RCA Astro-Electronics Division records

70

Finding aid prepared by Daniel Michelson and Kenneth Cleary, 2016..

Last updated on April 07, 2017.

Manuscripts and Archives Department

Table of Contents

Summary Information

Repository	Hagley Museum and Library: Manuscripts and Archives Department
Creator	RCA Corporation. Astro-Electronics Division.
Title	RCA Astro-Electronics Division records
Call number	70
Date	1910-1993
Extent	4.25 linear feet
General Physical Description (AVD portion only)	(AVD portion only) 32 photographic prints : color ; 8 x 10 in and larger. 50 photographic prints : b&w ; 8 x 10 in. 1 photographic print : b&w ; 5 x 7 in. 6 photographic prints : color ; 8 x 8 in. 13 photographic prints : b&w ; 4 x 5 in. and smaller. 234 photographic slides : color ; 35 mm.
Language	English
Abstract	The RCA Astro-Electronics Division (AED) led RCA's research and development efforts in space technology from the beginning of the space race to the acquisition of RCA by GE in 1986. The records consist primarily of the papers of scientists Bert Sheffield, Max Mesner, and Charles Vose documenting RCA's pioneering research. In addition, the Art Gompper Astro Print Shop collection provides insight into the administrative and promotional side of AED.

Biography/History

The RCA Astro-Electronics Division (AED) led RCA's research and development efforts in space technology from the beginning of the space race to the acquisition of RCA by GE in 1986.

Public dismay over the Soviet launch of Sputnik in October 1957 and the embarrassing failure of America's first satellite launch in December prompted the federal government to pour funding into spacecraft development. In April 1958, President Eisenhower proposed the creation of the National Aeronautics and Space Administration (NASA), which became operational in October.

By this time RCA was already deeply involved in space research. Its first ad hoc space research team was formed in 1957 out of scientists and engineers from the Advanced Technology Laboratories in Camden and RCA Laboratories. In March 1958, RCA established Astro Electronic Products (AEP) as a division of RCA Defense Electronic Products.

AEP, which was soon renamed the Astro-Electronics Division (AED), was initially housed at the David Sarnoff Research Center, but moved to new facilities nearby later in the year. The facility was also referred to as the RCA Space Center.

On December 18, 1958, RCA's first satellite was successfully launched from Cape Canaveral. Called SCORE (Signal Communications by Orbiting Relay Equipment), it was the world's first communications satellite. In line with RCA's expertise in communications, AED designed and built dozens of communications satellites over the next few decades.

AED was best known for its pioneering and highly successful series of weather satellites, beginning with TIROS I in April 1960. Nine more followed within the next five years, with a total of twenty-seven reached in July 1976. The TIROS program, by then run by Lockheed Martin, ended with the launch of the 43rd satellite (NOAA-19) in 2009.

RCA was also an important subcontractor on larger projects, including the cameras for the Ranger lunar probes, communications equipment for the Viking Mars probes, and various subsystems for the Space Shuttle program. However, the proudest achievement for many RCA scientists was their participation in developing cameras and other equipment for the Apollo program, especially the lunar module.

After GE acquired RCA in 1986, it combined AED with the Spacecraft Operations of its Space Systems Division to form the GE Astro Space Division. The entire division was sold to Martin Marietta in 1993, which in turn merged with Lockheed to form Lockheed Martin in 1995. Soon after the merger, Lockheed Martin announced that they would be closing the former AED facility. In 1998, forty years after its establishment, the RCA Space Center shut down for good.

Scope and Contents

The RCA Astro-Electronics Division (AED) records consist primarily of the papers of scientists Bert Sheffield, Max Mesner, and Charles Vose documenting RCA's pioneering space research. In addition, the Art Gompper Astro Print Shop collection provides insight into the administrative and promotional side of AED.

Arrangement

The RCA Astro-Electronics Division records are arranged in five series:

I. Art Gompper Astro Print Shop collection

II. Max H. Mesner papers

III. Bert Sheffield papers

IV. Charles H. Vose papers

V. General

Files are arranged alphabetically.

Administrative Information

Manuscripts and Archives Department
Finding aid prepared by Daniel Michelson and Kenneth Cleary, 2016..

Sponsor

The collection was processed with support from the Council on Library and Information Resources (CLIR) Cataloging Hidden Special Collections and Archives grant.

Access Restrictions

This collection is open for research.

This collection contains material from the Manuscripts and Archives Department (M&A) and the Audiovisual Collections and Digital Initiatives Department (AVD). Box prefixes indicate which department holds an individual file or item.

Provenance

In 2009, along with the rest of the archival collections of the David Sarnoff Library, the RCA Astro-Electronics Division records were donated to the Hagley Museum and Library.

Related Materials

Related Material

The RCA Astro-Electronics Division records are part of the David Sarnoff Library collection (Accession 2464). The collection includes nineteen other finding aids:

Consumer electronics history collection (Accession 2464.79), Manuscripts and Archives Department, Hagley Museum and Library.

David Sarnoff Library records (Accession 2464.73), Manuscripts and Archives Department and Audiovisual Collections and Digital Initiatives Department, Hagley Museum and Library.

David Sarnoff Research Center records (Accession 2464.09), Manuscripts and Archives Department and Audiovisual Collections and Digital Initiatives Department, Hagley Museum and Library.

Charles B. Jennings photographs, scrapbook boards, and other materials (Accession 2464.21), Manuscripts and Archives Department and Audiovisual Collections and Digital Initiatives Department, Hagley Museum and Library.

Alexander Magoun advertising collection (Accession 2464.81), Manuscripts and Archives Department, Hagley Museum and Library.

Marconi Wireless Telegraph Company of America engineering drawings (Accession 2464.83), Manuscripts and Archives Department, Hagley Museum and Library.

RCA Camden records (Accession 2464.76), Manuscripts and Archives Department and Audiovisual Collections and Digital Initiatives Department, Hagley Museum and Library.

RCA Corporation collection of television and company history photographs and audiovisual material (Accession 2464.78), Audiovisual Collections and Digital Initiatives Department, Hagley Museum and Library.

RCA Harrison records (Accession 2464.71), Manuscripts and Archives Department and Audiovisual Collections and Digital Initiatives Department, Hagley Museum and Library.

RCA Missile and Surface Radar Division photographs (Accession 2464.31), Audiovisual Collections and Digital Initiatives Department, Hagley Museum and Library.

RCA News and Information Department photographs (Accession 2464.68), Audiovisual Collections and Digital Initiatives Department, Hagley Museum and Library.

RCA product information (Accession 2464.77), Manuscripts and Archives Department, Hagley Museum and Library.

RCA publications (Accession 2464.82), Manuscripts and Archives Department, Hagley Museum and Library.

RCA Solid State Division records (Accession 2464.75), Manuscripts and Archives Department and Audiovisual Collections and Digital Initiatives Department, Hagley Museum and Library.

RCA technical reports (Accession 2464.69), Manuscripts and Archives Department, Hagley Museum and Library.

RCA/Thomson Lancaster records (Accession 2464.74), Manuscripts and Archives Department and Audiovisual Collections and Digital Initiatives Department, Hagley Museum and Library.

Records of other RCA divisions (Accession 2464.80), Manuscripts and Archives Department and Audiovisual Collections and Digital Initiatives Department, Hagley Museum and Library.

David Sarnoff papers (Accession 2464.55), Manuscripts and Archives Department and Audiovisual Collections and Digital Initiatives Department, Hagley Museum and Library.

Robert W. Sarnoff papers (Accession 2464.04), Manuscripts and Archives Department and Audiovisual Collections and Digital Initiatives Department, Hagley Museum and Library.

Collection Inventory

I.. Art Gompper Astro Print Shop collection, 1962-1989.

Historical Note

Arthur H. Gompper (1930-2009) began his career with the Astro Print Shop (established 1958) in 1961, retiring in 1991 as Printshop Leader.

Scope and Content

The files contain print samples of newsletters, employee stationary, company forms, award certificates, packaging and promotional materials, as well as *RCA Family*, an employee magazine. Thank you letters compliment numerous printing jobs. Mr. Gompper received several awards during his employment with RCA, including assisting man to walk on the moon.

Provenance

Donated to the David Sarnoff Library by Art Gompper in 2005.

Processing Notes

Processed by Marsha Mills, 2015.

	Box	Folder
Awards, 1965-1984, undated.	M&A 869	1
Congratulatory/Recognition letters, 1965-1989.	M&A 869	2
Printing Week, 1971-1972.	M&A 869	3
Publications - *AED style guide for writers and editors*, 1967 April 15.	M&A 869	4
Publications - *Astro Orbiter*, 1982 March - 1986 Fall.	M&A 869	5-6

Publications - *Astro: RCA special board grant request*, 1983 November 7.	M&A 869	7
Publications - *Astro: satellites and space systems*, 1984.	M&A 869	7
Publications - Newsletters, photocopies, 1963-1988.	M&A 869	8
Publications - *RCA Family*, 1962-1973.	M&A 869	9-14
Publications - *Technical communications. Section I: TPA guide*, undated.	M&A 869	15
Scrapbook, 1966-1987, undated. **Scope and Content** Includes print job samples: Employee business cards, stationery, and benefits materials. Christmas party menus, profit and loss charts, NASA and space program promotional material. Blank awards, manuals, and parts instructions.	M&A 869	16-21

II.. Max H. Mesner papers, 1960-1979. .

Historical Note

Max H. Mesner (1912–2004) received a B.S.E.E. degree from the University of Missouri in 1940. That same year he joined the RCA Manufacturing Company in Camden, N.J. as a radio engineer assigned to airborne radar equipment. In 1942 he went with the RCA Laboratories to Princeton, N.J. and there did research and development work on television cameras, studio equipment, color TV receivers, and computer storage devices. Joining RCA's Astro-Electronic Products Division upon its formation, he was engaged in the development and design of TV cameras for satellite use, and became the project engineer in charge of TV camera design for weather satellites. He later became Manager, Spacecraft Electronics.

He was responsible for the TV camera systems on TIROS (Television and Infrared Observation Satellite) the world's first meteorological satellite launched by NASA on April 1, 1960. He also directed

development of miniaturized cameras for Nimbus, Ranger, Apollo, Tigris satellites and the Orbiting Astronomical Observatory. He was granted 14 patents.

Scope and Content

The Mesner papers include publications by Mesner, clippings, photographs, and ephemera relating to his time at RCA Astro-Electronics.

Twenty-eight of Mesner's lab notebooks (1940-1958) from his time at RCA Laboratories can be found in Record group 26 of the David Sarnoff Research Center records (2464.09).

Provenance

Donated to the David Sarnoff Library by Max H. Mesner in 2001.

Processing Notes

Processed by Rainer Naus, April 2015.

	Box	Folder
Artifacts, circa 1965-circa 1971.	M&A 14	10
Articles by M.H. Mesner in the *Journal of the Society of Motion Picture and Television Engineers (SMPTE)*, 1960-1970.	M&A 14	11
Publication pages on a weather satellite and electronics; NASA invitation at the gift of a TIROS Satellite to the Smithsonian Institution; newspaper articles on the Ranger satellite and Dr Vladimir Zworykin; RCA 25th Anniversary Laboratory Tour outline; space flight cameras count from RCA and others; TIROS VII 4th Anniversary event handout; illustration of Apollo Soyuz; 15th Anniversary of NASA photo collage, 1960-1970.	M&A 14	12
Publications from and articles by Mesner, 1960-1974.	M&A 14	13
Sarnoff publicity and articles about satellite TV cameras; press release regarding discussion by President Mobutu and Robert Sarnoff on Electronic Technology; American Institute of Aeronautics and	M&A 14	14

Astronautics Executive Subcommittee meeting agenda; and RCA VideoDisc Player brochure, 1965-1979.		
"TIROS - A Story of Achievement," Astro-Electronics Division Booklet, AED P-5167 A, 1964.	M&A 14	15
Video Recording photographs, circa 1960s. .	AVD1	13

III.. Bert Sheffield papers, 1910-1993. .

Historical Note

Berthold Sheffield was born in 1910 in Heilbronn, Germany. He, his brother and his parents immigrated to the United States in 1923, where, influenced by the works of German physicist Heinrich Hertz and Italian physicist Guglielmo Marconi, Bert's interest in technology grew. At the age of 19 Sheffield won a 5 1/2 month scholarship at the Radio Institute of America, presented in person by David Sarnoff, Vice President of RCA. The award was granted because of Sheffield's proficiency as a telegrapher. In 1937 Sheffield received a diploma from the RCA Institute in Communications Engineering and went to work for RCA at Rocky Point, New York. From 1937 through 1941 he worked as an engineer for RCA Communications and supervised operations of high powered radio transmissions, including those used for international communications. He received a Bachelor of Electrical Engineering from the Polytechnic Institute of Brooklyn in 1950. While assigned to the RCA International Division, he developed the first centralized traffic control system for a railroad using radio to operate the railroad's signals and switches in Venezuela.

Sheffield closed out his career at the RCA Astro-Electronics Division, working on engineering and development of earth environmental satellite systems. He retired in 1973 after 36 years at RCA. Sheffield subsequently consulted for several companies in computer electronics and telecommunications, including MCI, RCA, and Western Union. Because of his knowledge of computer engineering and telecommunications, Sheffield was elected a Fellow in the Institute of Electrical and Electronics Engineers (IEEE). He passed away in 2005.

Scope and Content

The papers of Bert Sheffield document his life and work to advance the science of electronics, specifically relating to computer engineering and telecommunications. It includes internal correspondence, performance data and notes, journal articles and reprints, meeting notes, product catalogs and RCA employee benefits policies.

Arrangement

The Bert Sheffield papers consist of four subseries:

A. Communications

B. Computer notebook

C. Consulting

D. General

Files are arranged alphabetically.

Provenance

Donated to the David Sarnoff Library by Bert Sheffield in 2005.

Processing Notes

Processed by David Burdash and Daniel Michelson, 2014-2015.

A.. Communications, 1936-1975.

Scope and Content

This series consists of information regarding the evolution of traditional means of communications to the development of satellite communications.

	Box	Folder
Antennas, 1944 - 1949.	M&A 12	1
Baseband signal to noise ratio in FM system, 1956.	M&A 12	2

A.. Communications

"A Calculator for Satellite Ground Tracks" by F.S. Nyland, 1965 June.	M&A 12	3
Channel signal to noise ratio and FM improvement threshold, 1956.	M&A 12	4
Computer programs for analyzing common communications problems, 1967 November 6.	M&A 12	5
Correspondence from H.E. Goldstein to Sheffield about an attenuation of coaxial cable, 1955 February 24.	M&A 12	6
CW20-AW 120 channel equipment, 1958 November 10.	M&A 12	7
"DB Calculations Made Easy" from *Radio Maintenance* by Berthold Sheffield, 1948 April.	M&A 12	8
"Demolition Threshold Performance and error rates in angle modulated digital signals" by J. Klapper, 1966 June.	M&A 12	9
Department of Defense pricing guide, 1965.	M&A 12	10
Disc recording and microgroove recording, 1944 - 1951.	M&A 12	11
Dividing networks (between high frequency and low frequency networks), 1945 - 1948.	M&A 12	12
Electro acoustics course, 1939 February.	M&A 12	13
"The Electron Art" by Bert Sheffield, undated.	M&A 12	14
Filter Design and Evaluation by Grant E. Hansell, 1969.	M&A 12	15
"Filter Design Simplified" by Berthold Sheffield (reprint from *Audio Engineering*), 1951 March.	M&A 12	16

A.. Communications

"Final Report for the High Data Rate Storage System (Engineering Models EM-1 and EM-2)" by RCA Astro Electronics, 1967.	M&A 12	17
"Final Report for the Nimbus-D High Data Rate Storage System" by RCA Defense Electronic Products for the Goddard Space Center, 1970 April 17.	M&A 12	18
FM terminal and radio relay equipment, 1969.	M&A 12	19
Frequency division multiplex considerations for F-M radio relay facilities, 1955 June 1.	M&A 12	20
Frequency division v. time division communication systems, undated.	M&A 12	21
"Great Circulation Revisited" by R.B. Murrow, includes transparencies of matching polar stereographic projections, 1965 November.	M&A 12	22
High data rate storage system for the nimbus D satellite, 1968 March 29.	M&A 12	23
High frequency propagation, 1953 September 1.	M&A 12	24
"Highlights of Antenna Lore" by Edmund A Laport, 1956 April 3.	M&A 12	25
Kay Electric Company's Smith chart series for impedance, diodes, capacitance, 1962 - 1966.	M&A 12	26
Klystron Facts, 1958 May.	M&A 12	27
"Laboratory Equipment" by Steve Levy, 1950.	M&A 12	28
Line-of-sight equipment, undated.	M&A 12	29

A.. Communications

List of definitions of telecommunications terms, 1961.	M&A 12	30
The Marconi Review, 1949 October-December; 1950 3rd Quarter; 1953 1st Quarter.	M&A 12	31
"A Mathematical Theory of Communication" by C. E. Shannon, 1957.	M&A 12	32
MCI surveillance network operations manual, 1974 January 22.	M&A 12	33
Microwave passive aluminum reflectors - a product of Tower Construction Company, 1955.	M&A 12	34
Military systems directory, 1967 April.	M&A 12	35
Mobile communications, 1973-1974.	M&A 12	36
The multivibrator, 1944 January, February, March.	M&A 12	37
"Nomograms for the Statistical Summation of Noise in Multihop Communications System" by Berthold Sheffield (part of the convention record of the Fifth Annual Symposium on Global Communications), 1961 May 22-24.	M&A 12	38
"Notes Collateral to Electrical Communications" by E.A. Guillimin, 1945.	M&A 12	39
"Orinico Mining Company Communications System Manual" by RCA International Division, 1955.	M&A 12	40
Overseas commercial satellite communications systems, 1965 - 1975.	M&A 12	41
Passive reflectors, 1958.	M&A 12	42

A.. Communications

"Prediction and Entropy of Printed English" by C.E. Shannon, 1951 January.	M&A 13	1
Principles of carrier current transmission, 1944.	M&A 13	2
"Propagation of Radio Waves at V.H.F." by R.H. Hammond, undated.	M&A 13	3
"Radio Beamed Telecommunications Circuits" by R. Cabessa, 1952 April - May.	M&A 13	4
Radio set AN/TRC-8 description and operating instructions, 1944 June 12 - September 11.	M&A 13	5
"Railroad in Venezuela" by B. Sheffield, 1956 December.	M&A 13	6
"The Rand Sync - Sat Calculator " , 1967 September.	M&A 13	7
RCA 9000 protection switching equipment, 1973 November.	M&A 13	8
RCA 9000 supervisory equipment technical description; wire voice frequency units, 1973.	M&A 13	9
"RCA electronic training series Point to Point Radio Delay Systems" by Government Service Division of RCA, 1954.	M&A 13	10
RCA radios, generators, and tape recorders, 1967.	M&A 13	11
RCA spacecraft capabilities guide; inventory of existing spacecraft and technologies, 1967 September.	M&A 13	12
"RCA's Astro Electronics Products Space Technology" by RCA, 1959 September.	M&A 13	13

A.. Communications

"Redesign of Nimbus E High Data Rate Storage Subsystem" by RCA Government and Commercial Systems Astro Electronics for GE, 1972 November 6.	M&A 13	14
Revised transistor manual, 1956 October 3.	M&A 13	15
Satellite command systems, memos and charts, 1965 March 29 - 1967 July 18.	M&A 13	16
Satellite command systems study part 1, 1966-1967.	M&A 13	17
Satellite command systems study part 2 Tiros, 1967.	M&A 13	18
Satellite command systems study part 3 working notes, 1967 June 13-September 11.	M&A 13	19
Spacecraft performance and 1966 annual report of RCA Space Center activities, 1966.	M&A 13	20
Specifications for line-of-sight radio relay elements of combined radio relay scatter equipment, 1960 January 15.	M&A 13	21
"A Summary of Some Probability Methods" R.A. Hammond, undated.	M&A 13	22
"Synthetic Inductor Active Filter" by Gerald Aronson, 1967 November.	M&A 13	23
Systems design charts, 1954 October 1.	M&A 13	24
Telephone system for the Dominican Republic - VHF system, undated.	M&A 13	25
Transistors: fundamentals and junction transistors, 1958 - 1959.	M&A 13	26

A.. Communications

Transmission lines, 1936-1949.	M&A 13	27
Transmission Systems for Communications Volume 1 by Bell Labs, 1959.	M&A 13	28
Transmission Systems for Communications Volume 2 by Bell Labs, 1959.	M&A 13	29
Two wire applique (splice), 1943.	M&A 13	30
Ultra high frequency fundamentals, undated.	M&A 13	31
"UHF Television Antenna Design Characteristics and Performance Measurements" by John F. Martin, 1954 January.	M&A 13	32
The U.S. independent communications industry - an American growth story, 1968.	M&A 13	33
"VHF Fading Range Guide for Overwater Paths and for Overland Paths for which Nocturnal Surface Ducting is Common" , 1955 January.	M&A 13	34
VHF radiotelephone system overall system performance calculations, 1956 April 6.	M&A 13	35
Very low frequency (VLF) satellite equipment, undated.	M&A 13	36
Very low frequency study, 1967 - 1968.	M&A 13	37
Very low frequency tuner for the Navy's satellite transmitting experiment, 1967 May 31.	M&A 13	38
"The World's Earth Stations" by Communications Satellite Corporation, 1973 August.	M&A 13	39

B.. Computer notebook, 1965-1971.

	Box	Folder
Computer notebook part 1: computer program library by subject, 1971.	M&A 13	40
Computer notebook part 2: MUX-Demox simulator, 1971.	M&A 13	41
Computer notebook part 3: 2nd and 3rd order and distortion, FM MUX signal, 1971.	M&A 13	42
Computer notebook part 4: FM in and out band power calculations program, 1971.	M&A 13	43
Computer notebook part 5: Fourier series digital phase offset sinusoidal phase error, 1971.	M&A 13	44
Computer notebook part 6: Data cards for Fourier analysis, digital input generalized filter, 1971.	M&A 13	45
Computer notebook part 7: Plotting procedure for digital input, 1971.	M&A 13	46
Computer notebook part 8: pulse integration, 1967.	M&A 13	47
Computer notebook part 9: pulse interference due to delay distortion effects in a low pass filter, 1965.	M&A 13	48
Computer notebook part 10: phase lock-loop error due to filter, 1967.	M&A 13	49
Computer notebook part 11: listings of calculations, undated.	M&A 13	50

C.. Consulting, 1973-1976.

	Box	Folder
Communications system in Iran, 1974-1975.	M&A 13	51
Consulting work, 1974-1976.	M&A 14	1
MCI, 1973.	M&A 14	2
Telesis Company, 1974 July 25 - 1975 March 7.	M&A 14	3
Telesis Company in Iran, 1974 May 23 - August 9.	M&A 14	4

D.. General, 1910-1993. .

Scope and Content

The final subseries includes slides, biographical and personal documentation, artifacts, and employee benefits information. The slides consist of images of color television testing and production, National Bureau of Standards color charts, building construction, as well as large numbers of flowers and trees.

	Box	Folder
Artifacts: printing on rotating cardboard wheels which calculates information on the solar system, satellite tracking, performance of selected experiments, and radiation., 1965 - 1967.	M&A 14	5
Biographical and personal material, 1910 - 1945.	M&A 14	6
Biographical and personal material, 1937 - 1993.	M&A 14	7
Color television and miscellaneous images, 1 of 6, circa 1950s. .	AVD1	1
Color television and miscellaneous images, 2 of 6, circa 1950s. .	AVD1	2

Color television and miscellaneous images, 3 of 6, circa 1950s. .	AVD1	3
Color television and miscellaneous images, 4 of 6, circa 1950s. .	AVD1	4
Color television and miscellaneous images, 5 of 6, circa 1950s. .	AVD1	5
Color television and miscellaneous images, 6 of 6, circa 1950s. .	AVD1	6
RCA benefits, 1967-1968.	M&A 14	8
RCA insurance plans, retirement program, health plans, long term disability plan, 1971 - 1976.	M&A 14	9

IV.. Charles H. Vose papers, 1935-1967. .

Historical Note

Charles H. Vose was a design engineer employed by RCA Astro-Electronics, Princeton, New Jersey, which conceived, designed and developed TIROS I (Television and Infrared Observation Satellite) the first advanced meteorological satellite, equipped with television cameras, launched by NASA on April 1, 1960. It was the first of a series of TIROS weather satellites to be sent into space. Vose joined RCA Astro-Electronics after working in research and development in Camden and RCA Laboratories in Princeton.

Scope and Content

The Vose papers consist mostly of publications, reports, and photographs relating to the TIROS satellites.

One of Vose's patent notebooks (1932) can be found in Record group 26 of the David Sarnoff Research Center records (2464.09).

Processing Notes

Processed by Rainer Naus, April 2015.

IV.. Charles H. Vose papers

	Box	Folder
25 Year Club dinner, circa 1964. .	AVD1	11
Amateur radio information from The American Radio Relay League and Hallicrafters, 1965-1967.	M&A 14	16
Broadcast facsimile, 1935. .	AVD1	8
"Instruction and Operating Handbook for the TIROS II Meteorological Satellite System", developed and produced for NASA by the Astro-Electronics Division, Defense Electronic Products, Radio Corporation of America, Princeton N.J., 1960 October 1.	M&A 14	17
Patents issued to C.H. Vose, 1935-1940.	M&A 14	18
RCA Laboratories Division birthday greeting and RCA A.E.P. Project Team Certificate, 1950, 1960.	M&A 14	19
Retirement party, 1966. .	AVD1	12
Satellite, circa 1960s. .	AVD1	10
Satellite and communications publications, 1959-1964.	M&A 14	20
"TIROS Meteorological Satellite Report" by A. Schnapf, TIROS Project Manager, Astro-Electronics Division, prepared for the XIV International Astronautical Congress, Paris, France, 1963 September.	M&A 14	21
TIROS Weather Satellite and Kennedy Space Center brochures and documents, early 1960s.	M&A 14	22
TIROS Weather Satellite newspaper clippings, 1960 April 2 - 1966 February 6 .	M&A 1152	2

TIROS Weather Satellite photographs, circa 1960-1964. .	AVD1	9

V.. General, 1960s-1973.

Scope and Content

This small series consists of photographs, a report, and a certificate relating to RCA Astro-Electronics Division projects.

Arrangement

Files are arranged alphabetically.

	Box	Folder
Atmosphere Explorer, 1972-1973. .	AVD1	7
Historical Note Launched by NASA in 1973 the Atmosphere Explorer-C was tasked with a five year orbit to study the earth's thermosphere. The emphasis of this study was to gain a better understanding of the energy transfer and how the atmosphere of Earth absorbed solar UV radiation. The AE-C was a multi-sided polyhedron with a diameter of about 1.4 m and weighing about 660 kg. The AE-C was just the first in a series of spacecraft that were sent up into the atmosphere to study it. RCA's Astro-Electronics Division was contracted to design and build the satellite spacecraft for NASA.		
Scope and Content Photographs show the Atmosphere Explorer-C as it was being developed and as a final product before its launch in 1973.		
Cohen, H.: Apollo Color Television Camera RCA Model QTV-9 operation and maintenance manual, 1970 September 15. .	M&A 1252	26

Cohen, H.: Apollo Program, circa 1966. .	AVD1	14
Cohen, H.: Certificate of award, 1969, undated. .	M&A 1160	6
Hightstown, circa 1960s . . **Scope and Content** These photographs show the exterior of RCA's Space Center in Hightstown, New Jersey.	AVD1	15