



Smithsonian

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

## Guide to the Felix P. Caruthers Papers

NMAH.AC.0812

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Undated

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## Collection Overview

<b>Repository:</b>	Archives Center, National Museum of American History
<b>Title:</b>	Felix P. Caruthers Papers
<b>Date:</b>	1952-1984
<b>Identifier:</b>	NMAH.AC.0812
<b>Source:</b>	National Museum of American History (U.S.). Division of Engineering and Industry
<b>Creator:</b>	Caruthers, Felix P.
<b>Extent:</b>	1 Cubic foot (4 boxes)
<b>Language:</b>	English .
<b>Summary:</b>	Papers, mostly technical, relating to Caruthers' development of automated machine tools. The papers include technical reports and notes; schematics for specific inventions including diagrams, graphs, photographs and plans bound together; patents and related correspondence; operators' manuals; copies of papers delivered by Caruthers at engineering events; and assorted trade literature.

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## Administrative Information

### Acquisition Information

Collection transferred by Division of the History of Technology, National Museum of American History, Engineering and Industry Collections.,12th Street and Constitution Avenue, N.W., Washington, D.C. 20560.,Transfer.,ACNMAH 812; Nonacc. No. 2002.3050.

### Ownership and Custodial History

Mr. Caruthers donated the papers to the Museum's Division of Engineering and Industry in 1984.

### Provenance

The collection was transferred to the Archives Center in 2002.

### Processing Information

Collection processed by Don Darroch and Robert Harding, undated.

### Preferred Citation

Felix P. Caruthers Papers, 1952-1984, Archives Center, National Museum of American History.

### Restrictions

Collection is open for research. Register by Robert S. Harding and Don Darroch, 2 pp., available in repository.

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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 Note

Felix P. (Phil) Caruthers was born in Brooklyn, N.Y. (ca. 1915) and took an early interest in radio, constructing his own transmitter at age nine. He continued this interest, obtaining an advanced-class amateur license. After graduating Princeton University (BSEE 1938) Caruthers joined EBASCO Services, specializing in long-distance high-voltage utility systems.

After Pearl Harbor, Caruthers enrolled in a course at Brooklyn Polytechnic Institute specializing in radio wave analysis and pulse techniques which predated radar. When the instructor was called to a government assignment, Caruthers took over his place and completed the course. He then volunteered in the U.S. Navy and was assigned to a program under Sperry Gyroscope Co. which was developing night fighter aircraft and radar. Promoted to the rank of Lieutenant, Caruthers was put in charge of all plants producing this equipment. Later, he was assigned to work on antennas and other components of radar equipment.

On his return to civilian life, Caruthers joined Thomson Equipment Co. as vice president and chief engineer, producing precision machined products and metal toys. Later, the firm's output shifted to machine tools, which Thomson not only manufactured but also designed, introducing new concepts of machine control.

In 1968 Caruthers organized Caruthers & Associates, Inc., consultants to various industrial firms, and also served as Director of Engineering of Industrial Control Equipment for the Bendix Corporation.

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## Scope and Contents

This collection consists largely of bound copies of technical manuals, providing information on automatic machine control equipment, including its operation, servicing and parts. The papers include technical reports and notes; schematics for specific inventions including diagrams, graphs, photographs and plans bound together; patents and related correspondence; operators' manuals; copies of papers delivered by Caruthers at engineering events; and assorted trade literature. Published materials include a book co-authored by Caruthers. A partial personnel history of F. P. Caruthers is included together with his hand-written notebooks.

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## Arrangement

1 series.

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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:

Automation -- 1950-1990  
Inventions -- 1950-2000  
Machine-tool industry

Types of Materials:

- Charts
- Correspondence -- 1950-2000
- Diagrams
- Lectures
- Patents -- 20th century
- Photographs -- 20th century
- Technical notes
- Technical reports

Names:

National Museum of American History (U.S.). Division of Engineering and Industry

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## Container Listing

Box 1, Folder 1	Automatic Machine Control: A Five Generation History of Numerical Control Systems as Conceived and Developed by Felix Porter Caruthers (aka Phil Caruthers) by Caruthers & Associates, Inc., Three Rivers, CA 93271, (bound volume), February 22, 1984
Box 1, Folder 1	Exhibit 2-1 Tape
Box 1, Folder 2	Exhibit 2-16: F.P. Caruthers, Technical Notebook, 1952-1956
Box 1, Folder 3	Exhibit 3-1: Specialmatic, Technical Information; Exhibit 3-3: Photographs; Exhibit 3-7: Publicity (bound volume), 1958-1970
Box 1, Folder 4	Exhibit 3-2: Specialmatic, Schematics for printed circuit boards, specifications, programming, (bound volume), 1961-1963
Box 1, Folder 5	Exhibit 3-4: Specialmatic, Patent Actions and Patents Issued (bound volume), 1957-1967
Box 2, Folder 6	Exhibit 3-5: Specialmatic, Operator's Manual
Box 2, Folder 7	Exhibit 3-6: Automatic Turret Lathe, Parts & Service Manual
Box 2, Folder 8	Exhibit 3.7A: American Machinist: Metalworking Manufacturing(McGraw Hill Publication),, 9/13/65
Box 2, Folder 9	Exhibit 5-1: Bendix, correspondence
Box 2, Folder 9	Exhibit 5-2: Photographs
Box 2, Folder 9	Exhibit 5-3: Publicity (Bound Volume), 1965-1970
Box 2, Folder 10	Exhibit 5-4: Printed Control Board
Box 3, Folder 1	Exhibits 6-1: and 6-2: Hughes, 1969-1970;
Box 3, Folder 2	Exhibit 7-1: Actron (Bound Volume), 1973
Box 3, Folder 3	Exhibits 10-1 to 10-14: Published Papers, Presentations, Editorials and Documents, 1960-1973
Box 3, Folder 4	Exhibit 10-15: Adaptive Control Systems, Editors, F.P. Caruthers and H. Levenstein Published by MacMillan Co, 1963
Box 3	Correspondence, 1969-1991

Box 4

Unidentified Material