



Smithsonian

*National Museum of American History Kenneth E. Behring Center*

## Guide to the Institute for Advanced Study Computer Project Records

NMAH.AC.0401

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1991

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## Collection Overview

<b>Repository:</b>	Archives Center, National Museum of American History
<b>Title:</b>	Institute for Advanced Study Computer Project Records
<b>Date:</b>	1950-1957.
<b>Identifier:</b>	NMAH.AC.0401
<b>Creator:</b>	Princeton University. Institute for Advanced Study Computer Project
<b>Extent:</b>	0.7 Cubic feet (3 boxes )
<b>Language:</b>	English .
<b>Summary:</b>	Collection documents the Electronic Computer Project, 1950-1957 at the Institute for Advanced Study. The goal of the project was to build a computer that would be a general-purpose postwar tool for various branches of scientific research.

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## Administrative Information

### Acquisition Information

Collection donated by Leon D. Harmon, March 23, 1982.

### Provenance

Transferred to the Archives Center from the Division of Computer, Information & Society (now Division of Medicine and Science) on January 22, 1991.

### Processing Information

This collection was processed by Don Darroch, Archives Center volunteer.

### Preferred Citation

Institute for Advanced Study Computer Project Records, 1950-1957, Archives Center, National Museum of American History.

### Restrictions

Collection is open for research.

### Conditions Governing Use

Collection items available for reproduction, but the Archives Center makes no guarantees concerning copyright restrictions. Other intellectual property rights may apply. Archives Center cost-recovery and use fees may apply when requesting reproductions.

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## Biographical / Historical

This material was generated by participants in the IAS Computer Project, 1950-1957. The Institute for Advanced Study at Princeton, NJ has long been a center of scholarly work in many disciplines of science by noted researchers (e.g. Albert Einstein). The computer project was initiated there in 1946 by John Von

Neumann, a mathematician who had been working on ballistics computations during World War II. He used the first version of the Princeton computer to calculate the results of the thermonuclear reaction of the first H bomb in 1950. In the late 1950s, after Von Neumann's death, the project was terminated. A brief summary of the project and Von Neumann's contribution is found in Chapter 5 of *Who Got Einstein's Office?* by Edward Regis (Addison Wesley Publishing Co., Inc., 1987.)

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## Scope and Contents

The collection includes published reports of the staff of the Electronic Computer Project, monthly progress reports, and reports by individual staff members (sometimes in draft form) on particular problems or pieces of equipment. Numerous drawings of computer components are also included, together with 10 glass photo slides in color of equipment and two slides of personnel (unidentified). A special "computer issue" of *Proceedings of the Institute of Radio Engineers* (published October, 1953) contains 41 papers on technical aspects of computers.

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## Names and Subject Terms

This collection is indexed in the online catalog of the Smithsonian Institution under the following terms:

Subjects:

- Computer programming
- Computer science

Types of Materials:

- Drawings -- 1950-1960
- Journals (accounts)
- Reports

Names:

- National Museum of American History (U.S.). Division of Computers, Information and Society
- von Neumann, John

Places:

- New Jersey
- Princeton (N. J.)

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## Container Listing

Box 1, Folder 1	The Institute for Advanced Study. Electronic Computer Project. 6th Interim Progress Report on the Physical Realization of an Electronic Computing Instrument. Sep 1951.by Charles V.L. Smith.
Box 1, Folder 1	Report of Tests Made on Two Groups of "Round Robin" Williams Storage Tubes at the Institute for Advanced Study. 6 July 1953.
Box 1, Folder 2	The Institute for Advanced Study. Electronic Computer Project. Final Progress Report on the Physical Realization of an Electronic Computing Instrument. (Part I Text). IAS: January 1954.
Box 1, Folder 3	The Institute for Advanced Study. Electronic Computer Project. Final Report on Contract No. DA 36 034 ORD 1023. IAS: April 1954.
Box 1, Folder 4	The Institute for Advanced Study. Electronic Computer Project. Final Report on Contract No. DA 36 034 ORD 1330. IAS: December 1954.
Box 1, Folder 5	The Institute for Advanced Study. Electronic Computer Project. Monthly Progress Report. May 1955. Contract No. DA 36 034 ORD 1646. Project No. TB3 0538
Box 1, Folder 6	Gilchrist, Bruce; Pomerene, J.H.; Wong, S.Y. "Fast Carry Logix for Digital Computers." The Institute for Advanced Study. Electronic Computer Project. Technical Report No. 55 01. July 1955.
Box 1, Folder 7	The Institute for Advanced Study. Electronic Computer Project. Monthly Progress Report. May 1956. Contract No. DA 36 034 ORD 1646. Project No. TB3 0538.
Box 2, Folder 1	The Institute for Advanced Study. Electronic Computer Project. Final Report on Contract No. DA 36 034 ORD 1646. Part I (Engineering). IAS: December 1956.
Box 2, Folder 2	The Institute for Advanced Study. Electronic Computer Project. Final Report on Contract No. DA 36 034 ORD 1646. Part II (Computer Use) for the period from 1 July 1954 to 31 December 1956. IAS: May 1957.
Box 2, Folder 3	Proceedings of the Institute of Radio Engineers, 41: 10 (October, 1953).
Box 2, Folder 4	Sheets, Set of Harmon, L.D. "Remote Control of Vacuum Tube Bistable Toggles", 19 November 1953 / rev April, 1954.
Box 2, Folder 5	Sheets, Set of J.H. Promerane, "Memo to Computer Users," Subject: New Magnetic Drum.
Box 2, Folder 6	Sheets, Set of N.A. Barricelli, "Experiments in Bionumeric Evolution Executed by the Electronic Computers at Princeton, NJ," August, 1953.

Box 2, Folder 7	Drawings, IAS Computer. [Group of 66]
Box 2, Folder 8	Drawings and Listings, IAS Computer. [Group of 75]
Box 2, Folder 9	Drawings of IAS Computer. [1982.0169.07.31 to 1982.0169.07.45]
Box 2, Folder 10	Drawings of IAS Computer. [1982.0169.07.46 to 1982.0169.07.66]
Box 2, Folder 11	Drawings & Listings, IAS Computer External Cabinet and Drum Cabinet Drawings. [1982.0169.08.01 to .15]
Box 2, Folder 12	Drawings & Listings for IAS Computer External Cabinet and, Drum Cabinet Drawings. [1982.0169.08.16 1982.0169.08.40]
Box 2, Folder 13	Drawings & Listings for IAS Computer External Cabinet and Drum Cabinet Drawings. [1982.0169.08.41 to 1982.0169.08.75]
Box 3, Folder 1-12	12 Glass photo slides, 3 1/4" x 4". [1982.0169.1.1 to 1982.0169.1.12]