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## Guide to the Samuel Silver papers, 1939-1976

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## Guide to the Samuel Silver Papers, 1939-1976

**Collection number: BANC MSS 77/114 c**

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University of California, Berkeley  
Berkeley, California

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### Collection Summary

**Collection Title:** Samuel Silver Papers,

**Date (inclusive):** 1939-1976

**Collection Number:** BANC MSS 77/114 c

**Creator:** Silver, Samuel, 1915-

**Extent:** Number of containers: 20 boxes and 17 cartons

**Repository:** The Bancroft Library

Berkeley, California 94720-6000

**Physical Location:** For current information on the location of these materials, please consult the Library's online catalog.

**Abstract:** Letters written to him and copies of letters by him; manuscripts of speeches, course lectures, papers and books; reprints; notebooks; research proposals; materials relating to University committees and institutes, research notes; personalia, etc., documenting his career at the University and his research in microwave electronics and the space sciences. Also included are correspondence, minutes of meetings, summaries of papers and reports, relating to the activities of and his involvement in various professional organizations, most notably the International Union of Radio Science and the International Council of Scientific Unions.

**Languages Represented:** English

**Access**

Collection is open for research.

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### **Preferred Citation**

[Identification of item], Samuel Silver papers, BANC MSS 77/114 c, The Bancroft Library, University of California, Berkeley.

Photographs have been removed to the Pictorial Collections of The Bancroft Library.

### **Biography**

Samuel Silver was born on February 25, 1915 in Philadelphia, Pennsylvania to Boris and Molly (Agrin) Silver. His early schooling was in Philadelphia and he attended Temple University there from 1931 to 1937, graduating with an M.A. in physics with a mathematics minor. He received his Ph.D. in theoretical physics from the Massachusetts Institute of Technology in 1940 with a dissertation on vibrational state of polyatomic molecules and worked then as a research assistant at the Mendenhall Laboratory of Physics of Ohio State University. From 1941 to January of 1943 he was, successively, instructor and assistant professor of physics at the University of Oklahoma. He returned to M.I.T. in 1943 to work with the antenna group at the Radiation Laboratory on the theory of microwave antennas and networks. In 1946 he went on to head a basic research group at the newly formed Antenna Research Branch of the Naval Research Laboratory in Washington, D.C.

In the Fall of 1947 he joined the staff of the University of California, Berkeley and in 1950 he was appointed professor of electrical engineering. In 1950 he also began active membership in the International Union of Radio Science. He was to remain associated with both of these organizations throughout the rest of his life.

In 1951 he became the chairman of Commission VI of the U.S. National Committee of U.R.S.I. He served until 1953 when he became chairman of the International Commission VI of the International Union of Radio Science, a position he held until 1960.

On the academic front, in 1956 he became the director of the Electronics Research Laboratory of the Department of Electrical Engineering and the Institute of Engineering Research. There he developed the research program on microwave antennas, applied electromagnetic theory and related areas of microwave electronics. In 1960 he was appointed the first director of the newly formed Space Sciences Laboratory. At this point his interests broadened to include upper atmosphere studies, solar phenomena in the microwave region and studies in the space sciences in general. In 1969 poor health forced him to retire from the directorship, but he continued his academic work as professor of engineering science until his death in 1976.

### **Scope and Content**

The Silver collection came to The Bancroft Library in February of 1977 with additional materials received in June of 1978, as a gift of Mrs. Silver. Consisting of twenty boxes of correspondence and seventeen cartons of related materials, it includes letters addressed to Silver and others; copies of letters written by him; minutes of meetings and reports of University and professional organizations; copies of his speeches; research data; course materials; and publications. Photographs have been removed to the Library's Pictorial Collection.

The papers cover a wide range of subject matter including his research on microwave antennas and electronics, radio astronomy and various aspects of the space sciences; his membership in professional organizations, especially Council of Scientific Unions and the International Union of Radio Science; and his career as professor of engineering science and director of the Electronics Research Laboratory and the Space Sciences Laboratory.

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Boxes 1-14

**Letters written to Silver****Additional Note**

Include letters from colleagues, friends and organizations relating to his service to the University of California, the electrical engineering department at Berkeley, the Space Sciences Laboratory and professional societies, especially the International Union of Radio Science and the International Council of Scientific Unions, Committee on Space Research; his research on microwave antennas, the upper atmosphere, and space sciences in general; consulting duties for private industry; and his speeches and publications, including reviews of articles and books. Included also are copies of letters routed to Silver by their authors. Arranged alphabetically. A partial list of correspondents follows the Key to Arrangement. Unlisted letters are arranged alphabetically in miscellanies preceding each letter of the alphabet. Unidentified letters are at the end.

Boxes 15-20

**Letters written by Silver, 1940-76****Additional Note**

Primarily carbon copies with occasional drafts. No letters for the years 1942, 1943 and 1944. Arranged chronologically, with undated letters at the end.

Ctn. 1

**Materials re the University of California, Berkeley****Additional Note**

Include announcements and minutes of meetings of various University and College of Engineering committees of which Silver was a member as well as materials relating to university-sponsored institutes and laboratories with which he was connected. Arranged in alphabetical order as follows:

**Academic Senate, Committee on Research, 1956-67**

**Physical Description:** (four folders)

**Academic Senate, Committee on Teaching, 1973-75 & n.d.**

**Physical Description:** (three folders)

**Academic Senate, Graduate Council**

**Atmospheric Sciences Committee (contains some form letters from Robert R. Brown and William B. Fretter)**

**College of Engineering; Conference on Research Administration**

**College of Engineering; Engineering News**

**College of Engineering; Engineering Science Committee**

**College of Engineering; Executive Committee**

**Cooperative College; School Science Program**

**Electronics Research Laboratory**

**Institute of Engineering Research**

**Miscellaneous**

**Statewide Advisory Committee on Space Science**

**University Patent Board**

carton Ctns. 1-2

**Materials re the University of California, Berkeley. Department of Electrical Engineering and Computer Science****Additional Note**

Include announcements, minutes of departmental meetings and course materials, including lecture notes, exams and student critiques of Silver's teaching. Arranged in alphabetical order as follows:

Ctn. 1

**Chairman's Advisory Committee****Committee on Policy and Budget****Courses, 1945-61**

**Physical Description:** (six folders)

- Ctn. 2                    **Courses, 1962-76**  
                              **Physical Description:** (four folders)
- Dean's Advisory Council, 1958-63**  
                              **Physical Description:** (four folders)
- Executive Committee**  
**General, 1948-73**  
                              **Physical Description:** (five folders)
- Microwave Transmitting Equipment**  
**Ph.D. Qualifying and Preliminary Exams**  
**Student Critiques**
- Ctn. 2                    **Materials re the University of California, Berkeley. Space Sciences Laboratory**  
                              **Additional Note**  
                              Include announcements, research proposals, financial records, reports on special programs  
                              and news articles about the laboratory. Arranged in alphabetical order as follows:
- General, 1960-73**  
                              **Physical Description:** (five folders)
- Lunar Electrodynamics Experiment**  
**Proposals**  
**Social Sciences Program**  
**Symposia, Colloquia, Seminars**  
**U.S. Navy Sponsored Research**
- Ctn. 3                    **Materials re the International Council of Scientific Unions**  
                              **Additional Note**  
                              Include announcements and minutes of meetings, summaries of papers given at meetings as  
                              well as minutes of special commissions directed at specific areas of interest. Also, some form  
                              letters to members written by Herbert Friedman. Arranged in chronological order as follows:
- 7th Executive Committee Meeting, Rome, October 1967**  
**General**  
**8th General Assembly, Washington, D.C., October 1958**  
**11th General Assembly, Bombay, January 1966**  
**12th General Assembly and 8th Executive Committee Meeting, Paris, June 1968**  
                              **Physical Description:** (two folders)
- 9th Executive Committee Meeting, Paris, October 1968**  
**Inter-Union Commission on Frequency Allocations for Radio Astronomy and Space**  
**Science**  
**Inter-Union Commission on Solar-Terrestrial Physics, 1966-69**  
                              **Physical Description:** (two folders)
- Yearbook**
- carton Ctns. 3-4        **Materials re the International Council of Scientific Unions. Committee on Space**  
**Research**  
                              **Additional Note**  
                              Include form letters sent to members, mostly from Maurice Roy; satellite and space probe  
                              summaries; reports on symposia and bureau meetings; minutes of meetings and reports of  
                              activities of national space sciences programs. Arranged in chronological order as follows:
- Ctn. 3                    **General, 1959-63**
-

- Sixth Plenary Meeting (three folders), June 3-11, 1963**  
**General, 1964**  
**Seventh Plenary Meeting, May 8-20, 1964**  
**Physical Description:** (four folders)
- Ctn. 4  
**General, 1965**  
**Eighth Plenary Meeting, May 10-21, 1965**  
**Physical Description:**
- General, 1966**  
**Ninth Plenary Meeting, May 10-19, 1966**  
**Physical Description:** (four folders)
- General, 1967-73**  
**Tenth Plenary Meeting, July 24-29, 1967**  
**Eleventh Plenary Meeting, May 9-12, 1968**  
**Twelfth Plenary Meeting, May 1969**  
**Thirteenth Plenary Meeting, May 20-29, 1970**
- carton Ctns. 4-6  
**Materials re the International Union of Radio Science (International)**  
**Additional Note**  
Include form letters sent to members, mostly written by I. E. Herbays and C. M. Minnis; programs and arrangements for assemblies and symposia; minutes of meetings and membership lists; materials re personnel changes, finances and publications. Arranged in alphabetical order as follows:
- Ctn. 4  
**Ad hoc Committees**  
**Accounts**  
**Awards**  
**Board of Officers**  
**Board of Officers Meeting, Mar. 23 and 26, 1965**  
**Board of Officers Meeting, Feb. 7-9, 1967**  
**Board of Officers Meeting, Mar. 1968**  
**Board of Officers Meeting, Mar. 1969**  
**Board of Officers Meeting, Apr. 20 & 23, 1971**  
**Bulletin Horaire**  
**C.O.S.P.A.R.-U.R.S.I. Relations**  
**Comité International de Geophysique**  
**Committees on Organization of U.R.S.I.**  
**Committee on Space Radio Research**  
**Conferences**  
**Co-Ordinating Committee**  
**General, 1968-75 & n.d.**  
**10th General Assembly, Sydney, 1952**  
**11th General Assembly, Le Hage, 1954**  
**11th General Assembly; Commission VI, Papers**  
**11th General Assembly; Commission VI, Reports of National Committees**  
**12th General Assembly, Boulder, 1957**  
**12th General Assembly**  
**13th General Assembly, London, 1960**  
**14th General Assembly, Tokyo, 1963**  
**14th General Assembly; Commissions I-VIII**  
**Physical Description:** (five folders)
- Ctn. 5  
**14th General Assembly, Papers**  
**Physical Description:** (three folders)

- 15th General Assembly, Munich, 1966**  
**15th General Assembly, Secretary General's Report**  
**16th General Assembly, Ottawa, 1969**  
**Physical Description:** (two folders)
- Ctn. 6
- 17th General Assembly, Warsaw, 1972**  
**18th General Assembly, Peru, 1975**  
**International Radio Consultative Committee (C.C.I.R.)**  
**International Ursigram and World Days Service**  
**Progress in Radio Science**  
**Secretariat**  
**Symposia**  
**Symposium on Electromagnetic Theory and Antennas, Copenhagen, June 1962**  
**Physical Description:** (two folders)
- carton Ctns. 6-7
- Symposium with C.O.S.P.A.R., Argentina, May 1965**  
**Materials re the International Union of Radio Science (USA)**  
**Additional Note**  
Include memos and form letters, mostly written by William E. Gordon, Alice McIntyre, Millett G. Morgan and Alan T. Waterman, Jr., re agendas, arrangements and publications to be read at national committee meetings; minutes of meetings; financial and membership records; and by-laws. Arranged in alphabetical order as follows:
- Ctn. 6
- Commission IV**  
**Commission VI, 1951-73**  
**Physical Description:** (three folders)
- Committee on the Exosphere**  
**Electromagnetic Wave Theory Symposia**  
**General, 1949-73**  
**Physical Description:** (five folders)
- Membership Lists, 1949-73**  
**Physical Description:** (three folders)
- National Committee Meeting, Apr. 16-18, 1951**  
**National Committee Meeting, Apr. 21-24, 1952**  
**National Committee Meetings, 1953**  
**National Committee Meeting, May 3-6, 1954**  
**National Committee Meetings, 1955-57**  
**Physical Description:** (three folders)
- carton Ctns. 6-7  
Ctn. 7
- Materials re International Union of Radio Science (USA)**  
**National Committee Meetings, 1958**  
**National Committee Meetings, 1959**  
**National Committee Meeting, October 1959, Commissions I and II**  
**National Committee Meeting, October 1959, Commission III**  
**National Committee Meeting, October 1959, Commission IV**  
**National Committee Meeting, October 1959, Commission VI**  
**National Committee Meeting, Spring, 1960**  
**Physical Description:** (two folders)
- National Committee Meetings, Fall, 1960**  
**National Committee Meetings, 1961**  
**National Committee Meeting, Spring, 1962**  
**National Committee Meetings, Fall, 1962**
-

**National Committee Meetings, 1963-69**

**Physical Description:** (seven folders)

**National Committee Meetings, 1972 & 1974**

**Radio Science**

carton Ctns. 7-8

**Materials re Miscellaneous Organizations**

**Additional Note**

Include form letters, brochures, notes, publications, etc. of various organizations, schools, laboratories and projects with which Silver was involved. Arranged in alphabetical order as follows:

Ctn. 7

**American Geophysical Union**

**American Institute of Aeronautics and Astronautics, Inc.**

**American Institute of Physics**

**California Universities Council on Space Sciences; (C.U.C.O.S.S.)**

**California Universities Council on Space Sciences; spacecraft models**

**Electronics Research Center**

**Hughes Aircraft Company**

Ctn. 8

**Institute of Radio Engineers, Inc.**

**Institute of Radio Engineers, Inc.; Executive Committee**

**Institute of Radio Engineers, Inc.; Subcommittee on Waveguides**

**International Astronomical Union**

**International Union of Geodesy and Geophysics (I.U.G.G.)**

**International Union of Geodesy and Geophysics; XII General Assembly, 1960**

**Physical Description:** (two folders)

**International Union of Geodesy and Geophysics; XIII General Assembly, 1963**

**Massachusetts Institute of Technology**

**National Academy of Engineering**

**National Academy of Sciences**

**National Academy of Sciences NAS-CAS Remote Atmospheric Probing Panel**

**National Academy of Sciences, NAS/NRC Committee on International Organizations and Programs**

**National Aeronautics and Space Administration**

**National Bureau of Standards**

**National Bureau of Standards; International Conference on Precision Electromagnetic Measurements**

**Naval Research Laboratory; Antenna Research Section**

**North Atlantic Treaty Organization**

**Oakland Workshop**

**Physical Description:** (two folders)

**Optical Society of America**

**Popov Society**

**Western Electric Show and Convention**

**World Data Center A (Rockets and Satellites)**

carton Ctns. 8-9

**Manuscripts of Speeches**

**Additional Note**

Include holograph and typed manuscripts of various speeches, lectures and talks given by Silver. Arranged in chronological order as follows:

Ctn. 8

**Infra-red Bands of the Tetramethylammonium Ion, 1941**

**Slots and Aperture Radiators in Simple and Multi-Mode Waveguides (Notes), 1957**

**Welcoming Address at U.R.S.I. Symposium, June 15, 1959**

**The Biological System in a Space Environment and a Space Vehicle, May 11, 1960**



Ctn. 9

**Scientific and Practical Applications of Artificial Earth Satellites and of Space Probes, Nov. 7, 1960**  
**Lectures at the University of Michigan, May 1960**  
**Why a Social Sciences Project in the Space Sciences Laboratory?, Nov. 3, 1962**  
**Properties of the Ionosphere (Lecture No. 8), 1962**  
**The University and Our Future, Feb. 14, 1963**  
**Presentation to the American Chemical Society, Northern California Section, Apr. 15, 1963**  
**Report to the Third International Conference on Atmospheric and Space Electricity, May 6-10, 1963**  
**Presentation to the American Institute of Chemical Engineers, May 24, 1963**  
**The Research Program of the Space Sciences Laboratory at the University of California, Berkeley, Sept.-Oct. 1963**  
**Naval Clinic Talk, Oct. 16, 1963**  
**The Research Program of the Space Sciences Laboratory at the University of California, Berkeley, 1963**  
**Talk for University of California, Berkeley Family Day, Oct. 3, 1964**  
**Planetary Atmosphere, Nov. 22, 1965**  
**What Philosophy can do for Sciences, Dec. 27, 1965**  
**At the Dedication of the Space Sciences Laboratory, Oct. 27, 1966**  
**Quality of Life in the 21st Century, ca. 1966**  
**Opening Remarks to the Joint Meeting of Canadian and U.S. National Committee of U.R.S.I., May 23, 1967**  
**The Impact of Modern Science and Technology on Society, ca. 1967**  
**U.R.S.I. (the International Scientific Radio Union), 1968**  
**Scientific Evolution and Human Equality, 1969**  
**Bolljaha Memorial Lecture, Sept. 22, 1971**  
**Education and Research in the Space Sciences at Berkeley, Oct. 28, 1971?**  
**A Bit of Personal History, Dec. 1971**  
**Remarks on 'Societal Relevance' in Teaching Research in Electromagnetics of Continuous Media, 1972**  
**On the Introduction of Radio Astronomy at the University of California, with Luis W. Alvarez and Harold Weaver, n.d.**  
**Organization and Research Program of the Space Science Laboratory, University of California, Berkeley, n.d.**  
**Perspectives on Education in Electromagnetics towards Societal Needs, n.d.**  
**Professor K. M. Siegel - Remembrances and Recollections, n.d.**  
**Sessions on Diffraction and Electromagnetic Theory of the Microwave Optics Symposium, n.d.**  
**Untitled**

Ctn. 9

**Reprints****Additional Note**

Include reprints of papers by Silver and those co-authored by him. Some include handwritten or typed manuscripts. Arranged in chronological order as follows:

**Inertial Effects in the Skeletal Vibration of Tetra-methylmethane and Tetramethylsilicon, Dec. 1939**  
**The Normal Vibrations of Molecules of the Tetra-methylmethane Type, Dec. 1940**  
**Vibration-Rotation Energies of the Planar XY<sub>3</sub> Molecular Model, with Wave H. Shaffer, Aug. 1941**  
**Vibration-Rotation Energies of Planar ZXY<sub>2</sub> Molecules. Part I-The Vibrational Modes and Frequencies, with Earle S. Ebers, Sept. 1942**  
**Vibration-Rotation Energies of Planar ZXY<sub>2</sub> Molecules. Part II-The Quantum-Mechanical Hamiltonian and the Energy Values, Sept. 1942**  
**The External Field Produced by a Slot in an Infinite Circular Cylinder, with William K. Saunders, Feb. 1950**

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- The Radiation from a Transverse Rectangular Slot in a Circular Cylinder, with William K. Saunders, Aug. 1950**
- Diffraction of Microwaves by Apertures and Obstacles, 1952**
- Studies of the Diffraction of Electromagnetic Waves by Circular Apertures and Complementary Obstacles: The Near-Zone Field, with Morris J. Ehrlich and Gedeliahu Held, Mar. 1955**
- The Edge Conditions and Field Representation Theorems in the Theory of Electromagnetic Diffraction, with A. E. Heins, 1955**
- Exterior Electromagnetic Boundary Value Problems for Spheres and Cones, with L. L. Bailin, Jan. 1956**
- Comments on the Treatment of Diffraction of Plane Waves: Addendum to "The Edge Conditions and Field Representation Theorems in the Theory of Electromagnetic Diffraction" with Albert E. Heins, 1958**
- New Results in Back Scattering from Cones and Spheroids with Andrejs Olte, Dec. 1959**
- The ONR Program in the Electronics Research Laboratory of the University of California, Jan. 1960**
- Antennas and Data-Processing Techniques, 1960 Microwave Aperture Antennas and Diffraction Theory, Feb. 1962**
- The Role of the University in the Space Program, May 1962**
- Space Communications, 1962**
- Space Radio Research, with Ken-Ichi Maeda, Sept. 10, 1963**
- Planetary Research in the Millimetre and Infra-red Region of the Spectrum, with H. F. Weaver, ca. 1963**
- The Propagation of Electromagnetic Waves in a Statistically Inhomogenous Medium, Apr. 27, 1964**
- On Observations of Lunar Magnetic Storms, 1964**
- Physics of the Upper Atmosphere, Parts I-IV, Mar. 1966**
- Absorbption and Emission in the 8 Millimetre Region by Ozone in the Upper Atmosphere, with W. M. Caton and W. J. Welch, Dec. 15, 1967**
- Science and Society, Oct. 1969**
- Transformation of the Spectrum of a Signal in Communication between Relativistically Moving Inertial Frames, with Michael A. Morgan, Jan. 1974**
- Delineation of Problems and Methodology in the Subject of Scattering by a Statistically Inhomogenous Medium (summary), n.d.**
- Expanding Horizons of Electronics Research (in Japanese), n.d.**
- carton Ctns. 9-11     **Manuscript of *Microwave Antenna Theory and Design***
- Additional Note**
- Include holograph and typewritten drafts of chapters of the book edited by Silver and published in 1949, as well as photographs and illustrations. Arranged by chapter as follows:
- Ctn. 9     **Table of Contents**
- Chapter 1, Survey of Microwave Antenna Design Problems**
- Physical Description: (two folders)
- Chapter 2, Circuit Relations, Reciprocity Theorems**
- Physical Description: (four folders)
- Ctn. 10     **Chapter 3, Radiation from Current Distributions**
- Physical Description: (four folders)
- Chapter 4, Wave Fronts and Rays**
- Physical Description: (three folders)
- Chapter 5, Scattering and Diffraction**
-

	<p><b>Chapter 6, Aperture Illumination and Antenna Patterns</b> <b>Physical Description:</b> (two folders)</p>
	<p><b>Chapter 7, Microwave Transmission Lines</b> <b>Physical Description:</b> (four folders)</p>
	<p><b>Chapter 8, Microwave Dipole Antennas and Feeds</b> <b>Physical Description:</b> (five folders)</p>
Ctn. 11	<p><b>Chapter 9, Linear Array Antennas and Feeds</b> <b>Physical Description:</b> (two folders)</p> <p><b>Chapter 10, Waveguide and Horn Feeds</b> <b>Physical Description:</b> (two folders)</p> <p><b>Chapter 11, Dielectric and Metal-Plate Lenses</b> <b>Physical Description:</b> (five folders)</p> <p><b>Chapter 12, Pencil-Beam and Simple Fanned Beam Antennas</b> <b>Physical Description:</b> (three folders)</p> <p><b>Chapter 13, Shaped Beam Antennas</b> <b>Chapter 14, Antenna Installation Problems</b> <b>Chapter 15, Antenna Measurements-Techniques</b> <b>Chapter 16, Antenna Measurements-Equipment</b> <b>Physical Description:</b> (two folders)</p>
Ctn. 12	<p><b>Chapter 16, Antenna Measurements-Equipment</b> <b>Physical Description:</b> (two folders)</p> <p><b>Author's Copy, 1948 (Chapters 1-8)</b> <b>Author's Copy, 1948 (Chapters 9-16)</b> <b>Illustration Record</b> <b>Index</b> <b>Material not included in the book</b> <b>Physical Description:</b> (two folders)</p>
carton Ctns. 12-13	<p><b>Manuscripts of Papers</b> <b>Additional Note</b> Manuscripts and related notes for papers written or co-authored by Silver. A few published copies included. Arranged in chronological order as follows:</p>
Ctn. 12	<p><b>Report on the Theory of Metals, Jan. 1938</b> <b>The Normal Vibrations of Tetrahedral A (CH<sub>3</sub>)<sub>4</sub> Molecules, ca. 1940</b> <b>Preparation and Physical Properties of Tetramethylmethane, ca. 1940</b> <b>The Infra-red and Raman Spectra of Tetramethylmethane in the Vapor State, with Howard H. Claassen, Dec. 4-5, 1942</b> <b>The Leninson and Booker Synthesis of Csc 2 Patterns, ca. 1943</b> <b>Vibrations of Tetramethylmethane, ca. 1945</b> <b>Physical Description:</b> (two folders)</p> <p><b>Microwave Transmission Lines and Antennas, May 17, 1946</b> <b>Planar Diffraction Problems (Summary), ca. 1950</b> <b>Diffraction of a Plane Electromagnetic Wave by a Circular Aperture and Complementary Obstacle, 1951</b></p>

The Field of a Slot of Arbitrary Shape in an Infinite Circular Cylinder, Jan. 3, 1949  
The Radiation from a Rectangular Slot in a Circular Cylinder, with W. K. Saunders, Oct. 26, 1949  
On the Integral Equations of Planar Diffraction Problems, Dec. 1949  
Diffraction of a Plane Electromagnetic Wave by a Circular Aperture and Complementary Obstacle, Part I, with M. J. Ehrlich, Dec. 27, 1951  
Diffraction of a Plane Electromagnetic Wave by a Circular Aperture and Complementary Obstacle, Part II, Discussion of Experimental Results, with Morris Ehrlich and G. Held, Sept. 5, 1952  
Tokyo-Shibaura Electric Company, Ltd., ca. 1952  
A.I.P. Handbook, 1954  
Major Problems and Current Developments in the Theory of Diffraction, 1954  
Slots and Aperture Radiators in Single and Multimode Waveguides, 1957  
Theoretical and Experimental Studies of Scattering Cross Sections in the Microwave Region, 1957  
Notes on Ground Illumination in the Near Zone of a Paraboloid Reflector, with W. Welch and A. Olte, May 5, 1958  
Scattering of Microwaves by Figures of Revolution, with J. S. Honda and F. D. Clapp, Mar. 16, 1959  
Graduate Study and Research in Electrical Engineering at the University of California at Berkeley, with R. M. Saunders, June 22-26, 1959  
Antennas in Space Communications, Lectures I and II, May 1960  
Solar Radiation and Atmosphere Absorbption for the Ozone Line at 8.3MM, with Robert Burneal Mouw, June 30, 1960  
Review of: Electromagnetic Theory and Engineering Applications by John B. Walsh, July 1960  
Review of: Waves in Layered Media by Leonid M. Brekhovskikh, Dec. 1960  
Contributions to the Antenna Field During World War II, with L. C. Van Atta, 1961  
Linear Dynamical Systems, 1961

Physical Description: (two folders)

Ctn. 13

Physical Methods in Planetary Research, 1962  
Planetary Research in the Millimetre Wave and Infra-red Regions, Feb. 1965  
Review of: Space Probes and Planetary Exploration, by William Corliss, Aug. 9, 1965  
The Backscattering Cross Section of Loaded Antenna, 1966  
Reactions in the Ionosphere, ca. 1966  
Abstracts of Interdisciplinary Research in the Physical, Biological, Engineering, and Social Science, Mar. 31, 1968  
Federal Support of Research in Universities, Mar. 17, 1969  
Science and Technology in the Social Process, 1969  
Solar Radiation and Solar Activity at Millimetre Wavelengths, with M. El-Raey and W. J. Welch, ca. 1969  
Solar Activity in the Frequency Band 22-25.5 Ge/sec During the Period Aug. 7-Sept. 17, 1972, with Mohamed El-Raey and A. R. Cannon, 1972  
Transformation of the Spectrum of a Signal in Communication between Relativistically Moving Initial Frames, with Michael A. Morgan, ca. 1973  
Spectral Broadening as a Probe of the Corona and the Interplanetary Medium, ca. 1974  
Review of: Engineering in Medicine, by B. McA. Sayers, S. A. V. Swanson, and B. W. Wetson, 1975  
Certain Aspects of the Theory of Molecular Vibrations; n.d.  
Design of Antennas for Optimum Directivity, n.d.  
Diffraction of X-Rays in Their Passage Through a Crystalline Solid, n.d.  
Dynamical Problems of Satellites, n.d.  
Dynamics of Crystal Lattices, n.d.  
Equations of Motion for Simple Cubic Lattice Vibrations Assuming Forces Between 24 Nearest Neighbors, n.d.

**Exterior Electromagnetic Boundary Value Problems for Spheres and Cones, n.d.**  
**The External Symmetry of Crystals, n.d.**  
**A Ferrite Resonance Device for High Microwave Peak Power, with Elliot C. Levinthal, n.d.**  
**Incomplete Spherical Mode Representation, n.d.**  
**The Infra-red Spectra of Diatomic Molecules, n.d.**  
**Measurement of Scattering Cross Sections of Figures of Revolution, with J. Honda and F. Clapp, n.d.**  
**Microwave Circuit Theory, Parts I, II, and III (Monograph), n.d.**  
**Modes in Linear Circuits, n.d.**  
**Multidimensional Systems-Mathematical Hardware, n.d.**  
**Normal Vibrations, n.d.**  
**Normalization of a Detrimental Wave Function, n.d.**  
**Notes on Specific Heat and Elastic Vibrations in Solids, n.d.**  
**On the Elastic Characteristic Vibrations of Symmetrical Systems, n.d.**  
**One-Dimensional or Single Variable Systems, n.d.**  
**Outline of Report (Magnetic Resonance Phenomenon), n.d.**  
**Parallel Plate Systems, n.d.**  
**The Planar XY 2 Molecule: Sample Valence Potential, n.d.**  
**Planar Diffraction Problems, n.d.**  
**Radiating Systems, n.d.**

Physical Description: (two folders)

**Review of: Beam Spread and the Heisenberg Principle, n.d.**  
**Scattering of Microwaves by Figures of Revolution, n.d.**  
**Schwingungen in Raumgittern, n.d.**  
**Simple Vibrating Systems, n.d.**  
**A Study of Electrojet Sources of Micropulsation in the Auroral Zone, n.d.**  
**The Vibrational Analysis of the YX 2 Molecule, n.d.**  
**Vibrations of a Pentatonic Molecule in a Tetrahedral Group, n.d.**  
**Vibrations of a Tetrahedral Pentatonic-Type Molecule, n.d.**  
**Vibrations of N Particles, n.d.**  
**Untitled, July 1948**  
**Untitled, n.d.**

Physical Description: (four folders)

carton Ctns. 13-14

#### **Research Proposals**

##### **Additional Note**

Include formal proposals to funding agencies for research done between the years 1953 to 1975 by Silver alone or in a joint effort with others. Identified by title and arranged in chronological order as follows:

Ctn. 13

**Microwave Antenna Research, 1953?**  
**Broadband Microwave Radiating Systems and Networks, with D. J. Angelakas and J. R. Whinnery, May 24, 1956**  
**A Study of Biodynamical Correlates, Jan. 31, 1962**  
**Research Program in Control and Information Systems, Feb. 1962**  
**Investigation of the Structure and Surface Properties of the Moon, April 1962**  
**Solar Radiation and Atmospheric Absorption in the Millimetre Region, May 22, 1962**  
**Research in Exobiology: Continuation of Studies of Reflection Spectra: Extension of Work on Meteorite Analysis and Chemical Evolution, June 1962**  
**Planetary Radio Astronomy at Millimetre Wavelength, ca. 1963**  
**Biochemical Activities of Terrestrial Microorganisms in Simulated Planetary Environments, Feb. 24, 1964**  
**Study of Atmospheric Constituents and Structure by Measurement of Transmission and Absorption of Millimetre Waves of Radioastronomical Origin, Aug. 1965**

Ctn. 14

**Interdisciplinary Research in the Physical, Biological, Engineering, and Social Sciences, Aug. 25, 1966**  
**Solar Radiation and Atmospheric Absorbption in the Millimetre and Submillimetre Regions, with William J. Welch, Apr. 8, 1969**  
**Study of the Atmospheric Constituents and Temperature Structure by Measurement of Emission and Absorbption of Millimeter Wave by the Atmosphere, June 7, 1968**  
**Proposal for the Study and Development of Long Base-Line Interferometric Techniques in the Millimeter Wave Region, with William J. Welch, Mar. 26, 1970**  
**Study of the Vertical Distribution of Temperature and Humidity in the Troposphere by Ground Based Observations of the Millimetre Wavelength Emission of the Atmosphere, July 1, 1970**  
**Application to the Education Abroad Program for the Directorship of the Study Center in Israel, ca. 1970**  
**Proposal for the Continuation of the Study and Development of Long Base-line Interferometric Techniques in the Millimetre Wave Region, with William J. Welch, Mar. 8, 1971**  
**Radio Astronomical Studies, Mar. 1971**  
**The Passive Remote Sensing in the Mm.-Wavelength Region of the Spectrum, ca. 1972**  
**Proposal for the Continuation of the Study and Development of Long Base-line Interferomagnetic Techniques in the Millimetre-Wave Region, with William J. Welch, Feb. 26, 1973**  
**Balloon-borne Experiment to Measure Temporal Variations in the Infra-red Emissions in the Band 0.7-2.7 During an Aurora, Mar. 2, 1973**  
**Research on Molecular Constituents of the Atmosphere by Passive Ground-Based Remote Sensing Instruments, May 22, 1973**  
**Studies of Solar System Objects with the New Hat Creek Millimeter Wavelength Interferometer, with W. J. Welch and Douglas D. Thornton, Oct. 3, 1974**  
**Studies of Solar System Objects with the New Hat Creek Millimeter Wavelength Interferometer, Jan. 1975**

Ctn. 14

**Research Reports**

**Additional Note**

Formal typed reports of research done by Silver or in collaboration with others during the years 1960 to 1973. Identified by title and arranged in chronological order as follows:

**Research on Solar Radiation and Atmospheric Absorbption in the MM Wave Region, Quarterly Report, Oct. 1, 1960**  
**Research on Solar Radiation and Atmospheric Absorbption in the MM Wave Region, Jan. 1, 1961-Nov. 30, 1961**

**Physical Description:** (three folders)

**Radioastronomical and Upper Atmosphere Studies in the Microwave Region, Mar. 1-Sept. 15, 1962**  
**Solar Radiation and Atmospheric Absorbption in the MM Wave Region-Annual and Quarterly Report, Oct. 1-Dec. 31, 1962**  
**Radioastronomy and Upper Atmosphere Studies in the Microwave Region, Final Report, April 30, 1964**  
**The Effect of the Ionosphere on Attenuation of "Pearl" Activity-Project Termination Report, Jan. 1965?**  
**Project No. 4600; Quarterly Status Report No. 1, April 30-July 31, 1966**  
**Project No. 4600; Quarterly Status Report No. II, July 31-Nov. 30, 1966**  
**Interdisciplinary Research in the Physical, Biological Engineering, and Social Sciences, Annual Report, Oct. 1, 1966-Mar. 31, 1967**  
**Project No. 8262; Task No. 826203, Quarterly Status Report No. 1, Sept. 1-Nov. 30, 1967**

- Study of Atmospheric Constituents and Structure by Measurement of the Emission and Absorption of Millimetre Waves by the Atmosphere, Final Report, Sept. 1, 1967-Aug. 31, 1968**  
**Project No. 8682; Task 868203, Quarterly Status Report No. II, Dec. 1, 1967-Feb. 29, 1968**  
**Project No. 8682; Task No. 868303, Quarterly Status Report No. III, Mar. 1-May 31, 1968**  
**Radioastronomy, Quarterly Status Reports No. V, VI, IX, Sept. 1, 1968-Mar. 31, 1969; Sept. 1, 1969-Nov. 30, 1969**  
**Solar Radiation and Atmospheric Absorption in the MM Wave Region, Final Report, Nov. 14, 1969**  
**The Development of an Interferometer for Millimeter Wavelengths, Annual Report, with R. Hills, W. Hoffman, M. Janssen, D. D. Thornton, and W. J. Welch, July 1970-June 30, 1971**  
**Office of Naval Research, Final Report, ca. 1972**  
**Communication Between Relativistically Moving Inertial Frames, Jan. 11, 1973**
- Ctn. 14      **Class Notes**
- Additional Note**
- Include holograph or typed notes, mostly from physics courses taken by Silver during the years 1933 to 1942 while he was a student at Temple University and Massachusetts Institute of Technology. Some examinations are also included. Arranged in alphabetical order as follows:
- Complex Numbers, n.d.**  
**Coupled Oscillators, n.d.**  
**Electromagnetic Theory, 1939**  
**Electromagnetic Theory (Stratton & Jears), n.d.**  
**Exam Blue Books, n.d.**  
**Final Exams, Massachusetts Institute of Technology; 1938**  
**Group Theory, n.d.**  
**Introduction to Theoretical Physics, 1942-43**  
**Introduction to Theoretical Physics (8.463), n.d.**  
**Matrix and N-Dimensional Vector Algebra, n.d.**  
**Methods of Theoretical Physics; n.d.**  
**Miscellaneous Problems - Massachusetts Institute of Technology, 1938**  
**Physics**  
**Physics 1 Temple University, 1933**
- Physical Description: (two folders)
- Physics 1, n.d.**  
**Physics 2; Test II, 1942**  
**Physics 2, n.d.**  
**Physics 206, Light, n.d.**  
**Physics 409, (Test No. 1), n.d.**  
**Rotating Axes and Polyatomic Molecules, ca. 1935**  
**Statistical Mechanics, 1939**  
**Untitled, 1933-34**  
**Untitled, n.d.**
- carton Ctns. 15-16      **Research Notes**
- Additional Note**
- Include holograph notes from the years ca. 1939 to 1946 on various problems in electrical engineering and antenna design. Arranged in alphabetical order as follows:
- Ctn. 15      **Antenna Program, Continental Television Corporation, 1946**  
**Antenna Site Considerations, n.d.**  
**Bipolar Coordinates, n.d.**

**BF 3 Calculations**

**Conical Horn, 1943-44**

**Cylindrical Coordinates**

**Degeneracy Between D 1 and V 3 in Tetrahedral XY 4 Systems, 1941**

**Development of Symmetry Coordinates, n.d.**

Physical Description: (two folders)

**Elements of Space Group Theory-Bragg: The Crystalline State, Vol. 1, n.d.**

**Evaluation of Slot Impedance, 195?**

**First Order Perturbation Theory for a Degenerate Level: Energies and Wave Functions, n.d.**

**Hat Creek Data**

**Isotropic Two-Dimensional Oscillator Wave Functions and Matrix Elements, n.d.**

**Maxwell Equations**

**Measurement Errors Arising from Probe Depth, n.d.**

**Mechanical Aspects of the Electromagnetic Field, n.d.**

**Problems on Heat, n.d.**

**Logarithmic Potential and General Ideas on**

**Magnetic Wall Modes in Waveguide, 195?**

**Matrix Perturbation Theory, 1942**

**Miscellaneous, 1939**

Physical Description: (two folders)

**Miscellaneous, 1943-58**

**Miscellaneous, 1950-55**

**Miscellaneous, n.d.**

Physical Description: (three folders)

**Notes on Handbook, 1944**

**On Analysis, n.d.**

**Paraboloidal Antenna Pattern Calculations, n.d.**

**Perfect Fluids, n.d.**

**Potential Constants for SiH 4 and GeH 4, 1941**

**Propagation Through a Magnebionic Medium, ca. 1962**

**Rotation-Vibration Energy of XY 3 Molecules with D 3h Symmetry, n.d.**

**Sky Temperature Experiment, Lafayette Data, Summer 1965**

**Solar Activity and Spectral Broadening, 1972 & 1973**

**Solution of the One-Dimensional Wave Equation, n.d.**

**(CH 3) 4 N + Measurement, 1941**

**Theory of Electric Circuits, 194?**

**Transactions of the Faraday Society, 1941**

**University of Oregon Physics Colloquium, May 31, 1962**

**Upper Atmosphere Reactions, ca. 1966**

**Van der Waal Forces**

**Various Graphs, n.d.**

**Vibrating Strings, n.d.**

**Vibration-Rotation Energies of the Planar XY 3 Molecule**

**Vibration-Rotation Energies of the Planar XY 3 Molecular Model, n.d.**

**Vibrations of the Tetrahedral Pentatomic-like Molecule Assuming Central Force Systems, n.d.**

**XY 3 Molecule, n.d.**

**XY 4 System, 1940**

**Zonal Harmonics-Some General Developments, n.d.**

**Untitled, 1938**

Ctn. 16



carton Ctns. 16-17

**Notebooks**

**Additional Note**

Include datebooks, ca. 1950s to 1970s and research notebooks ca. 1930s and early 1940s.  
Arranged in alphabetical order as follows:

Ctn. 16

**Datebooks, 1955-70**

**Physical Description:** (fourteen folders)

**Datebooks, Academic Year, 1973-74**

**Introduction to Theoretical Physics III (Quantum Mechanics)**

Ctn. 17

**Ph.D. Thesis, 1940**

**Physics, Temple University, 1934**

**Planar ZXY 2 Auxiliary Computations I, II, and III**

**Physical Description:** (three folders)

**Untitled, 1938**

**Untitled, 1941-42**

**Physical Description:** (two folders)

**Untitled, 1953-54**

**Untitled, n.d.**

**Physical Description:** (three folders)

Ctn. 17

**Personal Materials**

**Additional Note**

Include biographical information, awards and honors received by Silver and information on travel. Arranged in alphabetical order as follows:

**Awards and Honors**

**Biographical Materials, 1940-75 (two folders)**

**Publicity**

**Travel Expenses, 1950-73**

**Physical Description:** (two folders)

**Trip Reports**

**Aarons, Jules, 1921-**

**Letter, June 25, 1965**

**Abbott, Frank Riley, 1905-**

**2 memos, 1958**

**Abelson, Philip Hauge, 1913-**

**Letter, Oct. 11, 1965**

**Scope and Content Note**

Correspondence addressed to and from him in Alan H. Shapley correspondence.

**Abramson, Norman, 1932-**

**Letter, May 31, 1966**

**Ackerman, William Carl, 1913-**

**Letter, Dec. 11, 1967**

**Scope and Content Note**

Correspondence addressed to him in Hugh Odishaw and Frederick Seitz correspondence.

**Adey, William Ross, 1922-**

**Letter, Nov. 30, 1964**

**Aerojet-General Corporation**

**12 letters, 1962-1964**

**Scope and Content Note**

Included also are minutes of meetings, 1962-63, of the Nerva Advisory Group.

**Albert, Richard David, 1922-**

**2 letters, 1966, addressed to Horacio E. Bosch.**

**Memo, Dec. 9, 1966**

**Scope and Content Note**

Letter, addressed to him from Horacio E. Bosch in B Miscellaneous correspondence.

**Alldredge, Leroy Romney, 1917-**

**Letter, May 21, 1954**

**Scope and Content Note**

Copy of a letter, Jan. 3, 1968, to him in International Union of Radio Science correspondence.

**Allen, Clabon Walter, 1904-**

**Scope and Content Note**

No incoming letters; enclosure to letter, Aug. 4, 1964, in Joseph Kaplan correspondence is a letter to him from J. A. Ratcliffe.

**Alpert, Daniel, 1917-**

**Scope and Content Note**

No incoming letters; copy of a letter, Dec. 19, 1968, addressed to him in Silver's outgoing letters.

**Althis, William Phelps, 1901-**

**Scope and Content Note**

No incoming letters; copy of a letter, June 8, 1961, addressed to him in James R. Wait correspondence.

**Alter, Dinsmore, 1888-**

**3 letters, 1967**

**Scope and Content Note**

Correspondence addressed to him from Earl Blount in B Miscellaneous and in Howard S. Seifert correspondence.

**Alvarez, Luis Walter, 1911-**

**Letter, May 10, 1956, addressed to Clark Kerr.**

**Scope and Content Note**

Correspondence addressed to him and others in Alva R. Davis, Clark Kerr, and Otto Struve correspondence.

**Ambartsumian, Viktor Amazaspovich, 1908-**

**Letter, Oct. 3, 1968**

**Ament, William Sterling, 1918-**

**2 letters, 1961**

**Anderson, Kinsey A., 1926-**

**12 letters, 1961-73, addressed to Silver and others.**

**3 memos, 1965-68**

**Scope and Content Note**

Correspondence addressed to him and others in California. University, Berkeley, Sanford S. Elberg, and International Council of Scientific Unions correspondence.

**Andrews, Paul Revere, 1906-**

**Scope and Content Note**

No incoming letters; copy of a letter, Jan. 4, 1965, addressed to him in Silver's outgoing letters.

**Angelakos, Diogenes James, 1919-**

**8 letters, 1953-72**

**3 memos, 1958-76**

**Scope and Content Note**

Copies of letters, Jan. 24, 1956 and Oct. 7, 1957, to him and others in California. University, Berkeley correspondence.

**Angot, Andre Marie, 1905-**

**3 letters, 1953-54**

**Scope and Content Note**

Copy of a letter, Mar. 15, 1957, to him in International Union of Radio Science correspondence.

**Appleton, Sir Edward Victor, 1892-1965**

**Letter, Oct. 1959**

**Arrhenius, Gustaf Olof Suante, 1922-**

**Letter, Jan. 14, 1963**

**Asling, Clarence Willet, 1913-**

**Scope and Content Note**

No incoming letters; copy of a letter, Sept. 27, 1960, addressed to him in Silver's outgoing letters.

**Aspinall, Samuel Rusmisell, 1915-**

**Scope and Content Note**

No incoming letters; copy of a letter, Feb. 16, 1954, to him in Randal M. Robertson correspondence.

**Astin, Allen Varley, 1904-**

**Letter, Sept. 10, 1965, addressed to Millett G. Morgan.**

**Scope and Content Note**

Correspondence addressed to him in W. E. Gordon, John P. Hagen, and Millett G. Morgan correspondence.

**Atlas, David, 1924-**

**Letter, Apr. 29, 1968, addressed to Hans A. Panofsky.**

**Atwood, Wallace Walter, 1906-**

**Letter, June 9, 1959**

**Scope and Content Note**

Correspondence addressed to him in John H. Dellinger and William E. Gordon correspondence.

**Bacher, Robert Fox, 1905-**

**Scope and Content Note**

No incoming letters; copy of a letter, Nov. 15, 1968, addressed to him in Silver's outgoing letters.

**Bachynski, Morrel Paul, 1930-**

**3 letters, 1968, 1969 and n.d.**

**Scope and Content Note**

Enclosure to letter Mar. 14, 1961, in James R. Wait correspondence is a letter to him from Wait.

**Bailey, Dana Kavanagh, 1916-**

**Scope and Content Note**

No incoming letters; copies of letters, Mar. 20, 1967 and May 23, 1967, to him in International Union of Radio Science correspondence.

**Bailey, George William, 1887-**

**Scope and Content Note**

No incoming letters; copy of a letter, Apr. 7, 1961, to him in Wilham E. Gordon correspondence.

**Baird, Walter Scott, 1908-**

**Letter, Feb. 6, 1959**

**Baker, Robert M. L., 1923-**

**Letter, Oct. 14, 1960**

**Balakrishnan, A. V., 1922-**

**Scope and Content Note**

No incoming letters; correspondence addressed to him in Silver's outgoing letters and in F. L. Stumpers correspondence.

**Ballou, Clinton Edward, 1923-**

**Scope and Content Note**

No incoming letters; copy of a letter, Nov. 24, 1965, addressed to him in Silver's outgoing letters.

**Barankin, Edward William, 1920-**

**Scope and Content Note**

No incoming letters; copy of a letter, Dec. 3, 1968, addressed to him in Silver's outgoing letters.

**Barlow, Harold Everard Monteagle, 1899-**

**6 letters, 1959-68, addressed to Silver and others.**

**Scope and Content Note**

Correspondence addressed to him in Bradford R. Bean, International Union of Radio Science, Robert Saunders, George B. Sinclair, James R. Wait, and Francis J. Zucker correspondence.

**Barrett, Alan Hildreth, 1927-**

**4 letters, 1962-65**

**Bartels, Julius, 1899-**

**Scope and Content Note**

No incoming letters; copy of a letter, June 13, 1960, addressed to him in Silver's outgoing letters.

**Barton, Henry Askew, 1898-**

**Scope and Content Note**

No incoming letters; copy of a letter, July 3, 1947, addressed to him in Silver's outgoing letters.

**Bates, David Robert, 1916-**

**Scope and Content Note**

No incoming letters; copy of letter, July 3, 1964, to him in Ann Palm's correspondence.

**Beakley, George Carroll, 1922-**

**Scope and Content Note**

No incoming letters; copy of a letter, June 6, 1961, addressed to him in Silver's outgoing letters.

**Bean, Bradford R., 1927-**

**9 letters, 1960, addressed to Silver and others.**

**Telegram, June 17, 1960, re International Union of Radio Sciences. United States National Committee.**

**Scope and Content Note**

Correspondence addressed to him in International Union of Radio Science. United States National Committee, James R. Wait, and Alan T. Waterman correspondence.

**Beard, Charles Irwin, 1916-**

**Scope and Content Note**

No incoming letters; copy of a letter, June 8, 1967, addressed to him in Silver's outgoing letters.

Correspondence addressed to him in David M. Gates, William C. Hoffman, James R. Wait and Alan T. Waterman correspondence.

**Beeler, Madison Scott, 1910-**

**2 letters, 1959 and 1960**

**Bell, Clifford, 1898-**

**Letter, Nov. 12, 1958**

**Bellman, Richard Ernest, 1920-**

**Letter, Aug. 8, 1961**

**Below, John Frederich, 1927-**

**Scope and Content Note**

No incoming letters; copy of a letter, May 19, 1964, addressed to him in Silver's outgoing letters.

**Belton, Michael J. S., 1934-**

**Scope and Content Note**

No incoming letters; copy of a letter, June 23, 1965, addressed to him in Silver's outgoing letters.

**Benedict, Albert Alfred, 1921-**

**Scope and Content Note**

No incoming letters; copy of a letter, May 10, 1968, addressed to him in Silver's outgoing letters.

**Bennett, Herbert Seymour, 1917-**

**Scope and Content Note**

No incoming letters; copy of a letter, May 1, 1953, to him in Roy C. Spencer correspondence.

**Bennett, Rawson, 1905-**

**3 letters, 1958-60, re U.S. Navy Department. Office of Naval Research.**

**Benton, George Stock, 1917-**

**2 letters, 1969**

**Beran, Mark Jay, 1930-**

**Scope and Content Note**

No incoming letters; copy of a letter, Oct. 5, 1966, addressed to him in Silver's outgoing letters:

**Berkner, Lloyd Viel, 1905-1967**

**33 letters, 1952-1957, addressed to Silver and others, re International Union of Radio Science. United States National Committee.**

**Scope and Content Note**

Included also, a letter, June 24, 1967, from his wife.

Correspondence addressed to him in Bradford R. Bean, J. Howard Dellinger, William E. Gordon, John P. Hagen, International Union of Radio Science, National Academy of Science, National Research Council, Kenneth A. Norton, Alan H. Shapley, George B. Sinclair, and, from O. G. Villard, in V Miscellaneous correspondence.

**Berlad, Abraham Leon, 1921-**

**Scope and Content Note**

No incoming letters; copy of a letter, June 19, 1962, addressed to him in Silver's outgoing letters.

**Beynon, W. J. Granville**

**44 letters, 1961-73, addressed to Silver and others, re International Union of Radio Science.**

**Scope and Content Note**

Correspondence addressed to him in Sidney A. Bowhill, James W. Dungey, William C. Erickson, International Council of Scientific Unions, and International Union of Radio Science correspondence.

**Bickmore, Robert William, 1923-**

**2 letters, 1958-1959, addressed to J. I. Bohnert.**

**Birdsall, Charles Kennedy, 1925-**

**5 letters, 1959-72**

**Memo, Nov. 9, 1959**

**Birge, Raymond Thayer, 1887-**

**3 letters, 1953-54, addressed to Silver and others.**

**Bisplinghoff, Raymond Lewis, 1917-**

**Scope and Content Note**

No incoming letters; copies of letters, Jan. 3, 1963, Mar. 22, 1963, Aug. 6, 1963, July 10, 1964, Nov. 10, 1964, Dec. 4, 1964 and Sept. 29, 1965, addressed to him in Silver's outgoing letters.

**Bittner, Burt James, 1921-**

**Letter, Apr. 7, 1952**

**Black, Leonard James, 1904-**

**2 letters, 1952, addressed to C. F. Garland, T. C. McFarland and R. C. Grassi.**

**Scope and Content Note**

Copy of a letter addressed to him and others in California. University, Berkeley correspondence.

**Blackman, Nelson Merle, 1923-**

**Letter, Nov. 26, 1956, addressed to Julien Loeb.**

**Scope and Content Note**

Copy of a letter, Dec. 7, 1956, to him in Julien M. Loeb correspondence.

**Blagonrarov, Anatolii Arkadyevich, 1894-**

**Scope and Content Note**

No incoming letters; copy of a letter, July 2, 1968, to him in Maurice Roy correspondence.

**Bleil, David Franklin, 1908-**

**Letter, Aug. 29, 1962**

**Scope and Content Note**

Copy of a letter, July 6, 1960, to him in John R. Whinnery correspondence.

**Blumer, Herbert, 1900-**

**Scope and Content Note**

No incoming letters; copies of memos, Jan. 4, 1963, Oct. 6, 1964, Dec. 8, 1964, and Feb. 15, 1965, to him and others in California. University, Berkeley correspondence.

**Boelter, Llewellyn Michael Kraus, 1898-**

**Letter, Jan. 28, 1957**

**Bohnert, John Ignatius, 1910-**

**9 letters, 1958-59, addressed to Silver and others, re International Union of Radio Science. United States National Committee.**

**Scope and Content Note**

Correspondence addressed to him in Robert W. Bickmore, Georg Goubau, William E. Gordon, Robert C. Hansen, Victor Twersky, James R. Wait, and Francis J. Zucker correspondence.

See also: Materials re International Union of Radio Science (U.S.A.) for National Committee Meeting, Oct. 1959, Commission VI. Carton 7.

**Booker, Henry George, 1910-**

**24 letters, 1961-74, addressed to Silver and others, re International Union of Radio Science. United States National Committee.**

**Scope and Content Note**

Correspondence addressed to him in John S. Coleman, James W. Dungey, William E. Gordon, International Union of Radio Science, Millett G. Morgan, Maurice Roy, Robert M. Saunders, and James R. Wait correspondence.

**Borgnis, Fritz Edward, 1906-**

**Letter, Feb. 14, 1961**

**Borowitz, Sidney, 1918-**

**2 letters, 1959 and 1960**

**Borrowman, Merle L., 1920-**

**Scope and Content Note**

No incoming letters; copy of a letter, Sept. 25, 1974, addressed to him in Silver's outgoing letters.

**Bostrom, Kurt G. V., 1932-**

**Scope and Content Note**

No incoming letters; copy of a letter, Nov. 13, 1964, addressed to him in Silver's outgoing letters.

**Bouwkamp, Christoffel Jacob, 1915-**

**6 letters, 1954-55**

**Bowhill, Sidney Allan, 1927-**

**45 letters, 1963-69**

**3 memos, 1967-68**

**Scope and Content Note**

Correspondence addressed to him in W. J. G. Beynon correspondence; from F. du Castel in D Miscellaneous correspondence; in Harold E. Dinger, International Union of Radio Science, Sadami Matsushita, Millett G. Morgan, J. A. Ratcliffe and Maurice Roy correspondence.

**Bowker, Albert Hosmer, 1919-**

**2 letters, 1972 & 1973**

**Bowman, Thomas Elliot, 1918-**

**Letter, Oct. 7, 1966**

**Bracewell, Ronald Newbold, 1921-**

**2 letters, 1955 and 1969, addressed to Silver and William J. Welch.**

**Scope and Content Note**

Copy of a letter, Feb. 2, 1961, addressed to him in James R. Wait correspondence.

**Brady, James Joseph, 1924-**

**2 letters, 1958 and 1962**

**Scope and Content Note**

Copy of a letter, May 17, 1958, addressed to him in Charles Süsskind correspondence.

**Brandstatter, Julius J., 1920-**

**Letter, Dec. 7, 1962**

**Branscomb, Lewis McAdory, 1926-**

**Scope and Content Note**

No incoming letters; copy of a letter, Feb. 25, 1966, addressed to him in Silver's outgoing letters.

**Brewer, Leo, 1919-**

**Scope and Content Note**

No incoming letters; copy of a letter, June 30, 1965, addressed to him in Silver's outgoing letters.

**Brewer, Max Clifton, 1924-**

**Scope and Content Note**

No incoming letters; copy of a letter, Mar. 13, 1963, addressed to him in Silver's outgoing letters.

**Brewer, Richard George, 1928-**

**Scope and Content Note**

No incoming letters; copy of a letter, Apr. 26, 1963, addressed to him in Silver's outgoing letters.

**Brode, Robert Bigham, 1900-**

**17 letters, 1963-64**

**3 memos, 1963-65**

**Scope and Content Note**

Addressed to Silver and others, re California. University, Berkeley. Space Sciences Laboratory.

Correspondence addressed to him and others in California. University, Berkeley, Sanford S. Elberg, Frederick Ferguson, and Aaron Gary correspondence; from Frederick Jandrey in J Miscellaneous correspondence; in Willard Libby correspondence; from Strickland in S Miscellaneous correspondence; in Charles Süsskind, U.S. Navy Department. Office of Naval Research and, from A. W. Wolfendale, in W Miscellaneous correspondence.



**Brode, Wallace Reed, 1900-  
Letter, June 14, 1956, addressed to F. A. Jenkins.**

**Bronk, Deltev Wulf, 1897-  
Letter, Feb. 23, 1950**

**Scope and Content Note**

Copy of a letter, May 1, 1958, to him in John H. Dellinger correspondence.

**Brown, Edmund Gerald "Pat", 1905-**

**Scope and Content Note**

No incoming letters; copy of a letter, [1965], addressed to him in Silver's outgoing letters.

**Brown, Frederick Winfield, 1908-**

**3 letters, 1959 and 1961, addressed to Silver and William E. Gordon.**

**Scope and Content Note**

Copies of letters, May 8, 1959 and Jan. 13, 1961, addressed to him in William E. Gordon correspondence.

**Brown, Gordon Stanley, 1907-**

**Letter, Sept. 23, 1964**

**Scope and Content Note**

Copy of a letter, Jan. 4, 1968, to him from C. M. Minnis in International Union of Radio Science correspondence.

**Brown, Harold, 1927-**

**Letter, April 9, 1969**

**Brown, Harrison Scott, 1917-**

**5 letters, 1966-69, addressed to Silver and others.**

**Scope and Content Note**

Copy of a letter, July 29, 1963, to him in Alan T. Waterman correspondence.

**Brown, Robert Reginald, 1923-**

**5 letters, 1963-66, addressed to Silver and others.**

**Scope and Content Note**

Copy of a memo, Jan. 4, 1963, addressed to him and others from the Graduate Division, in California. University, Berkeley correspondence.

See also: Materials re University of California, Berkeley, for Atmospheric Sciences Committee. Carton 1.

**Bruckner, Keith Allan, 1924-**

**Letter, Nov. 1, 1961**

**Budden, Kenneth George, 1915-**

**Letter, July 31, 1962, from his secretary.**

**Scope and Content Note**

Copy of a letter, Feb. 1, 1961, to him in James R. Wait correspondence.

**Burdick, Wayne Elwin, 1913-**

**Scope and Content Note**

No incoming letters; copy of a letter, Feb. 8, 1966, addressed to him in Silver's outgoing letters.

**Burgess, Ronald Eric, 1917-**

**Scope and Content Note**

No incoming letters; copy of a letter, Nov. 7, 1966, addressed to him in Silver's outgoing letters.

**Burke, Philip George, 1932-**

**Scope and Content Note**

No incoming letters; copy of a letter, Mar. 16, 1964, addressed to him in Silver's outgoing letters.

**Burrows, Charles Russell, 1902-**

**6 letters, 1951-67, addressed to Silver and L. C. Van Atta.**

**Scope and Content Note**

Correspondence addressed to him in Lloyd V. Berkner, J. Howard Dellinger, John V. Granger, Millett G. Morgan, Roy C. Spencer, Lester C. Van Atta, and Arthur H. Waynick correspondence.

**Cabot, John M., 1901-**

**Scope and Content Note**

No incoming letters; copy of a letter, Apr. 1, 1964, to him from Charles C. Stelle in S Miscellaneous correspondence.

**Cahill, James Francis, 1926-**

**Scope and Content Note**

No incoming letters; copy of a letter, Apr. 2, 1974, addressed to him in Silver's outgoing letters.

**Caldwell, Joseph Jefferson, 1915-**

**Letter, Aug. 23, 1946**

**California. University**

**4 letters, 1961-65**

**California. University. President**

**5 letters, 1963-69**

**California. University. Regents**

**13 letters, 1952-72**

**California. University, Berkeley**

**43 letters, 1948-74 & n.d.**

**23 memos, 1955-75**

**Scope and Content Note**

Addressed to Silver and others. From miscellaneous campus offices.

**California. University, Berkeley. Associated Students**

**4 letters, 1974-75**

**California. University, Berkeley. Chancellor**

**7 letters, 1961-74, addressed to Silver and others.**

**See also: Heyman, Ira M.; Kerr, Clark; and Strong, Edward W.**

**California. University, Berkeley. College of Engineering**

**3 letters, 1961-63**

**10 memos, 1956-72**

**California. University, Berkeley. Electronics Research Laboratory**

**7 letters, 1951-55, addressed to Silver and others.**

**California. University, Berkeley. Space Sciences Laboratory**

**40 letters, 1961-75**

**23 memos, 1961-75**

**Scope and Content Note**

Addressed to Silver and others.

See also: Brode, Robert B.

**Calvin, Melvin, 1911-**

**4 letters, 1960-69, addressed to Silver and others.**

**Scope and Content Note**

Correspondence addressed to him in Sanford S. Elberg, and U.S. Navy Dept. Office of Naval Research correspondence.

**Campbell, Owin Watson, 1906-**

**Scope and Content Note**

No incoming letters; copy of a letter, July 28, 1965, addressed to him in Silver's outgoing letters.

Copy of a letter, Mar. 13, 1964, addressed to him in Robert B. Brode correspondence.

**Carter, Philip Staats, 1896-**

**3 letters, 1951-53**

**Chamberlain, Joseph Wyan, 1928-**

**Letter, Aug. 31, 1976**

**Chang, Howard How Chung, 1922-**

**Scope and Content Note**

No incoming letters; copy of a letter, Jan. 16, 1967, addressed to him in Silver's outgoing letters.

**Chapman, John Milton, 1914-**

**Scope and Content Note**

No incoming letters; enclosure to a letter, Mar. 23, 1963, in Silver's outgoing letters is a copy of a letter to him from K. Maeda.

**Charney, Jule Gregory, 1917-**

**Scope and Content Note**

No incoming letters; copy of a letter, Sept. 24, 1962, addressed to him in Silver's outgoing letters.

**Chasson, Robert Lee, 1919-**

**2 letters, 1965**

**Chernin, Milton, 1910-**

**Scope and Content Note**

No incoming letters; memo, May 3, 1966, addressed to him and others in Roger W. Heyns correspondence.

**Chodorow, Marvin, 1913-**

**Letter, May 16, 1958**

**Scope and Content Note**

Correspondence addressed to him in Edward C. Jordan and National Academy of Sciences. National Research Council correspondence.

**Christensen, Ralph Jorgensen, 1906-**

**Scope and Content Note**

No incoming letters; copy of a letter, Oct. 12, 1962, addressed to him in Silver's outgoing letters.

**Christiansen, Mark Newell, 1930-  
3 letters, 1973-74, addressed to Silver and others.**

**Christopher, George, 1907-**

**Scope and Content Note**

No incoming letters; copy of a letter, Mar. 2, 1962, addressed to him in Silver's outgoing letters.

**Chu, Ju Chin, 1919-**

**Scope and Content Note**

No incoming letters; copy of a letter, Sept. 14, 1962, addressed to him in Silver's outgoing letters.

**Chu, Lan Jen, 1913-**

**7 letters, 1947-63**

**Scope and Content Note**

Correspondence addressed to him in John S. Coleman, George B. Sinclair and B. D. H. Tellegen correspondence.

**Churchman, Charles West, 1913-**

**3 letters, 1963-67**

**4 memos, 1964-66**

**Scope and Content Note**

Correspondence addressed to him and others in Roger W. Heyns and, from Melvin M. Webber, in W Miscellaneous correspondence.

**Classen, Richard Strong, 1922-**

**Letter, Nov. 23, 1960**

**Clark, Clayton, 1912-**

**Scope and Content Note**

No incoming letters; copy of a letter, Feb. 1, 1967, addressed to him in outgoing letters.

**Clark, John Fulmer, 1920-**

**2 letters, 1964-65**

**Clavier, Andre Gabriel, 1894-**

**Letter, Mar. 10, 1950**

**Clough, Ray William, 1920-**

**Scope and Content Note**

No incoming letters; copy of a memo, Oct. 10, 1968, addressed to him and others in George J. Maslach correspondence.

**Coates, Leonidas Dixon, 1907-**

**Letter, Dec. 7, 1962**

**Cockrell, Robert Alexander, 1909-**

**Scope and Content Note**

No incoming letters; copy of a letter, Jan. 4, 1962, addressed to him and others in Sanford S. Elberg correspondence.

**Cohen, Gerald Howard, 1922-**

**Scope and Content Note**

No incoming letters; copy of a letter, June 16, 1964, addressed to him in Silver's outgoing letters.

**Cohen, Robert, 1924-**

**Letter, Apr. 25, 1960, addressed to Ralph J. Slutz.**

**Coleman, John Sherrard, 1914-**

**17 letters, 1954-63, addressed to Silver and others, primarily re International Union of Radio Science. United States National Committee; and National Academy of Sciences. National Research Council.**

**Scope and Content Note**

Correspondence addressed to him in William E. Gordon, Millett G. Morgan, National Academy of Sciences. National Research Council, Alan H. Shapley, and Arthur H. Waynick correspondence.

**Coltman, John Wesley, 1915-**

**Scope and Content Note**

No incoming letters; copy of a letter, Mar. 25, 1959, addressed to him in Silver's outgoing letters.

**Colwell, Robert Neil, 1918-**

**Scope and Content Note**

No incoming letters; copy of a letter, Nov. 2, 1966, addressed to him in Silver's outgoing letters.

**Condon, Edward Uhler, 1902-1974**

**Letter, Jan. 8, 1958**

**Coney, Donald, 1901-**

**2 letters, 1956, addressed to Morrrough P. O'Brian.**

**Connick, Robert Elwell, 1917-**

**Scope and Content Note**

No incoming letters; copy of a letter, Feb. 23, 1967, addressed to him in Silver's outgoing letters.

**Constance, Lincoln, 1909-**

**4 letters, 1956-62, addressed to University of California officials.**

**Scope and Content Note**

Copy of a letter, Aug. 24, 1961, to him in California. University, Berkeley. Chancellor correspondence.

**Corley, James Henry, 1904-1974**

**Scope and Content Note**

No incoming letters; copy of a letter, Jan. 26, 1962, to him in Paul S. Johnson correspondence.

**Cornell, Samuel Douglas, 1915-**

**Letter, Dec. 11, 1959, addressed to William E. Gordon.**

**Scope and Content Note**

Copies of letters, Nov. 23, 1959 and Dec. 21, 1960, addressed to him in William E. Gordon correspondence.

**Cornet, Israel Isaac, 1912-**

**Letter, Jan. 8, 1968, addressed to David Tabor.**

**Coroniti, Samuel C., 1908-**

**14 letters, 1963-67, addressed to Silver and others.**

**Scope and Content Note**

Correspondence addressed to him in International Union of Radio Science and Maurice Roy correspondence.

**Corrington, Murlan Stanley, 1913-**

**Letter, May 26, 1958**

**Cottony, Herman Vladimir, 1909-**

**Scope and Content Note**

No incoming letters; copies of letters, Oct. 6, 1961, Dec. 4, 1961 and Jan. 15, 1962, addressed to him in Silver's outgoing letters.

**Coulomb, Jean Marie François Joseph, 1904-**

**5 letters, 1968-69, re International Union of Geodesy and Geophysics.**

**Scope and Content Note**

Enclosure to letter, May 19, 1966, in Joseph Kaplan correspondence is a letter addressed to him from Kaplan.

**Cowee, John Widmer, 1918-**

**2 letters, 1961 & 1963**

**Scope and Content Note**

Correspondence addressed to him and others in California. University, Berkeley, Roger W. Heyns, and Edward W. Strong correspondence.

**Craig, Robert Wallace, 1924-**

**Scope and Content Note**

No incoming letters; copy of a letter, July 14, 1963, addressed to him in Silver's outgoing letters.

**Crain, Cullen Malone, 1920-**

**Scope and Content Note**

No incoming letters; copy of a letter, July 1, 1968, addressed to him in William E. Gordon correspondence.

**Crichlow, Wilham Quarles, 1917-**

**Scope and Content Note**

No incoming letters; copy of a letter, Aug. 11, 1959, addressed to him in Silver's outgoing letters.

Correspondence addressed to him and others in William E. Gordon and National Academy of Science. National Research Council and, from C. A. Samson, in S Miscellaneous correspondence.

**Cross, George Lynn, 1905-**

**Letter, Mar. 5, 1956**

**Cunningham, Walter Jack, 1917-**

**Letter, June 13, 1956**

**Curtis, Huntington Woodman, 1921-**

**Scope and Content Note**

No incoming letters; copy of a letter, Sept. 28, 1956, addressed to him in Silver's outgoing letters.

**Curtiss, John Hamilton, 1909-**

**Scope and Content Note**

No incoming letters; copy of a letter, Oct. 4, 1956, addressed to him in Jack W. Herbstreit correspondence.

**Cutler, Cassius Chapin, 1914-**

**2 letters, 1973 & 1975**

**Dalziel, Charles Francis, 1904-**

**Memo, Nov. 8, 1955, addressed to P. L. Morton.**

**Scope and Content Note**

Copy of a letter, May 26, 1959, addressed to him and others in Sanford S. Elberg correspondence.

**Daniels, Fred Bryan, 1901-**

**Scope and Content Note**

No incoming letters; copy of a letter, Sept. 9, 1959, addressed to him in Silver's outgoing letters.

**Darlington, Sidney, 1906-**

**2 letters, 1964, addressed to Silver and K. M. Siegel.**

**Dart, Francis Eliot, 1914-**

**Letter, Mar. 5, 1962**

**Davenport, Wilbur Bayley, 1921-**

**Scope and Content Note**

No incoming letters; copy of a letter, Nov. 12, 1958, addressed to him in Silver's outgoing letters.

Copy of a letter, May 13, 1958, addressed to him in National Academy of Science, National Research Council correspondence.

**Davis, Alva Raymond, 1887-1965**

**Letter, Dec. 21, 1955, addressed to Silver and others.**

**Davis, Harmer Elmer, 1905-**

**Scope and Content Note**

No incoming letters; copy of a memo, Oct. 10, 1968, addressed to him and others in George J. Maslach correspondence.

**DeClaris, Nicholas, 1931-**

**2 letters, 1959**

**Scope and Content Note**

Correspondence addressed to him and from him in International Union of Radio Science correspondence.

**Dees, Bowen Causey, 1917-**

**Letter, Nov. 20, 1963, re National Science Foundation.**

**Dellinger, John Howard, 1886-**

**41 letters, 1952-62, re International Union of Radio Science.**

**Scope and Content Note**

Correspondence addressed to him in William E. Gordon, Donald W. R. McKinley, and James D. O'Connell correspondence; and from Bruno O. Weinschel in W Miscellaneous correspondence.

**Demboski, Henry, 1908-**

**Scope and Content Note**

No incoming letters; copies of letters, July 8, 1968 and Sept. 5, 1968, addressed to him in Silver's outgoing letters.

**Dennes, William Ray, 1898-**

**Letter, Nov. 8, 1960**

**Scope and Content Note**

Enclosure to memo, Mar. 8, 1960, in Kenneth S. Pitzer correspondence is a letter from him to Carl Sagan.

**Dessler, Alexander Jack, 1928-  
2 letters, 1969 & 1972, addressed to Silver and Homer E. Newell.**

**Scope and Content Note**

Enclosure to letter, Apr. 23, 1964, in Willard F. Libby correspondence is a letter from him to Libby.

**Dickinson, Fred Eugene, 1912-  
Letter, Feb. 22, 1961**

**Dieter, Nannielou Hepburn, 1926-**

**Scope and Content Note**

No incoming letters; copy of a letter, Nov. 16, 1960, addressed to her in Silver's outgoing letters.

**Dinger, Harold Eugene, 1905-  
Letter, July 22, 1963, addressed to S. A. Bowhill.**

**Scope and Content Note**

Correspondence addressed to him and from him in Sidney A. Bowhill and William E. Gordon correspondence.

**Donaldson, Merle Richard, 1920-**

**Scope and Content Note**

No incoming letters; copies of letters, June 14, 1960 and Jan. 17, 1961, addressed to him in Silver's outgoing letters.

**Dorn, John Emil, 1909-1971  
3 letters, 1956-59, addressed to Silver and J. A. Putnam.**

**Scope and Content Note**

Copy of a letter, Jan. 11, 1956, addressed to him and others in John A. Putnam correspondence.

**Doudney, Charles Owen, 1925-**

**Scope and Content Note**

No incoming letters; copy of a letter, Apr. 13, 1967, addressed to him in Silver's outgoing letters.

**Dougal, Arwin Adelbert, 1926-**

**Scope and Content Note**

No incoming letters; copies of letters, Mar. 4, 1966 and Mar. 7, 1967, addressed to him in Silver's outgoing letters.

**Dow, William Gould, 1895-  
7 letters, 1958-61**

**Dowd, Thomas Bartholomew, 1919-  
4 letters, 1961-64**

**Scope and Content Note**

Enclosures to memo, June 1, 1964, in U.S. Navy Dept. Office of Naval Research correspondence are a letter to him from Silver's secretary and a letter from him to Chairman, National Infra-red Information Symposium.

**Drenick, Rudolf F., 1914-  
4 letters, 1967**

**Scope and Content Note**

Correspondence addressed to him in Seymour W. Herwald correspondence and in International Union of Radio Science correspondence.



**Droessler, Earl George, 1920-  
8 letters, 1961-63, re National Science Foundation.**

**Scope and Content Note**

Copy of a letter, Sept. 6, 1963, addressed to him in Stanley H. Ward correspondence.

**Drucker, Daniel Charles, 1918-**

**Scope and Content Note**

No incoming letters; copy of a letter, Aug. 19, 1955, addressed to him in Silver's outgoing letters.

**Drummond, James Edgar, 1924-  
Letter, Mar. 11, 1965**

**Dryden, Hugh Latimer, 1898-**

**3 letters, 1961-62, re United States National Aeronautics and Space Administration.**

**Scope and Content Note**

Enclosure to letter, Oct. 19, 1962, in California. University, Berkeley correspondence is a letter from him to David B. Stewart.

**DuBridge, Lee Alvin, 1901-  
Letter, July 3, 1969**

**Duke, Charles Martin, 1917-  
Letter, Nov. 23, 1966**

**Dungey, James Wynne, 1923-**

**5 letters, 1966-68, addressed to Silver and others.**

**Scope and Content Note**

Correspondence addressed to him in Henry G. Booker, W. J. G. Beynon and International Union of Radio Science correspondence.

**Dunning, John Ray, 1907-1975**

**Scope and Content Note**

No incoming letters; copies of letters, Nov. 3, 1965 and Nov. 12, 1965, addressed to him in Silver's outgoing letters.

**Duntley, Seibert Quimby, 1911-  
Letter, Sept. 17, 1969**

**Dyer, Edward Ryant, 1918-**

**6 letters, 1964-68, addressed to Silver and others.**

**Scope and Content Note**

Correspondence addressed to him from Geoffrey M. Brown in B Miscellaneous correspondence; and in International Union of Radio Science correspondence.

**Eades, James Beverly, 1923-  
Letter, Apr. 3, 1962**

**Eakin, Richard Marshall, 1910-**

**Scope and Content Note**

No incoming letters; copy of a letter, Mar. 11, 1963, addressed to him in Silver's outgoing letters. Copy of memo, Feb. 15, 1965, addressed to him and others in California. University, Berkeley correspondence.

**Easterday, Otho Dunreath, 1924-**

**Scope and Content Note**

No incoming letters; copy of a letter, July 13, 1965, addressed to him in Silver's outgoing letters.

**Eastman, Austin Vitruvius, 1902-  
Letter, Apr. 22, 1955**

**Ebers, Earle Street, 1910-  
Letter, Jan. 29, 1924**

**Eckart, Carl Henry, 1902-**

**Scope and Content Note**

No incoming letters; copy of a letter, Jan. 30, 1961, addressed to him in Silver's outgoing letters.

**Edelsack, Edgar Allen, 1924-**

**Scope and Content Note**

No incoming letters; copy of a letter, Mar. 9, 1961, addressed to him in Silver's outgoing letters.

**Edlefsen, Niels Edlef, 1893-**

**Letter, Feb. 15, 1968**

**Memo, Apr. 5, 1968**

**Edmondson, Frank Kelley, 1912-**

**Scope and Content Note**

No incoming letters; copy of a letter, Nov. 9, 1956, addressed to him in Silver's outgoing letters.

**Eggers, Alfred John, 1922-**

**Scope and Content Note**

No incoming letters; copy of a letter, Oct. 3, 1963, to him in Charles W. Churchman correspondence.

**Eglinton, Geoffrey, 1927-**

**Scope and Content Note**

No incoming letters; copies of letters, Dec. 5, 1962, Jan. 21, 1963, Apr. 5, 1963 and May 27, 1963, addressed to him in Silver's outgoing letters.

**Eisenbud, Merril, 1915-**

**Letter, July 13, 1960**

**Elberg, Sanford Samuel, 1913-**

**8 letters, 1962-67**

**5 memos, 1959-63**

**Scope and Content Note**

Addressed to Silver and others.

Correspondence addressed to him and others in Kinsey A. Anderson, Robert B. Brode, Francis E. Dart, Roger W. Heyns, George C. Pimental, U.S. National Aeronautics and Space Administration, and U.S. Navy Dept. correspondence.

**Elias, Peter, 1923-**

**4 letters, 1959-65**

**Elliott, Robert Stratmen, 1921-**

**4 letters, 1957-64, addressed to Silver and M. G. Morgan.**

**Elms, James Cornelius, 1916-**

**2 letters, 1968 & 1969, re U.S. National Aeronautics and Space Administration.  
Electronics Research Center.**

**Emberson, Richard Maury, 1914-**

**4 letters, 1959-66, addressed to Silver and others.**

**Scope and Content Note**

Copy of a letter, Dec. 28, 1966, addressed to him in International Union of Radio Science correspondence.

**Enenstein, Norman Harry, 1923-**

**Scope and Content Note**

No incoming letters; copy of a letter, Apr. 15, 1969, addressed to him in Silver's outgoing letters.

**English, Albert Charles, 1919-**

**Scope and Content Note**

No incoming letters; copy of a letter, Nov. 22, 1958, addressed to him from Yashitaha Iheda in I Miscellaneous correspondence.

**Erickson, William Clarence, 1930-**

**2 letters, 1967 & 1969, addressed to M. G. Morgan and W. J. G. Beynon.**

**Scope and Content Note**

Correspondence addressed to him in W. J. G. Beynon and Millett G. Morgan correspondence.

**Esaki, Leo, 1925-**

**Scope and Content Note**

No incoming letters; enclosure to a copy of a letter, Feb. 24, 1960, in Silver's outgoing letters is a draft of a letter from Silver to him.

Enclosure to letter, Feb. 8, 1960, in William G. Shepherd correspondence is a letter to him from Shepherd.

**Essen, Louis, 1908-**

**13 letters, 1965-69**

**Scope and Content Note**

Correspondence addressed to him and from him in International Union of Radio Science and Siegfried F. Singer correspondence.

**Estermann, Emmanuel, 1900-**

**Scope and Content Note**

No incoming letters; copies of letters, May 18, 1960 and Oct. 25, 1960, addressed to him in Silver's outgoing letters.

**Everhart, Thomas Eugene, 1932-**

**3 letters, 1972-73**

**Fano, Robert Mario, 1917-**

**Scope and Content Note**

No incoming letters; copies of letters, Feb. 1, 1952 and May 28, 1952, addressed to him in Silver's outgoing letters.

**Farbar, Leonard, 1911-**

**Scope and Content Note**

No incoming letters; copy of a letter, Nov. 3, 1966, addressed to him in Silver's outgoing letters.

**Farley, Thomas Albert, 1933-**

**Letter, May 31, 1969**

**Farris, Hansford White, 1919-**

**Letter, Jan. 19, 1966**

**Feibelman, Walter A., 1925-**

**Scope and Content Note**

No incoming letters; copies of letters, Sept. 26, 1961 and Oct. 26, 1961, addressed to him in Silver's outgoing letters.

**Feiker, George Edward, 1918-**

**Scope and Content Note**

No incoming letters; copy of a letter, Mar. 4, 1959, addressed to him in Silver's outgoing letters.

Copy of a letter, Mar. 2, 1959, addressed to him in Richard M. Emberson correspondence.

**Felling, William Edward, 1924-**

**Scope and Content Note**

No incoming letters; copy of a letter, Oct. 29, 1963, addressed to him in Silver's outgoing letters.

**Fellows, Robert Francis, 1920-**

**Scope and Content Note**

No incoming letters; copy of a letter, Nov. 5, 1965, addressed to him in George C. Pimentel correspondence.

**Felsen, Leopold Benno, 1924-**

**10 letters, 1958-76, addressed to Silver and others.**

**Scope and Content Note**

Correspondence addressed to him in John I. Bohnert and Garnet A. Woonton correspondence.

**Ferguson, Eldon Earl, 1926-**

**Scope and Content Note**

No incoming letters; enclosure to letter, June 12, 1969, in Henry G. Booker correspondence is a letter from him to Booker.

**Ferguson, Frederich Palmer, 1916-**

**Letter, July 11, 1964, addressed to Robert B. Brode.**

**Fernbach, Sidney, 1917-**

**Scope and Content Note**

No incoming letters; copy of a letter, Dec. 6, 1965, addressed to him in Silver's outgoing letters.

**Field, George Brooks, 1929-**

**Letter, Oct. 9, 1970**

**Findlay, John Wilson, 1915-**

**3 letters, 1959-67, addressed to Silver and others.**

**Scope and Content Note**

Copy of a letter, Oct. 14, 1966, to him from J. P. Wild in W Miscellaneous correspondence.

**Fink, Donald Glen, 1911-**

**Letter, Nov. 25, 1969**

**Fite, Gilbert Courtland, 1918-**

**4 letters, 1959**

**Fleischer, Robert L., 1918-**

**2 letters, 1964 & 1966, addressed to Silver and H. F. Weaver.**

**Fock, Vladimir Alexandrovitch, 1898-**

**Scope and Content Note**

No incoming letters; copies of letters, Mar. 20, 1961 and Dec. 18, 1961, addressed to him in James R. Wait correspondence.

**Fokker, Adrian Daniel, 1887-**

**Letter, Nov. 8, 1962**

**Folsom, Richard Gilman, 1907-**

**2 letters, 1973 & 1974**

**Foster, John Stuart, 1922-**

**Letter, Oct. 26, 1972**

**Foster, Paul Darwin, 1888-1971**

**Letter, Oct. 8, 1956**

**Fox, Jerome Lewis, 1923-**

**Scope and Content Note**

No incoming letters; copy of a letter, June 27, 1966, addressed to him in Silver's outgoing letters.

Correspondence addressed to him in U.S. Navy Dept. correspondence.

**Freeman, Monroe Edward, 1906-**

**Scope and Content Note**

No incoming letters; copy of a letter, May 14, 1965, addressed to him in Silver's outgoing letters.

**Fretter, William Bache, 1916-**

**5 letters, 1962-63**

**Scope and Content Note**

Correspondence addressed to him and others in Lincoln Constance, Sanford S. Elberg, Roger W. Heyns and Stanley H. Ward correspondence.

See also: Materials re University of California, Berkeley, for Atmospheric Sciences Committee. Carton 1.

**Friedman, Bernard, 1915-**

**Letter, May 9, 1957**

**Scope and Content Note**

Correspondence addressed to him and others in Victor H. Rumsey and Edward C. Jordan correspondence.

**Friedman, Herbert, 1916-**

**5 letters, 1959-68, addressed to Silver and others.**

**Scope and Content Note**

Correspondence addressed to him and others and from him in W. J. G. Beynon, Sidney A. Bowhill, John S. Coleman, Samuel C. Coroniti, Colin O. Hines, International Council of Scientific Unions, International Union of Radio Science, Willard F. Libby, Millett G. Morgan, Hugh Odishaw, and Frederich Seitz correspondence; and from Donald J. Williams in W Miscellaneous correspondence.

See also: Materials re International Council of Scientific Unions. Carton 3.

**Friis, Harald Trap, 1893-**

**Scope and Content Note**

No incoming letters; copy of a letter, July 23, 1957, addressed to him in Silver's outgoing letters.

**Frye, Glenn McKindley, 1926-**

**Scope and Content Note**

No incoming letters; copy of a letter, Nov. 15, 1965, addressed to him in Silver's outgoing letters.

**Fubini, Eugene Ghiron, 1913-**

**Scope and Content Note**

No incoming letters; copies of letters, Apr. 21, 1969 and July 25, 1969, addressed to him in Silver's outgoing letters.

**Fukushima, Naoski, 1925-**

**Scope and Content Note**

No incoming letters; copies of letters, July 29, 1964 and Feb. 8, 1965, addressed to him in Silver's outgoing letters.

**Fulton, Charles Maxwell, 1910-**

**Scope and Content Note**

No incoming letters; copy of a letter, Feb. 25, 1963, addressed to him in Silver's outgoing letters.

**Gabriel, William Francis, 1925-**

**Letter, Feb. 9, 1959**

**Gaffron, Hans, 1902-**

**Letter, Nov. 6, 1969**

**Ganz, Aaron, 1924-**

**Letter, Feb. 3, 1964, addressed to R. B. Brode.**

**Garland, Clyne Frederick, 1903-**

**3 letters, 1958-59, addressed to Silver and others.**

**Scope and Content Note**

Correspondence addressed to him and others in Leonard J. Black, International Union of Radio Science, and Clark Kerr correspondence.

**Garland, George David, 1926-**

**Letter, Sept. 20, 1963, addressed to D. K. Todd, re International Union of Geodesy and Geophysics.**

**Gates, David Murry, 1921-**

**Letter, June 6, 1963, addressed to C. I. Beard.**

**Gautier, Thomas Nicholas, 1913-**

**Scope and Content Note**

No incoming letters; enclosure to letter, Mar. 17, 1960, in James R. Wait correspondence is a memo to Wait from him.

**General Electric Company**

**4 letters, 1955-60**

**Telegram, Nov. 13, 1958**

**George, William Donovan, 1907-**

**Scope and Content Note**

No incoming letters; copy of a letter, May 26, 1960, addressed to him in John S. Coleman correspondence.

**Giacoletto, Lawrence Joseph, 1916-**

**Letter, Apr. 11, 1969**

**Gibbs, Roswell Clifton, 1878-**

**5 letters, 1950-56, re International Union of Radio Science.**

**Scope and Content Note**

Copy of a letter, May 19, 1952, addressed to him in Joseph M. Pettit correspondence.

**Gibson, Ralph Edward, 1901-**

**Scope and Content Note**

No incoming letters; copies of letters, Feb. 13, 1962 and July 8, 1963, addressed to him in Silver's outgoing letters.

**Gilbert, Frederick Chester, 1876-**

**Scope and Content Note**

No incoming letters; letter, Dec. 12, 1961, addressed to Silver from him and Mark in Hans M. Mark correspondence.

**Gilruth, Robert Rowe, 1913-**

**2 letters, 1962 & 1963**

**Gladfelter, Millard E., 1900-**

**Letter, Jan. 14, 1964**

**Glassgold, Alfred Emanuel, 1929-**

**Letter, Mar. 28, 1966**

**Glazer, Harold, 1929-**

**Scope and Content Note**

No incoming letters; copy of a letter, Mar. 8, 1966, addressed to him in Silver's outgoing letters.

**Glock, Charles Young, 1919-**

**Scope and Content Note**

No incoming letters; copies of memos, Oct. 6, 1964, Nov. 3, 1964, Dec. 8, 1964 and Feb. 15, 1965, addressed to him and others in California. University, Berkeley correspondence.

**Goddard, Earl Gascoigne, 1917-**

**Letter, Feb. 6, 1959**

**Gold, Louis, 1917-**

**Letter, May 18, 1960**

**Scope and Content Note**

Copy of a letter, Oct. 8, 1959, to him from R. W. Beatty in B Miscellaneous correspondence.

**Goldberg, Harold Seymour, 1925-**

**Letter, Jan. 9, 1959**

**Goldberg, Leo, 1913-**

**Scope and Content Note**

No incoming letters; copy of a letter, Dec. 6, 1966, addressed to him in Silver's outgoing letters.

**Goldman, Stanford, 1907-**

**Letter, Jan. 16, 1956**

**Goldsmith, Alfred Norton, 1887-**

**See Institute of Electrical and Electronics Engineers**

**Goldstein, Sydney, 1903-**

**6 letters, 1965-69**

**Goldwasser, Edwin Leo, 1919-**

**Scope and Content Note**

No incoming letters; enclosures to letter, May 7, 1969, in Edward C. Jordan correspondence are two letters to Jordan from him.

**Gordon, Robert Aaron, 1908-**

**Scope and Content Note**

No incoming letters; copy of a memo, Jan. 4, 1963, addressed to him and others in California. University, Berkeley correspondence.

**Gordon, William Edwin, 1918-**

**116 letters, 1954-75**

**4 memos, 1958-60**

**Scope and Content Note**

Re International Union of Radio Science. United States National Committee. Correspondence addressed to him and from him from R. W. Beatty in B Miscellaneous correspondence; in Lloyd V. Berkner, John I. Bohnert, Henry G. Booker, Frederick W. Brown, and Samuel D. Cornell correspondence; from Charles J. Derganc in D Miscellaneous correspondence; in John H. Dellinger correspondence; from him to John V. Evans in E Miscellaneous correspondence; in International Union of Radio Science, International Union of Radio Science. United States National Committee, Edward C. Jordan, and Francis M. Kobayashi correspondence; from Ken-ichi Maeda in M Miscellaneous correspondence; in Lawrence A. Manning, John S. Marshall, Millett G. Morgan, National Academy of Sciences. National Research Council, Alan H. Shapley, George B. Sinclair, Ernest K. Smith, John B. Smyth, George W. Swenson, James R. Wait, and Arthur H. Waynick correspondence.

See also: Materials re International Union of Radio Science (U.S.A.). Cartons 6 & 7.

**Gordy, Walter, 1909-**

**Scope and Content Note**

No incoming letters; copy of a letter, Feb. 11, 1957, addressed to him in Silver's outgoing letters.

**Gotaas, Harold Benedict, 1906-**

**8 letters, 1957-61**

**Goubau, Georg, 1906-**

**Letter, Sept. 15, 1959, addressed to J. I. Bohnert.**

**Scope and Content Note**

Copy of a letter, Nov. 20, 1961, addressed to him in James R. Wait correspondence.

**Goudet, Georges, 1912-**

**Letter, Feb. 24, 1970**

**Gould, Roy Walter, 1927-**

**Scope and Content Note**

No incoming letters; copy of a letter, Feb. 13, 1961, addressed to him in James R. Wait correspondence.

**Graham, Martin Harold, 1926-**

**Scope and Content Note**

No incoming letters; copy of a letter, Mar. 17, 1975, addressed to him and Felix Wu in John R. Whinnery correspondence.

**Granger, John Van Nuys, 1918-**



**2 letters, 1952 & 1954, addressed to Silver and C. R. Burrows.**

**Scope and Content Note**

Copy of a letter, May 17, 1951, addressed to him in Lester C. Van Atta correspondence.

**Grant, Carroll Walter, 1900-**

**Letter, Dec. 12, 1961**

**Grant, William Chase, 1924-**

**Scope and Content Note**

No incoming letters; copy of a letter, Feb. 1, 1967, addressed to him in Silver's outgoing letters.

**Grassi, Raymond Charles, 1918-**

**Scope and Content Note**

No incoming letters; correspondence addressed to him and others in Leonard J. Black and John A. Putnam correspondence.

**Gray, Irving, 1920-**

**Scope and Content Note**

No incoming letters; copy of a letter, Jan. 11, 1963, addressed to him in Silver's outgoing letters.

**Green, Jerome Bowles, 1898-1960**

**Letter, May 23, 1958**

**Green, Paul Eliot, 1924-**

**2 letters, 1962 and 1963**

**Greyber, Howard David, 1923-**

**Scope and Content Note**

No incoming letters; copy of a letter, Mar. 6, 1967, addressed to him in Silver's outgoing letters.

**Gross, Bernhard, 1905-**

**Scope and Content Note**

No incoming letters; copy of a letter, Apr. 3, 1961 and June 2, 1961, addressed to him in James R. Wait correspondence.

**Gurs, Karl August, 1927-**

**Scope and Content Note**

No incoming letters; copy of a letter, Dec. 20, 1967, addressed to him in Silver's outgoing letters.

**Haas, Ward John, 1921-**

**3 letters, 1964-67**

**Haddock, Frederick Theodore, 1919-**

**Scope and Content Note**

No incoming letters; copy of a letter, Oct. 25, 1959, addressed to him in Silver's outgoing letters.

**Hadley, Lawrence Nathan, 1916-**

**Letter, Jan. 23, 1958**

**Hagen, John Peter, 1908-**

**19 letters, 1956-68, addressed to Silver and others.**

**Scope and Content Note**

Correspondence addressed to him and others in Lloyd V. Berkner, John S. Coleman, and John H. Dellinger correspondence; from Irvin H. Gerks in G Miscellaneous correspondence; in International Union of Radio Science, International Union of Radio Science. United States National Committee, Robert W. Knecht, Millett G. Morgan, Edward T. Pierce, Alan H. Shapley, James R. Wait, and Arthur H. Waynick correspondence.

**Hagerty, William Walsh, 1916-**

**Scope and Content Note**

No incoming letters; copies of letters, Nov. 4, 1960 and Dec. 15, 1960, addressed to him in Silver's outgoing letters.

**Hagfors, Tor, 1930-**

**Letter, June 1, 1965**

**Scope and Content Note**

Included also, reprint of an article by him, "Backscattering from an Undulating Surface with Applications to Radar Returns from the Moon," 1964.

**Hahn, Erwin Louis, 1921-**

**Letter, May 5, 1966**

**Haley, Richard Louis, 1923-**

**Scope and Content Note**

No incoming letters; copy of a letter, Nov. 22, 1968, addressed to him in Silver's outgoing letters.

**Hall, John Scoville, 1908-**

**Scope and Content Note**

No incoming letters; copy of a letter, July 3, 1964, addressed to him in Ann Palm correspondence.

**Hallen, Erik Gustaf, 1899-**

**Scope and Content Note**

No incoming letters; copy of a letter, June 14, 1954, addressed to him in Silver's outgoing letters.

**Hammond, Harry Kruvson, 1917-**

**Letter, Dec. 5, 1962**

**Hand, Cadet Hammond, 1920-**

**Scope and Content Note**

No incoming letters; correspondence addressed to him and others in California. University, Berkeley, and William B. Fretter correspondence.

**Hansen, Robert Clinton, 1926-**

**18 letters, 1958-74**

**Scope and Content Note**

Correspondence addressed to him in John I. Bohnert, Edward C. Jordan, Lester C. Van Atta, and James R. Wait correspondence.

**Harrington, John Vincent, 1919-**

**Scope and Content Note**

No incoming letters; copies of letters, Oct. 20, 1966 and Apr. 26, 1968, addressed to him in Silver's outgoing letters.

**Harris, Donald Brewer, 1901-**

**Scope and Content Note**

No incoming letters; copies of letters, Jan. 3, 1957 and Apr. 5, 1957, addressed to him in J. Howard Dellinger correspondence.

**Harris, Franklin Stewart, 1912-**

**Letter, Sept. 20, 1961**

**Hanison, James Merritt, 1915-**

**5 letters, 1967-68, addressed to Silver and others.**

**Scope and Content Note**

Correspondence addressed to him in W. J. B. Beynon, Harrison Brown, Herbert Friedman, International Council of Scientific Union, and International Union of Radio Science correspondence.

**Hartz, Theodore Robert, 1923-**

**Scope and Content Note**

No incoming letters; copy of a letter, Mar. 21, 1969, addressed to him in Silver's outgoing letters.

**Hausz, Walter, 1917-**

**Scope and Content Note**

No incoming letters; copies of letters, Aug. 22, 1961 and Jan. 13, 1962, addressed to him in John P. Hagen correspondence.

**Hawthorne, Edward I., 1921-**

**Letter, Aug. 5, 1960**

**Haymes, Robert, 1924-**

**Scope and Content Note**

No incoming letters; copy of a letter, Mar. 3, 1961, addressed to him in Silver's outgoing letters.

**Haynes, Sherwood Kimball, 1910-**

**Letter, Feb. 10, 1966**

**Hazen, Harold Locke, 1901-**

**Scope and Content Note**

No incoming letters; copy of a letter, Feb. 19, 1952, addressed to him in Silver's outgoing letters.

**Hazlett, Thomas Herbert, 1917-**

**Memo, July 28, 1958**

**Heckmann, Otto Herman Leopold, 1901-**

**Letter, Oct. 31, 1967**

**Heffner, Hubert, 1924-**

**Letter, Apr. 17, 1969, addressed to F. L. Stumpers.**

**Scope and Content Note**

Enclosure to letter, June 2, 1969, in Francis S. Johnson correspondence is a letter from him to Johnson.

**Heikkila, Walter John, 1928-**

**Letter, Jan. 22, 1965**

**Heins, Albert Edward, 1912-**

**16 letters, 1945-59**

**Heizer, Robert Fleming, 1915-**

**Scope and Content Note**

No incoming letters; copy of a letter, Feb. 11, 1960, addressed to him in Silver's outgoing letters. Copy of a memo, Feb. 6, 1959, addressed to him in Louis G. Henyey correspondence.

**Held, Gedaliahu, 1926-**

**12 letters, 1953-57, addressed to Silver and H. Unz.**

**Helliwell, Robert Arthur, 1920-**

**Letter, Nov. 19, 1965**

**Scope and Content Note**

Correspondence addressed to him in Samuel C. Coroniti, Arthur E. Little, and James R. Wait correspondence.

**Helmholz, August Carl, 1915-**

**Scope and Content Note**

No incoming letters; copies of letters, July 30, 1958 and May 6, 1960, addressed to him in Silver's outgoing letters.

Copy of a letter, Apr. 17, 1956, addressed to him in Lincoln Constance correspondence.

**Helstrom, Carl Wilhelm, 1925-**

**Letter, Nov. 24, 1970**

**Henderson, Ernest, 1897-**

**Scope and Content Note**

No incoming letters; copy of a letter, Feb. 13, 1959, addressed to him in Silver's outgoing letters.

**Henyey, Louis George, 1910-**

**Memo, Feb. 6, 1959, addressed to R. F. Heizer.**

**Herbstreit, Jack Wilham, 1917-**

**2 letters, 1956 & 1966, addressed to Silver and J. H. Curtiss.**

**Scope and Content Note**

Correspondence addressed to and from him in International Union of Radio Science, International Union of Radio Science. United States National Committee, and R. L. Smith-Rose correspondence.

**Herold, Edward William, 1907-**

**Scope and Content Note**

No incoming letters; copies of letters, Apr. 7, 1961 and June 12, 1961, addressed to him in Silver's outgoing letters.

**Herrick, Samuel, 1911-**

**Scope and Content Note**

No incoming letters; copy of a letter, July 31, 1961, addressed to him in International Union of Radio Science correspondence.

**Herwald, Seymour Willis, 1917-**

**Letter, Aug. 22, 1967, addressed to R. F. Drenick.**

**Hess, Harry Hammond, 1906-**

**Letter, Nov. 28, 1967, addressed to E. C. Jordan.**

**Scope and Content Note**

Correspondence addressed to him and others in Edward C. Jordan, Hugh Odishaw, and Frederich Seitz correspondence.

**Hess, Robert Lawrence, 1924-**

**Letter, June 16, 1958, re John R. Whinnery.**

**Hess, Wilmont Norton, 1927-**

**Scope and Content Note**

No incoming letters; copies of letters, Mar. 30, 1962 and June 25, 1968, addressed to him in Silver's outgoing letters.

**Hewlett, William Redington, 1913-**

**Letter, Mar. 9, 1956**

**Heyman, Ira Michael, 1930-**

**2 letters, 1974 & 1975**

**Scope and Content Note**

Enclosure to letter, Jan. 23, 1975, in M. Lynn Stevenson correspondence is a copy of a letter addressed to him from Stevenson.

**Heyns, Roger William, 1918-**

**2 letters, 1966 & 1970, addressed to Silver and others.**

**Scope and Content Note**

Copy of a letter, Nov. 20, 1967, addressed to him from the Campus Research Office in California. University, Berkeley correspondence.

**Hiatt, Ralph Ellis, 1910-**

**2 letters, 1962 & 1968**

**Scope and Content Note**

Enclosure to letter, Mar. 16, 1965, in Keeve M. Siegel correspondence is a letter addressed to him from Siegel.

**Hibbard, Walter Rollo, 1918-**

**Scope and Content Note**

No incoming letters; copies of letters, July 15, 1968 and Aug. 2, 1968, addressed to him in Silver's outgoing letters.

**Hibbs, Albert Roach, 1924-**

**Letter, Oct. 17, 1960**

**Hicks, John Frederick Gross, 1908-**

**4 letters, 1963**

**Hill, Albert Gordon, 1910-**

**Scope and Content Note**

No incoming letters; copy of a letter, Aug. 12, 1946, addressed to him in Lester C. Van Atta correspondence.

**Hines, Colin Oswald, 1927-**

**20 letters, 1965-75, addressed to Silver and others.**

**Scope and Content Note**

Correspondence addressed to him and others from F. du Castel in D Miscellaneous correspondence; in International Council of Scientific Unions. Committee on Space Research, International Union of Radio Science, Ray L. Leadabrand, Karl M. Rawer, Maurice Roy, and James R. Wait correspondence.

**Hitch, Charles Johnston, 1910-**

**Scope and Content Note**

No incoming letters; copy of a letter, Nov. 1, 1973, addressed to him in Mark N. Christiansen correspondence.

**Hoffman, William Charles, 1919-**

**5 letters, 1959-63, addressed to Silver and J. R. Wait.**

**Scope and Content Note**

Correspondence addressed to him in International Union of Radio Science. United States National Committee, James R. Wait, and John R. Whinnery correspondence.

**Hogg, David Clarence, 1921-**

**2 letters, 1967 & 1969, addressed to J. A. Saxton and E. C. Jordan.**

**Holden-Day, Inc.**

**15 letters, 1960-1967, addressed to Silver and others.**

**Hollingsworth, Guilford Leroy, 1918-**

**Letter, Aug. 18, 1959**

**Scope and Content Note**

Enclosure to letter, July 31, 1959, in Keeve M. Siegel correspondence is a letter addressed to Siegel from him.

**Holloway, John Thomas, 1922-**

**7 letters, 1966-67, re U.S. National Aeronautics and Space Administration grants.**

**Holmes, Alester Garden, 1904-**

**Scope and Content Note**

No incoming letters; copy of a letter, Jan. 18, 1967, addressed to him in Silver's outgoing letters.

**Hooper, James Ripley, 1915-**

**Letter, May 1, 1956**

**Hoover, Linn, 1923-**

**Letter, Mar. 1966**

**Hoover, William George, 1906-**

**Letter, May 18, 1966, re John R. Whinnery.**

**Hopkin, Arthur McMurrin, 1919-**

**2 letters, 1959 & 1963, addressed to Silver and others.**

**Hopkins, Robert Earl, 1915-**

**Letter, Apr. 5, 1960**

**Hornbeck, John Austin, 1918-**

**Letter, Sept. 5, 1957**

**Horning, Donald Oury, 1910-**

**Scope and Content Note**

No incoming letters; copy of a letter, May 26, 1959, addressed to him and others in Sanford S. Elberg correspondence.

**Houghton, John Theodore, 1931-**

**Letter, June 18, 1959**

**Howard, John Nelson, 1921-**

**3 memos, 1962-1964, addressed to Silver and others.**

**Hraba, John Burnett, 1921-**

**Scope and Content Note**

No incoming letters; copy of a letter, July 15, 1960, addressed to him in Silver's outgoing letters.

**Huffman, David Albert, 1925-**

**Scope and Content Note**

No incoming letters; copy of a letter, April 11, 1952, addressed to him in Silver's outgoing letters.

**Huggins, William Herbert, 1919-**

**Letter, Apr. 24, 1951**

**Scope and Content Note**

Correspondence addressed to and from him in National Academy of Science. National Research Council, and Emerick Toth correspondence.

**Hultgren, Ralph Raymond, 1905-**

**Scope and Content Note**

No incoming letters; copy of a letter, Aug. 27, 1965, addressed to him in Silver's outgoing letters.

**Hurlburt, Everett Harrington, 1910-**

**Letter, Oct. 2, 1963**

**Scope and Content Note**

Copy of a memo, Oct. 24, 1963, addressed to him and others in Charles Süsskind correspondence.

**Huskey, Harry Douglas, 1916-**

**Scope and Content Note**

No incoming letters; copy of a letter, June 2, 1965, addressed to him in Silver's outgoing letters.

Copy of a memo, Jan. 4, 1963, addressed to him and others in California. University, Berkeley correspondence.

**Hutchisson, Elmer, 1902-**

**3 letters, 1950 & 1957**

**Institute of Electrical and Electronics Engineers**

**47 letters, 1946-73 & n.d., addressed to Silver and others.**

**Scope and Content Note**

Includes letters from Alfred N. Goldsmith and Donald D. King.

Copy of a letter, May 20, 1967, addressed to the staff secretary in Kenneth A. Norton correspondence.

See also: Pots, Byron C

**Institute of Radio Engineers**

**See Institute of Electrical and Electronics Engineers**

**International Council of Scientific Unions**

**31 letters, 1959-1969**

**7 memos, 1969**

**Scope and Content Note**

Addressed to Silver and others.

Copies of letters, Apr. 8, 1968, June 25, 1968, and June 24, 1969, addressed to the secretary from C. M. Minnis in International Union of Radio Science correspondence.

**International Council of Scientific Unions. Committee on Space Research**

**18 letters, 1963-1968**

**2 telegrams, 1965**

**Scope and Content Note**

Addressed to Silver and others.

See also: Roy, Maurice and Van de Hulst, Hendrick C.

**International Scientific Radio Union**

**See International Union of Radio Science**

**International Union of Geodesy and Geophysics**

**2 letters, 1967**

**See also: Materials re Miscellaneous Organizations. Carton 8.**

**See also: Coulomb, Jean M. F. J.; Garland, George D.; Kaplan, Joseph; and Todd, David K.**

**International Union of Radio Science**

**800 letters, 1953-75 & n.d.**

**5 telegrams, 1967-68**

**Scope and Content Note**

Addressed to Silver and others.

Correspondence addressed to the Union from Geoffrey M Brown in B Miscellaneous correspondence; in Harold M. Barlow, Bradford R. Bean, Lloyd V. Berkner, W. J. B. Beynon, Henry G. Booker, and Sidney A. Bowhill correspondence; from Israel Cedarbaum in C Miscellaneous correspondence; in Jean M. Coulomb correspondence; from Dieminger in D Miscellaneous correspondence; in Nicholas DeClariss, John H. Dellinger, J. W. Dungey, and Edward R. Dyer correspondence; from J. V. Evans in E Miscellaneous correspondence; in Richard M. Emberson, Louis Essen, Herbert Friedman, William E. Gordon, John P. Hagen, Jack W. Herbstreit, Colin O. Hines, International Council of Scientific Unions. Committee on Space Research, International Union of Radio Science. United States National Committee, Leonard Jaffe, Francis S. Johnson, and Edward C. Jordan correspondence; from Isaac Koga in K Miscellaneous correspondence; in Joseph Kaplan, and H. Lottrup Knudsen correspondence; from G. R. Laclavère in L Miscellaneous correspondence; in Julien M. Loeb, and Alfred C. B. Lovell correspondence; from R. M. MacGibbon, Ken-ichi Maeda, and D. Bruce Montgomery in M Miscellaneous correspondence; in Millett G. Morgan correspondence; from North-Holland Publishing Co. in N Miscellaneous correspondence; in National Academy of Science. National Research Council, Tatsuzo Obayashi, J. C. Pecker, J. A. Ratcliffe, Richard S. Rettie, and Maurice Roy correspondence; from D. H. Sadler in S Miscellaneous correspondence; in William G. Shepherd, George B. Sinclair, R. L. Smith-Rose, James M. Snodgrass, and F. L. Stumpers correspondence; from J. Voge in V Miscellaneous correspondence; in James R. Wait and Alan T. Waterman correspondence; and from G. Zervas in Z Miscellaneous correspondence.

See also: Beynon, W. J. G.; Dellinger, J. Howard; Gibbs, Roswell C.; Loeb, Julian M.; Ratcliffe, J. A.; Rettie, Richard S.; Smith-Rose, R. L.; Stumpers, F. L.

**International Union of Radio Science. United States National Committee**

**54 letters, 1958-75**

**29 memos, 1958-72**

**Scope and Content Note**

Addressed to Silver and others.

Correspondence addressed to Union in Lloyd V. Berkner, John W. Findlay, William E. Gordon, International Union of Radio Science, National Academy of Science. National Research Council, Arthur A. Oliver, Alan H. Shapley, John B. Smyth and, from Katsumi Watanabe, in W Miscellaneous correspondence.

See also: Bean, Bradford R.; Berkner, Lloyd V.; Bohnert, John I.; Booker, Henry G.; Bowhill, Sidney A.; Coleman, John S.; Gordon, William E.; Jordan, Edward C.; Leadabrand, Ray L.; Morgan, Millett G.; and National Academy of Sciences. National Research Council.

**Jacchia, Luigi Giuseppe, 1910-**

**Scope and Content Note**

No incoming letters; enclosure to letter, Aug. 14, 1967, in Sidney A. Bowhill correspondence is a letter from him to Bowhill.



**Jacobs, George Joseph, 1917-**

**Scope and Content Note**

No incoming letters; copies of letters, Apr. 27, 1961 and Jan. 26, 1968, addressed to him in Silver's outgoing letters.

Copy of a letter, Nov. 3, 1964, to him from an administrative assistant in California. University, Berkeley. Space Sciences Laboratory correspondence.

**Jaffe, Leonard, 1926-**

**Letter, Mar. 23, 1964, addressed to the secretary of the International Union of Radio Science.**

**Jastrow, Robert, 1925-**

**4 letters, 1960-61, primarily re U.S. National Aeronautics and Space Administration.**

**Jeffries, Carson Dunning, 1922-**

**Scope and Content Note**

No incoming letters; copies of letters, Aug. 20, 1963 and Feb. 3, 1965, addressed to him in Silver's outgoing letters.

**Jenkins, Francis Arthur, 1899-1960**

**Scope and Content Note**

No incoming letters; copies of letters, June 11, 1958 and Oct. 6, 1959, addressed to him in Silver's outgoing letters.

Correspondence addressed to him in Wallace R. Brode, and Marrough P. O'Brien correspondence.

**Jenny, Dietrich Alfred, 1920-**

**Scope and Content Note**

No incoming letters; enclosures to letter, Feb. 8, 1960, in William G. Shepherd correspondence are two letters, one from Shepherd to him and one from him to Shepherd.

**Jensen, Axel George, 1896-**

**Scope and Content Note**

No incoming letters; copy of a letter, Feb. 13, 1953, addressed to him in Philip S. Carter correspondence.

**Jensen, James Herbert, 1906-**

**Scope and Content Note**

No incoming letters; copy of a letter, Apr. 28, 1965, addressed to him in Silver's outgoing letters.

**John Simon Guggenheim Memorial Foundation**

**2 letters, 1960 & 1961**

**Scope and Content Note**

Included also, report on candidate, David J. Sakrison.

See also: Moe, Henry A. and Ray, Gordon N.

**Johnson, David Simonds, 1924-**

**2 letters, 1965 & 1966**

**Johnson, Francis Severin, 1918-**

**15 letters, 1963-69**

**3 memos, 1969**

**Scope and Content Note**

Addressed to Silver and others.

Correspondence addressed to and from him in Henry G. Booker, Sanford S. Elberg, International Union of Radio Science, Edward C. Jordan, and Alan T. Waterman correspondence.

**Johnson, Paul Sosinshi, 1899-**

**Letter, Jan. 26, 1962, addressed to James H. Corley.**

**Johnson, Shirley Alma, 1922-**

**Letter, June 9, 1967**

**Johnston, Harold Sledge, 1920-**

**Scope and Content Note**

No incoming letters; copy of memo, May 3, 1966, addressed to him and others from Heyns in Roger W. Heyns correspondence.

**Jolliffe, Charles Byron, 1894-**

**Scope and Content Note**

No incoming letters; copy of a letter, May 6, 1958, addressed to him in John H. Dellinger correspondence.

**Jones, Douglas Samuel, 1922-**

**4 letters, 1954**

**Jones, Hardin Blair, 1914-1978**

**6 letters, 1961-64, addressed to Silver and others.**

**Scope and Content Note**

Correspondence addressed to him and others in California. University, Berkeley, Sanford S. Elberg, Thomas H. Jukes, and, from R. A. San Souci, in S Miscellaneous correspondence.

**Jordan, Edward Conrad, 1910-**

**38 letters, 1951-76, addressed to Silver and others, re International Union of Radio Science. United States National Committee.**

**Scope and Content Note**

Correspondence addressed to and from him and to others in Diogenes J. Angelakos, Sidney A. Bowhill, Harry H. Hess, D. C. Hogg, International Union of Radio Science, and F. S. Johnson correspondence; from Donald H. Liebenberg in L Miscellaneous correspondence; in Millett G. Morgan, James A. Morrison, George B. Sinclair, Roy C. Spencer, James R. Wait, and Alan T. Waterman correspondence.

**Judd, Deane Brewster, 1900-**

**Scope and Content Note**

No incoming letters; copies of letters, Feb. 26, 1962, Aug. 3, 1962 and Oct. 11, 1962, addressed to him in Silver's outgoing letters.

**Jukes, Thomas Hughes, 1906-**

**5 letters, 1964-69, addressed to Silver and others.**

**6 memos, 1965-69**

**Kales, Morris L., 1910-**

**2 letters, 1947 & 1948**

**Kammen, Harold Oscar, 1927-**

**Scope and Content Note**

No incoming letters; copy of a letter, Mar. 20, 1968, addressed to him in Thomas H. Jukes correspondence.

**Kane, Julius, 1935-**

**Scope and Content Note**

No incoming letters; copy of a letter, June 14, 1965, addressed to him in Silver's outgoing letters.

**Kaplan, Joseph, 1902-**

**9 letters, 1963-67 & n.d.**

**2 memos, 1964 & 1966, some re International Union of Geodesy and Geophysics.**

**Scope and Content Note**

Correspondence addressed to him and others in Samuel C. Coroniti, Herbert Friedman, J. M. Harrison, International Union of Radio Science, Maurice Roy, and Hugh Odishaw correspondence.

**Kaprelian, Zohrab Arakel, 1923-**

**Scope and Content Note**

No incoming letters; copies of letters, Dec. 31, 1963, Jan. 17, 1967 and Jan. 22, 1968, addressed to him in Silver's outgoing letters.

**Karo, Henry Arnold, 1903-**

**Scope and Content Note**

No incoming letters; copy of a letter, Nov. 11, 1964, addressed to him in Edward W. Strong correspondence.

**Karp, Samuel Noah, 1924-**

**Scope and Content Note**

No incoming letters; copy of a letter, April 18, 1961, addressed to him in James R. Wait correspondence.

**Karplus, Robert, 1927-**

**2 letters, 1974 & 1975**

**Katcher, David Abraham, 1915-**

**Letter, Feb. 12, 1963**

**Kavanagh, Thomas Christian, 1912-**

**Scope and Content Note**

No incoming correspondence; copy of a letter, Nov. 22, 1974, addressed to him in Silver's outgoing letters.

**Kay, Irvin William, 1924-**

**Scope and Content Note**

No incoming letters; copy of a letter, Feb. 21, 1952, addressed to him in Silver's outgoing letters.

Copy of a letter, Apr. 18, 1961, addressed to him in James R. Wait correspondence.

**Keary, Thomas Joseph, 1914-**

**Scope and Content Note**

No incoming letters; copies of letters, Nov. 11, 1960 and Aug. 29, 1961, addressed to him in Silver's outgoing letters.

**Keese, William Brewer, 1910-**

**Scope and Content Note**

No incoming letters; copy of a letter, Apr. 18, 1962, addressed to him in Edward W. Strong correspondence.

**Keiser, Bernhard Edward, 1928-**

**Letter, Nov. 17, 1958**

**Keldysh, Mstislav Vsevolodovich, 1911-**

**Scope and Content Note**

No incoming letters; copy of a letter, Oct. 1, 1976, addressed to him in Silver's outgoing letters.

**Keller, Geoffrey, 1918-**

**2 letters, 1958 & 1964, addressed to Silver and others.**

**Keller, Joseph Bishop, 1923-**

**Scope and Content Note**

No incoming letters; correspondence addressed to him in Edward C. Jordan and James R. Wait correspondence.

**Kelley, John LeRoy, 1916-**

**Letter, Oct. 16, 1959**

**Kelley, Mervin Joe, 1894-**

**Letter, May 26, 1954**

**Kerr, Clark, 1911-**

**16 letters, 1956-65**

**3 memos, 1957-58**

**Scope and Content Note**

Addressed to Silver and others.

Correspondence addressed to him in Luis W. Alvarez, Robert B. Brode, California. University. President, Adrian A. Kragen, Morrough P. O'Brian, Randal M. Robertson, Edward W. Strong, Otto Struve, and Harry W. Wells correspondence.

**King, Charles Glen, 1896-**

**Letter, June 3, 1968**

**King, Donald DeWolf, 1919-**

**Scope and Content Note**

No incoming letters; copies of letters, Oct. 28, 1956, Aug. 16, 1960 and April 27, 1965, addressed to him in Silver's outgoing letters.

Copy of a letter, June 30, 1966, addressed to him in James R. Wait correspondence.

See also: Institute of Electrical and Electronics Engineers

**King, Ivan Robert, 1927-**

**Memo, April 24, 1969**

**King, James Ferguson, 1913-**

**Scope and Content Note**

No incoming letters; copies of letters, Nov. 8, 1960 and July 31, 1962, addressed to him in Silver's outgoing letters.

**King, Ronald Wyeth Percival, 1905-**

**Scope and Content Note**

No incoming letters; copy of a letter, May 25, 1957, addressed to him in Silver's outgoing letters.

**Kip, Arthur Frederick, 1910-**

**Scope and Content Note**

No incoming letters; copy of a letter, Apr. 2, 1957, addressed to him in McGraw-Hill Book Company, Inc. correspondence.

**Kittel, Charles, 1916-**

**Scope and Content Note**

No incoming letters; copy of a letter, July 9, 1963, addressed to him in Lotfi A. Zadeh correspondence.

**Klein, Harold Paul, 1921-**

**Scope and Content Note**

No incoming letters; copy of a letter, May 6, 1963, addressed to him in Donald G. Rea correspondence.

**Kline, Morris, 1908-**

**5 letters, 1951-62**

**Scope and Content Note**

Included also, papers by him, ca. 1951: "Some Recent Research in Microwave Optics" and "Asymptotic Solutions for Electromagnetic Field Problems: A Review of Recent Work." Correspondence addressed to him from G. Toraldo in T Miscellaneous correspondence; and in James R. Wait correspondence.

**Knecht, Robert W., 1928-**

**Letter, Nov. 29, 1960, addressed to John P. Hagen.**

**Knowland, William Fife, 1908-**

**Scope and Content Note**

No incoming letters; copy of a letter, Sept. 28, 1965, addressed to him in Silver's outgoing letters.

**Knudsen, Hans Lottrup, 1917-**

**19 letters, 1953-62, addressed to Silver and others.**

**Scope and Content Note**

Correspondence addressed to him from H. Bremmer in B Miscellaneous correspondence; from E. K. Fedorov in F Miscellaneous correspondence; in William E. Gordon, International Union of Radio Science, Victor Twersky, James R. Wait, and John R. Whinnery correspondence.

**Knudsen, Vern Oliver, 1893-1974**

**Scope and Content Note**

No incoming letters; copy of a letter, Apr. 29, 1960, addressed to him in Willard F. Libby correspondence.

**Ko, Hsien Ching, 1928-**

**Letter, July 6, 1962**

**Kobayashi, Francis Masao, 1925-**

**Letter, June 4, 1959, addressed to W. E. Gordon.**

**Scope and Content Note**

Copy of a letter, Mar. 22, 1960, addressed to him in William E. Gordon correspondence.

**Kompfner, Rudolf, 1909-**

**Scope and Content Note**

No incoming letters; copy of a letter, Feb. 7, 1963, addressed to him in Silver's outgoing letters.

**Kotcher, Ezra, 1903-**

**Letter, Sept. 21, 1961**

**Kotel'nikov, Vlademir Aleksandrovich, 1908-**

**Letter, Jan. 13, 1960**

**Kounacki, Stanislaw, 1910-  
Letter, Oct. 28, 1959**

**Kragen, Adrian Albert, 1907-  
Letter, Dec. 7, 1960**

**Kraus, Alfred Andrew, 1925-**

**Scope and Content Note**

No incoming letters; copy of a letter, Nov. 29, 1960, addressed to him in Silver's outgoing letters.

**Kuh, Ernest Shiu-Jen, 1928-  
2 letters, 1968 and 1974  
Memo, Dec. 3, 1970**

**Scope and Content Note**

Included also, a report on him for a fellowship application.

Correspondence addressed to him and others in California. University, Berkeley and George J. Maslach correspondence.

**Kuhi, Leonard Vello, 1936-**

**Scope and Content Note**

No incoming letters; copy of a letter, Mar. 29, 1974, addressed to him and H. F. Weaver in Silver's outgoing letters.

**Kuiper, Gerard Peter, 1905-  
Letter, Apr. 11, 1963**

**Kummer, Wolfgang Helmut, 1925-  
Letter, May 14, 1958**

**Scope and Content Note**

Copy of a letter, Sept. 10, 1965, addressed to him in Millett G. Morgan correspondence.

**Kutsky, Roman Joseph, 1922-**

**Scope and Content Note**

No incoming letters; copies of letters, May 16, 1962 and June 19, 1962, addressed to him in Silver's outgoing letters.

**LaGrone, Alfred Hall, 1912-**

**Scope and Content Note**

No incoming letters; copy of a letter, Oct. 30, 1967, addressed to him in Silver's outgoing letters.

**Landin, Joseph, 1913-  
Letter, Mar. 9, 1966**

**Landsberg, Helmut Erich, 1906-**

**Scope and Content Note**

No incoming letters; copy of a letter, Mar. 14, 1967, addressed to him in Silver's outgoing letters.

**Lane, Harold Hooker, 1910-**

**Scope and Content Note**

No incoming letters; correspondence addressed to him in Carl A. Rouse correspondence.

**Lango, Kaare, 1913-  
Letter, May 12, 1959**

**Latter, Richard, 1923-  
Letter, Aug. 11, 1964**

**Laufer, Arthur Russell, 1917-  
2 letters, 1960**

**Lawrence, John Hundale, 1904-  
Letter, Feb. 20, 1962**

**Lax, Benjamin, 1915-  
Letter, Sept. 4, 1959**

**Leadabrand, Ray Laurence, 1927-  
3 letters, 1960, addressed to R. Slutz, L. A. Manning and Colin Hines, re International Union of Radio Science. United States National Committee.**

**Scope and Content Note**

Correspondence addressed to him from Robert E. Jones in J Miscellaneous correspondence; and in Laurence A. Manning correspondence.

**LeCorbeiller, Phillippe, 1891-  
Letter, Mar. 12, 1969**

**Scope and Content Note**

Copies of letters, Jan. 6, 1969 and May 17, 1969, addressed to him from the secretary in International Union of Radio Science correspondence.

**Lee, Chi-Yuan, 1926-**

**Scope and Content Note**

No incoming letters; copy of a letter, July 5, 1963, addressed to him in Lotfi A. Zadeh correspondence.

**LeMay, Curtis E., 1906-**

**Scope and Content Note**

No incoming letters; copy of a letter, July 24, 1962, addressed to him in Silver's outgoing letters.

**Lengyel, Bela Adalbert, 1910-  
Letter, July 23, 1948**

**Leopold, Aldo Starker, 1913-  
2 letters, 1962 & 1963**

**LePage, Wilbur Reed, 1911-  
Letter, Jan. 28, 1951, addressed to L. C. Van Atta.**

**Scope and Content Note**

Copy of a letter, Jan. 30, 1951, addressed to him in Lester C. Van Atta correspondence.

**Letiche, John Marion, 1918-**

**Scope and Content Note**

No incoming correspondence; copy of a letter, Apr. 4, 1975, addressed to him in Silver's outgoing letters.

**Leventhal, Albert Rice, 1907-  
Letter, June 6, 1962**

**Libby, Willard Frank, 1908-  
11 letters, 1960-69, addressed to Silver and others.**

**Scope and Content Note**

Correspondence addressed to him and others from Harry P. Bailey in B Miscellaneous correspondence; in Robert B. Brode and California. University, correspondence.

**Lichtenstein, Pearl Rubenstein, 1917-**

**Scope and Content Note**

No incoming letters; copies of letters, Feb. 23, 1965, Apr. 8, 1965 and Jan. 4, 1966, addressed to him in Silver's outgoing letters.

**Lieber, Paul, 1918-**

**Letter, Feb. 23, 1960**

**Lilley, Arthur Edward, 1928-**

**4 letters, 1960-62, addressed to Silver and others.**

**Scope and Content Note**

Correspondence addressed to him in John S. Coleman and William E. Gordon correspondence.

**Lin, Tung Yen, 1911-**

**Scope and Content Note**

No incoming letters; copy of a memo, Oct. 10, 1968, to him and others in George J. Maslach correspondence.

**Lindgren, Frank Tycko, 1924-**

**Letter, Feb. 20, 1962**

**Linlor, William Iran, 1915-**

**Scope and Content Note**

No incoming letters; copy of a letter, Apr. 17, 1968, addressed to him in Silver's outgoing letters.

**Linville, John Grimes, 1919-**

**Scope and Content Note**

No incoming letters; copy of a letter, Jan. 3, 1966, addressed to him in Silver's outgoing letters.

**Lipset, Seymour Martin, 1922-**

**Scope and Content Note**

No incoming letters; copy of a letter, Aug. 3, 1964, to him and others from the Graduate Division in California. University, Berkeley correspondence.

**Litkenhous, Edward Earl, 1907-**

**Scope and Content Note**

No incoming letters; copy of a letter, Aug. 27, 1957, to him in Robert M. Saunders correspondence.

**Littauer, Raphael Max, 1925-**

**Scope and Content Note**

No incoming letters; copies of letters, Oct. 18, 1965 and Nov. 2, 1965, addressed to him in Silver's outgoing letters.

**Little, Charles Gordon, 1924-**

**4 letters, 1963-75, addressed to Silver and others.**

**Scope and Content Note**

Correspondence addressed to him in Sidney A. Bowhill, Laurence A. Manning and Millett G. Morgan correspondence.



**Livermore, Arthur Hamilton, 1915-**

**Scope and Content Note**

No incoming letters; copy of a letter, Aug. 19, 1965, addressed to him in Silver's outgoing letters.

**Loeb, Julien M.**

**18 letters, 1954-63 & n.d., addressed to Silver and others, re International Union of Radio Science.**

**Scope and Content Note**

Copy of a letter, Feb. 8, 1957, addressed to him in Richard A. Silverman correspondence.

**Loève, Michel M, 1907-1979**

**Scope and Content Note**

No incoming letters; copy of a letter, May 1, 1953, from him, Silver and Edmund Pinney to A. R. Davis in Silver's outgoing letters.

**Lohman, Joseph Dean, 1910-**

**Letter, Oct. 27, 1964**

**Scope and Content Note**

Copy of a memo, May 3, 1966, addressed to him and others in Roger W. Heyns correspondence

**Long, Ralph Henry, 1922-**

**Letter, Jan. 7, 1963, re review of a National Science Foundation grant proposal.**

**Loomis, Francis Wheeler, 1889-**

**Memo, Sept. 28, 1945**

**Louisell, David William, 1913-**

**Letter, Oct. 3, 1967**

**Lovelace, William Randolph, 1907-**

**Scope and Content Note**

No incoming letters; copy of a letter, Sept. 14, 1964, addressed to him in Hardin B. Jones correspondence.

**Lovell, Alfred Charles Bernard, 1913-**

**5 letters, 1954-60**

**Scope and Content Note**

Copy of a letter, Dec. 7, 1959, addressed to him from the secretary in International Union of Radio Science correspondence.

**Low, William, 1922-**

**3 letters, 1961-71**

**Lusted, Lee Browning, 1922-**

**Letter, Oct. 13, 1961**

**Lutz, Samuel Gross, 1907-**

**Letter, Jan. 12, 1960**

**Lyon, Ronald James Pearson, 1928-**

**Scope and Content Note**

No incoming letters; copies of letters, July 28, 1964 and Nov. 24, 1964, addressed to him in Silver's outgoing letters.

**Lyons, Harold, 1913-**

**2 letters, 1949 and 1955, addressed to Silver and L. E. Reukema.**

**McClain, Edward Fifer, 1921-**

**Letter, May 13, 1958, addressed to A. E. Covington.**

**Scope and Content Note**

Copy of a letter, May 27, 1960, addressed to him in William E. Gordon correspondence.

**McClaine, Leslie Andrew, 1921-**

**Letter, Apr. 18, 1963**

**McConnell, Thomas Raymond, 1901-**

**Scope and Content Note**

No incoming letters; copies of memos, Oct. 6, 1964, Dec. 8, 1964 and Feb. 15, 1965, to him and others from the Graduate Division in California. University, Berkeley correspondence.

**McCrensky, Edward, 1912-**

**2 letters, 1960 & 1962, re U.S. Navy Dept. Office of Naval Research contracts.**

**McDaniel, Paul William, 1916-**

**Scope and Content Note**

No incoming letters; copy of a letter, Sept. 9, 1964, addressed to him in Silver's outgoing letters.

**MacDonald, Gordon James Fraser, 1911-**

**Scope and Content Note**

No incoming letters; copies of letters, Apr. 11, 1960 and May 18, 1960, addressed to him in Silver's outgoing letters.

**McEachron, Karl Boyer, 1915-**

**Letter, Apr. 10, 1957**

**McFarlan, Ronald Lyman, 1905-**

**Letter, Nov. 19, 1960**

**McFarland, Thomas Clair, 1893-1954**

**3 letters, 1947-48**

**Scope and Content Note**

Copy of a letter, May 6, 1952, addressed to him and R. C. Grassi in Leonard J. Black correspondence.

**McGauhey, Percy Harold, 1904-**

**Scope and Content Note**

No incoming letters; copy of a letter, Feb. 27, 1964, addressed to him in Silver's outgoing letters.

**McGraw-Hill Book Company, Inc.**

**28 letters, 1952-64**

**Telegram, Nov. 5, 1958**

**Scope and Content Note**

Addressed to Silver and others.

Copy of a letter, Mar. 27, 1947, to the vice president in Cleveland Norcross correspondence.

**Machlis, Leonard, 1915-**

**Letter, Apr. 8, 1974**

**McIlwain, Carl Edwin, 1931-**

**Scope and Content Note**

No incoming letters; copy of a letter, May 31, 1963, addressed to him in Silver's outgoing letters.

Enclosure to letter, Apr. 23, 1964, in Willard F. Libby correspondence is a copy of a letter from him to Libby.

**Mackay, Ralph Stuart, 1924-**

**Letter, Mar. 16, 1964, addressed to M.W. Morgan.**

**2 memos, 1963**

**Scope and Content Note**

Correspondence addressed to him from Henry B. Peters in P Miscellaneous correspondence; and in John R. Whinnery correspondence.

**McKinley, Donald William Robert, 1912-**

**Letter, May 12, 1958, addressed to J. Howard Dellinger.**

**MacKinney, Gordon, 1905-**

**Letter, May 20, 1960**

**McMillan, Edwin Mattison, 1907-**

**Scope and Content Note**

No incoming letters; copy of a letter, Aug. 9, 1966, addressed to him in Silver's outgoing letters.

Memo, Nov. 8, 1968, addressed to him and others from Vice Chancellor Sammet in California. University, Berkeley. Chancellor correspondence.

**Mahan, Bruce Herbert, 1930-**

**Scope and Content Note**

No incoming letters; copy of a memo, Apr. 13, 1962, addressed to him and others in William B. Fretter correspondence.

**Maisel, Sherman Joseph, 1918-**

**Scope and Content Note**

No incoming letters; copy of a memo, June 18, 1963, addressed to him and others in William B. Fretter correspondence.

**Malone, Thomas Francis, 1917-**

**2 letters, 1961 & 1968**

**Scope and Content Note**

Correspondence addressed to him in Lloyd V. Berkner and International Union of Radio Science correspondence.

**Manildi, Joseph Frank, 1918-**

**Letter, Oct. 20, 1952, addressed to S. A. Schelkunoff.**

**Scope and Content Note**

Correspondence addressed to him in Raymond C. Grassi and, from T. R. Simpson, in S Miscellaneous correspondence.

**Manning, Laurence Albert, 1923-**

**8 letters, 1958-64, addressed to Silver and others.**

**Scope and Content Note**

Correspondence addressed to him in William E. Gordon, John P. Hagen, Ray L. Leadabrand, Charles G. Little, Millett G. Morgan, National Academy of Science. National Research Council, Alan H. Shapley, James R. Wait and Francis J. Zucker correspondence. See also: Materials re International Union of Radio Science (U.S.A.) for National Committee Meeting, Oct., 1959, Commission III. Carton 7.

**Manov, George Gregory, 1909-**

**Scope and Content Note**

No incoming letters; copy of a letter, Feb. 25, 1963, addressed to him in Silver's outgoing letters.

**Marcus, Rudolph Julius, 1926-  
Letter, Oct. 18, 1960**

**Marcuvitz, Nathan, 1913-  
9 letters, 1952-62, addressed to Silver and others.**

**Scope and Content Note**

Correspondence addressed to him in John S. Coleman, Julien M. Loeb, and James R. Wait correspondence.

**Mariolopoulos, Elias, 1900-**

**Scope and Content Note**

No incoming letters; enclosures to letter, Aug. 4, 1967, in International Union of Radio Science correspondence are copies of his letters addressed to F. L. Stumpers and R. F. Drenick.

**Mark, Hans Michael, 1929-**

**5 letters, 1961-72  
2 memos, 1961**

**Scope and Content Note**

Copy of a letter, July 23, 1969, addressed to him in Alan M. Portis correspondence.

**Markowitz, William, 1907-**

**2 letters, 1966**

**Marshall, John Stewart, 1911-**

**2 letters, 1960**

**Scope and Content Note**

Copies of letters, May 8, 1959 and Feb. 24, 1960, addressed to him in William E. Gordon correspondence.

**Martin, Katzin, 1908-**

**Scope and Content Note**

No incoming letters; copy of a letter, July 1, 1959, addressed to him in John S. Coleman correspondence.

**Martyn, David Forbes, 1906-**

**3 letters, 1963 & 1968**

**Scope and Content Note**

Copy of a letter, June 24, 1968, addressed to him in International Union of Radio Science correspondence.

**Maslach, George James, 1920-**

**3 letters, 1957-75**

**3 memos, 1957-68**

**Scope and Content Note**

Addressed to Silver and others. Correspondence addressed to him and others in California. University, Berkeley, California. University, Berkeley. Chancellor, John A. Putnam, Charles Süsskind and Lotfi Zadeh correspondence.

**Mason, Martin Alexander, 1907-**

**Scope and Content Note**

No incoming letters; copy of a letter, Mar. 28, 1967, addressed to him in Silver's outgoing letters.

**Massevitch, Alla Genrikhovna, 1918-**

**Scope and Content Note**

No incoming letters; copy of a letter, Aug. 9, 1966, addressed to him in Silver's outgoing letters.

**Matarrese, Lawrence Melvin, 1924-**

**Scope and Content Note**

No incoming letters; copy of a letter, June 11, 1962, addressed to him in Silver's outgoing letters.

**Mather, Norman Wells, 1914-**

**Letter, Oct. 13, 1960**

**Matsushita, Sadami, 1920-**

**2 letters, 1969, addressed to S. A. Bowhill.**

**Scope and Content Note**

Copies of letters, July 17, 1963 and July 24, 1969, addressed to him in Sidney A. Bowhill correspondence.

**Mayer, Cornell Henry, 1921-**

**2 letters, 1961 & 1962, addressed to M. G. Morgan.**

**Scope and Content Note**

Copy of a letter, Mar. 15, 1962, addressed to him in Millett G. Morgan correspondence.

**Mayne, Robert, 1901-**

**Letter, Dec. 19, 1956**

**Mayor, John Roberts, 1906-**

**Scope and Content Note**

No incoming letters; copies of letters, Aug. 19, 1965 and Nov. 24, 1965, addressed to him in Silver's outgoing letters.

**Medved, David Bernard, 1926-**

**2 letters, 1962**

**Meek, John Millar, 1912-**

**2 letters, 1964 & 1965**

**Meeks, Marion Littleton, 1923-**

**2 letters, 1952 & 1953**

**Scope and Content Note**

Copy of a letter, July 21, 1953, addressed to him in California. University, Berkeley. Electronics Research Laboratory correspondence.

**Meghreblian, Robert Vaughn, 1922-**

**Scope and Content Note**

No incoming letters; copy of a letter, Jan. 8, 1968, addressed to him in Silver's outgoing letters.

**Meitner, John George, 1918-**

**Letter, Aug. 10, 1967**

**Meyerson, Martin, 1922-**

**Scope and Content Note**

No incoming letters; copy of a letter, Feb. 8, 1965, addressed to him in Silver's outgoing letters.

Correspondence addressed to him in California. University, and Roger W. Heyns correspondence.

**Middleton, John Tyler, 1912-**

**Scope and Content Note**

No incoming letters; copy of a letter, Oct. 22, 1964, addressed to him in Silver's outgoing letters.

**Milch, Lawrence Jacques, 1918-**

**Scope and Content Note**

No incoming letters; copies of letters, Apr. 12, 1962 and Sept. 11, 1962, addressed to him in Silver's outgoing letters.

Letter, Oct. 28, 1962, addressed to him in Laurence O. Pilgeram correspondence.

**Miller, George Paul, 1891-**

**Letter, Apr. 17, 1962**

**Scope and Content Note**

Correspondence addressed to him in Hardin B. Jones correspondence.

**Miller, William Frederick, 1925-**

**Letter, Dec. 14, 1971**

**Mimno, Harry Rowe, 1900-**

**Letter, Sept. 13, 1973**

**Scope and Content Note**

Copy of a letter, Nov. 13, 1958, addressed to him in National Academy of Sciences, National Research Council correspondence.

**Miner, Eunice Thomas, 1899-**

**Letter, Oct. 16, 1957**

**Minton, John Preston, 1889-**

**Scope and Content Note**

No incoming letters; copy of a letter, Mar. 16, 1953, addressed to him in Silver's outgoing letter.

**Mittleman, Marvin M., 1928-**

**Scope and Content Note**

No incoming letters; copy of a letter, Dec. 9, 1968, addressed to him in Silver's outgoing letters.

**Mitz, Milton Aaron, 1921-**

**Scope and Content Note**

No incoming letters; copies of letters, Nov. 14, 1968 and Dec. 4, 1968, addressed to him in Silver's outgoing letters.

**Moe, Henry Allen, 1894-**

**28 letters, 1956-64, re Guggenheim Memorial Foundation.**

**Moore, Ernest Julius, 1919-**

**Letter, Mar. 4, 1952**

**Moore, Richard Kerr, 1923-**

**Scope and Content Note**

No incoming letters; copy of a letter, Sept. 9, 1959, addressed to him in Silver's outgoing letters.

**Morgan, Joseph Owen, 1924-**

**3 letters, 1962 & 1964**

**Morgan, Meredith Walter, 1912-**

**Scope and Content Note**

No incoming letters; copy of a letter, Mar. 16, 1964, addressed to him in Ralph S. Mackay correspondence.

**Morgan, Millett Granger, 1915-**

**114 letters, 1958-68**

**2 memos, 1970**

**Telegram, July 15, 1965**

**Scope and Content Note**

Addressed to Silver and others, re International Union of Radio Science. United States National Committee.

Correspondence addressed to and from him and to others from Bert Bartlow in B Miscellaneous correspondence; in Sidney A. Bowhill and John S. Coleman correspondence; from Charles J. Derganc in D Miscellaneous correspondence; in John H. Dellinger, Robert S. Elliott, William C. Erickson, William E. Gordon, Robert C. Hansen, International Union of Radio Science, International Union of Radio Science. United States National Committee, Francis S. Johnson, Edward C. Jordan, and Charles G. Little correspondence; from J. M. McDowell in M Miscellaneous correspondence; in Cornell H. Mayer and Hugh Odishaw correspondence; from R. C. Peavey in P Miscellaneous correspondence; in John M. Richardson, Frederick Seitz, Alan H. Shapley, Keeve M. Siegel, Louis D. Smullin, James R. Wait, Alan T. Waterman, Arthur H. Waynick, and Lotfi A. Zadeh correspondence.

See also: Materials re International Union of Radio Science (U.S.A.). Cartons 6 & 7.

**Morgen, Ralph Alexander, 1903-**

**3 letters, 1952-54**

**Morris, Robert G., 1929-**

**Scope and Content Note**

No incoming letters; copy of a letter, Mar. 3, 1973, addressed to him in Silver's outgoing letters.

**Morrison, James Alexander, 1918-**

**3 letters, 1960 and 1967, addressed to Silver and E. C. Jordan.**

**Scope and Content Note**

Correspondence addressed to him in Edward C. Jordan and Millett G. Morgan correspondence.

**Morton, Paul Lester, 1906-**

**10 letters, 1954-59, addressed to Silver and others.**

**Scope and Content Note**

Correspondence addressed to and from him and to others from R. N. Bracewell in B Miscellaneous correspondence; in Charles F. Dalziel, Morrrough P. O'Brien, and John R. Whinnery correspondence.

**Mower, Lyman, 1927-**

**Scope and Content Note**

No incoming letters; copy of a letter, Mar. 4, 1958, addressed to him in John R. Whinnery correspondence.

**Moyer, Burton Jones, 1912-**

**Scope and Content Note**

No incoming letters; copy of a letter, Nov. 30, 1962, addressed to him in Silver's outgoing letters.

Memo, Jan. 29, 1963, addressed to him and others in Sanford S. Elberg correspondence.

**Muelder, Milton E., 1908-  
Letter, Mar. 3, 1966**

**Mueller, George Edwin, 1918-  
Letter, Dec. 12, 1962**

**Muldawer, Leonard, 1920-**

**Scope and Content Note**

No incoming letters; copy of a letter, Apr. 9, 1951, addressed to him in Silver's outgoing letters.

**Muller, Richard S., 1933-**

**Scope and Content Note**

No incoming letters; copy of a letter, Mar. 26, 1974, addressed to him in Silver's outgoing letters.

**Mulligan, James Henry, 1920-  
2 letters, 1953 and 1960**

**Mumford, William Walden, 1905-**

**Scope and Content Note**

No incoming letters; copy of a letter, Apr. 6, 1955, addressed to him in John R. Whinnery correspondence.

**Murich, Leslie Ferguson, 1893-**

**Scope and Content Note**

No incoming letters; copy of a letter, Jan. 3, 1955, addressed to him in Silver's outgoing letters.

**Murphy, Franklin David, 1916-**

**Letter, Apr. 4, 1967, addressed to Frederick Seitz.**

**Scope and Content Note**

Correspondence addressed to him in California. University and Frederick Seitz correspondence.

**Murphy, Gordon J., 1927-  
Letter, Sept. 30, 1968**

**Murray, Robert B., 1911-**

**Scope and Content Note**

No incoming letters; copies of letters, Apr. 10, 1963, Apr. 16, 1963 and May 29, 1963, addressed to him in Silver's outgoing letters.

**Myers, Frank Evans, 1906-**

**Scope and Content Note**

No incoming letters; copy of a letter, Nov. 20, 1968, addressed to him in Silver's outgoing letters.

**National Academy of Sciences. National Research Council**

**16 letters, 1959-1970 & n.d.**

**4 memos**

**Scope and Content Note**

Addressed to Silver and others.  
See also: Coleman, John S.

**National Science Foundation**



**15 letters, 1957-69, addressed to Silver and others.**

**Scope and Content Note**

Included also, program of meeting, 1961.

See also: Dees, Bowen C.; Droessler, Earl G; and Long, Ralph H.

**Naugle, John Earl, 1923-**

**Scope and Content Note**

No incoming letters; copies of letters Nov. 13, 1964, addressed to him and, May 17, 1964, addressed to him and others in Silver's outgoing letters.

**Ness, Norman Frederick, 1933-**

**3 letters, 1964-65**

**Newell, Homer Edward, 1915-**

**3 letters, 1961-70**

**Scope and Content Note**

Correspondence to and from him in Dinsmore Alter, Alexander J. Dessler and C. Gordon Little correspondence.

**Newman, Frank Cecil, 1917-**

**Scope and Content Note**

No incoming letters; copy of a memo, Jan. 4, 1963, to him and others from the Graduate Business Officer in California. University, Berkeley correspondence.

**Newman, Morris M., 1909-**

**Scope and Content Note**

No incoming letters; copy of a letter, July 17, 1963, to him in Sidney A. Bowhill correspondence.

**Neyman, Jerzy, 1894-**

**Letter, Nov. 26, 1954**

**Nicodemus, David Bowman, 1916-**

**3 letters, 1964-65**

**Nicolet, Marcel, 1912-**

**4 letters, 1966-68, addressed to Silver and M. Roy.**

**Scope and Content Note**

Correspondence addressed to him in Colin O. Hines, International Council of Scientific Unions. Committee on Space Research, Maurice Roy, and Arthur H. Waynick correspondence.

**Nielsen, Harold Herborg, 1903-**

**2 letters, ca. 1945**

**Nielsen, Jens Reed, 1894-**

**Scope and Content Note**

No incoming letters; copy of a letter, Nov. 10, 1964, addressed to him in Silver's outgoing letters.

**Nierenberg, William Aaron, 1919-**

**Letter, May 7, 1969**

**Norcross, Cleveland, 1912-1949**

**2 letters, 1947, addressed to Silver and the McGraw-Hill Book Company.**

**Norton, Kenneth Alva, 1907-**

**2 letters, 1967 & 1968, addressed to Silver and the Institute of Electronic and Electrical Engineers, re R. L. Smith-Rose.**

**Scope and Content Note**

Correspondence addressed to him in J. Howard Dellinger and Millett G. Morgan correspondence.

**Noyes, William Albert, 1898-**

**Scope and Content Note**

No incoming letters; copy of a memo, June 1, 1967, to him and others in Hugh Odishaw correspondence.

**Obayashi, Tatsuzi, 1926-**

**3 letters, 1964-68**

**Scope and Content Note**

Copy of a letter, Apr. 29, 1967, addressed to him in International Union of Radio Science correspondence.

**O'Brien, Brian, 1898-**

**Scope and Content Note**

No incoming letters; correspondence addressed to him in John H. Dellinger, William E. Gordon and John P. Hagen correspondence.

**O'Brien, Brian John, 1934-**

**2 letters, 1964 and 1966**

**O'Brien, Morrrough Parker, 1902-**

**14 letters, 1952-59**

**4 memos, 1954-57**

**Scope and Content Note**

Correspondence addressed to and from him in Raymond T. Birge, California. University, Berkeley. Electronics Research Laboratory, Donald Coney, Lincoln Constance, John E. Dorn, Clark Kerr, McGraw-Hill Book Company, Inc., Paul L. Morton, John A. Putnam, Robert M. Saunders, and John R. Whinnery correspondence.

**O'Connell, James D., 1899-**

**Letter, May 16, 1958, addressed to J. H. Dellinger.**

**Scope and Content Note**

Copy of a letter, May 1, 1958, addressed to him in John H. Dellinger correspondence.

**Odishaw, Hugh, 1916-**

**3 letters, 1960-67**

**Memo, June 1, 1967**

**Scope and Content Note**

Addressed to Silver and others. Correspondence addressed to him in Lloyd V. Berkner, Millett G. Morgan correspondence.

**Oetjen, Robert Adrian, 1912-**

**Letter, Feb. 3, 1961**

**Ogg, James Elvis, 1924-**

**Scope and Content Note**

No incoming letters; copy of a letter, Dec. 20, 1967, addressed to him in Silver's outgoing letters.

**Oliner, Arthur Aaron, 1921-**

**5 letters, 1959-66, addressed to Silver and the International Union of Radio Science. United States National Committee.**

**Scope and Content Note**

Included also, a research proposal, 1964.

Correspondence addressed to and from him in International Union of Radio Science.

United States National Committee, and Millett G. Morgan correspondence; from the

United States secretary of SETA in S Miscellaneous correspondence. correspondence; and in Kiyo Tomiyasu correspondence.

**Oliver, Bernard More, 1916-**

**Letter, n.d.**

**Olte, Andrejs, 1927-**

**2 letters, 1959, addressed to Silver and George Sinclair.**

**Oort, Jan Hendrik, 1900-**

**Letter, Apr. 30, 1958, addressed to Otto Struve.**

**Oppenheim, Antoni Kazimierz, 1915-**

**Letter, Aug. 26, 1963**

**Memo, Mar. 16, 1960**

**Owen, Thomas Barron, 1920-**

**Scope and Content Note**

No incoming letters; copies of letters, Oct. 19, 1966 and Nov. 8, 1966, addressed to him in Silver's outgoing letters.

**Ozawa, Yasutomo, 1919-**

**Scope and Content Note**

No incoming letters; copy of a letter, July 15, 1957, addressed to him in Silver's outgoing letters.

**Pace, Nello, 1916-**

**Scope and Content Note**

No incoming letters; correspondence addressed to him and others in William Fretter, California. University, Berkeley, and Sanford S. Elberg correspondence.

**Padden, Frank Joseph, 1928-**

**Scope and Content Note**

No incoming letters; copy of a letter, Nov. 14, 1968, addressed to him in Silvers outgoing letters.

**Page, Chester Hall, 1912-**

**3 letters, 1951-52, addressed to Silver and A. H. Waynick.**

**Scope and Content Note**

Copy of a letter, July 2, 1951, addressed to him in Arthur H. Waynick correspondence.

**Page, Robert Morris, 1903-**

**Scope and Content Note**

No incoming letters; copy of a letter, Oct. 7, 1958, addressed to him in Silver's outgoing letters.

**Paine, Thomas Otten, 1921-**

**Scope and Content Note**

No incoming letters; copies of letters, May 13, 1968 and Nov. 13, 1968, addressed to him in Silver's outgoing letters.

**Palm, Ann, 1921-**

**16 letters, 1963-65, addressed to Silver and others.**

**Palmer, Carl Brey, 1914-**

**Letter, n.d.**

**Panofsky, Hans Arnold, 1917-**

**Scope and Content Note**

No incoming letters; correspondence addressed to him in David Atlas correspondence, and from Ralph Bolgiano, Jr. in B Miscellaneous correspondence.

**Paris, Oscar Hall, 1931-**

**Letter, July 17, 1968**

**Parker, Earl Randall, 1912-**

**Scope and Content Note**

No incoming letters; copy of a letter, June 7, 1974, addressed to him in Silver's outgoing letters.

Copy of a memo, Aug. 14, 1962, addressed to him and others in John R. Whinnery correspondence.

**Parker, Eugene Newman, 1927-**

**Scope and Content Note**

No incoming letters; copy of a letter, Oct. 9, 1968, addressed to him in Silver's outgoing letters.

**Pearson, Erman A., 1920-**

**Letter, Apr. 17, 1964**

**Pecker, Jean-Claude, 1923-**

**2 letters, 1967**

**Scope and Content Note**

Correspondence addressed to him in International Union of Radio Science and Marcel Nicolet correspondence.

**Pederson, Donald Oscar, 1925-**

**Memo, May 18, 1960, addressed to J. R. Whinnery.**

**Scope and Content Note**

Copy of a letter, Oct. 7, 1957, addressed to him and others from the Institute of Engineering Research in California. University, Berkeley correspondence.

**Peoples, James A, 1920-**

**Scope and Content Note**

No incoming letters; copy of a letter, Mar. 19, 1965, addressed to him in Silver's outgoing letters.

Copy of a letter, May 11, 1967, addressed to him in William J. Welch correspondence.

**Perkinson, Jesse Dean, 1914-**

**Scope and Content Note**

No incoming letters; copy of a letter, May 21, 1968, addressed to him in International Union of Radio Science correspondence.

**Perry, William James, 1927-**

**Scope and Content Note**

No incoming letters; copy of a letter, June 14, 1962, addressed to him in Silver's outgoing letters.

**Peterson, Laurence E., 1931-**

**Scope and Content Note**

No incoming letters; copy of a letter, Nov. 13, 1964, addressed to him in Silver's outgoing letters.

**Pettit, Joseph Mayo, 1916-**

**8 letters, 1952-54, addressed to Silver and others.**

**Phillips, Franklyn Woods, 1917-**

**3 letters, 1962-63, addressed to Silver and E. W. Strong.**

**Phillips, Lyle Winston, 1910-**

**Scope and Content Note**

No incoming letters; copy of a letter, Dec. 28, 1964, addressed to him in Silver's outgoing letters.

**Picha, Kenneth George, 1925-**

**Letter, July 18, 1960**

**Scope and Content Note**

Copy of a letter, Sept. 25, 1959, addressed to him in William E. Gordon correspondence.

**Pickering, William Hayword, 1910-**

**3 letters, 1969-74**

**Scope and Content Note**

Correspondence addressed to him from M. J. Zucrow in Z Miscellaneous correspondence; and in Lotfi A. Zadeh correspondence.

**Pierce, Edward Thomas, 1916-**

**Letter, Dec. 30, 1960, addressed to J. P. Hagen.**

**Scope and Content Note**

Enclosures to letter, Jan. 15, 1967, in Millett G. Morgan correspondence are a copy of a letter to Morgan from him and one to him from Morgan.

**Pierce, John Alvin, 1907-**

**Letter, Feb. 12, 1951**

**Pierce, John Robinson, 1910-**

**2 letters, 1960**

**Pigford, Thomas Harrington, 1922-**

**Letter, Mar. 26, 1964**

**Pilgeram, Laurence Oscar, 1924-**

**Letter, Oct. 28, 1962, addressed to L. J. Milch.**

**Pimentel, George Claude, 1922-**

**2 letters, 1965 and 1966, addressed to S. S. Elberg and R. F. Fellows.**

**Pinney, Edmund Joy, 1917-**

**Scope and Content Note**

No incoming letters; copy of a letter, May 1, 1953, from him, Silver and Michel Loève to Alva R. Davis in Silver's outgoing letters.

**Pitzer, Kenneth Sanborn, 1914-**

**3 letters, 1960 and 1962**

**Pletta, Dan Henry, 1903-**

**Scope and Content Note**

No incoming letters; copy of a letter, Apr. 17, 1961, addressed to him in Silver's outgoing letters.

**Plonsey, Robert, 1924-**

**5 letters, 1953-61**

**Scope and Content Note**

Copy of a letter, Mar. 24, 1955, addressed to him in John R. Whinnery correspondence.

**Plotnikoff, Nicholas Peter, 1927-**

**Scope and Content Note**

No incoming letters; copy of a letter, Aug. 29, 1961, addressed to him in Silver's outgoing letters.

**Polvani, Carlo, 1924-**

**Scope and Content Note**

No incoming letters; copy of a letter, Apr. 24, 1954, addressed to him in Silver's outgoing letters.

**Poritsky, Hillel, 1898-**

**Letter, Nov. 29, 1960**

**Porter, Richard William, 1913-**

**4 letters, 1964-67, addressed to Silver and Maurice Roy.**

**Scope and Content Note**

Correspondence addressed to him and others in Lloyd V. Berkner, Hugh Odishaw, and Frederick Seitz correspondence.

**Portis, Alan Mark, 1926-**

**Letter, July 23, 1969, addressed to Hans Mark.**

**Portmann, Pierre Andre, 1920-**

**Scope and Content Note**

No incoming letters; copy of a letter, Feb. 19, 1951, addressed to him in Silver's outgoing letters.

**Potts, Byron C., 1930-**

**2 letters, 1960, re Institute of Radio Engineers.**

**Powell, John Leonard, 1919-**

**2 letters, 1962**

**Press, Frank, 1924-**

**Letter, June 11, 1970**

**Priester, Wolfgang, 1924-**

**Scope and Content Note**

No incoming letters; copies of letters, Jan. 6, 1965 and Jan. 6, 1966, addressed to him in Silver's outgoing letters.

**Prokhorov, Aleksandr Mikhaylovich, 1916-**

**Letter, Jan. 10, 1969**

**Scope and Content Note**

Copy of a letter, Apr. 9, 1966, addressed to him in International Union of Radio Science correspondence.

**Putnam, John Alpheus, 1907-**

**3 letters, 1955-56**

**Scope and Content Note**

Memo, Mar. 2, 1956, addressed to Silver and others.

Copy of a letter, Jan. 24, 1956, to him in John E. Dorn correspondence.

**Pyle, Robert V., 1923-**

**Scope and Content Note**

No incoming letters; copy of a letter, Nov. 2, 1966, addressed to him in Silver's outgoing letters.

**Quimby, Freeman Henry, 1915-**

**Scope and Content Note**

No incoming letters; copies of letters, Apr. 11, 1962, Feb. 8, 1964 and Oct. 23, 1964, addressed to him in Silver's outgoing letters.  
Copy of a letter, Nov. 2, 1964, addressed to him in California. University, Berkeley. Space Sciences Laboratory correspondence.

**Radford, William Henry, 1909-**

**Scope and Content Note**

No incoming letters; copy of a letter, July 23, 1957, addressed to him in Silver's outgoing letters.

**Ragazzini, John Ralph, 1912-**

**Scope and Content Note**

No incoming letters; copy of a letter, Feb. 11, 1960, addressed to him in Silver's outgoing letters.

**Randt, Clark Thorp, 1917-**

**2 letters, 1960**

**Scope and Content Note**

Enclosure to letter, Sept. 28, 1960, in Melvin Calvin correspondence is a copy of a letter from him to Calvin.

**Ratcliffe, J. A.**

**21 letters, 1954-71, addressed to Silver and others re International Union of Radio Science.**

**Scope and Content Note**

Correspondence addressed to and from him and to others in W. J. G. Beynon, Sidney A. Bowhill, William E. Gordon, International Union of Radio Science, International Union of Radio Science. United States National Committee, Joseph Kaplan, Millett G. Morgan, Ernest K. Smith, Roy C. Spencer and F. L. Stumpers correspondence.

**Rawer, Karl Maria Aloys, 1913-**

**6 letters, 1967-69, addressed to Silver and others.**

**Scope and Content Note**

Copy of a letter, Apr. 24, 1969, addressed to him in International Union of Radio Science correspondence.

**Ray, Gordon Norton, 1915-**

**29 letters, 1960-70**

**3 memos, 1965-67**

**Scope and Content Note**

Re Guggenheim Memorial Foundation  
Copy of a letter, Oct. 6, 1972, addressed to him in Carl A. Rouse correspondence.

**Rea, Donald George, 1929-**

**Letter, May 6, 1963, addressed to Harold Klein.**

**Scope and Content Note**

Copy of a letter, Apr. 5, 1963, addressed to him in International Council of Scientific Unions. Committee on Space Research correspondence.

**Reed, Sidney George, 1921-**

**Scope and Content Note**

No incoming letters; copies of letters, Feb. 3, 1961 and Nov. 4, 1966, addressed to him in Silver's outgoing letters.

**Reeds, John Nelson, 1925-**

**Letter, Oct. 26, 1959**

**Regener, Victor H., 1913-**

**Letter, Jan. 27, 1965**

**Reich, Herbert Joseph, 1900-**

**Scope and Content Note**

No incoming letters; copies of letters, Feb. 2, 1967 and Mar. 28, 1967, addressed to him in Silver's outgoing letters.

**Reid, Henry John, 1895-**

**Scope and Content Note**

No incoming letters; copy of a letter, Oct. 25, 1959, addressed to him in Silver's outgoing letters.

**Reilley, Edward M., 1919-**

**3 letters, 1960-61**

**Reines, Frederich, 1918-**

**Scope and Content Note**

No incoming letters; copy of a letter, Nov. 9, 1965, addressed to him in Silver's outgoing letters.

**Remeika, Joseph Peter, 1924-**

**Scope and Content Note**

No incoming letters; copy of a letter, May 19, 1959, addressed to him in Silver's outgoing letters.

**Renoir, Alain, 1921-**

**Scope and Content Note**

No incoming letters; copy of a letter, June 7, 1974, addressed to him in Silver's outgoing letters.

**Resnick, Robert, 1923-**

**Scope and Content Note**

No incoming letters; copy of a letter, Mar. 12, 1963, addressed to him in Silver's outgoing letters.

**Rettie, Richard S.**

**18 letters, 1966-69, re the Canadian national committee of the International Union of Radio Science.**



**Reukema, Lester Edwin, 1891-**

**Scope and Content Note**

No incoming letters; copy of a memo, Apr. 11, 1952, addressed to him in Silver's outgoing letters.

Correspondence addressed to him and others in California. University, Berkeley and Harold Lyons correspondence.

**Reynolds, John Hamilton, 1923-**

**2 letters, 1962, addressed to Silver and F. W. Hess.**

**Reynolds, Orr Esrey, 1920-**

**Scope and Content Note**

No incoming letters; copies of letters, July 14, 1965, Dec. 6, 1965, addressed to him in Silver's outgoing letters.

Copy of a letter, Nov. 2, 1964, addressed to him in California. University, Berkeley. Space Sciences Laboratory correspondence.

**Rhodes, Donald Robert, 1923-**

**Scope and Content Note**

No incoming letters; correspondence addressed to him in Alan T. Waterman correspondence.

**Riblet, Henry James, 1913-**

**Letter, Feb. 9, 1948**

**Scope and Content Note**

Included also, paper written by him, "Geometric Optical Currents," 1948.

**Richardson, John Marshall, 1921-**

**Letter, Oct. 12, 1965, addressed to M. G. Morgan.**

**Scope and Content Note**

Correspondence addressed to and from him in Edward C. Jordan and Millett G. Morgan correspondence.

**Rideout, Vincent Charles, 1914-**

**Letter, Apr. 26, 1960**

**Scope and Content Note**

Enclosure to letter, Oct. 9, 1958, in Otto J. M. Smith correspondence is a copy of a letter from him to Smith.

**Roberts, Walter Orr, 1915-**

**3 letters, 1963**

**Robertson, Burtis Lowell, 1902-**

**Scope and Content Note**

No incoming letters; copy of a memo, Mar. 2, 1956, addressed to him and others in John A. Putnam correspondence.

**Robertson, Randal McGavock, 1911-**

**4 letters, 1954-61, addressed to Silver and others.**

**Rogers, Thomas Alvin, 1905-**

**Scope and Content Note**

No incoming letters; copy of a letter, Nov. 29, 1966, addressed to him in Silver's outgoing letters.

Letter, Nov. 23, 1966, written by him in Charles M. Duke correspondence.

**Ronhovde, Andreas Gotthard, 1906-**

**Letter, Jan. 19, 1967**

**Rosenfeld, Arthur Hinton, 1926-**

**Scope and Content Note**

No incoming letters; copy of a letter, Mar. 8, 1966, addressed to him in Silver's outgoing letters.

**Rosenfeld, George, 1919-**

**Scope and Content Note**

No incoming letters; copies of letters, May 20, 1960 and Apr. 4, 1962, addressed to him in Silver's outgoing letters.

**Rosenlicht, Maxwell, 1924-**

**Scope and Content Note**

No incoming letters; copy of a letter, May 28, 1974, addressed to him in Silver's outgoing letters.

**Rosser, John Barkley, 1907-**

**2 letters, 1961**

**Rostenbach, Royal Edwin, 1912-**

**Scope and Content Note**

No incoming letters; copy of a letter, Sept. 20, 1966, addressed to him in Silver's outgoing letters.

**Rouse, Carl Albert, 1926-**

**10 letters, 1966-74, addressed to Silver and others.**

**Roy, Maurice, 1899-**

**33 letters, 1963-69, addressed to Silver and others, re International Council of Scientific Unions. Committee on Space Research.**

**Scope and Content Note**

Correspondence addressed to and from him in Henry G. Booker, Sidney A. Bowhill, Colin Hines, and International Union of Radio Science correspondence; from L. Koenigsfeld in K Miscellaneous correspondence; in Marcel Nicolet and Richard W. Porter correspondence. See also: Materials re International Council of Scientific Unions. Committee on Space Research. Cartons 3 & 4.

**Roy, Robert Hall, 1906-**

**Letter, July 1, 1968**

**Rubey, William Walden, 1898-**

**Letter, Feb. 8, 1954**

**Ruby, Lawrence, 1925-**

**Letter, July 9, 1964**

**Ruina, Jack Philip, 1923-**

**Scope and Content Note**

No incoming letters; copies of letters, Feb. 23, 1960 and May 9, 1962, addressed to him in Silver's outgoing letters.

**Rumsey, Victor Henry, 1919-**

**4 letters, 1950-60, addressed to Silver and others.**

**Runcorn, Stanley Keith, 1922-**

**Letter, Oct. 7, 1964**

**Russell, John Albert, 1913-**

**Letter, Apr. 26, 1960**

**Rydbeck, Olaf Erik Hans, 1911-**

**Scope and Content Note**

No incoming letters; copy of a letter, June 26, 1961, addressed to him in James R. Wait correspondence.

**Ryder, John Douglas, 1907-**

**Scope and Content Note**

No incoming letters; copy of a letter, Mar. 1, 1966, addressed to him in Silver's outgoing letters.

**Sachs, Robert Green, 1916-**

**Scope and Content Note**

No incoming letters; copy of a letter, Nov. 24, 1964, addressed to him in Silver's outgoing letters.

**Sagan, Carl, 1934-**

**Scope and Content Note**

No incoming letters; copy of a letter, Dec. 6, 1960, addressed to him in Silver's outgoing letters.

Correspondence addressed to him and others in Melvin Calvin, Sanford S. Elberg, Kenneth S. Pitzer, and Maurice Roy correspondence.

**Salpeter, Edwin Ernest, 1924-**

**Scope and Content Note**

No incoming letters; copy of a letter, July 1, 1968, addressed to him in William E. Gordon correspondence.

**Saunders, Robert Mallough, 1915-**

**19 letters, 1957-66, addressed to Silver and others.**

**7 memos, 1959-63**

**Scope and Content Note**

Copy of a letter, Dec. 21, 1960, to him in Yasundo Takahishi correspondence.

**Saxe, Edward Lawrence, 1916-**

**Note, July 1, 1970**

**Saxton, John Albion, 1907-**

**6 letters, 1966-69, addressed to Silver and E. K. Smith.**

**Scope and Content Note**

Correspondence addressed to him in David C. Hogg, International Union of Radio Science, Edward C. Jordan, and Ernest K. Smith correspondence.

**Sayers, James, 1912-**

**2 letters, 1969, addressed to Ernest K. Smith.**

**Scope and Content Note**

Copy of a letter, July 1, 1968, to him in William E. Gordon correspondence.

**Scalapino, Robert Anthony, 1919-**

**Scope and Content Note**

No incoming letters; copy of a memo, Jan. 4, 1963, to him and others from the graduate business officer in California. University, Berkeley correspondence.

**Schelkunoff, Sergi Alexander, 1897-**

**11 letters, 1945-60**

**Scope and Content Note**

Correspondence addressed to him and others in Joseph F. Manildi and James R. Wait correspondence.

**Schelling, John Christopher, 1892-**

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**Letter, July 30, 1957**

**Scher, Stanley, 1927-**

**Memo, Apr. 11, 1963**

**Scope and Content Note**

Copy of a letter, Apr. 5, 1963, addressed to him in International Council of Scientific Unions. Committee on Space Research correspondence.

**Schiff, Leonard Isaac, 1915-1971**

**Memo, July 25, 1955**

**Schilling, Martin, 1911-**

**Scope and Content Note**

No incoming letters; copy of a letter, Sept. 6, 1962, addressed to him in Silver's outgoing letters.

**Schmerling, Erwin Robert, 1929-**

**2 letters, 1965 & 1968, addressed to Silver and W. R. Piggott.**

**Scope and Content Note**

Copy of a letter, Nov. 21, 1958, addressed to him in John S. Coleman correspondence.

**Schrock, Virgil Edwin, 1926-**

**Scope and Content Note**

No incoming letters; copy of a letter, Dec. 5, 1968, addressed to him in Silver's outgoing letters.

**Schutzman, Elias, 1925-**

**Scope and Content Note**

No incoming letters; copies of letters, Jan. 12, 1965 and Jan. 25, 1966, addressed to him in Silver's outgoing letters.

**Schwinghamer, Edwin A., 1920-**

**Scope and Content Note**

No incoming letters; copies of letters, July 18, 1960 and Oct. 11, 1960, addressed to him in Silver's outgoing letters.

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**8 letters, 1968-69**

**Scott, Eugene Warren, 1907-**

**Letter, Nov. 22, 1948**

**Scott, Herbert Jefferson, 1897-**

**Letter, May 5, 1951**

**Scriven, Michael, 1928-**

**3 letters, 1973-74, addressed to Silver and others.**

**Seaborg, Glenn Theodore, 1912-**

**15 letters, addressed to Silver and Edward Teller.**

**Scope and Content Note**

Correspondence addressed to him in Morrough P. O'Brien and Edward Teller correspondence.

**Searcy, Alan Winn, 1925-**

**Letter, Sept. 23, 1964, addressed to Stanley Ward.**

**Scope and Content Note**

Correspondence addressed to him and others in California. University, Berkeley and John R. Whinnery correspondence.

**Seely, Samuel, 1909-**

**6 letters, 1954-57**

**Seifert, Howard Stanley, 1911-**

**Letter, June 24, 1965, addressed to Dinsmore Alter.**

**Seitz, Frederick, 1911-**

**3 letters, 1966-67**

**Telegram, Jan. 26, 1967**

**Scope and Content Note**

Addressed to Silver and others

Correspondence addressed to him in Millett G. Morgan and Franklin D. Murphy correspondence

**Selgnick, Philip, 1919-**

**Scope and Content Note**

No incoming letters; copies of memos, Oct. 6, 1964 and Feb. 15, 1965, addressed to him and others from the graduate division in California. University, Berkeley correspondence.

**Sells, Jackson Stuart, 1920-**

**2 letters, 1962**

**Senior, Thomas Bryant Alexander, 1928-**

**Scope and Content Note**

No incoming letters; copy of a letter, Jan. 13, 1957, addressed to him in Silver's outgoing letters.

**Senitzky, Israel Ralph, 1920-**

**Scope and Content Note**

No incoming letters; copy of a letter, Mar. 25, 1965, addressed to him in Silver's outgoing letters.

**Shane, Charles Donald, 1895-**

**Scope and Content Note**

No incoming letters; correspondence addressed to him and others in Clark Kerr, Hugh Odishaw, Frederick Seitz, and Otto Struve correspondence.

See also: Materials re Miscellaneous Organizations for Western Electric Show and Convention. Carton 8.

**Shapley, Alan Horace, 1919-**

**10 letters, 1955-67**

**Memo, July 5, 1955**

**Scope and Content Note**

Addressed to Silver and others.

Correspondence addressed to him and others in William E. Gordon, International Union of Radio Science, Arthur E. Little, Millett G. Morgan, Hugh Odishaw, and Frederick Seitz correspondence.

**Shepherd, William Gerald, 1911-**

**8 letters, 1959-61, addressed to Silver and others.**

**Scope and Content Note**

Correspondence addressed to him in Donald B. Sinclair and B. D. H. Tellegan correspondence.

**Shively, Jessup MacClean, 1935-**

**Scope and Content Note**

No incoming letters; copy of a letter, Feb. 19, 1962, addressed to him in Silver's outgoing letters.

**Shostak, Arnold, 1913-**

**7 letters, 1957-72, primarily re U.S. Navy Department. Office of Naval Research.**

**Siegel, Keeve Milton, 1923-**

**58 letters, 1951-72 & n.d.**

**Telegram, May 19, 1954**

**Scope and Content Note**

Addressed to Silver and others.

Correspondence addressed to and from him in John I. Bohnert, Sidney Darlington, John H. Dellinger, and Millett G. Morgan correspondence; from the United States secretary of SETA in S Miscellaneous correspondence; in George B. Sinclair, Victor Twersky, Lester C. Van Atta, James R. Wait, Arthur H. Waynick, and Francis J. Zucker correspondence.

**Siforov, Vladimir Ivanovich, 1904-**

**3 letters, 1960-69**

**Scope and Content Note**

Correspondence addressed to him in International Union of Radio Science correspondence.

**Silber, Gustave, 1924-**

**Scope and Content Note**

No incoming letters; copy of a letter, Apr. 6, 1967, addressed to him in Silver's outgoing letters.

**Silverman, Richard Allan, 1926-**

**Letter, Feb. 8, 1957, addressed to J. Loeb.**

**Silverman, Shirleigh, 1907-**

**2 letters, 1958**

**Silverstein, Abe, 1908-**

**Scope and Content Note**

No incoming letters; enclosure to letter, Sept. 21, 1961, in Kinsey A. Anderson correspondence is a copy of a letter from him to Anderson.

**Simpson, John Alexander, 1916-**

**Scope and Content Note**

No incoming letters; correspondence addressed to and from him and to others in Willard F. Libby, and Frederick Seitz correspondence.

**Sinclair, Donald Bellamy, 1910-**

**Letter, Aug. 8, 1966**

**Sinclair, George B., 1912-**

**46 letters, 1953-67, addressed to Silver and others.**

**Scope and Content Note**

Correspondence addressed to him in Lloyd V. Berkner, William E. Gordon, Robert C. Hansen, International Union of Radio Science, International Union of Radio Science. United States National Committee, Andrejs Olte, Keeve M. Siegel, Roy C. Spencer, and James R. Wait correspondence.

**Singer, Jerome Ralph, 1921-**

**Letter, Feb. 1, 1961**

**Scope and Content Note**

Copies of letters, Mar. 18, 1959 and Mar. 19, 1959 addressed to him and others in Victor H. Rumsey correspondence.

**Singer, Siegfried Fred, 1924-**

**2 letters, 1960 and 1965, addressed to L. Essen and W. Caton.**

**Scope and Content Note**

Copy of a letter, Mar. 18, 1959, addressed to him from Wolfgang Pfister in P Miscellaneous correspondence.

**Slack, Lewis, 1924-**

**Scope and Content Note**

No incoming letters; copy of a letter, Dec. 29, 1966, addressed to him in Silver's outgoing letters.

Correspondence addressed to him in Edward C. Jordan, and Millett G. Morgan correspondence.

**Slater, John Clarke, 1900-**

**Letter, May 27, 1947**

**Slater, John Vernon, 1920-**

**Letter, Nov. 9, 1960**

**Slepian, David, 1923-**

**3 letters, 1962 & 1968**

**Slichter, William Pence, 1922-**

**Scope and Content Note**

No incoming letters; copy of a letter, Feb. 9, 1960, addressed to him in Silver's outgoing letters.

**Slutz, Ralph Jeffrey, 1917-**

**Letter, Oct. 28, 1959**

**Scope and Content Note**

Correspondence addressed to him in Robert Cohen and Ray L. Leadabrand correspondence.

**Smith, Arthur Hamilton, 1916-**

**Scope and Content Note**

No incoming letters; copies of letters, Apr. 8, 1960 and June 3, 1960, addressed to him in Silver's outgoing letters.

**Smith, Ernest Ketcham, 1922-**

**8 letters, 1968-70**

**Memo, Nov. 17, 1969**

**Scope and Content Note**

Addressed to Silver and others.

Correspondence addressed to him in International Union of Radio Science and John A. Saxton correspondence.

**Smith, Lester Crawford, 1912-**

**Letter, Nov. 28, 1958**

**Smith, Newbern, 1909-**

**Letter, May 9, 1951**

**Smith, Otto Joseph Mitchell, 1917-**

**6 letters, 1957-67**

**Memo, Oct. 2, 1959**

**Smith, Paul Albert, 1901-**

**Letter, Nov. 16, 1960**

**Smith, Rhoten Alexander, 1921-**

**2 letters, 1963**

**Smith, Waldo Edward, 1900-**

**Letter, Dec. 18, 1964**

**Scope and Content Note**

Copy of a letter, Feb. 14, 1969, addressed to him in Edward C. Jordan correspondence.

**Smith, William Payne, 1915-**

**2 letters, 1965**

**Smith-Rose, R. L.**

**35 letters, 1959-68 & n.d., addressed to Silver and others, re International Union of Radio Science.**

**Scope and Content Note**

Correspondence addressed to and from him in International Union of Radio Science and Joseph Kaplan correspondence.

See also: Norton, Kenneth A.

**Smull, Thomas Leland Kemp, 1916-**

**11 letters, 1961-65, re United States National Aeronautics and Space Administration grants.**

**Scope and Content Note**

Correspondence addressed to him in Kinsey A. Anderson, Wallace R. Brode, California. University, Berkeley. Space Sciences Laboratory and Thomas H. Jukes correspondence.

**Smullin, Louis Dijour, 1916-**

**2 letters, 1963 and 1965, addressed to Silver and M. G. Morgan.**

**Scope and Content Note**

Copy of a letter, Feb. 18, 1963, addressed to him in John P. Hagen correspondence.

**Smyth, John Bridges, 1914-**

**17 letters, 1953-1965, addressed to Silver and others.**

**Scope and Content Note**

Correspondence addressed to him in William E. Gordon, International Union of Radio Science. United States National Committee, and Millett G. Morgan correspondence.

**Snodgrass, James Marion, 1908-**

**Letter, Mar. 11, 1968, addressed to R. L. Smith-Rose.**

**Scope and Content Note**

Correspondence addressed to him in R. L. Smith-Rose correspondence.

**Sonett, Charles Philip, 1924-**

**2 letters, 1964 and 1965**

**Soohee, Ronald Franklin, 1928-**

**2 letters, 1965 & 1967**

**Spangenberg, Karl Rudolph, 1910-**

**Letter, Aug. 22, 1958**

**Speed, Robert Clarke, 1933-**

**Scope and Content Note**

No incoming letters; copy of a letter, Jan. 4, 1965, addressed to him in Silver's outgoing letters.

**Spencer, Roy Clarence, 1901-**



**20 letters, 1951-58, addressed to Silver and others.**

**Scope and Content Note**

Correspondence addressed to him in International Union of Radio Science and Lester C. Van Atta correspondence.

**Spimad, Hyron, 1934-**

**Scope and Content Note**

No incoming letters; copy of a letter, Oct. 26, 1965, addressed to him in Silver's outgoing letters.

**Spitzer, Lyman, 1914-**

**Scope and Content Note**

No incoming letters; copy of a letter, Mar. 31, 1967, addressed to him in Silver's outgoing letters.

**Staras, Harold, 1922-**

**Scope and Content Note**

No incoming letters; enclosure to letter, Dec. 6, 1962 in William E. Gordon correspondence is a copy of a letter from him to Gordon.

**Steidel, Robert Francis, 1926-**

**Memo, Jan. 11, 1962**

**Steinberg, Samuel Sidney, 1891-**

**Letter, June 6, 1960**

**Stevenson, Merlon Lynn, 1923-**

**2 letters, 1975**

**Stewart, Morris Albion, 1902-1961**

**4 letters, 1957-59, addressed to Silver and others.**

**Scope and Content Note**

Copy of a letter, Sept. 11, 1957, to him in Morrough P. O'Brien correspondence.

**Stitt, Fred, 1911-**

**2 letters, 1963**

**Straiton, Archie Waugh, 1907-**

**2 letters, 1960-61**

**Scope and Content Note**

Correspondence addressed to him in William E. Gordon and Millett G. Morgan correspondence.

**Strauss, Lewis Lichtenstein, 1896-**

**Scope and Content Note**

No incoming letters; copy of a letter, Oct. 21, 1968, addressed to him in Silver's outgoing letters.

**Streitwiesser, Andrew, 1927-**

**Scope and Content Note**

No incoming letters; copy of a letter, Mar. 29, 1974, addressed to him in Silver's outgoing letters.

**Strong, Edward William, 1901-**

**20 letters, 1961-64**

**Memo, July 17, 1961**

**Scope and Content Note**

Addressed to Silver and others.

Correspondence addressed to and from him in Kinsey A. Anderson correspondence; from R. V. Bartz in B Miscellaneous correspondence; in California. University, Berkeley, Lincoln Constance, Sanford S. Elberg and, from Robert F. Kerley, in K Miscellaneous correspondence from E. Mauchlin in M Miscellaneous correspondence; in Franklyn W. Phillips, Edward Teller and U.S. Air Force correspondence.

**Strum, Peter Daub, 1922-**

**2 letters, 1961**

**Strutt, Maximillian Julius Otto, 1903-**

**Letter, May 5, 1954**

**Struve, Otto, 1897-1963**

**5 letters, 1955-58**

**2 memos, 1957-58**

**Scope and Content Note**

Addressed to Silver and others.

Included also, minutes of the Advisory Committee on Radio Astronomy, Aug. 2, 1957  
Correspondence addressed to him and others in Geoffrey Keller, Clark Kerr, Jan H. Oort, and Harold F. Weaver correspondence.

**Stumpers, F. L.**

**33 letters, 1954-69, addressed to Silver and others, re International Union of Radio Science.**

**Scope and Content Note**

Correspondence addressed to and from him in Robert C. Hansen, Hubert Heffner, International Union of Radio Science and Keeve M. Siegel correspondence.

**Sturrock, Peter Andrew, 1924-**

**Letter, Oct. 12, 1964**

**Süsskind, Charles, 1921-**

**8 letters, 1957-75**

**4 memos, 1958-63**

**Scope and Content Note**

Addressed to Silver and others.

Included also, research report, 1958 and evaluation report for fellowships, 1961.

**Swarm, Howard Myron, 1916-**

**Letter, Dec. 17, 1963**

**Scope and Content Note**

Correspondence addressed to him in William E. Gordon and Millett G. Morgan correspondence.

**Swenson, George Warner, 1922-**

**Letter, Oct. 20, 1960, addressed to W. E. Gordon.**

**Swig, Benjamin Harrison, 1893-**

**Scope and Content Note**

No incoming letters; copy of a letter, Jan. 2, 1963, addressed to him in Silver's outgoing letters.

**Takahishi, Yasundo, 1912-**

**Letter, Dec. 21, 1960, addressed to R. M. Saunders.**

**Talbot, Lawrence, 1925-**

**Scope and Content Note**

No incoming letters; memo, Nov. 8, 1968, addressed to him and others from Vice Chancellor Sammet, in California. University, Berkeley. Chancellor correspondence.

**Tank, Franz, 1890-**

**Scope and Content Note**

No incoming letters; copies of letters, July 19, 1960 and July 29, 1960, addressed to him in Silver's outgoing letters.

**Taub, Abraham Haskell, 1911-**

**Scope and Content Note**

No incoming letters; copies of memos, Oct. 6, 1964, Aug. 3, 1964 and Feb. 15, 1965, addressed to him from the graduate division in California. University, Berkeley correspondence.

**Tayar, Abdulhamid Ramadan, 1936-**

**Scope and Content Note**

No incoming letters; copy of a letter, Mar. 21, 1975, addressed to him in Silver's outgoing letters.

**Taylor, Angus Ellis, 1911-**

**Letter, Oct. 23, 1970**

**Taylor, John Whitfield, 1914-**

**Scope and Content Note**

No incoming letters; copy of a letter, Nov. 4, 1958, addressed to him in Silver's outgoing letters.

**Taylor, Lauriston Sale, 1902-**

**Scope and Content Note**

No incoming letters; copy of a letter, May 13, 1963, addressed to him in James R. Wait correspondence.

**Taylor, Raymond Leech, 1901-**

**Scope and Content Note**

No incoming letters; copy of a letter, Nov. 26, 1953, addressed to him in Silver's outgoing letters.

**Tellegen, B. D. H.**

**13 letters, 1954-60, addressed to Silver and others, re International Union of Radio Science (International) Commission VI.**

**Teller, Edward, 1908-**

**Letter, Mar. 24, 1961**

**Memo, May 18, 1959, addressed to G. Seaborg and E. W. Strong.**

**Scope and Content Note**

Correspondence addressed to him in Glenn T. Seaborg and Edward W. Strong correspondence.

See also: Materials re University of California, for the Statewide Advisory Committee on Space Sciences. Carton 1.

**Terman, Frederick Emmons, 1900-**

**Letter, Aug. 16, 1968**

**Thimann, Kenneth Vivian, 1904-**

**Scope and Content Note**

No incoming letters; copy of a letter, Mar. 19, 1968, addressed to him in Silver's outgoing letters.

**Thompson, Floyd L., 1898-**

**Letter, Apr. 23, 1964**

**Thorn, Donald Childress, 1929-**

**Scope and Content Note**

No incoming letters; copy of a letter, June 10, 1964, addressed to him in Silver's outgoing letters.

**Tien, Ping King, 1919-**

**Letter, n.d.**

**Tiffany, Otho Lyle, 1919-**

**Letter, June 1, 1960**

**Tisza, Laszlo, 1907-**

**Scope and Content Note**

No incoming letters; copy of a letter, Dec. 13, 1946, addressed to him in Silver's outgoing letters.

**Tobias, Charles William, 1920-**

**Scope and Content Note**

No incoming letters; copies of letters, Feb. 27, 1961 and Jan. 4, 1962, addressed to him in Silver's outgoing letters.

**Tobias, Cornelius Anthony, 1918-**

**3 letters, 1961-67**

**Scope and Content Note**

Copy of a letter, May 17, 1960, addressed to him from R. A. San Souci in S Miscellaneous correspondence.

**Todd, David Keith, 1922-**

**Letter, June 6, 1962, re International Union of Geodesy and Geophysics, general assembly.**

**Scope and Content Note**

Copy of letter, Sept. 20, 1963, addressed to him in George D. Garland correspondence.

**Todd, Edward Payson, 1922-**

**3 letters, 1960 and 1963**

**Tomiyasu, Kiyo, 1919-**

**12 letters, 1958-61**

**Scope and Content Note**

Enclosure to letter, Feb. 24, 1961, in Archie W. Straiton correspondence is a letter to Straiton from him.

**Toth, Emerick, 1905-**

**2 letters, 1952, addressed to Silver and L. C. Van Atta.**

**Townes, Charles Hard, 1915-**

**Letter, July 29, 1968**

**Scope and Content Note**

Correspondence addressed to him in Robert M. Saunders and Keeve M. Siegel correspondence.

**Trautman, DeForest Lloyd, 1920-**

**Scope and Content Note**

No incoming letters; copy of a letter, Jan. 11, 1961, addressed to him in Silver's outgoing letters.

**Trilling, George Henry, 1930-**

**Scope and Content Note**

No incoming letters; copy of a letter, May 12, 1966, addressed to him in Silver's outgoing letters.

**Trolese, Louis Gustave, 1908-**

**2 letters, 1959**

**Trytten, Merriam Hartwick, 1894-**

**Letter, Feb. 3, 1960**

**Scope and Content Note**

Copy of a letter, June 2, 1960, to him from Pieter Eyhoff in E Miscellaneous correspondence

**Turner, Francis John, 1904-**

**Letter, Jan. 26, 1968**

**Tuve, Merle Antony, 1901-**

**Scope and Content Note**

No incoming letters; correspondence addressed to him and others in George S. Benton and Frederick Seitz correspondence.

**Twersky, Victor, 1923-**

**22 letters, 1956-76 & n.d., addressed to Silver and others.**

**Scope and Content Note**

Correspondence addressed to him in Bradford R. Bean, Edward C. Jordan and James R. Wait correspondence.

**Tyler, William Royall, 1910-**

**Letter, Apr. 10, 1964, addressed to C. C. Stelle.**

**Scope and Content Note**

Copy of a letter, Apr. 1, 1964, to him from Charles C. Stelle in S Miscellaneous correspondence.

**Uchida, Henry Shigetomi, 1917-**

**8 letters, 1960-69**

**U.S. Air Force**

**15 letters, 1955-74, addressed to Silver and others.**

**U.S. Dept. of Commerce**

**5 letters, 1957-67**

**U.S. National Aeronautics and Space Administration**

**42 letters, 1962-70, addressed to Silver and others.**

**See also: Dryden, Hugh L.; Holloway, John T.; Jastrow, Robert; Smull, Thomas L. K.; and Webb, James E.**

**U.S. National Aeronautics and Space Administration. Electronics Research Center**

**5 letters, 1965-69**

**2 memos, 1965-66**

**Scope and Content Note**

Included also, material re millimeter wave symposium, May 1965.

See also: Elms, James C.

**U.S. National Bureau of Standards**

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**4 letters, 1960-61**

**See also: Wait, James R.**

**U.S. Navy**

**11 letters, 1950-63**

**U.S. Navy Dept.**

**13 letters, 1946-47 & n.d.**

**U.S. Navy Dept. Office of Naval Research**

**35 letters, 1953-70**

**8 memos, 1958-71**

**See also: Bennett, Rawson; McCrensky, Edward; and Shostak, Arnold**

**Unz, Hillel, 1929-**

**4 letters, 1958-69**

**Scope and Content Note**

Copy of a letter, Dec. 10, 1956, addressed to him in Gedaliahu Held correspondence.

**Urey, Harold Clayton, 1893-**

**5 letters, 1960-63**

**Scope and Content Note**

Copy of a letter, June 18, 1959, addressed to him in William E. Gordon correspondence.

**Van Allen, James Alfred, 1914-**

**Scope and Content Note**

No incoming letters; correspondence addressed to and from him in Willard F. Libby, Millett G. Morgan, Hugh Odishaw, and Frederick Seitz correspondence.

**Van Atta, Lester Clare, 1905-**

**28 letters, 1946-70**

**3 memos, 1946-53**

**Scope and Content Note**

Addressed to Silver and others.

Correspondence addressed to him in Charles R. Burrows and J. Howard Dellinger correspondence; from R. A. Fairbairn in F Miscellaneous correspondence; in Robert C. Hansen, Institute of Electrical and Electronics Engineers, and International Union of Radio Science correspondence; from A. Blanc Lapiere in L Miscellaneous correspondence; in Wilbur R. LePage, Julien M. Loeb, Roy C. Spencer and Emerick Toth correspondence.

**Van Bladel, Jean Georges, 1922-**

**Letter, Jan. 5, 1962**

**Van de Hulst, Hendrik Christofell, 1918-**

**Letter, Nov. 30, 1959, re International Council of Scientific Unions. Committee on Space Research.**

**Scope and Content Note**

Correspondence addressed to and from him and to others in Lloyd V. Berkner and International Union of Radio Science correspondence.

**Van der Pol, Balthasar**

**11 letters, 1952-69, addressed to Silver and others.**

**Scope and Content Note**

Also in the file: "Notes from a series of Lectures by Balth. van der Pol at University of California, Fall Semester 1957-58." Notes by Stanley L. Mercer.  
Correspondence addressed to him in International Union of Radio Science, and John R. Whinnery correspondence.

**Van Valkenburg, MacElwyn, 1921-**

**2 letters, 1975 & 1976**

**Van Zandt, Thomas Edward, 1929-**

**Scope and Content Note**

No incoming letters; copy of a letter, July 17, 1963, addressed to him in Sidney A. Bowhill correspondence.

**Vassy, Etienne Joseph, 1905-**

**3 letters, 1964-65**

**Vaux, Henry J., 1912-**

**Letter, July 3, 1963, addressed to S. H. Ward.**

**Scope and Content Note**

Copy of a letter, July 10, 1963, addressed to him in Stanley H. Ward correspondence.

**Villard, Oswald Garrison, 1916-**

**Letter, Oct. 19, 1955**

**Vinti, John Pascal, 1907-**

**Letter, July 13, 1954**

**Vivian, Weston Edward, 1924-**

**Letter, Oct. 28, 1965**

**Vvedenskii, Boris Alekseievich, 1893-**

**Letter, June 23, 1960**

**Waddington, Guy, 1904-**

**Letter, Oct. 17, 1966**

**Scope and Content Note**

Copies of letters, July 19, 1966 and June 11, 1968, addressed to him in International Union of Radio Science correspondence.

**Waggoner, James Arthur, 1931-**

**Scope and Content Note**

No incoming letters; copy of a letter, Sept. 15, 1964, addressed to him in Silver's outgoing letters.

**Wait, James Richard, 1924-**

**114 letters, 1955-68**

**5 memos, 1958-67**

**Telegram, Apr. 9, 1962**

**Scope and Content Note**

Addressed to Silver and others; some re U.S. National Bureau of Standards. Correspondence addressed to and from him from J. Bach Anderson in A Miscellaneous correspondence; from H. Bremmer in B Miscellaneous correspondence; in John I. Bohnert, Sidney A. Bowhill, John H. Dellinger, Robert C. Hansen, William C. Hoffman, International Union of Radio Science, Hans L. Knudsen, Nathan Marcuvitz, and Millett G. Morgan correspondence; from the Optical Society of America in O Miscellaneous correspondence; in Keeve M. Siegel, and George B. Sinclair correspondence; from L. A. Wainstein in W Miscellaneous correspondence; in Albert D. Wheelon, John R. Whinnery, and Frederick K. Willenbrock correspondence.

**Walker, Eric Arthur, 1910-**

**8 letters, 1968-69**

**Scope and Content Note**

Correspondence addressed to him in William E. Gordon, International Union of Radio Science United States National Committee and Arthur H. Waynick correspondence.

**Walker, Robert John, 1909-**

**2 letters, 1964**

**Wallman, Henry, 1915-**

**Letter, Dec. 23, 1946**

**Ward, Stanley Henry, 1923-**

**8 letters, 1962-65, addressed to Silver and others.**

**Scope and Content Note**

Enclosure to letter, June 22, 1964, in Silver's outgoing letters is a memo from him to Silver.

Correspondence addressed to and from him in California. University, Berkeley, Alan W. Searcy, Edward W. Strong, Henry J. Vaux, and James R. Wait correspondence.

**Warwick, Constance Sawyer, 1926-**

**Scope and Content Note**

No incoming letters; copy of a letter, July 17, 1963, addressed to him in Sidney A. Bowhill correspondence.

**Waterfall, Wallace, 1900-**

**Letter, Feb. 15, 1956**

**Waterman, Alan Tower, 1918-**

**20 letters, 1959-71**

**2 memos, 1968 and 1971**

**Scope and Content Note**

Addressed to Silver and others.

Correspondence addressed to and from him from Irvin H. Gerks in G Miscellaneous correspondence; in William E. Gordon, John P. Hagen, and Millett G. Morgan correspondence; from George C. Reed in R Miscellaneous correspondence; in F. L. Stumpers and Harry W. Wells correspondence.

See also: Materials re International Union of Radio Science (U.S.A.). Cartons 6 & 7.

**Watson, Kenneth Marshall, 1921-**

**Letter, Apr. 6, 1964**

**Waynick, Arthur Henry, 1905-**

**45 letters, 1951-63, addressed to Silver and others.**

**Memo, Sept. 7, 1951**

**Telegram, June 4, 1953**

**Scope and Content Note**

Correspondence addressed to him and others from L. G. Cummings in C Miscellaneous correspondence; in John S. Coleman, J. Howard Dellinger, William E. Gordon, International Union of Radio Science, International Union of Radio Science. United States National Committee, Millett G. Morgan, Chester H. Page, Joseph M. Pettit, Roy C. Spencer, and Ernst Weber correspondence.

**Weaver, Harold F., 1917-**

**4 letters, 1957-66**

**Scope and Content Note**

Correspondence addressed to and from him and to others in Luis Alvarez, Melvin Calvin, Alva R. Davis, Robert L. Fleischer, Geoffrey Keller, Clark Kerr, and Otto Struve correspondence.

**Webb, James Edwin, 1906-**

**8 letters, 1961-69, primarily re U.S. National Aeronautics and Space Administration.**

**Scope and Content Note**

Correspondence addressed to him in C. West Churchman, and Edward W. Strong correspondence.

**Weber, Ernst, 1901-**



**5 letters, 1946-76, addressed to Silver and A. H. Waynick.**

**Scope and Content Note**

Copy of a letter, Jan. 4, 1954, to him in Arthur H. Waynick correspondence.

**Weber, Marvin John, 1932-**

**Scope and Content Note**

No incoming letters; copies of letters, Nov. 29, 1965 and Dec. 12, 1966, addressed to him in Silver's outgoing letters.

**Webster, Harold Frank, 1919-**

**Letter, Sept. 9, 1959**

**Wedding, Randolph Townstead, 1921-**

**Scope and Content Note**

No incoming letters; copy of a letter, Jan. 10, 1959, addressed to him in Thomas H. Jukes correspondence.

**Weimer, Arthur Martin, 1909-**

**Scope and Content Note**

No incoming letters; copy of a letter, May 21, 1963, addressed to him in Silver's outgoing letters.

**Weinberg, Elliot Hillel, 1924-**

**Scope and Content Note**

No incoming letters; copy of a letter, Mar. 18, 1968, addressed to him in Silver's outgoing letters.

**Weinberg, Louis, 1919-**

**7 letters, 1958-64, addressed to Silver and L. A. Zadeh.**

**Scope and Content Note**

Enclosure to letter, July 29, 1960, in Silver's outgoing letters is a letter to Silver from him.

**Weisbrod, Steven, 1925-**

**Letter, Oct. 6, 1959**

**Welch, William John, 1934-**

**2 letters, 1967 & 1968, addressed to T. A. Peoples and Thomas Seliga.**

**Scope and Content Note**

Correspondence addressed to and from him in Ronald N. Bracewell, California. University, Berkeley, California. University, Berkeley. Space Sciences Laboratory, and Geoffrey Keller correspondence.

**Wellman, Harry Richard, 1899-**

**Scope and Content Note**

No incoming letters; copy of a letter, June 6, 1967, addressed to him in Silver's outgoing letters.

Correspondence addressed to him in California. University, Berkeley. Chancellor and, from E. Mauchlin, in M Miscellaneous correspondence.

**Wells, Harry Warren, 1907-**

**8 letters, 1952-64, addressed to Silver and others.**

**Scope and Content Note**

Copy of a letter, Apr. 4, 1956, addressed to him in Clark Kerr correspondence.

**Wheeler, Harold Albert, 1903-**

**2 letters, 1956 & 1957**

**Wheelon, Albert Dewall, 1929-**

**3 letters, 1961, addressed to Peter Beckmann and J. R. Wait.**

**Scope and Content Note**

Copies of letters, Feb. 1, 1961, & Sept. 26, 1961, addressed to him in James R. Wait correspondence.

**Whinnery, John Ray, 1916-**

**76 letters, 1953-75**

**11 memos, 1955-62**

**Scope and Content Note**

Copies of letters, Feb. 10, 1955 and Mar. 7, 1955, from him, Silver and others to M. P. O'Brien in Silver's outgoing letters.

Correspondence addressed to him and others from F. E. Borgnia and Thomas D. Boyd in B Miscellaneous correspondence; in Charles K. Birdsall & California. University, Berkeley correspondence; from M. Ettenberg in E Miscellaneous correspondence; from Setsuo Fukuda in F Miscellaneous correspondence; in Clyne F. Garland correspondence; from T. H. Haxlett and Milford C. Horton in H Miscellaneous correspondence; in Clark Kerr, George J. Maslach, Paul L. Morton, Marrough P. O'Brien, Donald O. Pederson, Robert M. Saunders, Otto Struve, and Balth. van der Pol correspondence.

See also: Hess, Robert L. and Hoover, William G.

**White, Frederick Andrew, 1918-**

**Scope and Content Note**

No incoming letters; copies of letters, Apr. 12, 1968, Aug. 23, 1968, Sept. 23, 1968, and Feb. 25, 1969, addressed to him in Silver's outgoing letters.

Copy of a letter, Feb. 14, 1968, addressed to him in William E. Gordon correspondence.

**White, Harvey Elliott, 1902-**

**2 letters, 1965**

**White, Marsh William, 1896-**

**Scope and Content Note**

No incoming letters; copy of a letter, May 23, 1963, addressed to him in Silver's outgoing letters.

**White, Richard M., 1930-**

**Scope and Content Note**

No incoming letters; copy of a letter, Mar. 29, 1974, addressed to him in Silver's outgoing letters.

**White, Robert M., 1923-**

**Scope and Content Note**

No incoming letters; enclosure to letter, July 10, 1969, in George S. Benton correspondence is a letter from him to Alberto A. Giesecke and enclosure to letter, Aug. 14, 1969, is a copy of letter from him to Merle A. Tuve.

**Wiegel, Robert L., 1922-**

**Scope and Content Note**

No incoming letters; copy of a memo, May 3, 1966, addressed to him and others in Roger W. Heyns correspondence.

**Wiesner, Jerome Bert, 1915-**

**Scope and Content Note**

No incoming letters; copies of letters, Apr. 18, 1957 and Mar. 10, 1961, addressed to him in Silver's outgoing letters.

Copy of a letter, Apr. 8, 1957, addressed to him in J. Howard Dellinger correspondence.

**Wilcox, John Marsh, 1925-**

**Scope and Content Note**

No incoming letters; letter, Sept. 18, 1967, addressed to him and others in Silver's outgoing letters.

Correspondence addressed to him from James Alfven, in A Miscellaneous correspondence; in Kinsey A. Anderson and, from Karl Schindler, in S Miscellaneous correspondence.

**Willenbrock, Frederick Karl, 1920-**

**2 letters, 1963 & 1965, addressed to Silver and J. R. Wait.**

**Scope and Content Note**

Copy of a letter, Sept. 16, 1965, to him in James R. Wait correspondence.

**Williams, Dudley, 1912-**

**3 letters, 1961-64**

**Williamson, Merritt Alvin, 1916-**

**Scope and Content Note**

No incoming letters; correspondence addressed to him in International Union of Radio Science. United States National Committee and Arthur H. Waynick correspondence.

**Wisser, Edward Hollister, 1895-**

**Scope and Content Note**

No incoming letters; copy of a letter, Oct. 2, 1961, addressed to him in Silver's outgoing letters.

**Wolf, Emil, 1922-**

**3 letters, 1954-66**

**Wolf, Frantisek, 1904-**

**Letter, July 10, 1953**

**Wolfe, Hugh Campbell, 1905-**

**Letter, Dec. 18, 1961, addressed to Victor Twersky.**

**Wolff, Edward A., 1929-**

**Letter, Jan. 11, 1958**

**Wood, Frederick Bernard, 1917-**

**Letter, Oct. 9, 1962**

**Wootton, Garnet Alexander, 1906-**

**8 letters, 1953-63, addressed to Silver and L. B. Felsen.**

**Work, Harold Knowlton, 1901-**

**Letter, Jan. 12, 1960**

**Wright, Raymond William Henry, 1926-**

**Scope and Content Note**

No incoming letters; copy of a letter, Jan. 20, 1969, to him in International Union of Radio Science correspondence.

**Wu, Chine-Shiung, 1913-**

**Scope and Content Note**

No incoming letters; copies of letters, Oct. 18, 1965 and Nov. 11, 1965, addressed to him in Silver's outgoing letters.

**Yates, Kenneth Pidcock, 1920-**

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**Letter, Mar. 4, 1947**  
**Yeh, Kung Chie, 1930-**  
**Letter, Mar. 23, 1960**  
**York, Herbert Frank, 1921-**  
**Telegram, Mar. 29, 1963**  
**Zadeh, Lotfi A., 1921-**  
**10 letters, 1952-64**  
**Memo, Mar. 12, 1964**

**Scope and Content Note**

Addressed to Silver and others. Included also, reports for fellowships, 1961. Correspondence addressed to him and others in John I. Bohnert, International Union of Radio Science. United States National Committee, Millett G. Morgan, James R. Wait, and Louis Weinberg correspondence.

**Zahl, Harold Adelbert, 1904-**

**Scope and Content Note**

No incoming letters; copies of letters, Feb. 19, 1951, and Apr. 3, 1951, addressed to him in Silver's outgoing letters.  
Copy of a letter, Feb. 2, 1951, addressed to him in Lester C. Van Atta correspondence.

**Zivnuska, John Arthur, 1916-**

**Scope and Content Note**

No incoming letters; copy of a letter, Mar. 1, 1967, addressed to him in Silver's outgoing letters.

**Zucker, Francis John, 1922-**

**12 letters, 1946-64 & n.d., addressed to Silver and others.**

**Scope and Content Note**

Correspondence addressed to him in Victor Twersky and James R. Wait correspondence.