

Guide to the Collection of Fairchild Semiconductor employee papers

Dates: 1959-1988, bulk 1959-1977 **Extent:** 1.8 linear feet, 2 record boxes

Collection numbers: X4348.2008; X4172.2008; X4359.2008;

X4380.2008; X4324.2008

Accession number: 102708013

Processed by: Sara Chabino Lott 2008. Processing funded by a grant

from the Gordon and Betty Moore Foundation.

Abstract

The Collection of Fairchild Semiconductor employee papers contains professional papers of early Fairchild Semiconductor employees Geri Hadley, Hazel White, Robert K. Waits and Lars Lunn. The collection does not contain any official corporate records of the company. The collection spans 1958 through 1988 with approximately half the collection comprised of newsletters and another quarter of the collection marketing brochures. The remainder of the collection consists of annual reports, advertisements, memoranda, articles, graphs, and a very small number of photographs.

Administrative Information

Access Restrictions

The collection is open for research.

Publication Rights

The Computer History Museum (CHM) can only claim physical ownership of the collection. Users are responsible for satisfying any claims of the copyright holder. Permission to copy or publish any portion of the Computer History Museum's collection must be given by the Computer History Museum.

Preferred Citation

[Identification of Item], [Date], Collection of Fairchild Semiconductor employee papers, Lot number, Box [#], Folder [#], Computer History Museum

Provenance

The papers that make up the Collection of Fairchild Semiconductor employee papers were donated to the Computer History Museum by Geri Hadley in May of 2007, Hazel White in July of 2007, Robert K. Waits in October of 2007 and Lars Lunn in October of 2007. The papers were collected individually during each person's time as an employee of Fairchild Semiconductor and maintained by each person until their donation.

Repository

Computer History Museum 1401 N. Shoreline Blvd. Mountain View, CA 94043 USA 650-810-1010 www.computerhistory.org

Biographical and Administrative History

Fairchild Semiconductor was founded in 1957 by Julius Blank, Victor Grinich, Jean Hoerni, Eugene Kleiner, Jay Last, Gordon Moore, Robert Noyce, and Sheldon Roberts with funding from New York based Fairchild Camera and Instrument Corporation (FCIC). These young scientists involved in solid-state electronics had developed a method of mass-producing silicon transistors using a double diffusion technique and a chemical etching system called the "mesa" process. FCIC provided the necessary backing for the groups' project and the development and production of silicon diffused transistors and other semiconductor devices began.

Fairchild Semiconductor became a wholly-owned subsidiary of FCIC in 1959 and in 1961 became the Semiconductor Division. In 1959, Fairchild Semiconductor announced the development of the patented Planar process for semiconductor device manufacturing. The Planar process paved the way for such technological advances as the integrated circuit. In 1961 Fairchild introduced the world's first monolithic integrated circuit and in 1971 the isoplanar process for semiconductor manufacturing.

In 1979 Schlumberger Limited purchased Fairchild Semiconductor as a diversification move, but sold the assets to National Semiconductor Corporation (NSC) in 1987. In 1997 NSC divested a number of mature products to executives at Fairchild Semiconductor's former South Portland, Maine facility and the "new" Fairchild Semiconductor became a publicly traded company once again.

For a more detailed account of the history of Fairchild Semiconductor see the recommended readings in the bibliography.

Geri Hadley began working as a secretary at Fairchild Semiconductor in 1965. She soon moved into Marketing and Marketing Services/Communications, where she became Marketing Communications Manager. Hadley left Fairchild in 1981.

Hazel White began working at Fairchild Semiconductor in 1959. White worked in the Gate Array Division as an Assistant Engineer until 1987.

Robert K. Waits worked in the Exploratory Devices Section of the Device Physics and Development Department in Research and Development at Fairchild Semiconductor from 1960 to 1973.

Lars Lunn was employee #29 at Fairchild Semiconductor where he worked from 1958 until 1961. Lunn was an engineer in the crystal growing section of Research and Development and grew some of the first silicon ingots used by the company.

Scope and Content of the Collection

The Collection of Fairchild Semiconductor employee papers contains material from employees of Fairchild Semiconductor's Mountain View, California facility. The collection spans 1959 through 1988 with the bulk of the collection being from 1959 to1977. Approximately half of the collection is comprised of Fairchild Camera and Instrument Corporation (FCIC) and Fairchild Semiconductor employee newsletters *Leadwire, Microwire, Horizons* and *Views* as well as some smaller division specific newsletters. The collection also contains technical product and process brochures and a small amount of annual reports. Items of interest include a nearly complete run of Don C. Hoefler's *Microelectronics News* from January 1979 to May 1981, Fairchild Semiconductor National Sales Conference souvenir yearbooks and proofs of "Made in Fairchild" advertisements. The collection is arranged in 4 series:

Series 1: Geri Hadley papers, 1959-1986, bulk 1965-1977

Series 2: Hazel White newsletters, 1959-circa 1988

Series 3: Robert K. Waits papers, circa 1965-circa 1973

Series 4: Lars Lunn papers, circa 1958-1959

Unless otherwise noted dates are inclusive. Unless otherwise noted the original order of the papers has been maintained.

Indexing Terms

Fairchild (Firm)
Fairchild Camera and Instrument Corporation
Integrated circuits
Semiconductor industry
Hadley, Geri
White, Hazel
Waits, Robert K.
Lunn, Lars

Separated Material

Monographs that were moved to the library from the Geri Hadley papers: Kvamme, E. Floyd, and L. H. Bieler. *Fairchild Semiconductor Integrated Circuits*. Mountain View, Calif: Fairchild Semiconductor, 1966.

Processing Note

The decision was made to combine these separate donations into one collection to facilitate researcher's access to Fairchild Semiconductor material. It was also decided that the series arrangement would be by donor, rather than function, so that the provenance of the donations would remain distinct. Duplicates of printed material across donations have been weeded.

Bibliography

- Berlin, Leslie. *The man behind the microchip: Robert Noyce and the invention of Silicon Valley*: Oxford: Oxford University Press, 2005.
- Lécuyer, Christophe. *Making Silicon Valley: innovation and the growth of high tech*, 1930-1970. Cambridge, Mass: MIT Press, 2006.
- Lojek, Bo. History of semiconductor engineering. New York: Springer, 2006.
- Reid, T. R. The Chip: How Two Americans Invented the Microchip and Launched a Revolution. New York: Random House, 2001.
- Riordan, Michael, and Lillian Hoddeson. *Crystal Fire: The Birth of the Information Age.* New York: Norton, 1997.

Related Collections at CHM

Lot X4017.2007 Gift of Henry Mahler. unprocessed Lot X4360.2008 Steve Allen photographs of Fairchild Semiconductor

Related Collections at Other Repositories

- Bruce E. Deal papers, 1958-1987. Stanford University. Libraries. Dept. of Special Collections: M1051.
- Rob Walker Papers, 1959-2005. Stanford University. Libraries. Dept. of Special Collections: M0742.
- The Robert Noyce papers, ca. 1948-1990. Stanford University. Libraries. Dept. of Special Collections: M1490.
- Technical reports and progress reports, 1965-1987. Stanford University. Libraries. Dept. of Special Collections: M1055.

Collection Contents

Series 1, Geri Hadley papers, 1959-1986, bulk 1965-1977

This series contains FCIC and Fairchild Semiconductor employee newsletters, annual reports, advertisements, technical brochures, sales conference yearbooks, and memoranda that Hadley deemed interesting. This series is arranged in 3 subseries:

Subseries 1.1, Newsletters Subseries 1.2, Other printed Subseries 1.3, Memoranda

Newsletters, 1966-1986

This subseries contains the FCIC employee newsletters *Horizons* and *Views* and the Fairchild Semiconductor employee newsletters *Leadwire* and *Microwire*, as well as some individual division's newsletters. Also included is an incomplete run of Don C. Hoefler's *Microelectronics News with Managers Casebook* from 1979 through 1981. This subseries is arranged in 6 sub-subseries:

Sub-subseries 1.11, Microwire Sub-subseries 1.12, Leadwire Sub-subseries 1.13, Views Sub-subseries 1.14, Horizons Sub-subseries 1.15, Other Sub-subseries 1.16, Microelectronics News

Sub-subseries 1.11, Microwire, 1968-1975 8 folders

This subseries contains an incomplete run of *Microwire*. *Microwire* was published by and for the employees of Fairchild Semiconductor in Mountain View, Palo Alto, and Sunnyvale, CA. Microwire was published twice a month until late 1974 when it switched to a monthly publication schedule. It was previously called *Leadwire News Supplement*, included in this subseries. *Microwire* contains short articles and announcements about featured employees, promotions, awards, parties, picnics, company sponsored sports teams, open houses and classifieds. *Microwire* is similar in content to Leadwire, but had a smaller distribution. This subseries is arranged chronologically.

Sub-subseries 1.12, Leadwire, 1966-1970 2 folders

This subseries contains an incomplete run of *Leadwire*. *Leadwire* was published by and for the employees of Fairchild Semiconductor around the world. *Leadwire* started as a single bi-fold sheet of

paper and evolved into a glossy magazine style newsletter. Leadwire was published monthly until 1970 when it moved to a bimonthly publication schedule. It contains short articles and announcements about promotions, awards, anniversaries, company sponsored sports teams, open houses and other human interest topics. See also Series 2 Hazel White papers for additional issues. This subseries is arranged chronologically.

Sub-subseries 1.13, Views, 1969-1970 2 folders

This subseries contains an incomplete run of *Views. Views* was published for the employees of FCIC and its divisions and subsidiaries. *Views* began as a monthly newspaper and evolved into a bi-monthly newsletter by 1970. *Views*' focus was keeping employees informed of management's thinking and the company's direction. It contains interviews with executives, profiles of managers, somewhat in-depth articles about important events shaping the company, whether internal or external, and announcements about service awards and personnel changes. It had fewer locally specific news items than *Microwire* or *Leadwire*. This subseries is arranged chronologically.

Sub-subseries 1.14, Horizons, 1972-1986 1 folder

This subseries contains an incomplete run of *Horizons*. *Horizons* was published for the employees of FCIC. Horizons began as a bimonthly newsletter and evolved into a quarterly glossy magazine. *Horizons* is similar in content to *Views*, but was intended to supplement other corporate employee communications by giving a broader view of the company as well as a digest of the events affecting employees. In addition to articles about the direction of FCIC it sponsored photo contests and showcased employee hobbies. See also Series 2 Hazel White papers for additional issues. This subseries is arranged chronologically.

Sub-subseries 1.15, Other, 1969-1976, bulk 1970 1 folder

This subseries contains miscellaneous newsletters from FCIC divisions around the United States. Included are three issues of *Progress: Fairchild Journal of Semiconductor*. This subseries is arranged alphabetically by newsletter title.

Sub-subseries 1.16, Microelectronics News, Jan. 1979-May 1981

6 folders

This subseries contains an incomplete run of the weekly newsletter *Don C. Hoefler's Microelectronic News* about developments in the field of corporate microelectronics. Most issues include "Manager's Case Book," an editorial on various business and economic topics. Hoefler is sometimes credited with coining the term "Silicon Valley." This subseries is arranged chronologically.

Subseries 1.2, Other printed, 1958-1988, bulk 1966-1970 8 folders

This subseries contains FCIC and Schlumberger annual reports. Reports for the years 1963, 1966-1967, 1969-1976, and 1978-1979 are missing. See Series 2 Hazel White papers for 1976, 1978 and 1984 annual reports. Also in this series are souvenir yearbooks from Fairchild Semiconductor's national salesman's conferences held in tropical vacation spots. The yearbooks contain black and white captioned photographs and are valuable for their candid photographs of salesman at work and at play. Also in this subseries are proofs from the "Made in Fairchild" advertising campaign from about 1970 and technical product and process brochures published by Fairchild Instrumentation and Fairchild Semiconductor and an invitation to the 1988 "Thank you Fairchild" gala. This subseries is arranged alphabetically by function and chronologically within function.

Subseries 1.3, **Memoranda, 1959-1987, bulk 1968-1980** 1 folder

This subseries contains memoranda that were originally housed in a folder labeled "memorable memos." The memoranda are incoming, primarily copies, to all employees, operational vice presidents/executive staff, and some individuals. Topics include the organizational structure of Fairchild Semiconductor and personnel announcements. Included is one memo from Robert Noyce and a photocopy of a handwritten memo from Les Hogan. It is unclear how Hadley came to possess memoranda that were not addressed to her. This subseries is unarranged.

Series 2, Hazel White newsletters, 1959-circa 1988

This series contains Fairchild Semiconductor and FCIC newsletters and some other printed material such as annual reports and brochures. This series is arranged in 4 subseries:

Subseries 2.1, Leadwire Subseries 2.2, Horizons Subseries 2.3. Other

Subseries 2.4, Other printed

Subseries 2.1, Leadwire, 1959-1970

4 folders

See Series 1 Geri Hadley papers, subseries 1.12 for a description of *Leadwire* and additional issues. This subseries is arranged chronologically.

Subseries 2.2, Horizons, 1973-1986

5 folders

See Series 1 Geri Hadley papers, subseries 1.14 for a description of *Horizons* and additional issues. This subseries is arranged chronologically.

Subseries 2.3, Other, 1978-1986

5 folders

This subseries contains regional and division specific newsletters such as *Pacific Circuit* for West Coast employees of FCIC, *Data Bits* for the employees of Component Test Systems of San Jose, CA and *Bear Facts* for bipolar employees. Most runs are short and do not cover more than two years. This subseries is arranged alphabetically by newsletter title.

Subseries 2.4, Other printed, circa 1975-1984 2 folders

This subseries contains miscellaneous FCIC and Schlumberger annual reports and Fairchild Semiconductor and FCIC brochures. This subseries is arranged alphabetically by function.

Series 3, Robert K. Waits papers, circa 1965-circa 1973

This series contains articles written by Waits, brochures, organizational charts, clippings, and a few photographs. One item of interest is a paper from a Fairchild Semiconductor micrologic familiarization program designed for sales personnel. This series is arranged in 3 subseries:

Subseries 3.1, Printed

Subseries 3.2, Photographs

Subseries 3.3, Miscellaneous unprinted

Subseries 3.1, Printed, 1959-1977

5 folders

This subseries contains reprints of technical articles written by Waits, a preprint of a book chapter by Gordon Moore, technical process and

product brochures and promotional brochures from FCIC and Fairchild Semiconductor, including a recruitment brochure and a *Welcome to Fairchild* brochure for new employees at the Mountain View, CA plant. Found with the brochures are two memos from Gordon Moore. This subseries also includes clippings about the financial state of FCIC, two shareholder meeting reports and a few miscellaneous Fairchild Semiconductor newsletters. This subseries is arranged alphabetically by function.

Subseries 3.2, Photographs, circa 1960-circa 1975 1 folder

This subseries contains a photograph of a Fairchild hybrid circuit for a Medtronics heart pacer, a photograph of a poster illustrating "improved thin film resistors for radiation environments" and an unidentified photograph of a device.

Subseries 3.3, Miscellaneous unprinted, 1969-1971 3 folders

This subseries contains handwritten research & development organizational charts with related memoranda and newsletters and a paper used in a micrologic familiarization program to help sales personnel by giving them a general understanding of digital computers and their terminology. There is also a set of graphs illustrating different relationships in silicon. This subseries is arranged alphabetically by folder title.

Series 4, Lars Lunn papers, circa 1958-1959 3 folders

This series contains graphs used in processing operations, early Fairchild Semiconductor brochures and a photograph of Lunn growing crystals at Fairchild Semiconductor. This series is arranged alphabetically by function.

<u>Box</u>	Folder Number	<u>Title</u>	<u>Date</u>					
Folder List								
Geri Hadley papers; Newsletters; Microwire								
1	102710143	Microwire	1968-03-1968-11					
1	102710144	Microwire	1969-01-1969-11					
1	102710145	Microwire	1970-10-1970-11					
1	102710146	Microwire	1971-01-1971-12					
1	102710147	Microwire	1972-01-1972-12					
1	102710148	Microwire	1973-02-1973-12					
1	102710149	Microwire	1974-01-1974-06					
1	102710150	Microwire	1975-01-1975-10					
Geri Hadley papers; Newsletters; Leadwire								
1	102710151	Leadwire	1966-1968					
1	102710152	Leadwire	1968-1970					
	Ge	eri Hadley papers; Newsletters; Views						
1	102710153	Views	1969					
1	102710154	Views	1969-1970					
	Ger	i Hadley papers; Newsletters; Horizons						
1	102710155	Horizons	1972-1986					
•	102110100	1161126116	1072 1000					
	G	eri Hadley papers; Newsletters; Other						
1	102710156	Miscellaneous newsletters	1969-1976					
Geri Hadley papers; Newsletters; Microelectronics News								
1	102723956	Microelectronics News	1973-01-27					
1	102710157	Microelectronics News	1979-01-1979-12					
1	102710158	Microelectronics News	1980-01-1980-12					
1	102710159	Microelectronics News	1981-01-1981-09					
	Geri Hadley papers; Other printed							
1	102685644	Fairchild, Sherman giving a speech	1950 ca.					
1	102710160	Annual reports	1958-1961					
1	102710165	Brochures	1961-1988					
1	102710161	Annual reports	1962-1968					
1	102710163	Yearbooks from national sales conferences	1964-1974					
1	102710164	Advertisements from the Made in Fairchild	ca. 1970					
1	102710162	campaign Annual reports	1977-1980					
Computer History Museum 10								

	<u>Date</u>						
Geri Hadley papers; Memoranda							
1 102710166 Memoranda	1959-1987						
Hazel White newsletters; Leadwire							
2 102710167 Leadwire	1959-10-1961-12						
2 102710168 Leadwire	1962-02-1963-12						
2 102710169 Leadwire	1964-01-1965-11						
2 102710170 Leadwire	1966-02-1970-03						
Hazel White newsletters; Horizons							
2 102710171 Horizons	1973-09 - 1976-08						
2 102710172 Horizons	1976-09 - 1977						
2 102710173 Horizons	1977-1979						
2 102710174 Horizons	1980-1982						
2 102710175 Horizons	1982-1987						
Hazel White newsletters; Other							
2 102710176 Bear facts: a newsletter by and for bipolar	1981-1982						
employees	4000						
2 102710177 Circuit writer	1983						
2 102710178 Data bits	1982-1983						
2 102710179 Gatorator	1985-1986						
2 102710180 Pacific circuit	1978-1980						
Hazel White newsletters; Other printed							
2 102710181 Annual reports	1976; 1978-1984						
2 102710182 Brochures	ca. 1975-ca.1982						
Robert K. Waits papers; Printed							
2 102710183 Articles by Robert K. Waits	1966-1971						
2 102710185 Clippings	1969-1973						
2 102710184 Fairchild brochures	1959-1977						
2 102710186 Preprint of Semiconductor integrated circui	its to 1962						
be published as chapter 5 of Principles of microelectronic engineering							
Robert K. Waits papers; Photographs							
2 102710187 Hybrid circuit	ca. 1960-ca.1975						

<u>Box</u>	Folder Number	<u>Title</u>	<u>Date</u>			
Robert K. Waits papers; Miscellaneous unprinted						
2	102710188	Graphs	ca. 1965			
2	102710189	Micrologic familiarization for sales personnel	ca. 1965			
2	102710190	Organizational charts	1969-1971			
Lars Lunn papers						
2	102710191	Brochures	1958-1959			
2	102710192	Graphs used in processing operations	ca. 1958			
2	102710193	Photograph of Lars Lunn growing crystals	1958-02			