N. C. Gerson Papers

A Finding Aid to the Collection in the Library of Congress

Prepared by T. Michael Womack



Manuscript Division, Library of Congress

Washington, D.C.

2007

Contact information: http://lcweb.loc.gov/rr/mss/address.html

Finding aid encoded by Glenn R. Gardner, 2009

Finding aid URL: http://hdl.loc.gov/loc.mss/eadmss.ms009090

Collection Summary

Title: N. C. Gerson Papers Span Dates: 1928-1998 Bulk Dates: (bulk 1950-1970)

ID No.: MSS84060 Creator: Gerson, N. C.

Extent: 6,300 items; 18 containers; 7.2 linear feet

Language: Collection material in English

Repository: Manuscript Division, Library of Congress, Washington, D.C.

Abstract: Research physicist. Correspondence, biographical material, drafts and offprints of scientific articles, memoranda, minutes, notes and equations, reports, research material, rosters, schematics, and other papers documenting Gerson's career as a research physicist and his service as a member of the United States National Committee for the International Geophysical Year (1957-1958).

Selected Search Terms

The following terms have been used to index the description of this collection in the Library's online catalog. They are grouped by name of person or organization, by subject or location, and by occupation and listed alphabetically therein.

Personal Names

Gerson, N. C.

Organizations

American Geophysical Union.

Cosmos Club (Washington, D.C.)

Mitre Corporation.

National Academy of Sciences (U.S.)

Syracuse University. Research Corporation.

United States. National Committee for the International Geophysical Year.

Subjects

Airglow.

Artificial satellites in ionospheric research.

Atmosphere, Upper--Rocket observations.

Auroras.

Ballistics--Research.

Cosmic rays.

Geomagnetism.

Geophysics--International cooperation.

Glaciology.

Gravity.

International Geophysical Year (1957-1958)

Meteorology.

Oceanography.

Radio wave propagation.

Rockets (Aeronautics)

Science--International cooperation.

Science--Soviet Union.

Science--United States.

Scientific expeditions--Antarctica.

Scientific expeditions--Arctic regions.

Seismology.

Solar activity.

Occupations Physicists.

Administrative Information

Provenance:

The papers of Nathaniel C. Gerson, research physicist, were given to the Library of Congress by Gerson in two installments from 1997 to 1999.

Processing History:

The Gerson Papers were processed in 1999. The finding aid was revised in 2007.

Copyright Status:

The status of copyright in the unpublished writings of N. C. Gerson is governed by the Copyright Law of the United States (Title 17, U.S.C.).

Access and Restrictions:

The papers of N. C. Gerson are open to research. Researchers are advised to contact the Manuscript Reading Room prior to visiting. Many collections are stored off-site and advance notice is needed to retrieve these items for research use.

Preferred Citation:

Researchers wishing to cite this collection should include the following information: Container number, N. C. Gerson Papers, Manuscript Division, Library of Congress, Washington, D.C.

Biographical Note

| Diographical Note | | |
|-------------------|---|--|
| Date | Event | |
| 1915, Oct. 15 | Born, Boston, Mass. | |
| 1938-1946 | Technical Investigations Section, United States Weather Bureau | |
| 1944 | B.S., physics, University of Puerto Rico, Rio Piedras, P.R. | |
| 1945 | Married Sareen R. Epstein | |
| 1946-1948 | Assistant, LF Loran Evaluation, Watson Laboratories, United States Army Air Force, Ft. Monmouth, N.J. | |
| 1948 | M.S., physics, New York University, New York, N.Y. | |
| 1948-1951 | Chairman, Tropospheric Propagation Committee, United States Air Force Member, Ionospheric Propagation Committee, United States Air Force | |
| 1948-1955 | Chief, Ionospheric Physics Laboratory, Air Force Cambridge Research Center, United States Air Force, Cambridge, Mass. | |
| 1949-1952 | Member, United States Civil Service Commission | |

| 1952 | Member, United States Air Force Committee to evaluate Alaskan Radar Defenses |
|---------------|---|
| 1953-1955 | Chairman, first two Antarctic committees, United States National Committee for the International Geophysical Year |
| 1953-1957 | Secretary, National Committee for the International Geophysical Year Secretary, Executive Committee, National Committee for the International Geophysical Year |
| 1954-1955 | Assigned by American Geophysical Union to negotiate with Merle Tuve for transfer of <i>Journal of Geophysical Research</i> from the Carnegie Institution, Washington, D.C., to American Geophysical Union |
| 1954-1958 | Member, Ionospheric Panel, National Committee for the International Geophysical Year Member, Rocket and Space Panel, National Committee for the International Geophysical Year |
| 1955-1958 | Vice-chairman, Arctic Committee, National Committee for the International Geophysical Year Chairman, Advertising Committee, American Geophysical Union |
| 1956 | Consultant, Department of Defense, Washington, D.C. Consultant, National Academy of Sciences, Washington, D.C. |
| 1956-2001 | Senior scientist, National Security Agency |
| 1959-1960 | Consultant, Lincoln Laboratory, Massachusetts Institute of Technology, Lexington, Mass. |
| 1960-1965 | Advanced Research Projects Agency, Washington, D.C. |
| 1965-1968 | Staff scientist, Mitre Corp., Bedford, Mass. |
| 1966-1969 | Consultant, Syracuse University Research Corp., Syracuse, N.Y. |
| 1968-1970 | Staff scientist, Syracuse University Research Corp., Syracuse, N.Y. Consultant, Mitre Corp., Bedford, Mass. |
| 2002, Jan. 11 | Died, Millersville, Md. |

Scope and Content Note

The papers of Nathaniel Charles Gerson (1915-2002) span the years 1928-1998, with the bulk of the items concentrated in the period 1950-1970. The collection focuses on Gerson's career as a research physicist, particularly on his involvement with the International Geophysical Year (1957-1958). The collection consists of four series: General Correspondence, United States National Committee for the International Geophysical Year, Writings, and Subject File. Included in the papers are biographical material, correspondence, drafts and offprints of scientific papers,

memoranda, minutes, notes and equations, reports, research material, rosters, schematics, and miscellaneous material.

The <u>General Correspondence</u> series consists of letters sent and received primarily from family members, friends, colleagues, employers, business suppliers, and professional organizations, such as Mitre Corporation, Syracuse University Research Corporation, American Geophysical Union, National Academy of Sciences, and companies supplying scientific equipment for expeditions. The series also contains correspondence relating to the education of Gerson's children, recommendations for membership in the Cosmos Club, with which Gerson was very involved, and lists of books and serials on physics donated to the library at Brandeis University.

The <u>United States National Committee for the International Geophysical Year</u> series is the largest in the collection. From 1953 to 1957 Gerson served as secretary of both the organization and its executive committee. The series provides information regarding the planning and execution of projects and expeditions undertaken during the International Geophysical Year. Subjects include budget estimates on projects, ballistics research and rocket exploration of the upper atmosphere, expeditions to the Arctic and Antarctica, and cooperative efforts with the Soviet Union.

The <u>Writings</u> series is organized in two parts. Writings by Gerson include drafts and offprints of scientific papers dealing with various aspects in physics. Writings by others represent drafts and offprints by colleagues and associates. Used frequently by Gerson as reference material, these relate to meteorology, geomagnetism, aurora and airglow, ionospheric physics, solar activity, cosmic rays, glaciology, radio propagation, oceanography, rockets and satellites, seismology, and gravity.

The <u>Subject File</u> consists of both personal and professional material. The former includes biographical material and information relating to the Cosmos Club. Files more professional in nature include lists of classified records destroyed, notes and equations on physics, and issues of *RASO*, published by Radio Amateur Scientific Observations, an amateur radio organization cofounded by Gerson to provide general research information.

Arrangement of the Papers

This collection is arranged in four series:

- General Correspondence, 1950-1998
- <u>United States National Committee for the International Geophysical Year, 1928-1961</u>
- Writings, 1940-1998
- Subject File, 1947-1996

Description of Series

Container Series

BOX 1-6 General Correspondence, 1950-1998

Letters sent and received with attached and related material.

Arranged chronologically.

BOX 6-12 United States National Committee for the International Geophysical

Year, 1928-1961

Budget material, correspondence, memoranda, minutes, reports, research

material, rosters, schematics, and miscellaneous material. Arranged by type of material and chronologically therein.

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BOX 13-17 <u>Writings, 1940-1998</u>

Drafts and offprints of scientific papers and articles.

Arranged under authorship by Gerson or by others and chronologically

therein.

BOX 17-18 <u>Subject File, 1947-1996</u>

Biographical material, lists, notes, schematics, and miscellaneous material.

Arranged alphabetically by subject, type of material, or name of individual

or organization and chronologically therein.

Container List

| Container | Contents |
|-----------|---|
| вох 1-6 | General Correspondence, 1950-1998 |
| | Letters sent and received with attached and related material. |
| | Arranged chronologically. |
| вох 1 | 1950-1964 |
| | (9 folders) |
| BOX 1 | 1965 |
| BOX 1 | JanJune |
| | (4 folders) |
| BOX 2 | July-Dec. |
| | (3 folders) |
| BOX 2 | 1966 |
| _ | (9 folders) |
| BOX 2 | 1967 |
| BOX 2 | Jan. |
| вох 3 | FebDec. |
| | (5 folders) |
| вох 3 | 1968 |
| | (7 folders) |
| BOX 4 | 1969-1970 |
| | (11 folders) |
| BOX 4 | 1971 |
| BOX 4 | JanJuly |
| | (2 folders) |
| BOX 5 | AugDec. |
| BOX 5 | 1972-1976 |
| | (11 folders) |
| BOX 5 | 1977 |
| BOX 5 | JanApr. |
| BOX 6 | May-Dec. |
| | (2 folders) |
| BOX 6 | 1978-1979, 1985-1998, undated |
| | (5 folders) |
| вох 6-12 | United States National Committee for the International Geophysical Year, 1928-1961 |
| | Budget material, correspondence, memoranda, minutes, reports, research |
| | material, rosters, schematics, and miscellaneous material. |
| | Arranged by type of material and chronologically therein. |
| вох 6 | Budget, 1954-1958, undated |
| вох 6 | Correspondence, 1948-1958, undated |
| | (4 folders) |
| | |

United States National Committee for the International Geophysical Year, 1928-1961

| Container | Contents |
|-----------|--|
| вох 6 | Memoranda |
| BOX 6 | 1953-1954 |
| вох 6 | 1955 |
| вох 6 | JanMay |
| | (2 folders) |
| BOX 7 | June-Dec. |
| | (6 folders) |
| вох 7 | 1956-1960, undated |
| | (8 folders) |
| вох 8 | Minutes |
| BOX 8 | 1953-1954 |
| 2017 0 | (11 folders) |
| BOX 8 | 1955 |
| BOX 8 | JanFeb. |
| DOX 0 | (4 folders) |
| вох 9 | MarNov. |
| DOX 0 | (14 folders) |
| BOX 10 | Dec. |
| BOX 10 | 1956-1958 |
| BOX 10 | (3 folders) |
| вох 10 | Miscellany, 1953-1961, undated |
| BOX 10 | Reports |
| BOX 10 | 1953-1954 |
| BOX 10 | |
| DOV 11 | (9 folders) 1955-1957 |
| BOX 11 | |
| DOV 10 | (12 folders) |
| BOX 12 | 1958, undated |
| DOV 10 | (10 folders) |
| BOX 12 | Research material, 1928-1946, 1954, undated |
| DOV 10 | (5 folders) Rosters, 1955, undated |
| BOX 12 | |
| BOX 12 | Schematics, 1949, undated |
| вох 13-17 | Writings, 1940-1998 |
| | Drafts and offprints of scientific papers and articles. |
| | Arranged under authorship by Gerson or by others and chronologically |
| | therein. |
| вох 13 | By Gerson |
| вох 13 | Notes and fragments, 1964-1989, undated |
| | (3 folders) |
| вох 13 | Texts |
| BOX 13 | 1945-1968 |
| - | (14 folders) |
| BOX 14 | 1969, 1977, 1984-1987, 1997, undated |
| | (11 folders) |
| BOX 14 | By others |
| - | |

Writings, 1940-1998

| Container | Contents |
|-----------|--|
| | |
| BOX 14 | 1940, 1950-1951 |
| | (3 folders) |
| BOX 15 | 1953-1962 |
| | (14 folders) |
| BOX 16 | 1963-1991 |
| | (13 folders) |
| BOX 17 | 1998, undated |
| | (4 folders) |
| вох 17-18 | Subject File, 1947-1996 |
| | Biographical material, lists, notes, schematics, and miscellaneous material. |
| | Arranged alphabetically by subject, type of material, or name of individual or organization and chronologically therein. |
| вох 17 | Biographical material, 1970, 1989-1996, undated |
| BOX 17 | Cosmos Club, Washington, D.C., 1990 |
| BOX 17 | Destruction of classified records, lists, 1959-1965 |
| | (5 folders) |
| BOX 17 | Miscellany, 1965-1968, 1978, 1995-1996, undated |
| BOX 17 | Physics, notes and equations |
| BOX 17 | 1965-1966 |
| | (3 folders) |
| BOX 18 | 1967-1973, undated |
| | (6 folders) |
| BOX 18 | Radio Amateur Scientific Observations (RASO), 1950-1951 |
| | (2 folders) |
| BOX 18 | Schematics, 1947-1963, undated |
| | (3 folders) |