

# Corson, Blake W., Jr., Papers

Blake W. Corson, Jr., Papers  
1861-1984



## Title Statement

Corson, Blake W., Jr., Papers Blake W. Corson, Jr., Papers 1861-1984 (Bulk, 1934-1979) Ms.1990.055

**Author:** Kaitlyn Britt, Student Assistant, and Kira A. Dietz, Archivist

## Publication Statement

**Publisher:** Special Collections and University Archives, Virginia Tech

Special Collections and University Archives, University Libraries (0434)  
560 Drillfield Drive  
Newman Library, Virginia Tech  
Blacksburg, Virginia 24061  
Business Number: 540-231-6308  
specref@vt.edu  
URL: <http://spec.lib.vt.edu>



2016 (CC0 1.0)

## Profile Description

**Creation:** This finding aid was produced using ArchivesSpace on 2024-11-20 07:14:12 -0500.

**Language Usage:** Description is written in: English, Latin script.

**Descriptive Rules:** Describing Archives: A Content Standard

## Descriptive Summary

### Unit ID

Ms.1990.055

### Unit Date

1861-1984

### Unit Date

1934-1979

### Language

The materials in the collection are in English.

### Abstract

The Blake W. Corson, Jr., Papers are comprised of professional and personal files, correspondence, and published materials from 1861-1984 (bulk, 1934-1979), primarily relating to Corson's (1908-1991) career as an engineer at NASA Langley.

### Creator

Corson, Blake W., Jr. (Blake Wilson), 1908-1991

### Extent

17.7 Cubic Feet 9 boxes; 17 oversize folders

### Physical Location

**Please note:** The majority collection is in off-site storage and requires 2-3 days notice for retrieval. Please contact Special Collections and University Archives for more information.

### Repository

Special Collections and University Archives, Virginia Tech

## Administrative Information

### Conditions Governing Access

The collection is open for research.

### Conditions Governing Reproduction and Use

The copyright status of this collection is unknown. Copyright restrictions may apply. Contact Special Collections and University Archives for assistance in determining the use of these materials.

Reproduction or digitization of materials for personal or research use can be requested using our reproduction/digitization form: <http://bit.ly/scuareproduction>. Reproduction or digitization of materials for publication or exhibit use can be requested using our publication/exhibition form: <http://bit.ly/scuapublication>. Please contact Special Collections and University Archives ([specref@vt.edu](mailto:specref@vt.edu) or 540-231-6308) if you need assistance with forms or to submit a completed form.

### Source of Acquisition

The Blake W. Corson, Jr., Papers were donated to Special Collections and University Archives in 1990.

### Preferred Citation

Researchers wishing to cite this collection should include the following information: [identification of item], [box], [folder], Blake W. Corson, Jr., Papers, Ms1990-055, Special Collections and University Archives, Virginia Tech, Blacksburg, Va.

## Biographical Note

### Family History

Blake Wilson Corson, Sr., was born in Cumberland Virginia in 1874. Wilson Corson had five sisters. Corson attended Virginia Polytechnic Institute in 1895. Corson married Anne Mason "Annie" White on April 23, 1907.

Blake Wilson Corson, Jr., was born to Blake Wilson Corson, Sr. (1874-1962) and Anne Mason Corson (1874-1968) on October 1, 1908, in Henrico, Virginia. Corson had two younger sisters Judith Parker (born July 20, 1911) and Georgina White (born June 26, 1915). Blake W. Corson, Jr., married Shirley Huxter (1921-2014) on December 6, 1947. They had one daughter.

Corson, Sr., died in 1962, and Anne Corson died in 1968. They were buried together at Grace Episcopal Church.

Blake W. Corson, Jr., died at 83 on December 23, 1991. He was survived by his wife and daughter. Corson was buried in Peninsula Memorial Park Newport News. Shirley Corson died in 2014 at the age of 93.

## Education and Work

Blake W. Corson, Jr., graduated from John Marshall High School. Corson, Jr., attended the University of Richmond and earned a B.S. in Mathematics and Physics in 1932. In 1935 Corson, Jr., began working with the National Advisory Committee for Aeronautics and the National Aeronautical and Space Association. Corson, Jr., retired in 1972.

## Patents

- Cascade Plug Nozzle, Filed :1974, 07, 12, Publication: 1976, 02, 17
- Nozzle: Filed: 1960, 05, 23; Publication: 1961,12,12

## Publications

- "The Aerodynamics of a Wind Tunnel Fan." NASA. 1941.
- "Model Tests of a Wing-Duct System for Auxiliary Air Supply." NASA. 1941.
- "The Belt Method for Measuring Pressure Distribution." NASA. 1943.
- "Cooling Characteristics of a Pratt and Whitney R-2800 Engine Installed in an NACA Short-nose High-inlet-velocity Cowling." NASA. 1944.
- "Analysis of Propeller Efficiency Losses Associated with Heated-air Thermal De-icing." NASA. 1946.
- "The Effect of Simulated Icing on Propeller Performance." NASA. 1946.
- "Investigation of the Effect of a Tip Modification and Thermal De-icing Air Flow on Propeller Performance." NASA. 1946.
- "A Review Of Propeller Theory" NASA. 1948.
- "The Langley 2,000 Horsepower propeller Dynamometer and Tests at High Speed of an NACA 10-(3)(08)-03 Two Blade Propeller". NASA. 1952.
- "Static Thrust of an Annular Nozzle with a Concave Central Base." NASA. 1960.
- "Transonic Thrust and Drag Characteristics of an Annular Nozzle Having a Semitoroidal Concave Plug." NASA. 1964.
- "Summary of Research on Jet Exit Installations." NASA. 1966.
- "Calibration of the Langley 16-Foot Transonic Tunnel with Test Section Air Removal." NASA. 1974.

## Sources:

- "Black Wilson Corson Jr." obituary, *Daily Press* (Newport News, Va.), Dec. 25, 1991, p. A16, available online from Newsbank at [https://infoweb-newsbank-com.ezproxy.lib.vt.edu/apps/news/openurl?ctx\\_ver=z39.88-2004&rft\\_id=info%3Aid/infoweb.newsbank.com&svc\\_dat=AWNB&req\\_dat=0D13EB2D702F7E0A&rft\\_val\\_format=info%3Aofi/fmt%3Akev%3Amtx%3Actx&rft\\_dat=document](https://infoweb-newsbank-com.ezproxy.lib.vt.edu/apps/news/openurl?ctx_ver=z39.88-2004&rft_id=info%3Aid/infoweb.newsbank.com&svc_dat=AWNB&req_dat=0D13EB2D702F7E0A&rft_val_format=info%3Aofi/fmt%3Akev%3Amtx%3Actx&rft_dat=document)
- "Blake Wilson Corson Sr." entry, Findagrave.com, <https://www.findagrave.com/memorial/5313978/blake-wilson-corson>
- "Blake Wilson Corson Jr." entry, Findagrave.com, <https://www.findagrave.com/memorial/83447647/blake-wilson-corson>
- Ancestry.com Library Edition

## Scope and Content

The Blake W. Corson, Jr., Papers are comprised of professional and personal files, correspondence, and published materials from 1861-1984 (bulk, 1934-1979), primarily relating to his career as an engineer at NASA Langley. Topics include aerodynamic performance of aircraft propellers and manned aircraft; wind tunnel fans, jet noise suppression, and tunnel calibration. This collection is organized into five series by material type.

## Keywords

Aeronautical engineers  
Archives of American Aerospace Exploration (AAAE)  
Blueprints (reprographic copies)  
Correspondence  
Engineering Drawings  
Memorandums  
Physics  
Physicists  
Science and Technology  
United States -- National Advisory Committee for Aeronautics -- Officials and employees  
United States -- National Aeronautics and Space Administration -- Officials and employees  
Becker, John V. (John Vernon), 1913-2020 -- Correspondence  
Bierman, David -- Correspondence  
United States. National Advisory Committee for Aeronautics  
United States. National Aeronautics and Space Administration

## Rights Statement for Archival Description

The guide to the Blake W. Corson, Jr., Papers by Special Collections and University Archives, Virginia Tech, is licensed under a CC0 (<https://creativecommons.org/share-your-work/public-domain/cc0/>).

## Arrangement

This collection is organized into five series by material type.

**Series I: Personal Papers, 1861-1865, 1962-1966, n.d.** includes Corson's resume, personal photographs, and materials relating to the Corson family history, genealogy, and copies of family correspondence. This series is arranged by material type.

**Series II: Personal Projects, 1941-1979, n.d.** consists of research, subject files, patent forms, and extensive notes on a variety of research projects conducted by Corson outside of his work for Langley. The majority of this series surrounds two projects: "Toward Energy Independence" and Corson's interest in environmental clean up in the Newport News area. This series is arranged by project/topic.

**Series III: Correspondence/Memorandum, 1938-1978, n.d.** contains letters to and from a variety of scientists, researchers, community members, government employees, and some corporations and agencies. In addition, there are extensive memos written reporting on projects of which Corson was a part. There is a list of major correspondents below. This series is in chronological order.

Major correspondents in this collection include:

- A.W. Vogley
- Abe Silverstien
- Acoustics Division (Position Transfer)
- Admiral Ralph W. Cousins (Cleaning Up Newport News)
- Anita Cavagnara Associate Director (Cooperation and Research with Boeing)
- Bill Greathouse Booth (High Speed Tunnel)
- Chief Of Aerodynamics (High Speed Tunnel Reports)
- Chief of Compressibility Research (16ft High Speed Tunnel Rotating Seal)
- Chief of Compressibility Research (Project Z)
- Chief of Research (Mechanical Sink)
- Chief of Research (Propeller Projects and Papers)
- Chief of Research (Thermal Deicing Propeller and Jet Driven Propeller)
- Clyde Lumpkin Construction Office, John D.R. Zeno (ASME Talk on Propeller Theory)
- David Biermann (Moffett Field/Langley Field Fans, R-2800 Engine)
- Director John R. Erwin (Shadow Graph Wing Shock)
- Donald D. Amos (Oscillating Orifice Pump)
- Donald D. Baals
- Dr. Adolph Busemann
- Dr. Clinton C. Kemp E. Boxer (Compressor Noise Reduction)
- E. J. Manganillo E. Johnson (Moffett Field Fans)
- Edgar M. Cartright Energy Research and Development Administration Engineer in Charge (High Speed Tunnel)
- Engineer in Charge (Servo Control) FAECT-- PAC Committee of Chapter 15
- Frank Smiley (Newport News City Manager)
- G.W. Lewis

- George R. Kinney
- H. J. E. Reid
- H.B. Edwards (16 foot Wind Tunnel Fan Blades)
- Hamilton Standard Division
- Harleth G. Wiley (Research and Technology Resume Numbering System)
- Harry E. Shanner
- Henry Balfour
- Howard J. Osborn; Office of Patent Council LRC (Mutiple Cell Toridal Vortex Tube)
- Hugh L. Dryden (University Conference on Aerodynamics)
- J. G. McHugh
- J.M. Carson, Jr. (Office Patent Council)
- J.O. Tresansky (Office Patent Council)
- J.W. Crowley
- James B. Delanor
- John L. Crigler
- John N. Randolph (Patent, Improved Type of Crate for Bottled Beverages)
- John V. Becker (Moffett Field Tunnel Fans)
- Keffer (Langley Field Rear Propeller)
- L. R. Quarles (Blade Elements)
- Lawrence K. Loftin, Jr. (McDonnell Douglas Review)
- Leland B. Salters, Jr.
- Lindsey I . Turner (Oscillating Orifice Pump)
- Lowell Hasel
- Manned Spacecraft Center
- Mark R. Nichols (VTOL, FSRD)
- Mason (16 ft Wind Tunnel Study and Alteration)
- Mason (Gust Tunnel)
- Messick (Langley Field Rear Fan)
- Michael A. Chaszeyka (McDonnell Douglas Review)
- Mr. DeFraue (Two Dimensional Pressure Tunnel)
- Mr.Wood (Free-Flight Tunnel)
- NACA/LMAL Travel Permission
- Norman Silvers
- P.W. Mangen (Hotel New Yorker)
- Paul Taynton (Texaco; Hydrazine in Fuel)
- Peninsula Planning District Commission (Cleaning Up Newport News)
- Planning Office of the Technical Service Division
- President Jimmy Carter (Energy Crisis)
- R.C. Platt
- R.J. Landberg (McDonnell Douglas Review)
- Ray W. Hooker (Gust Tunnel)
- Ribner
- Richard O. Carden
- Robert R. Gilruth
- S. Walter Hixton Jr. (Management Training)
- State Corporation Commission
- Sylvia Thomas (S.A.E.)
- Tab Smith (York County Board of Supervisors)
- Travel Request and Authorization U.S. Office of Patents (Purox System)
- Union Carbide Corporation (Cleaning up Newport News/ Towards Energy Independence)
- William A. Harding
- William A. Scheller

**Series IV: Professional Projects, 1937-1984, n.d.** includes a small group of outlines and reports. This series primarily consist of five subseries, organized by topic/project, consisting of a variety of formats from Corson's work as an Aerospace Engineer with NASA.

Subseries A: Research Tunnels includes papers and research relating to a variety of tunnels on which Corson worked (other than the 16 foot Transonic Tunnel (which is its own subseries below).

Subseries B: Propellers and Propeller Research includes notes, graphs, calculations, and subject files on propellers and fan designs.

Subseries C: Nozzles and Nozzle Research includes reports, notes, figures, proposals, and designs for nozzles.

Subseries D: Research Projects contains drawings, calculations, notes, and subject files on topics relating to aspects of flight and engineering, especially certain parts or processes.

Subseries E: 16 Foot Transonic Tunnel and Research includes extensive notes, photographs, calculations, notes, and reports on one of Corson's major projects and research topics. Materials in these series, subseries, and sub-subseries are organized by topic/subject.

Major projects in this series include:

- 19 Foot Pressure Tunnel
- 20 Spin Tunnel
- AERL Ice Tunnel
- Air Breathing Propulsions Systems
- Annular Nozzle with a Concave Central base
- Annular Nozzle with a Semi Toridal Base
- Carderock Wind Tunnel
- Cascade Plug Nozzle
- Convergent Divergent Nozzle
- Exhaust Nozzle and Jet Nozzle Performance
- High Speed Tunnel
- Jet Interference Program
- McDonnell Douglas Review
- Moffett Field
- Perforated Diffuser Nozzle Bifurcated Rotary Joint
- Propeller Research Tunnel
- Stability Tunnel
- Swept Wing
- Transonic Tunnel
- Two Dimensional Pressure Tunnel

**Series V: Publications, Journals, and Reports, 1934-1982** contains published works by Corson or collected by him for research purposes. The majority are directly related to projects on which Corson worked. This series includes six subseries, organized by type of publication (Publications, Reports, Papers, Journals, Articles, and Pamphlets, Brochures, and Directories). Materials in each subseries are organized alphabetically by title.

## Description of Subordinate Components

### Series I: Personal Papers

**Unit Date** 1861-1865, 1962-1966, n.d.

**Keywords**

Civil War  
Family histories

**Resume**

**Unit Date** n.d.

**box-folder** 1 (box)

**Container** 1 (folder)

**Photographs--Corson****Unit Date** 1962-1966, n.d.**box-folder** 1 (box)**Container** 2 (folder)**Subseries A: Family History and Letter Copies****"My Dear Jennie"--Author: William Clark Corson; Editor: Blake W. Corson, Jr.****Unit Date** 1861-1865**box-folder** 1 (box)**Container** 3 (folder)**"My Dear Jennie"--1861 Letters; Correspondence-- William Clark Corson, Jennie****Unit Date** 1861, n.d.**box-folder** 1 (box)**Container** 4 (folder)**"My Dear Jennie"--1862 Letters; Correspondence-- William Clark Corson, Jennie****Unit Date** 1862, n.d.**box-folder** 1 (box)**Container** 5 (folder)**"My Dear Jennie"--1863 Letters; Correspondence-- William Clark Corson, Jennie****Unit Date** 1863, n.d.**box-folder** 1 (box)**Container** 6 (folder)**"My Dear Jennie"--1864 Letters; Correspondence-- William Clark Corson, Jennie****Unit Date** 1864, n.d.**box-folder** 1 (box)**Container** 7 (folder)**"My Dear Jennie"--1865 Letters; Correspondence-- William Clark Corson, Jennie; Closing Quote****Unit Date** 1865, n.d.**box-folder** 1 (box)**Container** 8 (folder)**Series II: Personal Projects****Unit Date** 1941-1979, n.d.**Keywords**

Aeronautics

Aerospace engineers

Photographs

Airplanes

**VT Bomb Fuse****Unit Date** n.d.**box-folder** 1 (box)**Container** 9 (folder)**Practice Problems--Least of Squares****Unit Date** 1941**box-folder** 1 (box)**Container** 10 (folder)**Proposal Outlining the Feasibility of Humans in Space --Notes/Data****Unit Date** 1946, n.d.**box-folder** 1 (box)**Container** 11 (folder)**Patent Forms--NAVEXOS****Unit Date** 1951, n.d.**box-folder** 1 (box)**Container** 12 (folder)**Subseries A: Towards Energy Independence****box** 1**folder** 1 (oversize)**Scope and Contents**

Materials from this sub-series are in Box 1 (folders listed below) and in oversize Folder 1.

**"Towards Energy Independence"-- Research****Unit Date** 1974-1976**box-folder** 1 (box)**Container** 13 (folder)**"Towards Energy Independence"--Research Notes****Unit Date** 1975**box-folder** 1 (box)**Container** 14 (folder)

**Inter Technology Corporation--"The Enerfy Plantation" (Cr. Clinton C. Kemp)**

**Unit Date** 1975

**box-folder** 1 (box)

**Container** 15 (folder)

**Professional Engineer--"Energy from Municipal Refuse a Comparison of 10 Processes"**

**Unit Date** ca. 1976

**box-folder** 1 (box)

**Container** 16 (folder)

**U.S. News and World Report--Issue February 14 1977; pg 23-26, 63-66**

**Unit Date** 1977

**box-folder** 1 (box)

**Container** 17 (folder)

**"Towards Energy Independence"--Notes/Proposal Draft**

**Unit Date** 1977, n.d.

**box-folder** 1 (box)

**Container** 18 (folder)

**"Towards Energy Independence"--Proposal Draft**

**Unit Date** 1977

**box-folder** 1 (box)

**Container** 19 (folder)

**"Towards Energy Independence"--Proposal Final**

**Unit Date** 1977

**box-folder** 1 (box)

**Container** 20 (folder)

**"Towards Energy Independence"**

**Unit Date** 1977

**box-folder** 1 (box)

**Container** 21 (folder)

**The Virginia Engineer--Volume 27, Number 8 (Two Copies)**

**Unit Date** 1977

**box-folder** 1 (box)

**Container** 22 (folder)

**Subseries B: Cleaning Up Newport News**

**box** 1

**folder** 1 (oversize)

**Scope and Contents**

Materials from this sub-series are in Box 1 (folders listed below) and in oversize Folder 1.

**"Cleaning Up Newport News"/ "Towards Energy Independence"--Tables/Maps/Figures**

**Unit Date** n.d.

**box-folder** 1 (box)

**Container** 23 (folder)

**Union Carbide--Purox System: Fuel Gas Characteristics**

**Unit Date** 1974-1976

**box-folder** 1 (box)

**Container** 24 (folder)

**Union Carbide--Purox System: Waste Resource Recovery**

**Unit Date** 1975

**box-folder** 1 (box)

**Container** 25 (folder)

**Keywords**

Correspondence

**Notes on Purox Patent**

**Unit Date** 1975, n.d.

**box-folder** 1 (box)

**Container** 26 (folder)

**Union Carbide--The Purox System (T.F. Fisher, M.L. Kasbohm, J.R. Rivero)**

**Unit Date** 1975

**box-folder** 1 (box)

**Container** 27 (folder)

**Union Carbide--"The Production of Industrial Gases from Air" (R.L. Shaner)**

**Unit Date** 1976

**box-folder** 1 (box)

**Container** 28 (folder)

**Union Carbide-- "Linde Molecular Sieves"**

**Unit Date** 1976

**box-folder** 1 (box)

**Container** 29 (folder)

**Union Carbide-- "Purox System Charecteristics"**

**Unit Date** 1976  
**box-folder** 1 (box)  
**Container** 30 (folder)

**Union Carbide--"Molecular Sieves in the Process Industries"**

**Unit Date** 1976  
**box-folder** 1 (box)  
**Container** 31 (folder)

**Times Herald--Articles on Cleaning Up Newport News (by BWC)**

**Unit Date** 1976  
**box-folder** 1 (box)  
**Container** 32 (folder)

**"Look Ahead Newport News"--Research/Notes**

**Unit Date** 1977, n.d.  
**box-folder** 1 (box)  
**Container** 33 (folder)

**Original Text--"Look Ahead Newport News"**

**box-folder** 1 (box)  
**Container** 34 (folder)

**"Look Ahead Newport News" -- Proposal Draft**

**Unit Date** 1977  
**box-folder** 1 (box)  
**Container** 35 (folder)

**"Look Ahead Newport News"**

**Unit Date** 1977  
**box-folder** 1 (box)  
**Container** 36 (folder)

**Times Herald--Newport News Waste**

**Unit Date** 1977-1978  
**box-folder** 1 (box)  
**Container** 37 (folder)

**"Abolish The Dung Heaps"-- Draft**

**Unit Date** 1978  
**box-folder** 1 (box)  
**Container** 38 (folder)

**"Abolish The Dung Heaps"**

**Unit Date** 1978  
**box-folder** 1 (box)  
**Container** 39 (folder)

**Reflective Beam--Calculations/Sketches**

**Unit Date** 1979, n.d.  
**box-folder** 1 (box)  
**Container** 40 (folder)

**Series III: Correspondence/Memorandum**

**Unit Date** 1938-1978, n.d.

**Keywords**

Memorandums  
Aeronautics  
Correspondence  
Langley Aeronautical Laboratory

**Correspondence--Mason (Gust Tunnel)**

**Unit Date** n.d.  
**box-folder** 1 (box)  
**Container** 41 (folder)

**Correspondence--Construction Office, John**

**Unit Date** n.d.  
**box-folder** 1 (box)  
**Container** 42 (folder)

**Memorandum--Mr. DeFraue (Two Dimensional Pressure Tunnel)**

**Unit Date** 1938  
**box-folder** 1 (box)  
**Container** 43 (folder)

**Correspondence-- H. J. E. Reid**

**Unit Date** 1938  
**box-folder** 1 (box)  
**Container** 44 (folder)

**Correspondence-- G.W. Lewis and R.C. Platt**

**Unit Date** 1938, ca.1970

**box-folder** 1 (box)

**Container** 45 (folder)

**Memorandum--Mr.Wood (Free-Flight Tunnel)**

**Unit Date** 1939

**box-folder** 1 (box)

**Container** 46 (folder)

**Memorandum--Chief Of Aerodynamics (High Speed Tunnel Reports)**

**Unit Date** 1940-1943

**box-folder** 1 (box)

**Container** 47 (folder)

**Correspondence-- FAECT-- PAC Committee of Chapter 15**

**Unit Date** 1941-1943, n.d.

**box-folder** 1 (box)

**Container** 48 (folder)

**Memorandum-- Engineer in Charge (Servo Control)**

**Unit Date** 1942

**box-folder** 1 (box)

**Container** 49 (folder)

**Memorandum-- For Files (Pressure Belt Analysis)**

**Unit Date** 1942

**box-folder** 1 (box)

**Container** 50 (folder)

**Correspondence--Mason (16 ft Wind Tunnel Study and Alteration)**

**Unit Date** ca. 1942

**box-folder** 1 (box)

**Container** 51 (folder)

**Memorandum-- Messick (Langley Field Rear Fan)**

**Unit Date** 1942

**box-folder** 1 (box)

**Container** 52 (folder)

**Memorandum--Keffer (Langley Field Rear Propeller)**

**Unit Date** 1942

**box-folder** 1 (box)

**Container** 53 (folder)

**Memorandum-- E. Johnson (Moffett Field Fans)**

**Unit Date** 1942

**box-folder** 1 (box)

**Container** 54 (folder)

**Correspondence--L. R. Quarles (Blade Elements)**

**Unit Date** 1942-1943

**box-folder** 1 (box)

**Container** 55 (folder)

**Memorandum-- David Biermann (Moffett Field/Langley Field Fans, R-2800 Engine)**

**Unit Date** 1942-1943

**box-folder** 1 (box)

**Container** 56 (folder)

**Memorandum-- H.B. Edwards (16 foot Wind Tunnel Fan Blades)**

**Unit Date** 1943

**box-folder** 1 (box)

**Container** 57 (folder)

**Memorandum-- J.W. Crowley**

**Unit Date** 1943

**box-folder** 1 (box)

**Container** 58 (folder)

**Correspondence--Planning Office of the Technical Service Division**

**Unit Date** 1943

**box-folder** 1 (box)

**Container** 59 (folder)

**Memorandum-- Ray W. Hooker (Gust Tunnel)**

**Unit Date** 1943

**box-folder** 1 (box)

**Container** 60 (folder)

**Memorandum--Chief of Compressibility Research (16ft High Speed Tunnel Rotating Seal)**

**Unit Date** 1943-1944

**box-folder** 1 (box)

**Container** 61 (folder)

**Memorandum--Booth (High Speed Tunnel)**

**Unit Date** 1943-1944

**box-folder** 1 (box)

**Container** 62 (folder)

**Memorandum-- Engineer in Charge ( High Speed Tunnel)**

**Unit Date** 1943-1945

**box-folder** 1 (box)

**Container** 63 (folder)

**Memorandum-- John V. Becker (Moffett Field Tunnel Fans)**

**Unit Date** 1943-1945

**box-folder** 1 (box)

**Container** 64 (folder)

**Memorandum-- Clyde Lumpkin**

**Unit Date** 1944

**box-folder** 1 (box)

**Container** 65 (folder)

**Memorandum/Photos--Chief of Research (Thermal Deicing Propeller and Jet Driven Propeller)**

**Unit Date** 1944

**box-folder** 1 (box)

**Container** 66 (folder)

**Memorandum--Chief of Research (Propeller Projects and Papers)**

**Unit Date** 1944-1945

**box-folder** 1 (box)

**Container** 67 (folder)

**Correspondence--Bill Greathouse**

**Unit Date** 1944, 1970

**box-folder** 1 (box)

**Container** 68 (folder)

**Correspondence--Unidentified**

**Unit Date** 1945

**box-folder** 1 (box)

**Container** 69 (folder)

**Correspondence--A.W. Vogley**

**Unit Date** 1945

**box-folder** 1 (box)

**Container** 70 (folder)

**Correspondence-- John L. Crigler**

**Unit Date** 1945

**box-folder** 1 (box)

**Container** 71 (folder)

**Correspondence--J. G. McHugh**

**Unit Date** 1945

**box-folder** 1 (box)

**Container** 72 (folder)

**Correspondence--Ribner**

**Unit Date** 1945

**box-folder** 1 (box)

**Container** 73 (folder)

**Correspondence-- James B. Delanor**

**Unit Date** 1945

**box-folder** 1 (box)

**Container** 74 (folder)

**Correspondence/Notes--NACA/LMAL Travel Permission**

**Unit Date** 1945-1957

**box-folder** 1 (box)

**Container** 75 (folder)

**Memorandum-- Chief of Compressibility Research (Project Z)**

**Unit Date** 1946, n.d.

**box-folder** 1 (box)

**Container** 76 (folder)

**Memorandum--J.P.L. Appendix**

**Unit Date** 1946  
**box-folder** 1 (box)  
**Container** 77 (folder)

**Memorandum-- Chief of Research (Mechanical Sink)**

**Unit Date** 1946  
**box-folder** 1 (box)  
**Container** 78 (folder)

**Memorandum-- Personal Request**

**Unit Date** 1947  
**box-folder** 1 (box)  
**Container** 79 (folder)

**Memorandum-- Dr. Adolph Busemann**

**Unit Date** 1947  
**box-folder** 1 (box)  
**Container** 80 (folder)

**Memorandum-- Director John R. Erwin (Shadow Graph Wing Shock)**

**box-folder** 1 (box)  
**Container** 81 (folder)

**Correspondence-- Sylvia Thomas (S.A.E.)**

**Unit Date** 1947  
**box-folder** 1 (box)  
**Container** 82 (folder)

**Correspondence-- Hugh L. Dryden (University Conference on Aerodynamics)**

**Unit Date** 1948  
**box-folder** 1 (box)  
**Container** 83 (folder)

**Correspondence-- Henry Balfour**

**Unit Date** 1948  
**box-folder** 1 (box)  
**Container** 84 (folder)

**Correspondence-- P.W. Mangen (Hotel New Yorker)**

**Unit Date** 1948  
**box-folder** 1 (box)  
**Container** 85 (folder)

**Correspondence-- D.R. Zeno (ASME Talk on Propeller Theory)**

**Unit Date** 1949  
**box-folder** 1 (box)  
**Container** 86 (folder)

**Correspondence -- Anita Cavagnara**

**Unit Date** 1949  
**box-folder** 1 (box)  
**Container** 87 (folder)

**Memorandum-- Changes to the Full Scale Research Division**

**Unit Date** 1949-1962  
**box-folder** 1 (box)  
**Container** 88 (folder)

**Correspondence-- John N. Randolph (Patent, Improved Type of Crate for Bottled Beverages)**

**Unit Date** 1961  
**box-folder** 1 (box)  
**Container** 89 (folder)

**Memorandum-- Robert R. Gilruth**

**Unit Date** 1952  
**box-folder** 1 (box)  
**Container** 90 (folder)

**Correspondence-- E. J. Manganillo, Abe Silverstien, Lewis**

**Unit Date** 1953  
**box-folder** 1 (box)  
**Container** 91 (folder)

**Correspondence--Norman Silvers**

**Unit Date** 1957  
**box-folder** 1 (box)  
**Container** 92 (folder)

**Memorandum-- Acoustics Division (Position Transfer)**

**Unit Date** 1957-1958

**box-folder** 1 (box)

**Container** 93 (folder)

**Correspondence--J.O. Tresansky; J.M. Carson, Jr. (Office Patent Council)**

**Unit Date** 1959-1962

**box-folder** 1 (box)

**Container** 94 (folder)

**Memorandum--Editorial Review of "Static Thrust of an Annular Jet Exit with a Concave Base"**

**Unit Date** 1960

**box-folder** 1 (box)

**Container** 95 (folder)

**Correspondence-- Paul Taynton (Texaco; Hydrazine in Fuel)**

**Unit Date** 1961

**box-folder** 1 (box)

**Container** 96 (folder)

**Memorandum-- Associate Director (Cooperation and Research with Boeing)**

**Unit Date** 1962

**box-folder** 1 (box)

**Container** 97 (folder)

**Memorandum-- Manned Spacecraft Center**

**Unit Date** 1962

**box-folder** 1 (box)

**Container** 98 (folder)

**Correspondence/Forms--Travel Request and Authorization**

**Unit Date** 1963-1970

**box-folder** 1 (box)

**Container** 99 (folder)

**Correspondence-- Howard J. Osborn; Office of Patent Council LRC (Multiple Cell Toroidal Vortex Tube)**

**Unit Date** 1964-1967

**box-folder** 1 (box)

**Container** 100 (folder)

**Memorandum-- Donald D. Baals**

**Unit Date** 1966

**box-folder** 1 (box)

**Container** 101 (folder)

**Memorandum-- S. Walter Hixton Jr. (Management Training)**

**Unit Date** 1966-1968

**box-folder** 1 (box)

**Container** 102 (folder)

**Correspondence-- Hamilton Standard Division**

**Unit Date** 1966

**box-folder** 1 (box)

**Container** 103 (folder)

**Memorandum--Mark R. Nichols (VTOL, FSRD)**

**Unit Date** 1966, 1972

**box-folder** 1 (box)

**Container** 104 (folder)

**Memorandum-- Program Changes (FSRD)**

**Unit Date** 1967, n.d.

**box-folder** 1 (box)

**Container** 105 (folder)

**Correspondence--E. Boxer (Compressor Noise Reduction)**

**Unit Date** 1967

**box-folder** 1 (box)

**Container** 106 (folder)

**Memorandum-- Lindsey I. Turner (Oscillating Orifice Pump)**

**Unit Date** 1967

**box-folder** 1 (box)

**Container** 107 (folder)

**Memorandum-- Donald D. Amos (Oscillating Orifice Pump)**

**Unit Date** 1967

**box-folder** 1 (box)

**Container** 108 (folder)

**Correspondence-- Michael A. Chaszeyka, Lawrence K. Loftin, Jr. (McDonnell Douglas Review)**

**Unit Date** 1968  
**box-folder** 1 (box)  
**Container** 109 (folder)

**Correspondence -- R.J. Landberg (McDonnell Douglas Review)**

**box-folder** 1 (box)  
**Container** 110 (folder)

**Correspondence--Harry E. Shanner**

**Unit Date** 1969  
**box-folder** 1 (box)  
**Container** 111 (folder)

**Correspondence--George R. Kinney**

**Unit Date** 1971  
**box-folder** 1 (box)  
**Container** 112 (folder)

**Correspondence-- Harleth G. Wiley (Research and Technology Resume Numbering System)**

**Unit Date** 1971  
**box-folder** 1 (box)  
**Container** 113 (folder)

**Correspondence--Lowell Hasel**

**Unit Date** 1972  
**box-folder** 1 (box)  
**Container** 114 (folder)

**Memorandum--Leland B. Salters, Jr.**

**Unit Date** 1972  
**box-folder** 1 (box)  
**Container** 115 (folder)

**Correspondence/Contracts/Receipts-- Salters**

**Unit Date** 1973, n.d.  
**box-folder** 1 (box)  
**Container** 116 (folder)

**Correspondence--Union Carbide Corporation (Cleaning up Newport News/ Towards Energy Independence)**

**Unit Date** 1973-1978  
**box-folder** 1 (box)  
**Container** 117 (folder)

**Correspondence-- Edgar M. Cartright**

**Unit Date** 1974  
**box-folder** 1 (box)  
**Container** 118 (folder)

**Correspondence-- Dr. Clinton C. Kemp**

**Unit Date** 1975  
**box-folder** 1 (box)  
**Container** 119 (folder)

**Correspondence--U.S. Office of Patents (Purox System)**

**Unit Date** 1975  
**box-folder** 1 (box)  
**Container** 120 (folder)

**Correspondence-- William A. Scheller**

**Unit Date** 1976  
**box-folder** 1 (box)  
**Container** 121 (folder)

**Correspondence--Peninsula Planning District Commission (Cleaning Up Newport News)**

**Unit Date** 1976  
**box-folder** 1 (box)  
**Container** 122 (folder)

**Correspondence-- William A. Harding**

**Unit Date** 1976  
**box-folder** 1 (box)  
**Container** 123 (folder)

**Correspondence-- Richard O. Carden**

**Unit Date** 1977  
**box-folder** 1 (box)  
**Container** 124 (folder)

**Correspondence--President Jimmy Carter (Energy Crisis)**

**Unit Date** 1977  
**box-folder** 1 (box)  
**Container** 125 (folder)

**Correspondence-- Frank Smiley ( Newport News City Manager)**

**Unit Date** 1977  
**box-folder** 1 (box)  
**Container** 126 (folder)

**Correspondence-- Admiral Ralph W. Cousins (Cleaning Up Newport News)**

**Unit Date** 1977  
**box-folder** 1 (box)  
**Container** 127 (folder)

**Correspondence--Energy Research and Development Administration**

**Unit Date** 1977-1978  
**box-folder** 1 (box)  
**Container** 128 (folder)

**Correspondence--Tab Smith (York County Board of Supervisors)**

**Unit Date** 1978  
**box-folder** 1 (box)  
**Container** 129 (folder)

**Correspondence--State Corporation Commission**

**Unit Date** 1978  
**box-folder** 1 (box)  
**Container** 130 (folder)

**Series IV: Professional Projects**

**Unit Date** 1937-1984, n.d.

**Keywords**

Reports  
Aerospace engineers  
Notes (documents)  
Engineering Drawings

**Management Training--Outlines/Reports**

**Unit Date** 1966-1968  
**box-folder** 1 (box)  
**Container** 131 (folder)

**Subseries A: Research Tunnels**

**folder** 10 (oversize)  
**folder** 12 (oversize)  
**folder** 13 (oversize)  
**folder** 14 (oversize)  
**folder** 15 (oversize)  
**folder** 16 (oversize)  
**folder** 17 (oversize)

**Scope and Contents**

Materials from this sub-series are in Box 1 (folders listed below) and in oversize Folders 10-17.

**7' by 10' Wind Tunnel--Obsolete Propeller Design**

**Unit Date** n.d.  
**box-folder** 1 (box)  
**Container** 132 (folder)

**Sub-subseries i: AERL Deicing**

**folder** 11 (oversize)

**Scope and Contents**

Materials from this sub-subseries are in Box 1 (folders listed below) and in oversize Folder 11.

**"The Effect of Ice and Heated-Air Deicing on the Aerodynamic Performance of Propellers" (Transpare Report)**

**Unit Date** n.d.  
**box-folder** 1 (box)  
**Container** 133 (folder)

**"The Effect of Ice and Heated-Air Deicing on the Aerodynamic Performance of Propellers" --Report**

**Unit Date** n.d.  
**box-folder** 1 (box)  
**Container** 134 (folder)

**"The Effect of Ice and Heated-Air Deicing on the Aerodynamic Performance of Propellers" (Figures)**

**Unit Date** n.d.  
**box-folder** 1 (box)  
**Container** 135 (folder)

**AERL Ice Tunnel--Countervanes**

**Unit Date** n.d.  
**box-folder** 1 (box)  
**Container** 136 (folder)

**AERL Ice Tunnel -- Propellers**

**Unit Date** 1937-1938  
**box-folder** 1 (box)  
**Container** 137 (folder)

**AERL Ice Tunnel-- Estimation of Air State of Fan (Drawings/Notes)**

**Unit Date** 1942, n.d.  
**box-folder** 1 (box)  
**Container** 138 (folder)

**AERL Ice Tunnel-- Propellers (Calculations/Notes)**

**Unit Date** 1942  
**box-folder** 1 (box)  
**Container** 139 (folder)

**AERL Ice Tunnel-- Countervane Design Analysis (Calculations/Notes)**

**Unit Date** 1943, 1967, n.d.  
**box-folder** 1 (box)  
**Container** 140 (folder)

**AERL Ice Tunnel-- Simulated Propeller Icing (Department Meeting; Summary/Figures)**

**Unit Date** 1944  
**box-folder** 1 (box)  
**Container** 141 (folder)

**Sub-subseries ii: Propeller Research Tunnel**

**Language** English.

**P.R.T. Torque Dynamometer (Drawings)**

**Unit Date** n.d.  
**folder** 2 (box)  
**Container** 1 (folder)

**P.R.T. Propeller Blade Deflection--Report**

**Unit Date** n.d.  
**box-folder** 2 (box)  
**Container** 2 (folder)

**P.R.T. Propeller--Analysis/Graphs/Notes**

**Unit Date** 1937, n.d.  
**box-folder** 2 (box)  
**Container** 3 (folder)

**P.R.T. Propeller: Aerodynamic and Stress Analysis-- Graphs/Notes**

**Unit Date** 1937-1938  
**box-folder** 2 (box)  
**Container** 4 (folder)

**P.R.T. Full Scale Tunnel: Wooden Propeller--Calculation/Graphs/ Notes**

**Unit Date** 1938, n.d.  
**box-folder** 2 (box)  
**Container** 5 (folder)

**P.R.T. Wood Propeller--Calculations/Graphs/Notes**

**Unit Date** 1938, n.d.  
**box-folder** 2 (box)  
**Container** 6 (folder)

**19 Foot P.R.T. Wooden Propeller Hub Specifications-- Notes/Report**

**Unit Date** 1937, 1939  
**box-folder** 2 (box)  
**Container** 7 (folder)

**Sub-subseries iii: Two Dimensional Pressure Tunnel****Two Dimensional Pressure Tunnel Propeller VI (F-6159; A-Twisted) -- Calculations/Notes/Tables**

**Unit Date** 1938, 1939, n.d.  
**box-folder** 2 (box)  
**Container** 8 (folder)

**Two Dimension Pressure Tunnel Specifications-- Notes/Report**

**box-folder** 2 (box)  
**Container** 9 (folder)

**Sub-subseries iv: High Speed Tunnel**

**folder** 14 (oversize)

**Scope and Contents**

Materials from this sub-subseries are in Box 2 (folders listed below) and in oversize Folder 14.

**High Speed Wind Tunnel Propeller Design Charts-- Notes/Tables****Unit Date** n.d.**box-folder** 2 (box)**Container** 10 (folder)**High Speed Tunnel Boundary Layer-- Calculations/Data/Graphs****Unit Date** n.d.**box-folder** 2 (box)**Container** 11 (folder)**High Speed Tunnel--Combined Correlation and Friction/ Horsepower Tests--Calculations/Graphs/Tables****Unit Date** n.d.**box-folder** 2 (box)**Container** 12 (folder)**High Speed Tunnel Propellers--Obsolete Design (Calculations/Graphs/Notes)****Unit Date** 1939, n.d.**box-folder** 2 (box)**Container** 13 (folder)**High Speed Tunnel-- Rear Propeller (Graphs/Tables)****Unit Date** 1940, n.d.**box-folder** 2 (box)**Container** 14 (folder)**High Speed Tunnel: Front Propeller-- Calculations/Graphs/Notes****Unit Date** 1940-1942, n.d**box-folder** 2 (box)**Container** 15 (folder)**High Speed Tunnel Counter Balance for Rear Propeller--Calculations/Design/ Notes****Unit Date** 1942**box-folder** 2 (box)**Container** 16 (folder)**High Speed Wind Tunnel: Fan Calibrations****Unit Date** 1954-1956, n.d.**box-folder** 2 (box)**Container** 17 (folder)**Sub-subseries v: Moffett Field****Moffett Field: Scale Tunnel Propeller and Variable Pitch--Figures/Notes****Unit Date** n.d.**box-folder** 2 (box)**Container** 18 (folder)**Moffett Field Rear Propeller-- Calculations/Graphs/Notes****Unit Date** 1939, n.d.**box-folder** 2 (box)**Container** 19 (folder)**Moffett Field Front Propeller Specifications-- Calculations/Notes****Unit Date** 1939, n.d.**box-folder** 2 (box)**Container** 20 (folder)**Moffett Field Front Propeller Hub--Calculations/Graphs/Notes****Unit Date** 1939, n.d.**box-folder** 2 (box)**Container** 21 (folder)**Moffett Field Wind Tunnel Propeller--Calculations/Graphs/Notes****Unit Date** 1939, n.d.**box-folder** 2 (box)**Container** 22 (folder)**Moffett Field Tunnel Propellers-- Calculations/Figures/Graphs/Photographs/Notes****Unit Date** 1942-1944**box-folder** 2 (box)**Container** 23 (folder)**Keywords**

Becker, John V. (John Vernon), 1913-2020 -- Correspondence

Johnson, E. -- Correspondence

Bierman, David -- Correspondence

**Sub-subseries vi: 20 Foot Spin Tunnel****20 Foot Spin Tunnel Propeller Hub Design-- Calculations/Notes****Unit Date** n.d.**box-folder** 2 (box)**Container** 24 (folder)

**20 Foot Spin Tunnel Obsolete Designs-- Calculations/Graphs/Tables**

**Unit Date** 1939

**box-folder** 2 (box)

**Container** 25 (folder)

**20 Foot Spin Tunnel Propeller Acceleration Stress Analysis**

**Unit Date** 1939-1940, n.d.

**box-folder** 2 (box)

**Container** 26 (folder)

**20 Foot Spin Tunnel: 5 Blade Propeller Design--Calculations/Notes**

**Unit Date** 1939-1940, n.d.

**box-folder** 2 (box)

**Container** 27 (folder)

**20 Foot Spin Tunnel Propeller Hub--Calculations/Drawings/Notes**

**Unit Date** 1940, n.d.

**box-folder** 2 (box)

**Container** 28 (folder)

**20 Foot Spin Tunnel: 3 Blade Propeller-- Calculations/Notes/Tables**

**Unit Date** 1940, n.d.

**box-folder** 2 (box)

**Container** 29 (folder)

**Sub-subseries vii: Stability Tunnel**

**folder** 9 (oversize)

**Scope and Contents**

Materials from this sub-subseries are in Box 2 (folders listed below) and in oversize Folder 9.

**6ft by 6ft Stability Tunnel Propeller--Calculations/Notes**

**Unit Date** 1940, n.d.

**box-folder** 2 (box)

**Container** 30 (folder)

**Stability Tunnel: Original Motor Housing, Cooling, and Countervanes--Calculations/Notes**

**Unit Date** 1940, n.d.

**box-folder** 2 (box)

**Container** 31 (folder)

**Stability Tunnel Propeller Hub--Notes/Tables**

**Unit Date** 1940, n.d.

**box-folder** 2 (box)

**Container** 32 (folder)

**Stability Tunnel Countervanes--Notes/Graphs**

**box-folder** 2 (box)

**Container** 33 (folder)

**Sub-subseries viii: Carderock Wind Tunnel**

**folder** 12 (oversize)

**Scope and Contents**

Materials from this sub-subseries are in Box 2 (folders listed below) and in oversize Folder 12.

**Carderock Wind Tunnel--Figures/Graphs**

**Unit Date** n.d.

**box-folder** 2 (box)

**Container** 34 (folder)

**Carderock Wind Tunnel Design--Figures/Notes**

**Unit Date** 1943, n.d.

**box-folder** 2 (box)

**Container** 35 (folder)

**Flutter Tunnel--Figures/Report**

**Unit Date** 1946

**box-folder** 2 (box)

**Container** 36 (folder)

**Gust Tunnel: Propellers-- Drawings/Notes**

**Unit Date** 1943, n.d.

**box-folder** 2 (box)

**Container** 37 (folder)

**Subseries B: Propellers and Propeller Research**

**folder** 8 (oversize)

**Scope and Contents**

Materials from this sub-subseries are in Box 2 (folders listed below) and in oversize folders (listed below), as well as in oversize Folder 8.

**Sub-Subseries i: Propeller Theory**

**Propeller Theory-- Bibliography Outline****Unit Date** n.d.**box-folder** 2 (box)**Container** 38 (folder)**"A Review of Propeller Theory"-- Draft****Unit Date** n.d.**box-folder** 2 (box)**Container** 39 (folder)**"A Review of Propeller Theory" (By Blake W. Corson)****Unit Date** n.d.**box-folder** 2 (box)**Container** 40 (folder)**Propeller Theory Airfoil Characteristics--Figures****Unit Date** n.d.**box-folder** 2 (box)**Container** 41 (folder)**Propeller Theory Airfoil Characteristics--Negative Figures****Unit Date** n.d.**box-folder** 2 (box)**Container** 42 (folder)**Analysis of Propeller Data: Induced Angle--Calculations/Notes****Unit Date** n.d.**box-folder** 2 (box)**Container** 43 (folder)**Indication of Velocity Distribution by a Catenary****Unit Date** n.d.**box-folder** 2 (box)**Container** 44 (folder)**NACA Propellers--Figures****Unit Date** n.d.**box-folder** 2 (box)**Container** 45 (folder)**Air Psychrometric Chart for Various Pressures****Unit Date** n.d.**box-folder** 2 (box)**Container** 46 (folder)**Hooded Propellers--Original Figures 2-56 (Mastrocola)****Unit Date** n.d.**folder** 6 (oversize)**box-folder** 2 (box)**Container** 47 (folder)**Westphal Compressor--Graphs/Notes****Unit Date** n.d.**box-folder** 2 (box)**Container** 48 (folder)**Free Vortex--Calculations/Notes****Unit Date** n.d.**box-folder** 2 (box)**Container** 49 (folder)**XSC: Temperature Dispersion Engine Tests--Tables****Unit Date** n.d.**box-folder** 2 (box)**Container** 50 (folder)**Engine Cooling Correlation--Report****Unit Date** n.d.**box-folder** 2 (box)**Container** 51 (folder)**7'by 10' Wind Tunnel: Motor Cooling and Fairing--Calculations/Notes****Unit Date** n.d.**box-folder** 2 (box)**Container** 52 (folder)**12 ft Free Flight Propeller--Data/Notes****Unit Date** 1938, 1944, n.d**box-folder** 2 (box)**Container** 53 (folder)**Sub-subseries ii: XF4U-1**

**XF4U-1--Photographs****Unit Date** n.d.**box-folder** 2 (box)**Container** 54 (folder)**XF4U-1--Reports****Unit Date** 1938, n.d.**box-folder** 2 (box)**Container** 55 (folder)**Wind Tunnel Tests for Vought XF4U-1-- NACA Report****Unit Date** 1939**box-folder** 2 (box)**Container** 56 (folder)**XF4U-1 Extract: Model Tests of a Wing Duct System for Auxiliary Air Supply--Report****Unit Date** 1940**box-folder** 2 (box)**Container** 57 (folder)**Vought XF4U-1 Cuff-- Data/Graphs****Unit Date** 1941, n.d.**box-folder** 2 (box)**Container** 58 (folder)**Wind Tunnel Fan Design (TN-820)--Charts****Unit Date** n.d.**box-folder** 2 (box)**Container** 59 (folder)**Wind Tunnel Fan Design--Figures/Graphs/Notes****Unit Date** 1940, n.d.**box-folder** 2 (box)**Container** 60 (folder)**Martian B-26: Modified Cowling, Entrance Computations, Cuff Design****Unit Date** 1941, n.d.**box-folder** 2 (box)**Container** 61 (folder)**Hooded Propellers-- Draft****Unit Date** 1941, 1942, n.d.**folder** 6 (oversize)**box-folder** 2 (box)**Container** 62 (folder)**Preliminary Hooded Propellers Program Tests--Report****Unit Date** 1942**box-folder** 2 (box)**Container** 63 (folder)**folder** 6 (oversize)**Propeller: P-62--Graphs/Notes****Unit Date** 1941, n.d.**box-folder** 2 (box)**Container** 64 (folder)**E.R.L. Cleveland Wind Tunnel --Propeller Check:Analysis; Cleveland****Unit Date** 1941**box-folder** 2 (box)**Container** 65 (folder)**Two Balde Propeller at High Forward Speed--Report****Unit Date** ca. 1941, 1944**box-folder** 2 (box)**Container** 66 (folder)**Sub-subseries iii: Bell P-39****folder** 4 (oversize)**Bell Cuff Design: P-39--Graphs/Tables****Unit Date** n.d.**box-folder** 2 (box)**Container** 67 (folder)**Bell: P-39 (H.S.T. Tests)-- Calculations/Drawings/Notes/Photographs****Unit Date** 1942, n.d.**box-folder** 2 (box)**Container** 68 (folder)**Sub-subseries iv: XA-26**

**XA-26: Propellers and Drag Computations--Report**

**Unit Date** 1942, n.d.  
**box-folder** 2 (box)  
**Container** 69 (folder)

**XA-26: Directions--Calculations/Notes**

**Unit Date** 1942, n.d.  
**box-folder** 2 (box)  
**Container** 70 (folder)

**XA-26: Propeller and Drag Computations--Graphs/Tests**

**Unit Date** 1942  
**box-folder** 2 (box)  
**Container** 71 (folder)

**XA-26: Propeller and Drag Computations--Notes**

**box-folder** 2 (box)  
**Container** 72 (folder)

**Sub-subseries v: XSB2D-1 Propeller****Douglas XSB2D-1: Propeller Tests 210 and 211--Data/Graphs/Summary**

**Unit Date** 1942, n.d.  
**box-folder** 2 (box)  
**Container** 73 (folder)

**XSB2D-1: Fuel Flow Data-- Tables**

**Unit Date** 1942, n.d.  
**box-folder** 2 (box)  
**Container** 74 (folder)

**XSB2D-1: Tests and Calculations Relative to the State of Air in the Test Section-- Calculations/Data/Graphs**

**Unit Date** 1942, n.d.  
**box-folder** 2 (box)  
**Container** 75 (folder)

**XSB2D-1: Old Baffels--Calculations/Notes**

**Unit Date** 1942  
**box-folder** 2 (box)  
**Container** 76 (folder)

**XSB2D-1: Old and New Baffels(Obsolete Curves)--Graphs/Notes**

**box-folder** 2 (box)  
**Container** 77 (folder)

**XSB2D-1: Engine Correlations and Preliminary Analysis--Graphs/Notes**

**box-folder** 2 (box)  
**Container** 78 (folder)

**Flight Information Tables**

**Unit Date** n.d.  
**box-folder** 2 (box)  
**Container** 79 (folder)

**Sub-subseries vi: Goldstein and Blade Theory****Ideal Propeller Efficiency: Propeller Design Data-- Clark-Y/Goldstien**

**Unit Date** 1940-1942, n.d.  
**box-folder** 3 (box)  
**Container** 1 (folder)

**Goldstien Vortex Theory: Elemental Efficiency-- Figures/Graphs**

**Unit Date** 1942  
**box-folder** 3 (box)  
**Container** 2 (folder)

**Goldstien Design and Aircraft Propeller Design--Calculations/Notes**

**Unit Date** 1942, n.d.  
**box-folder** 3 (box)  
**Container** 3 (folder)

**Blade Element Theory: Goldstien Vortex & Dual Rotation--Calculations/Graphs/Notes**

**Unit Date** 1942-1944, n.d.  
**box-folder** 3 (box)  
**Container** 4 (folder)  
**Keywords**  
Quarles, L. R.

**Goldstien Correction Factor for Vortex Blade Theory--Graphs**

**Unit Date** 1942-1943  
**box-folder** 3 (box)  
**Container** 5 (folder)

**Glauert Propeller: Data Corrections due to Wind Tunnel Inference--Graphs/Notes**

**Unit Date** 1942, n.d.

**box-folder** 3 (box)

**Container** 6 (folder)

**Propeller Maximum Thickness: Typical Distribution--Figures**

**Unit Date** 1942

**box-folder** 3 (box)

**Container** 7 (folder)

**Course Roll--Aircraft Propellers**

**Unit Date** 1942, 1945, n.d.

**box-folder** 3 (box)

**Container** 8 (folder)

**Sub-subseries vii: Pratt and Whitney R 2800 Engine**

**R 2800-27: Engine Friction Tests**

**Unit Date** 1943, n.d.

**box-folder** 3 (box)

**Container** 9 (folder)

**R2800 Pratt and Whitney Engine-- Friction, Horsepower, and Heat Balance Data**

**Unit Date** 1943

**box-folder** 3 (box)

**Container** 10 (folder)

**Keywords**

Bierman, David

**R2800 Correlation-- Figures 16- 18**

**Unit Date** 1943

**box-folder** 3 (box)

**Container** 11 (folder)

**R 2800 Heat Balance Charts-- Figures/Notes/Reports**

**Unit Date** 1944, n.d.

**box-folder** 3 (box)

**Container** 12 (folder)

**Curtis-Wright Corporation: Propeller Division Charts**

**Unit Date** 1943-1944

**box-folder** 3 (box)

**Container** 13 (folder)

**Bureau of Standards: Wind Tunnel Fan-- Drawings/Notes**

**Unit Date** 1943, n.d.

**box-folder** 3 (box)

**Container** 14 (folder)

**Propeller Wind Tests--Reports**

**Unit Date** 1943, n.d.

**box-folder** 3 (box)

**Container** 15 (folder)

**Negative Thrust Considerations-- Calculations/Figures**

**Unit Date** 1943

**box-folder** 3 (box)

**Container** 16 (folder)

**Rotating Mercury Seal: Pressure Transfer Device--Notes**

**Unit Date** 1943, 1945, n.d.

**box-folder** 3 (box)

**Container** 17 (folder)

**Power Stability of Three Polar Variables--Calculations/Graphs/Notes**

**Unit Date** 1944-1946, n.d.

**box-folder** 3 (box)

**Container** 18 (folder)

**NACA--ESMDT Course--Propeller Notes**

**Unit Date** 1945, n.d.

**box-folder** 3 (box)

**Container** 19 (folder)

**Propeller Symbols--Figures/Index**

**Unit Date** 1945

**box-folder** 3 (box)

**Container** 20 (folder)

**Turbine Driven Propeller--Notes**

**Unit Date** 1945  
**box-folder** 3 (box)  
**Container** 21 (folder)

**Propeller Symbols--Index/Negatives/Tables**

**Unit Date** 1945-1946  
**box-folder** 3 (box)  
**Container** 22 (folder)

**Sub-subseries viii: Pusher Propeller****Vibratory Stress--Calculations/Data/Graphs/Notes**

**Unit Date** 1945-1946, n.d.  
**box-folder** 3 (box)  
**Container** 23 (folder)

**Pusher Propeller: Blade Three Vibratory Stress(200 mph)--Graphs/Notes/Tables**

**Unit Date** 1946, n.d.  
**box-folder** 3 (box)  
**Container** 24 (folder)

**Pusher Propeller: Blade Three Vibratory Stress (300mph)-- Graphs/Tables**

**box-folder** 3 (box)  
**Container** 25 (folder)

**Pusher Propeller: Blade Three Vibratory Stress--With Flutter**

**Unit Date** 1946, n.d.  
**box-folder** 3 (box)  
**Container** 26 (folder)

**Sub-subseries ix: Sweptback Propeller****" Calculation of Space Locus for Blade Section Centeroid of Swept Propeller"--Figures/Report**

**Unit Date** 1946, n.d.  
**box-folder** 3 (box)  
**Container** 27 (folder)

**Calculated Sweptback Propeller Efficiency--Conference Chart**

**Unit Date** 1946, n.d.  
**box-folder** 3 (box)  
**Container** 28 (folder)

**Sweptback Propeller Structural Analysis-- Graphs/Notes**

**Unit Date** 1946, n.d.  
**box-folder** 3 (box)  
**Container** 29 (folder)

**Method of Reducing Propeller Stress and Vibration**

**Unit Date** 1946-1947  
**box-folder** 3 (box)  
**Container** 30 (folder)

**Pressure Distribution on Rotating Propeller--Graphs/Notes**

**Unit Date** 1947-1948  
**box-folder** 3 (box)  
**Container** 31 (folder)

**University Conference On Aerodynamics--A Review of Propeller Theory**

**Unit Date** 1948  
**box-folder** 3 (box)  
**Container** 32 (folder)

**Wind Tunnel Fan Design(Lift Coefficient and Alpha Corrections due to Solidity)**

**Unit Date** 1948  
**box-folder** 3 (box)  
**Container** 33 (folder)

**Sub-subseries x: Slotted Test Section****Slotted Test Section: Obsolete Computations--Calculations/Data**

**Unit Date** 1948, n.d.  
**box-folder** 3 (box)  
**Container** 34 (folder)

**Slotted Test Section--Choking Speed, Re-entrance Area Limitation**

**Unit Date** 1948  
**box-folder** 3 (box)  
**Container** 35 (folder)

**Slotted Test Section: One Dimensional Analysis-- Calculations/Graphs**

**Unit Date** 1948, 1956, n.d.

**box-folder** 3 (box)

**Container** 36 (folder)

**Slotted Test Section: Viscous Flow at Slot Entrance--Calculations/Drawings/Graphs**

**Unit Date** 1949, n.d.

**box-folder** 3 (box)

**Container** 37 (folder)

**Ring Vortex--Calculations/Drawings**

**Unit Date** 1949, n.d.

**box-folder** 3 (box)

**Container** 38 (folder)

**"Propeller Inflow Corrections at High Subsonic Mach Numbers"-- Calculations/Report**

**Unit Date** 1949, n.d.

**box-folder** 3 (box)

**Container** 39 (folder)

**Sub-subseries xi: Propeller Induced Camber**

**Induced Angle Propeller--Calculations/Drawings/Notes**

**Unit Date** 1949, n.d.

**box-folder** 3 (box)

**Container** 40 (folder)

**Propeller Induced Camber Tests [(10/3049/03), (10/3066/03), (10/3090/03), (16/3090/03)]-- Data/Graphs**

**Unit Date** 1949-1950, n.d.

**box-folder** 3 (box)

**Container** 41 (folder)

**Propeller Induced Camber--Drafts/Notes/Reports**

**Unit Date** 1950, n.d.

**box-folder** 3 (box)

**Container** 42 (folder)

**Propeller Induced Camber-- Notes**

**Unit Date** 1950, n.d.

**box-folder** 3 (box)

**Container** 43 (folder)

**Propeller Induced Camber--Calculations/Notes**

**Unit Date** 1950, n.d.

**box-folder** 3 (box)

**Container** 44 (folder)

**Propeller Design for Constant Centrifugal Stress--Report**

**Unit Date** 1950

**box-folder** 3 (box)

**Container** 45 (folder)

**Submarine Propulsive System--Figures/Report**

**Unit Date** 1950, 1959, n.d.

**box-folder** 3 (box)

**Container** 46 (folder)

**Langley 2000 Horse Power Propeller--Photographs**

**Unit Date** ca. 1952

**box-folder** 3 (box)

**Container** 47 (folder)

**Tripple Rotart Joint: Model String Support--Calculations/Drawings/Notes/Report**

**Unit Date** 1952-1953, n.d.

**box-folder** 3 (box)

**Container** 48 (folder)

**Sub-subseries xii: Ski Wing**

**Ski Wing--Drawings/Proposal**

**Unit Date** 1952, n.d.

**box-folder** 3 (box)

**Container** 49 (folder)

**Ski Wing Analysis-- Photographs/Proposal**

**Unit Date** 1953

**box-folder** 3 (box)

**Container** 50 (folder)

**Ski Wing: Tests-- Graph/Photographs**

**Unit Date** 1954  
**box-folder** 3 (box)  
**Container** 51 (folder)

**Propeller Blade Vibration Research**

**Unit Date** 1954  
**box-folder** 3 (box)  
**Container** 52 (folder)

**Corotational Tangent Rotors--Calculations/Drawings/Notes**

**Unit Date** 1955  
**box-folder** 3 (box)  
**Container** 53 (folder)

**Sub-subseries xiii: Jet Exit Research**

**Nacelle Aspect Ratio Coefficients: Drag--Calculations/Graphs/Notes**

**box-folder** 3 (box)  
**Container** 54 (folder)

**TFX Jet Exit Research-- Calculations/Drawings/Notes**

**Unit Date** 1955-1960, n.d.  
**box-folder** 3 (box)  
**Container** 55 (folder)

**Jet Exit Research--Analysis/Notes**

**Unit Date** 1957, n.d.  
**box-folder** 3 (box)  
**Container** 56 (folder)

**Jet Exit Research: Air Powered Nacelle (Tri Tunnel Model)-- Notes/Report**

**Unit Date** 1963, n.d.  
**box-folder** 3 (box)  
**Container** 57 (folder)

**Summary of Research on Jet Exit Installations--Report**

**Unit Date** 1966, 1971  
**box-folder** 3 (box)  
**Container** 58 (folder)

**Jet Exit Research: Exhaust Nozzle VTOL Models**

**Unit Date** 1971, n.d.  
**box-folder** 3 (box)  
**Container** 59 (folder)

**Jet Over Wing Propulsion: Nacelle-- Drawings/Purchase Request**

**Unit Date** 1971  
**box-folder** 3 (box)  
**Container** 60 (folder)

**Sub-subseries ivx: Jet Noise Suppression**

**Jet Noise Suppression--Notes/Report**

**Unit Date** 1956  
**box-folder** 3 (box)  
**Container** 61 (folder)

**Jet Noise Suppression-- Calculations/Notes**

**Unit Date** 1956-1958, n.d.  
**box-folder** 3 (box)  
**Container** 62 (folder)

**Multiple Annular Jet Noise Suppressor**

**Unit Date** 1957-1959  
**box-folder** 3 (box)  
**Container** 63 (folder)

**Jet Noise Suppression--References**

**Unit Date** 1971, n.d.  
**box-folder** 3 (box)  
**Container** 64 (folder)

**Flow Entrainment: Circular Jet-- Calculations/Data/Figures/Notes**

**Unit Date** 1956  
**box-folder** 3 (box)  
**Container** 65 (folder)

**Propeller Static: Ideal Effect Coefficient-- Graphs/Notes**

**Unit Date** 1956  
**box-folder** 3 (box)  
**Container** 66 (folder)

**XP6M-1 Problems--Analysis**

**Unit Date** 1957, n.d.

**box-folder** 3 (box)

**Container** 67 (folder)

**Valveless Pulse Jet--Notes/Photographs**

**Unit Date** 1960, n.d.

**box-folder** 3 (box)

**Container** 68 (folder)

**Aerodynamics of Wind Tunnel Fan (TN 820)--Notes**

**Unit Date** 1961, 1972

**box-folder** 3 (box)

**Container** 69 (folder)

**Supersonic Propeller Efficiency -- Data/Graphs**

**Unit Date** 1962

**box-folder** 3 (box)

**Container** 70 (folder)

**Apollo Escape Craft-- Drawings/Notes**

**Unit Date** 1962, n.d.

**box-folder** 3 (box)

**Container** 71 (folder)

**TRECOM Hiller Data: Helicopter Blade Tip Mounted Turbojet--Comments/Notes**

**Unit Date** 1964

**box-folder** 3 (box)

**Container** 72 (folder)

**Sub-subseries vx: Multiple Cell Toridal Vortex Tube**

**folder** 10 (oversize)

**Multiple Cell Toridal Vortex Tube--Negative Figures (1,2,4,7,8)**

**Unit Date** 1964

**box-folder** 3 (box)

**Container** 73 (folder)

**Multiple Cell Toridal Vortex Tube--Patent Transparencies**

**Unit Date** 1964

**box-folder** 3 (box)

**Container** 74 (folder)

**Multiple Cell Toridal Vortex Tube--Patent Manuscript**

**Unit Date** 1964

**box-folder** 3 (box)

**Container** 75 (folder)

**Multiple Cell Toridal Vortex Tube--Patent Figures (1-8)**

**Unit Date** 1964

**box-folder** 3 (box)

**Container** 76 (folder)

**Multiple Cell Toridal Vortex Tube--Patent Figure 1**

**Unit Date** 1964

**box-folder** 3 (box)

**Container** 77 (folder)

**Multiple Cell Toridal Vortex Tube--Patent Figure 2**

**Unit Date** 1964

**box-folder** 3 (box)

**Container** 78 (folder)

**Multiple Cell Toridal Vortex Tube--Patent Figure 4**

**Unit Date** 1964

**box-folder** 3 (box)

**Container** 79 (folder)

**Multiple Cell Toridal Vortex Tube--Patent Figure 7**

**Unit Date** 1964

**box-folder** 3 (box)

**Container** 80 (folder)

**Multiple Cell Toridal Vortex Tube--Patent Figure 8**

**Unit Date** 1964

**box-folder** 3 (box)

**Container** 81 (folder)

**Multiple Cell Toridal Vortex Tube--Patent**

**Unit Date** 1964

**box-folder** 3 (box)

**Container** 82 (folder)

**Patent Copy--Multiple Cell Toridal Vortex Tube**

**Unit Date** 1964  
**box-folder** 3 (box)  
**Container** 83 (folder)

**Vortex Tube Model--Calculations/Notes/Tables (William R. Bobo)**

**Unit Date** 1964-1965, n.d.  
**box-folder** 3 (box)  
**Container** 84 (folder)

**Surge Control Valve--Graphs/Notes/Report**

**Unit Date** 1965, n.d.  
**box-folder** 3 (box)  
**Container** 85 (folder)

**XC-142A Propeller--Calculations/Graphs/Notes**

**Unit Date** 1965, 1966, n.d.  
**box-folder** 3 (box)  
**Container** 86 (folder)

**Subseries C: Nozzles and Nozzle Research**

**folder** 7 (oversize)

**Scope and Contents**

Materials from this subseries are in Box 4 (folders listed below) and in oversize Folder 7.

**Nozzle Installation and Pressure Ratio--Figures(1, 5-8)**

**Unit Date** n.d.  
**box-folder** 4 (box)  
**Container** 1 (folder)

**Mechanical Sink: Supersonic Nozzle-- Notes/Proposal**

**Unit Date** 1947-1961  
**box-folder** 4 (box)  
**Container** 2 (folder)

**Dual Flow Nozzle--Report (copies)**

**Unit Date** 1948  
**box-folder** 4 (box)  
**Container** 3 (folder)

**Dual Passage Nozzle-- Figures/Report**

**Unit Date** 1948  
**box-folder** 4 (box)  
**Container** 4 (folder)

**Sub-subseries i: Perforated Difusser Nozzle**

**Perforated Diffuser Nozzle-- Photographs**

**Unit Date** n.d.  
**box-folder** 4 (box)  
**Container** 5 (folder)

**Perforated Difusser Nozzle-- Notes/Report**

**Unit Date** 1953, 1957, n.d.  
**box-folder** 4 (box)  
**Container** 6 (folder)

**Sub-subseries ii: Bifurcated Rotary Joint**

**Biofurcated Rotary Joint: "Sting"--Analysis/Notes**

**Unit Date** 1952, 1954, n.d.  
**box-folder** 4 (box)  
**Container** 7 (folder)

**Bifurcated Rotary Joint Support-- Wind Tunnel Models**

**Unit Date** 1954  
**box-folder** 4 (box)  
**Container** 8 (folder)

**Bifurcated Rotary Joint Support for Wind Tunnel Models-- Patent Application**

**Unit Date** 1954-1958  
**box-folder** 4 (box)  
**Container** 9 (folder)

**Sub-subseries iii:Cascade Plug Nozzle**

**folder** 5 (oversize)

**Scope and Contents**

Materials from this sub-subseries are in Box 4 (folders listed below) and in oversize Folder 5.

**Figures(1-4, 6-7)--Ratio of Average Incompressible Turbulent skin Friction to Karman Schoenherr's Formula**

**Unit Date** n.d.

**box-folder** 4 (box)

**Container** 10 (folder)

**Nozzle Loss and Skin Friction-- Calculations/Data/Draft/Graph**

**Unit Date** 1958, n.d.

**box-folder** 4 (box)

**Container** 11 (folder)

**Cascade Plug Nozzle--Calculations/Drawings**

**Unit Date** 1966, n.d.

**box-folder** 4 (box)

**Container** 12 (folder)

**Cascade Plug Nozzle: Mixed Flow Nozzle Turbofan Propulsion Simulation with an Air Driven Model Engine-- Graph/Notes/Report**

**Unit Date** 1969-1970, n.d.

**box-folder** 4 (box)

**Container** 13 (folder)

**Cascade Plug Nozzle: Test 266 (Corrected and Obsolete)-- Data/Notes**

**Unit Date** 1969-1972, n.d.

**box-folder** 4 (box)

**Container** 14 (folder)

**Cascade Plug Nozzle--Report Outline**

**Unit Date** 1971, n.d.

**box-folder** 4 (box)

**Container** 15 (folder)

**Cascade Plug Nozzle--Photographs**

**Unit Date** 1971, n.d.

**box-folder** 4 (box)

**Container** 16 (folder)

**Cascade Plug Nozzle-- Report Draft**

**Unit Date** 1971, n.d.

**box-folder** 4 (box)

**Container** 17 (folder)

**Cascade Plug Nozzle Model II--Graphs/Notes/Report/Tables**

**Unit Date** 1971-1972, n.d.

**box-folder** 4 (box)

**Container** 18 (folder)

**Cascade Plug Nozzle--Notes/Tables**

**Unit Date** 1971

**box-folder** 4 (box)

**Container** 19 (folder)

**Cascade Plug Nozzle--Disclosure of Invention (NASA Case Number LAR 10951-1)**

**Unit Date** 1971

**box-folder** 4 (box)

**Container** 20 (folder)

**Cascade Plug Nozzle--Patent Copy**

**Unit Date** 1971-1977

**box-folder** 4 (box)

**Container** 21 (folder)

**Cascade Plug Nozzle: Model III--Calculations/Data**

**Unit Date** 1972, n.d.

**box-folder** 4 (box)

**Container** 22 (folder)

**Cascade Plug Nozzle:Model IV-- Calculations/Graphs/Notes**

**Unit Date** 1972, n.d.

**box-folder** 4 (box)

**Container** 23 (folder)

**Cascade Plug Nozzle--Manuscript**

**Unit Date** 1972, n.d.

**box-folder** 4 (box)

**Container** 24 (folder)

**Cascade Plug Nozzle: Model II Sketches**

**Unit Date** 1972

**box-folder** 4 (box)

**Container** 25 (folder)

**Cascade Plug Nozzle--Noise Measurements( E.p. McDavid)--Notes/Report**

**Unit Date** 1972

**box-folder** 4 (box)

**Container** 26 (folder)

**Cascade Plug Nozzle--Application For Patent**

**Unit Date** 1973

**box-folder** 4 (box)

**Container** 27 (folder)

**Cascade Plug Nozzle: Signed Copy-- Patent**

**box-folder** 4 (box)

**Container** 28 (folder)

**Cascade Plug Nozzle--Patent Plaque**

**Unit Date** 1976

**box-folder** 4 (box)

**Container** 29 (folder)

**Cascade Plug Nozzle--Patent**

**Unit Date** 1976-1977

**box-folder** 4 (box)

**Container** 30 (folder)

**Sub-subseries iv: Annular Nozzle Concave Central Base**

**Annular Nozzle : Concave Central Base--Notes/Report**

**Unit Date** 1959, n.d.

**box-folder** 4 (box)

**Container** 31 (folder)

**Annular Nozzle : Concave Central Base-- Patent Notes**

**Unit Date** 1959

**box-folder** 4 (box)

**Container** 32 (folder)

**Annular Nozzle : Concave Central Base-- Patent Manuscript**

**Unit Date** 1959

**box-folder** 4 (box)

**Container** 33 (folder)

**Annular Nozzle : Concave Plug Base Thrust-- Calculations/Graphs/Tables**

**Unit Date** 1959, 1961, n.d.

**box-folder** 4 (box)

**Container** 34 (folder)

**Annular Nozzle : Concave Central Base-- Patent Data**

**Unit Date** 1959-1961

**box-folder** 4 (box)

**Container** 35 (folder)

**Static Thrust on an Annular Jet Exit with a Concave Central Base--Notes/Report Draft**

**Unit Date** 1960, n.d.

**box-folder** 4 (box)

**Container** 36 (folder)

**Static Thrust of an Annular Jet Exit with a Concave Central Base-- Notes/Report**

**Unit Date** 1960, n.d.

**box-folder** 4 (box)

**Container** 37 (folder)

**Static Thrust of an Annular Jet Exit with a Concave Central Base--Report Copy**

**box-folder** 4 (box)

**Container** 38 (folder)

**Sub-subseries vi: Convergent Divergent Nozzle Ejector Performance and Characteristics**

**Ejectors-- Calculations/Drawings/Notes**

**Unit Date** n.d.

**box-folder** 4 (box)

**Container** 39 (folder)

**Controlable Convergent Divergent Nozzle--Notes**

**Unit Date** 1954-1956, n.d.

**box-folder** 4 (box)

**Container** 40 (folder)

**Relationship of Flight Factors with Regards to Primary and Secondary Airflows or Ejectors--Calculations/Graphs/Notes**

**Unit Date** 1965-1966, n.d.

**box-folder** 4 (box)

**Container** 41 (folder)

**Ejector Performance with Secondary Ram Drag-- Calculations/Graphs/Notes****Unit Date** 1966**box-folder** 4 (box)**Container** 42 (folder)**Extension of Ejector Charts--Calculations/Graphs/Notes****Unit Date** 1966**box-folder** 4 (box)**Container** 43 (folder)**Sub-subseries v: Annular Nozzle with Semi-Toridal Base****Annular Nozzle with Semi-Toridal Concave Base--Calculations/ Drawings/Notes****Unit Date** 1961-1963, n.d.**box-folder** 4 (box)**Container** 44 (folder)**Transonic Thrust Characteristics of an Annular Nozzle with Semi-Toridal Concave Base--Notes/Draft****Unit Date** 1962-1963, n.d.**box-folder** 4 (box)**Container** 45 (folder)**Transonic Thrust and Drag Characteristics of an Annular Nozzle with Semi-Toridal Concave Base (Obsolete)--Draft****Unit Date** 1962-1963, n.d.**box-folder** 4 (box)**Container** 46 (folder)**Transonic Thrust and Drag Characteristics of an Annular Nozzle with Semi-Toridal Concave Base--Figures****Unit Date** 1962-1963, n.d.**box-folder** 4 (box)**Container** 47 (folder)**Transonic Thrust and Drag Characteristics of an Annular Nozzle with Semi-Toridal Concave Base--Notes/Report****Unit Date** 1962-1963, n.d.**box-folder** 4 (box)**Container** 48 (folder)**Transonic Thrust and Drag Characteristics of an Annular Nozzle with Semi-Toridal Concave Base--Conversions(Static to Dynamic)****Unit Date** 1962-1963, n.d.**box-folder** 4 (box)**Container** 49 (folder)**Sub-subseries vi: Exhaust Nozzle and Jet Nozzle Performance****Exhaust Nozzle and Jet Effects Research-- Figures/Photographs****Unit Date** 1996, n.d.**box-folder** 4 (box)**Container** 50 (folder)**Jet Nozzle-- Calculations/Notes****Unit Date** 1968**box-folder** 4 (box)**Container** 51 (folder)**Jet Nozzle Performance and Comparison--Notes/Calculations****Unit Date** 1969, n.d.**box-folder** 4 (box)**Container** 52 (folder)**Nozzle Thrust Coefficient-- Graphs****Unit Date** 1967, n.d.**box-folder** 4 (box)**Container** 53 (folder)**Sliding Block Nozzle--Calculations/Notes****Unit Date** 1968, n.d.**box-folder** 4 (box)**Container** 54 (folder)**Airframe Afterbody Configuration Thrust and Drag-- Analysis/Drawings/Notes****Unit Date** 1968-1969, n.d.**box-folder** 4 (box)**Container** 55 (folder)**Thrust Modulator Effectiveness in Reverse Thrust Mode--Calculations/Notes/Report****Unit Date** 1969, n.d.**box-folder** 4 (box)**Container** 56 (folder)

**Comments on Analysis of Thrust and Drag Measurements on Airframe and Afterbody Nozzle Configurations**

**Unit Date** 1969  
**box-folder** 4 (box)  
**Container** 57 (folder)

**Mixed Flow Nozzle Turbofan Propulsion Simulation with an Air Driven Model Engine--Calculations/Data/ Notes**

**Unit Date** 1969-1970, n.d.  
**box-folder** 4 (box)  
**Container** 58 (folder)

**Mixed Flow Nozzle Turbofan Propulsion Simulation with an Air Driven Model Engine-- Draft**

**Unit Date** 1970-1971, n.d.  
**box-folder** 4 (box)  
**Container** 59 (folder)

**Miscellaneous Nozzle Notes**

**Unit Date** 1967-1970, n.d.  
**box-folder** 4 (box)  
**Container** 60 (folder)

**Subseries D: Research Projects**

**Variable Information: Sucession of Coordinates**

**Unit Date** n.d.  
**box-folder** 5 (box)  
**Container** 1 (folder)

**Study on Particle Behavior--Calculations/Drawings/Notes**

**Unit Date** 1937-1938, n.d.  
**box-folder** 5 (box)  
**Container** 2 (folder)

**Sub-subseries i: Compressibility Research**

**Energy Relations and Compressible Flow--Notes/Report Draft**

**Unit Date** n.d.  
**box-folder** 5 (box)  
**Container** 3 (folder)

**Bernouilli's Equation for Compressible Fluids--Calculations/Graphs/Notes**

**Unit Date** 1939, n.d.  
**box-folder** 5 (box)  
**Container** 4 (folder)

**Analysis of Compressibility Loss: Propeller 3155-6--Graphs/Tables**

**Unit Date** 1941, n.d.  
**box-folder** 5 (box)  
**Container** 5 (folder)

**Compressible Flow: Propeller Efficiency-- Drawings/Graphs/Notes**

**Unit Date** 1941, n.d.  
**box-folder** 5 (box)  
**Container** 6 (folder)

**16-000 Series Compressibility--Calculations/Figures**

**Unit Date** 1941, n.d.  
**box-folder** 5 (box)  
**Container** 7 (folder)

**Compressibility Research: Estimation of Propeller Loss of Efficiency-- Data/Graphs/Report**

**Unit Date** 1941  
**box-folder** 5 (box)  
**Container** 8 (folder)

**Compressibility Loss: P-60A Airplane Propeller-- Graphs/Tables**

**Unit Date** 1941  
**box-folder** 5 (box)  
**Container** 9 (folder)

**Compressible Flow: Tube of Varying Cross Section--Calculations/Graphs/Notes**

**Unit Date** 1942-1944, n.d.  
**box-folder** 5 (box)  
**Container** 10 (folder)

**Compressible Flow: Thermal Deicing Propeller-- Calculations/Graphs/Reports**

**Unit Date** 1943-1944, n.d.  
**box-folder** 5 (box)  
**Container** 11 (folder)

**Compressible Flow: Jet Reactions-- Calculations/Notes**

**Unit Date** 1954  
**box-folder** 5 (box)  
**Container** 12 (folder)

**Rocket Fuel Data**

**Unit Date** 1958, n.d.  
**box-folder** 5 (box)  
**Container** 13 (folder)

**Variable Sweep--Drawing/Notes**

**Unit Date** 1960, n.d.  
**box-folder** 5 (box)  
**Container** 14 (folder)

**Sub-subseries ii: Jet Interference Program**

**Jet Interference Program: Energy Relations of Compressible Flow--Calculations/Notes**

**Unit Date** 1965, n.d.  
**box-folder** 5 (box)  
**Container** 15 (folder)

**Jet Interference Program--Notes/Proposal**

**Unit Date** 1965  
**box-folder** 5 (box)  
**Container** 16 (folder)

**Jet Interference Program: CCO Interfacing--Photographs/Report**

**Unit Date** 1965, n.d.  
**box-folder** 5 (box)  
**Container** 17 (folder)

**Pressure Belt Analysis-- Drawings/Graphs/Photographs**

**Unit Date** 1942, n.d.  
**box-folder** 5 (box)  
**Container** 18 (folder)

**Turbo Jet Engines: Engine Comparison Tables**

**Unit Date** 1947  
**box-folder** 5 (box)  
**Container** 19 (folder)

**Thin Wing Buffeting--Notes/Report**

**Unit Date** 1953, n.d.  
**box-folder** 5 (box)  
**Container** 20 (folder)

**Mach with Respect to HP-- Graphs/Notes**

**Unit Date** 1954-1955, n.d.  
**box-folder** 5 (box)  
**Container** 21 (folder)

**Projectiles in Elliptical Orbit Near Earth--Calculations/Drawings/Notes**

**Unit Date** 1955  
**box-folder** 5 (box)  
**Container** 22 (folder)

**Sub-subseries iii: Boundary Layer Control**

**"Effect of Boundary Layer Control and Design Parameters on Propeller Performance at Zero Advance (BWC)**

**Unit Date** n.d.  
**box-folder** 5 (box)  
**Container** 23 (folder)

**Boundary Layer Control: Figures 1-13**

**Unit Date** n.d.  
**box-folder** 5 (box)  
**Container** 24 (folder)

**Boundary Layer Losses in Diffuser: Attempted Estimate**

**Unit Date** ca. 1955  
**box-folder** 5 (box)  
**Container** 25 (folder)

**The Effect of Boundary Layer Control and Design Parameters on Propeller Performance at Zero Advance--Draft**

**Unit Date** 1956  
**box-folder** 5 (box)  
**Container** 26 (folder)

**Constant Pressure Injector: Equations-- Graphs/Tables**

**Unit Date** 1956, n.d.

**box-folder** 5 (box)

**Container** 27 (folder)

**Regenerative Decomposition Unit-- Notes**

**Unit Date** 1959, n.d.

**box-folder** 5 (box)

**Container** 28 (folder)

**Saturn C-5 Three Stage Escape Vehicle: Stability and Drag Characteristics--Report**

**Unit Date** 1962, n.d.

**box-folder** 5 (box)

**Container** 29 (folder)

**Rocket Thrust-- Calculations/Notes**

**Unit Date** 1963-1964

**box-folder** 5 (box)

**Container** 30 (folder)

**Turbine Air Compression--Calculations/Graphs/Notes**

**Unit Date** 1965, n.d.

**box-folder** 5 (box)

**Container** 31 (folder)

**V/STOL: Site Plan--Figures/Notes**

**Unit Date** 1966, n.d.

**box-folder** 5 (box)

**Container** 32 (folder)

**Oscillating Office Pump--Calculations/Model/Notes/Photographs**

**Unit Date** 1967, n.d.

**box-folder** 5 (box)

**Container** 33 (folder)

**Double Vortex Pressure Box--Data/Drawings**

**Unit Date** 1967, n.d.

**box-folder** 5 (box)

**Container** 34 (folder)

**Miscellaneous Flight Characteristics-- Calculations**

**Unit Date** ca. 1967

**box-folder** 5 (box)

**Container** 35 (folder)

**Force on a Rankine Ovid--Calculations/Notes**

**Unit Date** ca. 1968

**box-folder** 5 (box)

**Container** 36 (folder)

**Sub-subseries iv: Air Breathing Propulsions Systems****Air Breathing Propulsion Systems**

**Unit Date** 1968, n.d.

**box-folder** 5 (box)

**Container** 37 (folder)

**Air Breathing Propulsion Systems--Report**

**Unit Date** 1968

**box-folder** 5 (box)

**Container** 38 (folder)

**Sub-subseries v: Swept Wing****Swept Wing Deflected: Jet Lift Propulsion Systems--Calculations/Data/Drawings/Proposal**

**Unit Date** 1968-1969, n.d.

**box-folder** 5 (box)

**Container** 39 (folder)

**Swept Wing: Inboard Jet Flight--Calculations/Figures/Notes/ Proposal**

**Unit Date** 1968-1969

**box-folder** 5 (box)

**Container** 40 (folder)

**Sub-subseries vi: Power on Polars****Trimmed Power on Polars: Wind Tunnel Model--Report Draft**

**Unit Date** 1970, n.d.

**box-folder** 5 (box)

**Container** 41 (folder)

**Trimmed Power on Polars: Wind Tunnel Model-- Report**

**Unit Date** 1970

**box-folder** 5 (box)

**Container** 42 (folder)

**Subseries E: 16 Foot Transonic Tunnel and Research**

**Transonic Tunnel: Test Section Air Removal-- Notes**

**Unit Date** n.d.

**box-folder** 5 (box)

**Container** 43 (folder)

**Transonic Tunnel Tasks: T0282, T0284**

**Unit Date** n.d.

**box-folder** 5 (box)

**Container** 44 (folder)

**Transonic Tunnel: Mass Flow Calculations**

**Unit Date** n.d.

**box-folder** 5 (box)

**Container** 45 (folder)

**Transonic Tunnel Energy Relation for Compression Box--Calculation/Graph**

**Unit Date** n.d.

**box-folder** 5 (box)

**Container** 46 (folder)

**16 ft Transonic High Speed Tunnel Section Information: Critical Speed--Figures**

**Unit Date** n.d.

**box-folder** 5 (box)

**Container** 47 (folder)

**"The 16 ft. Transonic Wind Tunnel Calibration with Test Section Air Removal"--Report Draft**

**Unit Date** n.d.

**box-folder** 5 (box)

**Container** 48 (folder)

**16 ft. Transonic Tunnel-- Photographs**

**Unit Date** n.d.

**box-folder** 5 (box)

**Container** 49 (folder)

**"The 16 ft. Transonic Wind Tunnel Calibration with Test Section Air Removal"-- Corrected Pages**

**Unit Date** n.d.

**box-folder** 5 (box)

**Container** 50 (folder)

**Transonic Tunnel:Transfer of Pitching Moments-- Report**

**Unit Date** 1936, 1940

**box-folder** 5 (box)

**Container** 51 (folder)

**Corrections to 16 ft. Transonic Wind Tunnel Air Flow Pressure-- Figures/ Graphs**

**Unit Date** 1936, 1942, n.d.

**box-folder** 5 (box)

**Container** 52 (folder)

**Transonic Tunnel: Propeller Research-- Calculations/Drawings/Graphs/ Notes**

**Unit Date** 1936-1945, n.d.

**box-folder** 5 (box)

**Container** 53 (folder)

**Transonic Tunnel: Jet Propulsion Research-- Graphs/Notes**

**Unit Date** 1937, 1942, 1944, n.d.

**box-folder** 5 (box)

**Container** 54 (folder)

**Transonic Tunnel: Velocity Survey Ahead of Fans**

**Unit Date** 1941-1942, n.d.

**box-folder** 5 (box)

**Container** 55 (folder)

**Transonic Tunnel Calibrations-- Calculations/Logs/Notes**

**Unit Date** 1941-1943, n.d.

**box-folder** 5 (box)

**Container** 56 (folder)

**Transonic Tunnel: Rear Fan-- Torsional Rigidity of Blades**

**Unit Date** 1942, n.d.

**box-folder** 5 (box)

**Container** 57 (folder)

**Transonic Tunnel: Study and Alteration to the Wind Tunnel Fans--Graphs/Notes**

**Unit Date** 1942

**box-folder** 5 (box)

**Container** 58 (folder)

**Transonic Tunnel: Rear Fan Adaptation of M.F. 7 Blade Tunnel Design**

**Unit Date** 1942

**box-folder** 5 (box)

**Container** 59 (folder)

**Keywords**

Messick, Mr.

Keffer, Percy

Bierman, David

**Transonic Tunnel: 1940 Reports**

**Unit Date** 1942-1949

**box-folder** 5 (box)

**Container** 60 (folder)

**Transonic Tunnel: Fan Blade Vibration**

**Unit Date** 1943, n.d.

**box-folder** 5 (box)

**Container** 61 (folder)

**Keywords**

Edwards, H. B.

**Transonic Tunnel: Front Fan Blade Vibration**

**Unit Date** 1943, n.d.

**box-folder** 5 (box)

**Container** 62 (folder)

**Transonic Tunnel: Rear Fan Blade Vibration--Graphs/Tables**

**Unit Date** 1943, n.d.

**box-folder** 5 (box)

**Container** 63 (folder)

**Transonic Tunnel: LMAL Propeller Dyanometer Tests--Figures**

**Unit Date** 1944

**box-folder** 5 (box)

**Container** 64 (folder)

**16 ft. Transonic Tunnel: NACA-- Photographs**

**Unit Date** 1944-1967, n.d.

**box-folder** 5 (box)

**Container** 65 (folder)

**16 Ft. Transonic Tunnel: Operational Data--Graphs**

**Unit Date** 1945-1947

**box-folder** 5 (box)

**Container** 66 (folder)

**S.A.E.: Propeller Shafts and Cone Dimensions-- Blueprints**

**Unit Date** 1946

**box-folder** 5 (box)

**Container** 67 (folder)

**Transonic Tunnel: Air Removal Section--Figure/Graphs/Notes**

**Unit Date** 1946-1965, n.d.

**box-folder** 5 (box)

**Container** 68 (folder)

**Transonic Tunnel: Two-Dimensional Profile Drag--Calculations Photographs**

**Unit Date** 1947, n.d.

**box-folder** 5 (box)

**Container** 69 (folder)

**Transonic Tunnel: Propeller Dynamometer Equipment-- Graphs/Report**

**Unit Date** 1948

**box-folder** 5 (box)

**Container** 70 (folder)

**Transonic Tunnel: Propeller Induced Angle of Attack-- Graphs/Notes/Tables**

**Unit Date** 1949, n.d.

**box-folder** 5 (box)

**Container** 71 (folder)

**Transonic Tunnel and Corson-- Photographs**

**box-folder** 5 (box)

**Container** 72 (folder)

**Transonic Tunnel: 1950-59 Reports**

**Unit Date** 1950-1959

**box-folder** 5 (box)

**Container** 73 (folder)

**Transonic Tunnel: Horsepower vs. RPM Tests-- Graphs/Notes/Tables**

**Unit Date** 1951-1952, 1957, n.d.

**box-folder** 5 (box)

**Container** 74 (folder)

**Transonic Tunnel: Mass Flow (Pressure Rise through Fans)--Graphs**

**Unit Date** 1952

**box-folder** 5 (box)

**Container** 75 (folder)

**Transonic Tunnel: Turbulence Measurements--Graphs**

**Unit Date** 1952

**box-folder** 5 (box)

**Container** 76 (folder)

**Transonic Tunnel: Test Section--Graphs/Notes**

**Unit Date** 1953

**box-folder** 5 (box)

**Container** 77 (folder)

**Transonic Tunnel: Loss--Notes**

**Unit Date** 1954-1955, n.d.

**box-folder** 5 (box)

**Container** 78 (folder)

**Transonic Tunnel: Test F-105 (Old Model)-- Drawings/Graphs/Notes**

**Unit Date** 1954-1957, n.d.

**box-folder** 5 (box)

**Container** 79 (folder)

**Transonic Tunnel--Notes**

**Unit Date** 1955-1956, n.d.

**box-folder** 5 (box)

**Container** 80 (folder)

**Transonic Tunnel: Wind Tunnel to be Operated with Transonic Tunnel Air Removal Compressor-- Calculations/Drawings/Notes/ Proposal**

**Unit Date** 1956, n.d.

**box-folder** 5 (box)

**Container** 81 (folder)

**Transonic Tunnel: Supersonic Addition--Calculations/Notes**

**Unit Date** 1956, n.d.

**box-folder** 5 (box)

**Container** 82 (folder)

**Transonic Tunnel: Calibration with Test Section Air Removal --Calculations/Graphs/Notes**

**Unit Date** 1956-1973, n.d.

**box-folder** 5 (box)

**Container** 83 (folder)

**Transonic Tunnel (Small) to be Powered by Compressor for B-L Removal**

**Unit Date** 1957, n.d.

**box-folder** 5 (box)

**Container** 84 (folder)

**Transonic Tunnel--Photographs**

**Unit Date** 1957, n.d.

**box-folder** 5 (box)

**Container** 85 (folder)

**Transonic Tunnel: Air Removal System**

**Unit Date** 1957-1960

**box-folder** 5 (box)

**Container** 86 (folder)

**Transonic Tunnel: RML 52E01-- Shaft Torsion, Dampers, and Humidity**

**box-folder** 5 (box)

**Container** 87 (folder)

**Transonic Tunnel: Compressor Analysis Data**

**Unit Date** 1958-61, n.d.

**box-folder** 5 (box)

**Container** 88 (folder)

**Transonic Tunnel: Ground Rules/ Position Request-- Notes**

**Unit Date** 1960, n.d.

**box-folder** 5 (box)

**Container** 89 (folder)

**Transonic Tunnel: 1960-69 Reports**

**Unit Date** 1960-1969

**box-folder** 5 (box)

**Container** 90 (folder)

**Transonic Tunnel: Wind Tunnel Calibration With Test Section Air Removal**

**Unit Date** 1961-1973, n.d.

**box-folder** 5 (box)

**Container** 91 (folder)

**Transonic Tunnel: Size Classifications**

**Unit Date** ca. 1962

**box-folder** 5 (box)

**Container** 92 (folder)

**Transonic Tunnel: Balance List Completed**

**Unit Date** 1962, n.d.

**box-folder** 5 (box)

**Container** 93 (folder)

**Transonic Tunnel: Miscellaneous Facilities**

**Unit Date** ca. 1962

**box-folder** 5 (box)

**Container** 94 (folder)

**Transonic Tunnel--Figures/Graphs/Notes**

**Unit Date** 1962

**box-folder** 5 (box)

**Container** 95 (folder)

**Transonic Tunnel: Wall Divergence--Graphs/Notes/Reports**

**Unit Date** 1963-1964, n.d.

**box-folder** 5 (box)

**Container** 96 (folder)

**Transonic Tunnel: Wind Tunnel Test Section Air Removal--Figures/Graphs**

**Unit Date** 1963-1973, n.d.

**box-folder** 5 (box)

**Container** 97 (folder)

**Transonic Tunnel: Flight, Thrust, and Drag**

**Unit Date** 1964-1966, n.d.

**box-folder** 5 (box)

**Container** 98 (folder)

**Transonic Tunnel: Flight and Aerodynamic Analysis**

**Unit Date** 1965-1967

**box-folder** 6 (box)

**Container** 1 (folder)

**Transonic Tunnel:Subsonic WindTunnel Drag-- Calculations/Notes**

**Unit Date** 1966-1967

**box-folder** 6 (box)

**Container** 2 (folder)

**Transonic Tunnel: NASA Photographs**

**Unit Date** 1967, n.d.

**box-folder** 6 (box)

**Container** 3 (folder)

**Sir Frank Whittle: Visit at Langley-- Photographs**

**Unit Date** 1967

**box-folder** 6 (box)

**Container** 4 (folder)

**Transonic Tunnel: Cooling by Direct Integration of Cool Dry Air-- Calculations/Graphs/Notes**

**Unit Date** 1967-1979, n.d.

**box** 6

**Container** 5 (folder)

**Transonic Tunnel:Wind Tunnel Test Section--Data/Graphs/Notes**

**Unit Date** 1969-1974, n.d.

**box** 6

**Container** 6 (folder)

**Transonic Tunnel: 1970-1972 Reports**

**Unit Date** 1970-1972

**box** 6

**Container** 7 (folder)

**"Transonic Wind Tunnel Calibration with Test Section Air Removal"--Outline**

**box-folder** 6 (box)

**Container** 8 (folder)

**Transonic Tunnel: Air Stream Turbulence**

**Unit Date** 1971

**box-folder** 6 (box)

**Container** 9 (folder)

**Transonic Tunnel:Staff List**

**Unit Date** 1972

**box-folder** 6 (box)

**Container** 10 (folder)

**Transonic Tunnel Calibration Report--Edits/Outline**

**Unit Date** 1973, n.d.

**box-folder** 6 (box)

**Container** 11 (folder)

**" 16' Transonic Wind Tunnel Calibration with Test Section Air Removal"--Blue Card Editorial**

**Unit Date** 1973, n.d.

**box-folder** 6 (box)

**Container** 12 (folder)

**"16 Foot Transonic Wind Tunnel Calibration with Test Section Air Removal"-- Tables 1-8**

**Unit Date** 1973

**box-folder** 6 (box)

**Container** 13 (folder)

**"16 Foot Transonic Wind Tunnel Calibration with Test Section Air Removal"-- Report by BWC, Runckle, and Igoe**

**Unit Date** 1973

**box-folder** 6 (box)

**Container** 14 (folder)

**"16 Foot Transonic Wind Tunnel Calibration with Test Section Air Removal"-- Figures 1-48**

**Unit Date** 1973

**box-folder** 6 (box)

**Container** 15 (folder)

**16' Transonic Tunnel Calibration Report: Edited Copy**

**Unit Date** 1973

**box-folder** 6 (box)

**Container** 16 (folder)

**16' Transonic Tunnel Calibration: Edited Copy with Notes--Report Draft**

**Unit Date** 1973

**box-folder** 6 (box)

**Container** 17 (folder)

**"16 Foot Transonic Wind Tunnel Calibration with Test Section Air Removal"-- Manuscript**

**Unit Date** 1973

**box-folder** 6 (box)

**Container** 18 (folder)

**"16 Foot Transonic Wind Tunnel Calibration with Test Section Air Removal"-- Unedited**

**Unit Date** 1973

**box-folder** 6 (box)

**Container** 19 (folder)

**"16 Foot Transonic Wind Tunnel Calibration with Test Section Air Removal"-- Draft by BWC, Jack F.Runckle, and William B.Igoe**

**Unit Date** 1973

**box-folder** 6 (box)

**Container** 20 (folder)

**"16 Foot Transonic Wind Tunnel Calibration with Test Section Air Removal"-- Edits with Table of Contents**

**Unit Date** 1973

**box-folder** 6 (box)

**Container** 21 (folder)

**"16 Foot Transonic Wind Tunnel Calibration with Test Section Air Removal"-- with Corrections**

**Unit Date** 1973

**box-folder** 6 (box)

**Container** 22 (folder)

**"16 Foot Transonic Wind Tunnel Calibration with Test Section Air Removal"-- Report**

**Unit Date** 1973  
**box-folder** 6 (box)  
**Container** 23 (folder)

**"16 Foot Transonic Wind Tunnel Calibration with Test Section Air Removal"-- Tables**

**Unit Date** 1973  
**box-folder** 6 (box)  
**Container** 24 (folder)

**"16 Foot Transonic Wind Tunnel Calibration with Test Section Air Removal"-- Figures/Photographs**

**Unit Date** 1973  
**box-folder** 6 (box)  
**Container** 25 (folder)

**"16 Foot Transonic Wind Tunnel Calibration with Test Section Air Removal"-- Copy 1**

**Unit Date** 1973  
**box-folder** 6 (box)  
**Container** 26 (folder)

**Transonic Tunnel: Testing Information (Donald L. Maiden)**

**Unit Date** 1973  
**box-folder** 6 (box)  
**Container** 27 (folder)

**Wind Tunnel Design Theory--Calculations/Notes/Tables**

**Unit Date** 1976, n.d.  
**box-folder** 6 (box)  
**Container** 28 (folder)

**Transonic Tunnel: Internal Photographs**

**Unit Date** 1984  
**box-folder** 6 (box)  
**Container** 29 (folder)

**Series V: Publications, Journals, and Reports**

**Unit Date** 1934-1982

**Subseries A: Publications**

**folder** 2 (oversize)

**Scope and Contents**

Materials from this subseries are in Boxes 6-9 (folders listed below) and in oversize Folder 2.

**"60,000 HP Fan Drive For the 16-Foot Tunnel"**

**Unit Date** 1948  
**box-folder** 6 (box)  
**Container** 30 (folder)

**"8th Intersociety Energy Conservation Engineering Conference Proceedings"**

**Unit Date** 1973  
**box-folder** 6 (box)  
**Container** 31 (folder)

**"Aircraft Power Plant"--Patent**

**Unit Date** 1937  
**box-folder** 6 (box)  
**Container** 32 (folder)

**"Air Craft Propulsion Conference"--Figure Reprints**

**Unit Date** 1970  
**box-folder** 6 (box)  
**Container** 33 (folder)

**"Becco 90% and 98% Hydrogen Peroxide: Properties, Records and Potential in the Propulsions Field"**

**Unit Date** 1961  
**box-folder** 6 (box)  
**Container** 34 (folder)

**"Becco: Hydrogen Peroxide Physical Properties Book"**

**Unit Date** 1955  
**box-folder** 6 (box)  
**Container** 35 (folder)

**"Commercial Air Transportation Developments in the Next Three Decades" by H.W. Withington**

**Unit Date** 1978  
**box-folder** 6 (box)  
**Container** 36 (folder)

**"High Bypass Lift/Cruise Fan: The State of the Art"**

**Unit Date** 1965  
**box-folder** 6 (box)  
**Container** 37 (folder)

**"Concentrated Hydrogen Peroxide"**

**Unit Date** 1959  
**box-folder** 6 (box)  
**Container** 38 (folder)

**"Concentrated Hydrogen Peroxide H2O2 Properties, Uses, Storage, and Handling"**

**Unit Date** 1959  
**box-folder** 6 (box)  
**Container** 39 (folder)

**"Encyclopedia of Chemical Technology: Manganese Compounds to Nitrophenols"**

**Unit Date** ca. 1967, 1976  
**box-folder** 6 (box)  
**Container** 40 (folder)

**"The Energy Dilema and its Impact on Transportation"**

**Unit Date** 1973  
**box-folder** 6 (box)  
**Container** 41 (folder)

**"Exhaust Nozzles Lift Engines"**

**Unit Date** n.d., 1964  
**box-folder** 6 (box)  
**Container** 42 (folder)

**"Field Handling of Concentrated Hydrogen Peroxide"**

**Unit Date** 1955, 1958, 1962  
**box-folder** 6 (box)  
**Container** 43 (folder)

**"Fuel Conservation Prop-Fan: Propulsion for High Speed Aircraft"**

**Unit Date** 1976  
**box-folder** 6 (box)  
**Container** 44 (folder)

**"Investigation of the Use of Meathonal-Gasoline Blends"**

**Unit Date** 1977  
**box-folder** 6 (box)  
**Container** 45 (folder)

**"Physical Constants and Conservation Factors Revised"**

**Unit Date** 1969  
**box-folder** 6 (box)  
**Container** 46 (folder)

**"Performance Matching to the Propulsion System--S.A.E."**

**Unit Date** 1968  
**box-folder** 6 (box)  
**Container** 47 (folder)

**"Selecting Construction Steels for Aircraft Design" by C.L. Hilbert**

**Unit Date** 1956  
**box-folder** 6 (box)  
**Container** 48 (folder)

**"A Short Method for Evaluating Determinants and Solving for Systems of Linear Equations with Real or Complex Coefficients"**

**Unit Date** 1941  
**box-folder** 6 (box)  
**Container** 49 (folder)

**"Supersonic Systems Exhaust Nozzle Configuration Study" by W.A. Fasching and H.A. Carl**

**Unit Date** 1962  
**box-folder** 7 (box)  
**Container** 1 (folder)

**"Supersonic Transport Mach +-2.5: Annular Exhaust System Configuration Study for Turbofan Engine" by W.A. Fasching**

**Unit Date** 1963  
**box-folder** 7 (box)  
**Container** 2 (folder)

**"Supersonic Transport Propulsion Considerations"**

**Unit Date** 1963  
**box-folder** 7 (box)  
**Container** 3 (folder)

**"Theoretical Analysis of Oscillations of a Towed Cable"**

**Unit Date** 1949  
**box-folder** 7 (box)  
**Container** 4 (folder)

**"TJ70 Engine Considerations for Supersonic Transport"**

**Unit Date** 1963  
**box-folder** 7 (box)  
**Container** 5 (folder)

**"Twelfth Southeastern Seminar on Thermal Sciences"**

**Unit Date** 1976  
**box-folder** 7 (box)  
**Container** 6 (folder)

**Subseries B: Reports**

**Author Search--Research Notes**

**Unit Date** n.d.  
**box-folder** 7 (box)  
**Container** 7 (folder)

**"16 Foot Transonic Wind Tunnel Calibration with Test Section Air Removal" -- George Strokes Editorial**

**Unit Date** 1974  
**box-folder** 7 (box)  
**Container** 8 (folder)

**"Aerodynamic Interface Between Exhaust System and Airframe"**

**Unit Date** 1970  
**box-folder** 7 (box)  
**Container** 9 (folder)

**"Aerodynamic Performance of the 16-Foot Transonic Tunnel Air Removal Compressor"**

**Unit Date** 1961  
**box-folder** 7 (box)  
**Container** 10 (folder)

**"Aerodynamic Reduction of Static-Pressure Sensing Errors for Aircraft at Subsonic, Near Sonic, and Low Super Sonic Speed"**

**Unit Date** 1959  
**box-folder** 7 (box)  
**Container** 11 (folder)

**"The Aerodynamics of High Speed Propellers"**

**Unit Date** n.d., 1976  
**box-folder** 7 (box)  
**Container** 12 (folder)

**"The Aerodynamics of a Wind Tunnel Fan"**

**Unit Date** 1941  
**box-folder** 7 (box)  
**Container** 13 (folder)

**"Agricultural Alcohol in Automotive Fuel : Nebraska GASOHOL"**

**Unit Date** 1973, 1976  
**box-folder** 7 (box)  
**Container** 14 (folder)

**"Air Flow and Power Characteristics of the Langley 16 Foot Transonic Tunnel with Slotted Test Section"**

**Unit Date** 1952  
**box-folder** 7 (box)  
**Container** 15 (folder)

**"Analysis of Heat and Compressibility Effects in Internal Flow Systems and High-Speed Tests of a Ram Jet System "**

**Unit Date** 1943  
**box-folder** 7 (box)  
**Container** 16 (folder)

**"Analysis of Propeller Efficiency Losses Associated with Heated-Air Thermal Deicing "**

**Unit Date** 1945  
**box-folder** 7 (box)  
**Container** 17 (folder)

**"Applications of Modern Hydrodynamics to Aeronautics"**

**Unit Date** n.d., 1972  
**box-folder** 7 (box)  
**Container** 18 (folder)

**"Calibration of the Langley 16-Foot Transonic Tunnel With Test Section Air Removal"--Personal Copy**

**Unit Date** 1974  
**box-folder** 7 (box)  
**Container** 19 (folder)

**"Calibration of the Langley 16-Foot Transonic Tunnel With Test Section Air Removal "**

**Unit Date** 1974  
**box-folder** 7 (box)  
**Container** 20 (folder)

**"Calibration of the Langley 16-Foot Transonic Tunnel with Test Section Air Removal"**

**Unit Date** 1974  
**box-folder** 7 (box)  
**Container** 21 (folder)

**"Characteristics of the Langley 8-Foot Transonic Tunnel with Slotted Test Section"**

**Unit Date** 1958  
**box-folder** 7 (box)  
**Container** 22 (folder)

**"Check Calibration of the ADEC 16-Ft Transonic Tunnel"**

**Unit Date** 1966  
**box-folder** 7 (box)  
**Container** 23 (folder)

**"Closed Space Nozzles Twin Jet Configuration"**

**Unit Date** 1970  
**box-folder** 7 (box)  
**Container** 24 (folder)

**"Comments on Russian Tu-114"**

**Unit Date** 1959  
**box-folder** 7 (box)  
**Container** 25 (folder)

**"Compound Compressible Nozzle Flow"**

**Unit Date** 1966  
**box-folder** 7 (box)  
**Container** 26 (folder)

**"Copper Artifacts: Correlation with Source Types Copper Ores"**

**Unit Date** 1966  
**box-folder** 7 (box)  
**Container** 27 (folder)

**"A Correlation of High Subsonic Afterbody Drag in the Presence of a Propulsive Jet or Support Sting"**

**Unit Date** 1965  
**box-folder** 7 (box)  
**Container** 28 (folder)

**"Effects of Compressibility on the Lift and the Load Characteristics of a Tapered Wing of NACA 64-210 Air Foil Sections"**

**Unit Date** 1948  
**box-folder** 7 (box)  
**Container** 29 (folder)

**"Effect of Ice and Heated Air Deicing on the Aerodynamic Performance of Propellers"**

**Unit Date** 1948  
**box-folder** 7 (box)  
**Container** 30 (folder)

**"Effect of Ice and Heated-Air Deicing on the Aerodynamic Performance of Propellers"--S.A.E.**

**Unit Date** 1948  
**box-folder** 7 (box)  
**Container** 31 (folder)

**"The Effect of a Tip Modification and Thermal Deicing Air Flow on Propeller Performance"**

**Unit Date** 1945  
**box-folder** 7 (box)  
**Container** 32 (folder)

**"The Elimination of Diffuser Separation by Vortex Generators"**

**Unit Date** 1947  
**box-folder** 7 (box)  
**Container** 33 (folder)

**"Energy Losses in Air Screw Propellers"**

**Unit Date** 1938, 1970  
**box-folder** 7 (box)  
**Container** 34 (folder)

**"Experimentally Determined Drag of Conical Afterbodies with Effects of Jet Exiting From a Convergent Divergent Nozzle with Thin Base"**

**Unit Date** 1969  
**box-folder** 7 (box)  
**Container** 35 (folder)

**"An Experimental Investigation of the Unsteady Flows about Spheres and Disks"**

**Unit Date** 1968  
**box-folder** 7 (box)  
**Container** 36 (folder)

**"Facility Safety Analysis Report: Vought Missiles and Space Company"**

**Unit Date** 1973  
**box-folder** 7 (box)  
**Container** 37 (folder)

**"Facility Review for Director of Langley Research Center"**

**Unit Date** 1968  
**box-folder** 7 (box)  
**Container** 38 (folder)

**"Field of Flow About a Jet and Effect of Jets on Stability of Jet Propelled Airplanes"**

**Unit Date** 1946  
**box-folder** 7 (box)  
**Container** 39 (folder)

**"Formulas and Charts for Designing Flexure Pivots"**

**Unit Date** 1947  
**box-folder** 7 (box)  
**Container** 40 (folder)

**"A Glow Discharge Anemometer"**

**Unit Date** 1934  
**box-folder** 7 (box)  
**Container** 41 (folder)

**"H<sub>2</sub>O<sub>2</sub> Injector: p1127 Box Engine"**

**Unit Date** 1959-1960, n.d.  
**box-folder** 7 (box)  
**Container** 42 (folder)

**"An Improved Type of Crate for Bottled Beverages"**

**Unit Date** 1951  
**box-folder** 7 (box)  
**Container** 43 (folder)

**"An Investigation of Transonic Flow Fields Surrounding Hot and Cold Sonic Jets"**

**Unit Date** 1961  
**box-folder** 7 (box)  
**Container** 44 (folder)

**"Jet Noise Prediction"**

**Unit Date** 1965  
**box-folder** 7 (box)  
**Container** 45 (folder)

**"The Langley 2000 Horsepower Propeller"**

**Unit Date** 1952  
**box-folder** 7 (box)  
**Container** 46 (folder)

**"McDonnell Douglas IRAD Review"**

**Unit Date** 1968, n.d.  
**box-folder** 7 (box)  
**Container** 47 (folder)

**"Performance Characteristics of Existing Utility Boilers When Fired with Low BTU Gas"**

**Unit Date** 1974  
**box-folder** 7 (box)  
**Container** 48 (folder)

**"Performance of an Ethanol-Gasoline Blend in Automobiles and Light Trucks"**

**Unit Date** 1975, 1976  
**box-folder** 7 (box)  
**Container** 49 (folder)

**"Performance of Multiple Jet-Exit Installations" (n-65)**

**Unit Date** n.d.  
**box-folder** 7 (box)  
**Container** 50 (folder)

**"Performance of Variable Divergent-Nozzle Designed for Flight Mach Numbers"**

**Unit Date** 1961  
**box-folder** 7 (box)  
**Container** 51 (folder)

**"Power Requirements of the Langley 16-Foot Transonic Tunnel with Test Section Air Removal"**

**Unit Date** 1955  
**box-folder** 7 (box)  
**Container** 52 (folder)

**"Power Requirements of the 16-Foot Transonic Tunnel with Test Section Air Removal" (copy)**

**Unit Date** 1955-1956

**box-folder** 7 (box)

**Container** 53 (folder)

**"Preliminary Report to the Peninsula Planning District Commission on Solid Waste Management Plan"**

**Unit Date** 1976

**box-folder** 7 (box)

**Container** 54 (folder)

**"Preliminary Trial of Pressure Belt"**

**Unit Date** 1942

**box-folder** 7 (box)

**Container** 55 (folder)

**"Pressure Distributions for a Sting-Mounted Cone-Cylinder Body Which Simulates the 16-Foot Transonic Tunnel Strut-Mounted Air-Powered Nacelle"**

**Unit Date** 1967

**box-folder** 7 (box)

**Container** 56 (folder)

**"A Problem of Three Dimensional Hypersonic Boundary Layer Interaction"**

**Unit Date** 1968

**box-folder** 7 (box)

**Container** 57 (folder)

**"Protein Concentrates from Distillers By-Products"**

**Unit Date** 1975, 1976

**box-folder** 7 (box)

**Container** 58 (folder)

**"Reduction of Noise from Unexpanded Axisymmetric Jet Flows Using Low Energy Radial Jet Flow Implement"**

**Unit Date** 1965

**box-folder** 7 (box)

**Container** 59 (folder)

**"Reduction of Wall Interface for High-Lift Model Testing"**

**Unit Date** 1971

**box-folder** 7 (box)

**Container** 60 (folder)

**"Second Generation Supersonic Transport"**

**Unit Date** n.d.

**box-folder** 7 (box)

**Container** 61 (folder)

**"Silver Screen Catalyst Bed"**

**Unit Date** 1959, n.d.

**box-folder** 7 (box)

**Container** 62 (folder)

**"Stress Investigation of Axial Flow Compressor"**

**box-folder** 8 (box)

**Container** 1 (folder)

**"Study and Development of Acoustic Treatment for Jet Engine Tail Pipes"**

**Unit Date** 1971

**box-folder** 8 (box)

**Container** 2 (folder)

**"Summary of Jet Exit Research"**

**Unit Date** n.d.

**box-folder** 8 (box)

**Container** 3 (folder)

**"The Transfer Function for a Laser Interferometric Angle Sensing Instrument"**

**Unit Date** 1972

**box-folder** 8 (box)

**Container** 4 (folder)

**"The Transonic 16-Foot Tunnel Turbulence-Damping-Screen"**

**Unit Date** n.d.

**box-folder** 8 (box)

**Container** 5 (folder)

**"Variable Geometry Requirements in Inlets and Exhaust Nozzles for High Mach Number Applications"**

**Unit Date** 1968

**box-folder** 8 (box)

**Container** 6 (folder)

**"War Time Report: Tunnel Wall Corrections to Rolling and Yawing Moments Due to Aileron Deflection in Closed Rectangular Wind Tunnels"**

**Unit Date** 1945  
**box-folder** 8 (box)  
**Container** 7 (folder)

**Wind Tunnel Tests: Vought XF4U-1 Airplane**

**Unit Date** 1939  
**box-folder** 8 (box)  
**Container** 8 (folder)

**Wind Tunnel Tests: Vought XF4U-1 Airplane Report Copy**

**Unit Date** 1939  
**box-folder** 8 (box)  
**Container** 9 (folder)

**XSB2D-1 Tests (Multiple Copies)**

**Unit Date** 1942  
**box-folder** 8 (box)  
**Container** 10 (folder)

**Subseries C: Papers**

**8th Intersociety Energy Conservation Engineering Conference: "Design and Demonstration of Low Emission Rankine Cycle Auto Engine Using Organic Working Fluid and Turbine Expander"**

**Unit Date** 1973  
**box-folder** 8 (box)  
**Container** 11 (folder)

**"Combustion and Emissions Characteristics of Methanol, Methanol-Water, and Gasoline-Methanol Blends in a Spark Ignition Engine"**

**Unit Date** 1976  
**box-folder** 8 (box)  
**Container** 12 (folder)

**"Design and Testing of a 150 Watt SNAP 19 High Performance Generator"**

**Unit Date** 1973  
**box-folder** 8 (box)  
**Container** 13 (folder)

**"Determination of ASME Nozzle Flow Coefficients by Thrust Measurement"**

**Unit Date** 1964  
**box-folder** 8 (box)  
**Container** 14 (folder)

**"A Dual-Element Transducer for Measuring Gas-Stream Temperatures"**

**Unit Date** 1965  
**box-folder** 8 (box)  
**Container** 15 (folder)

**"Effects of Engine Exhaust Flow on Boattail Drag"**

**Unit Date** 1970  
**box-folder** 8 (box)  
**Container** 16 (folder)

**"Experimental Optimization of Subsonic Inlet Design Parameters"**

**Unit Date** 1966  
**box-folder** 8 (box)  
**Container** 17 (folder)

**"Experimental Results with Lift Engine Exhaust Nozzles"**

**Unit Date** 1965  
**box-folder** 8 (box)  
**Container** 18 (folder)

**"Exploratory Investigation of Jet Engine Silencing with Plug Nozzle Configurations"**

**box-folder** 8 (box)  
**Container** 19 (folder)

**"Flow and Acoustic Characteristics of 191 Tubes and 191 Shrouds Supersonic Jet Noise Suppressor"**

**Unit Date** 1971  
**box-folder** 8 (box)  
**Container** 20 (folder)

**"H2O2 Auxiliary Power Unit for Space Shuttle Vehicles"**

**Unit Date** 1973  
**box-folder** 8 (box)  
**Container** 21 (folder)

**"The Jet Flap Diffuser: A New Thrust Augmenting Device"**

**Unit Date** 1969  
**box-folder** 8 (box)  
**Container** 22 (folder)

**"Large Scale Terrestrial Solar Cell Power Generation Cost: A Preliminary Assessment"**

**Unit Date** 1971  
**box-folder** 8 (box)  
**Container** 23 (folder)

**"Prespectives of SST Aircraft Noise Problem"**

**Unit Date** 1958  
**box-folder** 8 (box)  
**Container** 24 (folder)

**"Methanol Technology and Economics "**

**Unit Date** ca. 1970, 1976  
**box-folder** 8 (box)  
**Container** 25 (folder)

**"Methanol: A Versatile Fuel for Immediate Use"**

**Unit Date** ca. 1973, 1976  
**box-folder** 8 (box)  
**Container** 26 (folder)

**"Mixed Flow Nozzle Turbofan Propulsion Simulation with an Air Driven Model Engine"**

**Unit Date** 1971, n.d.  
**box-folder** 8 (box)  
**Container** 27 (folder)

**"Multielement Suppressor Nozzles for Thrust Augmentation Systems"**

**Unit Date** 1972  
**box-folder** 8 (box)  
**Container** 28 (folder)

**"Nebraska Statutes: The Basis for the Gasohol Program"**

**Unit Date** 1976, n.d.  
**box-folder** 8 (box)  
**Container** 29 (folder)

**"The Nebraska GASOHOL Program, Providing Food and Fuel for the Future"**

**Unit Date** 1976  
**box-folder** 8 (box)  
**Container** 30 (folder)

**"Net Energy Analysis of Ethanol Production"**

**Unit Date** 1976  
**box-folder** 8 (box)  
**Container** 31 (folder)

**"New Aspects of Sound Generation by Circular Jets"**

**Unit Date** 1972  
**box-folder** 8 (box)  
**Container** 32 (folder)

**"Oxygen: New Chemical for Pulp Industry"**

**Unit Date** 1972, 1976  
**box-folder** 8 (box)  
**Container** 33 (folder)

**"Oxygen Separated from Air Using Molecular Sieve"**

**Unit Date** 1972  
**box-folder** 8 (box)  
**Container** 34 (folder)

**"A Preliminary Assment of the Feasibility of Deriving Liquid and Gaseous Fuels from Grown and Waste Organics"**

**Unit Date** 1976  
**box-folder** 8 (box)  
**Container** 35 (folder)

**"Propulsive Efficiency of Tail Mounted Turbofan Engines"**

**Unit Date** 1968  
**box-folder** 8 (box)  
**Container** 36 (folder)

**"Simple Pressure Source Model of Jet Noise"**

**Unit Date** ca. 1971,1972  
**box-folder** 8 (box)  
**Container** 37 (folder)

**"Simplified Propeller Calculations"**

**Unit Date** 1938  
**box-folder** 8 (box)  
**Container** 38 (folder)

**"The Solution of Isentropic Transonic Flow"**

**Unit Date** 1972  
**box-folder** 8 (box)  
**Container** 39 (folder)

**"Some Details of the Structure of an Axis Symetric**

**box-folder** 8 (box)  
**Container** 40 (folder)

**"Some Experiments on Two Stream Propelling Nozzles for Supersonic Aircraft"**

**Unit Date** 1970  
**box-folder** 8 (box)  
**Container** 41 (folder)

**"Supersonic Annular Nozzles"**

**Unit Date** 1971  
**box-folder** 8 (box)  
**Container** 42 (folder)

**"Tables for Compressible Flow for a Gamma of 1.266"**

**Unit Date** 1967  
**box-folder** 8 (box)  
**Container** 43 (folder)

**"On the Thermodynamic Spectrum of Air Breating Propulsion"**

**Unit Date** 1964  
**box-folder** 8 (box)  
**Container** 44 (folder)

**"The Theory of Ejectors"**

**Unit Date** 1945  
**box-folder** 8 (box)  
**Container** 45 (folder)

**"Vortex Decay about a Stationary Boundary"**

**Unit Date** 1967  
**box-folder** 8 (box)  
**Container** 46 (folder)

**Subseries D: Journals**

**Sub-subseries i: Journal of Aeronautical Sciences**

**Journal of Aeronautical Scienes: Volume 8, Number 9**

**Unit Date** 1941  
**box-folder** 8 (box)  
**Container** 47 (folder)

**Journal of Aeronautical Scienes: Volume 11, Number 5**

**Unit Date** 1944  
**box-folder** 8 (box)  
**Container** 48 (folder)

**Journal of Aeronautical Scienes: Volume 16, Number 5**

**Unit Date** 1949  
**box-folder** 8 (box)  
**Container** 49 (folder)

**Journal of Aeronautical Scienes: Volume 16, Number 2**

**Unit Date** 1949  
**box-folder** 8 (box)  
**Container** 50 (folder)

**Sub-subseries ii: Journal of Energy**

**Journal of Energy: Volume 1, Number 1**

**Unit Date** 1977  
**box-folder** 8 (box)  
**Container** 51 (folder)

**Journal of Energy: Volume 1, Number 2**

**Unit Date** 1977  
**box-folder** 8 (box)  
**Container** 52 (folder)

**Journal of Energy: Volume 1, Number 3**

**Unit Date** 1977  
**box-folder** 8 (box)  
**Container** 53 (folder)

**Journal of Energy: Volume 1, Number 4**

**Unit Date** 1977

**box-folder** 8 (box)

**Container** 54 (folder)

**Journal of Energy: Volume 1, Number 5**

**Unit Date** 1977

**box-folder** 8 (box)

**Container** 55 (folder)

**Journal of Energy: Volume 1, Number 6**

**Unit Date** 1977

**box-folder** 8 (box)

**Container** 56 (folder)

**Journal of Energy: Volume 2, Number 1**

**Unit Date** 1978

**box-folder** 8 (box)

**Container** 57 (folder)

**Journal of Energy: Volume 2, Number 2**

**Unit Date** 1978

**box-folder** 8 (box)

**Container** 58 (folder)

**Journal of Energy: Volume 2, Number 3**

**Unit Date** 1978

**box-folder** 8 (box)

**Container** 59 (folder)

**Journal of Energy: Volume 2, Number 4**

**Unit Date** 1978

**box-folder** 8 (box)

**Container** 60 (folder)

**Journal of Energy: Volume 2, Number 5**

**Unit Date** 1978

**box-folder** 8 (box)

**Container** 61 (folder)

**Journal of Energy: Volume 2, Number 6**

**Unit Date** 1978

**box-folder** 8 (box)

**Container** 62 (folder)

**Journal of Energy: Volume 3, Number 1**

**Unit Date** 1979

**box-folder** 8 (box)

**Container** 63 (folder)

**Journal of Energy: Volume 3, Number 2**

**Unit Date** 1979

**box-folder** 8 (box)

**Container** 64 (folder)

**Journal of Energy: Volume 3, Number 3**

**Unit Date** 1979

**box-folder** 8 (box)

**Container** 65 (folder)

**Journal of Energy: Volume 3, Number 4**

**Unit Date** 1979

**box-folder** 8 (box)

**Container** 66 (folder)

**Journal of Energy: Volume 3, Number 5**

**Unit Date** 1979

**box-folder** 8 (box)

**Container** 67 (folder)

**Journal of Energy: Volume 3, Number 6**

**Unit Date** 1979

**box-folder** 8 (box)

**Container** 68 (folder)

**Journal of Energy: Volume 4, Number 1**

**Unit Date** 1980

**box-folder** 8 (box)

**Container** 69 (folder)

**Journal of Energy: Volume 4, Number 2**

**Unit Date** 1980  
**box-folder** 8 (box)  
**Container** 70 (folder)

**Journal of Energy: Volume 4, Number 3**

**Unit Date** 1980  
**box-folder** 8 (box)  
**Container** 71 (folder)

**Journal of Energy: Volume 4, Number 4**

**Unit Date** 1980  
**box-folder** 8 (box)  
**Container** 72 (folder)

**Journal of Energy: Volume 4, Number 5**

**Unit Date** 1980  
**box-folder** 8 (box)  
**Container** 73 (folder)

**Journal of Energy: Volume 4, Number 6**

**Unit Date** 1980  
**box-folder** 8 (box)  
**Container** 74 (folder)

**Journal of Energy: Volume 5, Number 1**

**Unit Date** 1981  
**box-folder** 8 (box)  
**Container** 75 (folder)

**Journal of Energy: Volume 5, Number 2**

**Unit Date** 1981  
**box-folder** 8 (box)  
**Container** 76 (folder)

**The Virginia Engineer: Volume 27, Number 8**

**Unit Date** 1977  
**box-folder** 8 (box)  
**Container** 77 (folder)

**Subseries E: Articles**

**Annual Review of Energy**

**Unit Date** 1976  
**box-folder** 8 (box)  
**Container** 78 (folder)

**"Anti-Icing Cuts [nu]sub-prop Less Than Moderate Icing"**

**Unit Date** 1949  
**box-folder** 8 (box)  
**Container** 79 (folder)

**"Aircraft propulsions Systems in Evolution"**

**Unit Date** 1965  
**box-folder** 8 (box)  
**Container** 80 (folder)

**"Astronaut Defends U.S. Space Program During Dedication"**

**Unit Date** 1970  
**box-folder** 8 (box)  
**Container** 81 (folder)

**"Charge Analyzer for Aerosols and Sprays"**

**Unit Date** 1964  
**box-folder** 8 (box)  
**Container** 82 (folder)

**"Comparisons of Free Flight and Wind Tunnel Data on Slender Cones"**

**Unit Date** 1965  
**box-folder** 8 (box)  
**Container** 83 (folder)

**"The Compressible Discharge Coefficient of a Borda-Pipe and Other Nozzles"**

**Unit Date** 1964  
**box-folder** 8 (box)  
**Container** 84 (folder)

**"Compressible Flow Through a Two Dimensional Slit"**

**Unit Date** 1965  
**box-folder** 8 (box)  
**Container** 85 (folder)

**"Conductivity of Dust Laden Gases"**

**Unit Date** 1965  
**box-folder** 8 (box)  
**Container** 86 (folder)

**"Discharge Coefficient Characteristics of Orifices"**

**Unit Date** 1964  
**box-folder** 8 (box)  
**Container** 87 (folder)

**"Dynamics of Bilaterally Symetric Vortex Rings"**

**Unit Date** 1971  
**box-folder** 8 (box)  
**Container** 88 (folder)

**"The Effects of Exhaust Nozzle Recombination on Hypersonic Ramjet Performance"**

**Unit Date** 1963  
**box-folder** 8 (box)  
**Container** 89 (folder)

**"The Effect of Jet Entrainment on Lift and Moment for a Thin Aerofoil with Blowing"**

**Unit Date** 1963, 1964  
**box-folder** 8 (box)  
**Container** 90 (folder)

**"An Equation for the Entrainment of Ejectors"**

**box-folder** 8 (box)  
**Container** 91 (folder)

**"Flow Field in A Swirl Chamber"**

**Unit Date** 1964  
**box-folder** 8 (box)  
**Container** 92 (folder)

**"Fuel and Feedstock from Refuse"**

**Unit Date** 1976  
**box-folder** 8 (box)  
**Container** 93 (folder)

**"Handbook of Solid Waste Disposal Materials and Energy Recovery"**

**Unit Date** ca. 1976  
**box-folder** 8 (box)  
**Container** 94 (folder)

**"History of the NACA"**

**Unit Date** 1965, n.d.  
**box-folder** 8 (box)  
**Container** 95 (folder)

**"How to Prevent and Remove Mildew"**

**Unit Date** 1976  
**box-folder** 8 (box)  
**Container** 96 (folder)

**"How Much Defense?"**

**Unit Date** 1968  
**box-folder** 8 (box)  
**Container** 97 (folder)

**"Hypersonic Propulsion"**

**Unit Date** 1965  
**box-folder** 8 (box)  
**Container** 98 (folder)

**"Hysteresis in the Flow Through an Orifice"**

**Unit Date** 1966  
**box-folder** 8 (box)  
**Container** 99 (folder)

**"Influence of a Jet on the Aerodynamic Properties of Wings Positioned Above the Jet"**

**Unit Date** 1970  
**box-folder** 8 (box)  
**Container** 100 (folder)

**"LRC Turboprop Research to Support LeRC Propulsion/Airframs Integration"**

**Unit Date** 1976, n.d.  
**box-folder** 8 (box)  
**Container** 101 (folder)

**"The Maximum Attainable Pressure in a Moving Gas-Vacuum- Atmosphere System"**

**Unit Date** n.d.

**box-folder** 8 (box)

**Container** 102 (folder)

**"The Motion of a Two Dimensional Bouyant Vortex "**

**Unit Date** 1964

**box-folder** 8 (box)

**Container** 103 (folder)

**"Nozzle Discharge Coefficient"**

**Unit Date** 1970

**box-folder** 8 (box)

**Container** 104 (folder)

**"Pressure Change Accompanying Mixing Two Ideal Gases"**

**Unit Date** 1971

**box-folder** 8 (box)

**Container** 105 (folder)

**"Processing Energy from Wastes"**

**Unit Date** ca. 1976

**box-folder** 8 (box)

**Container** 106 (folder)

**"Propelling Nozzle Research"**

**Unit Date** 1964

**box-folder** 8 (box)

**Container** 107 (folder)

**"James J. Kilpatrick: Questions Things They Ought Not to Have Done"**

**Unit Date** 1972

**box-folder** 8 (box)

**Container** 108 (folder)

**"The Stability of Viscous Fluid Between Cylinders with an Axial Flow"**

**Unit Date** 1964

**box-folder** 8 (box)

**Container** 109 (folder)

**"Sink Vorticies and Whirlwinds"**

**Unit Date** 1964

**box-folder** 8 (box)

**Container** 110 (folder)

**"Scientists Tackle Jet Noise Problem"**

**Unit Date** 1956

**box-folder** 8 (box)

**Container** 111 (folder)

**"SpaceCraft Radiators"**

**Unit Date** 1962

**box-folder** 8 (box)

**Container** 112 (folder)

**"Some Experiments on an Engine Installed Above the Wing"**

**Unit Date** 1970

**box-folder** 8 (box)

**Container** 113 (folder)

**"Soviet Physics Acoustics"**

**Unit Date** 1965

**box-folder** 8 (box)

**Container** 114 (folder)

**"Suggests Look at Disposal Systems"**

**Unit Date** 1965

**box-folder** 8 (box)

**Container** 115 (folder)

**"The Turborocket for High Speed Air Breathing Vehicles"**

**Unit Date** 1965

**box-folder** 8 (box)

**Container** 116 (folder)

**"A Windstorm That Blows Good!"**

**Unit Date** 1971

**box-folder** 8 (box)

**Container** 117 (folder)

**Air Scoop Langley Newsletter**

**Unit Date** 1947-1960

**box-folder** 9 (box)

**Container** 1 (folder)

**Aviation Week and Space Technology XC-142A Pamphlet**

**Unit Date** 1965

**box-folder** 9 (box)

**Container** 2 (folder)

**Contact Lenses Coupon**

**Unit Date** 1982

**box-folder** 9 (box)

**Container** 3 (folder)

**Directory for Langley Research Center**

**Unit Date** 1972

**box-folder** 9 (box)

**Container** 4 (folder)

**Directory for Langley Research Center**

**Unit Date** 1973

**box-folder** 9 (box)

**Container** 5 (folder)

**Directory for Langley Research Center**

**Unit Date** 1976

**box-folder** 9 (box)

**Container** 6 (folder)

**Langley Research Center: Personnel Newsletter**

**box-folder** 9 (box)

**Container** 7 (folder)

**McDonnell Douglas--Brochure/Map**

**Unit Date** 1967, n.d.

**box-folder** 9 (box)

**Container** 8 (folder)

**NACA Fortieth Anniversary**

**Unit Date** 1955

**box-folder** 9 (box)

**Container** 9 (folder)

**"NACA-LMAL and You"**

**box-folder** 9 (box)

**Container** 10 (folder)

**NACA Reunion: Ashville, North Carolina**

**Unit Date** 1976

**box-folder** 9 (box)

**Container** 11 (folder)

**NASA Fiftieth Anniversary Celebration**

**Unit Date** 1967

**box-folder** 9 (box)

**Container** 12 (folder)

**"Nuclear Attack and Industrial Survival"**

**Unit Date** 1962

**box-folder** 9 (box)

**Container** 13 (folder)

**Society of Automotive Engineers--Brochures/Pamphlets**

**Unit Date** 1948

**box-folder** 9 (box)

**Container** 14 (folder)

**S.A.E.: Aeronautical and Air Transport Meeting**

**Unit Date** 1948

**box-folder** 9 (box)

**Container** 15 (folder)

**Tech Brief (Category 2): Prediction of Friction Coefficients for Gases**

**Unit Date** 1969

**box-folder** 9 (box)

**Container** 16 (folder)

**"A Visit to Langley Research Center"**

**Unit Date** 1970

**box-folder** 9 (box)

**Container** 17 (folder)