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DEPARTMENT OF ENGINEERING

a bibliography on aerosonics

ALAN POWELL

T.J.B. SMITH

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UNIVERSITY OF CALIFORNIA, LOS ANGELES

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A BIBLIOGRAPHY ON AEROSONICS

Alan Powell
T. J. B. Smith

Aerosonics Laboratory
Department of Engineering
University of California
Los Angeles 24, California

FOREWORD

The research described in this report, *A Bibliography on Aerosonics*, by Alan Powell and T. J. B. Smith, was carried out under the technical direction of Alan Powell and is part of the continuing program in Fluid Motion and Sound.

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J. M. English
Director – Research

University of California
Department of Engineering
Los Angeles, California

INTRODUCTION

This bibliography, which has been compiled primarily to meet the requirements of research being undertaken at the Aerosonics Laboratory of the University of California at Los Angeles, consists mainly of references to open literature relating to those sections of acoustics which are particularly associated with fluid motion and thermal action. Any bibliography such as this can only approach completeness in a narrow sense, since its scope must be limited in some way. The criterion of selection used here has primarily been one of relevance to the central subject area; consequently a few items are included which are extremely relevant but display no direct acoustical connotations, and on the other hand many aspects of acoustics which are not closely related to the areas of specialization have been omitted. The references are followed by a simple indexing system in order to provide rapid location of information relating to any of eighteen subdivisions of the main subject and it is hoped that this will greatly add to the convenience of the bibliography, which contains about two thousand entries.

It is inevitable that there will be oversights and omissions of some references. The help of users (and of authors) will be welcomed in repairing defects, since it is intended to produce supplementary issues to this volume, in order to keep its content up-to-date and to correct any errata and omissions. The compilers will be very grateful for any comments which may lead to an improvement in format or ease of use in any later editions.

ABBREVIATIONS OF TITLES OF JOURNALS AND ORIGINS OF REFERENCES CONTAINED IN THE BIBLIOGRAPHY

A.A.U.S.
Department of Aeronautics and Astronautics, University of Southampton, U.K.

AD
Armed Services Technical Information Agency, Document Number

Aero. Engr. Rev.
Aeronautical Engineering Review

Aero. Quart.
Aeronautical Quarterly

Af. Ned. Akad. Wet
Afdeeling natuurkunde Nederlandsche akademie van wetenschappen, Amsterdam

AFOSR
Air Force Office of Scientific Research

A.G.A.
American Gas Association

AGARD
Advisory Group for Aeronautical Research and Development, North Atlantic Treaty Organization

A. J. Phys.
American Journal of Physics

A. J. Sci.
American Journal of Science

Akust. Z.
Akustische Zeitschrift

Ann. Physik.
Annalen der Physik.

Ann. physique
Annales de physique

ARC
Aeronautical Research Council, Air Ministry, U.K.

A.R.L.
Aeronautical Research Laboratories (Australia)

A. R. S. J.
American Rocket Society Journal

ASHAE Trans.
American Society of Heating & Air-Conditioning Engineers, Transactions

BRL
Ballistic Research Laboratories, Aberdeen Proving Ground, Maryland

C. I. T.
California Institute of Technology, Pasadena, Calif.

Comm. Pure App. Math.
Communications in Pure & Applied Mathematics

Compt. Rend.
Comptes Rendus hebdomadaires des seances de l'Academie des Sciences, Paris

Dok. Akad. Nauk., SSSR
Doklady Adademii Nauk S.S.S.R.

DTMB
David Taylor Model Basin, Washington D.C.

Dan. Mat. Fys. Medd.
Der Kongelige Danske Videnskabeones Selskab Matematisk – fysiske Meddelelser, Kobenhavn

G. I. T.
Georgia Institute of Technology, Atlanta, Ga.

Helv. Phys. Acta
Helvetica Physica Acta

Ind. Engr. Chem.
Industrial and Engineering Chemistry

Inzh. Fiz. Zh.
Inzhenero, Fizicheskii Zhurnal, Minsk

J. Aero/Space Sci.
Journal of the Aerospace Sciences

J. Aero. Sci.
Journal of Aeronautical Sciences

J. App. Mech.
Journal of Applied Mechanics

J. App. Phys.
Journal of Applied Physics

J.A.S.A.
Journal of the Acoustical Society of America

J. Chem. Phys.
Journal of Chemical Physics

J. Chem. Soc.
Journal of the Chemical Society, London

Jet Prop.
Jet Propulsion

J.E.T.P., USSR
Journal of Experimental & Theoretical Physics
Translation of:
Zhurnal eksperimental 'noi i teoreticheskoi fiziki

J. Fluid Mech.
Journal of Fluid Mechanics

J.I.E.E.
Journal of the Institution of Electrical Engineers, London

J. Inst. Pet. Tech.
Journal of the Institute of Petroleum Technology, London

J. Math. Phys.
Journal of Mathematical Physics

J. Mech. App. Math.
Journal of Mechanics & Applied Mathematics

J. Opt. S. A.
Journal of the Optical Society of America

J. Phys. Chem.
Journal of Physical Chemistry

J. phys. et radium
Journal de physique et le radium

J. P. L.
Jet Propulsion Laboratory, Calif. Institute of Technology, Pasadena, Calif.

J. R. Ae. S.
Journal of the Royal Aeronautical Society, London

J. Sci. Arts
Journal of Science and the Arts; ed. at The Royal Institution, London

M.I.T.
Massachusetts Institute of Technology, Cambridge, Mass.

NACA
National Advisory Committee for Aeronautics

NASA
National Aeronautics & Space Administration

NGTE
National Gas Turbine Establishment, U.K.

ONERA
L'office National d'études et de Recherches Aéronautiques, Paris

Phil. Mag
Philosophical Magazine

Phil. Trans. Roy. Soc.
Philosophical Transactions of the Royal Society, London

Phys. Z.
Physikalische Zeitschrift

Proc. I. Mech. E.
Proceedings of the Institute of Mechanical Engineers, London

Proc. I. R. E.
Proceedings of the Institute of Radio Engineers

Proc. Phys. Soc.
Proceedings of the Physical Society, London

Proc. Roy. Soc.
Proceedings of the Royal Society, London

Quart. App. Math.
Quarterly Journal of Applied Mathematics

Quart. J. Mech. App. Math
Quarterly Journal of Mechanics & Applied Mathematics

RAE
Royal Aircraft Establishment, Farnborough, Ministry of Aviation, London

Rep. Prog. Phys.
Reports on Progress in Physics, Physical Society of London

Rev. Acoust.
Revue d'acoustique

Rev. Mod. Phys.
Reviews of Modern Physics

S. A. E. Quart. Trans
Society of Automotive Engineers Quarterly Transactions

Trans. ASME
Transactions of the American Society of Mechanical Engineers

Trans. Faraday Soc.
Transactions of the Faraday Society

Trans. I. Chem. E.
Transactions of the Institute of Chemical Engineers

Trans Roy. Soc.
Philosophical Transactions of the Royal Society, London

USAA
Univ. of Southampton, Department of Aeronautics and Astronautics, U.K.

UTIA
University of Toronto Institute of Aerophysics, Canada

WADC
Wright Air Development Center

WADD
Wright Air Development Division

Z. angew. Math. Mech.
Zeitschrift für angewandte Mathematik und Mechanik, Berlin

Z. angew. Math. Physik.
Zeitschrift. für angewandte Mathematik und Physik, Basel

Zh. Fiz. Khimii
Zhurnal Fizicheskoi Khimii

Zh. Tekh. Fiz.
Zhurnal Tekhnicheskoi Fiziki

Z. Physik.
Zeitschrift für angewandte Physik, Berlin

Z. physik Chem.
Zeitschrift für physikalische Chemie

Z.V.D.I.
Zeitschrift des Vereines Deutcher Ingenieure, Dusseldorf.

1818001/Fy - Michael Faraday
"On the Sounds Produced by Flame in Tubes"
J. Sci. Arts, 5, 274-280, 1818

1854001/Ss - C. Sondhauss
"Über die beim Ausströmen der Luft entstehenden Töne"
Ann. Physik, 91, 126-147, 1854;
91, 214-240, 1854

1857001/Sh - F. G. Schaffgotsch
"Akustische Beobagtungen"
Ann. Physik, 101, 471-487, 1857

1858001/Le - John Leconte
"On the Influence of Musical Sounds on the Flame of a Jet of Coal Gas"
Am. J. Sci., 25, 62-67, 1858;
Phil. Mag., 15, 235-239, 1858

1858002/Rs - William B. Rogers
"Some experiments on Sonorous Flames with Remarks on the Primary Source of their Vibration"
Am. J. Sci., 26, 1-15, 1858

1859001/Rs - Paul Riess
"Anhaltendes Tönen eine Röhre durch eine Flamme"
Ann Physik., 109, 145-147, 1859

1859002/Rs - Paul Riess
"Das Anblasen offener Röhren durch eine Flamme"
Ann. Physik, 108, 653-656, 1859

1859003/Re - P. L. Rijke
"Notiz über eine neue Art, die in einer an beiden Enden offenen Röhre enthaltene Luft in Schwingungen zu versetzen"
Ann. Physik., 107, 339-343, 1859

1859004/Re - P. L. Rijke
"Notice of a New Method of Causing Vibration of the Air Contained in a Tube Open at Both Ends"
Phil. Mag., 17, 419-422, 1859

1860001/Cl - M. A. Cavaille-Coll
"Études expérimentales sur les tuyaux d'orgues; de la détermination des dimensions des tuyaux avec l'intonation des mêmes tuyaux"
Compt. Rend., 50, 176-180, 1860

1860002/Ss - Carl F. J. Sondhauss
"Ueber die chemische Harmonika"
Ann Physik., 109, 1-43, 427-469, 1860

1866001/Tr - A. Töpler
"Vibroskopische Beobachtungen über die Schwingungsphasen singender Flammen (der chemischen Harmonica) mit Benutzung des Schlierenapparates"
Ann Physik., 128, 126-139, 1866

1866002/Zh - Ivan B. Zoch
"Einiges zur kenntniss der chemischen Harmonica"
Ann Physik., 127, 580-589, 1866

1868001/Tm - A. Terquem
"Über die chemische Harmonica"
Ann Physik., 134, 468-472, 1868

1869001/Wd - A. Weinhold
"Herstellung sensitiver Flammen"
Ann. Physik., 136, 333-336, 1869

1872001/Gr - W. E. Geyer
"A New Sensitive Singing Flame"
Am. J. Sci., 3, 340, 1872

1873001/Ls - A. Lissajous
"Flammes sensibles et flammes vibrantes"
J. Physique, 2, 30-34, 1873

1874001/Si - H. Schneebeli
"Zur Theorie der Orgelpfeifen"
Ann. Physik., 153, 301-305, 1874

1874002/Sh - Hermann Smith
"On the Physical Action Taking Place at the Mouth of Organ-Pipes"
Nature, 10, 161-163, 1874

1876001/Rs - Osborne Reynolds
"On the Refraction of Sound by the Atmosphere"
Phil. Trans. Roy. Soc., 166, 315, 1876

1876002/Sk - W. Sonreck
"Die Schwingungs – Erregung und die Bewegung der Luftsäule in offenen und gedeckten Pfeifen"
Ann. Physik., 158, 129-147, 1876

1877001/Rh - Lord Rayleigh
"Theory of Sound " (2 Vols.)
MacMillan & Co., London, 1877

1878001/Rh - Lord Rayleigh
"The Explanation of Certain Acoustical Phenomena"
Nature, 18, 319-321, 1878

1878002/Sl - V. Strouhal
"Ueber eine besondere Art der Ton erregung"
Ann Physik., 5, 216-251, 1878

1879001/Rh - Lord Rayleigh
"Acoustical Observations II"
Phil. Mag., 7, 149-162, 1879

1880001/Rh - Lord Rayleigh
"On the Stability or Instability of Certain Fluid Motions, I"
Proc. London Math Soc., 11, 57-70, 1880

1881001/Kh - W. Kohlrausch
"Experimentelle Untersuchung der tone, welche beim Durchströmen von Gasen durch Spalten entstehen
Ann. Physik., 13, 545-569, 1881

1882001/Rh - Lord Rayleigh
"On the Pitch of Organ-Pipes"
Phil. Mag., 13, 340-347, 1882

1883001/Rs - Osborne Reynolds
"An Experimental Investigation of the Circumstances Which Determine Whether the Motion of Water Shall Be Direct or Sinuous and of the Law of Resistance in Parallel Channels"
Phil. Trans. Roy. Soc., 174, 935-982, 1883

1884001/Rh - Lord Rayleigh
"On the Circulation of Air Observed in Kundt's Tubes, and on Some Allied Acoustical Problems"
Phil. Trans. Roy. Soc., 175, 1-21, 1884

1886001/Bl - Chichester A. Bell
"On the Sympathetic Vibrations of Jets"
Phil. Trans. Roy. Soc., 177, 383-422, 1886

1887001/Rh - Lord Rayleigh
"On the Stability or Instability of Certain Fluid Motions, II"
Proc. London Math Soc., 19, 67-74, 1887

1895001/By - M. E. Booty
"Sur des flammes sensibles"
J. Physique, 4, 401-411, 1895

1895002/Rh - Lord Rayleigh
"On the Stability or Instability of Certain Fluid Motions. III"
Proc. London Math Soc., 27, 5-12, 1895

1897001/Gl - H. V. Gill
"The Theory of Singing Flames"
Am. J. Sci., 154, 177-190, 1897

1900's

1900-1933

00001/En - M. Th. Edelmann
"Studien über die Erzeugung sehr hoher töne vermittelst der Galtonpfiefe (Grenzpfiefe)
Ann. Physik., 2, 469-482, 1900

00002/Hn - Victor Hensen
"Die triebkroft für die Tonshivingung in den Labialpfeifen und die Lamellentöne"
Ann. Physik., 2, 719-741, 1900

04001/Ss - G. G. Stokes
"On the Effect of Wind on the Intensity of Sound"
Math. & Physical Papers, 4, 110-111, 1904

04002/Wh - R. Wachsmuth
"Labialpfeifen und Lamellentöne"
Ann. Physik., 14, 469-505, 1904

08001/As - G. Anthanasiadis
"Flammes sonores renforçant plusiers sons"
Compt. Rend., 146, 533-534, 1908

09001/MS - Karl Marbe & M. Seddig
"Untersuchungen schwingender Flammen"
Ann. Physik., 101, 579-592, 1909

09002/Pm - H. Pflaum
Versuche mit Einer Elektrischen Pfiefe
Universität Rostock, Dissertation, 1909

12001/KR - Th. von Karman & H. Rubach
"Über den Mechanismus den Flüssigkeitsund Luftwiderstandes"
Phys. Z., 13, 49-59, 1912

12002/Kg - W. König
"Zur Theorie der Schneidentöne"
Phys. Z., 13, 1053-1055, 1912

13001/Rh - Lord Rayleigh
"On the Stability of an Inviscid Fluid"
Phil Mag., 26, 1001-1010, 1913

15001/Rh - Lord Rayleigh
"Aeolian Tones"
Phil. Mag., 29, 433-444, 1915

18001/Kp - Charles T. Knipp
"A Possible Standard of Sound"
Phys. Rev., 12, 491-492, 1918

19001/Hn - Jul Hartmann
"Om en ny Metode til Frembringelse af Lydsvingninger"
Dan. Mat. Fys. Medd., 1, 1919

19002/KS - F. Krüger & E. Schmidtke
"2. Theorie der Spalttone"
Ann. Physik., 60, 701-714, 1919

19003/LW - J. H. Lynam & H. A. Webb
The Emission of Sound by Airscrews
Adv. Comm. for Aeronaut., RM 624, 1919

19004/MW - Walter Mason & Richard V. Wheeler
"The Propagation of Flame in Mixtures of Acetylene and Air"
J. Chem. Soc., 115, 578-587, 1919

19005/Se - E. Schmidtke
"Zur hydrodynamik der Schneidentöne"
Ann. Physik., 60, 715-733, 1919

20001/DR - Director of Research
The Sounds of Aeroplanes
ARC R&M, No. 694, 1-21, 1920

20002/Kr - F. Kruger
"Theorie der Schneidentone"
Ann. Physik., 62, 673, 1920

20003/MW - Walter Mason & Richard V. Wheeler
"The Propagation of Flame in Mixtures of Methane and Air. Part I. Horizontal Propagation"
J. Chem. Soc., 117, 36-47, 1920

21001/Rf - E. F. Relf
"On the Sound Emitted by Wires of Circular Section When Exposed to an Air Current"
Phil. Mag., 42, 173-176, 1921

23001/Ls - Walter Lewis
Modern Organ Building
William Reeves, London, 1923

23002/Rn - Edward G. Richardson
"The Theory of the Singing Flame"
Proc. Phys. Soc., 35, 47-54, 1923

23003/Sg - H. Schlichting
"Laminare Strahlausbreitung"
Z. angew. Math. Mech., 13, 260-263, 1923

1900-1933 Cont'd.

24001/GS - D. Gunnaiya & G. Subrahmaniam
"Underblown Pipes"
Proc. Phys. Soc., 37, 15-19, 1924

24002/Rn - Edward G. Richardson
"Aeolian Tones"
Proc. Phys. Soc., 36, 153-167, 1924

25001/At - J. Ackeret
Air Forces on Airfoils Moving Faster than Sound
NACA, TM-317, 1925

25002/Ce - Z. Carrière
"Phénomènes a l'embrouchure d'un tuyau d'orgue"
J. Phys. et radium, 6, 52-64, 1925

26002/Bn - W. E. Benton
"On Edge-Tones (1)"
Proc. Phys. Soc., 38, 109-126, 1926

26003/HT - Jul. Hartmann & Birget Trolle
"New Investigation on the Air – Jet Generator for Acoustic Waves"
Dan. Mat. Fys. Medd., 7, 1926

27001/EG - A. Egerton & S. F. Gates
"Further Experiments on Explosions in Gaseous Mixtures of Acetylene, of Hydrogen and of Pentane"
Proc. Roy. Soc., 116A, 516-529, 1927

27002/HT - Jul. Hartmann & Birgit Trolle
"A New Acoustic Generator. The Air-Jet-Generator"
J. Sci. Inst., 4, 101-111, 1927

27003/Hy - S. R. Humby
"Some Experiments With Sound Waves of High Frequency"
Proc. Phys. Soc., 39, 435-443, 1927

27004/Mn - J. D. Morgan
"Note on the Vibrational Movements Which Occur During the Inflammation of Combustible Gases"
Phil. Mag., 3, 1161-1166, 1927

28003/Ce - Z. Carrière
"Écoulements gazeux alternatifs"
J. Phys. et radium, 9, 187-204, 1928

28004/KW - William A. Kirkby & Richard V. Wheeler
"Explosions in Closed Cylinders"
J. Chem. Soc., 3203-3218, 1928

28005/MW - G. B. Maxwell & R. V. Wheeler
"Flame Characteristics of *Pinking* and *Non-Pinking* Fuels"
J. Inst. Pet. Tech., 14, 175-189, 1928

28006/Tr - W. S. Tucker
The Problem of Noise in Civil Aircraft and The Possibilities of its Elimination
NACA, TM-473, 1928

29001/Br - R. Becker
Impact Waves and Detonation
NACA, TM-505, 1929

29002/Fh - Adrien Foch
"Sur l'entretien des vibrations d'une colonne fluide pour changement due régime d'écoulement"
Compt. Rend., 188, 697-698, 1929

29003/Ht - Morris D. Hart
The Aeroplane as a Source of Sound
ARC R&M, No. 1310, 1929

29004/Ls - Charles H. Lees
"The Free Periods of a Composite Elastic Column or a Composite Stretched Wire"
Proc. Phys. Soc., 41, 204-213, 1929

29005/Rn - E. G. Richardson
Sound - Ch. 6, Vortex Formation and Jet Tones
Edward Arnold & Co., London, 1929

31001/Ae - E. N. da C. Andrade
"On the Circulations Caused by the Vibration of Air in a Tube"
Proc. Roy. Soc., 134A, 445-470, 1931

31002/Rn - Edward G. Richardson
"Edge Tones"
Proc. Phys. Soc., 43, 394-404, 1931

31003/Rd - L. Rosenhead
"The Formation of Vortices From a Surface of Discontinuity"
Proc. Roy. Soc., A134, 170-192, 1931

1900-1933 Cont'd

32002/An - Anon
Research in the Elimination of Noise in Industrial Gas Burners
A. G. A. Comm. on Industrial Gas Burners, Rep. No. 692, 1932

32003/Bn - G. Burniston Brown
"On Sensitive Flames"
Phil. Mag., 13, 161-195, 1932

32004/Bn - G. Burniston Brown
"Sensitive Flames"
Science Progress, 26, 672-674, 1932

32005/Zt - Hans Zickendraht
"Über schallempfindliche Flammen: Erste Mitteilung"
Helv. Phys. Acta., 5, 317-335, 1932

33001/An - Anon
Research in the Elimination of Noise in Industrial Gas Burners
A. G. A. Comm. on Industrial Gas Burners, Rep. No. 724, 1933

1934

34001/Ce - Z. Carrière
"Flammes sensibles"
Rev. Acoust., 3, 221-245, 1934

34002/Hg - Viktor Hardung
"Zum hydrodynamischen Mechanismus schallempfindlicher Flammen"
Helv. Phys. Acta, 7, 655-656, 804-812, 1934

34003/Zt - Hans Zickendraht
"Die schallempfindliche Flamme als Gleichrichter"
Helv. Phys. Acta., 7, 653-655, 1934

34004/Zt - Hans Zickendraht
"Uber schallempfindliche Flammen: Zweite Mitteilung"
Helv. Phys. Acta., 7, 773-803, 1934

1935

35001/Bn - G. Burniston Brown
"On Vortex Motion in Gaseous Jets and the Origin of their Sensitivity to Sound"
Proc. Phys. Soc., 47, 703-732, 1935

1935 Cont'd

35002/Ce - Z. Carrière
"Flammes excitatrices"
Rev. Acoust., 4, 149-177, 1935

35003/Hr - S. G. Hooker
"On the Action of Viscosity in Increasing the Spacing Ratio of a Vortex Street"
Proc. Roy. Soc., 154A, 67-89, 1935

35004/Ke - Arnold M. Kuethe
"Investigations of the Turbulent Mixing Regions Formed by Jets"
J. App. Mech., 2, 487-495, 1935

35005/Sn - L. T. Sivian
"Acoustic Impedance of Small Orifices"
J. A. S. A., 7, 94-101, 1935

35006/SD - E. Z. Stowell & A. F. Deming
Noise from Two-Blade Propellers
NACA, Rpt. 526, 1935

35007/SD - E. Z. Stowell & A. F. Deming
Vortex Sound From Rotating Cylindrical Rods
NACA, TN 519, 1935

35008/Zt - Hans Zickendraht
"Uber eine neue hydrodynamische Theorie der schallempfindlichen Flammen"
Helv. Phys. Acta., 8, 468-470, 1935

1936

36001/Ae - E. N. da C. Andrade
"Whirlpools and Vortices"
Proc. Roy. Inst., 29, 320-338, 1936

36002/Ce - Z. Carrière
"Flammes chantantes"
Rev. Acoust., 5, 112-138, 1936

36003/Gn - L. Ia Gutin
"On the Sound Field of a Rotating Propeller"
J. Tech. Phys., USSR, 6, 899-909, 1936

36004/KC - F. Krüger & H. Caspar
"Über die Wirbelbildung bei Scheidentönen"
Phys., 37, 842-849, 1936

1937

37001/AT - E. N. da C. Andrade & L. C. Tsien
"The Velocity-Distribution in a Liquid-into-Liquid Jet"
Proc. Phys. Soc., 49, 281, 1937

1937 Cont'd

37002/By - W. G. Bickley
"The Plane Jet"
Phil. Mag., 23, 727, 1937

37003/Bn - G. Burniston Brown
"The Mechanism of Edge-Tone Production"
Proc. Phys. Soc., 49, 508-521, 1937
Phil. Mag., 31, 1937

37004/Bn - G. Burniston Brown
"The Vortex Motion Causing Edge Tones"
Proc. Phys. Soc., 49, 493-507, 1937

37005/CH - H. F. Coward, F. J. Hartwell & E. M. M. Georgeson
"Studies in the Mechanism of Flame Movement. Part 4, The Vibratory Period"
J. Chem. Soc., 1482-1489, 1937

37006/Dg - A. F. Deming
Noise from Propellers with Symmetrical Sections at Zero Blade Angle. (I)
NACA TN 605, 1937

37007/En - W. Ernsthausen
The Source of Propeller Noise
NACA TM 825, 1937

37008/Ln - K. O. von Lehmann
"Uber die Theorie der Netztone,(thermische erregte Schallschwingungen)
Ann. Physik., 29, 527-555, 1937

37009/OB - L. S. Ornstein & van der Berg
"Reflectivity of Corrugated Surfaces"
Physica, 4, 1181-1189, 1937

1938

38001/Bn - G. Burniston Brown
"Jets Musically Inclined"
Science Progress, 33, 29-51, 1938

38002/Bn - G. Burniston Brown
"Organ Pipes and Edge Tones"
Nature, 141, 11-13, 1938

38003/Ce - Z. Carrière
"Entretien et stabilisation du chant du flammes"
Rev. Acoust., 7, 20-36, 1938

38004/Dg - A. F. Deming
Noise from Propellers with Symmetrical Sections at Zero Blade Angle. (II)
NACA TN 679, 1938

1938 Cont'd

38005/Rn - Edward G. Richardson
"Sound"
Rep. Prog. Phys., 5, 121-149, 1938

1939

39001/Ae - E. N. da C. Andrade
"The Velocity Distribution in a Liquid-into Liquid Jet. Part 2: The Plane Jet"
Proc. Phys. Soc., 51, 784, 1939

39002/Hn - Jul. Hartmann
"The Acoustic Air-Jet Generator"
Academy of Technical Sciences, Copenhagen, 4, 1-201, 1939

39003/HL -Jul. Hartmann & F. Lazarus
"The Air Jet With a Velocity Exceeding that of Sound"
Phil. Mag., 31, 1939

1940

40001/An - Anon
Report on the Noises of Gas Burners, 1.
Gas Res. Board (London) Comm. G.R.B. 3, 1940

40002/Hn - W. F. Hilton
"Measurements of the Noise from Aerofoils and Streamline Wires"
Phil. Mag., 30, 237, 1940

40003/LR - J. M. A. Lenikan & Edward G. Richardson
"Observations on Edge Tones"
Phil. Mag., 29, 400-406, 1940

40004/Ln - Albert London
Principles, Practice and Progress of Noise Reduction in Airplanes
NACA TN 748, 1940

1941

41001/Ae - E. N. da C. Andrade
"The Sensitive Flame"
Proc. Phys. Soc., 53, 329-355, 1941

41002/BK - V. M. Bol'sheverov & V. A. Krasil'nikov
"Preliminary Tests on the Acoustical Probing of the Atmosphere with a Monochromatic Beam"
Dok. Akad. Nauk, SSSR, 32, 44-46, 1941

1941 Cont'd

41003/Ov - A. M. Obukhov
"Propagation of Sound in a Turbulent Stream"
Dok. Akad. Nauk, SSSR, 30, 611-614, 1941

41004/Sc - P. Savic
"On Acoustically Effective Vortex Motion in Gaseous Jets"
Phil. Mag., 32, 245-252, 1941

41005/Zt - Hans Zickendraht
"Uber Schallempfindliche Flammen"
Helv. Phys. Acta, 14, 195-214, 1941

1942

42001/Js - Arthur T. Jones
"Edge Tones"
J. A. S. A., 14, 131-139, 1942

1943

43001/Cn - Stanley Corrsin
Investigation of Flow in an Axially Symmetrical Heated Jet of Air
NACA, ACR 3L23, 1943

43002/Ln - C. C. Lin
"On the Motion of a Pendulum in Turbulent Flow"
Quart. App. Math., 1, 43-48, 1943

43003/Ov - A. M. Obukhov
"On the Propagation of a Sound Wave in a Vortical Flow"
Dok. Akad. Nauk, SSSR, 39, 46-48, 1943

43004/SM - P. Savic & J. W. Murphy
"The Symmetrical Vortex Street in Sound Sensitive Plane Jets"
Phil. Mag., 34, 139-144, 1943

1944

44001/An - Anon
A Study of Fundamentals of Resonant Noise in Gas Furnaces
A.G.A. Testing Labs., Res. Bull. No. 25, 1944

44002/Bv - D. I. Blokhintsev
"Propagation of Sound in an Inhomogeneous and Moving Medium"
Dok. Akad. Nauk, SSSR, 45, 343-346, 1944

44003/Re - S. O. Rice
"Mathematical Analysis of Random Noise"
Bell System Tech. J., 23, 282-332, 1944
24, 46-156, 1945

1944 Cont'd

44004/Yu - E. Y. Yudin
On the Vortex Sound from Rotating Rods
NACA TM 1136, 1-9, 1944

1945

45001/Bv - D. I. Blokhintsev
"A Moving Sound Pickup"
Dok. Akad. Nauk, SSSR, 47, 22-25, 1945

45002/Bv - D. I. Blokhintsev
"Excitation of a Resonator by a Stream of Air"
J. E. T. P., USSR, 15, 63-70, 1945

45003/Bv - D. I. Blokhintsev
"Propagation of Sound in a Turbulent Stream"
Dok. Akad. Nauk, SSSR, 46, 150-153, 1945

45004/Bv - D. I. Blokhintsev
"Vortical Sound"
J. E. T. P., USSR, 15, 71-83, 1945

45005/Bv - D. I. Blokhintsev
"Excitation of Resonance by Air Flow"
Zh. Tekh. Fiz. Is. 63-70, 1945; DTMB Trans. 270, 1957

45006/Js - Arthur T. Jones
"Singing Flames"
J. A. S. A., 16, 254-266, 1945

45007/Kv - V. A. Krasil'nikov
"On the Propagation of Sound in a Turbulent Atmosphere"
Dok. Akad. Nauk, SSSR 42, 486-489, 1945

45008/Mr - M. A. Miner
"Cumulative Damage in Fatigue"
J. App. Mech., 12, A159-A164, 1945

1946

46001/Bv - D. I. Blokhintsev
Acoustics of a Nonhomogeneous Moving Medium
NACA, TM 1399, 1946

46002/Bs - J. M. Burgers
"On the Transmission of Sound Waves Through a Shock Wave"
Af. Nat. Ned. Akad. Wet., 49, 273-281, 1946

46003/Cv - L. A. Chernov
"The Flux and Density of Acoustical Energy in a Moving Medium"
J. E. T. P., USSR, 16, 733-736, 1946

1946 Cont'd

46004/Cr - D. H. D. Cooper
"A Suggested Method of Increasing the Damping of Aircraft Structures"
R. A. E. Rep. SME 3382, 1946

46005/Fg - N. Fleming
"The Silencing of Aircraft"
J. R. Ae. S., 50, 639-676, 1946

46006/GL - Henri Guenoche & Paul Laffitte
"Sur la deflagration des mélanges d'acétylène et d'oxygène"
Compt. Rend., 222, 1394-1396, 1946

46007/HC - G. A. Hankins & W. F. Cope
"The Flow of Gases at Sonic and Supersonic Speeds"
J. App. Mech., 155, 401-416, 1946

46008/HE - W. R. Heath & W. R. Elliot
"Control and Prediction of Pulsation Frequency in a Duct System"
J. App. Mech., 13, A291-A293, 1946

46009/Jm - K. R. Jackam
"Aircraft Acoustical Problems and Possible Solutions"
Aviation, 45, 7, 75-79, 1946

46010/Jm - K. R. Jackam
"Aircraft Acoustical Problems and Possible Solutions"
Aviation, 45, 8, 71-78, 1946

46011/Jm - K. R. Jackam
"Aircraft Acoustical Problems and Possible Solutions"
Aviation, 45, 9, 82-89, 1946

46012/Jm - K. R. Jackam
"Aircraft Acoustical Problems and Possible Solutions"
Aviation, 45, 10, 69-73, 1946

46013/SK - G. B. Schubauer & P. S. Klebanoff
Theory and Application of Hot Wire Instruments in the Investigation of Turbulent Boundary Layers
NACA ARC 5K27, 1946

46014/Sn - D. B. Steinman
Problems of Aerodynamic and Hydrodynamic Stability
Proc. 3rd Hydraulics Conference, Univ. of Iowa, 10-12, 1946; Univ. of Iowa Studies in Engr., Bull. 31, 136-164, 1947

1946 Cont'd

46015/TR - Theodore Theodorsen & Arthur A. Regier
The Problem of Noise Reduction With Reference to Light Airplanes
NACA TN 1145, 1946

1947

47001/Ce - Z. Carrière
"Critérium de sensibilité des jet gazeux et des flammes aux ondes sonores"
J. Phys. et Radium, 8, 225-233, 1947

47002/CM - J. Howard Childs, Richard J. McCafferty & Oakley W. Surine
Effect of Combustor-Inlet Conditions on Performance of an Annular Turbojet Combustor
NACA, TR 881, 1947

47003/En - L. B. Edelman
"The Pulsating Jet Engine—Its Evolution and Future Prospects"
SAE Quart. Trans., 1, 204-216, 1947

47004/HZ - J. C. Hubbard, I. F. Zartman & C. R. Larkin
"Optical Study of Acoustic Fields Near Diffracting Edges"
J. Opt. S. A., 37, 832-836, 1947

47005/Kv - V. A. Krasil'nikov
"On Sound Amplitude Fluctuations During Propagation in a Turbulent Atmosphere"
Dok. Akad. Nauk, SSSR, 58, 1353-1356, 1947

47006/MC - E. S. Mendelson & H. Conway
Turbojet Engine Noise: I. Clinical Survey of Vibratory Influence of I-16 Jet Engine on Man
Rep. No. TED NAM AE-509024, Part I, 1947

47007/Rr - Arthur A. Regier
Effect of Distance on Airplane Noise
NACA TN 1353, 1947

47008/RH - Arthur A. Regier & Harvey H. Hubbard
Factors Affecting the Design of Quiet Propellers
NACA RM L7H05, 1947

47009/RL - George Rudinger & J. G. Logan
Study of Gas Oscillations in Half Open Pipes of Various Shapes, I
Cornell Univ. Aero. Lab., Project Squid, T.R. 3, 1947

1947 Cont'd

47010/Sr - R. Sauer
General Characteristics of the Flow Through Nozzles at Near Critical Speeds
NACA TM 1147, 1947

47011/Yn - E. Y. Yudin
On the Vortex Sound from Rotating Rods
NACA TM 1136, 1947

1948

48001/Ai - M. A. Antokol'skii
"Reflection of Waves from Rough Absolutely Reflecting Surfaces"
Dok. Akad. Nauk., SSSR 62, 203-206, 1948

48002/Be - S. R. Badcoe
Preliminary Investigation of Noise in Wind Tunnels
RAE TN RAD 415, 1948

48003/BM - F. K. Bannister & G. F. Micklow
"Wave Action Following Sudden Release of Compressed Gas From a Cylinder"
Proc. I. Mech. E., 159, 269-300, 1948

48004/BH - Donald R. Bellman & Jack C. Humphrey
Photographic Study of Combustion in a Rocket Engine
NACA, R.M. E 8F01, 1948

48005/CF - R. Courant & K. O. Friedrichs
Supersonic Flow and Shock Waves
Interscience Publishers, Inc., N.Y., 1948

48006/Dy - C. L. Dailey
Comments on the Subcritical Buzz Phenomenon Encountered with Supersonic Ram-Jet Diffusers
Univ. So. Cal., Aero. Lab., Rep. 5-1-16, 1948

48007/Ds - Maurice Dubois
"Flammes et jets sensibles"
Compt. Rend. 226, 164-166, 1948

48008/Et - Carl Eckart
"Vortices and Streams Caused by Sound Waves"
Phys. Rev. 73, 68-76, 1948

48009/GM - Henri Guenoche, Numa Manson & Gustave Monnot
"La propagation uniforme d'une deflagration dans une tube cylindrique lisse"
Compt. Rend., 226, 163-164, 1948

1948 Cont'd

48010/Hd - Harvey H. Hubbard
Sound from Dual-Rotating and Multiple Single-Rotating Propellers
NACA, TN 1654, 1948

48011/HF - J. C. Hubbard, J. A. Fitzpatrick, B. T. Kankovsky & William J. Thaler
"Distortion of Progressive Ultrasonic Waves"
Phys. Rev., 74, 107-108, 1948

48012/Ky - Leslie S. G. Kovasznay
"Spectrum of Locally Isotropic Turbulence"
J. Aero. Sci., 15, 475-753, 1948

48013/Ms - John W. Miles
"Acoustical Methods in Supersonic Aerodynamics"
J.A.S.A., 20, 314-323, 1948

48014/My - Charles T. Molloy
"Calculation of the Directivity Index for Various Types of Radiators"
J.A.S.A., 20, 387-405, 1948

48015/Me - Philip M. Morse
Vibration and Sound
McGraw-Hill Book Co., Inc., 1948

48016/OT - P. L. Owen & C. K. Thornhill
The Flow in an Axially-Symmetric Supersonic Jet from Nearly-Sonic Orifice into a Vacuum
Ministry of Supply, U.K., RM 2612, 1948

48017/Pk - D. C. Pack
"On the Formation of Shock-Waves in Supersonic Gas Jets. (Two-Dimensional Flow)"
J. Mech. App. Math., 1, 1-17, 1948

48018/Pk - R. D. Park
Factors Affecting Combustion Stability
Third Symposium (International) on Combustion, 714-721, Baltimore, Williams & Wilkins Co., 1948

48019/RL - George Rudinger, J. G. Logan & O. B. Finamore
Investigation of Acoustic Jets, II
Project Squid, T.M. CAL-18, 1948

48020/TO - C. K. Thornhill & P. L. Owen
The Flow in an Axially Symmetric Supersonic Jet From a Nearly Sonic Orifice into a Vacuum
Min. of Supply Armament Research Est. Report 30/48, U.K, 1-5, 1948

1948 Cont'd

48021/Vl - Theodore Vogel
"Sur les vibrations de certains systèmes élastiques dans un champ sonore"
Publ. Scient. Tech. Min. Air, France No.209, 1948

1949

49001/AW - R. N. Arnold & G. B. Warburton
"Flexural Vibrations of the Walls of Thin Cylindrical Shells Having Freely Supported Ends"
Proc. Roy. Soc. (London), A297, 238-256, 1949

49002/BL - Richard H. Bolt, Samuel Labate & Uno Ingard
"The Acoustic Reactance of Small Circular Orifices"
J.A.S.A., 21, 94-97, 1949

49003/CS - James F. Connors & Albert H. Schroeder
Experimental Investigation of Pressure Fluctuations in 3.6-inch Ramjet at Mach Number 1:92
NACA, RM E9H12, 1949

49004/Cn - Stanley Corrsin
"An Experimental Verification of Local Isotropy"
J. Aero. Sci., 1-3, December, 1949

49005/Cn - Stanley Corrsin
Extended Applications of the Hot-Wire Anemometer
NACA TN 1864, 1-62, 1949

49006/Dn - I. M. Davidson
"Some Properties of the Compression Shock as in Turbine and Compressor Blade Passages"
Proc. I. Mech. E., 161, 187-202, 1949

49007/Gd - Harold Grad
"Resonance Burning in Rocket Motors"
Comm. Pure Appl. Math., 2, 79-102, 1949

49008/Hd - F. L. Hopwood
"Novel Methods of Producing Edge-Tones with Liquids"
Nature, 164, 454, 1949

49009/INY - Teyi Ichikowa, Tsuguo Nakano & Hitoshi Yamamura
"The Mechanism of the Combustion from the View-Point of the Vibration Observed in the Burning System of H_2-O_2"
J. Sci. Hiroshima Univ., 14A, 76-83, 1949

49010/KI - V. A. Krasil'nikov & K. M. Ivanov-shits
"Some Recent Experiments on the Propagation of Sound in the Atmosphere"
Dok. Akad. Nauk, SSSR, 67, 639-642, 1949

1949 Cont'd

49011/Ll - M. J. Lighthill
"The Shock Strength in Supersonic Conical Fields"
Phil. Mag., 11, 1202, 1949

49012/LF - S. Loshaek, R. S. Fein & H. L. Olsen
"The Effect of Sound on Laminar Propane-Air Flames"
J.A.S.A., 21, 605-612, 1949

49013/Mn - George H. Markstein
"Cell Structure of Propane Flames Burning in Tubes"
J. Chem. Phys., 17, 428, 1949

49014/MB - H. Merbt & H. Brilling
"The Propeller as Rotating Sound Source"
Z. Angew. Math. Physik., 29, 301-311, 1949 (Germany)

49015/OS - M. G. Odintsov & I. G. Shaposhinkov
"On the Influence of Large Scale Turbulence Upon the Propagation of Sound in a Turbulence Medium"
J.E.T.P., USSR, 19, 1001-1009, 1949

49016/Pi - Shih I. Pai
"Two-Dimensional Jet Mixing of a Compressible Fluid"
J. Aero. Sci., 16, 463-469, 1949

49017/Sk - Arch C. Scurlock
Flame Stabilization and Propagation in High-Velocity Gas Streams
M. I. T., Fuchs Res. Lab., Meteor Rep. 19, 1949

49018/St - D. G. Stewart
A Gas Dynamic Method for the Solution of the Pulse Jet Problem
A.R.L., Rep. E-64, 1949

49019/Td - K. W. Todd
"Some Developments in Instrumentation for Air-Flow Analysis"
Proc. Mech. E., 161, 213-226, 1949

49020/Ta - T. Paul Torda
"Compressible Flow Through Reed Valves For Pulse Jet Engines"
Polytechnic Inst., Brooklyn, *Reissner Anniversary Volume*, 469-493, 1949

1949 Cont'd

49021/Vy - A. W. Vogeley
Sound-Level Measurements of a Light Airplane Modified to Reduce Noise Reaching the Ground
NACA Rep. 926, 1949

49022/YW - M. Yachter & H. V. Waldinger
Dynamic Analysis of a Rocket Motor
M. W. Kellogg Co., Rep. No. SPD-241, Jersey City, 1949

1950

50001/Br - G. K. Batchelor
"Pressure Fluctuations in Isotropic Turbulence"
Proc. Camb. Phil. Soc., 47, 1950

50002/BE- L. L. Beranek, F. S. Elwell, J. P. Roberts & C. F. Taylor
Experiments in External Noise Reduction of Light Aeroplanes
NACA TN 2079, 1950

50003/Bs - J. M. Burgers
"The Formation of Vortex Sheets in a Simplified Type of Turbulent Motion"
Koninklijke Nederlands, Akademie Van Wetenschappen, 53, 1-12 (122-133), 1950

50004/Ce - Z. Carrière
"Action chimique des ondes sonores sur les flammes sensibles"
J. Phys. et Radium, 11, 124-130, 1950

50005/Cv - L. A. Chernov
Kirchoff's Theorem on the Acoustics of a Moving Medium
Rep. of the Acoustics Commission, USSR, 5, 10-22, 1950

50006/Cr - W. Chester
"The Propagation of a Sound Pulse in the Presence of a Semi-Infinite Open-Ended Channel. I"
Proc. Roy Soc., 242, 527-556, 1950

50007/Cr - W. Chester
"The Propagation of a Sound Pulse in the Presence of a Semi-Infinite Open-Ended Channel. II"
Proc. Roy. Soc., 203, 33-42, 1950

50008/Cs - James F. Connors
Effect of Ram-Jet Pressure Pulsations on Supersonic-Diffuser Performance
NACA RM E50H22, 1950

50009/Cn - Stanley Corrsin
"Hypothesis for Skewness of the Probability Density of the Lateral Velocity Fluctuations in Turbulent Shear Flow"
J. Aero. Sci., 17, 396-398, 1950

50010/CU - Stanley Corrsin & Mahinder S. Uberoi
Further Experiments on the Flow and Heat Transfer in a Heated Turbulent Air Jet
NACA, Rep. 998, 1950

50011/Dp - R. A. Dunlap
An Investigation Into Resonance in Ramjet-Type Burners
Univ. of Michigan, AF Tech. Rep. 6588, Air Material Command Project, M772, 1950

50012/Dp - R. A. Dunlap
Resonance of a Flame in a Parallel-Walled Combustion Chamber
Univ. of Michigan, Aero Res. Centre Proj. MX-833, Report No. UMM-43, 1950

50013/EK - D. H. Eldredge, Jr., H. F. Koster & H. O. Parrack
"Sound Problems Resulting From Jet-Engine Operations"
Tech. Data Digest, 15, 19-21, 1950

50014/FH - Francis E. Fox & Karl F. Herzfeld
"On the Forces Producing Ultrasonic Wind"
Phys. Rev., 76, 156-157, 1950

50015/Fl - F. I. Frankl
On the Formation of Shock Waves in Subsonic Flows With Local Supersonic Velocities
NACA, TM 1251, 1950

50016/Ge - Henning E. von Gierke
"Uber schneidentone an kreisrunden gasstrahlen und ebenen lamellen"
Z. Physik., 3, 97-106, 1950

50017/GM - Henri Guenoche & Numa Manson
"Sur la realisation due mouvement uniforme de propogation de la flamme"
Compt. Rend., 230, 726-728, 1950

50018/GF - D. F. Gunder & D. R. Friant
"Stability of Flow in a Rocket Motor"
J. App. Mech., 17, 3, 327-333, 1950

50019/HE - H. Hahnemann & L. Enret
Effect of Intense Sound Waves on a Stationary Gas Flame
NACA TM 1271, July 1950

50020/HR - Harvey H. Hubbard & Arthur A. Regier
Free-Space Oscillating Pressures Near the Tips of Rotating Propellers
NACA Rep. 996, 1-21, 1950

50021/Kl - I. A. Kiebel
Some Studies on the Flow of a Gas in the Region of Transition Through the Velocity of Sound
NACA, TM 1252, 1950

50022/LI - Samuel Labate & Uno Ingard
"Acoustic Circulation Effects and the Non-Linear Impedance of Orifices"
J.A.S.A., 22, 211-218, 1950

50023/Ln - Martin Lessen
On Stability of Free Laminar Boundary Layer Between Parallel Streams
NACA, Rep. 979, 1950

50024/LK - P. Lienard, M. Kobrynski & P. Antzenberger
Eléments d'acoustique aéronautique
ONERA Publications, 40, 1-84, 1950

50025/Ll - M. J. Lighthill
Aerodynamic Noise, or, Turbulence as a Source of Sound
ARC 13, 298, F.M. 1467, 1950

50026/Mn - George H. Markstein
The Structure of Flames Burning in Tubes. I. Flame Structure in Slow-Burning Mixtures of Hydrocarbons, Air and Nitrogen
Cornell Univ. Aero Lab., Project SQUID, TR 24, 1950

50027/Me - Clinton E. McAulifee
The Influence of High Speed Air Flow on the Behaviour of Acoustical Elements
M.I.T., M.Sc. Thesis, 1950

50028/PC - R. W. Parry, E. W. Comings & M. H. Raila
"Surging in Combustion"
Ind. Eng. Chem., 42, 560-565, 1950

50029/Rs - W. C. Randels
"The Mechanism of Unstable Combustion"
J. Aero. Sci., 7, 124-125, 1950

50030/Rn - Edward G. Richardson
"The Fine Structure of Atmospheric Turbulence in Relation to the Propagation of Sound over the Ground"
Proc. Roy. Soc., A203, 149, 1950

50031/Si - W. Szablewski
The Diffusion of a Hot Air Jet in Air in Motion
NACA TM 1288, 1950

50032/Ty - Victor Twersky
"On the Nonspecular Reflection of Plane Waves of Sound"
J.A.S.A., 22, 539, 1950

50033/VS - R. Vichnievsky & B. Sale
"Étude des phenomenes vibratoires accompagnent la combustion à volume constant"
Revue de l'Institut Francais du Petrole, 5, 286-294, 327-335, 1950

50034/Wm - G. B. Witham
"The Behavior of Supersonic Flow Past a Body of Revolution, Far From the Axis"
Proc. Roy. Soc., A201, 89, 1950

1951

51001/An - Anon
High Amplitude Sound Abatement Research Program
Soundrive Engine Co., Prog. Rept. 4, 1-60, 1951

51001/An - Anon
Measurements of the Effect of Water Injection on the Noise of a Rocket Motor
National Physical Lab., Physics Dept. Rep. 14th 1951

51003/AB - Harry I. Ashkenas & Arthur E. Bryson
"Design and Performance of a Simple Interferometer for Wind-Tunnel Measurements"
J. Aero. Sci., 18, 82-90, 1951

51004/By - N. P. Bailey
"Flow and Combustion Stability"
A. S. M. E. Paper No. 51-A-83, 1951

51005/Bs - Hans Behrens
"Self-Excitation of Flame Oscillation in Tubes"
Z. Physik. Chem. 197, 6-16, 1951

51006/BM - Joseph Black & O. P. Mediratta
"Supersonic Flow Investigation With a 'Hydraulic Analogy' Water Channel"
Aero. Quart., 2, 227-253, 1951

51007/BL - Thomas A. Bragdon, George D. Lewis & Charles H. King
Interim Report on Experimental Investigations of High-Frequency Oscillations in Ramjet Combustion Chambers
M.I.T., Meteor Rep. UAC-53, 1951

51008/Bh - L. M. Brekhovskikh
"Diffraction of Sound Waves at an Uneven Surface"
Dok. Akad. Nauk., SSSR 79, 585, 1951

51009/Bs - J. M. Burgers
Non-Uniform Propagation of Shock Waves
Inst. Fluid Dynamics & App. Math., Univ. of Maryland, Lecture Series No. 10, 1951

51010/BS - Warren C. Burgess, Jr. & Ferris L. Seashore
Criterions for Condensation-Free Flow in Supersonic Tunnels
NACA, TN 2518, 1951

51011/CG - F. Conac & V. Gavreau
"Ultrasonore ondes en air et les applications"
Acustica, 1, 3-16, 1951

51012/Cn - Stanley Corrsin
"On the Spectrum of Isotropic Temperature Fluctuations in an Isotropic Turbulence"
J. App. Phys., 22, 469-473, 1951

51013/Cn - Stanley Corrsin
"The Decay of Isotropic Temperature Fluctuations in an Isotropic Turbulence"
J. Aero. Sci., 18, 417-421, 1951

51014/CK - Stanley Corrsin & L. S. G. Kovasznay
"The Energy Equation for Two Kinds of Incompressible Flow"
J. Aero. Sci., 18, 843, 1951

51015/CU - Stanley Corrsin & Mahinder S. Uberoi
Spectra and Diffusion in a Round Turbulent Jet
NACA Rep. 1040, 1951

51016/Co - Luigi Crocco
"Aspects of Combustion Stability in Liquid Propellant Rocket Motors. Pt. 1 – Fundamentals: Low-Frequency Instability with Monopropellants"
A. R. S. J., 21, 163-178, 1951

51017/Dn - H. L. Dryden
"A Guide to Recent Papers on the Turbulent Motion of Fluids"
App. Mech. Rev., 4, 74-75, 1951

51018/EC - F. Edward Ehlers & Hirsh G. Cohen
An Investigation by the Hodograph Method of Flow Through a Symmetrical Nozzle With Locally Supersonic Regions
NACA, TN 2547, 1951

51019/FF - John B. Fenn, H. B. Forney & R. C. Garmon
"Burners for Supersonic Ramjets, Instability in a Two-Inch Ramjet Burner"
Ind. Eng. Chem., 43, 1663-1672, 1951

51020/Fx - Jerome L. Fox
Preliminary Investigation of Helmholtz Resonators for Damping Pressure Fluctuations in 3.6-inch Ramjet at Mach Number 1.90
NACA, RM E51C05, 1951

51021/HL - J. Hartmann & F. Larris
"The Air-Jet Generator as a Means for Setting Up Waves in a Liquid Medium"
Dan. Mat. Fys. Medd., 26, 1-26, 1951

1951 Cont'd

51022/HS - A. H. Howland & W. A. Simmonds
"A Mechanism of Intense Gaseous Combustion"
J. Inst. Fuel (London) , 24, 252-256, 1951

51023/Hn - J. D. Huffington
"The Burning and Structure of Cordite"
Trans. Faraday Soc., 47, 864-876, 1951

51024/Id - Uno Ingard
"On the Reflection of a Spherical Sound Wave from an Infinite Plane"
J.A.S.A., 23, 239-335, 1951

51025/Kr - Karl Klotter
"Non-Linear Vibration Problems Treated by the Averaging Method of W. Ritz"
Trans. A. S. M. E., 73, 125, 131, 1951

51026/LE - Bernard Lewis & Guenther von Elbe
Combustion, Flames and Explosions of Gases
Academic Press Inc., N. Y., 1951

51027/LL - Hans W. Liepman, John Laufer & Kate Liepmann
On the Spectrum of Isotropic Turbulence
NACA, TN 2473, 1951

51028/LM - S. Lippert & M. M. Miller
"An Acoustical Comfort Index for Aircraft Noise"
J.A.S.A., 23, 478, 1951

51029/Mn - George H. Markstein
"Experimental and Theoretical Studies of Flame Front Stability"
J. Aero. Sci., 18, 199-209, 1951

51030/Mn - George H. Markstein
"Interaction of Flow Pulsations and Flame Propagation"
J. Aero. Sci., 18, 428-429, 1951

51031/Mr - Derwent Mark Atkinson Mercer
"The Voicing of Organ Flue Pipes"
J.A.S.A., 23, 45-55, 1951

51032/Mn - David M. Middleton
"On the Theory of Random Noise, I, II"
J. App. Phys., 22, 1143-1163, 1951

51034/Me - Franklin K. Moore
Unsteady Boundary Layer Flow
NACA TN 2471, 1951

51035/Np - R. P. Northrup
Flow Stability in Small Orifice
A.R.S. Preprint, No. 49-51, 1951

51036/Pi - Shih I. Pai
"On the Stability of Two-Dimensional Laminar Jet Flow of Gas"
J. Aero. Sci., 18, 731-742, 1951

51037/PE - Horace O. Parrack & Donald H. Eldredge
"Noise Problems Associated with Aircraft Maintenance"
Tech. Data Digest, 16, 22-25, 1951

51038/Pl - Alan Powell
"A Schlieren Study of Small Scale Air Jets and Some Noise Measurements on Two-Inch Diameter Air Jets"
ARC 14,726, 1951

51039/Rl - Robert H. Randall
An Introduction to Acoustics
Addison-Wesley Press, Inc., 1951

51040/Rs - R. E. Robertson
"Random Noise in an Attenuating Fluid Medium"
J.A.S.A., 23, 353-358, 1951

51041/Rr - George Rudinger
"A Problem Arising in the Performance Analysis of a Ducted Pulsejet"
Proc. 1st Nat. Congress of App. Mech., ASME, 935-940, 1951

51042/Sy - Robert F. Smiley
A Semiempirical Procedure for Computing the Water-Pressure Distribution on Flat and V-Bottom Prismatic Surfaces During Impact or Planing
NACA TN 2583, 1951

51043/SE - William H. Sterbentz & John C. Evvard
Criterions for Prediction and Control of Ramjet Flow Pulsations
NACA, RM E 51C27, 1951

51044/St - D. G. Stewart
"Oscillatory Combustion in Tunnel-Type Gas Burners"
Industrial Gas, (London), 14, 304-306, 308-310, 1951

1951 Cont'd

51045/Sd - Martin Summerfield
"A Theory of Unstable Combustion in Liquid Propellant Rocket Systems"
A. R. S. J., 21, 108-114, 1951

51046/Si - W. Szablewski
Contributions to the Theory of the Spreading of a Free Jet Issuing From a Nozzle
NACA TM 1311, 1951

51047/Wt - G. D. West
"Circulations Occurring in Acoustic Phenomena"
Proc. Phys. Soc., B 64, 483-487, 1951

51048/Wt - Peter J. Westervelt
"Acoustic Streaming and the Conservation of Angular Momentum"
Phys. Rev., 84, 152-153, 1951

51049/Wt - Peter J. Westervelt
"The Theory of Steady Forces Caused by Sound Waves"
J.A.S.A., 23, 312, 315, 1951

51050/Wn - W. W. von Wittern
"The Relation Between Vortex Noise and Wind Resistance "
Tech. Data Digest, 16, 20-23, 1951

51051/Yr - M. Yachter
"Discussion of Stability of Flow in a Rocket Motor"
J. App. Mech., 18, 114-115, 1951

52001/At - J. Ackeret
"Akustische Phänomeme bei hohen Gluggeschwindigkeiten"
Schweizer Aero-Revue., 27, 429-430, 1952

52002/Ar - John H. Altseimer
"Photographic Techniques Applied to Combustion Studies – Two-Dimensional Transparent Thrust Chamber"
A. R. S. J., 22, 86-91, 103, 1952

52003/An - A. B. C. Anderson
"Dependence of Pfeifenton (pipe tone) Frequency on Pipe Length, Orifice Diameter, and Gas Discharge Pressure"
J.A.S.A., 24, 675-681, 1952

52004/An - Anon
F-89 Ground Noise Muffler
R. Northrop Aircraft, Inc., Rpt. PD-30, 1952

52005/An - Anon
"The Problem of Noise"
U.S. Air Force Medical Service Digest, 3, 8-9, 1952

52006/An - Anon
"The Sonic *Boom*"
Hawker Siddeley Rev., 5, 100-103, 1952

52007/BL - Kurt Berman & Stanley E. Logan
"Combustion Studies With a Rocket Motor Having a Full-Length Observation Window"
A. R. S. J., 22, 78-85, 1952

52008/Bh - L. M. Brekhovskikh
"Diffraction of Waves at an Uneven Surface, I"
J.E.T.P., USSR, 23, 275-288, 1952

52009/Bh - L. M. Brekhovskikh
"Diffraction of Waves at an Uneven Surface, II"
J.E.T.P., USSR, 23, 289-304, 1952

52011/Cn - Stanley Corrsin
"Effect of Wind-Tunnel Nozzle on Steady-Flow Non-Uniformities"
J. Aero. Sci., 19, 135, 1952

52012/Co - Luigi Crocco
"Aspects of Combustion Stability in Liquid Propellant Rocket Motors. Part 2: Low Frequency Instability With Bipropellants. High-Frequency Instability"
A. R. S. J., 22, 7-16, 1952

52013/Co - Luigi Crocco
Combustion Instability in Rocket Motors
Technical Presentations before the AGARD Combustion Panel, AG5/P2, 32-53, Rome AGARD Conference, 1952

52014/Co - Luigi Crocco, et al
Combustion Instability in Liquid Propellant Rocket Motors
Princeton Univ., Aero. Engr. Rpt. No. 216, Quart. Installments, Sept. 1, 1952-Sept. 1, 1959

52015/Dn - L. N. Deriugin
"Equations for Coefficients of Wave Reflections from a Periodically Uneven Surface"
Dok. Akad. Nauk., SSSR 87, 913, 1952

52016/EN - Lothar Ehret, Ulrich Neubert & Horst Hahnemann
"Über den Einfluss starker Schallwellen auf fortschreitende Gasflammen in Rohren"
Z. Physik., 4, 126-134, 1952

52017/EG - Isidor Elias & Robert Gordon
"Longitudinal Vibrations of Gas at Ambient Pressure in a Rocket Thrust Chamber"
A. R. S. J., 22, 263-268, 1952

52018/Fi - Jean Fabri
Combustion Chamber Problems
Tech. Presentations before the AGARD Combustion Panel, AG5/P2, 68-78, Rome AGARD Conference, 1952

52019/Fy - Richard D. Fay
"Waves in Liquid-Filled Cylinders"
J.A.S.A., 24, 459-562, 1952

52020/FL - Hugh M. Fitzpatrick & Robert Lee
Measurement of the Noise Radiated by Supersonic Air Jets
DTMB Rpt. 835, 1952

52021/GP - Henning E. von Gierke, Horace O. Parrack, W. J. Gannon & Ronald G. Hansen
"The Noise Field of a Turbo-Jet Engine"
J.A.S.A., 24, 169-174, 1952

52022/Ht - J. D. Hayhurst
An Investigation Into the Acoustic Screening of Aircraft on the Ground
Ministry of Civil Aviation, TN 10, ARC 15,109, Cir. 277, 1952

52023/Hs - Robert W. Hess
A Study of the Transient Behavior of Shock Waves in Transonic Channel Flows
NACA, TN 2797, 1952

52024/Hd - Harvey H. Hubbard
A Survey of the Aircraft-Noise Problem with Special Reference to its Physical Aspects
NACA TN 2701, 1952

1952 Cont'd

52025/HL - Harvey H. Hubbard & Leslie W. Lassiter
Sound From a Two Blade Propeller at Supersonic Tip Speeds
NACA Rpt. 1079, 1952

52026/Ih - M. A. Isakovich
"The Scattering of Waves From Statistically-Irregular Surfaces"
J.E.T.P., USSR, 23, 305-314, 1952

52027/Jr - Miguel C. Junger
"Sound Scattering by Thin Elastic Shells"
J.A.S.A., 24, 366-373, 1952

52028/Jr - Miguel C. Junger
"Vibrations of Elastic Shells in a Fluid Medium and the Associated Radiation of Sound"
J. App. Mech., 439-445, 1952

52029/KC - C. J. Kippenhan & H. O. Croft
"The Effect of High-Frequency Sound Waves on an Air-Propane Flame"
Trans. ASME., 74, 1151-1155, 1952

52030/Ki - P. N. Kubanskii
"Currents Around a Heated Solid in a Standing Acoustic Wave"
Dok. Akad. Nauk., SSSR, 82, 585, 1952

52031/Ki - P. N. Kubanskii
"Effect of Acoustical Vibrations of Finite Amplitude on the Boundary Layer"
J.E.T.P., USSR, 22, 593-601, 1952

52032/Ki - P. N. Kubanskii
"Flow Near a Heated Hard Body in a Standing Acoustic Wave"
J.E.T.P., USSR, 22, 585-592, 1952

52033/Ki - P. N. Kubanskii
"Viliani akusticheskikh kolebanii konechnoi emplitudi"
"Effect of Acoustical Vibrations of Finite Amplitude on the Boundary Layer"
Zh. Tek. Fiz., 22, 593, 1952

52034/Lr - Leslie W. Lassiter
Noise From Intermittent Jet Engines and Steady-Flow Jet Engines With Rough Burning
NACA, TN 2756, 1952

52035/LH - Leslie W. Lassiter & Harvey H. Hubbard
Experimental Studies of Noise from Subsonic Jets in Still Air
NACA, TN 2757, 1952

52036/LL - James C. Laurence & L. Gene Landes
Auxiliary Equipment and Techniques For Adapting the Constant-Temperature Hot-Wire Anemometer to Specific Problems in Air-Flow Measurements
NACA, TN 2843, 1952

52037/Le - H. Lembcke
"Das Schmidt Rohr"
Z.V.D.I., 1005-1008, 1952

52038/LL - Robert S. Levine & Robert W. Lawhead
"A Survey of Combustion Instability in Liquid Propellant Rocket Engines"
A.R.S.J., Preprint No. 63-52, 1952

52039/Ln - Hans W. Liepmann
"Aspects of the Turbulence Problem"
J. App. Math. Phys., 3, 321-426, 1952

52040/Ll - M. J. Lighthill
"On Sound Generated Aerodynamically, I General Theory."
Proc. Roy. Soc., 221A, 564-587, 1952

52041/LM - S. Lippert & M. M. Miller
"A Method for Evaluating Aircraft Acoustical Comfort"
J. Aviation Med., 23, 54-66, 1952

52042/Mm - Jordan J. Markham
"Second Order Acoustic Fields; Steaming With Viscosity and Relaxation"
Phys. Rev., 86, 497-502, 1952

52043/My - M. Moktar & H. Youssef
"Observations on Edge-Tones"
Acustica, 2, 135-139, 1952

52044/Mi - Gino Moretti
"Camp acustico de una distribución filiforme de singularidades en movimiento rectilineo no uniforme"
Aeron. Argentina, Escuela Superior Aerotecnica, Comunic, e Informes, C5, 1952

52045/Nt - Ulrich Neubert
"Längsschwingungen von Flammen in geschlossenen langgestreckten Verbrennung Verbrennungsbomben"
Z. Physik., 4, 121-126, 1952

1952 Cont'd

52046/NH - **Joseph L. Neuringer & George E. Hudson**
"An Investigation of Sound Vibrations in a Tube Containing a Heat Source"
J.A.S.A., 24, 667-674, 1952

52048/NR - **H. M. Nicholson & A. Radcliffe**
The Relation Between Combustion Instabilities and Pressure Fluctuation in a Jet Engine
NGTE, Rpt. R-85, 1952

52049/NB - **Wesley L. Nyborg, Mahlon D. Burkhard & Harold K. Schilling**
"Acoustical Characteristics of Jet-Edge and Jet-Edge Resonator Systems"
J.A.S.A., 24, 293-304, 1952

52050/Pi - **Shih-I. Pai**
"Axially Symmetrical Jet Mixing of a Compressible Fluid"
Quart. of App. Math., 10, 141-148, 1952

52051/Pi - **Shih-I. Pai**
"On Supersonic Flow of a Two-Dimensional Jet in Uniform Stream"
J. Aero. Sci., 19, 61-65, 1952

52052/Pi - **Shih-I. Pai**
"The Laminar Jet Mixing of Two Compressible Fluids"
Proc. 2nd Midwestern Conf. on Fluid Mech., 297-308, 1952

52053/Pn - **Ian Proudman**
"The Generation of Noise by Isotropic Turbulence"
Proc. Roy. Soc., A214, 119-132, 1952

52054/Rt - **F. H. Reynst**
"Das Schmidt-Rohr"
Z.V.D.I., 94, 1194-1196, 1952

52055/RC - **Orville R. Rogers & Richard F. Cook**
Aerodynamic Noise and the Estimation of Noise in Aircraft
WADC TR 52-341, 1952, AD 13026

52056/RB - **M. D. Rousso & L. E. Baughman**
Investigation at Mach Number 1.91 of Spreading Characteristics of Jet Expanding from Choked Nozzles
NACA TM E51 L 19, 1952

52057/Rk - **Isadore Rudnick**
Theory of the Attenuation of very High Amplitude Sound Waves
Soundrive Engine Co. TR No. 1, 1952

52058/Sd - **David E. Shonerd**
Studies of Flame-Front Oscillations
C.I.T., J. P. L., Rpt. No. 3-18, 1952

52059/Sk - **Raymond Siestrunck**
Combustion Problems in Ramjets
Tech. Presentations before the AGARD Combustion Panel, AG5/P2, 79-90, Rome AGARD Conference, 1952

52060/St - **D. G. Stewart**
An Experimental Analysis of the Pulse Jet
Aero. Res. Lab., Australia, Rpt. E 70, 1952

52061/Ts - **H. S. Tsein**
"Servo-Stabilization of Combustion in Rocket Nozzles"
A. R. S. J., 22, 256-262, 268, 1952

52062/Ts - **H. S. Tsein**
"The Transfer Functions of Rocket Nozzles"
A. R. S. J., 22, 139-143, 162, 1952

52063/UC - **Mahinder S. Uberoi & Stanley Corrsin**
Diffusion of Heat From a Line Source in Isotropic Turbulence
NACA TN 2710, 1952

52064/VE - **Paul S. Veneklasen & Lewis Emmerich**
Results of Tests of Pulse Jet Engine Noise Control Configurations
Amer. Helicopter Co., Inc., Rpt. No. 163-K-3, 1952

52065/WL - **R. Westley & G. M. Lilley**
An Investigation of the Noise Field From a Small Jet and Methods for its Reduction
Cranfield College of Aero., Rpt 53, 1952

52066/Wm - **G. B. Whitham**
"The Flow Pattern of a Supersonic Projectile"
J. App. Math., 5, 301-348, 1952

1953

53001/AB - Lloyd G. Alexander, Thomas Baron, & Edward W. Comings
Transport of Momentum, Mass and Heat in Turbulent Jets
Univ. of Ill., Eng. Exp. Station Bull. No. 413, 1953

53002/At - W. S. Ament
"Toward a Theory of Reflection by a Rough Surface"
Proc. I.R.E., 41, 142-146, 1953

53003/An - A. B. C. Anderson
"A Circular-Orifice Number Describing Dependency of Primary Pfeifenton Frequency on Differential Pressure, Gas Density, and Orifice Geometry"
J.A.S.A., 25, 626-631, 1953

53004/As - J. Milton Andres
Steady Flow and Circulations in Sound Fields
M.I.T., Ph.D. Thesis, 1953

53005/Al - J. Milton Andres & Uno Ingard
"Acoustic Streaming at Low Reynolds Numbers"
J.A.S.A., 25, 932-938, 1953

53006/Al - J. Milton Andres & Uno Ingard
"Acoustic Streaming at High Reynolds Numbers"
J.A.S.A., 25, 928-932, 1953

53007/Ae - Carmen M. Auble
Investigation of Organ-Pipe Type Oscillation in a Steady Flow Combustor
Univ. of Wisconsin, M. Sc. Thesis, 1953

53008/Bs - Hans Behrens
Flame Instabilities and Combustion Mechanism
Fourth Symposium on Combustion, 538-545, Baltimore: Williams & Wilkins Co., 1953

53009/BH - Donald R. Bellman, Jack C. Humphrey & Theodore Male
Photographic Investigation of Combustion in a Two-Dimensional Transparent Rocket Engine
NACA, Rpt. 1134, 1953

53010/BC - Kurt Berman & Samuel Cheney
"Combustion Studies in Rocket Motors"
A. R. S. J., 23, 89-95, 1953

53011/BS - Kurt Berman & Edward H. Scharres
"Photographic Techniques in Jet Propulsion Studies"
A. R. S. J., 23, 170-173, 1953

53012/Br - Perry L. Blackshear
Driving Standing Waves By Heat Addition
Fourth Symposium on Combustion, 553-566, Baltimore: Williams & Wilkins Co., 1953

53013/BR - Perry L. Blackshear, Warren D. Rayle, & Leonard K. Tower
Experimental Determination of Gas Motion Accompanying Screeching Combustion in a 6-inch Simulated Afterburner
NACA, RM E53 I 28, 1953

53014/Bt - P. Blockdassault
"On the Acoustics of Supersonic Missiles"
Comp. Rend., 237, 1123-1126, 1953

53015/Bt - Richard H. Bolt
"The Aircraft Noise Problem"
J.A.S.A., 25, 363-366, 1953

53016/BL - J. R. Burning, G. M. Lilley, R. Westley, & A. M. Yates
On Some Aspects of the Noise Propagation from Supersonic Aircraft
Cranfield College of Aero., Rpt. No. 71, 1953

53017/Cg - Sin-I Cheng
Concepts and Theory of Combustion Instability
Princeton Univ., Dept. Aero. Engr. Rpt. No. 251, 1953

53018/Cg - Sin-I Cheng
"Discussion of Paper by K. Berman and S. Cheney" "Combustion Studies in Rocket Motors"
A. R. S. J., 23, 96, 98, 1953

53019/Cg - Sin-I Cheng
High-Frequency Combustion Instability in Liquid Propellant Rockets with Concentrated Combustion and Distributed Time Lag
Princeton Univ., Dept. Aero. Engr., Rpt. No. 246, 1953

53019a/Cv - D. N. Chetaev
"On the Acoustical Impedance of a Moving Plane Radiator"
Dok. Akad. Nauk., SSSR, 90, 355-358, 1953

53020/Cu - Bau-Teh Chu
On the Generation of Pressure Waves at a Plane Flame Front
Fourth Symposium on Combustion, 603-612, Baltimore; Williams & Wilkins Co., 1953

1953 Cont'd

53021/Co - Luigi Crocco
"Supercritical Gaseous Discharge With High-Frequency Oscillations"
L'Aerotecnica, 33, 46-53, 1953

53022/CC - Luigi Crocco & Sin-I Cheng
High-Frequency Combustion Instability in Rockets With Distributed Combustion
Fourth Symposium on Combustion, 865-880. Baltimore: Williams & Wilkins Co., 1953

53023/CC - Luigi Crocco & Sin I Cheng
"High-Frequency Combustion Instability in Rocket Motors With Concentrated Combustion"
A.R.S.J., 23, 301-313, 322, 1953

53024/GW - B. E. Crocker & R .J. Wells
"Sound Radiation Patterns of Gas Turbine Exhaust Stocks"
J.A.S.A., 25, 433-437, 1953

53025/Ce - N. Curle
"The Mechanics of Edge-Tones"
Proc. Roy. Soc., 216A, 412-424, 1953

53026/DM - Ira Dyer & Osman K. Mawardi
"On Noise of Aerodynamic Origin"
J.A.S.A., 25, 389-395, 1953

53027/Et - Carl Eckart
"The Scattering of Sound from the Sea Surface"
J.A.S.A., 25, 566-570, 1953

53028/EO - Herbert Ellis, Irving Odgers, A. J. Stosick, Nathaniel van der Verg & Robert S. Wick
Experimental Investigation of Combustion Instability in Rocket Motors
Fourth Symposium on Combustion, 880-885, Baltimore: Williams & Wilkins Co., 1953

53029/Fz - C. Fernandez
Use of a Sampling Feedback System for Stabilization of Low-Frequency Oscillations in Liquid Monopropellant Rocket Motors
J. P. L., C. I. T., AE. E. Thesis, 1953

53030/GW - J. E. Garrick & C. E. Watkins
A Theoretical Study of the Effect of Forward Speed on the Free-Space Sound Pressure Field Around Propellers
NACA TN 3018, 1953

53031/Gd - J. H. Gerrard
Measurements of Aerodynamic Sound
Manchester Univ., Ph.D. Thesis, 1953

53032/Ve - Henning E. von Gierke
"Physical Characteristics of Aircraft Noise Sources"
J.A.S.A., 25, 367-378, 1953

53033/Gf - Kenneth W. Goff
The Localization of Sound Sources by Correlation Techniques
M. I. T., Acoustics Laboratory, ONR Contract, N5 ori-07869, 1953

53034/Gd - T. R. Gullstrand
"Sonic Bangs"
SAAB Sonics, 19, 18-20, 1953

53035/Hy - Howard C. Hardy
"Noise Control Measures for Jet Engine Test Installations"
J.A.S.A., 25, 423-428, 1953

53036/Ht - J. D. Hayhurst
"Acoustic Screening by Air Experimental Running-Up Pen"
J. R. A. S., 57, 3-11, 1953

53037/Hr - G. S. Heller
"Propagation of Acoustic Discontinuities in an Inhomogeneous Moving Liquid Medium"
J.A.S.A., 25, 950-951, 1953

53038/HS - A. H. Howland & W. A. Simmonds
Combustion Inside Refractory Tubes
Fourth Symposium on Combustion, 592-602, Baltimore: Williams & Wilkins Co., 1953

53039/Hd - Harvey H. Hubbard
Airplane and Airport Noise
Proc. 4th Annual National Noise Abatement Symposium, 81-88, 1953

53040/Hd - Harvey H. Hubbard
Propeller-Noise Charts for Transport Airplanes
NACA TN 2968, 1953

53041/Id - Uno Ingard
"A Review of the Influence of Meteorological Conditions on Sound Propagation"
J.A.S.A., 25, 405-411, 1953

1953 Cont'd

53042/Id - Uno Ingard
The Physics of Outdoor Sound
Proc. 4th Annual National Noise Abatement Symposium, 11-25, 1953

53043/IL - Uno Ingard & Richard H. Lyon
"The Impedance of a Resistance Loaded Helmholtz Resonator"
J.A.S.A., 25, 854-857, 1953

53044/Jr - Miguel C. Junger
"The Physical Interpretation of the Expression for an Outgoing Wave in Cylindrical Coordinates"
J.A.S.A., 25, 40-47, 1953

53045/Kn - W. E. Kaskan
An Investigation of Vibrating Flames
Fourth Symposium on Combustion, 575-591, Baltimore: Williams & Wilkins Co., 1953

53046/Ky - Leslie S. G. Kovasznay
"Turbulence in Supersonic Flow"
J. Aero. Sci., 20, 657-675, 1953

53047/Kn - Robert H. Kraichnan
"The Scattering of Sound in a Turbulent Medium"
J.A.S.A., 25, 1096-1104, 1953

53048/Kr - Max Kramer
"The Aerodynamic Profile as Acoustic Noise Generator"
J. Aero. Sci., 20, 280-282, 296, 1953

53049/KT - V. A. Krasil'nikov & V. I. Tatarsky
"Dispersion of Sound in Turbulent Flow"
Dok. Akad. Nauk, SSSR, 90, 159-162, 1953

53050/Ki - P. N. Kubanskii
"Currents Around a Heated Solid in a Standing Acoustic Wave"
Dok. Akad. Nauk., SSSR, 82, 585-588, 1953

53051/LH - Leslie W. Lassiter & Harvey H. Hubbard
"Experimental Studies of Jet Noise"
J.A.S.A., 25, 381-384, 1953

53052/Le - Robert Lee
Free Field Measurements of Sound Radiated by Subsonic Air Jets
DTMB, Rpt. 868, 1953

53053/LG - C. Lee, Marvin R. Gore & Chandler C. Ross
"Stability and Control of Liquid Propellant Rocket Systems"
A. R. S. J., 23, 75-81, 1953

53054/Ln - Richard D. Lemmerman
"Materials and Structures Problems in Aircraft Noise Control"
J.A.S.A., 25, 439-441, 1953

53055/Lt - J. E. Lett
"Noise – A Problem in Air Transport and in Ground Operation"
Aero. Eng. Rev., 12, 65-68, 1953

53056/LL - Robert S. Levine & R. W. Lawhead
"Combustion Instability in Liquid-Fuel Rockets"
Aviation Age, 19, 50-55, 1953

53057/Li - Y. T. Li
"Dynamic Pressure Measuring Systems for Jet Propulsion Research"
A. R. S. J., 23, 124-127, 1953

53058/Ll - M. J. Lighthill
On the Energy Scattered from the Interaction of Turbulence with Sound or Shock Waves
Proc. Cambridge Phil. Soc., 49, 531-551, 1953

53060/LW - G. M. Lilley, R. Westley, A. H. Yates & J. R. Busing
"Some Aspects of Noise from Supersonic Aircraft"
J. R. Ae. S., 57, 396-414, 1953

53061/MC - Frank E. Marble & Dale W. Cox
"Servo-Stabilization of Low-Frequency Oscillations in a Liquid Bipropellant Rocket Motor"
A. R. S. J., 23, 63-74, 81, 1953

53062/Mn - George H. Markstein
Instability Phenomena in Combustion Waves
Fourth Symposium on Combustion, 44-59, Baltimore: Williams & Wilkins Co., 1953

53063/MS - George H. Markstein & L. M. Somers
Cellular Flame Structure and Vibratory Flame Movement in n-Butane-Methane Mixtures
Fourth Symposium on Combustion, 527-535, Baltimore: Williams & Wilkins Co., 1953

53064/MD - Osman K. Mawardi & Ira Dyer
On Noise of Aerodynamic Origin
J.A.S.A., 25, 389-395, 1953

53065/Ml - W. R. Maxwell
Pyrotechnic Whistles
Fourth Symposium on Combustion, 906-914, Baltimore: Williams & Wilkins Co., 1953

1953 Cont'd

53066/Mm - William C. Meecham
"Propagation of Radiation in an Inhomogeneous Medium Near an Irregular Surface"
J.A.S.A., 25, 1012, 1953

53067/ML - William R. Michelson & James C. Laurence
Measurement and Analysis of Turbulent Flow Containing Periodic Flow Fluctuations
NACA, RM E53F19, 1953

53068/Ms - John W. Miles
An Approach to the Buffeting of Aircraft Structures By Jets
Douglas Aircraft Co., Rpt. SM-14795, 1953

53069/Mr - David Mintzer
"Discussion of the Paper by C. Eckart on Sea Surface Scattering"
J.A.S.A., 25, 1015, 1953

53070/NR - H. M. Nicholson & A. Radcliffe
"Pressure Fluctuations in a Jet Engine"
J. App. Phys., 4, 359-365, 1953

53071/Ng - Wesley L. Nyborg
"Acoustic Streaming Due to Attenuated Plane Waves"
J.A.S.A., 25, 68-75, 1953

53072/Ng - Wesley L. Nyborg
"Acoustic Streaming Equations – Laws of Rotational Motion for Fluid Elements"
J.A.S.A., 25, 938-944, 1953

53073/NW - Wesley L. Nyborg, C. L. Woodbridge & Harold K. Schilling
"Characteristics of Jet-Edge-Resonator Whistles"
J.A.S.A., 25, 138-146, 1953

53074/Pl - Alan Powell
"On Edge Tones and Associated Phenomena"
Acustica, 3, 233-243, 1953

53075/Pl - Alan Powell
"On the Mechanism of Choked Jet Noise"
Proc. Phys. Soc., 66, 1039-1056, 1953

53076/Pl - Alan Powell
"On the Noise Emanating From a Two-Dimensional Jet Above the Critical Pressure"
Aero. Quart., 4, 103-122, 1953

53077/Pl - Alan Powell
"The Noise of a Pulse Jet"
J. Helicopter Assoc., Great Britain, 7, 32-41, 1953

53078/Pl - Alan Powell
"The Noise of Choked Jets"
J.A.S.A., 25, 385-389, 1953

53079/PD - Abbott A. Putnam & William R. Dennis
"A Study of Burner Oscillations of the Organ-Pipe Type"
Trans. ASME, 75, 15-28, 1953

53080/PD - Abbott A. Putnam & William R. Dennis
Organ-Pipe Oscillations in a Flame-Filled Tube
Fourth Symposium on Combustion, 566-575, Baltimore; Williams & Wilkins Co., 1953

53081/Rh - B. V. Raushenbakh
"On a Remark by Rayleigh Concerning Thermal Excitation of Sounds"
Dok. Akad. Nauk., SSSR., 91, 749-752, 1953

53082/RH - Arthur A. Regier & Harvey H. Hubbard
"Status of Research on Propeller Noise and Its Reduction"
J.A.S.A., 25, 395-404, 1953

53083/Rr - Herbert S. Ribner
Convection of a Pattern of Vorticity Through a Shock Wave
NACA TN 2864, 1953

53084/RM - Herbert S. Ribner & Franklin K. Moore
Unsteady Interaction of Disturbances with a Shock Wave, with Applications to Turbulence and Noise
Proc. Heat Transfer & Fluid Mech. Inst., 45-55, 1953

53085/Rs - Elfyn J. Richards
"A Joint Symposium With the Acoustics Group of the Physical Society. Jet Engine Noise"
Roy. Aero. Soc., 57, 3-4, 1953

53086/Rs - Elfyn J. Richards
"Research on Aerodynamic Noise from Jets and Associated Problems"
J.R.Ae.S., 57, 318-342, 1953

53087/Rs - Elfyn J. Richards
Thoughts on Future Noise Suppression Research
AGARD Proc. AG6/P3, 41-46, 1953

1953 Cont'd

53088/Rs - Elfyn J. Richards
Thoughts on Future Noise Suppression Research
Commonwealth Adv. Aero., Research Council, CC. 222, 1953

53089/Rn - Edward G. Richardson
"Sounds of Jets"
Nature, 172, 54-56, 1953

53090/RS - Anthony L. Russo & Daniel S. Schwartz
"Schlieren Photographs of Sound Fields"
J. App. Phys., 24, 1061-1062, 1953

53091/Sh - E. T. B. Smith
"Some Simple Considerations of Combustion and Gas Dynamics in Liquid Propellant Rocket Motors"
J. Brit. Interplanetary Soc., 12, 53-62, 1953

53092/SS - Robert P. Smith & D. F. Sprenger
Combustion Instability in Solid-Propellant Rockets
Fourth Symposium on Combustion, 893-906, Baltimore; Williams & Wilkins Co., 1953

53093/SN - D. G. Stewart & M. V. Nesbitt
Pressure Pulses Caused by a Change in Fuel-Air Ratio in a Simple Stabilized Burning Zone
NGTE, Rpt. R-132, 1953

53094/Ti - V. I. Tatarskii
"On the Theory of Sound Wave Propagation in a Turbulent Stream"
J.E.T.P., USSR, 25, 74-83, 1953

53095/TB - Adelbert O. Tischler & Donald R. Bellman
Combustion Instability in an Acid-Heptane Rocket with a Pressurized-Gas-Propellant Pumping System
NACA, TN 2936, 1953

53096/TM - Adelbert O. Tischler, Rudolph V. Massa & Raymond L. Mantler
An Investigation of High-Frequency Combustion Oscillations in Liquid-Propellant Rocket Engines
NACA, RM E53B27, 1953

53097/Ti - Robert L. Trimpi
A Theory for Stability and Buzz Pulsation Amplitude in Ram Jets and an Experimental Investigation Including Scale Effects
NACA, RM L53G28, 1953

53098/TL - John C. Truman & N. J. Lipstein
"A Note on Organ-Pipe Resonance in Ducted Burners"
J. Aero. Sci., 20, 846-847, 1953

53099/Ti - Y. T. Tsui
The Effect of Vibration on Heat Transfer Coefficients
Ohio State Univ., Ph.D. Thesis, 1953

53100/Ty - Victor Twersky
"Reflection Coefficients for Certain Rough Surfaces"
J. App. Phys., 24, 659-660, 1953

53101/Ui - Mahinder S. Uberoi
"Eddy Turbulence and Random Sound in a Compressible Fluid"
Proc. Camb. Phil. Soc., 49, 731-734, 1953

53102/UK - Mahinder S. Uberoi & Leslie S. G. Kovasznav
"On Mapping and Measurement of Random Fields"
Quart. App. Math., 10, 375-393, 1953

53103/UM - Karl H. Usow, Carl L. Meyer & Frederick W. Schulze
Experimental Investigation of Screeching Combustion in Full-Scale Afterburner
NACA, RM E53I01, 1953

53104/Vn - Paul S. Veneklasen
"Noise Characteristics of Pulse Jet Engines"
J.A.S.A., 25, 378-380, 1953

53105/Vn - Paul S. Veneklasen
"Noise Control for Ground Operation of the F-89 Airplane"
J.A.S.A., 25, 417-422, 1953

53106/Ws - A. G. Walters
"The Noise from Aircraft Travelling with Velocities Greater than that of Sound"
J. R. Ae. S., 56, 719-720, 1953

53107/Wn - R. K. Wattson
A Method of Boundary Layer Attenuation by Ultrasonic Vibrations
Cessna Aircraft Co., Res. Dept. Engr. Rpt. 1324, 1953

53108/Wt - Peter J. Westervelt
"Acoustic Streaming Near a Small Obstacle"
J.A.S.A., 25, 1123, 1953

53109/Wt - Peter J. Westervelt
"The Theory of Steady Rotational Flow Generated by a Sound Field"
J.A.S.A., 25, 60-67, 1953

1953 Cont'd

53110/Wi - H. V. Wisniowski
Preliminary Experimental Investigation of Howling in Reheat Combustion Chambers
Nat. Aero. Est. Canada, Lab. Rpt. -84, 1953

53111/Zs - H. Zatzkis
"The Sound Field of Moving Sources"
J.A.S.A., 25, 897-898, 1953

1954

54001/An - A. B. C. Anderson
"A Jet-Tone Orifice Number for Orifices of Small Thickness-Diameter Ratio"
J.A.S.A., 26, 21-25, 1954

54002/An - Anon
A Review of the Problem of Abating the Noise from Aircraft
Ministry of Supply, Aircraft Noise Suppression Committee, N.C. 150, 1-5, 1954

54003/By - P. N. Borsky
Community Aspects of Aircraft Annoyance
Univ. of Chicago, National Opinion Research Center, Rpt. 54, 1954

54004/BN - John V. Bouyoucos & Wesley L. Nyborg
"Oscillations of the Jet in a Jet-Edge System. II"
J.A.S.A., 26, 511-514, 1954

54005/Be - John B. Brackenridge
Acoustical Characteristics of Underwater Jet-Edge Systems
Brown Univ., M.S. Thesis - Physics, 1954

54006/Bn - K. Bullington
"Reflection Coefficients of Irregular Terrain"
Proc. IRE, 42, 1258, 1954

54007/Bs - J. M. Burgers
"Further Statistical Problems Connected with the Solution of a Simple Non-Linear Partial Differential Equation"
Koninklijke Ned. Akad. Wet., 57, 159-169, 1954

54008/Bs - J. M. Burgers
"On the Coalescence of Wave-Like Solutions of a Simple Non-Linear Partial Differential Equation"
Koninklijke Ned. Akad. Wet., 57, 45-72, 1954

54009/CH - Edmund E. Callaghan, Walton Howes & Warren North
Tooth-Type Noise-Suppression Devices on a Full-Scale Axial-Flow Turbojet Engine
NACA, RM E54B01, 1954

54010/Cg - Sin-I Cheng
"High-Frequency Combustion Instability in Solid Propellant Rockets. Part I"
Jet Prop. 24, 27-32, 1954

54011/Cg - Sin-I Cheng
"High-Frequency Combustion Instability in Solid Propellant Rockets. Part II"
Jet Prop., 24, 102-109, 1954

54012/Cg - Sin-I Cheng
"Unconditional Stability of Low-Frequency Oscillation in Liquid Rockets"
Jet Prop., 24, 310-312, 315, 1954

54013/Cr - W. Chester
"The Diffraction and Reflection of Shock Waves"
Quart. J. Mech. App. Math., 7, 57-82, 1954

54014/Cr - W. Chester
"The Shock Strength in the Regular Reflection of Weak Shock Waves"
J. Aero. Sci., 21, 347-349, 1954

54015/Cr - W. Chester
"Unsteady Compressible Flow in Ducts"
Quart. J. Mech. App. Math., 7, Part 2, 247-256, 1954

54016/Cy - R. L. Christy
"Jet Engine and Other Noise Problems Aboard Aircraft Carriers"
J. Aviation Med., 485-491, 1954

54017/Ce - J. D. Cole
Acceleration of Slender Bodies of Revolution Through Sonic Velocity
C. I. T., OSR-TN-54-55, 1954

54018/Cd - W. C. Copeland
"Aircraft Noise"
Flight, 66, 932, 1954

54019/Cn - E. T. Copson
"The Reflexion of Sound Waves of Finite Amplitude by a Rigid Wall"
Proc. Roy. Soc., A222, 254-261, 1954

54020/CK - Stanley Corrsin & Alan L. Kistler
The Free-Stream Boundaries of Turbulent Flows
NACA, TN-3133, 1954

54021/Dn - L. N. Deriugin
"On the Theory of Irregular Waveducts"
Trans. Moscow Acoustics Inst., 39, 5-25, 1954

54022/Dn - L. N. Deriugin
"On the Theory of the Reflection of Waves from a Periodically Uneven Surface"
Trans. Moscow Acoustics Inst., 39, 26-43, 1954

54023/Dv - S. P. D'Yakov
"On the Stability of Shock Waves"
J.E.T.P., USSR, 27, 288-295, 1954

1954 Cont'd

54024/Dr - Ira Dyer
Sound Scattering by a Cylindrical Vortex
M.I.T., Ph.D. Thesis, 1954

54025/Fa - Joseph V. Foa
The R. P. I. Wave Engine
Rensselaer Poly. Inst., Troy, N.Y., Rpt. No. TR AE 5409, 1954, AD 47449

54026/Gr - Richard D. Geckler
The Mechanism of Combustion of Solid Propellants
Selected Combustion Problems: Fundamentals and Aeronautical Applications, 289-339, N. A. T. O., AGARD, Combustion Symposium, London, Butterworth Sci. Pub., 1954

54027/Gd - George De W. Gifford
On Noise of Vortical Origin
M.I.T., M.S. Thesis, 1954

54028/Gr - Henry Gortler
On the Three-Dimensional Instability of Laminar Boundary Layers on Concave Walls
NACA, TM 1375, 1954

54029/Gx - F. B. Greatrex
"Engine Noise"
J. R. Ae. S., 58, 223-235, 1954

54030/Gn - Leon Green
"Unstable Burning of Solid Propellants"
Jet Prop., 24, 252-253, 1954

54031/Gs - P. Grootenhuis
"A Correlation of the Resistance to Air Flow of Wire Gauzes"
Proc. I. Mech. E., 168, 837-846, 1954

54032/HV - James L. Harp, Wallace W. Velie & Lively Bryant
Investigation of Combustion Screech, and a Method of its Control
NACA RM E53L24b, 1954

54033/Hz - Hermann L. F. von Helmholtz
On the Sensations of tone as a Physiological Basis for the Theory of Music
Dover Publications, N.Y., 394, 1954

54034/HJ - J. Holtsmark, I. Johnsen, T. Sikkeland, & S. Skavlem
"Boundary Layer Flow Near a Cylindrical Obstacle in an Oscillating, Incompressible Fluid"
J.A.S.A., 26, 26-39, 1954

54035/HL - Harvey H. Hubbard & Leslie W. Lassiter
Some Aspects of the Helicopter Noise Problem
NACA TN 3239, 1954

54036/HL - Harvey H. Hubbard & Leslie W. Lassiter
The Near Noise Field of Static Jets and Some Model Studies of Devices for Noise Reduction
NACA TN 3187, 1954

54037/HR - Harvey H. Hubbard & Arthur A. Regier
The Nature of Aircraft Noise Sources
NACA Univ. Conference on Aerodynamics, Construction, and Propulsion, 8, 1-17, 1954

54038/Hn - J. D. Huffington
"The Unsteady Burning of Cordite"
Trans. Faraday Soc., 50, 942-952, 1954

54039/Jr - Miguel C. Junger
"Dynamic Behavior of Reinforced Cylindrical Shells in a Vacuum and in a Fluid"
J. App. Mech., 21, 35-41, 1954

54040/JR - Miguel C. Junger & Frank J. Rosato
"The Propagation of Elastic Waves in Thin-Walled Cylindrical Shells"
J.A.S.A., 26, 709-713, 1954

54041/Kn - Edward M. Kerwin
A Study of a Class of Thermo-Acoustic Oscillations
M.I.T., Sc.D. Thesis, 1954

54042/KM - Edward M. Kerwin & Osman K. Mawardi
A Study of a Class of Thermo-Acoustic Oscillation. I.
M.I.T. Acoustics Lab., T.M. No. 6, 1954

54043/KH - William K. Koffel, James L. Harp & Lively Bryant
Some Screeching-Combustion Characteristics of a Transpiration-Cooled After-Burner Having a Porous Wall of Wire Cloth
NACA RM E54H27, 1954

54044/LW - Jack Lorell & Henry Wise
"Excitation of Oscillations by Chemical Reaction"
A. R. S. J., 24, 110-111, 1954

1954 Cont'd

54045/LH - Leslie W. Lassiter & Robert H. Heitkotter
Some Measurements of Noise From Three Solid-Fuel Rocket Engines
NACA, TN 3316, 1954

54046/Li - M. J. Lighthill
"On Sound Generated Aerodynamically, II. Turbulence as a Source of Sound"
Proc. Roy. Soc., A222, 1-32, 1954

54047/Li - M. J. Lighthill
"The Response of Laminar Skin Friction and Heat Transfer to Fluctuations in the Stream Velocity"
Proc. Roy. Soc., A224, 1-23, 1954

54048/Ly - G. M. Lilley
A Joint Symposium With the Acoustics Group of the Physical Society. "Aerodynamic Noise"
J. R. Ae. S. 58, 235-239, 1954

54049/LT - R. M. Lockwood & C. H. Thomas
Effects of Low-Frequency Fuel Flow Performance of a Pulse Jet Engine
Amer. Helicopter Co., Inc., Rpt. No. 195-G-1, 1954, AD 58200

54050/Me - E. Macioce
"Combustion Instability in Liquid Fuel Rocket Motors, and Phenomena of Low-Frequency Oscillations"
L'Aerotechnica, 34, 319-325, 1954

54051/MK - Theodore Male, William R. Kerslake & Adelbert O. Tischler
Photographic Study of Rotary Screaming and Other Oscillations in a Rocket Engine
NACA RM E54A29, 1954

54052/Ms - John W. Miles
"On Nonspecular Reflection at a Rough Surface"
J.A.S.A., 26, 191-199, 1954

54053/Ms - John W. Miles
"On Structural Fatigue Under Random Loading"
J. Aero. Sci., 21, 753-762, 1954

54054/Mr - J. A. Milner
A Method of Frequency Analysis
RAE TN No. Arm 547; ARC 17306, 0 1162, 1954

54055/Me - Franklin K. Moore
Unsteady Oblique Interaction of a Shock Wave with a Plane Disturbance
NACA TN 2879, 1954

54056/MM - Franklin K. Moore & Stephen H. Maslen
Transverse Oscillations in a Cylindrical Combustion Chamber
NACA, TN 3152, 1954

54057/Mr - K. H. Mueller
The Contribution of Chemical Reactions to a Time Lag in Nitro-Methane Rocket Motors
A. R. S., Preprint 150-54, 1954

54058/Mk - Max M. Munk
On the Mechanism of Turbulent Fluid Motion
ARC., RM 2041, 16,616, 1954

54059/NC - Warren J. North, Edmund E. Callaghan & Chester D. Lanzo
Investigation of Noise Field and Velocity Profiles of an Afterburning Engine
NACA, RM E54G07, 1954

54060/Ng - Wesley L. Nyborg
"Self-Maintained Oscillations of the Jet in a Jet-Edge System. I"
J.A.S.A., 26, 174-182, 1954

54061/OV - Irving L. Odgers, N van de Verg & Robert S. Wick
Combustion-Stability Research
C. I. T., J. P. L., Prog. Rpt. 20-203, 1954

54062/Oh - Simon Ostrach
Note on the Aerodynamic Heating of an Oscillating Surface
NACA TN 3146, 1954

54063/Pk - D. C. Pack
"Laminar Flow in an Axially Symmetrical Jet of Compressible Fluid, Far from the Orifice"
Proc. Cambridge Phil. Soc., 40, 98-104, 1954

54064/PC - Shih-I. Pai & Beecher B. Cary
"Two Dimensional Jet Mixing of Supersonic Flow"
Fifty Years of Boundary Layer Research, 71-79, H. Görtler & N. Tollmein, ed., Friedr. Vieweg & Sohn, Braunschweig, publ., 1954

54065/Ps - Owen M. Phillips
Surface Noise From a Plane Turbulent Boundary Layer
ARC F. M. 2099, 16963, 1954

1954 Cont'd

54066/Pl - Alan Powell
A Note on the Sound from Weak Disturbances of a Normal Shock Wave
FM 2062, ARC 16, 728, 1954

54067/Pl - Alan Powell
"A Survey of Experiments on Jet Noise"
Aircr. Engr., 26, 2-9, 1954

54068/Pl - Alan Powell
"On the Reduction of Choked Jet Noise"
Proc. Phys. Soc., 67, 313-327, 1954

54070/Pl - Alan Powell
"The Influence of the Exit Velocity Profile on the Noise of a Jet"
Aero. Quart., 4, 341-360, 1954

54071/Pl - Alan Powell
Thoughts on Boundary Layer Noise
A. R. C., F. M. 2061, 16,727, 1954

54072/PD - Abbott A. Putnam & William R. Dennis
"Burner Oscillations of the Gauze-Tone Type"
J.A.S.A., 26, 716-725, 1954

54073/PD - Abbott A. Putnam, William R. Dennis & Bertrand A. Landry
A Survey of Organ-Pipe Oscillations in Combustion Systems
Battelle Memorial Inst., TR 15034-4, 1954

54074/RC - William P. Raney, W. C. Corelli & Peter J. Westervelt
"Acoustical Streaming in the Vicinity of a Cylinder"
J.A.S.A., 27, 1006-1014, 1954

54075/Rr - Herbert S. Ribner
Convection of a Pattern of Vorticity Through a Shock Wave
NACA, Rpt. 1164, 1954

54076/Rr - Herbert S. Ribner
Shock-Turbulence Interaction and the Generation of Noise
NACA TN 3255, 1954

54077/Rs - Elfyn J. Richards
"Jet Engine Noise"
J. R. Ae. S., 58, 221-223, 1954

54078/Rs - Don E. Rogers
An Experimental Investigation of High-Frequency Combustion Instability in a Fuel-Air Combustor
C. I. T., Ae.E. Thesis, 1954

54079/Ro - Anatol Roshko
On the Development of Turbulent Wakes From Vortex Streets
NACA Rpt. 1191, 1954

54080/RD - Chandler C. Ross & Paul P. Datner
A Monograph on the Problem of Combustion Instability in Liquid-Propellant Rocket Motors
A. R. S., Preprint 181, 54, 1954

54081/RD - Chandler C. Ross & Paul P. Datner
Combustion Instability in Liquid-Propellant Rocket Motors
AGARD, Selected Combustion Problems Butterworth's Scientific Publications, London, 352-376, 1954

54082/Sy - Rolf H. Sabersky
"Effect of Wave Propagation in Feed Lines on Low-Frequency Rocket Instability"
Jet Prop., 24, 172-174, 1954

54083/Sr - H. Sprenger
Über thermische effecte in Resonanzrohren
Mitteilungen aus dem Institut für Aerodynamik an der E.T.H., Zürick, Switzerland, No. 21, 1954

54084/Sb - Fritz Staab
"On Propulsive Devices Operating on the Principle of the V-1 (Schmidt tube)."
Z. fur Flugwissenschaften, 2, 129-141, 1954

54085/Ss - K. N. Stevens
A Survey of Background and Aircraft Noise in Communities Near Airports
NACA TN 3379, 1954

54086/Si - S. I. Syrovatskii
"Instability of Tangential Discontinuities in a Compressible Medium"
J.E.T.P., USSR, 27, 121-123, 1954

54087/Tn - Theodore Theodorsen
Mechanism of Turbulence
ARC, 16, 615, F.M. 2040, 1954

1954 Cont'd

54088/Tn - John C. Truman
"Some Properties of Intense Sound Waves in Relation to Combustion"
J. Aero. Sci., 21, 69, 1954

54089/Ui - Mahinder S. Uberoi
Correlations Involving Pressure Fluctuations in Homogeneous Turbulence
NACA TN 3116, 1954

54090/Uk - Robert J. Urick
"Backscattering of Sound From a Harbor Bottom"
J.A.S.A., 26, 231-235, 1954

54091/Vn - Paul S. Veneklasen
Pulse Jet Analog
Amer. Helicopter Co., Inc., Rpt. No. RR-20, 1954

54092/Ws - A. G. Walters
"The Noise From Aircraft"
J. R. Ae. S., 58, 65-71, 1954

54093/Wn - C. H. E. Warren
"Noise Associated with Supersonic Flight"
J. R. Ae. S., 58, 239-241, 1954

54094/Wx - N. Wax
Selected Papers on Noise and Stochastic Processes
Dover Publications, 1954

54095/Wk - Robert S. Wick
An Analysis of Oscillatory Flow in Liquid Propellant Rocket Systems and the Application of the Analysis to Combustion Stability
C. I. T., J. P. L., Prog. Rpt. 20-231, 1954

54096/Yg - James E. Young
"Transmission of Sound Through Thin Elastic Plates"
J.A.S.A., 26, 485-492, 1954

54097/Yg - James E. Young
"Correlation Functions for Noise Fields"
J.A.S.A., 26, 788-789, 1954

54098/Zs - H. Zatzkis
"Sound Field of a Moving Cylinder and a Moving Sphere"
J.A.S.A., 26, 169-173, 1954

1955

55001/An - A. B. C. Anderson
"Metastable Jet-Tone States of Jets from Sharp-Edged, Circular, Pipe-Like Orifices"
J.A.S.A., 27, 13-24, 1955

55002/An - A. B. C. Anderson
"Structure and Velocity of the Periodic Vortex-Ring Flow Pattern of a Primary Pfeifenton (pipe tone) Jet"
J.A.S.A., 27, 1048-1053, 1955

55003/An - Anon
"Runup Cells Solve Jet Ground Problem"
Aviation Age, 24, 68-71, 1955

55004/By - J. J. Bailey
On Certain Flame-Excited Oscillations in a Tube
Harvard Univ., Interim Tech. Rpt. No. 11, 1955

55005/BB - Marcel Barrére & J. J. Bernard
"Étude théoretique des instabilité de basse fréquence dans les fusées à liquide"
Publications *Onera*, No. 79, 1955

55006/BM - Marcel Barrére & A. Moutet
"Les instabilités de basse fréquence dans un moteur-fusée"
La Recherche Aéronautique, 44, 29-38, 1955

55007/BM - M. Barrére & A. Moutet
"Quelques résultats d'études de l'allumage et de l'inflammation des propergols liquides"
La Recherche Aéronautique, 48, 27-34, 1955

55008/BC - Kurt Berman & Samuel H. Cheney
"Rocket Motor Instability Studies"
Jet Prop., 25, 213-518, 1955

55009/Bn - Jean Bertin
"Dilution pulsatoire sur réacteur"
Compt. Rend., 240, 1855-1857, 1955

55010/Bp - R. E. D. Bishop
"The Treatment of Damping Forces in Vibration Theory"
J. R. Ae. S., 59, 738-742, 1955

55011/BR - Perry L. Blackshear, Warren D. Rayle & Leonard K. Tower
Study of Screeching Combustion in a 6-inch Simulated Afterburner
NACA TN 3567, 1955, AD 76,577

55012/Bs - John V. Bouyoucos
Self-Excited Hydrodynamic Oscillators
Harvard Univ., Acoustic Res. Lab., TM 36, 1955

55013/Bn - J. Brillouin
"Réflexion et réfraction d'ondes acoustique par une onde de choc"
Acustica, 5, 149-163, 1955

55014/CC - Edmund E. Callaghan & Willard D. Coles
Investigations of Jet-Engine Noise Reduction by Screens Located Transversely Across the Jet
NACA, TN 3452, 1955

55015/CS - Edmund E. Callaghan, N. D. Sanders & W. J. North
"Recent NACA Investigations of Noise-Reduction Devices for Full-Scale Engines"
Aero. Engr. Rev., 14, 66-71, 1955

55016/Cr - G. F. Carrier
"The Mechanics of the Rijke Tube"
Quart. App. Math., 12, 383-395, 1955

55017/CL - P. Chavasse & R. Lehmann
"Quelques aspects particuliers relatifs aux bruits produits par des avions modernes"
Acustica, 5, 289-297, 1955

55018/Cg - Sin-I Cheng
"Low-Frequency Combustion Stability of Liquid Rocket Motor with Different Nozzles"
Jet Prop., 25, 163-167, 1955

55019/Cg - Sin-I Cheng
"On Unstable Burning of Solid Propellants"
Jet Prop., 25, 79-81, 1955

55020/Cu - Boa-Teh Chu
Pressure Waves Generated by Addition of Heat in a Gaseous Medium
NACA, TN 3411, 1955

55021/Ck - R. K. Cook et al.
"Measurement of Correlation Coefficients in Reverberant Sound Fields"
J.A.S.A., 27, 1072-1077, 1955

55022/CL - G. M. Corcos & H. W. Liepmann
On the Transmission Through a Fuselage Wall of Boundary Layer Noise
Douglas Aircraft Co., Rpt. SM-19570, 1955

1955 Cont'd

55023/Cn - Stanley Corrsin
"A Measure of the Area of a Homogeneous Random Surface in Space"
Quart. App. Math., 12, 403-408, 1955

55024/CG - Luigi Crocco, Jerry Grey & George B. Matthews
Preliminary Measurements of the Combustion Time Lag in a Monopropellant Rocket Motor
Fifth Symposium (International) on Combustion, 164-170, Reinhold Publishing Co., N.Y., 1955

55025/Ce - N. Curle
"The Influence of Solid Boundaries Upon Aerodynamic Sound"
Proc. Roy. Soc., London 231, 505-514, 1955; ARC Rpt. 17373, 1955, AD 150 371

55026/DS - Fred L. Daum & Norman Smith
Experimental Investigation of the Shock Wave Pressure Characteristics Related to the Sonic Boom
WADC TN 55-203, 1955

55027/EW - Gerald W. Englert, Joseph F. Wasserbauer & Paul Whalen
Interaction of a Jet and F'at Plate Located in an Air-Stream
NACA, RM E55G19, 1955

55028/FK - L. R. Fowell & G. K. Korbacher
"A Review of Aerodynamic Noise"
UTIA, Rev. 8, 1955

55029/FS - E. M. Fradkina & M. F. Shirokov
"The Noise of a Rotating Aircraft Propeller During its Forward Movement in a Medium, and Movement of the Medium in Relationship to the Sound Receiver"
Trudi NAI, No. 51, 5-14, 1955

55030/Fn - Peter A. Franken
A Theoretical Analysis of the Field of a Random Noise Source Above an Infinite Plane
NACA, TN 3557, 1955

55031/Fn - R. E. Franklin
Noise Measurements on Cold Jets Using Convergent-Divergent Nozzles
ARC, 17,986, F.M. 2324, 1955

55032/Gs - Robert S. Gales
"Techniques of Noise Measurement and Evaluation of Data"
Noise Control, 1, 22-29, 1955

55033/Gr - Richard D. Geckler
Unsolved Problems in Solid-Propellant Combustion
Fifth Symposium (International) on Combustion , 29-40, N.Y., Reinhold Publ. Corp., 1955

55034/Gd - J. H. Gerrard
"Measurements of the Sound from Circular Cylinders in an Air Stream"
Proc. Phys. Soc., 68B, 453, 1955

55035/Ge - Gordon L. Getline
A Simplified Approach to Environmental Testing
Convair Rpt. DG-G-124, 1955

55036/Gs - F. Goettgens
"Noise in Gas Burners"
Gas-Warme, 4, 150-156, 1955

55037/Gf - Kenneth W. Goff
"An Analog Electronic Correlator for Acoustic Measurements"
J.A.S.A., 27, 223-236, 1955

55038/Gf - Kenneth W. Goff
"The Application of Correlation Techniques to Some Acoustic Measurements"
J.A.S.A., 27, 236-246, 1955

55039/Gt - C. W. Gourt
"Determination of Reflection Coefficient of the Sea"
Proc. I.R.E., 102, Pt. B, 827-830, 1955

55040/Gx - F. B. Greatrex
Jet Noise
A. I. S. Preprint 559, 1955

55041/Gn - Leon Green
Non-Steady Behavior of a Simplified Model of Solid Propellant Burning
Aerojet General, TN-15, OSR, TN55-475, 1955

55042/Gn - Leon Green
Pressure-Measuring Instrumentation for Combustion Stability Studies
OSR-TN-55-474, 1955

55043/GL - Leon Green, M. Lysow & K. L. Nall
Interim Report on an Experimental Study of Combustion Instability in Solid Propellant Rocket Motors
Aerojet-Gen. Corp., TN-11, AFOSR., TN 55-23, 1955

1955 Cont'd

55044/Gd - S. W. Greenwood
"The Helicopter Noise Problem"
The Aeroplane, 89, 908-909, 1955

55045/HB - W. B. Harrison, W. C. Boteler, T. W. Jackson, A. Lowi & F. A. Thomas
Heat Transfer to Vibrating Air Columns
G.I.T., Engr. Exp. Stat., Final Rpt. Proj. A-183, 1955

55046/HL - D. C. Hazen & R. F. Lehnert
Smoke Flow Studies Conducted at Princeton University
Princeton Dept. of Aero. Engr., Rpt. 290, 1955

55047/Hs - Harold S. Heaps
"Nonspecular Reflection of Sound from a Sinusoidal Surface"
J.A.S.A., 27, 698-705, 1955

55048/HL - R. W. Hess, Leslie W. Lassiter & Harvey H. Hubbard
A Study of the Response of Panels to Random Acoustic Excitation
NACA RM L55E13C, 1955

55049/Hn - Martin Hirschorn
"Use of Flat Splitter Construction in Aviation Test Cell Silencing"
J.A.S.A., 27, 969-973, 1955

55050/Hn - W. Hoffman
"A Theoretical Model for High-Frequency Backscatter From the Sea Surface Via the Ionosphere"
J. Atmospheric & Terrest. Phys., 7, 278-284, 1955

55051/HR - Marion A. Hollingsworth & Elfyn J. Richard
A Schlieren Study of the Interaction Between a Vortex and a Shock Wave in a Shock Tube
ARC 17,985, F.M. 2323, 1955, AD 140 845

55052/Ht - Frederick V. Hunt
"Notes on the Exact Equations Governing the Propagation of Sound in Fluids"
J.A.S.A., 27, 1019-1039, 1955

55053/Jr - Miguel C. Junger
"The Effect of a Surrounding Fluid on Pressure Waves in a Fluid-Filled Elastic Tube"
J. App. Mech., 22, 227-231, 1955

55054/KS - M. Kamrass & K. D. Swartzel
"Evaluation of Noise Field Around Jet-Powered Aircraft"
Noise Control, 1, 30-39, 1955

55055/KN - W. E. Kaskan & A. E. Noreen
"High-Frequency Oscillations of a Flame Held by a Bluff Body"
Trans. ASME, 77, 885-895, 1955

55056/Kn - M. Katzin
Backscattering from the Sea Surface
I.R.E. Convention Record, Part 1, 72-77, 1955

55057/Kn - M. Katzin
"On the Mechanism of Radar Sea Clutter"
Proc. IRE, 45, 44-54, 1955

55058/Ke - R. J. Klyle
On Thermally Maintained Vibrations in Gas Columns
G.I.T., Engr. Exp. Sta. Memo Survey Rpt., 1955

55059/Ki - M. Kobrynski
"Étude du bruit des turbo-réacteurs"
La Recherche Aéronautique, 46, 57-60, 1955

55060/Ky - L. S. G. Kovasznay
Interaction of Shock Wave and Turbulence
Proc. of 1955 Inst. on Heat Transfer and Fluid Mechanics, Univ. of Calif., Los Angeles, 1955

55062/Kn - Max C. Kurbjun
Noise Survey of a 10-ft Four-Blade Turbine-Driven Propeller Under Static Conditions
NACA TN 3422, 1955

55063/Lt - Robert F. Lambert
Excitation of Resonators by Air Flow
M.I.T., Acoustics Lab., Quart. Rpt., Jan-Mar. 1955

55064/Lt - Robert F. Lambert
Side Branch Filtering in the Presence of Flow
M. I. T., Acoustics Lab., Quart. Rpt., 6-7, April-June 1955

1955 Cont'd

55065/LD - G. N. Lance & E. C. Deland
"The Shape of the Nappe of a Thin Waterfall"
J. Mech. App. Math., 9, 394-399, 1955

55066/Le - C. A. Lane
"Acoustical Streaming in the Vicinity of a Sphere "
J.A.S.A., 27, 1082-1086, 1955
(See: *A. erratum*, 28, 1293, 1957)

55067/LH - Leslie W. Lassiter & Harvey H. Hubbard
"Some Results of Experiments Relating to the Generation of Noise in Jets"
J.A.S.A., 27, 431-437, 1955

55068/Le - James C. Laurence
Intensity, Scale, and Spectra of Turbulence in Mixing Region of Free Subsonic Jet
NACA TN 3561, 1955

55069/LM - D. H. Lee, D. G. Martin & N. P. W. Moore
"Combustion Within Heated Tubes"
Fuel, 34, 2 (Supplement), 5107-5118, 1955

55070/Lh - Robert Lemlich
"Effect of Vibration on Natural Convection Heat Transfer"
Symposium on Pulsatory & Vibrational Phenomena
Ind. Engr. Chem., 47, 1175-1180, 1955

55071/Li - A. N. Leporskii
"Experimental Study of the Diffraction of Acoustic Waves at Periodic Structures"
Acoustics J., USSR, 1, 48-57, 1955

55072/Ln - Hans W. Liepmann
"Extension of the Statistical Approach to Buffeting and Gust Response of Wings of Finite Span"
J. Aero. Sci., 22, 197-200, 1955

55073/LW - M. J. Lighthill & G. B. Whitham
"On Kinematic Waves, I. Flood Movement in Long Rivers"
Proc. Roy. Soc., 229, 281-316, 1955

55074/LW - M. J. Lighthill & G. B. Whitham
"On Kinematic Waves, II. A Theory of Traffic Flow on Long Crowded Roads "
Proc. Roy. Soc., 229, 317-345, 1955

55076/Ln - Richard H. Lyon
Excitation of Continuous Systems by Random Noise Fields
M.I.T., Dept. of Phys., Ph.D. Thesis, 1955

55077/Ln - Richard H. Lyon
"Response of an Elastic Plate to Localized Driving Forces"
J.A.S.A., 27, 259-265, 1955

55078/Lv - Iu. P. Lysanov
On the Theory of the Scattering of Waves at Uneven and Inhomogeneous Surfaces
Dissertation – Acoustics Inst. of the Acad. Sci., USSR, 1955

55079/Me - E. Macioce
"Combustion Stability in Rocket Motors with Bipropellants: Low-Frequency Oscillatory Phenomena"
L'Aerotecnica, 35, 144-151, 1955

55080/MS - George H. Markstein & D. Schwartz
"Interaction Between Pressure Waves and Flame Fronts"
Jet Prop., 25, 174-176, 1955

55081/MS - George H. Markstein & W. Squire
"On the Stability of a Plane Flame Front in Oscillating Flow"
J.A.S.A., 27, 416-424, 1955

55082/MY - Johann Martinek & Gordon C. K. Yeh
"Sound Scattering and Transmission by Thin Elastic Rectangular Plates"
Quart. J. Mech. App. Math., 8, 179-190, 1955

55083/Mi - Osman K. Mawardi
"On the Spectrum of Noise from Turbulence"
J.A.S.A., 27, 442-445, 1955

55085/Mr - D. M. A. Mercer
The Influence of Turbojet Engine Design Parameters on Noise Output
Preprint No. 544, IAS, 23rd. Annual Meeting, 1955

55086/Me - Marie Merle
"On the Structure of a High Velocity Air Jet"
Compt. Rend., 240, 1972-1973, 1955

55087/Me - Marie Merle
"Sound Waves Emitted by an Air Jet"
Compt. Rend., 240, 2055-2057, 1955

1955 Cont'd

55088/Mn - William R. Mickelson
An Experimental Comparison of the Lagrangian and Eulerian Correlation Coefficients in Homogeneous Isotropic Turbulence
NACA, TN 3570, 1955

55089/Cm - C. C. Miesse
Oscillation of the Flame Front Between Two Unlike Droplets in a Bipropellant Liquid System
Fifth Symposium (International) on Combustion, 190-195, Reinhold Publ. Corp., N.Y., 1955

55090/MP - M. M. Miller & R. Pollock
"Noise Considerations in Aircraft Structural Design"
Noise Control, 1, 50-52, 1955

55091/Ms - Harold Mirels
Acoustic Analysis of Ram-Jet Buzz
NACA, TN 3574, 1955

55092/MM - M. Moktar & M. A. Mahrous
"The Attenuation of Sound in a Turbulent Atmosphere Over a Desert Terrain"
Acustica, 5, 179-181, 1955

55093/MF - G. W. Morgan & W. R. Ferrante
"Wave Propagation in Elastic Tubes Filled with Streaming Liquid"
J.A.S.A., 27, 715-725, 1955

55094/MW - G. F. Mucklow & A. J. Wilson
"Wave-Action in Gases: The Attenuation and Reflection of Compression Waves Propagated in Pipes. Part I – Wave Attenuation. Part II – Wave Reflection"
Proc. I. Mech. E., 169, 69-82, 1955

55095/NA - J. I. Neimark & G. V. Aronovich
"The Conditions for Self-Excitation of a Singing Flame"
J.E.T.P., USSR, 1, 475-483, 1955

55095a/NT - Roger T. Newton & John C. Truman
"The Effect of Axial Flow in a Burner on Combustion Oscillation Frequencies"
J. Aero. Sci., 22, 583-584, 1955

55096/Nh - Warren J. North
Summary Evaluation of Toothed-Nozzle Attachments as a Jet-Noise-Suppression Device
NACA TN 3516, 1955

55097/Pi - Shih-I Pai
On the Stability of Parallel Flows With Respect to Periodic Disturbances
J. Franklin Inst., 259, 197-208, 1955

55098/Pi - Shih-I Pai
"Visualization of Jet Flows"
Aero Digest, 1-4, 1955

55099/Pn - D. F. Pangborn
A Comparison of Combustion Modes in Intermittent Jet Engines
Rensselaer Poly. Inst., Troy, N.Y., Rpt. No. TR AE 5504, 1955, AD 79389

55100/PS - G. N. Patterson & Staff
"The Role of Fluid Mechanics in Aeronautical Development"
Aero. Engr. Rev., 14, 27-39, 1955

55101/PD - S. S. Penner & Paul P. Datner
Combustion Problems in Liquid-Fuel Rocket Engines
Fifth Symposium (International) on Combustion 11-29, Reinhold Publ. Corp., N.Y., 1955

55102/Ps - Owen M. Phillips
On Aerodynamic Surface Sound
ARC F.M. 2099, 16963, 1955

55104/Pl - Alan Powell
A Note on the Sound From Weak Disturbances of a Normal Shock Wave
Aero. Res. Counc. Lond. Curr. Pap. 194, 1955

55105/Pl - Alan Powell
The Problem of Structural Failure Due to Jet Noise
Aero. Res. Counc. Lond. Rpt. 17514, 1955

55106/PH - Harry Press & J. C. Howbolt
"Some Applications of Generalized Harmonic Analysis to Gust Loads on Airplanes"
J. Aero. Sci., 22, 17-26, 1955

55107/PD - Abbott A. Putnam & William R. Dennis
Low-Frequency Oscillations in a Flame-Filled Tube
ASME Paper No. 55-SA-48, 1955

55108/PD - Abbott A. Putnam & William R. Dennis
"Organ-Pipe Oscillation in a Deep-Ported Burner
Ind. Engr. Chem., 47, 1184, 1955

1955 Cont'd

55109/PD - Abbott A. Putnam & William R. Dennis
"Suppression of Burner Oscillations by Acoustical Dampers"
Trans. ASME, 77, 875-885, 1955

55110/Ro - P. Sambasiva Rao
Supersonic Bangs
ARC 17, 427, F.M. 2194, 1955

55111/Ro - P. Sambasiva Rao
Supersonic Bangs, Part II
ARC 17, 842, F.M. 2295, 1955

55112/Rt - F. H. Reynst
"Pulsating Combustion"
Aeronautics, 32, 46-50, 1955

55113/Rt - F. H. Reynst
"Das Schmidt-Rohr"
Allgemeine Warmetechnik, 6, 77-81, 1955

55114/Rr - Herbert S. Ribner
Shock-Turbulence Interaction and the Generation of Noise
NACA, Rpt. 1233, 1955

55115/Rs - Elfyn J. Richards
"Problems of Noise in Helicopter Design"
J. R. Ae. S., 59, 225-266, 1955

55116/Rn - Edward G. Richardson
"Acoustics in Relation to Aerodynamics"
J. Aero. Sci., 22, 775-780, 1955

55117/Rr - F. C. Roesier
"Some applications of Fourier Series in the Numerical Treatment of Linear Behaviour"
Proc. Phys. Soc., 68, 89, 1955

55118/RT - F. C. Roesier & W. A. Twyman
"An Iteration Method for the Determination of Relaxation Spectra"
Proc. Phys. Soc., 68, 97, 1955

55119/RD - Chandler C. Ross & Paul P. Datner
"Combustion Instability in Rocket Engines"
Western Aviation, 35, 6-8, 35-37, 1955

55120/Sr - G. B. Schubauer
Turbulent Processes as Observed in Boundary Layer and Pipe
ARC F.M. 2176; 17, 321, 1955

55121/Sz - Theodore J. Schultz
"Measurement of Membrane Tension"
Rev. Scientific Instruments, 26, 624-625, 1955

55122/Sn - F. S. Sherman
A Low-Density Wind-Tunnel Study of Shock-Wave Structure and Relaxation Phenomena in Gases
NACA TN 3298, 1955

55123/Sw - William B. Snow
"Instrumentation for Noise Measurements"
Noise Control 1, 16-21, 1955

55124/Sg - W. G. Spangenberg
Heat-Loss Characteristics of Hot-Wire Anemometers at Various Densities in Transonic and Supersonic Flow
NACA TN 3381, 1955

55125/Sb - F. Staab
"Von Strahlantrieben ausgesandte Schall- und Ultraschallwellen"
Jahrb. Wiss. Ges. Luftfahrt., 265-275, 1955

55126/SE - William H. Sternbentz & John C. Evvard
Criterions for Prediction and Control of Ram-Jet Flow Pulsations
NACA, TN 3506, 1955

55127/SK - K. D. Swartzel & M. Kamrass
Evaluation of the Noise Field Around Jet-Powered Aircraft
SAE Preprint No. 510, 1955

55128/Si - B. Szczeniowski
Theory of the Jet Syphon
NACA TN 3385, 1955

55129/Tt - J. M. Talbot
"Breaking the Sound Barrier and its Effect on the Public"
J. Am. Med. Assoc., 158, 1-5, 1955

55130/To - R. E. Tatro
The Spreading Characteristics of Choked Jets Exhausting Into a Supersonic Stream
Arnold Engr. Dev. Center, TR-55-2, 1955

1955 Cont'd

55132/Ts - Nigel Thomas
"On the Production of Sound by Jets"
J.A.S.A., 27, 446-448, 1955

55133/Tg - Leon J. Trilling
"On Thermally Induced Sound Fields"
J.A.S.A., 27, 425-431, 1955

55134/TN - John C. Truman & Roger T. Newton
"Combustion Oscillations in Ducted Burners"
Ind. Engr. Chem., 47, 1182-1184, 1955

55135/TN - John C. Truman & Roger T. Newton
"Why Do High-Thrust Engines Screech?"
Aviation Age, 23, 136-143, 1955

55136/Tr - John M. Tyler
"A Jet Exhaust Silencer"
Noise Control, 1, 37-41, 1955

55137/Tr - John M. Tyler
"Handling Jet Engine Noise Data"
Noise Control, 1, 46-49, 1955

55138/TP - John M. Tyler & E. C. Perry
"Jet Noise"
S.A.E.Trans., 63, 308-320, 1955

55139/TT - John M. Tyler & G. B. Towle
A Jet Exhaust Silencer
Installation Engr. Rpt. PWA, Inst. 469, 1955. SAE Preprint No. 508, 1955

55140/UK - Mahinder S. Uberoi & Leslie S.G. Kovasznay
"Analysis of Turbulent Density Fluctuations by the Shadow Method"
J. App. Phys., 26, 19-24, 1955

55141/VK - A. W. Vogeley & M. C. Kurbjun
Measurements of Free-Space Oscillating Pressures Near a Propeller at Flight Mach Numbers to 0.72
NACA TN 3417, 1955

55142/We - Richard V. Waterhouse
"Interference Patterns in Reverberant Sound Fields"
J.A.S.A., 27, 247-258, 1955

55143/WL - J. M. Whitmore, W. R. Lull, & M. D. Adams
"How Sound Affects Vibration in Modern Aircraft Engines"
G. M. Eng. J., 2, 1-7, 1955

55144/Wk - Robert S. Wick
The Effect of Structure on Combustion Stability on Liquid-Propellant Rockets During Flight and During Static Test-Stand Firing
C.I.T., J. P. L., Prog. Rpt. 20-274, 1955

55145/Wk - Robert S. Wick
The Effect of Vehicle Structure on Combustion Stability in Liquid-Propellant Rockets
C.I.T., J. P. L., Prog. Rpt. 20-248 ,1955

55146/WB - Oscar B. Wilson & David A. Bies
Studies of Very High Amplitude Sound
Soundrive Engr. Co., AFOSR-TR-55-10, 1955, AD 72433

55147/WW - M. O. W. Wolfe & H. C. Wolley
Measurement of Pressure Disturbances on the Ground Due to Sonic Bangs
RAE Rpt. Struct. 191, 1955

55148/YM - G. C. K. Yeh & J. Martinek
"Forced Vibration of a Clamped Rectangular Plate in Fluid Media"
J. App. Mech., 22, 568, 1955

55149/Yn - F. Y. Yudin
"On the Sound Power of Noise Made by the Elements of Air Outlets"
Akust. Z., 1, 368-382, 1955

1956

56001/An - A. B. C. Anderson
"Vortex-Ring Structure-Transition in a Jet Emitting Discrete Acoustic Frequencies"
J.A.S.A., 28, 914, 921, 1956

56002/An - Leo Anton
Formation of a Vortex at the Edge of a Plate
NACA TM 1398, v. 10, 1956

56003/BM Marcel Barrère, A. Moutet & P. Sarrat
"Instabilities de la combustion dans les moteurs fusées étude experimentale"
Publications *ONERA*, No. 82, 1956

56004/BM - Marcel Barrère & A. Moutet
"Low-Frequency Combination Instability in Bipropellant Rocket Motors Experimental Study"
Jet Prop., 26, 9-19, 1956

56005/Bh - I. Berkovitch
The Effect of Sonic Vibrations on Heat Transfer From Town Gas Flames
London Univ., Ph.D. Thesis, 1956

56006/BC - David A. Bies, J. H. Cafrey & Oscar B. Wilson
Preliminary Research of Noise Associated with Turbojet Engines
Soundrive Engr. Co., Final Summary Rpt. 89, 1956, AD 147106

56007/Br - Perry L. Blackshear
Growth of Disturbances in a Flame-Generated Shear Region
NACA Rpt. 1360, 1956

56008/Bv - D. I. Blokhintsev
Acoustics of a Non-Homegeneous Moving Medium
NACA TM 1399, 1956

56009/By - P. N. Borsky
"The Problem of Community Reaction to Jet Aircraft Noise"
Proc. I.A.S., 55-60, 1956

56010/Bd - J. Bourdinand
"Assourdissements provoqués par un hélicoptere à réaction"
La Médecine Aéronautique, 11, 395-403, 1956

56011/Bn - E. A. Brown
The Effect of the Jet on the Sonic Boom
Theoretical Investigations of the Sonic Boom, Quart. Rpt. 4, ARF No. DO94, 1956

56012/CC - Edmund E. Callaghan & Willard D. Coles
Investigation of Far Noise Field of Jets. I – Effect of Nozzle Shape
NACA, TN 3590, 1956

56013/CH - Edmund E. Callaghan, Walton L. Howes & Willard D. Coles
Near Noise Field of a Jet-Engine Exhaust. II – Cross Correlation of Sound Pressures
NACA TN 3764, 1956

56014/Cn - G. B. Chamberlin, Jr.
Heat Transfer by Free Convection from a Longitudinally Oscillating Cylinder in Air
USAF Inst. of Techn., MS Thesis, 1956

56015/Ct - A. F. Charwat
"The Decay of Turbulence Near the Critical Reynolds Number"
J. Aero. Sci., 23, 1, 1956

56016/Cg - Sin-I Cheng
"High-Frequency Combustion Instability in Liquid Propellant Rocket with Concentrated Combustion and Distributed Time Lag"
Jet Prop., 26, 87-92, 1956

56017/Cu - Boa-Teh Chu
Mechanism of Generation of Pressure Waves at Flame Fronts
NACA TN3683, 1956

56018/Cu - Boa-Teh Chu
Stability of Systems Containing a Heat Source – the Rayleigh Criterion
NACA RM 46D27, 1956

56019/CH - D. M. Clemmow & J. D. Huffington
"An Extension of the Theory of Thermal Explosion and its Application to the Oscillatory Burning of Explosives"
Trans. Faraday Soc., 52, 385-396, 1956

56020/CW - D. S. Cohen & Peter J. Westervelt
The Transonic Wave Drag of Smooth Bodies of Revolution Derived with Acoustical Methods
WADC, TN 56-347, 1956

56021/CK - J. N. Cole, D. T. Kyrazis & Hans L. Oestreicher
A Method for Calculating the Acoustical Characteristics of Aircraft in Flight
WADC, TR 56-488, 1956

1956 Cont'd

56022/CC - Willard D. Coles & Edmund E. Callaghan
Investigation of Far Noise Field of Jets. II – Comparison of Air Jets and Jet Engines
NACA, TN 3591, 1956

56023/CL - G. M. Corcos & Hans W. Liepmann
On the Contribution of Turbulent Boundary Layers to the Noise Inside a Fuselage
NACA TM 1420, 1956

56024/CC - Luigi Crocco & Sin-I Cheng
Theory of Combustion Instability in Liquid Propellant Rocket Motors
AGARDograph No. 8, Butterworth's Sci. Pub., London, 1956

56025/CG - Luigi Crocco & Jerry Grey
Combustion Instability in Liquid Propellant Rocket Motors
Proc. of Gas Dynamics Symposium on Aerothermochemistry, Northwestern Univ., 55-70, 1956

56026/CG - Luigi Crocco, Jerry Grey & George B. Matthews
"Measurements of the Combustion Time Lag in a Liquid Bipropellant Rocket Motor"
Jet Prop., 26, 20-25, 1956

56027/Ce - N. Curle
"Unsteady Two-Dimensional Flows with Free Boundaries. I. General Theory"
Proc. Roy. Soc., 235, 375-381, 1956

56028/Ce - N. Curle
"Unsteady Two-Dimensional Flows with Free Boundaries. II. The Incompressible Inviscid Jet"
Proc. Roy. Soc., 235, 382-395, 1956

56029/Dh - Franklin W. Diederich
"The Dynamic Response of a Large Airplane to Continuous Random Atmospheric Disturbances"
J. Aero. Sci., 23. 917-930, 1956

56030/EK - Kenneth M. Eldred & Demos T. Kyrazis
Noise Characteristics of Air Force Turbojet Aircraft
WADC, TN 56-280, 1956

56031/EP - H. B. Ellis & R. S. Pickford
High-Frequency Combustion Instability
Aerojet-General, TN-17, 1956

56032/En - A. C. Eringen
"Response of Beams and Plates to Random Loads"
J. App. Mech., Paper 56-A-5, 1-7, 1956

56033/EK - B. Etkin, G. K. Korbacher & R. T. Keefe
Acoustic Radiation from a Stationary Cylinder in a Fluid Stream
UTIA, Rpt. 39, 1956

56034/FS - Hugh M. Fitzpatrick & Murray Strasberg
Hydrodynamic Sources of Sound
D. T. M. B., Rpt. 1269, 1956

56035/Fn - Peter A. Franken
The Interaction of Sound and Turbulence in a Closed Region
M.I.T., Ph.D. Thesis, 1956

56036/Fn - Evyind Frederiksen
Resonance-Behavior of Non-Linear One Dimensional Gas Vibrations Analyzed by the Ritz-Galerkin Method
WADC, TR 56-416, 1956

56037/FH - A. M. Freudenthal & R. A. Heller
"Accumulation of Fatigue Damage"
Fatigue in Aircraft Structures, A. M. Freudenthal, ed., Academic Press, Inc., New York, 146-177, 1956

56038/Gd - J. H. Gerrard
"An Investigation of the Noise Produced by a Subsonic Air Jet"
J. Aero. Sci., 23, 855-866, 1956

56039/Gt - M. B. Glauert
"The Laminar Boundary Layer on Oscillating Plates and Cylinders"
J. Fluid Mech., 1, 97-110, 1956

56040/GT - N. Granick & C. E. Thomas
Aircraft Structural Vibration Induced by Jet Noise
WADC TN 56-514, 1956, AD 110620

56041/Gn - Leon Green
"Observations on the Irregular Reaction of Solid Propellant Charges"
Jet Prop., 26, 655-659, 1956

56042/Gn - Leon Green
Studies on the Reaction Stability of Solid Propellant Charges
Aerojet-General Rpt. 1077, 1956

1956 Cont'd

56043/HH - A. K. Head & F. H. Hooke
Random Noise Fatigue Testing
International Conf. on Fatigue of Metals, Institution of Mechanical Engineers, London, 30-303, 1956

56044/Ht - Lothar O. Hoeft
A System for Measuring the High Sound Pressure Levels From Rockets
WADC, TR 56-655, 1956

56045/Ht - Lothar O. Hoeft
The Development of a Mobile Acoustics Laboratory
WADC, TR 56-656, 1956

56046/HN - D. W. Holder, R. J. North & G. P. Wood
Optical Methods for Examining the Flow in High-Speed Wind Tunnels
Wind Tunnel AGARDograph Series, 1956

56047/HR - Marion A. Hollingsworth & Elfyn J. Richards
On the Sound Generated by the Interaction of a Vortex and a Shock Wave
ARC 18,257, F. M. 2371, 1956, AD 140 844

56048/HM - Walton L. Howes & Harold R. Mull
Near Noise Field of a Jet-Engine Exhaust. I—Sound Pressures
NACA, TN 3763, 1956

56049/HD - Carl R. Huss & James J. Donegan
Method and Tables for Determining the Time Response to a Unit Impulse from Frequency-Response Data and for Determining the Fourier Transform of a Function of Time
NACA TN 3598, 1956

56050/IB - Uno Ingard & David Pridmore-Brown
"Sound Radiation from the Acoustic Boundary Layer"
J.A.S.A., 28, 128-129, 1956

56051/Jn - Robert G. Jahn
"The Refraction of Shock Waves at a Gaseous Interface"
J. Fluid Mech., 1, Pt. 5, 457-489, 1956

56052/KT - Edward J. Kirchman, D. Thomas & Joshua E. Greenspon
Panel Excitation by Acoustic Noise
Glenn L. Martin Co., Engr. Rpt. 8637, 1956, AD 150890

56053/Kr - Karl Klotter
How to Obtain Describing Functions for Nonlinear Feedback Systems
Trans. A. S. M. E., Paper 56-IRD-5, 1956

56054/Kh - Eldon L. Knuth
"Comments on Flight Measurements of Aerodynamic Heating and Boundary Layer Transition on the Viking 10 Nose Cone"
A.R.S.J., 20, 1101-1103, 1956

56056/Kv - I. M. Konovalov
"The Theory of Turbulent Jets"
In-ta Inzh. Vod. Transp., No. 23, 3-9, 1956

56057/Kn - Robert H. Kraichnan
"Pressure Fluctuations in Turbulent Flow Over a Flat Plate"
J.A.S.A., 28, 378-390, 1956

56058/Ky - K. Krishnamurty
Sound Radiation from Surface Cutouts in High Speed Flow
C.I.T., Ph.D. Thesis, 1956

56059/KB - H. George Krull & William T. Beale
Internal Performance Characteristics of Short Convergent-Divergent Exhaust Nozzles Designed by the Method of Characteristics
NACA, RM E56D27a, 1956

56060/LT - E. O. La Casce & P. Tamarkin
"Underwater Sound Scattering From a Rough Surface"
J. Appl. Phys., 27, 138-148, 1956

56061/Le - G. N. Lance
"Motion of a Viscous Fluid in a Tube Which is Subjected to a Series of Pulses"
Quart., App. Math., 14, 312-315, 1956

56062/LH - Leslie W. Lassiter, Robert W. Hess & Harvey H. Hubbard
"An Experimental Study of the Response of Simple Panels to Intense Acoustic Loading"
Inst. of Aero. Sci., Preprint 623, 1956
J. Aero. Sci., 24, 19-24, 1957

56063/LH - Leslie W. Lassiter & Harvey H. Hubbard
The Near Noise Field of Static Jets and Some Model Studies of Devices for Noise Reduction
NACA, Rpt. 1261, 1956

56064/Le - James C. Laurence
Intensity, Scale and Spectra of Turbulence in Mixing Region of Free Subsonic Jet
NACA, Rpt. 1292, 1956

56065/LS - James C. Laurence & Truman M. Stickney
Further Measurements of Intensity, Scale, and Spectra of Turbulence in a Subsonic Jet
NACA TN 3576, 1956

1956 Cont'd

56066/Ln - J. P. Layton
Heat Transfer in Oscillating Flow
Princeton Univ., Aero. Engr. Dept., Rpt. No. 266a, 1956

56067/Ln - B. J. Lazan
Damping and Resonant Fatigue Behaviour of Materials
I. Mech. E., Paper 2, 1956

56068/Ln - B. J. Lazan
"Fatigue Under Resonant Vibrations Considering Both Material and Slip Damping"
S. E. S. A. Proc., 15, 1-20, 1956

56069/LP - Y. C. Lee, A. M. Pickles & C. C. Miesse
"Experimental Aspects of Rocket System Stability"
Jet Prop., 26, 34-39, 1956

56070/Li - A. N. Leporskii
"On the Scattering of Sound Waves at Sinusoidal and Sawtooth Surfaces"
Acoustics J., USSR, 2, 177-181, 1956

56071/Li - Y. T. Li
"Stabilization of Low-Frequency Oscillations of Liquid Propellant Rockets with Fuel Line Stabilizer"
Jet Prop., 26, 26-33, 39, 1956

56072/Ln - T. H. Lin
"Creep Deflection of Visco-Elastic Plate Under Uniform Edge Compression"
J. Aero. Sci., 23, 883-887, 1956

56073/Ln - Richard H. Lyon
"Propagation of Correlation Functions in Continuous Media"
J.A.S.A., 28, 76-79, 1956

56074/Ln - Richard H. Lyon
"Response of Strings to Random Noise Fields"
J.A.S.A., 28, 391-398, 1956

56075/Lv - Iu. P. Lysanov
"One Approximate Solution of the Problem of the Scattering of Sound Waves at an Uneven Surface"
Acoustics J., USSR, 2, 182-187, 1956

56076/Mv - A. I. Maklatov
"Oscillation of Diffusion Flames Appearing when there is a Laminar Flow of the Ignitable Medium"
Zh. Fiz. Khimii, 30, 708, 1956

56077/MY - J. Martinek & G. C. K. Yeh
Forced Vibration of a Visco-Elastic Rectangular Plate in Fluid Media
Reed Research, Inc., Washington, D.C., 352-359, 1956

56078/MS - George H. Markstejn & D. Schwartz
Cellular Slot Burner Flames
Proceedings of the Gas Dynamics Symposium on Aerothermochemistry, Northwestern University, 83-94, 1956

56079/MM - Stephen H. Maslen & Franklin K. Moore
"On Strong Transverse Waves Without Shocks in a Circular Cylinder"
J. Aero. Sci., 23, 583-593, 1956

56080/Mi - Osman K. Mawardi
"Aero-Thermoacoustics. (The Generation of Sound by Turbulence and by Heat Processes.)
Rpt. Prog., Phys., 19, 156-186, 1956

56081/Mi - Osman K. Mawardi
"On Thermo-Acoustic Transduction in a Potential Flow"
J.A.S.A., 28, 239-245, 1956

56082/Mm - William Meecham
"Fourier Transform Method for the Treatment of the Problem of the Reflection of Radiation from Irregular Surfaces"
J.A.S.A., 28, 370, 1956

56083/Mm - William Meecham
"On the Use of the Kirchoff Approximation for the Solution of Reflection Problems"
J. Rational Mech. Analysis, 5, 323-334, 1956

56084/Mm - William Meecham
"Variational Method for the Calculation of the Distribution of Energy Reflected from Periodic Surfaces"
J. App. Phys., 27, 361, 1956

56085/Mk - H. J. Merk
"Analysis of Heat-Driven Oscillations of Gas Flows. I. General Considerations"
App. Sci. Res., 6, 317-336, 1956

56086/Me - Marie Merle
"On the Frequency of Sonorous Waves Emitted by an Air Jet at Great Velocity"
Compt. Rend., 243, 490-493, 1956

1956 Cont'd

56087/MB - William R. Mickelson & Lionel V. Baldwin
Aerodynamic Mixing Downstream from Line Source
NACA, TN 3760, 1956

56088/Ms - John W. Miles
"A First-Order Formulation of the Unsteady Supersonic Flow Problem for Finite Wings"
J. Aero. Sci., 23, 578-582, 1956

56089/Ms - John W. Miles
"On Linearized Transonic Flow Theory for Slender Bodies"
J. Aero. Sci., 23, 704-705, 1956

56090/Ms - John W. Miles
"On the Aerodynamic Instability of Thin Panels"
J. Aero. Sci., 23, 771-780, 1956

56091/Ms - John W. Miles
"On the Sonic Drag of a Slender Body"
J. Aero. Sci., 23, 146-154, 1956

56092/Ms - John W. Miles
"Relation Between Fatigue Lives Under Resonant and Random Loading"
A250-AERO-56-410, 1-5, 1956

56093/Ms - John W. Miles
"The Aerodynamic Force on an Airfoil in a Moving Gust"
J. Aero. Sci., 23, 1044-1050, 1956

56094/Ms - John W. Miles
"The Compressible Flow Past an Oscillating Airfoil in a Wind Tunnel"
J. Aero. Sci., 23, 671-678, 1956

56095/Ms - John W. Miles
Vibrations of Beams on Many Supports
Proc. ASCE, Paper 863, 1956

56096/MA - Harold R. Mull & Joseph S. Algranti
Preliminary Flight Survey of Aerodynamic Noise on an Airplane Wing
NACA, RM E55K07, 1956

56097/Nh - Warren J. North
Effect of Climb Technique on Jet-Transport Noise
NACA, TN 3582, 1956

56098/Nh - Warren J. North
Summary Evaluation of Toothed-Nozzle Attachments as a Jet-Noise-Suppression Device
NACA, TN 3516, 1956

56099/Pr - I. G. Parker
"Reflection of Plane Sound Waves from an Irregular Surface"
J.A.S.A., 28, 672-680, 1956

56100/PT - Isaac Pass & Adelbert O. Tischler
Effect of Fuels on Screaming in 200-pound Thrust Liquid-Oxygen-Fuel Rocket Engine
NACA, RM E56C10, 1956

56101/Pn - G. N. Patterson
The Theory of Free-Molecular, Orifice-Type, Pressure Probes in Isentropic and Nonisentropic Flows
UTIA Rpt. 41, 1956

56102/Ps - Owen M. Phillips
"On the Aerodynamic Surface Sound from a Plane Turbulent Boundary Layer"
Proc. Roy. Soc., 234, 327-335, 1956

56103/Ps - Owen M. Phillips
"The Intensity of Aeolian Tones"
J. Fluid Mech., 1, 607-624, 1956

56105/Pa - Adone C. Pietrasanta
"Noise Measurements Around Some Jet Aircraft"
J.A.S.A., 28, 434-442, 1956

56106/Pl - Alan Powell
"On the Problem of Structural Failure Due to Jets"
Proc. I.A.S., 61-64, 1956

56107/PM - Harry Press, May T. Meadows & Ivan Hadlock
A Reevaluation of Data on Atmospheric Turbulence and Airplane Gust Loads for Application in Spectral Calculations
NACA Rpt. 1272, 1956

56108/PC - Abbott A. Putnam, Gail M. Clough & Milton J. Kenworthy
Final Report on Studies of Turbulent Premixed Flames and Methods of Suppressing Oscillations
WADC, TR 56-583, 1956

56109/PD - Abbott A. Putnam, & William R. Dennis
"Organ-Pipe Oscillations in a Burner with Deep Ports"
J.A.S.A., 28, 260-269, 1956

1956 Cont'd

56110/PD - Abbott A. Putnam & William R. Dennis
"Survey of Organ-Pipe Oscillations in Combustion Systems"
J.A.S.A., 28, 246-259, 1956

56111/Ro - P. Sambasiva Rao
"Supersonic Bangs, Part I"
Aero. Quart., 7, 21-44, 1956

56112/Ro - P. Sambasiva Rao
"Supersonic Bangs, Part II"
Aero. Quart., 7, 135-155, 1956

56113/Rd - T. J. Reid
"Free Vibration and Hysteretic Damping"
J. R. Ae. S., 60, 1, 1956

56114/Rr - Herbert S. Ribner
Boundary-Layer-Induced Noise in the Interior of Aircraft
UTIA Rpt. No. 37, 1956

56115/Rr - Herbert S. Ribner
"Spectral Theory of Buffeting and Gust Response: Unification and Extension"
J. Aero. Sci., 23, 1075-1077,1956

56116/Rs - Elfyn J. Richards
"New Type of Tip Jet to Reduce Noise"
J. Helicopter Assoc., Gt. Brt., 9, 404-413, 1956

56117/RE - Elfyn J. Richards & D. J. Evans
"A New Concept in the Design of Jet Engine Mufflers and Test Cells"
J. R. Ae. S., 60, 1-12, 1956

56118/RM - Don E. Rogers & Frank E. Marble
"A Mechanism for High-Frequency Oscillation in Ramjet Combustors and Afterburners"
Jet Prop., 26, 456-462, 1956

56119/Rr - L. Rohr
Geometry of the Flow Field for an Accelerating Body
Theoretical Investigation of the Sonic Boom, Quart. Rpt. 2, ARF No. DO94, 1956

56120/Rr - L. Rohr
Preliminary Rocket Sled Tests for Sonic Boom Program
Theoretical Investigation of the Sonic Boom, Quart. Rpt. 3, ARF No. DO94, 1956

56121/RB - Morris D. Rousso & L. Eugene Baughman
Spreading Characteristics of a Jet Expanding from Choked Nozzles at Mach 1.91
NACA, TN 3836, 1956

56122/RK - Eugene S. Rubin & Edward M. Kerwin, Jr.
Experiments in Unsteady Aerodynamics Leading to the Development of an Acoustic Drag Coefficient
9th International Congress of App.Mech., 1-21, 1956

56123/Sv - G. F. Sabaneev
"Experiments in the Reduction of Noise from Gas Furnaces"
Gazovaya Promyshlennost, 12, 22-25, 1956

56124/SC - Newell D. Sanders & Edmund E. Callaghan
"Jet Engine Noise Reduction Research at NACA"
Noise Control, 2, 43-48, 1956

56126/So - Hiroshi Sato
"Experimental Investigation on the Transition of Laminar Separated Layer"
J. Phys. Soc. (Japan), II, 702-709, 1956

56127/Sn - J. A. Scanlan
"Effects of Normal Surface Vibration on Laminar Forced Convective Heat Transfer"
Ind. Engr. Chem., 50, 1565-1568, 1956

56128/Sz - Theodore J. Schultz
"Air-Stiffness Controlled Condenser Microphone"
J.A.S.A., 28, 337-342, 1956

56129/Sr - George T. Skinner
Time Correlator for Problems in Aerodynamics
NACA, TN 3682, 1956

56130/Si - L. N. Sretenskii
"Radiation of Sound by a Rotating Dipole"
Soviet Physics; Acoustics, 2, 89-94, 1956

56131/Se - R. Struble
Velocity Potential for an Accelerating Body
Theoretical Investigations of the Sonic Boom Quart. Rpt I, ARF No. DO94, 1956

56132/St - J. T. Stuart
"On the Role of Reynolds Stresses in Stability Theory"
J. Aero. Sci., 23, 86-88, 1956

56133/TW - R. W. Thrasher & Peter J. Westervelt
Acoustical Streaming in the Vicinity of a Sphere
WADC TR 56-346, 1956

1956 Cont'd

56134/TM - Adelbert O. Tischler & Theodore Male
Oscillatory Combustion in Rocket Propulsion Engines
Proc. of Gas Dynamics Symposium on Aero-thermochemistry, Northwestern Univ., 71-81, 1956

56135/Ti - Robert L. Trimpi
An Analysis of Buzzing in Supersonic Ramjets by a Modified One-Dimensional Non-Stationary Wave Theory
NACA, TN 3695, 1956

56136/Tr - Maurice Tucker
Interaction of a Free Flame Front with a Turbulence Field
NACA, Rpt. 1277, 1956

56137/UH - R. I. Urick & R. M. Hoover
"Backscattering of Sound from the Sea Surface: Its Measurement, Causes and Application to Prediction of Reverberation Levels"
J.A.S.A., 28, 1038, 1956

56138/Ve - D. H. Vance
"The Use of Vibration and Shock Control in Reducing Noise Levels"
Noise Control, 2, 64-72, 1956

56139/Vt - S. S. Voit
"Reflection of Sound Waves from a Vibrating Plane"
Trudi Moskva Matem. O-va, 5, 81-88, 1956;
Ref. *Zh. Mekh.*, 9, Rev. 9819, 1959

56140/WB - Richard V. Waterhouse & Raymond D. Berendt
A Reverberation Chamber Study of the Sound Power Output of Subsonic Air Jets
Natl. Bureau of Stds., NBS Rpt. 4912, 1956

56141/Wm - G. B. Whitham
"On the Propagation of Weak Shock Waves"
J. Fluid Mech., 1, 290-318, 1956

56142/Wk - Robert S. Wick
"The Effect of Vehicle Structure of Propulsion System Dynamics and Stability"
Jet Prop., 26, 878-887, 1956

56143/Wn - H. W. Withington
"Silencing the Jet Aircraft"
Noise Control, 2, 46-53, 1956

56144/Wy - John P. Wittry
Heat Transfer by Forced Convection from Longitudinally Oscillating Cylinder in Air
USAF Inst. of Tech., MS Thesis, 1956

56145/Wt - Richard R. Woollet
Preliminary Investigation of Short Two-Dimensional Subsonic Diffusers
NACA RM E56CO2, 1956

56146/YM - G. C.K. Yeh & J. Martinek
Forced Vibration of a Visco-Elastic Rectangular Plate in Fluid Media
Ninth Inter. Congr. App. Mech., Brussels, Paper No. 116, 1956

1957

57001/An - Anon
Estimate of Performance of Jet Engine Suppressors for Flight Use
CHABA Memo Rpt. No. 3, 1957

57002/An - Anon
"Jet Efflux – A Symposium"
J. R. Ae. S., 61, 103-115, 1957

57003/An - Anon
Noise Characteristics of the Caravelle
Shell Aviations News, 231, 15-18, 1957

57004/An - Anon
Reduction of the External Noise Level of Otter UC-1 Aircraft
De Havilland Aircraft Co. of Canada, Ltd., July, 1957

57005/An - Anon
Theoretical Investigations of Sonic Boom Phenomena
Armour Research Foundation, Chicago, Ill, Final Rpt. WADC TR 57-412, 1957, AD 130883

57006/BK - Harry E. Bailey & Arnold M. Kuethe
Supersonic Mixing of Jets and Turbulent Boundary Layers
WADC, TR 57-402, 1957

57007/By - J. J. Bailey
"A Type of Flame-Excited Oscillation"
J. App. Mech., 24, 333-339, 1957

57008/By - J. J. Bailey
A Type of Flame-Excited Oscillation in a Tube
A. S. M. E. Summer Conference, Berkeley, Calif., Paper 57-APM-26, 1957

57009/BB - Marcel Barrère & J. J. Bernard
Influence of the Injector Pressure Drop on Low-Frequency Instability in Liquid Propellant Rockets
Sixth Symposium (International) on Combustion, 487-492, N.Y., Reinhold Publ. Corp., 1957

57010/Bn - P. Beckmann
"A New Approach to the Problem of Reflection from a Rough Surface"
Acta Technica, 2, 4, 311-355, 1957

57011/Br - Peter M. Belcher
"Use of High-Intensity Siren in Fatigue Testing of Structures Subjected to Acoustic Forcing"
J.A.S.A., 29, 176, 1957

57012/Bf - Jean M. Benninghoff
Turbulence Measurements in Multiple Interfering Air Jets
NACA, TN 4029, 1957

57013/BH - L. L. Beranek, J. K. Hilliard et al.
Instrumentation for the Measurement and Generation of High Intensity Sound
CHABA, Memo Rpt. 4, 1957

57014/BK - Les L. Baranek, George W. Kamperman & Clayton H. Allen
"Noise of Centrifugal Fans"
J.A.S.A., 27, 217-219, 1957

57015/BC - David A. Bies, J. H. Caffrey & Oscar B. Wilson, Jr.
A Study of Internal Acoustic Absorbers as a Technique for Turbojet Engine Noise Reduction
Soundrive Engine Co., Final Rpt. 94, 1 and 2, ASTIA, 1957, AD 150 553, AD 150 554

57016/BW - David A. Bies & Oscar B. Wilson
"Acoustic Impedance of a Helmholtz Resonator at Very High Amplitude"
J.A.S.A., 29, 711-714, 1957

57017/BK - I. Bihari & M. Kelemen
"Explanation of the So-Called *Sound Detonation*"
Periodica Polytech., Elec. Engr. Ser., No. 3, 287-295, 1957

57018/Br - Perry L. Blackshear
The Growth of Disturbances in a Flame-Generated Shear Region
Sixth Symposium (International) on Combustion, 512-533, N.Y., Reinhold Publ. Corp., 1957

57019/BR - Perry L. Blackshear & Warren D. Rayle
Basic Considerations in the Combustion of Hydrocarbon Fuels with Air
Ch. 8. *Oscillations in Combustors*
NACA Rpt. 1300, 1957

57020/Bv - D. I. Blokhintsev
Excitation of Resonance by Air Flow
DTMB Trans. 270, 1957

57021/BN - John B. Brackenridge & Wesley L. Nyborg
"Acoustical Characteristics of Oscillating Jet-Edge Systems in Water"
J.A.S.A., 29, 459-463, 1957

1957 Cont'd

57022/BB - E. Brun & R. M. G. Boucher
"Research on the Acoustic Air-Jet Generator: A New Development"
J.A.S.A., 29, 573-583, 1957

57023/CC - Edmund E. Callaghan & Willard D. Coles
Far Noise Field of Air Jets and Jet Engines
Lewis Flight Propulsion Lab., Cleveland, Ohio, NACA, Rpt. 1329, 1957, AD 158 944

57024/Cl - A. J. Campbell
Investigation of a Wide Angle Diffuser with Air Augmentation for Use as a Jet Muffler
UTIA, TR 15, 1957

57025/Cg - Che-Tyan Chang
"Interaction of a Plane Shock and Oblique Plane Disturbances with Special Reference to Entropy Waves"
J. Aero. Sci., 24, 675-682, 1957

57026/Cn - Harvey R. Chaplin
Theory of the Annular Nozzle in Proximity to the Ground
DTMB Aero Rpt. 923, 1957

57027/Cv - I. A. Chernov
"Correlation of Field Fluctuations"
Sov. Phys. – Acoustics, 3, 203-206, 1957

57028/Ci - G. G. Chernyi
"The Problem of a Point Explosion"
Dok. Akad. Nauk., SSSR, 112, 213-216, 1957

57029/CP - V. Chobotov & Alan Powell
On the Production of Acoustic Environments from Rockets
Thompson Ramo Wooldridge, Inc., Rpt. GM TR 190, 1957, AD 217 248

57030/CP - Weldon E. Clark, Adone C. Pietrasanta & William J. Galloway
Noise Produced by Aircraft During Ground Run-Up Operations
WADC, TN 56-60, 1957

57031/Cn - B. L. Clarkson
"Stresses Produced in Aircraft Structures by Jet Efflux"
J. R. Ae. S., 61, 110-112, 1957

57032/Cn - B. L. Clarkson
The Effect of Jet Noise on Aircraft Structures
ARC 19,712, 1957, AD 161 268

57033/CG - J. N. Cole & Henning E. von Gierke
Noise from Missile Static Firing and Launch Sites and the Resultant Community Response
WADC, TR 57-547, 1957

57034/CG - J. N. Cole, Henning E. von Gierke, D. T. Kyrazis, K. M. Eldred & A. J. Humphrey
Noise Radiation from Fourteen Types of Rockets in the 1,000 to 130,000 pounds Thrust Range
WADC, TR 57-354, 1957, AD 130 794

57035/CC - Willard D. Coles & Edmund E. Callaghan
Full-Scale Investigation of Several Jet-Engine Noise-Reduction Nozzles
NACA TN 3974, 1957

57036/CN - Willard D. Coles & Warren J. North
Screen-Type Noise Reduction Devices for Ground Running of Turbojet Engines
NACA TN 4033, 1957

57037/CG - R. G. Cumings, N. W. Guinard & F. E. Boye
Acoustical Vibrations from Rocket Motor Combustion Processes
Naval Res. Lab., Rpt. No. 4834, 1957

57038/Ce - N. Curle
"On Hydrodynamic Stability in Unlimited Fields of Viscous Flow"
Proc. Roy. Soc., 238, 289-501, 1957

57039/Ds - M. G. Davies
Acoustic Radiation of Discrete Frequency from a Choked Rectangular Jet
ARC F.M. 2496, 19,016, 1-15, 1957

57040/Dn - Lee W. Dean
Excitation of Acoustic Resonators by Air Flow
M. I. T., Acoustics Lab., Quart. Rpt., 17-20, April-June, 1957

57041/Dn - Lee W. Dean
Excitation of Acoustic Resonators by Wind
M.I.T., M.Sc. Thesis, 1957

57042/DI - Lee W. Dean & Kare Uno Ingard
Excitation of Acoustic Resonators by Air Flow
M. I. T., Acoustics Lab., Quart. Rpt., 11-12, Jan-March, 1957

1957 Cont'd

57043/Dh - Franklin Diederich
Expected Number of Maxima and Minima of a Stationary Random Process with Non-Gaussian Frequency Distribution
NACA, TN 3960, 1957

57044/Dh - D. S. Dosanjh
"Experiments on Interaction Between Traveling Shock Wave and Turbulent Jet"
J. Aero. Sci., 24, 838-844, 1957

57045/De - J. Ducarme
Remarques sur les pulsoreacteurs
Combustion Researches and Reviews, Butterworths Sci. Pub., 112, 1957

57046/FD - Ira Dyer & Peter A. Franken
"Near Field Studies of Jet Noise"
J.A.S.A., 29, 779, 1957

57047/En - J. R. Edson
Review of Testing and Information on Sonic Fatigue
Boeing Airplane Co., D-17130, Struct. Dev. Note 38, 1-53, 1957

57048/EF - Isidor Elias & B. Flornes
Analytical and Experimental Investigation of the Fluid Dynamics of Ramjet Combustion Screech
Marquardt Aircraft Co., Rpt. No. 5677, 1957

57049/En - A. C. Eringen
"Response of Beams and Plates to Random Loads"
J. App. Mech., 24, 46-52, 1957

57050/EJ - W. Maurice Ewing, Wenceslas S. Jardetzky & Frank Press
Elastic Waves in Layered Media
McGraw-Hill Book Co., Inc., N.Y., 1957

57051/FF - J. Foxwell & R. E. Franklin
Acoustic Effects in the Vibrations of Structures
ARC 19, 495, 1957

57052/FF - J. H. Foxwell & R. E. Franklin
The Vibrations of a Thin-Walled Stiffened Cylinder in an Acoustic Field
ARC 19, 743, 1957

57053/Fn - R. E. Franklin
"Noise Measurements on Cold Jets Using Convergent-Divergent Nozzles"
Aero. Quart., 8, 346-359, 1957

57054/Fn - R. E. Franklin
"The Excitation of Structural Vibrations by Noise"
J. R. Ae. S., 61, 106-108, 1957

57055/FH - H. Fuchs & R. Hoodless
"Noise Measurements in the Aircraft Industry"
Technique, Muirhead & Co., 11, 21-22, 1957

57056/Ge - Henning E. von Gierke
Acoustical Criteria for Work Spaces, Living Quarters and Other Areas on Air Bases
WADC TN-57-248, 1957, AD 130839

57057/Ge - D. Grohne
On the Spectrum of Natural Oscillations of Two-Dimensional Laminar Flows
NACA, TM 1417, 1957

57058/Ha - Francis R. Hama
"Three-Dimensional Vortex Pattern Behind a Circular Cylinder"
J. Aero. Sci., 24, 156-157, 1957

57059/HL - Francis R. Hama, James D. Long & John C. Hegarty
"On Transition From Laminar to Turbulent Flow"
J. App. Phys., 28, 388-394, 1957

57060/HV - Andrew G. Hammitt, I. E. Vas & S. Hight
An Analysis of the Effect of Shockwaves on Turbulent Boundary Layers
AFOSR, TN 57-297, 1957, AD 132 368

57061/Hn - Marshall C. Harrington
"Excitation of Cavity Resonance by Air Flow"
J.A.S.A., 29, 187, 1957

57062/Hs - Cyril M. Harris
Handbook of Noise Control
McGraw-Hill Book Co., Inc., N.Y., 1957

57063/Hn - Mark Harrison
"Correlations and Spectra of Pressure Fluctuations on the Wall Adjacent to a Turbulent Boundary Layer"
J.A.S.A., 29, 1252, 1957

57064/Hs - Harold S. Heaps
"Reflection of Plane Waves of Sound from a Sinusoidal Surface"
J. App. Phys., 28, 815-818, 1957

57065/HF - Robert W. Hess, Robert W. Fralich & Harvey H. Hubbard
Studies of Structural Failure Due to Acoustic Loading
NACA, TN 4050, 1957

1957 Cont'd

57066/Hl - K. W. Hetzel
"Experimental Study of the Effects of Jet Noise on an Aircraft Structure"
J. R. Ae. S., 61, 112-114, 1957

57067/HC - Walton L. Howes, Edmund E. Callaghan, Willard D. Coles & Harold R. Mull
Near Noise Field of a Jet-Engine Exhaust
NACA, Rpt. 1338, 1957

57068/Hd - Harvey H. Hubbard
"Some Experiments Related to the Noise from Boundary Layers"
J.A.S.A., 29, 331-334, 1957

57069/HH - Harvey H. Hubbard & Robert W. Hess
"Some Comparisons of the Response of Simple Panels to Random and Discrete Noise"
J.A.S.A., 29, 176, 1957

57070/HD - Carl R. Huss & James J. Donegan
Tables for the Numerical Determination of the Fourier Transform of a Function of Time and the Inverse Fourier Transform of a Function of Frequency, With Some Applications to Operational Calculus Methods
NACA, TN 4073, 1957

57071/ID - Kare Uno Ingard & Lee W. Dean
Excitation of Damped Resonators by Wind
M. I. T., Acoustics Lab., Quart. Rpt., 10-11, July-Sept, 1957

57073/IL - Uno Ingard & George L. Lamb
"Effect of Reflecting Plane on the Power Output of Sound Sources"
J.A.S.A., 29, 743-744, 1957

57074/Ii - S. V. Iordanskii
"On the Stability of a Plane Stationary Shock Waves"
Prikl. Mat. i. Mekh., 21, 465-471, 1957

57075/Jn - R. H. Jacobson
"The Scream of a Jet in a Six-Inch Test Cell"
Tele-Tech. & Electronic Ind., 16, 63-65, 1957

57076/Jn - W. R. Johnson
The Interaction of Plane and Cylindrical Sound Waves with a Stationary Shock Wave
Univ. of Michigan, TR 2539-8-T, 1957

57077/KS - A. L. Karnesky & H. C. Schjelderup
A Combined Analytical and Experimental Approach to AIF (Acoustically Induced Fatigue)
Douglas Aircraft Co., Long Beach, Calif., TP 532, 1957

57078/KG - Edward J. Kirchman & Joshua E. Greenspon
"Nonlinear Response of Aircraft Panels in Acoustic Noise"
J.A.S.A., 29, 854-857, 1957

57079/Ke - Stephen J. Kline
"Some New Conceptions of the Mechanism of Stall in Turbulent Boundary Layers"
J. Aero. Sci., 24, 469-471, 1957

57079a/Ki - M. Kobrynski
"Sur la structure du champ sonore des turbo-reacteurs"
Acustica, 7, 121-126, 1957

57080/Kh - V. M. Kontorovich
"On the Stability of Shock Waves"
J.E.T.P., USSR, 33, 1525-1526, 1957

57081/Kh - V. M. Kontorovich
"Reflection and Refraction of Sound by a Shock Wave"
J.E.T.P., USSR, 33, 1527-1528, 1957

57082/Ky - Leslie S. G. Kovasznay
"An Electronic Analogue for Supersonic Flow"
J. Fluid Mech., 2, Pt. 4, 383-396, 1957

57083/Kn - Robert H. Kraichnan
"Noise Transmission from Boundary Layer Pressure Fluctuations"
J.A.S.A., 29, 65-80, 1957

57084/Kn - Max C. Kurbjun
Effects of Blade Plan Form on Free-Space Oscillating Pressures Near Propellers at Flight Mach Numbers to 0.72
NACA, TN 4068, 1957

57085/Kn - Max C. Kurbjun
Noise Survey of a Full-Scale Supersonic Turbine-Driven Propeller Under Static Conditions
NACA, TN 4059, 1957

57086/LA - Donald T. Laird, Eugene Ackerman, James B. Randels & Hans L. Oestreicher
Spherical Waves of Finite Amplitude
WADC, TR 57-463, 1957

57087/Lb - George L. Lamb, Jr.
"The Transmission of a Spherical Sound Wave Through a Thin Elastic Plate"
Annals of Physics, 1, 233-246, 1957

1957 Cont'd

57088/Lr - Leslie W. Lassiter
"Turbulence in Small Air Jets at Exit Velocities Up to 705 Feet per Second"
J. App. Mech., 24, 349-354, 1957

57089/LH - Leslie W. Lassiter & Robert W. Hess
Calculated and Measured Stresses in Simple Panels Subject to Intense Random Acoustic Loading Including the Near Noise Field of a Turbojet Engine
NACA, TN 4076, 1957

57090/LB - James C. Laurence & Jean M. Benninghoff
Turbulence Measurements in Multiple Interfering Air Jets
NACA, TN 4029, 1957, AD 149 560

57091/LS - Robert Lee and Edwin B. Smith
"Effects of Secondary Flow on Screech Noise Produced by Choked Jets"
J.A.S.A., 29, 779, 1957

57092/LS - Robert Lee & Edwin B. Smith
Experimental Investigation of Noise Radiated by Concentric Jets
Gen. Elec. Co., Cincinnati, Ohio, 1957

57093/LS - Robert Lee & Edwin B. Smith
"Noise Measurement of Subsonic Concentric Jets"
J.A.S.A., 29, 779, 1957

57094/Ls - Lester Lees
"Recent Developments in Hypersonic Flow"
Jet Prop., 27, 1162-1178, 1957

57095/Ls - A. Leiss
Effects on Adjacent Surfaces from the Firing of Rocket Jets
NACA, RM L57D19a, 1957

57096/Ln - Richard H. Lyon
"On the Low-Frequency Radiation Load of a Bass-Reflex Speaker"
J.A.S.A., 29, 654, 1957

57097/MW - Gideon Maidanik & Peter J. Westervelt
"Acoustical Radiation Pressure Due to Incident Plane Progressive Waves on Spherical Objects"
J.A.S.A., 29, 936-940, 1957

57098/MS - John P. Mayer, Ralph W. Stone, Jr. & Harold A. Hamer
Notes on a Large-Scale Statistical Program for the Establishment of Maneuver-Loads Design Criteria for Military Airplanes
NACA, RM L57E30, 1957

57099/Mr - D. M. McGregor
An Experimental Investigation of the Oscillating Pressures on a Circular Cylinder in a Fluid System
UTIA, TN 14, 1957

57100/Md - D. J. Mead
"The Effect of Structural Damping Upon the Stresses Due to Jet Efflux"
J. R. Ae. S., 61, 108-109, 1957

57101/Mk - H. J. Merk
An Analysis on Unstable Combustion of Premixed Gases
Sixth Symposium (International) on Combustion, 500-511, N.Y., Reinhold Publ. Corp., 1957

57102/Mk - H. J. Merk
"Analysis of Heat-Driven Oscillations of Gas Flows. II. On the Mechanism of the Rijke-Tube Phenomenon"
App. Sci. Res., 6, 402-420, 1957

57103/Mk - H. J. Merk
"Analysis of Heat-Driven Oscillations of Gas Flows. III. Characteristic Equation for Flame-Driven Oscillations of the Organ-Pipe Type"
App. Sci. Res., 7, 175-191, 1957

57104/Mk - H. J. Merk
"Analysis of Heat-Driven Oscillations of Gas Flows. IV. Discussion of the Theoretical Results Concerning Flame-Driven Oscillations"
App. Sci. Res., 7, 192-204, 1957

57105/Me - Marie Merle
"Nouvelles recherches sur les frequences ultrasonores emises par les jets d'air"

"New Researches on the Ultrasonic Frequencies Produced by Air Jets"
Ann. Telecomm, 12, 424-426, 1957

57107/Mn - William R. Mickelson
Effect of Standing Transverse Acoustic Oscillations on Fuel-Oxidant Mixing in Cylindrical Combustion Chambers
NACA, TN 3983, 1957

57108/MB - William R. Mickelson & Lionel V. Baldwin
"Aerodynamic Mixing in a High-Intensity Standing-Wave Sound Field"
J.A.S.A., 29, 46, 1957

1957 Cont'd

57110/Ms - John W. Miles
"On the Reflection of Sound at an Interface of Relative Motion"
J.A.S.A., 29, 226-228, 1957

57111/Ms - John W. Miles
"On a Reciprocity Condition for Supersonic Flutter"
J. Aero. Sci., 24, 920, 1957

57112/Ms - John W. Miles
"On the Velocity Profile for Turbulent Flow Near a Smooth Wall"
J. Aero. Sci., 24, 704, 1957

57113/Ms - John W. Miles
"Supersonic Flutter of a Cylindrical Shell"
J. Aero. Sci., 24, 107-118, 1957

57114/MB - Laymon N. Miller & Leo L. Beranek
"Comparison of the Take-Off Noise Characteristics of the Caravelle Jet Airliner and of Conventional Propeller-Driven Airlines"
J.A.S.A., 29, 1169-1179, 1957

57115/MB - Laymon N. Miller & Leo L. Beranek
"Noise Levels Inside the Prototype Caravelle Twin-Jet Air Liner During Flight"
J.A.S.A., 29, 1252, 1957

57117/ME - Harold R. Mull & John C. Erickson, Jr.
Survey of the Acoustic Near Field of Three Nozzles at a Pressure Ratio of 30
NACA, TN 3978, 1957

57118/No - Luigi G. Napolitano
Two-Dimensional Plane Mixing of Homogeneous and Non-Homogeneous Streams
AFOSR, TN 57-756, 1957, AD 136-745

57119/Nn - R. J. Nickerson
The Effect of Free-Stream Oscillations on the Laminar Boundary of a Flat Plate
M.I.T., Sc.D. Thesis, 1957

57120/Ns - J. P. Nicklas
Investigation of a Vortex Tube Acoustic True Airspeed Sensor
Cornell Aero. Lab., Rpt. 1H-942-P-2, 1957, AD 152002

57121/Or - Hans L. Oestreicher
"Field of a Spatially Extended Moving Sound Source"
J.A.S.A., 29, 1223-1232, 1957

57122/Or - Hans L. Oestreicher
"Representation on the Field of an Acoustic Source as a Series of Multipole Fields"
J.A.S.A., 29, 1219-1222, 1957

57124/Ol - Stanley K. Oleson & Uno Ingard
"Acoustic Characteristics of Model Pulsed Jets"
J.A.S.A., 29, 1145-46, 1957

57125/On - J. R. Osborn
An Experimental Study of Combustion Pressure Oscillation in a Gaseous Bipropellant Rocket Motor
Purdue Univ., Ph.D. Thesis, 1957

57126/OZ - J. R. Osborn & M. J. Zucrow
An Unclassified Literature Survey on Combustion Pressure Oscillations in Liquid Propellant Rocket Motors
Purdue Univ., Rocket Lab., TM 57-1, 1957

57127/Pr - I. G. Parker
"Reflection of Plane Sound Waves from a Sinusoidal Surface"
J.A.S.A., 29, 377-380, 1957

57128/Ps - Owen M. Phillips
"On the Generation of Waves by Turbulent Wind"
J. Fluid Mech., 2, 417-445, 1957

57129/PD - Abbott A. Putnam & William R. Dennis
"Pulsations in Residential Heating Equipment – Preliminary Results"
ASHAE Trans., 63, 153-170, 1957

57130/PD - Abbott A. Putnam & William R. Dennis
Some Stability Tests on an Axially Symmetric Combustor
Sixth Symposium (International) on Combustion, 493-500, N.Y., Reinhold Publ. Corp., 1957

57131/RR - G. Sri Ram & Herbert S. Ribner
The Sound Generated by Interaction of a Single Vortex with a Shock Wave
Heat Transfer and Fluid Mechanics, Stanford Press, Calif., 1957

1957 Cont'd

57132/Rl - D. G. Randall
Methods for Estimating Distributions and Intensities of Sonic Bangs
RAE., U. K., TN Aero 2524, 1957

57133/Rh - B. V. Raushenbakh
"On Energy Sources at the Thermal Excitation of Sound"
Dok. Akad. Nauk, SSSR, 115, 256-258, 1957

57134/RH - Arthur A. Regier, Harvey H. Hubbard & Leslie W. Lassiter
"Aircraft Noise"
Technical Aspects of Sound, E. G. Richardson (ed.), Elsevier Publishing Co., Amsterdam, 333-382, 1957

57135/Rd - John Reid
The Noise of Jet Aircraft – A Survey
RAE, Rpt. Aero 2588, 1957

57136/RH - H. E. Reiher, Richard N. Hamme & R. E. Hamilton
Tuned Spot Dampers for Aircraft Soundproofing. A Feasibility and Development Study
WADC, TR-57-519, 1957, AD 131081

57137/Rr - Herbert S. Ribner
"Reflection, Transmission, and Amplification of Sound by a Moving Medium"
J.A.S.A., 29, 435-441, 1957

57138/Rs - Elfyn J. Richards
"Noise Research in the United Kingdom"
Canadian Aero. J., 3, 341-357, 1957

57139/Rs - Elfyn J. Richards
"On the Noise from Supersonic Jets"
J. R. Ae. S., 61, 43-45, 1957

57140/Rs - Elfyn J. Richards
"The Technical Possibilities of Reducing the Noise of Jet Aircraft"
Shell Aviation News, No. 227, 19-24, May 1957

57141/RE - Elfyn J. Richards & D. J. Evans
"A New Concept in the Design of Jet Engine Mufflers and Test Cells"
J. R. Ae. S., 61, 619-630, 1957

57142/Rt - G. Riollet
Noise Generation by a Fan Treated from the Point of View of Dimensional Analysis
9th Congrès Intern. Mécan. Appl., Univ. Bruxelles, 2, 448-458, 1957

57143/RC - Orville R. Rogers & Richard F. Cook
Environmental Aspects of Sonic Fatigue
WADC TN 57-68, 1957, AD 118072

57144/RS - L. Rohr & R. A. Struble
Main Rocket Sled Tests for Sonic Boom Program
Quart. Rpt. 5, ARF No. D094, 1957

57145/Rr - George Rudinger
Shock Wave and Flame Interactions
Cornell Aero. Lab., Ind., Buffalo, N.Y., Proj. Squid TR CAL-74-P, 1957, AD 147 699

57145a/SL - Newell D. Sanders & James C. Laurence
"Fundamental Investigation of Noise Generation by Turbulent Jets"
SAE Trans, 65, 244-249, 1957

57146/Sn - E. Sassarsson
"Silencer for Ground Run-Up of Jet Engines"
Saab Sonics, 27, 1957

57147/Sa - S. M. Scala
Transverse Wave and Entropy Wave Combustion Instability in Liquid Propellant Rockets
Princeton Univ., Ph.D. Thesis, Aero. Engr. Rpt. No. 380, 1957

57148/Sf - Alvin Seiff
The Use of Gun-Launched Models for Experimental Research at Hypersonic Speeds
AGARD Rpt. 138, 1957

57149/Ss - J. C. Simmons
"Summary of the Discussion (On Jet Efflux)"
J. R. Ae. S., 61, 114-115, 1957

57150/SJ - Preston W. Smith & Miguel C. Junger
"Correlation of Sonic Damage with Vibration Tests"
J.A.S.A., 29, 776, 1957

57151/SB - R. L. Solnick & R. H. Bishop
"Noise, Vibration and Measurement Problems Resulting from Fluid-Flow Disturbances"
Trans. ASME 79, 1043-1056, 1957

57152/SD - Carl F. Speich, William R. Dennis & Abbott A. Putnam
"Acoustic Coupling of Residential Furnaces with their Surroundings"
ASHAE Trans., 63, 413-426, 1957

1957 Cont'd

57153/SS - R. A. Struble, C. E. Stewart
E. A. Brown & A. Ritter
Theoretical Investigations of Sonic Boom Phenomena
WADC-TR-57-412, 1957, AD 130883

57154/Tn - William T. Thomson
"Analog Computer for Nonlinear System with Hysteresis"
J. App. Mech., 24, 245-247, 1957

57155/Tn - William T. Thomson
Dynamic Response of Single Span Beams in the Plastic Region
UCLA Rpt. No. 57-53, 1957

57156/TB - William T. Thomson & Millard V. Barton
"The Response of Mechanical Systems to Random Excitation"
J. App. Mech., 24, 248-251, 1957

57157/TH - George B. Thurston, Logan E. Hargrove & Bill D. Cook
"Nonlinear Properties of Circular Orifices"
J.A.S.A., 29, 992-1001, 1957

57158/Tn - Paul A. Thurston
Research in the U.S. Naval Ordnance Laboratory Ballistics Ranges
AGARD Rpt. 137, 1957

57159/Ta - Sigve Tjotta
"Steady Rotational Flow Generated by a Sound Beam"
J.A.S.A., 29, 455-458, 1957

57160/Ta - T. Paul Torda
Nonlinear Method for Combustion Instability Analysis of Liquid Propellant Rocket Motors
A.R.S., Preprint No. 556-57, 1957

57161/Ta - T. Paul Torda
"Notes on Problems in Combustion Instability of Rocket Motors"
Aero. Engr. Rev., 16, 34-37, 47, 1957

57162/Ty - Victor Twersky
"On Scattering and Reflection of Sound by Rough Surfaces"
J.A.S.A., 29, 209-226, 1957

57163/Uk - R. I. Urick
"The Processes of Sound Scattering at the Ocean Surface and Bottom"
J. Marine Research, 15, 134-148, 1957

57164/VE - J. D. Van Dyke, A. Eshleman & P. M. Belcher
Method for Designing and Testing Structures Subjected to Random Frequency Acoustical Loading Model-General
Douglas Aircraft Rpt. SM-22555, 1957

57165/Vr - Marcel Vinokur
Longitudinal Combustion Instability in a Duct with Oblique Flame Front
Princeton Univ., Dept. Aero. Engr., Ph.D. Thesis, 1957

57167/We - Richard V. Waterhouse
"On Standard Methods of Measurement in Architectural Acoustics"
J.A.S.A., 29, 544-547, 1957

57168/Wt - Peter J. Westervelt
"Acoustic Radiation Pressure"
J.A.S.A., 29, 26-29, 1957

57169/Wt - Peter J. Westervelt
Aerodynamic Noise; Its Generation and Suppression
G.E. Lab., Rpt. No. 57GL222, 1957

57170/Wt - Peter J. Westervelt
"Scattering of Sound by Sound"
J.A.S.A., 29, 199-203, 1957

57171/Wt - Peter J. Westervelt
"Scattering of Sound by Sound"
J.A.S.A., 29, 934-935, 1957

57172/WD - Peter J. Westervelt, Ira Dyer & P. A. Franken
"Changes of Jet Noise by Mixing and an Upper Limit on Jet Noise Production"
J.A.S.A., 29, 778, 1957

57173/WM - Peter J. Westervelt & Richard J. McQuillin
"Theory of Pulse Jet Noise Generation"
J.A.S.A., 29, 1252, 1957

57174/Wm - G. B. Whitham
"A New Approach to Problems of Shock Dynamics, Part I. Two-Dimensional Problems"
J. Fluid Mech., 2, 145-171, 1957

1957 Cont'd

57175/WS - J. G. M. Williams & D. C. Stevenson
The Noise Field from Designed Nozzles at Different Mach Numbers
Univ. of Canterbury, Christchurch, New Zealand, School of Engr., 1957

57176/WD - I. C. Wiltse, S. P. Schlesinger & C. M. Johnson
"Backscattering Characteristics of the Sea in the Region from 10 to 50 kmc"
Proc. I.R.E., 45, 220-228, 1957

57177/We - M. O. W. Wolfe
"The Structural Aspects of Jet Noise"
J. R. Ae. S., 61, 103-106, 1957

57178/We - M. O. W. Wolfe
Near Field Jet Noise
AGARD Rpt. 112, 1957, AD 154 857

57179/Wd - Alexander B. Wood
Maintainance of Vibrations by Heat
A Textbook of Sound, 211-216, G. Bell & Sons, Ltd., London, 1957

57180/Wd - E. R. Wood
Reduction of External Noise of a YH-19 Helicopter, Serial No. 49-2015A Equipped with Pratt & Whitney R-1340 Engine
AD 211132, Sikorsky Aircraft Div. Rpt. SER-55034, 1957

57181/YL - Hsun-Tiao Yang & Lester Lees
Plane Couette Flow at Low Mach Number According to the Kinetic Theory of Gases
Fifth Midwestern Conference on Fluid Mech., 41-65, 1957. GALCIT Pub. No. 426

57182/ZS - L. K. Zarembo & V. V. Shklovskaiakordi
"A Method for Visualizing Acoustic Streaming at the Boundary of Two Immiscible Liquids
Sov. Phys.,-Acoustics, 3, 401-402(L), 1957

1958

58001/Aa - A. J. Acosta
An Experimental Study of Cavitating Inducers
Second Symposium on Naval Hydrodynamics, 533-558, Washington, 1958

58002/AN - John C. Allred & Albert Newhouse
"Applications of the Monte Carlo Method to Architectural Acoustics. II"
J.A.S.A., 30, 903, 1958

58003/AR - R. Anatanarayana & A. Ramachandran
"Effect of Vibration on Heat Transfer from a Wire to Air in Parallel Flow"
Trans. ASME, 80, 1426-1432, 1958

58004/AR - M. T. Anderson & L. L. Robinson
"Laboratory Simulation of Rocket Engine Noise"
Environmental Quart. 4, 6-32, 1958

58005/An - Anon
"Flow Noise"
Nature, 181, 388-389, 1958

58006/An - Anon
The Response of an Elastic Structure to a Random Excitation
U.S. Naval Air Missile Test Center, TM Rpt. No. 108, 1958

58007/AD - J. P. Appleton & H. J. Davies
Theoretical Investigation of the Sound Field Produced Down Stream of a Choked Two-Dimensional Channel Due to Unsteady Upstream Entropy Fluctuations
ARC 20126, 1958

58008/BS - Louis Baker & Fred W. Steffen
Screaming Tendency of the Gaseous Hydrogen-Liquid Oxygen Propellant Combination
NACA RM ES8-E09, 1958

58009/Br - Raymond L. Barger
Reflection and Transmission of Sound by a Slotted Wall Separating Two Moving Fluid Streams
NACA, TN 4295, 1958

58010/Br - Calvin L. Barker
Experiments Concerning the Occurrence and Mechanism of High-Frequency Combustion Instability
C. I. T., J. P. L., Prog. Rpt. No. 20-356, 1958

58011/BS - A. N. Barkhatov & I. I. Shmelev
"The Attenuation of a Sound Beam on Traversing a Layer Having Velocity Discontinuity"
Akust. Z., 4, 125-127, 1958

58012/BK - J. J. Baruch, G. W. Kamperman et al
Acoustic Design of Flight Vehicle Structures Facility
WADC, TN 58-189, 1958, AD 204792

58013/Bt - J. S. Bendat
Principles and Applications of Random Noise Theory
John Wiley, New York, 1958

58014/Bt - M. A. Biot
"On the Reflection of Acoustic Waves on a Rough Surface"
J.A.S.A., 30, 479, 1958

58015/Bf - Garrett Birkhoff
"Jets, Wakes, and Cavities"
Second Symposium on Naval Hydrodynamics 261-276, Washington, 1958

58016/Br - J. Brillouin
"Contribution a la théorie du bruit des moteurs à réaction: le bruit de combustion"
Compt. Rend., 246, 1818-1819, 1958

58018/Cn - Edmund E. Callaghan
An Estimate of the Fluctuating Surface Pressures Encountered in the Reentry of a Ballistic Missle
NACA, TN 4315, 1958

58019/Cl - A. J. Campbell
"Investigation of a Jet Muffler Model"
Canadian Aero. J., 4, 165-168, 1958

58020/CH - I. J. Campbell & D. V. Hilborne
"Air Entrainment Behind Artifically Inflated Cavities"
Second Symposium on Naval Hydrodynamics, 467-482, Washington, 1958

58021/Cl - R. Gordon Campbell
"Initial Wave Phenomena in a Weak Spherical Blast"
J. App. Phys., 29, 55-60, 1958

58022/CG - C. S. Chang & L. E. Goodman
Energy Dissipation in Longitudinal Vibration
WADC, TR 58-36, 1958

1958 Cont'd

58023/Cv - L. A. Chernov
"The Acoustics of a Moving Medium"
Sov. Phys.-Acoustics, 4, 311-318, 1958

58024/Cv - L. A. Chernov
"Acoustics of Moving Medium. Review"
Akust. Z., 4, 299-306, 1958

58025/CK - Boa-Teh Chu & Leslie S. G. Kovasznay
"Nonlinear Interactions in a Viscous Heat-Conducting Compressible Gas"
J. Fluid Mech., 3, 494, 1958

58026/CN - Carl C. Ciepluch, Warren J. North, Willard D. Coles & Robert J. Antl
Acoustic, Thrust and Drag Characteristics of Several Full-Scale Noise Suppressors for Turbojet Engines
NACA, TN 4261, 1958, AD 158 880

58027/CG - J. G. Clouston, A. G. Gaydon, F. R. S. Glass & I. I. Glass
"Temperature Measurements of Shock Waves by the Spectrumline Reversal Method"
Proc. Roy. Soc., 248, 429-444, 1958

58028/CD - Hirsh Cohen & R. C. DiPrima
"Wall Effects in Cavitating Flows"
Second Symposium on Naval Hydrodynamics, 367-390, Washington, 1958

58029/CM - T. L. Coleman, H. N. Murrow & H. Press
"Some Structural Response Characteristics of a Large Flexible Swept-Wing Airplane in Rough Air"
J. Aero. Sci., 25, 515-521, 536, 1958

58030/CC - Willard D. Coles & Edmund E. Callaghan
Full-Scale Investigation of Several Jet-Engine Noise-Reduction Nozzles
NACA Rpt. 1387, 1958

58031/CM - Willard D. Coles, John A. Milhaloew & Edmund E. Callaghan
Turbojet Engine Noise Reduction with Mixing Nozzle-Ejector Combinations
NACA, TN 4317, 1958

58032/Cl - William G. Cornell
"Some Aerodynamic Cavity Flows in Flight Propulsion Systems"
Second Symposium on Naval Hydrodynamics, 391-424, Washington, 1958

58033/Cx - Hugh L. Cox
"Vibration of Axially Loaded Beams Carrying Distributed Masses"
J.A.S.A., 30, 568-571, 1958

58034/CW - Frank B. Cramer, William T. Webber & Robert B. Lawhead
Research on the Basic Fluid Dynamic Phenomenon Related to Rocket Combustion Instability
WADC, TN 57-426, 1958, AD 142 255

58035/Cl - Stephen H. Crandall
"Mechanical Vibrations with Deterministic Excitation"
Random Vibration, S. H. Crandall, ed., Ch. 1, Technology Press, Cambridge, Mass, 1958

58036/Co - Luigi Crocco
"Comments on the Zucrow-Osborn Paper on
Jet Prop., 28, 843-844, 1958

58037/CG - Luigi Crocco & Jerry Grey
"Measurement of High-Frequency Limits of Stability in a Liquid Bipropellant Rocket Motor"
L'Aerotecnica, 38, 135, 1958

58038/CG - Luigi Crocco, Jerry Grey & David T. Harrje
"On the Importance of the Sensitive Time Lag in Longitudinal High-Frequency Rocket Combustion Instability"
Jet Prop., 28, 841-843, 1958

58039/CA - Harold Crouch & D. Andrews
"Reduction of Air Flow Noises"
Am. Ind. Hyg. Assoc. J., 19, 514-519, 1958

58040/Ce - N. Curle
"Hydrodynamic Stability of Laminar Wakes"
The Physics of Fluids, 1, 159, 1958

58041/Vo - R. S. de Voto
A Method of Air Flow Visualization with an Application to Convection Around a Heated Cylinder Subjected to External Sound Fields
M.I.T., BS Thesis, 1958

58042/Dr - Ira Dyer
"Distribution of Sound Sources in a Jet Stream"
J.A.S.A., 30, 676, 1958

1958 Cont'd

58043/Dr - Ira Dyer
"Estimation of Sound-Induced Missile Vibrations"
Random Vibration, S. H. Crandall, ed., Ch. 9, Technology Press, Cambridge, Mass., 1958

58044/Dr - Ira Dyer
"Measurement of Noise Sources in Ducts"
J.A.S.A., 30, 833-841, 1958

58045/Dr - Ira Dyer
Sound Radiation Into a Closed Space from Boundary Layer Turbulence
Bolt, Beranek & Newman Inc., Rpt. 602, AD 208459, 1958

58046/DF - Ira Dyer, Peter A. Franken & Peter J. Westervelt
"Jet Noise Reduction by Induced Flow"
J.A.S.A., 30, 761-764, 1958

58047/Ed - Kenneth M. Eldred
"Comments on Comparison of Takeoff Noise Characteristics of the Caravelle Jet Airliner and of Conventional Propeller-Driven Airliners"
J.A.S.A., 30, 363, 1958

58048/Ed - H. G. Elrod
"Drag Unit for the Artificial Generation of Turbulent Shear Flow"
Rev. Sci. Instr., 29, 762-764, 1958

58049/ER - B. Etkin & Herbert S. Ribner
Canadian Research in Aerodynamic Noise
UTIA, Rev. 13, 1958, AD 203 662

58050/Es - J. Evans
"Vibration and Acoustical Problems in Missiles"
Noise Control, 4, 22-26, 48, 1958

58051/Er - Marie L. Exner
Investigation of Aperiodic Time Processes with Auto-Correlation and Fourier Analysis
NACA, TM 1404

58052/FP - J. Fabri & J. Paulon
Theory and Experiments on Supersonic Air-to-Air Ejectors
NACA, TM 1410, 1958

58053/Fr - Charles E. Feiler
Effect of Fuel Drop Size and Injector Configuration on Screaming in a 200-pound Thrust Rocket Engine Using Liquid Oxygen and Heptane
NACA RM ES8A20a, 1958

58054/Fl - L. E. Fraenkel
"A Cylindrical Sound Pulse in a Rotating Gas"
J. Fluid Mech., 5, 635-649, 1958

58055/Fn - Peter A. Franken
"Review of Information on Jet Noise"
Noise Control, 4, 8-16, 1958

58056/FD - Peter A. Franken & Ira Dyer
"Noise Radiated by Jet Systems"
J.A.S.A., 30, 676, 1958

58057/FK - Peter A. Franken, E. M. Kerwin & Staff
Methods of Flight Vehicle Noise Prediction
WADC TR 58-343, 1958, AD 205776

58058/FF - R. E. Franklin & J. H. Foxwell
Correlation in the Random Pressure Field Close to a Jet
ARC 20,264: FM 2694; 1958, AD 216 136

58059/FF - R. E. Franklin & J. H. Foxwell
Pressure Fluctuations Near a Cold, Small-Scale Air Jet (Measurement of Space Correlations)
ARC 20,182: FM 2682,1958

58060/FL - N. C. Freeman & S. H. Lam
A Note on the Pressure Disturbance at Ground Level Caused by High-Flying Supersonic Aircraft
Princeton Univ., AFOSR, TN 58-1127, Rpt. 444, 1958, AD 207 781

58061/Fl - Francois N. Frenkiel
Statistical Study of Turbulence - Spectral Functions and Correlation Coefficients
NACA TM 1436, 1958

58062/Fd - W. H. Friend
The Interaction of a Plane Shock Wave with an Inclined Perforated Plate
UTIA, TN 25, 1958

58064/GM - W. E. Gibson & F. K. Moore
Acoustic Propagation in a Diatomic Gas Subject to Thermal or Chemical Relaxation
Cornell Aero. Lab., Rpt. HF-1056-A-2, AFOSR Tn 58-1057, 1958, AD 206988

1958 Cont'd

58065/Gn - Uwe H. von Glahn
Use of the Coanda Effect for Jet Deflection and Vertical Lift with Multiple-Flat-Plate and Curved-Plate Deflection Surfaces
NACA, TN 4377, 1958

58066/Gn - Leon Green
"Some Effects of Charge Configuration in Solid Propellant Combustion"
Jet Prop., 28, 483-485, 1958

58067/Gn - Leon Green
"Some Effects of Oxidizer Concentration and Particle Size on Resonance Burning of Composite Solid Propellants"
Jet Prop., 28, 159-164, 1958

58068/Gn - Leon Green
"Some Properties of a Simplified Model of Solid Propellant Burning"
Jet Prop., 28, 386-392, 1958

58069/GN - Leon Green & W. Nachbar
"A Comment on Combustion Instability in Solid Propellant Rocket Motors"
Jet Prop., 28, 769, 1958

58070/Gn - Roy M. Gundersen
"A Note on Shock Flow in a Channel"
J. Fluid Mech., 4, 501-504, 1958

58071/Hl - J. Gordon Hall
Shock Tubes. Part II. Production of Strong Shock Waves; Shock Tube Applications, Design and Instrumentation
UTIA, Rev. 12, 1958

58072/Hn - Mark Harrison
Pressure Fluctuations on the Wall Adjacent to a Turbulent Boundary Layer
D. T. M. B., Rpt. 1260, 1958

58073/He - David T. Harrje
Effects of Oscillating Flow on Heat Transfer in a Tube
C.I.T., J. P. L., Prg. Rpt. No. 20-363, 1958

58074/Hn - B. G. van der Hegge Zijnen
"Measurements of Distribution of Heat and Matter in Plane Turbulent Jet of Air"
App. Sci. Res., A7, 277-292, 1958

58075/Hn - B. G. van der Hegge Zijnen
"Measurements of Velocity Distribution in Plane Turbulent Jet of Air"
App. Sci. Res., A7, 256-276, 1958

58076/Hn - B. G. van der Hegge Zijnen
"Measurements of Turbulence in Plane Jet of Air by Diffusion Method and by Hot-Wire Method"
App. Sci. Res., A7, 293-313, 1958

58077/HF - John K. Hilliard & Walter T. Fiala
"Methods of Generating High-Intensity Sound with Loud Speakers for Environmental Testing of Electronic Components Subjected to Jet and Missile Engine Noise"
J.A.S.A., 30, 536-538, 1958

58078/He - T. A. Holbeche
A Preliminary Data Report on Ground Pressure Distrubances Produced by the Fairey Delta 2 in Level Supersonic Flight
RAE TN Aero. 2520, 1958

58079/Hd - J. F. Holford
The Effect of V.T.O. with Direct Lift Jet Engines on the Noise Problem in the Vicinity of Airports
RAE TN Aero. 2546, 1958

58081/Hm - W. H. Hoppmann II
"Some Characteristics of the Flexural Vibrations of Orthogonally Stiffened Cylindrical Shells"
J.A.S.A., 30, 77-82, 1958

58082/HS - Claude W. Horton & Arthur E. Sobey, Jr.
"Studies on the Near Fields of Monopole and Dipole Acoustic Sources"
J.A.S.A., 30, 1044-1099, 1958

58083/HR - Frederick S. Howes & R. R. Real
"Noise Origin, Power and Spectra of Ducted Centrifugal Fans"
J.A.S.A., 30, 714-720, 1958

58084/Hs - Walton L. Howes
Ground Reflection of Jet Noise
NACA, TN 4260, 1958

58085/HF - J. C. Hubbard, J. A. Fitzpatrick, W. J. Thaler, Laura Cheng & R. J. Beeber
"Study of Turbulence by Light Diffraction"
Phys. Rev., 74, 708-709, 1958

1958 Cont'd

58086/IT - Juichi Igarashi & Masasuke Toyama
Fundamentals of Acoustical Silencers. I. Theory and Experiment of Acoustic Low-Pass Filters
Univ. of Tokyo, Aero. Res. Inst. Rpt. No. 339, 24, 223-241, 1958

58087/Ih - C. R. Illingworth
"The Effects of a Sound Wave on the Compressible Boundary Layer on a Flat Plate"
J. Fluid Mech., 3, 471-493, 1958

58088/Ig - H. B. Irving
"Jet Aircraft Noise and the By-Pass Engine"
The Aeroplane, 44, 262-262A, 1958

58090/Ii - A. I. Ivanovskii
"The Connection of Acoustic Streaming with Absorption"
Sov. Phys.–Acoust., 4, 142-152, 1958

58091/JN - Francis J. Jackson & Wesley L. Nyborg
"Small Scale Acoustic Streaming Near a Locally Excited Membrane"
J.A.S.A., 30, 614-619, 1958

58092/JH - T. W. Jackson, W. B. Harrison & W. C. Boteler
Free Convection, Forced Convection, and Acoustic Vibrations in a Constant Temperature Vertical Tube
ASME Paper 58-HT-6, 1958

58093/Js - Carlton S. James
Observations of Turbulent-Burst Geometry and Growth in Supersonic Flow
NACA, TN 4235, 1958

58094/JH - J. W. Jewel & R. D. Harrington
Effect of Compressibility on the Hovering Performance of Two 10-foot-diameter Helicopter Rotors Tested in the Langley Full-Scale Tunnel
NACA, RM L58B19, 1958

58095/Jn - Virgil E. Johnson, Jr.
"The Influence of Depth of Submersion, Aspect Ratio, and Thickness on Supercavitating Hydrofoils Operating at Zero Cavitation Number"
Second Symposium on Naval Hydrodynamics, 317-366, Washington, 1958

58096/JA - L. R. Jordan & C. M. Auble
Development of the Suppressor and Thrust Brake for the DC-8 Airplane
Douglas Aircraft Co. Inc., Santa Monica, California, Engr. Paper 668, 1958

58097/Jn - Donald W. Jorgensen
Measurements of Noise from Cavitating Submerged Water Jets
DTMB Rpt. 1126, 1958

58098/Kn - George W. Kamperman, et al.
Design of the High Density Noise Test Facility
WADC TR 58-367, 1958, AD 202561

58099/Kl - R. P. Kanwal
Absorption of Sound Waves in a Uniform Stream
Math. Res. Centre, U.S. Army, Univ. of Wisconsin, Tech. Summ. Rpt. 25, 1958, AD 161818

58100/Ks - Henry B. Karplus
The Velocity of Sound in a Liquid Containing Gas Bubbles
AEC Res. & Devel. Rpt., 1958

58101/Kd - Dwight C. Kennard, Jr.
"Sonic Vibration as Exemplified by the RB-66B Airplane"
J.A.S.A., 30, 462-469, 1958

58102/Kr - T. H. Kerr
A Preliminary Review of the Low Level Supersonic Tests on the Fairey ER 103
RAE TN Aero. 2565, 1958

58103/Kn - Edward M. Kerwin, Jr.
"Vibration Damping by a Stiffened Damping Layer"
J.A.S.A., 30, 698, 1958

58104/KS - John K. Kilham & Timothy J. B. Smith
Combustion Noise
Gas Council, (London) Res. Comm., GC49, 1958

58105/Kg - Arthur J. King
"Attenuation of Sound in Lined Air Ducts"
J.A.S.A., 30, 505-506, 1958

58106/KG - P. F. King & R. P. Gannon
"The Effects of Engine Noise on Royal Air Force Personnel"
Proc. Roy. Soc. Med., 51, 45, 1958

1958 Cont'd

58107/Kr - Alan L. Kistler
Fluctuation Measurements in Supersonic Turbulent Boundary Layers
BRL, Rpt. 1052, 1958

58108/KS - S. M. Kogarko, V. I. Skobelkin & A. N. Kazakov
"The Interaction of Shock Waves with a Flame Front"
Dok. Akad. Nauk, SSSR, 122, 1046-1048, 1958

58109/Kl - Jerome Kohl
Rocket Engine Testing and Tracer Techniques with Radioactive Isotopes
Engr. & Dev. Tracerlab, Inc., Richmond, Calif., Reprint, 1958

58110/Ko - E. Kosko
The Compressive Instability of a Hydraulic Jack
UTIA Rpt. 55, 1958

58111/KN - Robert H. Kraichman
"Sound Radiation from High Reynolds Number Turbulence"
J.A.S.A., 30, 675, 1958

58112/Kn - Max C. Kurbjun
Noise Survey Under Static Conditions of a Turbine Driven Full-Scale Modified Supersonic Propeller with an Advance Ratio of 3.2
NACA TN 4172, 1958

58113/KV - Max C. Kurbjun & Arthur W. Vogeley
Measurements of Free-Space Oscillating Pressures Near Propellers at Flight Mach Numbers to 0.72
NACA Rpt. 1377, 1958

58114/Le - William E. Lawrie
Development of New Sound Absorbing Materials for Noise Suppressors, Pt. I
WADC TR 58-460, Part I, 1958, AD 215445

58115/Ls - H. W. Lerbs
"On Supercavitating Propellers"
Second Symposium on Naval Hydrodynamics 483-488, Washington, 1958

58116/LL - Lewis Laboratory Staff
A Summary of Preliminary Investigations Into the Characteristics of Combustion Screech in Ducted Burners"
NACA Rpt. 1384, 1958

58117/Ly - G. M. Lilley
On the Noise from Air Jets
ARC 20,376, N.40, F.M. 2724, 1958, AD 206 360

58118/LP - Kuang-ming Lin & Melville S. Priest
The Hydraulic Jump Over a Plane Inclined Bottom
Ala. Polytech. Inst., Auburn, Ala, Engr. Exper. Sta., Bull. 30, 1958

58119/Ll - A. M. Lippisch
"Flow Visualization"
Aero. Engr. Rev., 17, 24-36, 1958

58120/Ld - R. M. Lockwood
Investigation of a Resonant Combustor Concept
Hiller Aircraft Corp., Adv. Res. Dir., Rpt. ARD-219, 1958

58121/Le - Eugene S. Love
Supersonic Wave Interference Affecting Stability
NACA, TN 4358, 1958

58122/Ln - Richard H. Lyon
The Random Vibration of Elastic Strings - Theoretical
WADC, TR 58-570, 1958, AD 214-383

58122a/Lt - Robert F. Lambert
Response of Bars (with internal and boundary damping) to Transient and Random Excitation
WADC, TR 58-569, 1958, AD 214 382

58123/Lv - Iu P. Lysanov
"Theory of the Scattering of Waves at Periodically Uneven Surfaces"
Sov. Phys.–Acoust., 4, 1-10, 1958

58124/Lv - Iu P. Lysanov
"On the Scattering of Sound by a Non-Uniform Surface"
Sov. Phys.–Acoustics, 4, 45-49, 1958
translation of *Akust. Z.*, 4, 47-50, 1958

58125/MT - P. M. MacPherson, D. B. Thrasher, & O. Logan
A Survey of Noise at R.C.A.F. Station Cold Lake and R.C.A.F. Station Uplands
D.R.M.L. Rpt. 228-1, 1958

58126/My - R. Stuart MacKay
"Boat Driven by Thermal Oscillations"
Am. J. Phys., 26, 583-4, 1958

58127/Mo - L. Maestrello
UTIA Air Duct Facility for Investigation of Vibration Noise Induced by Turbulent Flow Past a Panel (boundary-layer noise)
UTIA, TN 20, 1958, AD 154 263

1958 Cont'd

58128/Mk - Gideon Maidanik
"Torques Due to Acoustical Radiation Pressure"
J.A.S.A., 30, 620-623, 1958

58129/Mk - Herman Mark
The Interaction of a Reflected Shock Wave With the Boundary Layer in a Shock Tube
NACA, TM 1418, 1958

58130/Me - Jack G. McArdle
Internal Characteristics and Performance of an Aerodynamically Controlled, Variable-Discharge Convergent Nozzle
NACA, TN 4312, 1958

58131/Me - Jack G. McArdle
Internal Characteristics and Performance of Several Jet Deflectors at Primary-Nozzle Pressure Ratios Up to 3.0
NACA, TN 4264, 1958

58132/Md - D. J. Mead
The Effect of a Damping Compound on Jet-Efflux Excited Vibrations. Part I. The Structural Damping Due to the Compound
A.R.C. 20,155, 1958

58133/MF - William C. Meecham & G. W. Ford
"Acoustic Radiation from Isotropic Turbulence"
J.A.S.A., 30, 318-322, 1958, AD 217911

58134/Ml - Theodore J. Mentel
Damping Energy Dissipated by Interfaces in Beam and Plate Supports and in Sandwich Cores
WADC TR 58-547, 1958

58135/Mk - H. J. Merk
"Analysis of Heat-Driven Oscillations of Gas Flows. V. Influence of Heat Transfer in the Burner Ports on the Stability of Combustion of Premixed Gases"
App. Sci. Res., 8, 1-27, 1958

58137/MM - Erwin Meyer, Fridolin Mechel & Gunther Kurtze
"Experiments on the Influence of Flow on Sound Attenuation in Absorbing Ducts"
J.A.S.A., 30, 165-174, 1958

58138/Mn - William R. Mickelsen
"An Analysis of Fuel-Oxidant Mixing in Screaming Combustors"
Jet Prop., 28, 172-177, 1958

58139/Ms - John W. Miles
"On the Disturbed Motion of a Plane Vortex Sheet"
J. Fluid Mech., 4, 538, 1958

58140/Mr - Norman B. Miller
"Reflections from Gradual Transition Sound Absorbers"
J.A.S.A., 30, 967-973, 1958

58141/MK - Robert R. Mills, Jr., Alan L. Kistler, Vivian O'Brien & Stanley Corrsin
Turbulence and Temperature Fluctuations Behind a Heated Grid
NACA, TN 4288, 1958

58142/MK - Carl A. Moore, Jr., & Stephen J. Kline
Some Effects of Vanes and of Turbulence in Two-Dimensional Wide-Angle Subsonic Diffusers
NACA, TN 4080, 1958

58143/Ml - G. Morrell
"An Empirical Method for Calculating Heat Transfer Rates in Resonating Gaseous Pipe Flow"
Jet Prop., 28, 829-831, 1958

58144/Mw - Charles T. Morrow
"Averaging Time and Data-Reduction Time for Random Vibration Spectra. I"
J.A.S.A., 30, 456-461, 1958

58145/Mw - Charles T. Morrow
"Averaging Time and Data-Reduction Time for Random Vibration Spectra. II"
J.A.S.A., 30, 572, 578, 1958

58146/MM - Ernst August Müeller & Klaus R. Matschat
"Calculation of Energy of Sound Radiated from Field of Decaying Homogeneous and Isotropic Turbulence"
Z. Flugwiss, 6, 161-170, 1958

58147/Mh - Tipton P. Mott-Smith
The Effect of High Sound Pressure Fields on Free-Convection Heat Transfer
U. S. A. F. Inst. of Tech., Thesis, Wright-Patterson AFB, Ohio, 1958

58149/Mz - E. P. Muntz
Pressure Measurements in Free Molecule Flow With a Rotating Arm Apparatus
UTIA, TN 22, 1958

1958 Cont'd

58150/NA - W. L. Nelson & C. M. Alaia
Aerodynamic Noise & Drag Measurements on a High-Speed Magnetically Suspended Rotor
WADC, TR 57-339, 1958, AD 142153

58151/Nh - Warren J. North
Transonic Drag of Several Jet-Noise Suppressors
NACA, TN 4269, 1958

58152/Ng - Wesley L. Nyborg
"Acoustic Streaming Near a Boundary"
J.A.S.A., 30, 329-338, 1958

58153/Ng - Wesley L. Nyborg
Self-Maintained Transverse Oscillations of a Jet
ASA Meeting, Paper G2, 1-13, 1958

58154/Or - Hans L. Oestreicher
"Erratum: Representation of the Field of an Acoustic Source as a Series of Multipole Fields"
J.A.S.A., 30, 481, 1958

58155/Or - Hans L. Oestreicher
Supplementary notes to "Field of a Spatially Extended Moving Sound Source"
J.A.S.A., 30, 480, 1958

58156/OW - Haakon Olsen, Harald Wergeland & Peter J. Westervelt
"Acoustic Radiation Force"
J.A.S.A., 30, 633-634, 1958

58157/OS - J. R. Osborn & R. M. Schiewe
An Experimental Investigation of High-Frequency Combustion Pressure Oscillations in a Gaseous Bi-Propellant Rocket Motor
Purdue Univ., Rpt. No. I-58-1, 40, 1958

58158/Oi - J. T. Osmanski
Experimental Investigation to Correlate the Recurrence of Fatigue Failures in a Typical Aircraft Structure with Vibratory Amplitude
WADC, TR 56-551, 1958, AD 110462

58159/OA - Simon Ostrach & Lynn U. Albers
On Pairs of Solutions of a Class of Internal Viscous Flow Problems with Body Forces
NACA, TN 4273, 1958

58160/Ps - V. M. Papadopoulos
"Ray Tracing Through a Lens of Circular Cross Section"
J. Opt. S. A., 48, 667, 1958

58161/Pn - G. N. Patternson
Transport Properties of Free Molecule (Knudsen) Flow
UTIA, Rev. 11, 1958

58162/Py - H. H. Pearcey
A Method for the Prediction of the Onset of Buffeting and Other Separation Effects From Wind Tunnel Tests on Rigid Models
AGARD, Rpt. 223, 1958, AD 248 342

58163/PL - Chiam Pekeris & Ivor M. Longman
"Ray-Theory Solution of the Problem of Propagation of Explosive Sound in a Layered Liquid"
J.A.S.A., 30, 323-328, 1958

58164/Ps - Owen M. Phillips
"Aerodynamic Sound Radiated From a Turbulent Boundary Layer"
J.A.S.A., 30, 680, 1958

58165/Ps - Owen M. Phillips
"Wave Generation by Turbulent Wind Over a Finite Fetch"
A. S. M. E., 785-789, (Reprint from Proc. Third U.S. Nat. Cong. Ap. Mech., 1958)

58166/Ps - Owen M. Phillips
"The Equilibrium Range in the Spectrum of Wind-Generated Waves"
J. Fluid Mec., 4, 426-433, 1958

58167/PC - Owen M. Phillips & C. S. Cox
"On Some Properties of the Spectrum of Wind-Generated Ocean Waves" Comments on Dr. Phillip's paper.
J. Marine Res., 16, 231-245, 1958

58169/PR - E. D. Poppleton & G. S. Ram
Approximate Calculation of the Pressure Distribution on a Rectangular Wing Oscillating in Incompressible Flow
UTIA Rpt. 56, 1958

58170/Pl - Alan Powell
"Comments on the Response of a String to Random Distributed Forces"
J.A.S.A., 30, 365-366, 1958

58171/Pl - Alan Powell
"Experimental Comparison Between Noise From Unheated Subsonic Air Jets Having 4:1 Elliptic and Circular Orifices"
J.A.S.A., 30, 642, 1958

58172/Pl - Alan Powell
"On the Approximation to the *Infinite* Solution by the Method of Normal Modes for Random Vibrations"
J.A.S.A., 30, 1136-1139, 1958

1958 Cont'd

58173/Pl - Alan Powell
"On the Effect of Missile Motion on Rocket Noise"
J.A.S.A., 30, 1048, 1958

58174/Pl - Alan Powell
"On the Fatigue Failures of Structures Due to Vibrations Excited by Random Pressure Fields"
J.A.S.A., 30, 1130-1135, 1958

58175/Pl - Alan Powell
"On the Measurement of Pressure Correlations for Random Vibration Studies"
J.A.S.A., 30, 878, 1958

58176/Pl - Alan Powell
"On the Response of Structures to Random Pressures and to Jet Noise in Particular"
Random Vibration, S. H. Crandall, ed., Ch. 8, Technology Press, Cambridge, Mass., 1958

58177/Pl - Alan Powell
Similarity Considerations of Noise Production from Turbulent Jets, Both Static and Moving
Douglas Aircraft Co., Rpt. SM23246, 1958

58178/Pl - Alan Powell
Theory and Experiment in Aerodynamic Noise, with a Critique of Research on Jet Flows and their Relation to Sound
Second Symposium on Naval Hydrodynamics, 1958

58179/Pt - V. Prendergast
Measurement of Two-Point Correlations of the Surface Pressure on a Circular Cylinder
UTIA, TN 23, 1958

58180/PS - Harry Press and Roy Steiner
An Approach to the Problem of Estimating Severe and Repeated Gust Loads for Missile Operations
NACA, TN 4332, 1958

58181/Pe - E. W. Price
"Terminology in Rocket Combustion Instability"
Jet Prop., 28, 197, 1958

58182/PS - E. W. Price & J. W. Sofferis
"Combustion Instability in Solid Propellant Rocket Motors"
Jet Prop., 28, 190-192, 1958

58183/PN - David C. Pridmore-Brown
"Sound Propagation in a Fluid Flowing Through an Attenuating Duct"
J. Fluid Mech., 4, 393-406, 1958

58184/Pn - Ronald F. Probstein
Aerodynamics of Rarefied Gases
WADC, TN 58-228, 1958

58185/Pm - Abbott A. Putnam
"Pulsations in Residential Gas Furnaces with Multiple-Part Burners"
Heating, Piping & Air Conditioning, 30, 4, 143-149, 1958

58186/Rr - Herbert S. Ribner
On the Lift and Induced Drag Associated with Large Downwash Angles
UTIA Tech. Note 19, 1958

58187/Rr - Herbert S. Ribner
"Strength Distribution of Noise Sources Along a Jet"
J.A.S.A., 30, 876, 1958

58188/Rr - Herbert S. Ribner
On the Strength Distribution of Noise Sources Along a Jet
UTIA Report No. 51, 1958, AD 154 264

58189/Rr - Herbert S. Ribner
Canadian Research in Aerodynamic Noise
UTIA Review No. 13, 1958

58190/Rr - Herbert S. Ribner
Note on Acoustic Energy Flow in a Moving Medium
UTIA TN No. 21, 1958, AD 154 265

58191/Rs - Elfyn J. Richards
Note on the Effect of Velocity Profile on Jet Noise
ARC 20, 606, 1958

58192/Rs - Elfyn J. Richards
One-Dimensional Treatment of Weak Disturbances of a Shockwave
ARC 20, 125, F.M. 2677, 1958

58193/Rs - Elfyn J. Richards
Some Thoughts on Noise Suppression Nozzle Design
Combustion and Propulsion, 3rd AGARD Colloquium, 197-223, 1958

1958 Cont'd

58194/RM - G. C. Robinson & C. M. McClure
"Effects of Ultrasonics on Heat Transfer by Convection"
Am. Ceramic Soc. , Bull. 37, 399, 1958

58195/Rn - Vern G. Rollin
Effect of Jet Temperature on Jet-Noise Generation
NACA TN 4217, 1958

58196/Rt - Nicholas Rott
"On the Viscous Core of a Line Vortex"
J. App. Math. Phys., 9B, 543-553, 1958

58197/RS - Hunter Rouse, T. T. Siao & S. Nagaratnam
Turbulence Characteristics of the Hydraulic Jump
ASCE, Paper 1528, 1958

58198/Rk - Isadore Rudnick
"On the Attenuation of High Amplitude Waves of Stable Saw-Tooth Form Propagated in Horns"
J.A.S.A., 30, 339-342, 1958

58199/Rk - Isadore Rudnick
"On the Attenuation of Finite Amplitude Waves in a Liquid"
J.A.S.A., 30, 564-567, 1958

58200/SL - Guy J. Sanders & William E. Lawrie
"Low Frequency Combustion Noise in Oil-Burning Equipment"
Heating, Piping & Air Conditioning, 30, 10, 127-134, 1958

58201/Ss - K. D. Saunders
"A Power-Spectrum Equation for Stationary Gusts, Including a Sample Problem"
J. Aero. Sci., 25, 295-330, 1958

58202/Se - James C. Savage
"Reflection from a Fluid of Higher Sound Velocity"
J.A.S.A., 30, 974-978, 1958

58203/SG - R. Schultz, Leon Green, & S. S. Penner
Studies of the Decomposition Mechanism, Erosive Burning, Sonance and Resonance for Solid Composite Propellants
Third AGARD Colloquium, 367-420, N.Y., Pergamon Press, 1958

58204/Sw - F. Schultz-Grunow
"On the Generation of Axial Vortices in Boundary Layers"
Z. angew. Math. Mech., 38, 85-94, 1958

58205/Sd - J. W. C. Sherwood
"Propagation in an Infinite Elastic Plate"
J.A.S.A., 30, 979-984, 1958

58206/SV - Merwin Sibulkin & Thomas Vrebalovich
"Some Experiments with a Resonance Tube in a Supersonic Wind Tunnel"
J. Aero/Space Sci., 25, 465-466, 1958

58207/Sk - Eugen J. Skudrzyk
"Sound Radiation of a System with a Finite or an Infinite Number of Resonances"
J.A.S.A., 30, 1152-1158, 1958

58208/Sk - Eugen J. Skudrzyk
"Vibrations of a System with a Finite or an Infinite Number of Resonances"
J.A.S.A., 30, 1140-1151, 1958

58209/Sh - Preston W. Smith, Jr.
"Sound-Induced Vibration"
Noise Control, 4, 16-21, 45, 1958

58210/SP - Carl F. Speich & Abbott A. Putnam
"Pulsations in Single-Port Gas Fired Heating Equipment"
Heating, Piping & Air Conditioning, 30, 11, 139-146, 1958

58211/Sb - F. Staab
The Noise from Jet Engines and Its Reduction (in German)
DFL Rpt. 121, 1958

58212/Sn - A. Stepan
"Pressure Jet Helicopter"
J. R. Ae. S., 62, 123-131, 1958

58213/Sg - Murray Strasberg
"Response of Plates and Membranes to Pressure Fluctuations of a Turbulent Boundary Layer"
J.A.S.A., 30, 680, 1958

58214/St - J. T. Stuart
"On the Non-Linear Mechanics of Hydrodynamic Stability"
J. Fluid Mech., 4, 1, 1958

58215/Sv - B. A. Suchkov
"Sound Amplitude Fluctuations in a Turbulent Medium"
Akust. Z., 4, 85-91, 1958

58216/TM - A. J. Tachmindji & W. B. Morgan
"The Design and Estimated Performance of a Series of Supercavitating Propellers"
Second Symposium on Naval Hydrodynamics, 489-532, Washington, 1958

58217/TB - S. R. Tailby & I. Berkovitch
"The Effect of Sonic Vibrations on Heat Transfer from Town Gas Flames"
Tran. I. Chem. Engr., (London), 36, 13-25, 1958

58218/Te - Robert B. Tatge
Analytical Study of Jet Noise Reduction by Mixing with Secondary Flow
G.E.C. Rpt. No. 58GL36, 1-12, 1958

58219-TK - T. Tatsumi & T. Kakutani
"The Stability of a Two-Dimensional Laminar Jet"
J. Fluid Mech., 4, 261-275, 1958

58220/TS - Sir Geoffrey Taylor & P. G. Saffman
"Cavity Flows of Viscous Liquids in Narrow Spaces"
Second Symposium on Naval Hydrodynamics, 277-292, Washington, 1958

58221/Tn - W. Telimien
Research on Investigation of the Interaction of Sound and Turbulence
AFOSR TN 58-236, 1958, AD 154138

58222/TS - K. E. Tempelmeyer & G. H. Sheraden
Compressible Flow Tables for Gases with Specific Heat Ratios from 1.10 to 1.28
Arnold Engr. Dev. Center, Rpt. No. AEDC, TN 58-9, 1958, AD 152 041

58223/TE - G. J. Thiessen & T. F. W. Embleton
"Efficiency of a Linear Array of Point Sources with Linear Phase Variation"
J.A.S.A., 30, 449-451, 1958

58224/Ts - Dan A. Thomas
"Characteristic Impedances for Flexure Waves in Thin Plates"
J.A.S.A., 30, 220-221, 1958

58225/Tn - George B. Thurston
"Nonlinear Acoustic Properties of Orifices of Varied Shapes and Edge Conditions"
J.A.S.A., 30, 452-455, 1958

58226/Tn - R. Timman
"A General Linearized Theory for Cavitating Hydrofoils in Nonsteady Flow"
Second Symposium on Naval Hydrodynamics, 559-582, Washington, 1958

58227/TC - Robert L. Trimpi & Nathaniel B. Cohen
A Nonlinear Theory for Predicting the Effects of Unsteady Laminar, Turbulent, or Transitional Boundary Layers on the Attenuation of Shock Waves in a Shock Tube with Experimental Comparison
NACA TN 4347, 1958

58228/Tn - Marshall P. Tulin
"New Developments in the Theory of Supercavitating Flows"
Second Symposium on Naval Hydrodynamics, 235-260, Washington, 1958

58229/Vn - P. S. Veneklasen
"Missile Noise as Factor in Reliability"
Aero. Space Engr., 17, 44-48, 1958

58230/Wn - Kenneth . Wadlin
"Mechanics of Ventilation Inception"
Second Symposium on Naval Hydrodynamics, 425-446, Washington, 1958

58231/Wn - H. F. Waldron
An Experimental Investigation of the Flow Properties Behind Strong Shock Waves in Nitrogen
UTIA Rpt. 50, 1958

58232/Wn - F. Walkden
"The Shock Pattern of a Wing-Body Combination, Far from the Flight Path."
Aero. Quart., 9, 164-194, 1958

58233/We - Richard V. Waterhouse
"Output of a Sound Source in a Reverberation Chamber and Other Reflecting Environments"
J.A.S.A., 30, 4-13, 1958

58234/WB - Richard V. Waterhouse & Raymond D. Berendt
"Reverberation Chamber Study of the Sound Power Output of Subsonic Air Jets"
J.A.S.A., 30, 114-121, 1958

58235/WS - Leland Watermeier, Trexler Satowski & Thomas Mifflin
An Experimental Study of Combustion Instability in Solid Rocket Propellants - Part I
Ballistic Res. Labs, Memo Rpt. 1172, 1958, AD 206 469

58236/Wl - Donat G. Wentzel
"On the Spectrum of Turbulence"
Phys. Fluids, 1, 213-214, 1958

1958 Cont'd

58237/Wl - J. M. Wetzel
"Ventilation of Bodies Piercing a Free Surface"
Second Symposium on Naval Hydrodynamics, 447-466, Washington, 1958

58238/Ws - John E. F. Williams
Measuring Turbulence with a View to Estimating the Noise Field
ARC F.M. 2726, ARC 20, 381, 1958, AD 207 235

58240/Wi - H. U. Wisniowski
Experiments with Screens and Grids for Suppressing Jet Engine Noise
Nat. Aero. Establ., Canada, Lab. Rpt. 231, 1958

53241/Wf - H. Wolf
"Acoustic Effects Produced by Airscrews, Jet Engines and Free Jets" (in German)
Maschinenbautechnik, 7, 573-580, 1958

58242/Yg - W. H. Young
Tactical Use of Shock Waves from Aircraft
Bureau of Aero., Rpt. DR 1808, 1958, AD 204249

58243/ZO - M. J. Zucrow & J. R. Osborn
"An Experimental Study of High-Frequency Combustion Pressure Oscillations"
Jet Prop., 28, 654-659, 1958

1959

59001/As - H. W. Adams
"Jet Noise Suppression"
Mech. Engr., 81, 61-63, 1959

59002/AW - Clayton H. Allen & B. G. Watters
"Siren Design for Producing Controlled Wave Forms at High Intensities"
J.A.S.A., 31, 177-184, 1959

59003/AW - C. H. Allen & B. G. Watters
"Siren Design for Producing Controlled Wave Forms with Amplitude Modulation"
J.A.S.A., 31, 463-469, 1959

59004/An - Anon
"Jet Thrust Reversal and Reduced Noise"
Engr., 188, 453-454, 1959

59005/An - Anon
"Jet Noise Suppressor's Angle-Cone Converts Low Frequencies"
Design News, 14, 36-37, 1959

59006/Ae - T. Arase
"Some Characteristics of Long-Range Explosive Sound Propagation"
J.A.S.A., 31, 588-595, 1959

59007/Bn - C. G. Balachandran
"Random Sound Field in Reverberation Chambers"
J.A.S.A., 31, 1319, 1959

59008/Bt - J. E. Barfoot
Design, Development and Operational Experience of the Boeing 707 Thrust Reverser/Sound Suppressor
SAE Preprint 57S, 1959

59009/BS - W. A. Beach, R. W. Sage & H. F. Schroeder
"Effect of Fuel Composition on Oil Burner Noise"
J. ASHRAE, 1, 41-42, 1959

59010/BV - P. M. Belcher, J. D. Van Dyke & A. L. Eshleman
"Aircraft Structure to Withstand Acoustic Loads"
Aero/Space Engr., 18, 24-30, 1959

59011/Be - Arthur H. Benade
"On Woodwind Instrument Bores"
J.A.S.A., 31, 137-146, 1959

59012/BL - P. Bradshaw & Edna Love
The Normal Impingement of a Circular Air Jet on a Flat Surface
ARC., 21268, 1959

59013/Bh - L. M. Brekhovskikh
"Surface Waves in Acoustics"
Sov. Phys.–Acoustics, 5, 1-12, 1959

59014/Be - W. Grant Brownlee
An Experimental Investigation of Unstable Combustion in Solid-Propellant Rocket Motors
C. I. T., Ph.D. Thesis, 1959

59016/Cn - Edmund E. Callaghan
"Noise Suppressors for Jet Engines"
Noise Control, 5, 18-23, 80, 1959

59017/CM - Francois Canac & Marie Merle
"Relation, dans les jets d'air à grande vitesse, entre la forme, les dimensions de la buse et la nature des émissions acoustiques"
Compt. Rend., 248, 1953-1954, 1959

59018/Cn - Harry W. Carlson
An Investigation of Some Aspects of the Sonic Boom by Means of Wind-Tunnel Measurements of Pressures About Several Bodies at a Mach Number of 2.01
NASA, TN D-161, 1959

59019/Cn - Harry W. Carlson
"A Wind Tunnel Investigation of Some Aspects of the Supersonic Boom"
Aero/Space Engr., 18, 38-39, 52, 1959

59020/Cn - Harry W. Carlson
The Aerodynamics of the Sonic Boom
Inst. Aero. Sci. Paper, 59-115, 1959

59021/Cy - T. K. Caughey
"Response of a Nonlinear String to Random Loading"
J. App. Mech., Paper 59-APMW-4, 1959

59022/Cn - Harvey R. Chaplin
Effect of Jet Mixing on the Annular Jet
DTMB Aero Rpt. 953, 1959

59023/Cg - Sin-I Cheng
Combustion Instability in Solid Rockets Using Propellants with Suspended Metallic Powders
Princeton Univ., Dept. Aero. Engr. Rpt. No. 482, 1959

59024/Cg - Sin-I Cheng
Note on the Broad Spectrum Noise of a Jet and its Silencer
AFOSR-TN-59-1309, GASL-TR-149, 1959
AD 236 522

1959 Cont'd

59026/Cr - G. Chevalier
"Les Détonations Balistiques"
Docaero, (France), 27-30, 1959

59027/CW - Alfred C. F. Cho & Robert B. Watson
"Pulse Technique Applied to Acoustical Testing"
J.A.S.A., 31, 1322-1326, 1959

59028/CP - Welden E. Clark, Adone C. Pietrasanta & Staff
Intrusion of Aircraft Noise Into Communities Near Two U.S.A.F. Air Bases
WADC TN 58-213, 1959, AD 212223

59029/Cn - B. L. Clarkson
Correlation of Noise Pressures and of the Induced Strains in an Aircraft Structure
U.S.A.A. Rpt. 108, 1959

59030/Cn - B. L. Clarkson
Note on the Use of Correlation Techniques to Determine the Forms of Vibration of a Continuous Structure Excited by Random Pressures
ARC 21516, 1959

59031/Cn - B. L. Clarkson
"The Effect of Jet Noise on Aircraft Structures"
Aero. Quart., 10, 103-126, 1959

59032/Cs - Willard D. Coles
Jet-Engine Exhaust Noise from Slot Nozzles
NASA, TN D-60, 1959

59033/Cs - Gilles M. Corcos
"Some Effects of Sound-Reduction Devices on a Turbulent Jet"
J. Aero/Space Sci., 26, 717-722, 1959

59034/CC - Gilles M. Corcos, J. W. Cuthbert & William A. von Winkle
On the Measurement of Turbulent Pressure Fluctuations with a Transducer of Finite Size
Univ. of Calif., Inst. of Engr. Res., Series 82 Issue 12, 1959, AD 230166

59035/CB - Hugh L. Cox & Wilcomb A. Benfield
"Vibration of Uniform Square Plates Bounded by Flexible Beams"
J.A.S.A., 31, 963-966, 1959

59036/Ce - F. E. Crane
Jet Engine Exhaust Noise Suppression Investigation Report of Survey of PWA J75-P-11 Engine
Aero. Engr. Lab., Naval Air Material Center, Rpt. No. NAMC-AEL-1615, 1959, AD 226 553

59037/Cp - John D. C. Crisp
"The Equation of Energy Balance for Fluttering Systems with Some Applications in the Supersonic Regime"
J. Aero/Space Sci., 26, 703-716, 1959

59038/DL - H. Dahlen & W. Lohse
"Soundproofing of Research and Development Plants for Jet Engines"
DFL Rpt. 112, *Luftfahrttechnik*, 5, 117-123, 1959

59039/Dr - S. G. Datar
Temperature Response of a Hot-Wire Anemometer to Shock and Rarefaction Waves
UTIA, TN 28, 1959

59040/Dn - Charles Devin, Jr.
"Survey of Thermal, Radiation, and Viscous Damping of Pulsating Air Bubbles in Water"
J.A.S.A., 31, 1654-1667, 1959

59041/Dy - O. V. Doubrovsky
"An Experimental Investigation Into Burning of Liquid Fuel in Combustion Chambers of Stationary Gas Turbine Installations"
Teploenergetika, 6, 56, 1959

59042/Dr - Ira Dyer
"Distribution of Sound Sources in a Jet Stream"
J.A.S.A., 31, 1016-1021, 1959

59043/Dr - Ira Dyer
"Response of Plates to a Decaying and Convecting Random Pressure Field"
J.A.S.A., 31, 922-928, 1959

59044/ET - Norman G. Einspruch & Rohn Truell
"Propagation of Traveling Waves in a Circular Cylinder Having Hexagonal Elastic Symmetry"
J.A.S.A., 31, 691-693, 1959

59045/Er - Samuel A. Elder
"Cavitation Microstreaming"
J.A.S.A., 31, 54-64, 1959

59046/Ed - Kenneth M. Eldred
"Acoustical Factors in Jet Airport Design"
J.A.S.A., 31, 547-557, 1959

59047/Es - Isidor Elias
"Acoustical Resonances Produced by Combustion of a Fuel-Air Mixture in a Rectangular Duct"
J.A.S.A., 31, 295-304, 1959

1959 Cont'd

59048/EV - A. L. Eshleman, Jr., J. D. Van Dyke, Jr. & P. M. Belcher
"A Procedure for Designing and Testing Aircraft Structure Loaded by Jet-Engine Noise"
ASME Preprint 59-AV-48, 1959

59049/FM - John C. Fakan & Harold R. Mull
Effect of Forward Velocity on Sound-Pressure Level in the Near Noise Field of a Moving Jet
NASA, TN D-61, 1959, AD 227 291

59050/Fy - D. C. Fakley
"Comparison Between the Performances of a Time-Averaged Product Array and an Intra-Class Correlator"
J.A.S.A., 31, 1307-1314, 1959

59051/FK - R. M. Fand & J. Kaye
"A Hot Wire Method for Visualizing Intense Stationary Sound Waves"
J.A.S.A.,31, 810-811, 1959

59052/FK - R. M. Fand & J. Kaye
The Effect of High Intensity Stationary and Progressive Sound Fields on Free Convection from a Horizontal Cylinder
WADC, TN 59-18, 1959, AD 209 532

59053/Fy - Richard D. Fay
"Spherical Waves of Finite Amplitude"
J.A.S.A., 31, 1377-1379, 1959

59054/Fm - B. A. Fleishman
A Generalization of the Phase Relations in a Forced Harmonic Oscillator
Rensselaer Polytechnic Inst., N.Y., AFOSR, TN-59-1178, 1959

59055/Fs - G. R. Fowles
Attenuation of the Shock Wave Produced in a Solid by a Flying Plate
Stanford Res. Inst., Menlo Park, Calif., AFOSR TN 59-1281, 1959, AD 236 852

59056/Fz - Gerald J. Franz
The Near-Sound Field of Turbulence
D. T. M. B., Rpt. 982, 1959

59057/Fz - Gerald J. Franz
"Splashes as Sources of Sound in Liquids"
J.A.S.A., 31, 1080-1095, 1959

59058/FK - W. Fricke & R. K. Jaminski
"Airborne Noise, Its Simulation and Effect on Components"
Aero/Space Engr., 18, 47-53, 1959

59059/Gs - Denos C. Gazis
"Three-Dimensional Investigation of the Propagation of Waves in Hollow Circular Cylinders. I. Analytical Foundation"
J.A.S.A., 31, 568-572, 1959

59060/Gs - Denos C. Gazis
"Three-Dimensional Investigation of the Propagation of Waves in Hollow Circular Cylinders. II. Numerical Results"
J.A.S.A., 31, 573-578, 1959

59061/Ge - Albert R. George
An Investigation of a Wall Jet in a Free Stream
ONR, Rpt. 479, 1959, AD 230 802

59062/GK - Freeman Gilbert & Leon Knopoff
"Scattering of Impulsive Elastic Waves by a Rigid Cylinder"
J.A.S.A., 31, 1169-1175, 1959

59063/Ge - Henning E. von Gierke
"Vibration and Noise Problems Expected in Manned Spaced Craft"
Noise Control, 5, 8-16, 1959

59065/GH - I. I. Glass, L. E. Heuckroth & S. Molder
On the One-Dimensional Overtaking of a Shock Wave by a Rarefaction Wave
UTIA, TN 30, 1959

59066/GS - R. R. Godman & S. Stein
"Elimination of Noise in the Heat Exchanger of a Supersonic Wind Tunnel"
ASME Preprint 59-A-232, 1-5, 1959

59067/Gb - Peter Gottlieb
"Sound Transmission Through a Velocity Discontinuity"
J.A.S.A., 31, 1036, 1959

59068/Gk - N. Granick
Status Report on Random Vibration Simulation
WADC TN-58-274, 1959, AD 203 125

59069/Gx - F. B. Greatrex
"Noise Suppressors for Avon and Conway Engines"
ASME Preprint 59-AV-49, 1959

59070/GB - F. B. Greatrex & D. M. Brown
"Progress in Jet Engine Noise Reduction"
Advances in Aeronautical Sciences, Vol. I, Pergamon Press, N.Y., 364-392, 1959

1959 Cont'd

59071/GN - Leon Green & W. Nachbar
"Analysis of a Simplified Model of Solid Propellant Resonant Burning"
J. Aero/Space Sci., 28, 518, 1959

59072/Gs - P. Greguss
"Influencing Combustion Processes by Sound"
Ultrasonics News, 4th Quarter, 10-17, 1959

59073/Gs - M. J. Gross
"Underwater Edge Tones"
Acustica, 9, 164-172, 1959

59074/Gn - Roy M. Gundersen
"A Perturbation Analysis of Shock Flow in a Nozzle"
J. Aero/Space Sci., 26, 763, 1959

59075/Gn - Roy M. Gundersen
"Simple Wave Flow in Ducts"
Physics of Fluids, 2, 680-687, 1959

59076/Hl - G. W. Hall
"Application of Boundary Layer Theory to Explain Some Nozzle and Venturi Flow Peculiarities"
Proc. I. Mech. E., 173, 837-870, 1959

59077/HB - I. M. Hall & C. J. Berry
"On the Heating Effect in a Resonance Tube"
J. Aero/Space Sci., 26, 253, 1959

59078/Ht - Andrew G. Hammitt
The Oscillation and Noise of an Overpressure Sonic Jet
GASL Tech. Rpt. 137, & AFOSR TN 59-1307, 1959, AD 233 878

59079/HK - Cyril M. Harris & Leonard Kirvida
"Observation Concerning the Attenuation of Elastic Waves in the Ground"
J.A.S.A., 31, 1037, 1959

59080/HC - David T. Harrje & E. Croke
Heat Transfer in Oscillating Flow
Prog. Rpt. 1, Contract USN-ONR NONR-1858(29); AD 235 083

59081/HM - R. W. Hart & F. T. McClure
"Combustion Instability: Acoustic Interaction With a Burning Propellant Surface"
J. Chem. Phys., 30, 1501, 1514, 1959

59082/Hi - N. Hayasi
"On Quantitative Measurement of Turbulence by Means of a Constant Resistance Hot-Wire Anemometer"
J. Phys. Soc., Japan, 360-365, 1959

59083/HH - Robert W. Hess, Robert W. Herr & William H. Mayes
A Study of the Acoustic Fatigue Characteristics of Some Flat and Curved Aluminum Panels Exposed to Random and Discrete Noise
NASA, TN D-1, 1959, AD 219 890

59084/Hn - Harry H. Heyson
An Evaluation of Linearized Vortex Theory as Applied to Single and Multiple Rotors Hovering In and Out of Ground Effect
NASA TN D-43, 1959

59085/HS - P. G. Hill & A. H. Stenning
"Laminar Boundary Layers in Oscillatory Flow"
ASME, Paper 59-A-265, 1959

59086/Hn - A. W. Hogan
"Acoustical Test Facility"
Missile Design & Dev., 5, 90-93, 122, 1959

59087/HG - Jack P. Holman, H. E. Gartrell & Erich E. Soehngen
A Study of Free Convection Boundary Layer Oscillations and Their Effects on Heat Transfer
WADC-TR 59-3, 1959

59087a/HM - Jack P. Holman & Tipton P. Mott-Smith
"The Effects of Constant-Pressure Sound Fields on Free-Convection Heat Transfer from a Horizontal Cylinder"
J. Aero/Space Sci., 26, 188-189, 1959

59088/HM - R. M. Hoover & L. N. Miller
"Noise Characteristics of Some Jet Ground Operations"
Noise Control, 5, 28-31, 47, 1959

59089/Hd - Louis N. Howard
"Hydrodynamic Stability of a Jet"
J. Math. Phys., 37, 283-298, 1959

59090/Hl - Robert R. Howell
Experimental Operating Performance of a Single-Stage Annular Air Ejector
NASA, TN D-23, 1959

59091/Hs - Walton L. Howes
Ground Reflection of Jet Noise
NASA, TR R-35, 1959

1959 Cont'd

59092/Hs - Walton L. Howes
Similarity of Far Noise Fields of Jets
NASA TR-R-52, 1959, AD 228 470

59093/Hd - Harvey H. Hubbard
Noise Problems Associated with Ground Operations of Jet Aircraft
NASA, Memo. 3-5-59L, 1959

59094/HM - Harvey H. Hubbard & Domenic J. Maglieri
"The Shock Wave Noise Problem for Supersonic Aircraft"
ASME Preprint 59-SA-51, 1959

59095/Hr - G. Huebner
"Formation of Noise from Radial Blade Fans"
Siemens Z., 33, 499-505, 1959

59096/Hl - Herbert G. Hurrell
Analysis of Injection-Velocity Effects on Rocket Motor Dynamics and Stability
NASA TR R-43, 1959

59097/Id - Uno Ingard
Atmospheric Acoustics, Final Report
M.I.T., NASA Contract NAw-6516, 1959

59098/Id - Uno Ingard
"Simple Examples of Magnetomechanical Wave Motion"
J.A.S.A., 31, 1033, 1959

59099/Id - Uno Ingard
"Influence of Fluid Motion Past a Plane Boundary on Sound Reflection, Absorption and Transmission"
J.A.S.A., 31, 1035, 1959

59100/Id - Uno Ingard
"Attenuation and Regeneration of Sound in Ducts and Jet Diffusers"
J.A.S.A., 31, 1202-1212, 1959

59101/IM - Uno Ingard & George C. Maling, Jr.
"Noise Generated by Two Interacting Air Jets"
J.A.S.A., 31, 1031-1032, 1959

59102/Ig - H. B. Irving
"Helicopter Noise Suppression"
J. Hel. Assn. G.B., 13, 187-214, 1959

59103/JN - Francis J. Jackson & Wesley L. Nyborg
"Microscopic Eddying Near a Vibrating Ultrasonic Tool Tip"
J. App. Phys., 30, 949-950, 1959

59104/JH - Thomas W. Jackson, W. B. Harrison, & W. C. Boteler
"Free Convection, Forced Convection and Acoustic Vibrations in a Constant-Temperature Vertical Tube"
Trans. ASME, 81, 68-74, 1959

59105/Jn - Melvin J. Jacobson
"Correlation of a Finite Distance Point Source"
J.A.S.A., 31, 448-453, 1959

59106/JT - Melvin J. Jacobson & Robert J. Talham
"Use of Pressure Gradient Receivers in a Correlator Receiving System"
J.A.S.A., 31, 1352-1361, 1959

59107/Jn - D. S. Johnson
"Velocity and Temperature Fluctuation Measurements in a Turbulent Boundary Layer Downstream of a Stepwise Discontinuity in Wall Temperature"
J. App. Mech., 26, 325-336, 1959

59108/JR - Virgil E. Johnson, Jr. & Thomas A. Rasnick
Investigation of a High-Speed Hydrofoil with Parabolic Thickness Distribution
NASA, TN D-119, 1959

59109/Jn - Gareth H. Jordan
Some Aspects of Shock-Wave Generation by Supersonic Airplanes
AGARD, NATO, Rpt. 251, 1959, AD 248 344

59110/Jd - F. V. H. Judd
"The Aerodynamic Design of Jet Engine Test Cells"
Noise Control, 5, 50-53, 1959

59111/Ks - Edwin C. Kamps
"Statistical Evaluation of Near-Field Sound Pressures Generated by the Exhaust of a High-Performance Jet Engine"
J.A.S.A., 31, 65-67, 1959

59112/KK - Frank C. Karal, Jr. & Joseph B. Keller
"Elastic Wave Propagation in Homogeneous and Inhomogeneous Media"
J.A.S.A., 31, 694-705, 1959

59113/Kn - Louis G. Kaufman, II
Real Gas Flow Tables for Nondissociated Air
WADC TR 59-4, 1959

1959 Cont'd

59114/KM - Louis G. Kaufman II & Morris Morduchow
On the Stability of One-Dimensional Viscous Flows: Sound Waves and Shock Waves
WADC TR-59-355, 1959, AD 229452

59115/Kt - David N. Keast
"Calibration of Accelerometers in a Simulated Space Environment"
J.A.S.A., 31, 584-587, 1959

59116/Kr - T. H. Kerr
Experience of Supersonic Flying Over Land in the United Kingdom
AGARD, NATO, Rpt. 250, 1959

59117/Kn - Edward M. Kerwin, Jr.
"Damping of Flexural Waves by a Constrained Viscoelastic Layer"
J.A.S.A., 31, 952-962, 1959

59118/KT - P. S. Klebanoff & K. D. Tidstrom
Evolution of Amplified Waves Leading to Transition in a Boundary Layer with Zero Pressure Gradient
NASA, TN D-195, 1959

59119/Kk - Winston E. Kock
"Related Experiments with Sound Waves and Electromagnetic Waves"
Acustica, 9, 227-238, 1959

59120/Kg - R. J. Koenig
"Noise Control for Convair 880 and 600 Jets"
Noise Control, 5, 23-27, 1959

59121/Ky - Leslie S. G. Kovasznay
"Turbulence Measurements"
App. Mech. Revs., 12, 375-380, 1959

59122/Kr - Karl D. Kryter
"Scaling Human Reactions to the Sound from Aircraft"
J.A.S.A., 31, 1415-1429, 1959

59123/Ki - P. N. Kubanskii
"On Theory of Vortex Formation Near a Resonator in an Air Flow"
Akust. Z., 5, 324-331, 1959

59124/Ki - P. N. Kubanskii
"The Effect of Acoustic Flows on the Process of Convective Heat Exchange"
Akust. Z.,5, 51-57, 1959

59125/KR - Arnold M. Kuethe & K. R. Raman
Some Details of the Transition Flow in Poiseuille Flow in a Tube
AFOSR TR 59-84, 1959

59126/Kn - Max C. Kurbjun
Noise Survey Under Static Conditions of a Turbine-Driven Transonic Propeller with an Advance Ratio of 4.0
NASA Memo. 4-18-59L, 1959

59127/Ke - Günther Kurtze
"Bending Wave Propagation in Multilayer Plates"
J.A.S.A., 31, 1183-1201, 1959

59128/KB - Günther Kurtze & R. H. Bolt
"On the Interaction Between Plate Bending Waves and Their Radiation Load"
Acustica, 9, 238-242, 1959

59129/Kh - G. Kurylowich
The Applicability of a Sine Series Velocity Profile in a Two-Dimensional Imcompressible Laminar Boundary Layer
UTIA, TN 29, 1959

59130/LW - Robert F. Lambert & F. J. Wilmers
On the Utilization of the Concept of Boundary Impedance in Vibrations of Bars
WADC, TR 59-545, 1959

59131/LZ - Harold Lamport & Hans H. Zinsser
"Strain Gauge Measurement of Output of Magnetostrictive Ultrasonic Transducer – Pitfalls of Optical Measurement"
J.A.S.A., 31, 435-438, 1959

59132/Ll - Marten T. Landahl
Theoretical Studies of Unsteady Transonic Flow. Part V. Solution for the Delta Wing and Wings of General Polygonal Planforms
FFA Rpt. 81, 1959

59133/Lr - John Laufer
Aerodynamic Noise in Supersonic Wind Tunnels
Jet Prop. Lab., C. I. T., Prog. Rpt. 20-378 1959

59134/LR - B. J. Lazan & J. E. Ruzicka
"Damping Adhesives Solve Missile Vibration Problems"
S.A.E., 67, 69-71, 1959

1959 Cont'd

59135/LW - Robert Lee & J. Wenzelberger
Correlation Between the Sound Power Spectrum of a Free Jet and its Aerodynamic Characteristics
Inst. Aero Sci. Rpt. 59-106, 1959

59136/Ls - Lester Lees
A Kinetic Theory Description of Rarefied Gas Flows
Guggenheim Aero. Lab., C. I. T., Memo 51, 1959

59137/Ln - E. Rune Lindgren
"Liquid Flow in Tubes, I. The Transition Process Under Highly Disturbed Entrance Flow Conditions"
Arkiv För Fysik, 15, 97-119, 1959

59138/Ln - E. Rune Lindgren
"Liquid Flow in Tubes, II. The Transition Process Under Less Disturbed Inlet Flow Conditions"
Arkiv För Fysik, 15, 503-519, 1959

59139/Ln - E. Rune Lindgren
"Liquid Flow in Tubes, III. Characteristic Data of the Transition Process"
Arkiv För Fysik, 16, 101-112, 1959

59140/Ld - W. Littlewood
"Noise in Air Transport"
Advances in Aeronautical Sciences, Vol. 1, 442-461, Pergamon Press, N.Y., 1959

59141/LC - H. W. Liu & H. T. Corten
Fatigue Damage During Complex Stress Histories
NASA, TN D-256, 1959

59142/Ld - P. Lloyd
"Some Aspects of Engine Noise"
J. R. Ae. S., 63, 541-547, 1959

59143/Ld - W. T. Lord
A Theoretical Study of Annular Supersonic Nozzles
R.A.E., Rpt. No. Aero. 2627, 1959

59144/LG - Eugene S. Love, Carl E. Grigsby, Louise P. Lee & Mildred J. Woodling
Experimental and Theoretical Studies of Axisymmetric Free Jets
NASA, TR R-6, 1959

59145/LK - H. F. Ludloff, H. B. Keller, D. F. De Danto & R. Parthasarathy
Attempts at Derivation of Transition from Laminar Into Turbulent Flow Along a Flat Plate
AFOSR, TN 59-686, 1959

59146/Ln - Richard H. Lyon
"On the Diffusion of Sound Waves in a Turbulent Atmosphere"
J.A.S.A., 31, 1176-1182, 1959

59147/Mi - Domenic J. Maglieri
"Shielding Flap Type Jet Engine Noise Suppressor"
J.A.S.A., 31, 420-422, 1959

59148/MC - Domenic J. Maglieri & Harry W. Carlson
The Shock-Wave Noise Problem of Supersonic Aircraft in Steady Flight
NASA, Memo 3-4-59L, 1959

59149/MH - Domenic J. Maglieri, Harvey H. Hubbard & Donald L. Lansing
Ground Measurements of the Shock-Wave Noise from Airplanes in Level Flight at Mach Numbers to 1.4 and at Altitudes to 45,000 feet
NASA, TN D-48, 1959

59150/MB - P. E. Magyar & C. Burd
"Acoustic Characteristics of Some Experimental Pulsed-Jets"
Engenharia (São Paulo), 17, 263-265, 1959

59151/Ms - William H. Mayes
"Some Near- and Far-Field Noise Measurements for Rocket Engines Operating at Different Nozzle Pressure Ratios"
J.A.S.A., 31, 1013-1015, 1959

59152/ML - William H. Mayes, Wade E. Lanford & Harvey H. Hubbard
Near-Field and Far-Field Noise Surveys of Solid-Fuel Rocket Engines for a Range of Nozzle Exit Pressures
NASA, TN D-21, 1959

59153/Me - John W. McKee
Experimental Investigation of the Pressure Fluctuations on a Flat Plate and a Cylinder in the Slipstream of a Hovering Rotor
NASA, TN D-112, 1959

59154/Md - D. J. Mead
The Effect of a Damping Compound on Jet-Efflux Excited Vibrations
U. S. A. A. Rpt 123, 1959

59155/MF - C. Meecham & G. W. Ford
Acoustic Radiation from Isotropic Turbulence
Willow Run Labs., Univ. of Michigan, Rpt. No. 2900-42-T, 1959, AD 217 911

1959 Cont'd

59156/Mr - Leonard D. Miller
An Experimental Investigation of the Stability of a Two-Dimensional Laminar Jet
Univ. of Calif., M.S. Thesis, 1959

59157/MI - Toshisuke Miwa & Juichi Igarishi
Fundamentals of Acoustical Silencers. (II) Determination of Four Terminal Constants of Acoustical Elements
Univ. of Tokyo, Aero. Res. Inst., Rpt. No. 344, 67-85, 1959

59158/Mn - Erik Mollo-Christensen
"Acoustical Instability of Jets and Wakes of Mach Numbers Above Two"
J. Aero/Space Sci., 26, 765-766, 1959

59159/MS - Gino Moretti & Simon Slutsky
The Noise Field of a Subsonic Jet
AFOSR TN-59-1310, 1959, AD 236 386

59160/Mn - M. V. Morkovin
"On Supersonic Wind Tunnels With Low Free-Stream Disturbances"
J. App. Mech, 59-AMP-10, 1959

59161/Mn - A. A. Movchan
On Vibrations of a Plate Moving in a Gas
NASA Republication 11-22-58W, 1959

59161a/Mn - A. A. Movchan
On the Stability of a Panel Moving in a Gas
NASA Republication 11-21-58W, 1959

59162/Mh - Johann Muench
Supersonic Flow Part Oscillating Bodies of Revolution With a Frequency Not Necessarily Small
Mathematical Institute, Technische Hochschule Munchen, Munich, Germany, TN 8, 1959

59163/Ml - Harold R. Mull
"Effect of Jet Structure on Noise Generation By Supersonic Nozzles"
J.A.S.A., 31, 147-149, 1959

59164/MM - Ernst-August Müller & Klaus R. Matschat
The Scattering of Sound by a Single Vortex and by Turbulence
AFOSR TN-59-337, 1959, AD 213658

59165/NG - W. Nachbar & Leon Green
"Analysis of a Simplified Model of Solid Propellant Resonant Burning"
J. Aero./Space Sci., 26, 518-526, 1959

59166/NP - Luigi G. Napolitano & A. Pozzi
Laminar Mixing of Streams of Different Gasses
AFOSR, TN 59-977, 1959

59167/Nm - William A. Newsom
Wind-Tunnel Investigation of the Aerodynamic Characteristics of a Model Representative of a Supersonic Fighter-Class Airplane With an External-Flow Jet-Augmented Flap in Low-Speed Flight
NASA, TN D-50, 1959

59168/NG - T. D. Northwood, M. T. Grisaru & M. A. Medcof
"Absorption of Sound by a Strip of Absorptive Material in a Diffuse Sound Field"
J.A.S.A., 31, 595-599, 1959

59169/NG - Wesley L. Nyborg, R. K. Gould, F. J. Jackson & Carl E. Adams
"Sonically Induced Microstreaming Applied to a Surface Reaction"
J.A.S.A., 31, 706-711, 1959

59170/OH - T. C. O'Bryan & J. B. Hammack
Flight Performance of a Transonic Turbine-Driven Propeller Designed for Minimum Noise
NASA Memo. 4-19-59L, 1959

59171/Oa - George J. O'Hara
"Impedance and Shock Spectra"
J.A.S.A., 31, 1300-1303, 1959

59172/On - N. O. Olesten
"SAAB Silencer System"
Noise Control, 5, 15-20, 1959

59173/Om - Joseph Otterman
"Finite-Amplitude Propagation Effect on Shock-Wave Travel Times from Explosions at High Altitudes"
J.A.S.A., 31, 470-474, 1959

59174/Ps - Emmanuel P. Papadakis
"Correction for Diffraction Losses in the Ultrasonic Field of a Piston Source"
J.A.S.A., 31, 150-151, 1959

1959 Cont'd

59175/Ps - V. M. Papadopoulos
"The Diffraction and Refraction of Pulses"
Proc. Roy. Soc., A252, 520-537, 1959

59176/Ps - V. M. Papadopoulos
The Diffraction of an Acoustic or Electromagnetic Pulse by a Resistive Half-Plane
AFCRC-TN-59-793, 1959

59177/Pl - E. Pestel
Dynamics of Structures by Transfer Matrices
AFOSR TR 59-95, 1.1-9.3, 1959

59178/Pk - A. C. Pinchak
Investigation of Aerothermodynamic Interaction Phenomena in Combustion Pressure Oscillations
Purdue Univ., M. S. M. E. Thesis, 1959

59179/Pl - Alan Powell
"On the Aerodynamic Noise of a Rigid Flat Plate Moving at Zero Incidence"
J.A.S.A., 31, 1649-1653, 1959

59180/Pl - Alan Powell
"Propagation of a Pressure Pulse in a Compressible Flow"
J.A.S.A., 31, 1527-1535, 1959

59181/Pl - Alan Powell
"Considerations Concerning an Upper Limit to Jet Noise Reduction"
J.A.S.A., 31, 1138-1139, 1959

59182/Pl - Alan Powell
"Similarity and Turbulent Jet Noise"
J.A.S.A., 31, 812, 1959

59183/Pl - Alan Powell
"On the Generation of Noise by Turbulent Jets"
A. S. M. E., Paper 59-AV-53, 1959

59184/Pl - Alan Powell
One-Dimensional Treatment of Weak Disturbances of a Shock-Wave
ARC, TR C. P. 441, 20,125, 1959

59185/Pv - A. S. Predvoditelev
"Theoretical Examination of Vibratory Movement of the Flame Front in Closed Vessels"
Seventh Symposium (International) on Combustion, 779-782, N.Y., Academic Press, 1959

59186/Pe - E. W. Price
"Combustion Instability in Solid Propellant Rocket Motors"
Astronautica Acta, 5, 63-72, 1959

59187/PS - Abbott A. Putnam & Carl F. Speich
Bibliography on Combustion-Driven Oscillations, 1959
Battelle Memorial Inst., Columbus, Ohio

59188/RG - J. V. Rattayya & L. E. Goodman
Biographical Review of Panel Flutter and Effects of Aerodynamic Noise
WADC, Tech. Rpt., 59-70, 1959

59189/Rd - S. G. Reed, Jr.
"Note on Finite Amplitude Propagation Effects on Shock Wave Travel Times from Explosions at High Altitude"
J.A.S.A., 31, 1265, 1959

59190/RH - A. A. Regier & Harvey H. Hubbard
"Response of Structures to High Intensity Noise"
Noise Control 5, 13-19, 58, 1959

59191/RN - R. J. Reid & J. F. Newton
"Design Considerations for a Sonic Fatigue Tunnel"
Aircr. & Missiles Mfg., 2, 22-26, 1959

59192/Rd - W. H. Reid
One-Dimensional Equilibrium Spectra in Isotropic Turbulence
O. Naval Res., 562(07)27, 1959

59193/Rr - Herbert S. Ribner
"New Theory of Jet-Noise Generation, Directionality, and Spectra"
J.A.S.A., 31, 245, 1959

59194/Rr - Herbert S. Ribner
The Sound Generated by Interaction of a Single Vortex with a Shock Wave
UTIA Rpt. 61, 1959

59195/Rr - Herbert S. Ribner
Theory of Wings in Slipstreams
UTIA Rpt. No. 60, 21, 1959

59196/Rs - Elfyn J. Richards
An Introduction to Acoustic Fatigue
ARC 21515, 1959

1959 Cont'd

59197/RW - Elfyn J. Richards & J. E. Ff. Williams
Some Recent Developments in Jet Noise Research
U.S.A.A., Report No. 118, 1-21, 1959

59198/RP - Norman R. Richardson & Albin O. Pearson
Wind-Tunnel Calibrations of a Combined Pitot-Static Tube, Vane-Type Flow Direction Transmitter, and Stagnation-Temperature Element at Mach Numbers from 0.60 to 2.87
NASA TN D-122, 26 pp., 1959

59199/Ro - E. V. Romanenko
"Experimental Investigation of the Propagation of Finite-Amplitude Spherical Waves"
Soviet Physics-Acoustics, 5, 100-103, 1959

59200/Rn - Gerald Rosen
Nonlinear Pressure Oscillations in a Combustion Field
Proj. Squid., TR PR-98-0, 1959

59201/Rn - M. W. Rosen
The Noises of Two Spur-Gear Transmissions
Navord Report 6569, NOTS TP 2293, P-1746, 1-54, 1959

59202/Rt - Nicholas Rott
"On the Viscous Core of a Line Vortex II"
J. App. Math. Phys., 73-81, 1959

59203/So - Haruo Saito
On the Aileron Buzz in the Transonic Flow
Univ. of Tokyo, Aero. Res. Inst., Rpt. No. 346, 1959

59204/Ss - J. Clifton Samuels
"On Propagation of Waves in Slightly Rough Ducts"
J.A.S.A., 31, 319-325, 1959

59205/Ss - J. Clifton Samuels
"Reflection and Refraction of Elastic Waves at the Interface of Two Moving Semi-Finite Plane Media"
J.A.S.A., 31, 1076-1079, 1959

59206/SP - Herbert Sanders & Paul R. Paslay
"Inextensional Vibrations of a Sphere-Cone Shell Combination"
J.A.S.A., 31, 579-583, 1959

59207/So - Hiroshi Sato
"Further Investigation on the Transition of Two-Dimensional Separated Layer at Supersonic Speeds"
J. Phys. Soc., Japan, 14, 1797-1810, 1959

59208/So - Hiroshi Sato
"The Stability and Transition of a Two-Dimensional Jet"
J. Fluid Mech., 7, 53-80, 1959

59209/Sp - H. C. Schjelderup
"Accumulative Fatigue Damage Caused by Random Loading"
J. Aero/Space Sci., 26, 394-395, 1959

59210/Sp - H. C. Schjelderup
"Structural Acoustic Proof Testing"
Aircr. Engr., 31, 297-303, 1959

59211/Sz - Theodore J. Schultz
"Effect of Altitude on Output of Sound Sources"
Noise Control, 5, 17-21, 1959

59212/SS - Harold S. Shapiro & Richard A. Silverman
Alias-Free Sampling of Random Noise
AFCRC TN-59-353, 1959, AD 216368

59213/SS - Harold S. Shapiro & Richard A. Silverman
Some Spectral Properties of Weighted Random Processes
AFCRC-TN-59-160, 1959, AD 212927

59214/Sk - R. D. Shattuck
"Capacitance-Type Displacement Probe"
J.A.S.A., 31, 1297-1299, 1959

59215/Sn - K. I. Shchelkin
"Two Cases of Unstable Combustion"
J. E. T. P., 9, 416-420, 1959

59216/Sr - J. Shearer
"Reducing Noise in Ventilation Ducts"
Insulation (London), 3, 31-33, 1959

59217/Sr - Herbert Shieber
"Suppression of Combustion Instability in the Plunger-Jet Rocket Engine"
A. R. S. J., 29, 446-447, 1959

59218/Se - A. J. Shine
"The Effect of Transverse Vibrations on the Heat Transfer Rate from a Heated Vertical Plate"
ASME Paper 59-HT-27, 1959

1959 Cont'd

59219/SS - J. A. Skoog & G. G. Setterlund
"Space Requirements for Equipment Items Subjected to Random Excitation"
J.A.S.A., 31, 227-232, 1959

59220/Sk - Eugen J. Skudrzyk
"Theory of Noise and Vibration Insulation of a System with Many Resonances"
J.A.S.A., 31, 68-74, 1959

59221/Sn - I. I. Slavin
"Brief Review of Noise Research and Noise Control Carried Out in the U.S.S.R. until 1957"
Akust. Z., 5, 221-230, 1959

59222/Sh - A. G. Smith
A Theory of Resonant Burning of Solid Propellants Assuming a Constant Surface Temperature
A.R.C., 21018, 1959

59223/Sh - M. G. Smith
"The Behaviour of an Axially Symmetric Sonic Jet Near to the Sonic Plane"
Quart. J. App. Math., 12, 287-297, 1959

59224/SP - J. C. Snowdon & G. G. Parfitt
"Isolation from Mechanical Shock with One- and Two-Stage Mounting Systems"
J.A.S.A., 31, 967-976, 1959

59225/Sv - V. V. Solevev
"The Problem of Vibrational Combustion in Highly Stressed Combustion Chambers" (in Russian)
Inzh.-Fiz. Zh., 1, 25-31, 1959

59226/SP - Carl F. Speich & Abbott A. Putnam
"Suppression of Oscillations in Gas-Fired Residential Heating Equipment"
A S H R A E Journal, 1, 8, 41-45, 1959

59227/Sr - Herbert Sprenger
Concerning Thermic Effects in Resonance Tubes
A260-RES-TM-132, 1-28, 1959

59228/St - L. Sprott
The Effect of Strong Progressive Sound Waves on the Free Convection Heat Transfer from a Horizontal Cylinder in Air
USAF Inst. of Tech. Thesis GAE 59-22, 1959

59229/SH - Arthur L. Sprott, Frederick L. Durand & Jack P. Holman
An Experimental Study of the Interaction of *Strong Sound Fields with Free Convection Boundary Layers*
WADC TR 59-717, 1-26, 1959

59230/SJ - Jack M. Spurlock, Thomas W. Jackson, Kenneth R. Purdy, Calvin C. Oliver & Harold L. Johnson
The Effects of Resonant Acoustic Vibrations on Heat Transfer to Air in Horizontal Tubes
WADC, TN 59-330, 1959, AD 231656

59231/SV - Gopala Mennon Sreekantath & C. A. Verghese
"On the Intensity of Ultrasonic Beams Diffracted by a Wire Grating"
J.A.S.A., 31, 633-634, 1959

59232/Sg - Kurt R. Stehling
"Combustion Instability – Causes and Cures"
Space/Aeronautics, 32, 46-47, 1959

59233/Se - J. A. Steketee
The Oscillating Plate in Magneto Hydrodynamics
UTIA Report No. 63, 1-35, 1959

59234/Sg - Joseph Sternberg
Triple-Shock-Wave Intersections
BRL Report 1068, P-1724, 3-97, 1959

59235/Sd - H. Sternfield
"New Techniques in the Reduction of Noise from Helicopters"
Tech. Sci. Aero, 5, 319-324, 1959

59236/SA - E. J. Stringas & H. Auer
In Flight Turbojet Noise Suppression Studies
Curtiss Wright Corp., Rpt. CWR 300-69, 1959, AD 218638

59237/Sg - E. E. Suckling
"Observations on Resolution and on Field Variations in Near Field Sonic Optical Systems"
J.A.S.A., 31, 678-680, 1959

59238/SN - James L. Summers & William R. Niehaus
A Preliminary Investigation of the Penetration of Slender Metal Rods in Thick Metal Targets
NASA TN D-137, 1-9, 1959

1959 Cont'd

59239/TS - Lawrence Talbot & F. S. Sherman
Structure of Weak Shock Waves in a Monatomic Gas
NASA Memo 12-14-58W, 1959

59240/TL - R. Tatge, R. Lawrence & W. Venneman
"A New Facility for Jet Noise Investigation"
Noise Control, 5, 32-36, 1959

59241/Tr - B. W. Taylor
Development of a Thin Film Heat-Transfer Gauge for Shock-Tube Flows
UTIA TN 27, 1959

59242/TS - F. W. Taylor & D. R. Segner
Hydrodynamic and Noise Level Characteristics Demonstration of the Model HRS-4 (S-61) Helicopter Report No. 1, Final Report
N.A.T.C. PTR AC-43203, 1959, AD 229412

59243/Tn - William T. Thomson
"Spectral Aspect of Earthquakes"
Bull. Seismological Soc. Am., 49, 91-98, 1959

59244/TK - D. B. Thrasher & L. B. Killoran
Noise Survey of the CC-107 Aircraft
DRML TM 208-1, 1959, Rpt. TL-126-59

59245/Tg - M. W. Thring
"A Non-Acoustic Theory of Oscillations in Pressure-Jet Oil-Fired Combustion Chambers"
Seventh Symposium (International) on Combustion, 659, London, Butterworth's Sci. Publ. Corp., 1959

59246/To - Anibal Alfredo Tinajero
Comparison of Experimental and Theoretical Design Parameters of a 6-inch-diameter Annular Jet Model with a Jet Angle of –45° Hovering in Proximity to the Ground; and Experimental Results for Forward Flight at Zero Angle of Attack
DTMB Aero Rpt. 954, 1-58, 1959

59247/TK - William H. Tolhurst, Jr., Mark W. Kelly & Richard K. Greif
Full-Scale Wind-Tunnel Investigation of the Effects of a Target-Type Thrust Reverser on the Low-Speed Aerodynamic Characteristics of a Single-Engine Jet Airplane
NASA TN D-72, 1-42, 1959

59248/TS - J. M. Tyler, T. G. Sofrin & J. W. Davis
"Rectangular Nozzles for Jet Noise Suppression"
SAE J., 67, 82-84, 1959

59249/UR - E. E. Ungar, D. Ross & E. M. Kerwin, Jr.
Damping of Flexural Vibrations by Alternate Visco-Elastic & Elastic Layers
SADC TR 59-509, 1959

59250/WA - C. T. Walker & C. E. Adams
"Thermal Effects of Acoustic Streaming Near a Cylindrical Obstacle"
J.A.S.A., 31, 813-814, 1959

59251/Wn - J. Watson
A Finite Disturbance in Plane Poiseuille and Plane Couette Flows
A.R.C. 21, 189, 1959

59252/WK - John C. Webster, Roy G. Klumpp, & Albert L. Witchey
"Evaluation of a Modulated Air-Flow Loudspeaker"
J.A.S.A., 31, 795-799, 1959

59253/Wr - Jack Eli Werner
Shock Wave-Turbulence Interaction, Investigations in a Shock Tube
John Hopkins Univ., Dept. of Aeronautics, AFOSR TR 59-46, 1959, AD 214847

59254/Wy - R. Westley
A Survey of the Take-Off Noise of Jet Airliners
N.R.C., Rpt. DME NAE, 1959

59255/WC - W. W. Wharton, J. W. Connoughton, B. D. Allen & W. D. Williams
The Effect of Sound Oscillations on Combustion and Heat Transfer
Res. Lab., Ord. Missile Lab., Redstone Arsenal, Rpt. TR 1 C 36 R, 1959

59256/Wd - D. S. Whitehead
The Vibration of Air in a Duct with a Subsonic Mean Flow
ARC 21, 336, 1959, AD 238 524

59257/WK - Francis M. Wiener & David N. Keast
"Experimental Study of the Propagation of Sound Over Ground"
J.A.S.A., 31, 724-733, 1959

59258/WS - J. G. M. Williams & D. C. Stevenson
The Noise Field from Designed Nozzles at Different Mach Numbers
A.R.C. 20,579, 1959

59259/Wh - William W. Willmarth
Space-Time Correlations and Spectra of Wall Pressure in a Turbulent Boundary Layer
NASA Memo 3-17-59W, 1959

1959 Cont'd

59261/Wd - W. W. Wood
Occurrence and Intensity of Sonic Bangs
ARL TM/A 140, (Australia) 1959

59262/Yg - Robert W. Young
"Sabine Reverberation Equation and Sound Power Calculations"
J.A.S.A., 31, 912-921, 1959

59263/Zv - G. I. Zamuruyev
"On a Method of Determining the Stability Criterion of Liquid Propellant Rocket Performance Collection"
Mekhanika, 92, 66, 1959

59264/ZA - E. F. E. Zeijdel & W. H. Ashley
Development of a Fatigue Testing Apparatus for Testing Honeycomb Sandwich Structural Panels in Service – Simulated Sonic Fatigue
WADC-TR-59-231, 1959, AD 229867

59265/ZO - M. J. Zucrow & J. R. Osborn
"Reply to Crocco's Criticism of the Zucrow-Osborn Paper"
A. R. S. J., 29, 221-222, 1959

1960

60001/An - T. C. Adamson, Jr.
On the Structure of Plane Detonation Waves
Univ. of Mich., TR Mich-6-P, Project Squid, 1960, AD 242 454

60002/AG - W. J. Alford & K. W. Goodson
A Technique for Firing Dynamically Scaled Missile Models in Wind Tunnels and for Measuring Rocket Motor Sound and Pressure Fluctuations
NASA TN D-224, 1960

60003/AH - James L. Amick & Paul B. Hayes
Interaction Effects of Side Jets Issuing from Flat Plates and Cylinders Alined with a Supersonic Stream
WADD TR 60-329, 1960

60004/Al - James E. Ancell
"Sound Pressure Spectra of a Muted Cornet"
J.A.S.A., 32, 1101-1104, 1960

60005/As - George J. Andrews
"Vibration Isolation of a Rigid Body on Resilient Supports"
J.A.S.A., 32, 995-1001, 1960

60006/As - Theos A. Angelus
"Unstable Burning in Double-Base Propellants"
Progress in Astronautics & Rocketry, Vol. I, 527-559, Martin Summerfield, ed., N.Y.: Academic Press, 1960

60007/An - Anon
A Study of the Structure of Shock Wave Fronts
Columbia Univ., N.Y., Electronic Res. Labs., Final Rpt. F/148, 1960, AD 247 661

60008/An - Anon
A Bibliography on Aircraft Noise
Ministry of Aviation (U.K.), TIL/BIB(U)/11, Supplement No. 5, 1960, AD 246 235

60009/An - Anon
Take Off Noise Characteristics of the Boeing 707-320 Jet Airliner
Bolt, Beranek & Newman Inc., Rpt. 683, 1960

60010/Ah - J. E. Ash
Finite and Infinitesimal Wave Solutions
WADD TR 61-21, 28-49, 1960

60011/Ah - J. E. Ash
Noise Produced by Overchoked Jets
WADD TR 61-21, 93-116, 1960

60012/Ay - Carlos P. Avery
An Investigation of Longitudinal Shear Distribution and Damping in a Viscoelastic Adhesive Lap Joint
WADD, TR 60-687, 1960

60013/Br - Stanley W. Baker
"High Frequency Pressure Instrumentation for Rocket Instability Studies"
Progress in Astronautics & Rocketry, Vol. II, 189-200, L. E. Bollinger et al., ed., N.Y., Academic Press, 1960

60014/Bi - M. Y. Baroudi
Measurement of Two-Point Correlations of Velocity Near a Cylinder Shedding a Karman Vortex Street
UTIA, TN 31, 1960

60015/Bz - E. L. Bednorz
Study of Heat Transfer from a Transversely Vibrating Cylinder in Forced Air Convection
Air Univ., USAF, Astronuatics Thesis, Wright-Patterson AFB, Ohio, 1960

60016/BB - Jack L. S. Bellin & Robert T. Beyer
"Scattering of Sound by Sound"
J.A.S.A., 32, 339-341, 1960

60017/Bn - T. Brooke Benjamin
Effects of a Flexible Boundary on Hydrodynamic Stability
ARC 22267, 1960, AD 247 643

60018/Bk - Leo L. Beranek (Editor)
Noise Reduction
McGraw-Hill Book Co., N.Y., 1960

60019/Bx - W. S. Bertaux
The Design and Development of the General Electric CJ805-3 Thrust Reverser and Noise Suppressor
S.A.E. Preprint 162B, 1960

60020/Br - Robert T. Beyer
"Parameter of Nonlinearity in Fluids"
J.A.S.A., 32, 719-721, 1960

60021/Bn - R. N. Bingman
Resonant Fatigue Failures Associated with Noise
S.A.E. Preprint 164B, 1960

60022/BH - J. F. Bird, L. Haar, R. W. Hart & F. T. McClure
"Effect of Solid Propellant Compressibility on Combustion Stability"
J. Chem. Phys., 32, 1423-1429, 1960

1960 Cont'd

60023/Bn - A. W. Blackman
"Effect on Non-Linear Losses on the Design of Absorbers for Combustion Instabilities"
A. R. S. J., 30, 1022-1028, 1960

60024/Bl - J. M. Bonnell
An Experimental Investigation of Transverse Mode Combustion Oscillations in Premixed Gaseous Bipropellant Rocket Motors
Purdue Univ., M. S. M. E. Thesis, 1960

60025/Be - J. Bruce Brackenridge
"Transverse Oscillations of a Liquid Jet. I"
J.A.S.A., 32, 1237-1242, 1960

60026/BG - P. Bradshaw & M. T. Gee
Turbulent Wall Jets with and without an External Stream
ARC, 22 008, 1960

60027/Bh - L. Brekhovskikh
Waves in Layered Media
Academic Press, New York, 1960

60028/BD - G. F. Bremner, J. K. Dukowicz & I. I. Glass
On the One-Dimensional Overtaking of a Rarefaction Wave by a Shock Wave
UTIA TN 33, 1960

60029/BB - G. A. Brigham & M. F. Borg
"An Approximate Solution to the Acoustic Radiation of a Finite Cylinder"
J.A.S.A., 32, 971, 981, 1960

60030/Bo - Ermenegildo Brosio
Measurements on Acoustic Absorbing Structures by Resonance
Feltman Res. Labs., Picatinny Arsenal, Dover, N. J., TN FRL-TN-10, 1960

60031/BM - W. Grant Brownlee & Frank E. Marble
"An Experimental Investigation of Unstable Combustion in Solid Propellant Rocket Motors"
Progress in Astronautics & Rocketry, Vol. 1, 455-494, Martin Summerfield, ed., N.Y.; Academic Press, 1960

60032/Bl - M. K. Bull
"Instrumentation for and Preliminary Measurement of Space-Time Correlations and Convection Velocities of the Pressure Field of a Turbulent Boundary Layer"
A.A.S.U., 149, 1960

60033/BKS - Mahlon D. Burkhard, Henry H. B. Karplus & Hale J. Sabine
Sound Propagation Near the Earth's Surface as Influenced by Weather Conditions
WADC TR 57-353, Part 2, 1960, AD 254 670

60034/BA - W. A. Burnett & E. Ackerman
Propagation Distortion of Bands of Large Amplitude Acoustic Noise. I. Theoretical Analysis of the Plane Wave Case
WADD-TR-60-232, 1960

60035/Cn - Robert M. Cameron
A Study of Shock Waves Moving Over a Perforated Wall
Inst. of Tech., Wright Patterson AFB, Ohio, M.Sc. Thesis, 1960, AD 243 481

60036/CM - F. Canac & M. Merle
"Sound Vibration and Emission of a Compressed Air Jet, as Studied with the Aid of a High-Speed Electronic Camera"
Compt. Rend., 250, 1795-1797, 1960

60037/Cy - T. K. Caughey
"Random Excitation of a Loaded Nonlinear String"
J. App. Mech., Paper 60-APMW-1, 1960

60038/Cd - Robert C. Chanaud
An Experiment Concerning Periodic Disturbances Applied to a Laminar Plane Jet
Univ. of Calif., M.S. Thesis, 1960

60039/Cg - Sin-I Cheng
"Combustion Instability in Solid Rockets Using Propellants with Reactive Additives"
Progress in Astronautics & Rocketry, Vol. 1, 393-422, Martin Summerfield, ed., N. Y.; Academic Press, 1960

60040/Cv - Leo A. Chernov
Wave Propagation in a Random Medium
McGraw-Hill Book Co., Inc., N.Y., 1960

60041/Cm - R. G. A. Chisholm
Design and Calibration of an Air Ejector to Operate Against Various Back Pressures
UTIA, TN 39, 1960

1960 Cont'd

60043/CS - S. T. Chow & P. R. Sethna
Steady State Damped Vibrations and Stability of a Class of Nonlinear Discrete Systems
WADC, TR 59-543, 1960

60044/CT - Robert O. Clark & William J. Taylor
Shock Pressures in Tunnels Oriented Face-On and Side-On to a Long Duration Blast Wave
Ballistic Res. Lab., Memo. Rpt. 1280, 1960, AD 242 793

60045/CF - B. L. Clarkson & R. D. Ford
Experimental Study of the Random Vibrations of an Aircraft Structure Excited by Jet Noise
Univ. of Southampton, USAA, Rpt. 128, ARC 22296, 1960

60046/CE - C. W. Clenshaw & D. Elliot
"A Numerical Treatment of the Orr-Sommerfeld Equation in the Case of a Laminar Jet"
J. Mech. App. Math., 13, 300-313, 1960

60047/CN - G. F. Cochrane, Jr. & R. G. Nevins
Photographic Investigation of a Pulsating Jet Impinging on a Heated Plate
Kansas State Univ., Int. Tech. Rpt. No. 1, 1960, AD 247211

60048/CE - John N. Cole, Robert T. England et al.
Effects of Various Exhaust Blast Deflectors on the Acoustic Noise Characteristics of 1,000 Pound Thrust Rockets
WADD TR-60-6, 1960, AD 251 833

60049/CS - Thomas L. Coleman & Roy Steiner
Atmospheric Turbulance Measurements Obtained from Airplane Operations at Altitudes Between 20,000 and 75,000 feet for Several Areas in the Northern Hemisphere
NASA, TN D-548, 1960

60050/Cs - Richard Collins
Some Methods of Generating Cylindrical Explosions
UTIA TN No. 43, 1960

60051/CD - W. C. T. Copeland, I. M. Davidson, T. J. Hargest & D. W. Robinson
"A Controlled Experiment on the Subjective Effects of Jet Engine Noise"
J. R. Ae. S., 64, 33-36, 1960

60052/CB - M. Cox & F. J. Bailey
"Effect of Flow Pulsations on the Drag of Baffles in Pipes"
J. Mech. Eng. Sci., 2, 16-24, 1960

60053/CC - A. H. Craven, D. H. Chester & B. H. Graham
Base Pressure at Supersonic Speeds in the Presence of a Supersonic Jet
College of Aeronautics, Cranfield, Rpt. No. 144, 1960

60054/CG - Luigi Crocco, Jerry Grey & David T. Harrje
"Theory of Liquid Propellant Rocket Combustion Instability and its Experimental Verification"
A. R. S. J., 30, 159-168, 1960

60055/CD - G. W. Crosse, I. M. Davidson, T. J. Hargest & M. J. Porter
"Controlled Experiment on Perception of Helicopter Rotor Noise"
J. R. Ae. S., 64, 629-632, 1960

60056/CP - J. E. Crump & E. Price
"*Catastrophic* Changes in Burning Rate of Solid Propellant During Combustion Instability"
A. R. S. J., 30, 705-707, 1960

60057/Ce - N. Curle
The Generation of Sound by Aerodynamic Means
ARC 22114, 1960

60058/Ch - O. E. Curth
Jet Noise Measurement
WADD TR 61-21, 130-142, 1960

60059/DS - Julian L. Davis
Problems in Wave Propagation in Plastic Media
Feltman Res. Labs., TR FRL-TR-12 1960, AD 246 969

60060/Dn - Wallace Dean
Scattering of Sound by Sound
M. I. T., Cambridge Mass., 1960, 1-6 (to be published)

60061/Dk - P. E. Doak
"Acoustic Radiation from a Turbulent Fluid Containing Foreign Bodies"
Proc. Roy. Soc., A254, 129-145, 1960

1960 Cont'd

60062/DF - Ira Dyer, Peter A. Franken & E. E. Ungar
"Noise Environments of Flight Vehicles"
Noise Control, 6, 31-40, 51, 1960

60063/EW - Ronald K. Eby, Arthur O. Williams, Jr., Robert P. Ryan & Paul Tamarkin
"Study of Acoustic Propagation in a Two-Layered Model"
J.A.S.A., 32, 88-99, 1960

60064/ES - Wiktor Eckhaus
Some Remarks on the Theory of Noise Generation by Turbulent Shear-Flow
NASA, ASRL-TR 92-2, 1960, AD 250 697

60065/ET - Norman G. Einspruch & Rohn Truell
"Scattering of a Plane Longitudinal Wave by a Spherical Fluid Obstacle in an Elastic Medium"
J.A.S.A., 32, 214-220, 1960

60066/Ee - Donn F. Eisele
The Effect of Vibrations on the Heat Transfer Rate from Cylinders in Free Convection
Inst. of Tech., Wright Patterson AFB, Ohio, 1960, AD 243 482

60067/Es - H. W. Emmons
Combustion Aerodynamics Project Final Summary Report
Harvard Univ., Div. of Engr. & App. Phys., 1960, AD 247 205

60068/Ht - Gerald W. Englert
Operational Method of Determining Initial Contour of and Pressure Field About a Supersonic Jet
NASA, TN D-279, 1960

60069/FK - R. M. Fand & J. Kaye
"Acoustic Streaming Near a Heated Cylinder"
J.A.S.A., 32, 579-584, 1960

60070/FH - J. A. Fitzpatrick, J. C. Hubbard & W. J. Thaler
"A High Intensity Short Duration Spark Light Source"
J. App. Phys., 21, 1269-1271, 1960

60071/FM - G. W. Ford & W. C. Meecham
"Scattering of Sound by Isotropic Turbulence of Large Reynolds Number"
J.A.S.A., 32, 1668-1672, 1960

60072/Fy - D. M. Forney
"Acoustical Fatigue Test Procedures"
Noise Control, 6, 11-21, 1960

60073/Fn - Peter A. Franken
"Input Impedances of Simple Cylindrical Structures"
J.A.S.A., 32, 473-477, 1960

60074/Fn - Peter A. Franken
"Jet Noise"
Noise Reduction, L. L. Beranek, ed., Ch. 24, p. 644-666, McGraw-Hill Book Co., New York, 1960

60075/FB - Peter A. Franken & Leo L. Beranek
"Noise Control in Transportation"
Noise Reduction, L. L. Beranek, ed., Ch. 25, 667-703, McGraw Hill Book Co., New York, 1960

60076/FF - R. E. Franklin & J. H. Foxwell
Pressure Fluctuations Near a Cold, Small-Scale Air Jet (Measurements of space correlations.)
ARC RHM 3162, 1960

60077/Fr - J. A. Fraser
"Is Sonic Boom an Explosion?"
Air Univ. Quart. Rev., 12, 118-126, 1960

60078/FS - Werner Fricke & W. Squire
"External Noise Fields of a Boost Glide Hypersonic Vehicle"
S.V.A.E. Bull. No. 28, Pt. 4, 48-56, 1960

60079/FS - M. B. Friedman & R. Shaw
Diffraction of a Plane Shockwave by an Arbitrary Rigid Cylindrical Obstacle
Columbia Univ., N.Y., TR 25, 1960, AD 249 141

60080/Fm - M. P. Friedman
"An Improved Perturbation Theory for Shock Waves Propagating Through Non-Uniform Regions"
J. Fluid Mech., 8, 193-209, 1960

60081/FM - C. C. Fu & T. J. Mentel
Steady State Response of Beams with Translational and Rotational Damping Motions at the Supports
WADD, TR 60-60, 1960

1960 Cont'd

60082/GM - G. R. Garrison, S. R. Murphy & D. S. Potter
"Measurements of the Backscattering of Underwater Sound from the Sea Surface"
J.A.S.A., 32, 104-111, 1960

60083/Gt - Freeman Gilbert
"Scattering of Impulsive Elastic Waves by a Smooth Convex Cylinder"
J.A.S.A., 32, 841-857, 1960

60084/Gs - I. I. Glass
Aerodynamics of Blasts
UTIA, Rev. 17, 1960

60085/GH - I. I. Glass & L. E. Heuckroth
An Experimental Investigation of the Head-On Collision of Spherical Shock Waves
UTIA, Rpt. 59, 1960

60086/GB - Lawrence E. Goodman & G. E. Bowie
Experiments on Slip Damping at Rounded Contacts
WADD, TR 60-161, 1960

60087/GY - Lawrence E. Goodman & Yellappa C. Das
Quasi-Orthogonal Modes of Dynamical Systems
WADD, TR 60-308, 1960

60088/GR - Lawrence E. Goodman & J. V. Rattayya
"Review of Panel Flutter and Effects of Aerodynamic Noise. Pt. I. Panel Flutter"
App. Mech. Rev., 13, 1960

60089/GR - Lawrence E. Goodman & J. V. Rattayya
"Review of Panel Flutter and Effects of Aerodynamic Noise. Part II. Structural Effects of Aerodynamic Noise"
App. Mech. Rev., 13, 81-87, 1960

60090/GR - Lawrence E. Goodman & Jasti V. Rattayya
Supersonic Speed Flutter Analysis of Circular Panels with Edges Elastically Restrained Against Rotation
WADD, TR 60-309, 1960

60091/Gb - Peter Gottlieb
"Sound Source Near a Velocity Discontinuity"
J.A.S.A, 32, 1117-1122, 1960

60092/GB - L. H. Gould & W. R. Bryce
Life and Non-Linear Behaviour of a Panel Excited by Periodic Sound
A.V. Roe (Canada), Rpt. S-M-4, 1960

60093/Gt - M. Gout
"Noise in Missiles"
Tech. Sci. Aero., 2, 107-113, 1960

60094/Gx - F. B. Greatrex
Approach Noise
ARC 21763, 1960

60095/Gx - F. B. Greatrex
"By-Pass Engine Noise"
S. A. E. J., 68, 76-80, 1960

60096/Ge - David C. Greene
Vibration and Sound Radiation of Rectangular Plates
Penn State Univ., Ord. Res. Lab., 1960, AD 240 830

60097/Gl - Edward G. Grimsal
The Lighthill Approach to Jet Noise
WADD TR 61-21, 50-89, 1960

60099/GD - G. W. Grosse, I. M. Davidson, T. T. Hargest & M. J. Porter
"A Controlled Experiment on the Perception of Helicopter Rotor Noise"
J. R. Ae. S., 64, 629-632, 1960

60100/Gn - Roy M. Gundersen
"The Piston-Driven Shock"
J. Aero/Space Sci., 27, 467-468, 1960

60101/Gn - Roy M. Gundersen
"The Non-Isentropic Perturbation of an Arbitrary Simple Wave"
J. Math. & Mech., 9, 141-146, 1960

60102/GT - Albert N. Guthrie, Ivan Tolstoy & John Shaffer
"Propagation of Low-Frequency cw Sound Signals in the Deep Ocean"
J.A.S.A., 32, 645-646, 1960

60103/HB - Francis R. Hama & E. R. Burke
On the Rolling-Up of a Vortex Sheet
AFOSR, TN 60-1069, 1960

60104/Ha - Mas Harada
"Steady and Unsteady Characteristics of Fans and Blowers"
J. Mech. Lab., Tokyo, 6, 27-41, 1960

1960 Cont'd

60105/Ht - T. J. Hargest & M. J. Porter
Preliminary Note on the Noise of Multiple Jets
N. G. T. E. Memo. No. M.342, 1960

60106/He - Logan E. Hargrove
"Fourier Series for the Finite Amplitude Sound Waveform in a Dissipationless Medium"
J.A.S.A., 32, 511, 1960

60107/He - D. T. Harrje
Heat Transfer in Oscillating Flow
Princeton Univ., N.J., Dept. of Aero. Engr., Rpt. 483-b, 1960, AD 249 670

60108/HB - R. W. Hart, J. F. Bird & F. T. McClure
"The Influence of Erosive Burning on Acoustic Instability in Solid Propellant Rocket Motors"
Progress in Astronautics & Rocketry, Vol. I, 423-451, Martin Summerfield, ed., N.Y.; Academic Press, 1960

60109/He - Raymond W. Hasse, Jr.
Techniques and Systems Employed for the Measurement of Acoustic Propagation Loss Using Explosives as Sound Sources
Navy Underwater Sound Lab. Res. Rpt. 486, 1960

60110/HF - John K. Hilliard & Walter T. Fiala
High Intensity Sound
Missile Des. & Devel., 18-21, 1960

60111/HM - David A. Hilton, William H. Mayes & Harvey H. Hubbard
Noise Considerations for Manned Reentry Vehicles
NASA, TN D-450, 1960

60112/Hn - Martin Hirschorn
"Problem ..., The Jet Aircraft Run-Up Noise"
Noise Control, 6, 10-18, 1960

60113/Ho - D. V. Ho
Note on Shock Propagation in a Non-Uniform Duct
Brown Univ., TR 4, 1960, AD 250315

60114/Hd - H. H. Holland, Jr.
Muzzle Blast Measurements on Howitzer, 105mm, M2A2E2 with Muzzle Brake No. 8
U.S. Army Ord. Human Engr. Labs., Aberdeen Proving Ground, Tech. Memo. 12-60, Maryland, 1960

60115/Hn - Jack P. Holman
"On the Effects of Sound Waves on Heat Transfer"
J.A.S.A., 32, 407, 1960

60116/HG - Jack P. Holman, H. E. Gartrell, & E. E. Soehngen
"An Interferometric Method of Studying Boundary Layer Oscillations"
J. Heat Transfer, 82, 263-264, 1960

60117/HS - Jack P. Holman, Kenneth E. Stout & Erich E. Soehngen
The Effects of Flow Obstructions on an Oscillating Free Convection Boundary Layer on a Heated Vertical Plate
WADD, TN 60-24, 1960, AD 249 380

60118/Hi - Isaburo Horiuchi
A Study of the Structure of Shock Wave Fronts
Columbia Univ., Electronics Res. Lab., Final Report F/148, RADC TR 60-232, 1960, AD 247 661

60119/HL - Charles D. Howard & James C. Laurence
Measurement of Screen-Size Effects on Intensity, Scale, and Spectrum of Turbulence in a Free Subsonic Jet
NASA TN D-297, 1960

60120/Hs - Walton L. Howes
Distribution of Time-Averaged Pressure Fluctuations Along the Boundary of a Round Subsonic Jet
NASA TN D-468, 1960, AD 244 343

60121/Hs - Walton L. Howes
Similarity of Far Noise Fields of Jets
NASA, TR R-52, 1960

60122/HP - Din-Yu Hsieh & Milton S. Plesset
The Theory of Rectified Diffusion of Mass Into Gas Bubbles
C. I. T., Engr. Rpt. 85-15, 1960, AD 242 240

60123/HP - Din-Yu Hsieh & Milton S. Plesset
On the Propagation of Sound in a Liquid Containing Gas Bubbles
C. I. T., Engr. Rpt. 85-17, 1960, AD 245 604

60124/HC - C. T. Hsu, C. W. Chu & C. C. Chang
Effect of Viscoelastic Foundation on Forced Vibration of Loaded Rectangular Plates
WADD, TR 60-360, 1960

60125/HM - Harvey H. Hubbard & Domenic J. Maglieri
"Noise Characteristics of Helicopter Rotors at Tip Speeds up to 900 Feet per Second"
J.A.S.A., 32, 1105-1107, 1960

1960 Cont'd

60127/IA - Juichi Igarashi & Masaaki Arai
Fundamentals of Acoustical Silencers. (III) Attenuation Characteristics Studied by an Electric Simulator
Univ. of Tokyo, Aero. Res. Inst., Rpt. No. 351, 1960

60128/Id - Uno Ingard
Errata: "Attenuation and Regeneration of Sound in Ducts and Jet Diffusers"
J.A.S.A., 32, 141, 1960

60129/IO - Uno Ingard, Stanley K. Oleson & Michael D. Mintz
Measurements of Sound Attenuation in the Atmosphere
M. I. T., Res. Lab. of Electronics., TR 60-431, Pt. 1, 1960, AD 248 636

60130/Jn - Francis J. Jackson
"Sonically Induced Microstreaming Near a Plane Boundary. II. Acoustic Streaming Field"
J.A.S.A., 32, 1387-1395, 1960

60131/JN - Francis J. Jackson & Wesley L. Nyborg
"Sonically Induced Microstreaming Near a Plane Boundary. I. The Sonic Generator and Associated Acoustic Field"
J.A.S.A., 32, 1243-1249, 1960

60132/JJ - Thomas W. Jackson & Harold I. Johnson
Convective Flow Due to Acoustic Vibrations in Horizontal Resonant Tubes
Final Report, 1960, AD 233 970

60133/JP - Thomas W. Jackson, Kenneth R. Purdy et al.
The Effects of Resonant Acoustic Vibrations on the Local and Overall Heat Transfer Coefficients for Air Flowing Through an Isothermal Horizontal Tube
G.I.T., ARL TR 60-322, 1960, AD 249 451

60134/Js - S. Jarvis, Jr.
Fluid Dynamic Model of Interior Ballistics
Frankford Arsenal, Pitman-Dunn Labs. Group, Philadelphia 37, Pa., Memo. Rpt. M60-24-1, 1960, AD 243 202

60135/Js - G. M. Jenkins
General Considerations in the Estimation of Spectra
App. Math. & Stat. Lab., Stanford Univ., TR No. 4, 1960, AD 246 071

60136/Jh - D. M. Jentsch
"The Measurement of Aviation Noise"
Dtsch. Flugtech., 4, 270-271, 274-278, 1960

60137/Jl - Joseph W. Jewel
Compressibility Effects on the Hovering Performance of a Two Blade 10 foot Diameter Helicopter Rotor Operating at Tip Mach Numbers up to 0.98
NASA TN D-245, 1960

60138/JH - Howland B. Jones & David T. Harrje
"An Integrated Combustion Instability Recording and Analysis Installation"
Progress in Astronautics & Rocketry, Vol II, 175-187, L. E. Bollinger et al, ed., N.Y., Academic Press, 1960

60139/JJ - M. Judd & J. P. Jones
Surface Pressure Fluctuation Correlation Measurements on a 70 Degree Delta Wing
ARC 22428, 1960

60140/KN - A. Kalnins & P. M. Naghdi
"Axisymmetric Vibrations of Shallow Elastic Spherical Shells"
J.A.S.A., 32, 342-347, 1960

60141/KA - George W. Kamperman, Clayton H. Allen, H. R. Sharp & L. J. Williams
Performance of Intense Acoustic Facility for Flight Vehicle and Electronic Research
WADD, TR 59-12, 1960

60142/Ks - George T. Kantarges
Some Measurements of Noise Transmission and Stress Response of a 0.020-inch Duralumin Panel in the Presence of Air Flow
NASA TN D-459, 1960

60143/KS - Louis G. Kaufman, II & Richard A. Scheuing
An Introduction to Hypersonics
Grumman Aircraft Engr. Corp., Rpt. RE-82, 1960, AD 243 027

60144/KJ - John K. Kilham, E. Gordon Jackson & Timothy J. B. Smith
An Investigation of Tunnel Burner Noise
Gas Council (London), Res. Comm. GC74, 1960

60145/Kn - Blair Kinsman
Surface Waves at Short Fetches and Low Wind Speeds – A Field Study
John Hopkins Univ., Chesapeake Bay Inst., TR 19, 1, Ref 60-1, 1960, AD 241 166

1960 Cont'd

60146/Kn - Blair Kinsman
Surface Waves at Short Fetches and Low Wind Speeds – A Field Study
John Hopkins Univ., Chesapeake Bay Inst., TR 19, 2, Ref 60-1, 1960, AD 241 167

60147/Kn - Blair Kinsman
Surface Waves at Short Fetches and Low Wind Speeds – A Field Study
John Hopkins Univ., Chesapeake Bay Inst., TR 19, 3, Ref 60-1, 1960, AD 241 168

60148/Kr - A. E. Knowler
"Keeping the Aeroplane Quiet"
Shell Aviation News, No. 268, 7-11, 1960

60149/Kh - V. M. Kontorovich
"Reflection and Refraction of Sound by Shock Waves"
J. Acoust. Acad. of Sci., USSR., 320-330, 1960

60150/Kl - Donald H. Koppel
Review of Three Classic Problems in Hydrodynamics Stability
Columbia Univ., Hudson Lab., TR 86, 1960

60151/KS - G. K. Korbacher & K. Sridhar
A Note on the Total Drag of Jet Flapped Wings
UTIA, Rpt. 64, 1960

60152/KS - G. K. Korbacher & K. Sridhar
A Review of the Jet Flap
UTIA, Rev. 14, 1960

60153/Ki - M. Kobrinski
"L'Insonorisation due bi-réacteur de transport *Caravelle*"
Ann. Télécomm. 15, 55-60, 1960

60154/KT - Eldon E. Kordes, Weimar J. Tuovila & Lawrence D. Guy
Flutter Research and Skin Panels
NASA, TN D-451, 1960

60155/Ko - E. Kosko
The Telescopic Strut as a Beam-Column
UTIA, Rpt. 66, 1960

60156/Ki - P. N. Kubanskii
"On the Theory of Vortex Formations in the Vicinity of a Resonator Subjected to Air Streaming"
J. Acous. Acad. Sci., USSR, 331-338, 1960

60157/Ki - P. N. Kubanskii
"Note on Theory of Acoustic Streams in the Environs of Heated Solids"
Akoustichiskiy Zhurnal, 6, 462-467, 1960, AD 258 840

60158/LR - S. H. Lam & Nicholas Rott
Theory of Linearized Time-Dependent Boundary Layers
AFOSR TN-60-1100, 1960, AD 246 519

60159/LT - Robert F. Lambert & Duane H. Tack
Influence of Natural Frequencies and Source Correlation Fields on Random Response of Panels
WADD, TR 60-188, 1960

60160/LK - E. M. Landsbaum, W. C. Kuby & F. W. Spaid
"Experimental Investigations of Unstable Burning in Solid Propellant Rocket Motors"
Progress in Astronautics & Rocketry, Vol. 1, 495-525, Martin Summerfield, ed., N.Y., Academic Press, 1960

60161/Lg - Donald L. Lansing
Calculated Effects of Body Shape on the Bow-Shock Overpressures in the Far Field of Bodies in Supersonic Flow
NASA TR R-76, 1960

60162/Le - James C. Laurence
Turbulence Studies of a Rectangular Slotted Noise-Suppressor Nozzle
NASA, TN D-294, 1960

60163/LL - Lester Lees & Chung-Yen Liu
Kinetic Theory Description of Plane, Compressible Couette Flow
C. I. T., Guggenheim Aero. Lab., Memo. 58, 1960, AD 248 354

60164/LS - G. M. Lilley & J. J. Spillman
Ground Level Disturbance from Large Aircraft Flying at Supersonic Speeds
College of Aero., Cranfield, Note 103, 1960

60165/LM - Lindsay J. Lina & Domenic J. Maglieri
Ground Measurements of Airplane Shock-Wave Noise at Mach Numbers to 2.0 and at Altitudes to 60,000 feet
NASA TN D-235, ARC 21976, 1960

60166/Le - Jens Lothe
"Acoustic Radiation Force on a Uniformly Moving Smooth Body, to the First Order in the Velocity"
J.A.S.A., 32, 140, 1960

1960 Cont'd

60167/Ld - G. S. S. Ludford
Magnetohydrodynamics of Conducting Fluids
AFCRL, TN-60-800, 1960, AD 246 224

60168/LC - T. S. Lundgren, C. C. Chang & Y. C. Whang
Damping of Rectangular Plate Vibrations
WADC, TR 59-544, 1960

60169/Ly - Morton Lutsky
The Spherical Taylor Wave for the Gaseous Products of Solid Explosives
NAVWEPS Rpt. 6848, 1960

60170/Ln - Ona Lyman
A Study of the Shock Wave Growth from a Weak Electrical Discharge
BRLM Rpt. 1300, 1960, AD 246 716

60171/Ln - Richard H. Lyon
Diffusion of Sound Waves in a Turbulent Atmosphere
NASA, TN D-456, 1960

60172/Ln - Richard H. Lyon
"Response of a Nonlinear String to Random Excitation"
J.A.S.A., 32, 953-960, 1960

60173/Me - Kenneth V. MacKenzie
"Formulae for the Computation of Sound Speed in Sea Water"
J.A.S.A., 32, 100-103, 1960

60174/Me - Kenneth V. MacKenzie
"Reflection of Sound from Coastal Bottoms"
J.A.S.A., 32, 221-231, 1960

60175/MT - Peter A. MacPherson & D. B. Thrasher
A Noise Study of a CF-100 Mark V Aircraft
DRML TM 27-10, 1960

60176/MS - P. T. Mahaffey & K. W. Smith
"Method for Predicting Environmental Vibration Levels in Jet-Powered Vehicles"
Noise Control, 6, 20-26, 1960

60177/Mk - Gideon Maidanik
The Use of Delta Function for the Correlations of Pressure Fields
Bolt, Beranek & Newman, Cambridge Mass., Rpt. No. 772, 1960, AD 249 050

60178/ML - Gideon Maidanik & Richard H. Lyon
Response of Strings to Moving Noise Fields
BBN Rpt. 776, 1960, AD 249 051

60179/Ml - P. Mandl
Reflection of a Plane Acoustic Shock by a Surface of Revolution
Nat. Res. Council of Canada, Aero. Rpt. LR-289, 1960, AD 248 520

60180/MR - Earle B. Mayfield & James W. Rogers
Cratering and Shock Wave Phenomena in Steel Plates at High Impact Speeds
NAVWEPS Rpt. 7066, 1960, AD 237 723

60181/MH - F. T. Mc Clure, R. W. Hart & J. F. Bird
"Acoustic Instability in Solid Rocket Fuels"
A.R.S.J., 30, 908-909, 1960

60182/MH - F. T. Mc Clure, R. W. Hart & J. F. Bird
"Acoustic Resonance in Solid Propellant Rockets"
J. App. Phys., 31, 884-896, 1960

60183/MH - F. T. Mc Clure, R. W. Hart & J. F. Bird
"Solid Propellant Rocket Motors as Acoustic Oscillators"
Progress in Astronautics & Rocketry, Vol. 1, 295-358, Martin Summerfield, ed., N.Y., Academic Press, 1960

60184/Mn - Russell W. McDearman
Investigation of the Flow in a Rectangular Cavity in a Flat Plate at a Mach Number of 3.55
NASA, TN D-523, 1960

60185/Mn - J. C. McMullen
Wind Tunnel Testing Facilities at the Ballistic Research Laboratories
BRLM Rpt. 1292, 1960, AD 244 180

60186/Md - D. J. Mead
Criteria for Comparing the Effectiveness of Damping Treatments
U. S. A. A. Rpt. 125, 1960

60187/Md - D. J. Mead
A Note on the Use of Sandwich Structures in U. S. A. A. Severe Acoustic Environments
U. S. A. A. Rpt. 145, 1960

60188/Ms - J. Menkes
On the Stability of the One-Dimensional Flow of a Real Gas
C. I. T., Jet. Prop. Lab., 1960, AD 237 694

1960 Cont'd

60189/MD - Erwin Meyer, A. Dinkelacker & K. Tamm
"Flow Noise in Water-Filled Tubes"
Acustica, 10, 322-325, 1960

60190/MH - R. E. Meyer & D. V. Ho
Note on Shock Propagation in a Stratified Atmosphere
Brown Univ., TR 35, 1960, AD 242 298

60192/Mz - Michael D. Mintz
Pulse Distribution Analysis of Scattered Sound
M. I. T., Res. Lab. of Electronics, Pt. 2, Final Rpt., 1960, AD 248 636

60193/MT - Mildred M. Moe & B. A. Troesch
"Jet Flows with Shocks"
A. R. S. J., 30, 487-489, 1960

60194/Mn - Erik Mollö-Christensen
Some Aspects of Free Shear-Layer Instability and Sound Emission
M.I.T., Fluid Dynamics Res. Lab., Memo. 60-1, AGARD Rpt. 260, 1960, AD 240 658

60195/MN - Erik Mollö-Christensen & Roddam Narasimha
"Sound Emission from Jets at High Subsonic Velocities"
J. Fluid Mech., 8, 49-60, 1960

60196/MG - Franklin K. Moore & Walter E. Gibson
"Propagation of Weak Disturbances in a Gas Subject to Relaxation Effects"
J. Aero/Space Sci., 27, 117-127, 1960

60197/Ms - John Morris
"An Investigation of Lifting Effects on the Intensity of Sonic Booms"
J. R. Ae. S., 64, 610-616, 1960

60198/Mw - Charles T. Morrow
"Significance of Power – Spectra and Probability Distributions in Connection with Vibration"
Noise Control, 6, 5-7, 1960

60200/MA - Harold R. Mull & Joseph S. Algranti
Flight Measurement of Wall-Pressure Fluctuations and Boundary-Layer Turbulence
NASA, TN D-280, 1960

60201/Mn - R. W. Mustain
On the Prediction of Dynamic Environments
S.V.A.E. Bull. No. 28, Pt. 4, 20-40, 1960

60202/Na - Roddam Narashimha
Nearly Free Molecular Flow Through an Orifice
N-ONR 220-21, Task 21, 1960, AD 245 314

60203/NS - H. B. Nudelman & J. P. Sheehan
Study of Fatigue Properties of Ultra-High Strength Steel
WADD, TR 60-120, 1960

60204/Ng - Wesley L. Nyborg
Nonlinear Sonic Phenomena
Brown Univ., AFOSR TR-60-70, 1960, AD 238 441

60205/OA - Fujio Oda & Eugene Ackerman
Propagation Distortion of Bands of Large Amplitude Acoustic Noise. II. Experimental Investigation of Certain Plane Waves Cases
WADD-TR-60-233, 1960

60206/Oe - T. F. Ogilvie
Propagation of Waves Over an Obstacle in Water of Finite Depth
Univ. of Calif., Berkeley, Inst. Engr. Res., 1960, AD 242 865

60207/On - M. W. Oleson
Application of a Special Test Fixture to Vibration Measurement During Static Firing of Rocket Motors
S.V.A.E. Bull. No. 28, Pt. 4, 165-170, 1960

60208/On - F. C. W. Olson
"Resonant Frequency of a Water-Loaded Circular Plate"
J.A.S.A., 32, 408, 1960

60209/Or - Donald W. Oplinger
"Frequency Response of a Nonlinear Stretched String"
J.A.S.A., 32, 1529-1538, 1960

60210/On - J. R. Osborn
"Some Instrumentation for Combustion Stability Research"
Progress in Astronautics & Rocketry, Vol.2, 145-173, L. E. Bollinger et al., ed., N.Y., Academic Press, 1960

60211/Oe - M. R. Osborne
"On the Propagation of Sound in a Layered Fluid Medium"
Quart. J. Mech. App. Math., 13, 472-486, 1960

1960 Cont'd

60212/Pg - L. R. Padberg, Jr.
Novel Sound Sources
U.S. Navy Electronics Lab., San Diego, NEL Rpt. 990, 1960

60213/Ps - V. M. Papadopoulos
A Line Source on an Interface Between a Fluid and an Elastic Solid
Brown Univ., TR 56, 1960

60214/Ps - V. M. Papadopoulos
"A Line Source on an Interface Between Two Media"
J. Fluid Mech., 8, 41-48, 1960

60215/Ps - V. M. Papadopoulos
"Diffraction of a Pulse by a Resistive Half-Plane"
Proc. Roy. Soc., A255, 538-557, 1960

60216/Ps - V. M. Papadopoulos
"Wave Propagation in a Coaxial System"
Quart. App. Math., 17, 423-436, 1960

60217/Pt - G. G. Parfitt
"Recent Studies of Noise Problems"
Brit. J. App. Phys., 53-57, 1960

60218/Py - H. J. Parry
Measurements for the Response of Substructures to the Exhaust Noise of a Turbojet Engine
S.V.A.E. Bull. No. 28, Pt. 4, 177-186, 1960

60219/Pn - Emanuel Parzen
Mathematical Considerations in the Estimation of Spectra
Stanford Univ., App. Math. & Stat. Labs., TR 3, 1960, AD 242 521

60220/Pn - G. N. Patterson
Recent Trends in the Mechanics of Highly Rarefied Gases
UTIA, Rev. 16, 1960

60221/Pn - D. W. Patterson
"Sonic Boom: Limitations on Supersonic Aircraft Operations"
Aero/Space Engr., 19, 20-44, 1960

60222/Pn - L. Pennelegion
A Report on Work Done and Visits Made in Canada and U. S. A. from October 1959-January 1960
USAA, Rpt. 141, 1960

60223/Pe - S. L. Petrie
The Basic Principles of Magnetogas-Dynamics
Ohio State Univ. Res. Foundation, 1960, AD 242 346

60224/Ps - Owen M. Phillips
"On the Generation of Sound by Supersonic Turbulent Shear Layers"
J. Fluid Mech., 9, 1-28, 1960

60225/Pv - E. I. Polyakov
"Experimental Investigation of Turbulent Jets of Axial Symmetry"
Zhur. Tekh. Fiz., 30, 1238-1244, 1960

60226/Pn - E. D. Poppleton
Note on the Design of Redundant Structures
UTIA TN 36, 1960

60227/Pl - Alan Powell
" Concerning the Noise of Turbulent Jets"
J.A.S.A., 32, 1609-1612, 1960

60228/Pl - Alan Powell
"Aerodynamic Noise and the Plane Boundary"
J.A.S.A., 32, 982-990, 1960

60229/Pl - Alan Powell
"Distortion of Finite Amplitude Sound Wave"
J.A.S.A., 32, 886, 1960

60230/Pl - Alan Powell
Fluid Motion and Sound
Univ. of Calif., L. A., Rpt. 60-51, 1960 AD 239 941

60231/Pl - Alan Powell
"Propagation of a Pressure Pulse in a Compressible Flow – Coda"
J.A.S.A., 32, 1116, 1960

60232/Pl - Alan Powell
"Theory of Sound Propagation Through Ducts Carrying High-Speed Flows"
J.A.S.A., 32, 1640-1646, 1960

60233/Pe - E. W. Price
Analysis of Results of Combustion Research on Solid Propellants
A. R. S. Preprint 1068-60, 1960

1960 Cont'd

60234/Pe - E. W. Price
"Combustion Instability in Solid Propellant Rocket Motors"
A.R.S.J., 30, 574-576, 1960

60235/Pe - E. W. Price
"Review of Experimental Research on Combustion Instability of Solid Propellants"
Progress in Astronautics & Rocketry, Vol. 1, 561-602, Martin Summerfield, ed., N.Y., Academic Press, 1960

60236/Re - W. J. Rae
Potential Flows in the Approximation of Viscous Acoustics
AFOSR-TN-60-409, 1960

60237/RM - W. J. Rae & F. K. Moore
On the Inviscid Stability of the Boundary Layer on a Flexible Wall
Cornell Aeronaut. Lab., Inc., N.Y., 1960, AD 246 520

60238/RB - Imants Reba & Coleman Brosilow
Combustion Instability: Liquid Stream and Droplet Behavior. The Response of Liquid Jets to Large Amplitude Sonic Oscillations
WADC TR 59-720, Part III, 1960

60239/Rz - John D. Regetz, Jr.
An Experimental Determination of the Dynamic Response of a Long Hydraulic Line
NASA, TN D-576, 1960

60240/RA - G. W. Reissig & Theos A. Angelus
"Instrumentation for Studies of Unstable Burning Phenomena"
Progress in Astronautics & Rocketry, Vol. 2, 201, 201-226, L. E. Bollinger et al., ed., N.Y. Academic Press, 1960

60241/Rr - Herbert S. Ribner
A Theory of the Sound from Jets and Other Flows in Terms of Simple Sources
AFOSR TN 60-950, UTIA Rpt. 67, 1960

60242/Rr - Herbert S. Ribner
"Energy Flux from an Acoustic Source Contained in a Moving Fluid Element and its Relation to Jet Noise"
J.A.S.A., 32, 1159-1160, 1960

60243/RB - Elfyn J. Richards, M. K. Bull & J. L. Willis
Boundary Layer Noise Research in the U.S.A. and Canada: A Critical Review
U.S.A.A. Rpt. No. 131, ARC 21766, Univ. of Southampton, 1960

60244/Rh - Rowena Rodabaugh
"Two-Phase Flow and Acoustic Phenomena in Gases and Liquids"
JPL Astr. Info. Search No. 177, 1-26, 1960

60245/Ro - E. V. Romanenko
"Experimental Study of Acoustic Streaming in Water"
Sov. Phys.-Acoustics, 6, 87-91, 1960

60246/Rn - Gerald Rosen
"Nonlinear Pressure Oscillations in a Combustion Field"
A. R. S. J., 30, 422-423, 1960

60247/RR - Anatol Roshko & M. Rubinstein
Tables of Flow Functions for a Simple Non-Steady Expansion Wave
Douglas Aircraft Co., Rpt. No. ES 40031, 1960, AD 246 728

60248/Rr - George Rudinger
Nonsteady Discharge of Subcritical Flow
Cornell Aero. Lab., Project Squid, TR CAL-80-P, 1-30, 1960, AD 239 648

60249/Rr - George Rudinger
Nonsteady Supercritical Discharge Through an Orifice
Cornell Aero. Lab., Project Squid, TR CAL-82-P, 1960, AD 250 107

60250/Rr - George Rudinger
"Passage of Shock Waves Through Ducts of Variable Cross Section"
Phys. of Fluids, 3, 449-455, 1960

60251/Rl - David A. Russell
A Study of Area Change Near the Diaphragm of a Shock Tube
C. I. T., Guggenheim Aero Lab., Memo. No. 57, 1960, AD 248 353

60252/RY - I. L. Ryhming & Y. A. Yoler
Supersonic Boom of Wing-Body Configurations
Inst. Aero. Sci. Paper No. 60-20, 1960

1960 Cont'd

60253/RY - I. L. Ryhming, Y. A. Yoler & Y. Aoki
Shock Wave Noise of Supersonic Aircraft
S. A. E. Preprint 166B, 1960

60254/SH - R. Alfred Saenger & George E. Hudson
"Periodic Shock Waves in Resonating Gas Columns"
J.A.S.A., 32, 961-970, 1960

60255/Sr - F. H. Sagar
"Acoustic Intensity Fluctuations and Temperature Microstructure in the Sea"
J.A.S.A., 32, 112-120, 1960

60256/So - Hiroshi Sato
"The Stability and Transition of a Two-Dimensional Jet"
J. Fluid Mech., 7, 53-80, 1960

60257/Sr - James W. Schmeer
Transonic Performance Characteristics of Several Jet Noise Suppressors
NASA TN D-388, 1960

60258/SS - James W. Schmeer, Leland B. Salters & Marlowe D. Cassetti
Transonic Performance Characteristics of Several Jet Noise Suppressors
NASA TN D-388, 1960

60259/St - Dieter W. Schmidt
Experiments Relating to the Interaction of Sound and Turbulence
AFOSR TN 60-347, 1960, AD 236 341

60260/St - H. Schmidt
"Technical Equipment for Protection Against Noise on Jet Engine Test Stands"
Flugwelt, 12, 449-451, 1960

60261/Sd - B. H. Schofield
Acoustic Emission Under Applied Stress
Lessells & Assoc. Progress Rpt. 10, 1960, AD 248 500

60262/Ss - W. E. Scholes
"Sound Propagation in the Atmosphere"
Nature, 188, 992-994, 1960

60263/So - Ascher H. Shapiro
"On the Maximum Obtainable Temperature in Resonance Tubes"
J. Aero./Space Sci., 27, 66-67, 1960

60264/SM - Reuel Shinnar & Menachem Dishon
"Heat Transfer Stability Analysis of Solid Propellant Rocket Motors"
Progress in Astronautics & Rocketry, Vol 1, 359-373, Martin Summerfield, ed., N.Y., Academic Press, 1960

60265/SS - John W. Shue & John K. Stauffer
Research on Coaxial Jet Air Mixing - Final Report, Phase I
Convair Final Rpt., Phase I, 1960, AD 242 997

60266/Sr - A. G. Shutler
An Experimental Investigation of the Wake on the Torsional Oscillations of Airscrew Blades at Low Mean Incidences
A.A.S.U. Rpt. 152, 1960

60267/Ss - B. D. Simmons
Radiation Impedance of Arrays of Finite Spherical Sources
Chesapeake Instr. Corp., Rpt. No. 123, 1960, AD 243 127

60268/Sk - Eugen Skudrzyk
"Acoustic Electronic Pulse Equipment"
J.A.S.A., 32, 565-570, 1960

60269/SH - Eugen Skudrzyk & Gillian P. Haddle
"Noise Production in a Turbulent Boundary Layer by Smooth and Rough Surfaces"
J.A.S.A., 32, 19-34, 1960

60270/Sh - A. G. Smith
"A Theory of Oscillatory Burning of Solid Propellants Assuming a Constant Surface Temperature"
Progress in Astronautics & Rocketry, Vol 1, 375-391, Martin Summerfield, ed., N.Y., Academic Press, 1960

60271/Sh - Harriet J. Smith
Experimental and Calculated Flow Fields Produced by Airplanes Flying at Supersonic Speeds
NASA TN D-621, 1960

60272/SL - M. W. Smith & R. F. Lambert
"Acoustic Signal Detection in Turbulent Airflow"
J.A.S.A., 32, 858-866, 1960

60273/SL - M. W. Smith & R. F. Lambert
"Propagation of Band Limited Noise"
J.A.S.A., 32, 512-514, 1960

1960 Cont'd

60274/St - A. B. T. Soderquist
Experimental Investigation of Stability and Post Buckling Behaviour of Stiffened Curved Plates
UTIA Tech. Note 41, 1-15, 1960

60275/SH - E. E. Soehngen & J. P. Holman
Experimental Studies on the Interaction of Strong Sound Fields with Free Convection Boundary Layers
A. R. L. TR 60-323, 1960, AD 249 104

60276/SG - J. F. South, R. F. Goodhart & T. I. Dodson
Pressure, Temperature and Noise Measurements in the Subsonic Region of the Terrier Guided Missile Booster MK 12 Mod. 0 (X-240) Exhaust Stream
Naval Weapons Lab. Rpt. 1712, 1960

60277/SL - F. W. Spaid & E. M. Landsbaum
"Instrumentation for Research on Combustion Instability in Solid-Propellant Rocket Motors"
Progress in Astronautics & Rocketry, Vol. 2, L. E. Bollinger et al., ed., N.Y., Academic Press, 1960

60278/Sy - William C. Sperry
Governing Equations for Wave Propagation in a Homogeneous, Isotropic, Continuous Fluid
WADD TR 61-21, 5-27, 1960

60279/Sy - William C. Sperry
Jet Noise Suppression
WADD TR 61-21, 143-171, 1960

60280/Ss - T. Sprinks
A Review of Work Relevant to the Study of Heat Transfer in Hypersonic Separated Flows
U.S.A.A. No. 138, 1960

60281/Sd - Harry Sternfeld
"New Techniques in Helicopter Noise Reduction"
J. Amer. Hel. Soc., 5, 2-8, 1960

60282/SK - D. G. Stewart & C. N. King
Some Tests of a Resonant Combustion Chamber
A. R. L., Mech. Engr. Rpt. 94, 1960

60283/Ss - E. Stringas
Notes on the Results of Recent Tests of a Momentum Exchange Type Silencer for Turbojet Engines
S.A.E. Preprint 162A, 1960

60284/SM - Louis C. Sutherland & Walter V. Morgan
"Use of Model Jets for Studying Acoustic Fields"
Noise Control, 6, 6-12, 1960

60285/Ti - C. Teleki
The Influence of Vertical Vibrations on the Rate of Heat Transfer from a Horizontal Cylinder in Air
WADC TN 59-357, 1960

60286/TB - Kenneth R. Thorson & Quentin R. Bohne
"Application of Power Spectral Methods in Airplane and Missile Design"
J. Aero./Space Sci., 27, 107-116, 1960

60287/Tl - E. W. Thrall
Acoustically Induced Fatigue - Cause, Solution and Design Analysis
S.A.E. Preprint 164A, 1960

60288/Tn - George B. Thurston
"Theory of Oscillation of a Viscoelastic Fluid in a Circular Tube"
J.A.S.A., 32, 210-213, 1960

60289/To - Anibal Alfredo Tinajero
Preliminary Investigation of Plan Form Effect on Augmentation Parameter for Peripheral-Het Ground Effect Machines
DTMB Aero Rpt. 972, 1-40, 1960

60290/To - Anibal Alfredo Tinajero
Static Behaviour of a Special Plan Form Gem Model Utilizing an Integrated System for Lift and Propulsive Thrust
DTMB Aero Rpt. 975, 1960

60291/To - Anibal Alfredo Tinajero
Static Behavior of a Rectangular Plan Form Gem Model Utilizing an Integrated System for List and Propulsive Thrust
DTMB Aero Rpt. 984, 1960

60292/TF - Anibal A. Tinajero & J. Norman Fresh
Aerodynamic Response of a 7-foot Ground-Effect Machine Flying Over Uneven Surfaces
DTMB Aero Rpt No. 982, 1960

60293/TJ - I. Torbe & D. I. G. Jones
On Influence Functions in the Theory of Forced Vibrations of Membranes
U.S.A.A. 115, 1960

60294/TL - W. J. Trapp & B. J. Lazan
Role of Structural Damping in Acoustical Fatigue
WADC TR 59-304, 1-26, 1960

1960 Cont'd

60295/Ur - E. E. Ungar
Response of Plates to Moving Shocks
WADD TR 60-445, 1960, AD 247 109

60296/Ud - Happy H. Unfried
An Experimental Study of Edge Tone Force
Univ. of Calif., M.S. Thesis, 1960

60297/Uk - Robert J. Urick
"Side Scattering of Sound in Shallow Water"
J.A.S.A., 32, 351-355, 1960

60298/Ui - I. A. Urusovskii
"Sound Scattering by a Sinusoidally Uneven Surface Characterized by Normal Acoustic Conductivity"
Sov. Phys.-Acoustics, 5, 362-369, 1960

60299/VS - L. F. Vereshchagin, A. A. Semerchan, A. I. Firsov, V. A. Galakmionov & F. M. Filler
Some Investigations on a Hydrodynamic Jet of Liquid Flowing from a Nozzle at Pressures up to 1,500 ATM
Min. of Aviation TIL/T 4832, 1960, AD 244 047

60300/VL - Marian Visich, Jr., & Paul A. Libby
Experimental Investigation of Mixing of Mach Number 3.95 Stream in Presence of Wall
NASA TN D-247, 1960

60301/Wl - R. H. Wall
"Resonant Burning of Solid Propellants: Review of Causes, Cures and Effects"
Progress in Astronautics & Rocketry, Vol. 1, 603-619, Martin Summerfield, ed., N.Y., Academic Press, 1960

60302/WG - W. R. Wally & R. N. Gardner
Sound Suppressor and Jet Reverser Effects on Aircraft Performance
Soc. Auto. Engrs., Paper 238C, 1960

60303/Wt - Peter J. Westervelt
"Effect of Sound Waves on Heat Transfer"
J.A.S.A., 32, 337-338, 1960

60304/Wy - R. Westley
Aerodynamic Sound and Pressure Fluctuations in a Supersonic Blowdown Wind Tunnel
Nat. Res. Coun., Canada, LR-274, 1960

60306/Ws - Paul F. R. Weyers
Vibration and Near-Field Sound of Thin-Walled Cylinders Caused by Internal Turbulent Flow
NACA TN D-430, 1960, AD 237 717

60307/Wd - D. S. Whitehead
A Narrow-Band Spectral Analyser for Random Waveforms
A.R.C. 22, 120, 1960, AD 247 645

60308/Wd - D. S. Whitehead
The Analysis of Blade Vibration Due to Random Excitation
A.R.C. 22, 119, 1960, AD 247 641

60309/Wr - J. S. Whittier
Rheological Properties of Adhesives Considered for Interface Damping
WADD TR 60-280, 1-62, 1960

60310/WM - Paul R. Wieber & William R. Mickelsen
Effect of Transverse Acoustic Oscillations on the Vaporization of a Liquid - Fuel Droplet
NASA, TN D-287, 1960

60311/Ws - D. Williams
A Scheme for Preventing Structural Damage by Jet Efflux
R.A.E. TN Struct 290, 1960

60312/Ws - J. E. Ff. Williams
On Convected Turbulence and its Relation to Near Field Pressure
U.S.A.A. 109, 1960

60313/Ws - J. E. Ff. Williams
Some Thoughts on the Effects of Aircraft Motion and Eddy Convection on the Noise from Air Jets
U.S.A.A. 155, 1960

60314/Wn - J. A. Wilson
The Effect of Dissociation and Recombination of Oxygen and Nitrogen on the Heat Transfer to a Body Flying in a Rarefied Atmosphere
U.S.A.A. Rpt 113, 1960

60315/WB - J. A. Wilson & K. N. C. Bray
A Preliminary Study of Ionic Recombination of Argon in Wind Tunnel Nozzles
U.S.A.A. Rpt. 134, 1960

60316/Wn - L. N. Wilson
"Experimental Investigation of the Noise Generated by the Turbulent Flow Around a Rotating Cylinder"
J.A.S.A., 32, 1203-1207, 1960

60317/Wn - Wayne D. Wilson
"Speed of Sound in Sea Water as a Function of Temperature, Pressure, and Salinity"
J.A.S.A., 32, 641-644, 1960

1960 Cont'd

60318/We - H. J. Wintle
"The Effect of Attenuation on the Acoustic Resonant Frequencies of Gases in Tubes"
Proc. Phys. Soc., 76, 772-775, 1960

60319/Wi - H. U. Wisniowski
Radial Grids with Water Injection for Suppressing the Noise of Jet Engines
NRC-LR-WIQ, 1960

60320/Wy - J. G. Woodley
Measurement of the Flow Field on an Underexpanded Jet in a Hypersonic External Stream (M_{co} = 6.8)
R.A.E. TN No. Aero. 2733, 1960, AD 252 432

60321/Wu - J. H. T. Wu
An Experimental Study of Perforated Intake Diffusers at Mach Number of 2.50
UTIA TR 69, 1-29, 1960

60322/Ya - Tatsuya Yasunaga
"Effect of Pressure on the Structure of and Sound Velocity in Water"
J.A.S.A., 32, 713-715, 1960

60323/YM - Musa Yildiz & Osman K. Mawardi
"On the Diffraction of Multipole Fields by a Semi-Infinite Rigid Wedge"
J.A.S.A., 32, 1685-1691, 1960

60324/ZH - G. Zartarian, P. T. Hsu & H. Ashley
Dynamic Airloads and Aeroelastic Problems at Entry Mach Numbers
IAS Paper No. 60-32, 1960

60325/Zk - J. K. Zbrozek
The Relationship Between the Discrete Gust and Power Spectra Presentations of Atmospheric Turbulence, with a Suggested Model of Low Altitude Turbulence
R.A.E. TN No. Aero. 2682, 1960, AD 242 944

60326/ZW - L. Zernow, F. Wright, Jr. & G. Woffinden
Cinemicroscopic Studies of Electrically Exploded Wires and Films
Quart. Prog. Rpt., Aerojet-General Corp., 1-4, 1960, AD 242 977

60327/ZO - M. J. Zucrow, J. R. Osborn, & A. C. Pinchak
"Luminosity and Pressure Oscillations Observed with Longitudinal and Transverse Modes of Combustion Instability"
A.R.S.J., 30, 758-761, 1960

1961

61001/Ae - Robert C. Amme
"The Influence of Atmospheric Parameters on Sound Absorption"
Proc. Symposium on Atmospheric Acoustic Propagation, El Paso, 1, 57-68, 1961

61002/An - Anon
A Bibliography on Aircraft Noise
Ministry of Aviation (U.K.), TIL/BIB(U) 11, Supplement No. 6 1961

61003/BS - R. C. Bauer & R. L. Schlumpf
Experimental Investigation of Free Jet Impingement on a Flat Plate
AEDC-TN-60-223, 1961, AD 253 229

61004/Br - R. E. Bieber
"Missile Structural Loads by Nonstationary Statistical Methods"
J. Aero/Space Sci., 28, 284-294, 1961

61005/BF - M. P. Bieniek & A. M. Freudenthal
"Frequency-Response Functions of Orthotropic Sandwich Plates"
J. Aero/Space Sci., 28, 732-735, 1961

61006/Bs - David Alan Bies
"Effect of a Reflecting Plane on an Arbitrarily Oriented Multipole"
J.A.S.A., 33, 286-288, 1961

61007/BF - David A. Bies & Peter A. Franken
"Notes on Scaling Jet and Rocket Noise"
J.A.S.A., 33, 1171-1173, 1961

61008/BL - Lothar Bohn, Friedrich Linhardt & Hermann Oberst
Progress in the Development of Vibration Damping Materials
WADC TR 59-676, 185-206, 1961

61009/BN - J. Bruce Brackenridge & Wesley L. Nyborg
"Transverse Oscillations of a Liquid Jet. II"
J.A.S.A., 33, 1078-1084, 1961

61010/BL - P. Bradshaw & Edna M. Love
The Normal Impingement of a Circular Air Jet on a Flat Surface
ARC R&M No. 3205, 1961

61011/BB - R. R. Brockhurst, J. G. Bruce, Jr. & A. B. Arons
"Refraction of Underwater Explosion Shock Waves by a Strong Velocity Gradient"
J.A.S.A., 33, 452-455, 1961

61012/BC - M. D. Brown & P. L. Clemens
The Measurement of Pressure Fluctuations in a Hypersonic Wind Tunnel
Arnold Engr. Dev. Centre, TN 61-64, 1961

61013/Ct - James B. Calvert
"Progress in the Calculation of the Sound Field in the Atmospheric Duct"
Proc. Symposium on Atmospheric Acoustic Propagation, El Paso, 1, 13-23, 1961

61014/Cn - Harry W. Carlson
An Investigation of the Influence of Lift on Sonic-Boom Intensity by Means of Wind-Tunnel Measurements of the Pressure Fields of Several Wing-Body Combinations at a Mach Number of 2.01
NASA TN D-881, 1961

61015/Cg - Sin-I Cheng
"On the Aerodynamic Noise of a Turbulent Jet"
J. Aero. Sci., 28, 321, 331, 1961

61016/Cn - B. L. Clarkson
Correlation of Pressures Around a Jet Engine
WADC TR 59-676, 85-98, 1961

61017/Cn - B. L. Clarkson
Note on the Use of Correlation Techniques to Determine the Forms of Vibration of a Continuous Structure Excited by Random Pressures
WADC TR 59-676, 99-108, 1961

61018/CF - B. L. Clarkson & R. D. Ford
Further Analysis of the Random Vibrations of the Caravelle Test Section
Univ. of Southampton, Dept. Aero. & Astro., A.A.S.U. 175, 1961

61019/CF - B. L. Clarkson & R. D. Ford
Experimental Study of the Random Vibrations of an Aircraft Structure Excited by Jet Noise
WADD TR 61-70, 1961

61020/CM - Willard D. Coles, John A. Mihaloew & William H. Swann
Ground and In-Flight Acoustic and Performance Characteristics of Jet-Aircraft Exhaust Noise Suppressors
NASA TN D-874, 1961

61021/CY - Stephen H. Crandall & Asim Yildiz
Random Vibration of Beams
M.I.T., AFOSR 484, 1961

1961 Cont'd

61022/CS - Benjamin F. Cron & William R. Schumacher
"Theoretical and Experimental Study of Underwater Sound Reverberation"
J.A.S.A., 33, 881-887, 1961

61023/CB - Allen J. Curtis & Thomas R. Boykin, Jr.
"Response of Two-Degree-of-Freedom Systems to White Noise Base Excitation"
J.A.S.A., 33, 655-663, 1961

61024/Dn - E. Alan Dean
"Absorption of Sound in the Atmosphere"
Proc. Symposium on Atmospheric Acoustic Propagation, El Paso, 1, 50-56, 1961

61025/Dn - E. Alan Dean
"The Wavelength Limits of Atmospheric Ray Acoustics"
Proc. Symposium on Atmospheric Acoustic Propagation, El Paso, 1, 7-12, 1961

61026/Dn - Charles Devin, Jr.
Resonant Frequencies of Pulsating Air Bubbles Generated in Short, Open-Ended Pipes
DTMB, Rpt. 1522, 1961, AD 261 341

61027/Dy - I. F. Dityakin & V. I. Yagodkin
Effect of Periodic Oscillations of Velocity and Density of a Medium on Disintegration of Liquid Jets
NASA TT F-63, 1961

61028/DB - J. C. Donaldson & D. R. Bell
Sound and Pressure Measurements in Cavities on a Body of Revolution at Supersonic Speeds
Arnold Engr. Dev. Center, TN-60-233, 1961, AD 249 608

61029/Dd - Wade D. Dorland
Far-Field Noise Characteristics of Saturn Static Tests
NASA TN D-611, 1961

61030/DF - Ira Dyer, P. A. Franken & E. E. Ungar
External Noise Environments of Flight Vehicles
WADC TR 59-676, 379-411, 1961

61031/Ed - Kenneth McK. Eldred
"Base Pressure Fluctuations"
J.A.S.A., 33, 59-63, 1961

61032/Ed - Harold G. Elrod, Jr.
The Theory of Pulsating Flow in Conical Nozzles
Franklin Inst., Philadelphia, Interim Rpt., I-A-2049-15, 1961

61033/Fy - D. M. Forney, Jr.
Acoustical Fatigue Test Procedures Used in Aircraft Industry and Their Limitations
WADC TR 59-676, 339-378, 1961

61034/Fn - Peter A. Franken
"Comments on Base Pressure Fluctuations"
J.A.S.A., 33, 813, 1961

61035/Fn - Peter A. Franken
"Generation of Sound in Cavities by Flow Rate Changes"
J.A.S.A., 33, 1193-1195, 1961

61036/FF - J. H. Frauenberger & J. G. Forbister
"The Axial Decay and Radial Spread of a Supersonic Jet Exhausting Into Air at Rest"
Aero. Quart. 22, 131-149, 1961

61037/Ge - Henning E. von Gierke
Types of Pressure Fields of Interest in Acoustical Fatigue Problems
WADC TR 59-676, 57-84, 1961

61038/Ge - David C. Greene
"Vibration and Sound Radiation of Damped and Undamped Flat Plates"
J.A.S.A., 33, 1315-1320, 1961

61039/He - Frank E. Hale
"Long-Range Sound Propagation in the Deep Ocean"
J.A.S.A., 33, 456-464, 1961

61040/Hh - Robert J. Hallbach
An Evaluation of Excess Attenuation of Sound for Overhead Aircraft Noise Measurements
Paper presented to National Aeronautic & Space Meeting, Los Angeles, October, 1961

61041/HN - Francis R. Hama & John Nutant
"Self-Induced Velocity on a Curved Vortex"
Phys. of Fluids, 4, 28-32, 1961

61042/Ht - Andrew G. Hammitt
"The Oscillation and Noise of an Overpressure Sonic Jet"
J. Aero/Space Sci., 28, 673-680, 1961

1961 Cont'd

61043/He - David T. Harrje
Nonlinear Aspects of Combustion Instability in Liquid Propellant Rocket Motors
Princeton Univ., Prog. Rpt. No. 1, 1961, AD 262 335

61044/Hr - H. Heller
"Noise Generated by the Gas Stream Leaving Jets"
Z.V.D.I., 103, 489-490, 1961

61045/HS - Maurice Holt & Sainsbury L. Strack
"Supersonic Panel Flutter of a Cylindrical Shell of Finite Length"
J. Aero/Space Sci., 28, 197-208, 1961

61046/Hs - Walton L. Howes
Similarity of Near Noise Fields of Subsonic Jets
NASA, TR R-94, 1961, AD 251 597

61047/Hd - Harvey H. Hubbard
Design Considerations for Minimizing Acoustic Fatigue
WADC TR 59-676, 321-338, 1961

61048/JT - J. J. Jacobson & R. J. Talham
"Comparison Analysis on Four Directional Receiver Correlators"
J.A.S.A., 33, 518-526, 1961

61049/Js - W. P. Jones
Research on Unsteady Flow
M.I.T., 6th Minta Martin Lecture, 1961

61050/Jn - Donald W. Jorgensen
"Near Field Noise from Turbulent Jets"
J.A.S.A., 33, 817, 1961

61051/Jn - Donald W. Jorgensen
"Noise from Cavitating Submerged Water Jets"
J.A.S.A., 33, 1334-1338, 1961

61052/KT - M. A. Kallistratova & V. I. Tatarskii
"Accounting for Wind Turbulence in the Calculation of Sound Scattering in the Atmosphere"
Soviet Physics-Acoustics, 6, 503-505, 1961

61053/Kr - M. Kaltwasser
Hydraprogram – Underwater Explosion Bubble's Time History
U.S. Naval Radiological Defense Lab., TR-513, 1961, AD 260 391

61054/KL - S. Kaufman, W. L. Lapinski & R. C. McCaa
"Response of a Single-Degree-of-Freedom Isolator to a Random Disturbance"
J.A.S.A., 33, 1108-1112, 1961

61055/Kn - Edward M. Kerwin, Jr.
Acoustic Damping Mechanisms
WADC TR 59-676, 286-319, 1961

61056/Lb - George L. Lamb, Jr.
"Input Impedance of a Beam Coupled to a Plate"
J.A.S.A., 33, 628-632, 1961

61057/Lg - Donald L. Lansing
"Some Effects of Flight Path Upon the Distribution of Sonic Booms"
Proc. Symposium at Atmospheric Acoustic Propagation, 1, 24-43, El Paso, 1961

61058/Lr - John Laufer
"Aerodynamic Noise in Supersonic Wind Tunnels"
J. Aero/Space Sci., 28, 685-692, 1961

61059/Ln - Benjamin J. Lazan
Review of Structural Damping Mechanisms
WADC TR 59-676, 168-184, 1961

61060/Le - George Lee
An Investigation of Transonic Flow Fields Surrounding Hot and Cold Sonic Jets
NASA TN D-853, 1961

61061/Le - Robert Lee et al.
Research Investigation of the Generation and Suppression of Jet Noise
Gen. Elect. Co., Flight Propulsion Lab. Dept., 1961, AD 251 887

61062/LS - Charles B. Leslie & Neil R. Sorensen
"Integral Solution of the Shallow Water Sound Field"
J.A.S.A., 33, 323-329, 1961

61063/Lr - William W. Lester
"On the Theory of the Propagation of Plane, Finite Amplitude Waves in a Dissipative Fluid"
J.A.S.A., 33, 1196-1199, 1961

61064/Ln - V. Y. Levin
Some Problems of Pulsating Combustion in Connection with the Pulsation Turbine
ARC, Ministry of Aviation TIL/T 5187, 1961

1961 Cont'd

61064a/Lr - John H. Linebarger
On the Stability of a Laminar Boundary Layer Over a Flexible Surface in a Compressible Fluid
M.I.T., M.S. Thesis, 1961, AD 257 560

61065/Lg - Robert R. Long
A Vortex in an Infinite Viscous Fluid
The Johns Hopkins Univ., Dept. of Mech., TR Rpt. No. 11 and 14, 1961, AD 257 756

61066/Lv - L. M. Lyamshev
"Reflection of Sound from a Moving Thin Plate"
Soviet Physics – Acoustics, 6, 505-507, 1961

61067/Ln - Richard H. Lyon
"Effect of Membrane Strain on Fatigue Damage Rate. Asymptotic Calculation"
J.A.S.A., 33, 815, 1961

61068/Ln - Richard H. Lyon
"On the Vibration Statistics of a Randomly Excited Hard-Spring Oscillator. II"
J.A.S.A., 33, 1395-1403, 1961

61069/LH - Richard H. Lyon, Manfred Heckl & C. Brian Hazelgrove
"Response of Hard-Spring Oscillator to Narrow-Band Excitation"
J.A.S.A., 33, 1404-1411, 1961

61070/MH - Domenic J. Maglieri, David A. Hilton & Harvey H. Hubbard
Noise Considerations in the Design and Operation of V/STOL Aircraft
NASA TN d-736, 1961

61071/MH - Domenic J. Maglieri & Harvey H. Hubbard
Ground Measurements of the Shock-Wave Noise from Supersonic Bomber Airplanes in the Altitude Range from 30,000 to 50,000 feet
NASA TN D-880, 1961

61072/Mh - Alan H. Marsh
"Noise Measurements Around a Subsonic Air Jet Impinging on a Plane, Rigid Surface"
J.A.S.A., 33, 1065-1066, 1961

61073/Mh - H. Wysor Marsh
"Exact Solution of Wave Scattering by Irregular Surfaces"
J.A.S.A., 33, 330-333, 1961

61074/MS - H. Wysor Marsh, Morris Schulkin & S. G. Kneale
"Scattering of Underwater Sound by the Sea Surface"
J.A.S.A., 33, 334-340, 1961

61075/ME - William H. Mayes, Philip M. Edge, Jr. & James S. O'Brien, Jr.
Near-Field and Far-Field Noise Measurements for a Blowdown-Wind-Tunnel Supersonic Exhaust Jet Having About 475,000 Pounds of Thrust
NASA, TN D-517, 1961, AD 253 683

61076/MH - F. T. McClure, R. W. Hart & J. F. Bird
"Heat Release Rate, Temperature and Pressure in Solid Rocket Instability"
A. R. S. J., 31, 367-368, 1961

61077/Md - D. J. Mead
The Damping, Stiffness and Fatigue Properties of Joints and Configurations Representative of Aircraft Structures
WADC TR 59-676, 235-261, 1961

61078/Mr - Allen H. Meitzler
"Mode Coupling Occurring in the Propagation of Elastic Pulses in Wires"
J.A.S.A., 33, 435-445, 1961

61079/Ml - Theodore J. Mentel
Damping of Simplified Configurations with Additives or Interfaces
WADC TR 59-676, 207-234, 1961

61080/Ms - P. C. Moies
Strong Sound Signals: Effect of the Wind
Feltman Res. Lab., Picatinny Arsenal, Dover, N.J., FRL-Tn-31, 1961, AD 253 793

61081/Mn - B. R. Morton
"On a Momentum-Mass Flux Diagram for Turbulent Jets, Plumes and Wakes"
J. Fluid Mech., 10, 101, 112, 1961

61082/Mr - D. E. Mullinger,
The Development of a Random Motion Vibrational System
RAE TN G. W. 571, 1961, N 99597

61083/MS - G. E. Myers, J. J. Schauer & R. H. Eustis
The Plane Turbulent Wall Jet (1) Jet Development and Friction Factor
Stanford Univ., Dept. of Mech. Engr., TR 1, 1961

1961 Cont'd

61084/OB - J. R. Osborn & J. M. Bonnell
"Importance of Combustion Chamber Geometry in High Frequency Oscillations in Rocket Motors"
A. R. S. J., 31, 482-486, 1961

61085/PE - W. E. Parker & L. V. East
"Automatic Processing System for Acoustical Data"
J.A.S.A, 33, 1-6, 1961

61086/Pn - Melvin A. Pedersen
"Acoustic Intensity Anomalies Introduced by Constant Velocity Gradients"
J.A.S.A., 33, 465-474, 1961

61087/Pe - D. Pierce
Photographic Evidence of the Formation and Growth of Vorticity Behind Plates Accelerated from Rest in Still Air
RAE, TN Aero. 2745, 1961

61088/Pl - Alan Powell
"On the Edgetone"
J.A.S.A., 33, 395-409, 1961

61089/Pl - Alan Powell
Vortex Sound
Univ. of Calif., Dept. of Engr., Rpt. 61-70, 1961

61090/PM - K. K. Prasad, K. Mahadevan & H. A. Havemann
"Flame Speeds in Oscillating Gases in a Tube"
J. Indian. Inst. Sci., 43, 26-43, 1961

61091/PM - Richard J. Priem & Gerald Morrell
Application of Similarity Parameters for Correlating High-Frequency Instability Behavior of Liquid Propellant Combustors
A.R.S. Paper, 1721-61, 1961

61092/Rd - Jack W. Reed
"Shock Propagation at Large Distances"
Proc. Symposium on Atmospheric Acoustic Propagation, 1, 3-6, El Paso, 1961

61093/Rs - Elfyn J. Richards
An Introduction to Acoustic Fatigue
WADC TR 59-676, 9-29, 1961

61094/Rn - Mosche Richman
Macrosonic Combustion
New York Univ., Coll. of Engr., Final Rpt. 1961, AD 262 668

61095/Rn - Vern G. Rollin
A Preliminary Study of the Acoustic Transmission Loss of Two Fiberglass Nose-Cone Shapes
NASA TN D-852, 1961

61096/Rn - Vern G. Rollin
Effect of Multiple-Nozzle Geometry on Jet Noise Generation
NASA TN D-770, 1961

61097/RS - David J. Romeo & James R. Sterrett
Aerodynamic Interaction Effects Ahead of a Sonic Jet Exhausting Perpendicularly from a Flat Plate Into a Mach Number 6 Free Stream
NASA D-743, 1961

61098/Rr - George Rudinger
On the Interaction of Centered Expansion Waves
Cornell Aero. Lab., Project Squid TR CAL-84-P, 1961, AD 262 231

61099/RY - I. L. Ryhming & Y. A. Yoler
"Supersonic Boom of Wing-Body Configurations"
J. Aero/Space Sci., 28, 313-320, 1961

61100/Rg - I. L. Ryhming
"The Supersonic Boom of a Projectile Related to Drag and Volume"
J. Aero/Space Sci., 28, 113-118, 1961

61101/Se - Hale J. Sabine
Sound Propagation Near the Earth's Surface as Influenced by Weather Conditions
WADC TR 57-353, Pt. 4, 1961, AD 254 672

61102/SR - Hale J. Sabine, V. J. Raelson & Mahlon D. Burkhard
Sound Propagation Near the Earth's Surface as Influenced by Weather Conditions
WADC TR 57-353, Pt. 3, 1961

61103/Sa - Rose L. Schalla
Examination of Pressure Oscillations Induced by Changes in the Burning Rate of Flames
NASA, TN D-764, 1961

61104/Sa - Rose L. Schalla
"Perturbation Studies of Flames by Changes in Composition"
Combustion & Flame, (Gt. Brit.), 5, 45-53, 1961

61105/Sp - H. C. Schjelderup
A New Look at Structural Peak Distributions Under Random Loading
WADC TR 59-676, 413-426, 1961

1961 Cont'd

61106/St - Hans J. Schmitt
"Diffraction of Electromagnetic Waves by Sound Waves"
J.A.S.A., 33, 1288-1292, 1961

61107/Sr - Joseph A. Scrimger
"Signal Amplitude and Phase Fluctuations Induced by Surface Waves in Ducted Sound Propagation"
J.A.S.A., 33, 239-247, 1961

61108/SB - Robert L. Schumaker & Aurora Bustos
"Ballistic Versus Spherical Fronts Originating from Supersonic Missiles"
Proc. Symposium on Atmospheric Acoustic Propagation, 1, 69-76, El Paso, 1961

61109/Sk - Russell D. Shattuck
Sound Pressures and Correlations of Noise on the Fuselage of a Jet Aircraft in Flight
NASA TN D-1086, 1961

61111/Sh - Timothy J. B. Smith
Combustion Noise
Univ. of Leeds, Ph.D. Thesis, 1961

61112/Sn - John C. Snowdon
"Response of Nonlinear Shock Mountings to Transient Foundation Displacements"
J.A.S.A., 33, 1295-1304, 1961

61113/SL - H. R. Spence & H. N. Luhrs
"Structural Fatigue Under Combined Sinusoidal and Random Vibration"
J.A.S.A., 33, 1098, 1101, 1961

61115/Ss - Byron L. Swenson
Exploratory Study of the Reduction in Friction Drag Due to Streamwise Injection of Helium
NASA TN D-342, 1-29, 1961

61116/TS - Duane H. Tack, M. W. Smith & Robert F. Lambert
"Wall Pressure Correlations in Turbulent Airflow"
J.A.S.A., 33, 410-418, 1961

61117/TS - N. J. Taleb & E. W. Suppiger
"Vibration of Stepped Beams"
J. Aero/Space Sci., 28, 295-298, 1961

61118/Ti - V. I. Tatarski
Wave Propagation in a Turbulent Medium
McGraw-Hill Book Co., Inc., N.Y., 1961

61119/TB - R. A. Toupin & B. Bernstein
"Sound Waves in Deformed Perfectly Elastic Materials. Acoustoelastic Effect"
J.A.S.A., 33, 216, 225, 1961

61120/Ur - Eric E. Ungar
"Transmission of Plate Flexural Waves Through Reinforcing Beams; Dynamic Stress Concentrations"
J.A.S.A., 33, 633-639, 1961

61121/Wr - Leland A. Watermeier
"Experimental Study of Combustion Instability in Solid Rocket Propellants"
A. R. S. J., 31, 564-566, 1961

61122/Wl - Waloddi Weibull
Statistical Aspects of Acoustical Fatigue
WADC TR 59-676, 153-167, 1961

61123/WR - John R. Weske & Tom M. Rankin
Production of Secondary Vortices in the Field of a Primary Vortex
Univ. of Maryland, TN BN-244, AFOSR-623, 1961

61124/Wd - D. S. Whitehead
"The Vibration of Air in a Duct with a Subsonic Mean Flow"
Aero. Quart., 12, 34-40, 1961

61125/Wr - Francis M. Wiener
"Sound Propagation Over Ocean Waters in Fog"
J.A.S.A., 33, 1200-1205, 1961

61126/Ws - J. E. Ff. Williams
A Note on the Approximation in the Simple Source Theories of Aerodynamic Noise
ARC 22497, 1961

61127/Wh - William W. Willmarth
Statistical Properties of the Pressure Field in a Turbulent Boundary Layer
WADC TR 59-676, 109-127, 1961

61128/Wi - H. U. Wisniowski
"Radial Grids with Water Injection for Suppressing Noise of Jet Engines"
Can. Aero. J., 7, 25-32, 1961

61129/ZR - Joseph Zemanek, Jr. & Isadore Rudnick
"Attenuation and Dispersion of Elastic Waves in a Cylindrical Bar"
J.A.S.A., 33, 1283-1287, 1961

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3. Experimental techniques and methods.
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51016/Co											T					T		
51017/Dn							R											
51018/EC		E					E						E					
51019/FF																E		
51020/Fx												E				E		
51021/HL		E										E						
51022/HS												E				E		
51023/Hn																TE		
51024/Id														T				
51025/Kr		T																
51026/LE																T		
51027/LL							T											
51028/LM	R																	
51029/Mn																TE		
51030/Mn												E				E		
51031/Mr						R						R						
51032/Mn									T									
51034/Me				T	T													
51035/Np					ET													
51036/Pi						T	T											
51037/PE	ER																	
51038/PI	TE	TE					TE											
51039/RI									R									
51040/Rs									T				T					
51041/Rr												TE				TE		

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
51042/Sy		T			T													
51043/SE												TE				TE		
51044/St												TE				TE		
51045/Sd											T	T				T		
51046/Si							T											
51047/Wt						E												
51048/Wt						T												
51049/Wt																	T	
51050/Wn	TE					TE				TE								
51051/Yr										T		T				T		
52001/At													T					
52002/Ar	E										E					E		
52003/An						T												
52004/An								E										
52005/An	R								R									
52006/An													T					
52007/BL			E								E					E		
52008/Bh														T				
52009/Bh														T				
52011/Cn							E											
52012/Co											TE	TE				TE		
52013/Co											TE	TE				TE		
52014/Co											TE	TE				TE		
52015/Dn														T				
52016/EN																E		
52017/EG											E	E				E		
52018/Fi																R		
52019/Fy											T						T	
52020/FL							E											
52021/GP	E						E											
52022/Ht	E							E										
52023/Hs													E					
52024/Hd	R																	
52025/HL										E								
52026/Ih														T				
52027/Jr														T				

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
52028/Jr														T	T			
52029/KC																E		
52030/Ki						E										E		
52031/Ki					T							T						
52032/Ki					T											T		
52033/Ki					E	E						E						
52034/Lr							E									E		
52035/LH	E						E											
52036/LL			E				E											
52037/Le												E				E		
52038/LL										R		R				R		
52039/Ln	T						T											
52040/Ll	T						T											T
52041/LM	T																	
52042/Mm						T												
52043/MY						E												
52044/Mi	T						T											
52045/Nt																E		
52046/NH												TE				TE		
52048/NR																TE		
52049/NB					TE		TE					TE						
52050/Pi							T											
52052/Pi							T											
52053/Pn	T						T											
52054/Rt												E				E		
52055/RC	R																	
52056/BB							E											
52057/Rk														T				
52058/Sd												E				E		
52059/Sk												R				R		
52060/St												E				E		
52061/Tn			E								E	E				E		
52062/Tn											T							
52063/UC							T									T		
52064/VE								E				E				E		
52065/WL	TE						TE		TE									

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
52066/WM													T					
53001/AB							T											
53002/At														T				
53003/An						T												
53004/As				T	E	T												
53005/Al						TE												
53006/Al						T												
53007/Ae												E				E		
53008/Bs																TE		
53009/BH			E								E					E		
53010/BC											E					E		
53011/BS			E				E									E		
53012/Br												TE				TE		
53013/BR							E					E				E		
53014/Bt											E		E					
53015/Bt	R									R								
53016/BL	E												E					
53017/Cg											T					T		
53018/Cg											T					T		
53019/Cg											TE	TE				TE		
53019a/Cv														T				
53020/Cu																T	T	
53021/Co							T									T		
53022/CC											TE	TE				TE		
53023/CC											TE	TE				TE		
53024/GW	E						E	E										
53025/Ce						T												
53026/DM	R				R		R											
53027/Et														E				
53028/EO			E								E	E				E		
53029/Fz			E								E	E				E		
53030/GW										T								
53031/Gd	TE						TE											
53032/Ve	R																	
53033/Gf														T				
53034/Gd													R					

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
53035/Hy							R	R										
53036/Ht	E							E										
53037/Hr							T											
53038/HS												TE				TE		
53039/Hd	TR																	
53040/Hd										E								
53041/Id														R				
53042/Id														R				
53043/IL												T						
53044/Jr																	T	
53045/Kn												E				E		
53046/Ky							T											
53047/Kn							T							T				
53048/Kr	R				R					R								
53049/KT							T							T				
53050/Kl					TE											TE		
53051/LH	E						E											
53052/Le	E						E											
53053/LG			E								E					E		
53054/Ln	R							R										
53055/Lt	R																	
53056/LL											R					R		
53057/Ll	E		E													E		
53058/Ll							T						T	T				
53060/LW													R					
53061/Mc			E									E				E		
53062/Mn																TE		
53063/MS																TE		
53064/MD	E						E											
53065/Ml																E		
53066/Mm														T			T	
53067/ML		TE					TE											
53068/Ms				E	E													
53069/Mr														T				
53070/NR					T	T										TE		
53071/Ng																		

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
53072/Ng						T												
53073/Ng						TE	TE					TE						
53074/Pl						T												
53075/Pl	TE						TE											
53076/Pl	TE						TE						TE					
53077/Pl	TE											TE				TE		
53078/Pl	TE						TE											
53079/PD												TE				TE		
53080/PD												TE				TE		
53081/Rh																T		
53082/RH										TR								
53083/Rr													T				T	
53084/RM	TE						TE						TE					
53085/Rs	R						R											
53086/Rs	R						R											
53087/Rs	R						R											
53088/Rs	R						R											
53089/Rn						R	R											
53090/RS			E															
53091/Sh											T					T		
53092/SS											E	E				E		
53093/SN												E				E		
53094/Ti							T							T				
53095/TB											E	E				E		
53096/TM											E	E				E		
53097/Ti												TE				TE		
53098/TL												E				E		
53099/Ti				TE		TE										TE		
53100/Ty														T				
53101/Ui							T		T									
53102/UK			T															
53103/UM												E				E		
53104/Vn	E											E				E		
53105/Vn	E						E	E										
53106/Ws													E					
53107/Wn			E	E														
53108/Wt						T												

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
53109/Wt						T												
53110/Wi												E				E		
53111/Zs													T					
54001/An						T	T											
54002/An	R							R										
54003/By	E																	
54004/BN						E	E											
54005/Be						TE												TE
54006/Bn														T				
54007/Bs		T															T	
54008/Bs		T															T	
54009/CH	E						E	E										
54010/Cg											TE	TE				TE		
54011/Cg											TE	TE				TE		
54012/Cg											T					T		
54013/Cr													T	T				
54014/Cr													T	T				
54015/Cr							T											
54016/Cy	R																	
54017/Ce													E					
54018/Cd	R																	
54019/Cn														T				
54020/CK							T											
54021/Dn																	T	
54022/Dn														T				
54023/Dv													T					
54024/Dr						T							T					
54025/Fo																E		
54026/Gr											TE					TE		
54027/Gd	TE				TE													
54028/Gr				T	T													
54029/Gx	E						E	E										
54030/Gn											E					E		
54031/Gs							TE											
54032/HV											E	E				E		
54033/Hz						E												
54034/HJ				TE	TE													

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
54035/HL													E					
54036/HL							E	E										
54037/HR	R																	
54038/Hn																TE		
54039/Jr															T			
54040/JR															TE			
54041/Kn												TE				TE		
54042/KM												TE				TE		
54043/KH								E								E		
54044/LW												E				E		
54045/LH											E							
54046/LI	T						T											
54047/LI					T											T		
54048/Ly	R																	
54049/LT												E				E		
54050/Me											TE	TE				TE		
54051/MK			E									E				E		
54052/Ms														T				
54053/Ms				T											T			
54054/Mr			T															
54055/Me													T				T	
54056/MM												TE				TE		
54057/Mr											TE					TE		
54058/Mk							T											
54059/NC	E						E											
54060/Ng						TE	TE											
54061/OV																E		
54062/Oh					T							T				T		
54063/Pk							TE											
54064/PC							E											
54065/PI	TE				TE													
54066/PI	TE												TE					
54067/PI	R						R	R										
54068/PI							E	E										
54070/PI	TE																	
54071/PI	T				T													
54072/PD												TE				TE		

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
54073/PD												R				R		
54074/RC					TE	TE												
54075/Rr																	T	
54076/Rr	E						E						E				E	
54077/Rs	R						R											
54078/Rs												E				E		
54079/Ro							T											
54080/RD											R	R				R		
54081/RD											R	R				R		
54082/Sy											E	E				E		
54083/Sr												E				E		
54084/Sb												T				T		
54085/Ss	R								R									
54086/Si						T	T											
54087/Tn							T											
54088/Tn																E	E	
54089/Ui							T											
54090/Uk														E				E
54091/Vn		T										T				T		
54092/Ws	R																	
54093/Wn	R												R					
54094/Wx								TE										
54095/Wk										TE	TE					TE		
54096/Yg														T	T			
54097/Yg									T					T				
54098/Zs														T				
55001/An						T	T											
55002/An						T	T											
55003/An								R										
55004/By												E				E		
55005/BB											T					T		
55006/BM											E					E		
55007/BM											E					E		
55008/BC			E								E					E		
55009/Bn							E									E		
55010/Bp															T		T	
55011/BR							E					E				E		

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
55012/Bs												E						E
55013/Bn													T	T				
55014/CC								E										
55015/CS								R										
55016/Cr												T				T		
55017/CL	TR						TR											
55018/Cg								TE			TE					TE		
55019/Cg											TE					TE		
55020/Cu																T	T	
55021/Ck														E				
55022/CL					E													
55023/Cn		T																
55024/CG											E					E		
55025/Ce	T				T													
55026/DS													E					
55027/EW					E		E											
55028/FK	R																	
55029/FS										E								
55030/Fn									T					T				
55031/Fn	E						E											
55032/Gs			R															
55033/Gr											R					R		
55034/Gd	E				E	E												
55035/Ge			R						E									
55036/Gs									E							E		
55037/Gf		E	E															
55038/Gf			E															
55039/Gt		E																
55040/Gx	R						R											
55041/Gn											E					E		
55042/Gn			E								E					E		
55043/GL											E					E		
55044/Gd	R								R									
55045/HB												E				E		
55046/HL			E															
55047/Hs														E				
55048/HL				E											E			

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
55049/Hn								E										
55050/Hn														T				
55051/HR			E										E					
55052/Ht														T			T	
55053/Jr															T		T	
55054/KS	T							T										
55055/KN					TE											TE		
55056/Kn		T												T				
55057/Kn		T												T				
55058/Ke												E				E		
55059/Ki	E						E											
55060/Ky							T						T					
55062/Kn										E								
55063/Lt					TE						TE							
55064/Lt					TE						TE							
55065/LD		TE																TE
55066/Le					TE													
55067/LH	E						E											
55068/Le							E											
55069/LM																E		
55070/Lh				E							E					E		
55071/Li														E				
55072/Ln				T											T			
55073/LW																	T	
55074/LW																	T	
55076/Ln									TE						TE			
55077/Ln															T			
55078/Lv														T				
55079/Me										TE	TE					TE		
55080/MS																TE	TE	
55081/MS											TE					TE		
55082/MY														T	T			
55083/Mi	TE						TE											
55085/Mr	E						E											
55086/Me			E				E											
55087/Me	E						E											

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
55088/Mn							E											
55089/Cm											E	E				E		
55090/MP	R																	
55091/Ms												TE				TE		
55092/MM														E				
55093/MF															E		E	
55094/MW														TE				
55095/NA												TE				TE		
55095a/NT												TE				TE		
55096/Nh								E										
55097/Pi						TE												
55098/Pi			E				E											
55099/Pn												E				E		
55100/PS			R		R													
55101/PD											R	R				R		
55102/Ps						TE												
55104/Pl	T												T					
55105/Pl				R														
55106/PH			T		T													
55107/PD												TE				TE		
55108/PD												TE				TE		
55109/PD												TE		TE		TE		
55110/Ro													T					
55111/Ro													T					
55112/Rf												TE				TE		
55113/Rt												TE				TE		
55114/Rr	T						T						T					
55115/Rs										R								
55116/Rn	R								R									
55117/Rr			T															
55118/RT			T															
55119/RD											E	E				E		
55120/Sr					E		E											
55121/Sz			E															
55122/Sn			E										E					
55123/Sw			R						R									

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
55124/Sg			E															
55125/Sb							R											
55126/SE												TE				TE		
55127/SK	T						T											
55128/Si							T											
55129/Tt													R					
55130/To							E											
55132/Ts	TE				TE		TE											
55133/Tg																T	T	
55134/TN												E				E		
55135/TN												R				R		
55136/Tr								E										
55137/Tr	R		R				R	R										
55138/TP	TE						TE											
55139/TT								E										
55140/UK			E				E											
55141/VK										E								
55142/We														T				
55143/WL	R			R														
55144/Wk										TE	TE					TE		
55145/Wk										TE	TE					TE		
55146/WB														TE				
55147/WW													TE					
55148/YM															T			
55149/Yn	T							T										
56001/An						T	T											
56002/An						T												
56003/BM											E					E		
56004/BM											E					E		
56005/Bh																TE		
56006/BC			E				E					E				E		
56007/Br																TE	TE	
56008/Bv	T																	
56009/By							R		R									
56010/Bd										T								

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
56011/Bn													E					
56012/CC	E						E	E										
56013/Ch	TE						TE											
56014/Cn					E							E				E		
56015/Ct							TE											
56016/Cg											TE	TE				TE		
56017/Cu																T	T	
56018/Cu												T				T		
56019/Ch																T		
56020/CW		T																
56021/CK			T															
56022/CC		TE					TE											
56023/CL	T				T		T											
56024/CC											T	T				T		
56025/CG											TE	TE				TE		
56026/CG											E					E		
56027/Ce						T	T											
56028/Ce						T	T											
56029/Dh															TE			
56030/EK									E									
56031/EP											E	E				E		
56032/En															TE			
56033/EK				TE		TE												
56034/FS																		R
56035/Fn	TE						TE											
56036/Fn												T						
56037/FH				TR														
56038/Gd	TE						TE											
56039/Gt					T							T						
56040/GT				E											E			
56041/Gn											E					E		
56042/Gn											E					E		
56043/HH				R														
56044/Ht			E								E							
56045/Ht			E															
56046/HN			E															

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
56047/HR	TE					TE							TE					
56048/HM	E						E											
56049/HD			T															
56050/IB	T				T													
56051/Jn														T				
56052/KT				E											E			
56053/Kr		T	T															
56054/Kh					T													
56056/Kv							T											
56057/Kn					TE		TE											
56058/Ky	TE				TE													
56059/KB							E											
56060/LT														TE				TE
56061/Le							T										T	T
56062/LH				E											E			
56063/LH	E						E	E										
56064/Le							E											
56065/LS							E											
56066/Ln												TE				TE		
56067/Ln				TE														
56068/Ln				TE														
56069/LP											E					E		
56070/Li														TE				
56071/Li			E								E					E		
56072/Ln															E			
56073/Ln				T											T			
56074/Ln															TE			
56075/Lv														T				
56076/Mv												TE				TE		
56077/MY															TE			
56078/MS																E		
56079/MM																TE	TE	
56080/Mi	R						R		R		R	R		R		R		
56081/Mi												T				T		
56082/Mm			T											T				
56083/Mm			T											T				

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
56084/Mm			T											T				
56085/Mk												T				T		
56086/Me							E											
56087/MB					TE											TE		
56088/Ms					T													
56089/Ms					T													
56090/Ms					TE									TE				
56091/Ms					TE													
56092/Ms				TE														
56093/Ms					T										T			
56094/Ms					TE		TE											
56095/Ms															T			
56096/MA	E				E													
56097/Nh	E						E											
56098/Nh								E										
56099/Pr														T				
56100/PT											E	E				E		
56101/Pn			T				T											
56102/Ps	TE				TE													
56103/Ps					TE													
56105/Pa	E						E											
56106/Pl				R			R											
56107/PM							T											
56108/PC												TE		TE		TE		
56109/PD												TE				TE		
56110/PD												R				R		
56111/Ro													T					
56112/Ro													T					
56113/Rd												T			T			
56114/Rr	E				E													
56115/Rr					T		T											
56116/Rs	E						E			E								
56117/RE								T										
56118/RM												TE				TE		
56119/Rr													T					

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
56120/Rr													E					
56121/RB							E											
56122/RK					E		E											
56123/Sv									E							E		
56124/SC	R						R											
56126/So						E												
56127/Sn					E							E				E		
56128/Sx			E															
56129/Sr			E															
56130/Si														T			T	
56131/Se													T					
56132/St						T												
56133/TW				TE	TE													
56134/TM										TE	TE					TE		
56135/Ti												T				T		
56136/Tr														T		T	T	
56137/UH														E				
56138/Ve									R									
56139/Vt														T				
56140/WB	E		E				E											
56141/Wm													T					
56142/Wk										TE	TE					TE		
56143/Wn								R										
56144/Wy					E							E				E		
56145/Wt								E										
56146/Ym												T			T			
57001/An								T										
57002/An	TE						TE	TE										
57003/An	R																	
57004/An	E									E								
57005/An													T					
57006/BK					E		E											
57007/By												E				E		
57008/By												E				E		
57009/BB											E					E		
57010/Bn														T				

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
57011/Br			E	E														
57012/Bf							E											
57013/BH			R															
57014/BK	E									E								
57015/BC								E										
57016/BW												T						
57017/BK														T				
57018/Br																TE	TE	
57019/BR												E				E		
57020/Bv						E						E						
57021/BN					TE													TE
57022/BB	E		E				E											
57023/CC	E						E											
57024/Cl								E										
57025/Cg													T				T	
57026/Cn							T											
57027/Cv			T															
57028/Ci													T					
57029/CP											TE							
57030/CP	E																	
57031/Cn				E			E								E			
57032/Cn	R			R			R								R			
57033/CG	E										E							
57034/CG											E							
57035/CG	E						E	E										
57036/CN								E										
57037/CG											E	E				E		
57038/Ce						T												
57039/Ds	TE						TE											
57040/Dn					TE							TE						
57041/Dn					TE							TE						
57042/DI					TE							TE						
57043/Dh			T															
57044/Dh							E						E					
57045/De												ER				ER		
57046/FD	E							E										

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
57048/EF											TE					TE		
57049/En															T			
57050/EJ																	T	
57051/FF	T		T			T									T			
57052/FF				TE											TE			
57053/Fn	E						E											
57054/Fn				T											T			
57055/FH	E		E						E									
57056/Ge									R									
57057/Ge												T						
57058/Ha					T	T												
57059/HL							T											
57060/HV					T		T						T					
57061/Hn						E						E						
57062/Hs									R									
57063/Hn				T			T											
57064/Hs														T				
57065/HF				E			E								E			
57066/HI				E			E								E			
57067/HC	E						E											
57068/Hd	E					E												
57069/HH				E											E			
57070/HD			T															
57071/ID					TE							TE						
57073/IL														T				
57074/Ii													T					
57075/Jn							E	E										
57076/Jn													T					T
57077/KS				E														
57078/KG				E											E			
57079/Ke							T											
57079a/Ki	E						E											
57080/Kh													T					
57081/Kh													T	T				
57082/Ky		T											T					
57083/Kn	E				E													

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
57084/Kn										E								
57085/Kn										E								
57086/LA																T		
57087/Lb														T				
57088/Lr							E											
57089/LH				TE			TE								TE			
57090/LB							E											
57091/LS							E	E										
57092/LS							E											
57093/LS							E											
57094/Ls													R					
57095/Ls				E							E							
57096/Ln														T				
57097/MW														T				
57098/MS			T															
57099/Mr					E	E												
57100/Md				E														
57101/Mk												TE				TE		
57102/Mk												T				T		
57103/Mk												T				T		
57104/Mk												T				T		
57105/Me	E					E												
57106/Mn					T													
57107/Mn												TE				TE		
57108/MB												E				E		
57110/Ms														T				
57111/Ms				T														
57112/Ms					T		T											
57113/Ms				T											T			
57114/MB	R						R			R								
57115/Mb	E						E											
57117/Me	E						E											
57118/No							T											
57119/Nn				TE		TE												
57120/Ns						E												
57121/Or														T			T	

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
57122/Or														T			T	
57124/Ol							E											
57125/On											E	E				E		
57126/OZ											R	R				R		
57127/Pr														T				
57128/Ps																	T	T
57129/PD												E				E		
57130/PD																E		
57131/RR	T					T							T					
57132/Rl													TR					
57133/Rh																T		
57134/RH	R				R	R	R	R		R	R		R					
57135/Rd	R						R											
57136/RH	R		R															
57137/Rr														T				
57138/Rs	R																	
57139/Rs	R						R	R										
57140/Rs	R						R	R										
57141/RE								TE										
57142/Rt										T								
57143/RC			R	R														
57144/RS													E					
57145/Rr													E			E		
57145a/SL										E								
57146/Sn								E										
57147/Sa										TE		TE				TE		TE
57148/Sf			E										E					
57149/Ss				R			R								R			
57150/SJ				T														
57151/SB	R				R	R	R											
57152/SD												E				E		
57153/SS													T					
57154/Tn			T															
57155/Tn															T			
57156/TB				T														
57157/TH					TE													

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
57158/Tn													E					
57159/Ta						T												
57160/Ta											T	T				T		
57161/Ta											E	E				E		
57162/Ty														T				
57163/Uk														T			T	
57164/VE				T											T			
57165/Vr												TE				TE		
57167/We			E															
57168/Wt																	T	
57169/Wt	R																	
57170/Wt														T				
57171/Wt														T				
57172/WD	E						E	E										
57173/WM												T				T		
57174/Wm													T					
57175/WS	E						E											
57176/WS		E												E				
57177/We	E			E			E											
57178/We	E						E											
57179/Wd																T		
57180/Wd	E									E								
57181/YL						T												
57182/ZS			E			E												
58001/Aa																		E
58002/AN		T																
58003/AR					E							E				E		
58004/AR		E									E							
58005/An	E						E											
58006/An				E														
58007/AD							T											
58008/Bs											E	E				E		
58009/Br							E							E				
58010/Br												E				E		
58011/BS														T				
58012/BK			R	R														

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
58013/Bt									R									
58014/Bt														T				
58015/Bf							R											R
58016/Bn							T									T		
58018/Cn				T														
58019/Cl								E										
58020/CH																		TE
58021/Cl														TE			TE	
58022/CG															TE			
58023/Cv	T						T							T				
58024/Cv	R						R							R				
58025/CK																	T	
58026/CN							E	E										
58027/CG													E					
58028/CD																		R
58029/CM				TE											TE			
58030/CC								E										
58031/CM								E										
58032/Cl				TE														TE
58033/Cx															TE			
58034/CW											E					E		
58035/Cl								TR							TR			
58036/Co											R	R				R		
58037/CG											E	E				E		
58038/CG											TE	TE				TE		
58039/CA	R						R	R										
58040/Ce						T	T											
58041/Vo			E		E											E		
58042/Dr							T											
58043/Dr	TR										TR				TR			
58044/Dr									E									
58045/Dr	E				E													
58046/DF	E							E										
58047/Ed	R																	
58048/Ed			E				E											

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
58049/ER	R																	
58050/Es				R							R							
58051/Er									T									
58052/FP							TE											
58053/Fr											E	E				E		
58054/Fl																	T	
58055/Fn	R						R	R										
58056/FD							E											
58057/FK	ER	ER		ER			ER											
58058/FF							E											
58059/FF	E						E											
58060/FL													T					
58061/Fl							T											
58062/Fd													E					
58064/GM														T				
58065/Gn					E		E											
58066/Gn											E					E		
58067/Gn											E					E		
58068/Gn											E					E		
58069/GN											E					E		
58070/Gn													T					
58071/Hl			E										E					
58072/Hn	E		E		E													
58073/He																TE		
58074/Hn							E											
58075/Hn							E											
58076/Hn			E				E											
58077/HF			E	E														
58078/He													E					
58079/Hd	E																	
58081/Hm															E			
58082/HS														TE				
58083/HR										E								
58084/Hs	E						E							E				
58085/HF			E				E											
58086/IT								TE										

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
58087/Ih					T													
58088/Ig	R																	
58089/Ii					TE									TE				
58091/Jn					TE													
58092/JH											TE					TE		
58093/Js					E								E					
58094/JH										E								
58095/Jn																		TE
58096/JA								E										
58097/Jn																		E
58098/Kn			E	E														
58099/Kl														T				
58100/Ks														E				E
58101/Kd					E													
58102/Kr													E					
58103/Kn															E			
58104/KS												R				R		
58105/Kg															T			
58106/KG	R																	
58107/Kr			E		E													
58108/KS														TE		TE		
58109/Kl			E															
58110/Ko						T												
58111/KN	E						E											
58112/Kn										E								
58113/KV										E								
58114/Le	E		E															
58115/Ls																		T
58116/LL											E	E				E		
58117/Ly	TE						TE											
58118/LP																		E
58119/LH			E															
58120/Ld												E				E		
58121/Le													E					
58122/Ln															T			
58122a/Lt															E			

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
58123/Lv														T				
58124/Lv														T				
58125/MT	E																	
58126/My												E				E		
58127/Mo			E	E	E													
58128/Mk																	T	
58129/Mk													TE					
58130/Me							E	E										
58131/Me								E										
58132/Md				E			E											
58133/MF							T											
58134/Ml															E			
58135/Mk												T				T		
58137/MM							E							E				
58138/Mn												E				E		
58139/Ms						T												
58140/Mr															TE			
58141/MK						E										E		
58142/MK								E										
58143/Ml												T				T		
58144/Mw			T															
58145/Mw			T															
58146/MM							T											
58147/Mh					TE											TE		
58149/Mz			E				E											
58150/NA	E				E													
58151/Nh								E										
58152/Ng						T												
58153/Ng					TE													
58154/Or														T				
58155/Or														T				
58156/OW																T		
58157/OS											E	E				E		
58158/Oi				E											E			
58159/OA					T													
58161/Pn							T											

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
58162/Py					T													
58163/PL													T					
58164/Ps	T				T		T											
58165/Ps																	E	
58166/Ps																	TE	
58167/PC																	T	
58169/Pr					T													
58170/Pl															T			
58171/Pl	E						E											
58172/Pl															T			
58173/Pl										T								
58174/Pl					TE													
58175/Pl					T													
58176/Pl	TR				TR	TR	TR								TR			
58177/Pl							T											
58178/Pl	R						R	R										
58179/Pt															T			
58180/PS					T													
58181/Pe											R							
58182/PS											E	E					E	
58183/PN															T			
58184/Pn					T													
58185/Pm												E					E	
58186/Rr					T													
58187/Rr							T											
58188/Rr							T											
58189/Rr	R																	
58190/Rr							T											
58191/Rs	T						T											
58192/Rs														T				
58193/Rs								T										
58194/RM					E							E					E	
58195/Rn							TE											
58196/Rt						T												
58197/RS							T											
58198/Rk														T				

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
58199/Rk														T				
58200/SL												E				E		
58201/Ss					T		T											
58202/Se																		T
58203/SG											TE	TE				TE		
58204/Sw					T	T												
58205/Sd																	T	
58206/SV												E						
58207/Sk												T		T				
58208/Sk												T		T				
58209/Sh				E														
58210/SP												E				E		
58211/Sb								ER										
58212/Sn								E		E								
58213/Sg				T														
58214/St						T												
58215/Sv							T											
58216/TM																		T
58217/TB												TE				TE		
58218/Te								TE										
58219/TK						T												
58220/TS																		TE
58221/Tn	TE							TE										
58222/TS																	T	
58223/TE														T				
58224/Ts															T			
58225/Tn					TE													
58226/Tn																		T
58227/TC					T								T					
58228/Tn																		T
58229/Vn				TR							TR							
58230/Wn																		E
58231/Wn													E					
58232/Wn													T					
58233/We														E				
58234/WB	E						E											

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
58235/Ws											E	E				E		
58236/Wl							T											
58237/Wl																		E
58238/Ws		TE					TE											
58240/Wi								E										
58241/Wf							R			R								
58242/Yg													R					
58243/ZO												TE				TE		
59001/As								E										
59002/AW			E															
59003/AW			E															
59004/An								E										
59005/An								R										
59006/Ae														TE				
59007/Bn																	TE	
59008/Bt								E										
59009/BS																E		
59010/BV				E											E			
59011/Be												TE						
59012/BL							TE											
59013/Bh																	T	
59014/Be											E	E				E		
59016/Cn								R										
59017/CM	TE						TE											
59018/Cn													E					
59019/Cn													E					
59020/Cn													E					
59021/Cy															TE			
59022/Cn							E											
59023/Cg											E					E		
59024/Cg	TE						TE	TE										
59026/Cr													R					
59027/CW			E															
59028/CP	E							E										
59029/Cn				TE														
59030/Cn			T	T											T			

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
59031/Cn				R														
59032/Cs	E	E					E											
59033/Cs								TE										
59034/CC			E				E											
59035/CB															T			
59036/Ce								E										
59037/Cp															T			
59038/DL	R									R								
59039/DR			E										E					
59040/Dn																		T
59041/Dy												E				E		
59042/Dr							TE											
59043/Dr															T			
59044/ET															T			
59045/Er					TE													TE
59046/Ed	R								R									
59047/Es												TE				TE		
59048/EV			E	E														
59049/FM	E						E											
59050/Fy			T															
59051/FK			E													E		
59052/FK					E							E				E		
59053/Fy																	T	
59054/Fm												T						
59055/Fs													E					
59056/Fz	E						E											
59057/Fz																		E
59058/FK	ER		ER	ER														
59059/Gs																	T	
59060/Gs																	E	
59061/Ge					E		E											
59062/GK															TE			
59063/Ge	R														R			
59065/GH													TE					
59066/Gs						E						E				E		
59067/GB														T				
59068/Gk			R	R											R			

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
59069/Gx							E											
59070/GB								R										
59071/GN											TE	TE				TE		
59072/Gs																E		
59073/Gs						E												E
59074/Gn													T					
59075/Gn																	T	
59076/Hl					T		T											
59077/HB																TE		
59078/Ht	ER				ER		ER											
59079/HK														E				
59080/HC												TE				TE		
59081/HM											T					T	T	
59082/Hl			E				E											
59083/HH				E														
59084/Hn					E					E								
59085/Hs					E							E						
59086/Hn	E		E															
59087/HG					E	E												
59087a/HM					E	E										E		
59088/HM	R						R		R									
59089/Hd						T												T
59090/Hl							E	E										
59091/Hs	TE						TE											
59092/Hs	TE						TE											
59093/Hd	R								R									
59094/HM													TE					
59095/Hr										TE								
59096/Hl											TE					TE		
59098/Id		T															T	
59099/Id					T									T				
59100/Id								TE										
59101/IM	E						E											
59102/Ig	E									E								
59103/JN						E												
59104/JH																TE		
59105/Jn																	T	

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
59106/JT			T															
59107/Jn					E													
59108/JR																		E
59109/Jn													R					
59110/Jd	R							R										
59111/Ks	TE						TE											
59112/KK																	T	
59113/Kn																	T	
59114/KM						T							T	T				
59115/Kt			E															
59116/Kr													R					
59117/Kn															T			
59118/KT					T												T	
59119/Kk		E	E															
59120/Kg								R										
59121/Ky			E				E											
59122/Kr	E								E									
59123/Ki						T						T						
59124/Ki						E										E		
59125/KR						E												
59126/Kn										E								
59127/Ke														TE				
59128/KB														T			T	
59129/Kh					T													
59130/LW															T			
59131/LZ			E															
59132/Ll					T													
59133/Lr	E																	
59134/LR			E	E											E			
59135/LW	TE						TE											
59136/Ls							T											
59137/Ln																		E
59138/Ln																		E
59139/Ln																		E
59140/Ld	R								R									
59141/LC				E														

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
59142/Ld	R								R									
59143/Ld							T											
59144/LG							TE											
59145/LK					T													
59146/Ln							TE							TE				
59147/Ml								E										
59148/MC													R					
59149/Mh													E					
59150/MB												E				E		
59151/Ms											E							
59152/ML											E							
59153/Me					E					E								
59154/Md	E																	
59155/MF	TE						TE											
59156/Mr						E	E											
59157/Ml		T	T					T										
59158/MC							T	T										
59159/MS	TE						TE											
59160/Mn			E															
59161/Mn				E														
59161a/Mn				E														
59162/Mh					TE													
59163/Ml	TE						TE											
59164/MM						T	T							T				
59165/NG											E	E				E		
59166/NP							TE											
59167/Nm					E													
59168/NG														TE				
59169/NG						E												E
59170/OH										E								
59171/OA													T					
59172/On								E										
59173/Om													E					
59174/Ps														T				
59175/Ps														T				
59176/Ps		T												T				

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
59177/Pl			T												T			
59178/Pk												TE				TE		
59179/Pl	T				T	T												
59180/Pl							T						T				T	
59181/Pl	T						T	T										
59182/Pl	T						T											
59183/Pl	TR						TR											
59184/Pl													T					
59185/Pv																T		
59186/Pe											E	E				E		
59187/PS																R		
59188/RG	R			R	R										R			
59189/Rd													E					
59190/RH			E	E											E			
59191/Rn			E	E														
59192/Rd							TE											
59193/Rr	T						T											
59194/Rr	T					T							T					
59195/Rr					T													
59196/Rs	ER			ER														
59197/RW							TE											
59198/RP			E															
59199/Ro														E				
59200/Rn												TE				TE		
59201/Rn									E									
59202/Rt						T												
59203/So					E							E						
59204/Ss														T				
59205/Ss														T				
59206/SP															T			
59207/So						E												
59208/So						T	T											
59209/Sp				ER														
59210/Sp			E	E														
59211/Sz														E				
59212/SS			T						T									

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
59213/SS			T															
59214/Sk			E												E			
59215/Sn												TE				TE		
59216/Sr	E								E									
59217/Sr												E				E		
59218/Se					E							E				E		
59219/SS					TE													
59220/Sk					T							T						
59221/Sn	R		R						R									
59222/Sh											T	T				T		
59223/Sh							T											
59224/SP			E												E			
59225/Sv												TE				TE		
59226/SP												E				E		
59227/Sr												E				E		
59228/St					E							E				E		
59229/SH					E							E				E		
59230/SJ												TE				TE		
59231/SV														TE				
59232/Sg																R		
59233/Se			T												T			
59234/Sg													TE					
59235/Sd	E									E								
59236/SA							E	E										
59237/Sg			E															
59239/TS													TE					
59240/TL	E		E				E											
59241/Tr			E										E					
59242/TS	E								E	E								
59243/Tn		T							T									
59244/TK	E																	
59245/Tg												T				T		
59246/To							TE											
59247/TK							E	E										
59248/TS	TE							TE										
59249/UR															E			

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
59250/WA					TE											TE		
59251/Wn						T												
59252/WK			E															
59253/Wr							TE						TE					
59254/Wy	ER																	
59255/WC												E				E		
59256/Wd							E											
59257/WK														E				
59258/WS	E						E	E										
59259/Wh					T													
59261/Wd													T					
59262/Yg														T				
59263/Zv											T	T				T		
59264/ZA			E	E														
59265/ZO												T				T		
60001/An													TE				TE	
60002/AG			E							E								
60003/AH							E											
60004/Al												E		E				
60005/As															T			
60006/As											TE					TE		
60007/An													TE					
60008/An	R																	
60009/An	E						E		E									
60010/Ah																	T	
60011/Ah							R											
60012/Ay															E			
60013/Br			E								E	E				E		
60014/Bi			E			E												
60015/Bz						E										E		
60016/BB														E				
60017/Bn						E												E
60018/Bk	TR	TR		TR			TR	TR										
60019/Bx								ER										
60020/Br																	T	
60021/Bn				R														

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
60022/BH											E	E				E		
60023/Bn														E		E		
60024/Bl											E	E				E		
60025/Be						E												
60026/BG					E		E											
60027/Bh														T				
60028/BD													E					
60029/BB														T				
60030/Bo			E									E						
60031/BM											E	E				E		
60032/Bl			E		E													
60033/BK														E				
60034/BA														TR				
60035/Cn													TE					
60036/CM			E				E											
60037/Cy																		T
60038/Cd					TE		TE											
60039/Cg											TE					TE		
60040/Cv														T				
60041/Cm			E				E											
60043/CS																T		
60044/CT													E					
60045/CF				E														
60046/CE						T	T											
60047/CN			E				E											
60048/CE								E			E							
60049/CS							E											
60050/Cs			E										E					
60051/CD	E																	
60052/CB					E													
60053/CC							E											
60054/CG											TE	TE				TE		
60055/CD										E								
60056/CP											E					E		
60057/Ce	R						R											

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
60058/Ch			R				R											
60059/Ds																	T	
60060/Dn														T				
60061/Dk														T				
60062/DF	R			R	R		R				R							
60063/EW														E				
60064/ES							T											
60065/ET														T				
60066/Ee						E						E				E		
60067/Es																E		
60068/Et			E				E											
60069/FK					TE											TE		
60070/FH			E															
60071/FM							TE							TE				
60072/Fy			E	E														
60073/Fn															T			
60074/Fn	R						R	R										
60075/FB					R		R					R						
60076/FF							E											
60077/Fr													TR					
60078/FS	T																	
60079/FS													T	T				
60080/Fm													T					
60081/FM															TE			
60082/GM														E				E
60083/Gt														T				
60084/Gs													TE					
60085/GH													E					
60086/GB															E			
60087/GY															T			
60088/GR				R											R			
60089/GR				R											R			
60090/GR					TE										TE			
60091/Gb														T				
60092/GB				TE											TE			

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
60093/Gt	R		R		R						R							
60094/Gx	E							E	E									
60095/Gx	TE							TE										
60096/Ge												E			E			
60097/Gl	R						R											
60099/GD										E								
60100/Gn													T					
60101/Gn																T		
60102/GT														E				E
60103/HB						TE												
60104/Ho										E								
60105/Ht	E						E											
60106/He																	T	
60107/He						E						E				E		
60108/HB											TE					TE		
60109/He			E											E				
60110/HF			R															
60111/HM	E																	
60112/Hn	R																	
60113/Ho													T					
60114/Hd			E										E					
60115/Hn																T		
60116/HG			E		E							E						
60117/HS					E	E										E		
60118/Hi													E					
60119/HL							E	E										
60120/Hs							TE											
60121/Hs							E											
60122/HP																		T
60123/HP																		TE
60124/HC															E			
60125/HM										E								
60127/IA		E						E										
60128/Id								T										
60129/IO														E				

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60130/Jn			E			E												
60131/JN			E			E												
60132/JJ					T	E						TE				TE		
60133/JP					T	E						TE				TE		
60134/Js		E																
60135/Js			T															
60136/Jh	R		R															
60137/Jl										E								
60138/JH			E								E					E		
60139/JJ					E													
60140/KN															E			
60141/KA			E	E														
60142/Ks				E											E			
60143/KS							T											
60144/KJ												ER				ER		
60145/Kn																	E	E
60146/Kn																	E	E
60147/Kn																	E	E
60148/Kr	R						R	R										
60149/Kh													T	T				
60150/Kl					TR													
60151/KS					E		E											
60152/KS					E		E											
60153/Ki								E										
60154/KT				E											E			
60155/Ko															T			
60156/Ki						T						T						
60157/Ki						T										T		
60158/LR					T													
60159/LT				T											T			
60160/LK											E					E		
60161/Lg													T					
60162/Le							E	E										
60163/LL					T													
60164/LS													T					
60165/LM													E					
60166/Le														T				

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
60167/Ld		T																
60168/LC															E			
60169/Ly																	T	
60170/Ln													E					
60171/Ln														T				
60172/Ln															T			
60173/Me														T			T	
60174/Me														TE			TE	
60175/MT	E						E											
60176/MS	T																	
60177/Mk			T														T	
60178/ML															T			
60179/Ml													T	T				
60180/MR													E		E			
60181/MH											E	E				E		
60182/MH											E	E				E		
60183/MH											T	T				T		
60184/Mn					E													
60185/Mn			E															
60186/Md															T			
60187/Md				E											E			
60188/Ms						TE												
60189/MD					E													E
60190/MH														T				
60192/Mz			T															
60193/MT							TE						TE					
60194/Mn	R		R		R													
60195/MN	TE						TE											
60196/MG																	T	
60197/Ms													E					
60198/Mw	R			R											R			
60200/MA					E		E											
60201/Mn					T		T				T							
60202/Na							T											
60203/NS				E														
60204/Ng						R												
60205/OA														E				

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
60206/Oe																	T	T
60207/On			E	E						E								
60208/On												T			T			
60209/Or															T			
60210/On			E													E		
60211/Oe													T					
60212/Pg			E															
60213/Ps													T					
60214/Ps													T					
60215/Ps													T					
60216/Ps														T			T	
60217/Pt	R								R									
60218/Py				E										E				
60219/Pn			T															
60220/Pn																	R	
60221/Pn													R					
60222/Pn	R																	
60223/Pe		R																
60224/Ps	T						T											
60225/Pv							E											
60226/Pn															T			
60227/Pl	T						T											
60228/Pl	T				T													
60229/Pl														T				
60230/Pl	R																	
60231/Pl														T			T	
60232/Pl														T				
60233/Pe											TE	TE				TE		
60234/Pe											TE	TE				TE		
60235/Pe											R					R		
60236/Re														T				
60237/RM					T	T												
60238/RB											E	E				E		
60239/Rz														E				
60240/RA			E									E				E		
60241/Rr	T						T											
60242/Rr	T						T							T				

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
60243/RB	R				R													
60244/Rh						R	R										R	
60245/Ro					E													
60246/Rn											TE					TE		
60247/RR													T				T	
60248/Rr						E												
60249/Rr					TE													
60250/Rr													E					
60251/Rl													TE					
60252/RY													TE					
60253/RY													TE					
60254/SH											TE		TE					
60255/Sr																		E
60256/So					TE													
60258/Sr								E										
60259/St							E											
60260/St			E					E										
60261/Sd									E									
60262/Ss														TE				
60263/So											TE					TE		
60264/SM										T	T					T		
60265/SS							E											
60266/Sr										E								
60267/Ss														T				
60268/Sk			E															
60269/SH					E													E
60270/Sh										T	T					T		
60271/Sh													TE					
60272/SL			T						T									
60273/SL								TE						TE				
60274/St															E			
60275/SH					E													
60276/SG										E								
60277/Sl			E							E	E					E		
60278/Sy														T				
60279/Sy	R						R	R										
60280/Ss																R		

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
60280/Ss																R		
60281/Sd	E		E							E								
60282/SK												E				E		
60283/Ss								E										
60284/SM								E			E							
60285/Ti						E						E				E		
60286/TB			T															
60287/Tl				TR														
60288/Tn												T						
60289/To					T		T											
60290/To							E											
60291/To							E											
60292/TF							E											
60293/TJ															T			
60294/TL				TE														
60295/Ur													T		T			
60296/Ud	E				E	E					E							
60297/Uk														E				E
60298/Ul														T				
60299/VS						E	E											E
60300/VL					E													
60301/Wl											R	R				R		
60302/WG								E										
60303/Wt						T										T		
60304/Wy	E				E													
60306/Ws	TE				TE													
60307/Wd			E															
60308/Wd				E														
60309/Wr															TE			
60310/WM											TE	TE						
60311/Ws			E	E														
60312/Ws							T											
60313/Ws	T						T											
60314/Wn					TE													
60315/WB							E											
60316/Wn	E				E		E											

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
60317/Wn																		E
60318/We												E						
60319/Wi	E							E										
60320/Wy							E											
60321/Wu							E											
60322/Yo			T															T
60323/YM														T				
60324/ZH					TE								TE					
60325/Zk					TR													
60326/ZW			E															
60327/ZO												E				E		
61001/Ae														T				
61002/An	R																	
61003/Bs					E		E											
61004/Br			T												T			
61005/BF															TE			
61006/Bs														T				
61007/Fn		T					T			T								
61008/BL				TR											TR			
61009/BN					TE													
61010/BL					E		E											
61011/BB													E	E				E
61012/BC			E															
61013/Ct														T				
61014/Cn													E					
61015/Cg	T						T											
61016/Cn				T			T											
61017/Cn			E												E			
61018/CF				E											E			
61019/CF				E			E								E			
61020/CM							E	E										
61021/CY															T			
61022/CS																		TE
61023/CB															T			
61024/Dn														T				
61025/Dn																		

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
61026/Dn																		TE
61027/DY						T	T											
61028/DB	E				E													
61029/Dd											E							
61030/Dr	R								R									
61031/Ed					E		E											
61032/Ed							T											
61033/Fy			R	R											R			
61034/Fn					T		T											
61035/Fn																TE	TE	
61036/FF							E											
61037/Ge				R	R		R				R							
61038/Ge															E			
61039/He														E				E
61040/Hh	R													R				
61041/Hn		E				E												
61042/Ht							TE											
61043/He			E								E	E	E			E		
61044/Hr	E						E											
61045/HS															T			
61046/Hs	E		E				E											
61047/Hd				R											R			
61048/JT			T															
61049/Js						R												
61050/Jn							E											E
61051/Jn							E											E
61052/KT														T				
61053/Kr																		E
61054/KL															T			
61055/Kn														T				
61056/Lb															T			
61057/Lg													T					
61058/Lr	TE				TE													
61059/Ln															R			
61060/Le							E											
61061/Le	TE						TE	TE										
61062/LS														T				T

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
61063/Lr														T				
61064/Ln												E				E		
61064a/Lr					T	T												
61065/Lg						T												
61066/Lv														T				
61067/Ln				T											T			
61068/Ln												T			T			
61069/LH												T			T			
61070/MH	R						R											
61071/MH													E					
61072/Mh	E				E		E											
61073/Mh														T				
61074/MS														T				T
61075/ME							E											
61076/Me										E		E				E		
61077/Md				R											R			
61078/Mr															T		T	
61079/Ml															R			
61080/Ms														T				
61081/Mn							T											
61082/Mr			T												T			
61083/MS							TE											
61084/OB										TE		TE				TE		
61085/PE	E		E															
61086/Pn																		TE
61087/Pe						E												
61088/Pl						T												
61089/Pl					TE													
61090/PM												E				E		
61091/PM										T		T				T		
61092/Rd													E	E				
61093/Rs				R														
61094/Rn										TR		TR				TR		
61095/Rn										E				E				
61096/Rn								E										
61097/RS					E		E											
61098/Rr																	T	

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
61099/RY													TE					
61100/Rg													T					
61101/Se														R				
61102/SR														TE				
61103/Sa												E				E		
61104/Sa																TE		
61105/Sp				T											T			
61106/St														TE				
61107/Sr														E				
61108/SB													R	R				
61109/Sk	E				E		E											
61111/Sh	ER						ER					ER				ER		
61112/Sn															TE			
61113/SL				T											T			
61115/Ss					E													

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
61116/TS					E		E											
61117/TS															T			
61118/Ti							T										T	
61119/TB																	T	
61120/Ur															T		T	
61121/Wr											E	E				E		
61122/Wl				T														
61123/WR						E												
61124/Wd							TE					TE						
61125/Wr														E				
61126/Ws	T																	
61127/Wh					T													
61128/Wi								E										
61129/ZR															TE		TE	

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