td>
<td>578</td>
</tr>
<tr>
<td>Robbins, J. L.</td>
<td>618</td>
</tr>
<tr>
<td>Robert, W. E.</td>
<td>801</td>
</tr>
<tr>
<td>Roberts, A. S., Jr.</td>
<td>418</td>
</tr>
<tr>
<td>Roberts, E.</td>
<td>8, 9</td>
</tr>
<tr>
<td>Roberts, T. W.</td>
<td>92, 826</td>
</tr>
<tr>
<td>Roche, A. E.</td>
<td>589</td>
</tr>
<tr>
<td>Rodgers, W. G., Jr.</td>
<td>89, 661</td>
</tr>
<tr>
<td>Rodriguez, J. M.</td>
<td>594, 603</td>
</tr>
<tr>
<td>Rodriguez, W. J.</td>
<td>869, 874</td>
</tr>
<tr>
<td>Roe, K. P.</td>
<td>701</td>
</tr>
<tr>
<td>Roell, M. M.</td>
<td>541</td>
</tr>
<tr>
<td>Rogers, J. L.</td>
<td>54, 711</td>
</tr>
<tr>
<td>Rogers, R. C.</td>
<td>140, 160</td>
</tr>
<tr>
<td>Rohrbach, W. W.</td>
<td>421</td>
</tr>
<tr>
<td>Rombado, G.</td>
<td>531</td>
</tr>
<tr>
<td>Rommel, M.</td>
<td>334</td>
</tr>
<tr>
<td>Rosch, W. R.</td>
<td>368</td>
</tr>
<tr>
<td>Rose, C. A.</td>
<td>524, 525, 526, 532</td>
</tr>
<tr>
<td>Rose, F. G.</td>
<td>617, 645</td>
</tr>
<tr>
<td>Rosenlof, K. H.</td>
<td>587</td>
</tr>
<tr>
<td>Rosolovsky, J.</td>
<td>352</td>
</tr>
<tr>
<td>Ross, H. M.</td>
<td>55</td>
</tr>
<tr>
<td>Rouse, M.</td>
<td>210, 268, 269</td>
</tr>
<tr>
<td>Rousseau, C. Q.</td>
<td>241, 247, 248</td>
</tr>
<tr>
<td>Rowe, G. S.</td>
<td>79</td>
</tr>
<tr>
<td>Rowell, E. A.</td>
<td>186</td>
</tr>
<tr>
<td>Rubinstein, R.</td>
<td>448, 449</td>
</tr>
<tr>
<td>Rubira, A. F.</td>
<td>352</td>
</tr>
<tr>
<td>Rudis, R.</td>
<td>858</td>
</tr>
<tr>
<td>Rummler, D. R.</td>
<td>404</td>
</tr>
<tr>
<td>Rumsey, C. L.</td>
<td>56, 57, 450, 785, 786</td>
</tr>
<tr>
<td>Rushby, J.</td>
<td>718</td>
</tr>
<tr>
<td>Russell, J. W.</td>
<td>202</td>
</tr>
<tr>
<td>Russell, T. F.</td>
<td>694</td>
</tr>
<tr>
<td>Rutan, D.</td>
<td>610, 617, 645, 646, 656</td>
</tr>
<tr>
<td>Ryabene'kii, V. S.</td>
<td>58, 748</td>
</tr>
</tbody>
</table>

**S**

<table>
<thead>
<tr>
<th>Name</th>
<th>Pages References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sachse, G. W.</td>
<td>537, 545, 548</td>
</tr>
<tr>
<td>Salas, A. O.</td>
<td>41, 42, 711</td>
</tr>
<tr>
<td>Salas, M. D.</td>
<td>387, 729</td>
</tr>
<tr>
<td>Sandford, S. P.</td>
<td>486, 488, 536, 562, 570</td>
</tr>
<tr>
<td>Sandholmen, S. T.</td>
<td>544</td>
</tr>
<tr>
<td>Sankaran, S. N.</td>
<td>232</td>
</tr>
<tr>
<td>Sansano, A. M.</td>
<td>703</td>
</tr>
<tr>
<td>Santa Maria, O. L.</td>
<td>827</td>
</tr>
<tr>
<td>Sarghini, F.</td>
<td>472</td>
</tr>
<tr>
<td>Sarkar, S.</td>
<td>442</td>
</tr>
<tr>
<td>Sato, Y.</td>
<td>901, 902</td>
</tr>
<tr>
<td>Sawyer, J. W.</td>
<td>353</td>
</tr>
<tr>
<td>Saxena, V. K.</td>
<td>602</td>
</tr>
<tr>
<td>Schaefer, J.</td>
<td>314</td>
</tr>
<tr>
<td>Scherner, M. J.</td>
<td>395</td>
</tr>
<tr>
<td>Scheuer, E.</td>
<td>544</td>
</tr>
<tr>
<td>Schimmel, M. L.</td>
<td>491</td>
</tr>
<tr>
<td>Schmidlin, F. J.</td>
<td>582</td>
</tr>
<tr>
<td>Schneider, T. L.</td>
<td>340</td>
</tr>
<tr>
<td>Schoebel, M.</td>
<td>589</td>
</tr>
<tr>
<td>Schowalter, D. G.</td>
<td>87</td>
</tr>
<tr>
<td>Schuster, D. M.</td>
<td>125</td>
</tr>
<tr>
<td>Schuster, G. L.</td>
<td>627, 647</td>
</tr>
<tr>
<td>Schutte, P. C.</td>
<td>133, 134</td>
</tr>
<tr>
<td>Schwab, R. W.</td>
<td>93</td>
</tr>
<tr>
<td>Scott, C. J.</td>
<td>594</td>
</tr>
<tr>
<td>Scott, M. A.</td>
<td>411</td>
</tr>
<tr>
<td>Scott, R. C.</td>
<td>126, 127</td>
</tr>
<tr>
<td>Scotti, S. J.</td>
<td>135</td>
</tr>
<tr>
<td>Seale, M. D.</td>
<td>824</td>
</tr>
<tr>
<td>Sealey, B. S.</td>
<td>469, 487</td>
</tr>
<tr>
<td>Segal, C.</td>
<td>367</td>
</tr>
<tr>
<td>Seiner, J. M.</td>
<td>822, 828, 829, 830</td>
</tr>
<tr>
<td>Seshadri, B. R.</td>
<td>270, 303</td>
</tr>
<tr>
<td>Settle, T. B.</td>
<td>120, 121</td>
</tr>
<tr>
<td>Seywald, H.</td>
<td>203</td>
</tr>
</tbody>
</table>
Summers, M. E.: 591
Sun, K. J.: 493
Sun, X-H.: 752
Sutherland, L. C.: 806
Sutter, T. R.: 353
Suttles, J. T.: 629
Sutton, M. A.: 289, 290, 302
Swain, M. H.: 296
Swanson, R. C., Jr.: 59, 92, 753, 826, 832
Swenson, D. V.: 291
Sze, N. D.: 594, 603

Taghavi, R. R.: 25
Tai, H.: 670, 852, 905
Talay, T. A.: 169
Talbot, R. W.: 544
Talcott, N. A., Jr.: 384
Tam, C. K.: 833
Tang, T.: 81
Tanner, J. A.: 113
Tanner, S. E.: 836
Tapia, M. A.: 719
Tartabini, P. V.: 166
Tawari, S. N.: 140
Taylor, L. T.: 316, 352
Tcheng, P.: 474
Tessler, A.: 489, 490, 522
Thibeault, S. A.: 237, 905, 912
Thomas, G. E.: 581
Thomas, J. L.: 56
Thomas, R. H.: 781, 834, 835
Thomason, L. W.: 586, 592, 593
Thompson, D. S.: 356, 357, 358, 359, 360
Thompson, D. W.: 356, 357, 358, 359, 360, 361, 363
Thompson, R. E.: 567
Thornton, T. A.: 360
Tiemsin, P. I.: 376, 388
Tilgner, M.: 687
Tindell, R. H.: 131
Tishkoff, J. M.: 142
Titlow, J.: 608
Todhunter, R. G.: 304, 305
Tocron, V.: 725, 754
Tovinkere, V.: 608
Towell, T. W.: 344

Townsend, L. W.: 853, 854, 908
Tracy, M. B.: 60
Trepte, C. R.: 592, 600
Trinidad, P. P.: 886
Tripathi, R. K.: 854, 910, 911
Tripp, J. S.: 474
Trivedi, K. S.: 686, 704
Trosset, M. W.: 754
Troutman, P. A.: 170, 185, 190
Trujillo, A. C.: 153
Tsou, H. T.: 257
Tsynkov, S. V.: 58, 61, 62
Tuck, A. F.: 587
Tucker, J. H.: 719
Turkel, E.: 59, 753, 832
Turner, T. L.: 825
Twohy, C. H.: 548

U

Ueng, S-K.: 705
Ueno, T.: 668, 800
Unal, R.: 758
Upchurch, B. T.: 469, 487
Ustinov, M. V.: 432

V

Vahala, G.: 461
Valero, F. P.: 621
Valla, R.: 466
Van Rosendale, J.: 680, 683
Vassey, F. S.: 385
Vatsa, V. N.: 62
Vaughan, R. M.: 173
Vaughn, M. R.: 769
Vaughn, T. P.: 288, 306
Vaughn, W. L.: 257
Vay, S. A.: 548
Vazquez, S. L.: 375
Veazie, D. R.: 230, 274
Venkat, V. S.: 232
Venkatadri, V.: 14, 727
Venkatapathy, E.: 406, 416, 433
Vicroy, D. D.: 88
Vieira, G. J.: 456
Villani, J. A.: 8, 9
<table>
<thead>
<tr>
<th>Name</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vipavetz, K. G.</td>
<td>385</td>
</tr>
<tr>
<td>Virgin, L. N.</td>
<td>818</td>
</tr>
<tr>
<td>W</td>
<td></td>
</tr>
<tr>
<td>Wagner, A.</td>
<td>33</td>
</tr>
<tr>
<td>Wagner, J. A.</td>
<td>288, 306</td>
</tr>
<tr>
<td>Wallace, T. A.</td>
<td>278, 279</td>
</tr>
<tr>
<td>Wallio, H. A.</td>
<td>542, 543, 548</td>
</tr>
<tr>
<td>Walpot, L.</td>
<td>439</td>
</tr>
<tr>
<td>Walsh, B. M.</td>
<td>865, 867, 868, 869, 870</td>
</tr>
<tr>
<td>Walsh, J. L.</td>
<td>63</td>
</tr>
<tr>
<td>Wang, J. T.</td>
<td>523, 527</td>
</tr>
<tr>
<td>Wang, P-H.</td>
<td>602, 651</td>
</tr>
<tr>
<td>Wang, Y.</td>
<td>170</td>
</tr>
<tr>
<td>Warren, A. W.</td>
<td>93</td>
</tr>
<tr>
<td>Waszak, M. R.</td>
<td>154, 155</td>
</tr>
<tr>
<td>Waters, J. W.</td>
<td>589</td>
</tr>
<tr>
<td>Watson, W. R.</td>
<td>836</td>
</tr>
<tr>
<td>Weaver, S. P.</td>
<td>634</td>
</tr>
<tr>
<td>Webb, J. R.</td>
<td>904</td>
</tr>
<tr>
<td>Weikel, W. J.</td>
<td>350</td>
</tr>
<tr>
<td>Weilmuenster, K. J.</td>
<td>416, 455</td>
</tr>
<tr>
<td>Weinstein, L. M.</td>
<td>456</td>
</tr>
<tr>
<td>Weisenborn, M. D.</td>
<td>594</td>
</tr>
<tr>
<td>Weisenstein, D. W.</td>
<td>603</td>
</tr>
<tr>
<td>Weiser, E. S.</td>
<td>339</td>
</tr>
<tr>
<td>Welch, S. S.</td>
<td>500, 501</td>
</tr>
<tr>
<td>Weston, R. P.</td>
<td>43</td>
</tr>
<tr>
<td>Westphal, D. L.</td>
<td>652</td>
</tr>
<tr>
<td>Wheeler, R. J.</td>
<td>627, 628, 647, 653</td>
</tr>
<tr>
<td>White, J. J., II.</td>
<td>84</td>
</tr>
<tr>
<td>White, N. H.</td>
<td>171</td>
</tr>
<tr>
<td>Whitesides, J. L.</td>
<td>31</td>
</tr>
<tr>
<td>Whitley, K. S.</td>
<td>228, 837</td>
</tr>
<tr>
<td>Whitlock, C. H.</td>
<td>620, 623, 628, 629, 644,</td>
</tr>
<tr>
<td></td>
<td>647, 653, 654, 656</td>
</tr>
<tr>
<td>Wiecek, M. M.</td>
<td>730</td>
</tr>
<tr>
<td>Wiedemann, K. E.</td>
<td>419</td>
</tr>
<tr>
<td>Wielicki, B. A.</td>
<td>561, 605, 613, 614, 615,</td>
</tr>
<tr>
<td></td>
<td>625, 632, 643, 655, 658</td>
</tr>
<tr>
<td>Wieseman, C. D.</td>
<td>126, 127</td>
</tr>
<tr>
<td>Wilber, A. C.</td>
<td>656</td>
</tr>
<tr>
<td>Wilbur, M. L.</td>
<td>71</td>
</tr>
<tr>
<td>Wilhite, A. W.</td>
<td>64</td>
</tr>
<tr>
<td>Wilkie, W. K.</td>
<td>132</td>
</tr>
<tr>
<td>Wilkinson, S. P.</td>
<td>340, 364</td>
</tr>
<tr>
<td>Wilkinson, S. P.</td>
<td>19, 27, 45, 65</td>
</tr>
<tr>
<td>Willard, S. A.</td>
<td>259, 260, 299, 309</td>
</tr>
<tr>
<td>Williams, G. B.</td>
<td>399</td>
</tr>
<tr>
<td>Williams, J. R.</td>
<td>662, 664, 665</td>
</tr>
<tr>
<td>Williams, R. A.</td>
<td>165</td>
</tr>
<tr>
<td>Williams-Byrd, J. A.</td>
<td>877, 878, 879</td>
</tr>
<tr>
<td>Willis, P.</td>
<td>313</td>
</tr>
<tr>
<td>Willshire, K. F.</td>
<td>134</td>
</tr>
<tr>
<td>Wilmoth, R. G.</td>
<td>20, 49, 66, 438, 492</td>
</tr>
<tr>
<td>Wilson, J. W.</td>
<td>237, 662, 663, 664, 665,</td>
</tr>
<tr>
<td></td>
<td>666, 669, 670, 852, 853,</td>
</tr>
<tr>
<td></td>
<td>905, 906, 907, 908, 909,</td>
</tr>
<tr>
<td></td>
<td>910, 911, 912, 913, 914</td>
</tr>
<tr>
<td>Wilson, M. R.</td>
<td>817</td>
</tr>
<tr>
<td>Wilson, R. G.</td>
<td>483</td>
</tr>
<tr>
<td>Wilson, R. V.</td>
<td>457</td>
</tr>
<tr>
<td>Wincheski, R. A.</td>
<td>292, 293, 304, 305, 310,</td>
</tr>
<tr>
<td></td>
<td>311</td>
</tr>
<tr>
<td>Winfree, W. P.</td>
<td>242, 312, 759, 760, 761,</td>
</tr>
<tr>
<td></td>
<td>762, 763, 764</td>
</tr>
<tr>
<td>Wing, D. J.</td>
<td>12, 67, 68</td>
</tr>
<tr>
<td>Wingrove, E. R., III</td>
<td>3, 6, 7, 10</td>
</tr>
<tr>
<td>Winker, D. M.</td>
<td>595, 596, 597, 598, 599</td>
</tr>
<tr>
<td>Winstead, E. L.</td>
<td>575, 576, 578</td>
</tr>
<tr>
<td>Wise, K. L.</td>
<td>328</td>
</tr>
<tr>
<td>Wise, S. A.</td>
<td>880, 881, 882</td>
</tr>
<tr>
<td>Wissel, V.</td>
<td>391, 392</td>
</tr>
<tr>
<td>Wong, T.</td>
<td>611, 657, 658</td>
</tr>
<tr>
<td>Wood, K. H.</td>
<td>365, 366</td>
</tr>
<tr>
<td>Wood, W. A.</td>
<td>69, 70, 458, 755</td>
</tr>
<tr>
<td>Woodard, S. E.</td>
<td>200, 201, 204, 205, 528,</td>
</tr>
<tr>
<td></td>
<td>529, 530</td>
</tr>
<tr>
<td>Woodell, G. A.</td>
<td>467, 471</td>
</tr>
<tr>
<td>Woods, D. C.</td>
<td>600, 603</td>
</tr>
<tr>
<td>Woods-Vedeler, J. A.</td>
<td>531</td>
</tr>
<tr>
<td>Worden, H.</td>
<td>601</td>
</tr>
<tr>
<td>Working, D. C.</td>
<td>362</td>
</tr>
<tr>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Xue, T.</td>
<td>313</td>
</tr>
<tr>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Yager, T. J.</td>
<td>105</td>
</tr>
<tr>
<td>Yang, J. N.</td>
<td>275</td>
</tr>
<tr>
<td>Yasukawa, B.</td>
<td>808</td>
</tr>
<tr>
<td>Yeager, J. C.</td>
<td>156, 157</td>
</tr>
<tr>
<td>Yeager, W. T., Jr.</td>
<td>71</td>
</tr>
<tr>
<td>Yee, J. H.</td>
<td>582</td>
</tr>
</tbody>
</table>
Yetter, J. A.: 131
Yeung, P. K.: 459
Ying, S. X.: 57
Yost, W. T.: 667, 668, 671, 778, 779, 800, 837
Young, D. F.: 615, 637, 638, 639, 640, 649, 658, 659, 660
Young, P. R.: 365, 366
Young, R. D.: 526, 532
Younis, B. A.: 785, 786
Yu, J.: 808, 877, 878, 879
Yu, Y. H.: 838
Yuan, S. P.: 460
Yue, G. K.: 579, 580, 594, 602, 603

Z

Zabora, R.: 231
Zak, J. A.: 89, 661
Zang, T. A.: 43
Zasadil, S.: 591
Zawodny, J. M.: 536, 557
Zhang, H.: 730
Zhao, W.: 302
Zhou, Y.: 397, 398, 448, 449, 459, 461
Zhuang, Y.: 752
Zima, H.: 680, 683
Zimmerman, D. C.: 199, 518
Zuckerwar, A. J.: 806, 839
Organization Index

Office of Director

Office of Director (A)


Office of Education (AE)

540, 887, 888, 889, 897, 898, 899, 900, 901, 902, 904

Airframe Systems Program Office

Aeronautics Systems Analysis Division (BA)

81, 93, 102, 122, 377, 384

High-Performance Aircraft Office (BC)

131

Space and Atmospheric Sciences Program Group

Atmospheric Sciences Division (CA)


Space Systems and Concepts Division (CB)

166, 167, 168, 169, 170, 171, 172, 173, 184, 185, 189, 190, 202, 464, 535, 756, 757, 758, 883, 884

Space Projects Office (CC)

186
Research and Technology Group

Research and Technology Group (D)
111, 130, 516, 716, 717

Aero- and Gas-Dynamics Division (DA)

Flight Dynamics and Control Division (DC)

Fluid Mechanics and Acoustics Division (DF)

Flight Electronics Technology Division (DI)

Materials Division (DM)
Structures Division (DS)

Technology Applications Group
Technology Applications Group (E)
207, 493, 885

Internal Operations Group
Facility Systems Engineering Division (GG)
206

Experimental Testing Technology Division (GH)
411, 462, 463, 466, 468, 469, 470, 473, 474, 487, 806, 839

Aerospace Mechanical Systems Division (GK)
96, 181, 182, 183, 276, 431, 491

Aerospace Electronic Systems Division (GL)
85, 378, 385, 465, 483, 486, 536, 537, 538, 539, 541, 570, 675, 719, 855, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 874, 875, 876, 877, 878, 879

Information Systems and Services Division (GM)
434, 485, 707, 709, 886, 890, 891, 892, 893, 894, 895, 896, 903

High-Speed Research Program Office
High-Speed Research Program Office (I)
64

Advanced Subsonic Technology Program Office
Advanced Subsonic Technology Office (KC)
3, 4, 6, 7, 8, 9, 10, 220, 802
Aerospace Transportation Technology Office

Aerospace Transportation Technology Office (L)
108

Hyper X Program Office (LA)
33, 34, 50, 53

Independent Program Assessment Office

Independent Program Assessment Office (M)
174
RTOP Index

RTOP 146-90-04
549, 564, 571, 572, 573, 574, 575, 576, 577, 578, 621, 636, 640, 641, 649, 650

RTOP 148-65-41
607, 609, 611, 612, 613, 614, 620, 622, 625, 626, 627, 628, 629, 632, 643, 644, 647, 653, 655, 656, 657, 658

RTOP 199-45-16
662, 663, 664, 665, 666, 669, 852, 854, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914

RTOP 225-12-02
431

RTOP 227-92-43
465

RTOP 229-01-02
605, 606, 610, 615, 630, 631, 633, 637, 648

RTOP 229-02-06
601

RTOP 229-10-32
552

RTOP 229-71-02
533

RTOP 232-01-04
51

RTOP 233-01-01
237, 510, 529, 882

RTOP 233-01-21
509

RTOP 233-02-03
350, 354, 356, 357

RTOP 233-03-01
187

RTOP 233-03-03
375

RTOP 233-10-14
196, 197, 198, 321, 330, 361, 470, 496, 505

RTOP 233-10-21
205

RTOP 233-20-21
223, 272, 860, 862, 864, 865, 866, 867, 868, 870, 875

RTOP 233-20-24
467

RTOP 233-30-31
869

RTOP 233-40-41
313

RTOP 236-04-70
181

RTOP 237-02-22
186
| RTOP 237-03-02   | 500                        |
| RTOP 237-03-33   | 200, 201                   |
| RTOP 237-08-02   | 501                        |
| RTOP 242-03-30   | 263, 824                   |
| RTOP 242-20-02   | 315                        |
| RTOP 242-20-07   | 135, 353                   |
| RTOP 242-20-08   | 40, 166, 168, 169, 400, 417|
| RTOP 242-30-03   | 173                        |
| RTOP 242-30-05   | 306                        |
| RTOP 242-30-33   | 172                        |
| RTOP 242-33-01   | 171, 264, 331, 419, 915, 916|
| RTOP 242-50-02   | 288                        |
| RTOP 243-10-01   | 885                        |
| RTOP 243-30-07   | 668                        |
| RTOP 243-50-01   | 207                        |
| RTOP 258-20-00   | 675                        |
| RTOP 258-70-21   | 180, 395, 471, 483, 486, 536, 570, 719, 859, 861, 863, 872, 877, 878, 879 |
| RTOP 260-30-15   | 283                        |
| RTOP 260-98-09   | 184                        |
| RTOP 267-10-00   | 185                        |
| RTOP 274-00-96   | 473, 482, 488, 724         |
| RTOP 274-00-97   | 394, 464, 535, 562, 563, 720 |
| RTOP 282-10-01   | 77, 78, 402, 403, 432      |
| RTOP 282-10-08   | 540                        |
RTOP 297-40-00
302

RTOP 297-50-00
182, 183, 491, 855

RTOP 297-90-00
174

RTOP 323-78-01
499

RTOP 344-16-50
582

RTOP 370-21-08
553, 554, 555

RTOP 413-18-07
569

RTOP 428-82-00
608, 623, 654

RTOP 460-44-41
638, 651, 652

RTOP 464-12-03
538, 539

RTOP 464-23-08
845, 850

RTOP 464-34-02
590

RTOP 464-51-01
443

RTOP 464-54-07
541

RTOP 464-54-11
544

RTOP 505-10-31
111

RTOP 505-59-10
37

RTOP 505-59-30
22, 23, 68

RTOP 505-59-36
97, 103

RTOP 505-59-50
19, 35, 38, 46, 450, 451, 454

RTOP 505-59-52
771, 772, 775, 776, 777, 785, 815, 829

RTOP 505-59-53
14, 30, 59, 767, 768, 799, 816, 826, 832, 836

RTOP 505-59-54
411, 856

RTOP 505-63-10
106, 217

RTOP 505-63-35
512

RTOP 505-63-36
71, 120, 123, 132, 262, 677, 803, 817
<table>
<thead>
<tr>
<th>1. AGENCY USE ONLY (Leave blank)</th>
<th>2. REPORT DATE</th>
<th>3. REPORT TYPE AND DATES COVERED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>February 1998</td>
<td>Technical Memorandum</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. TITLE AND SUBTITLE</th>
<th>5. FUNDING NUMBERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>NASA Langley Scientific and Technical Information Output—1997</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6. AUTHOR(S)</th>
<th>8. PERFORMING ORGANIZATION REPORT NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Susan H. Stewart and Harriet B. Machie, Compilers</td>
<td>L-17714</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)</th>
<th>9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NASA Langley Research Center&lt;br&gt;Hampton, VA 23681-2199</td>
<td>National Aeronautics and Space Administration&lt;br&gt;Washington, DC 20546-0001</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>11. SUPPLEMENTARY NOTES</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>12a. DISTRIBUTION/AVAILABILITY STATEMENT</th>
<th>12b. DISTRIBUTION CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unclassified—Unlimited&lt;br&gt;Subject Category 82&lt;br&gt;Distribution: Nonstandard&lt;br&gt;Availability: NASA CASI (301) 621-0390</td>
<td>A08</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>13. ABSTRACT (Maximum 200 words)</th>
</tr>
</thead>
<tbody>
<tr>
<td>This document is a compilation of the scientific and technical information that the Langley Research Center has produced during the calendar year 1997. Included are citations for Formal Reports, Conference Publications, High-Numbered Technical Memorandums, Contractor Reports, Journal Articles and Book Publications, Meeting Presentations, Technical Talks, and Patents.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>14. SUBJECT TERMS</th>
<th>15. NUMBER OF PAGES</th>
<th>16. PRICE CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bibliographies; Scientific and technical information; Documentation; Indexes</td>
<td>156</td>
<td>A08</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>17. SECURITY CLASSIFICATION OF REPORT</th>
<th>18. SECURITY CLASSIFICATION OF THIS PAGE</th>
<th>19. SECURITY CLASSIFICATION OF ABSTRACT</th>
<th>20. LIMITATION OF ABSTRACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unclassified</td>
<td>Unclassified</td>
<td>Unclassified</td>
<td></td>
</tr>
</tbody>
</table>

NSN 7540-01-280-5500

Standard Form 298 (Rev. 2-89)
Prescribed by ANSI Std. 239-18
298-102
RTOP 859-00-00
   167

RTOP 906-43-00
   170, 189, 190, 756, 757

RTOP 956-17-00
   873, 880

RTOP 963-35-00
   368

RTOP 963-89-00
   199, 202, 883, 884