

# Cornell H. Mayer Papers

## A Finding Aid to the Collection in the Library of Congress

Prepared by Joseph K. Brooks



**Manuscript Division, Library of Congress**

Washington, D.C.

**2013**

Contact information: <http://hdl.loc.gov/loc.mss/mss.contact>

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## Collection Summary

**Title:** Cornell H. Mayer Papers

**Span Dates:** 1940-2005

**Bulk Dates:** (bulk 1943-1990)

**ID No.:** MSS85500

**Creator:** Mayer, Cornell H., 1921-2005

**Extent:** 450 items ; 6 containers plus 2 oversize ; 2.4 linear feet

**Language:** Collection material in English

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

**Abstract:** Electrical engineer and radio astronomer. Scientific notebooks, biographical material, correspondence, topical files, writings, printed matter, scrapbooks, photographs, and miscellaneous material documenting Mayer's career with the Naval Research Laboratory during which he improved radio telescope technology and measured the surface temperatures of Venus and other planets.

## 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.

### People

Mayer, Cornell H., 1921-2005.

### Organizations

Naval Research Laboratory (U.S.)

### Subjects

Planets--Atmospheres.

Radio astronomy.

Radio telescopes.

Scientific expeditions--Alaska--Aleutian Islands.

Scientific expeditions--Sweden.

Solar eclipses.

### Places

Venus (Planet)--Atmosphere.

### Occupations

Astronomers.

Engineers.

## Administrative Information

### Provenance

The papers of Cornell H. Mayer, electrical engineer and radio astronomer, were given to the Library of Congress by his wife, Carey W. Mayer, in 2009. Additional material was transferred from the Naval Research Laboratory in 2010.

### Copyright Status

The status of copyright in the unpublished writings of Cornell H. Mayer is governed by the Copyright Law of the United States (Title 17, U.S.C.).

### Access and Restrictions

The papers of Cornell H. Mayer 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, Cornell H. Mayer Papers, Manuscript Division, Library of Congress, Washington, D.C.

## Biographical Note

<i>Date</i>	<i>Event</i>
1921, Dec. 10	Born, Ossian, Iowa
1943	B.S., State University of Iowa, Iowa City, Iowa
1944-1945	Served in navy, stationed at the Naval Research Laboratory, Washington, D.C.
1945-1947	Electronic engineer, Naval Research Laboratory, Washington, D. C.
1946	Married Carey Whitehead
1947-1956	Electronic scientist, Naval Research Laboratory, Washington, D. C.
1951	Masters degree in electrical engineering, University of Maryland, College Park, Md.
1958	Promoted to supervising electronic scientist, Naval Research Laboratory, and measured the surface temperature of Venus with radio telescope
1959	Collaborated with Charles H. Townes in applying Townes's maser invention to radio astronomy
1970-1980	Head of radio astronomy, Naval Research Laboratory, Washington, D. C.
1980	Retired from Naval Research Laboratory, Washington, D. C.
2005, Nov. 19	Died, Alexandria, Va.

## Scope and Content Note

The papers of Cornell H. Mayer (1921-2005) span the years 1940-2005, with the bulk of the material dated 1943-1990. Mayer was a pioneering radio astronomer working for the Naval Research Laboratory in Washington, D. C., who first measured the surface temperature of the planet Venus in 1958. He determined that Venus had a surface temperature too hot to sustain life on Earth. He installed a maser, a laser forerunner, invented by his collaborator Charles H. Townes on a radio telescope to greatly improve the range and accuracy of the instrument.

Scientific notebooks in the collection document his measuring the surface temperature of Venus and other planets, his efforts toward improving the radio telescope, and other scientific work. Other files include general correspondence, biographical material, printed matter, photographs, and topical files. Some of the topical files document Mayer's participation in expeditions to observe solar eclipses from Attu in the Aleutian Islands of Alaska, and Sweden.

## Arrangement of the Papers

This collection is arranged alphabetically by type of material or subject.

# Container List

<i>Container</i>	<i>Contents</i>
BOX 1	Awards, certificates, and diplomas
BOX 1	Photographs of ceremonies, undated
BOX 1	Miscellany, 1943-1989 <i>See also Oversize</i>
BOX 1	Biographical material
BOX 1	Military service, 1940-1953
BOX 1	Miscellaneous, 1945-1975
BOX 1	Obituaries and tributes, 2005
BOX 1	California Institute of Technology, Pasadena, Calif., visiting professorship, 1963
BOX 1	Education
BOX 1	State University of Iowa, Iowa City, Iowa, 1940-1943
BOX 1	University of Maryland, College Park, Md. 1949
BOX 1	General correspondence, 1955-2005
BOX 1	Miscellany, undated
BOX 2	Naval Research Laboratory, Washington, D. C., 1973, 1998
BOX 2	Newspaper clippings and press releases, 1956-1969
BOX 2	Overhead transparencies, undated
BOX 2	Photographs, 1973, undated <i>See also Oversize</i>
BOX 2	Printed matter, 1954-1990, undated (3 folders)
BOX 2	Professional eloquence course, 1976
BOX 3	Scientific notebooks
BOX 3	1943, May (2 folders)
BOX 3	1949
BOX 4	1952
BOX 4	1954
BOX 4	1956, 1958
BOX 5	Solar eclipses
BOX 5	Attu, Aleutian Islands, Alaska, 1950
BOX 5	Sweden, 1954
BOX 5	Speeches and writings
BOX 5	1954-1962 (5 folders)
BOX 6	1964-1973, 1983, undated (3 folders)
BOX OV 1	Awards, certificates and diplomas
BOX OV 1	Miscellany, 1943-1978 (Container 1)
BOX OV 2	Photographs, 1973, undated (Container 2)