

**MS-347**

**Richard Joseph Framme Papers**

**Special Collections and Archives  
Wright State University Libraries**

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## Introduction

The Richard Joseph Framme Papers were donated to Wright State University Special Collections and Archives by Roxanne Hemmelgarn, on May 16, 2006. 3.5 boxes (approximately 3 linear feet) of material were received.

The collection includes photographs, organization charts, research notebooks, research data, patent material, biographical information, blueprints and diagrams. Most items are technical reports or material related to Richard Framme's professional affiliation as an engineer with Wright Patterson Air Force Base. The papers date from 1929 - 1973. The bulk of the collection is dated between the 1940s-1950s.

The Richard Joseph Framme Papers are organized into 8 Series

Series I: Resumes & Biographies

Series II: Employment Records

Series III: Awards & Honors

Series IV: Research

Series V: Correspondence

Series VI: Research Notebooks

Series VII: Photographs

Series VIII: Technical Reports

## **Biographical Sketch**

Richard Joseph Framme was born February 7, 1905 in Carrollton, Kentucky. He was married to Blanche Anna Stanford May 8, 1937 and they had 2 sons and three daughters. Mr. Framme received a Bachelors of Science from the University of Kentucky in 1929. He continued his education and professional development at Bell Telephone Laboratories (1929-1933), Ohio State University (1948), University of Dayton (1958) and the United State Air Force Institute (1958).

Richard Framme enjoyed a long career, serving for such esteemed organizations as Bell Telephone Laboratory (1929-1933); Columbia University (1934-1935) and the USAF at Wright Patterson Air Force Base ARL under a variety of job titles from 1935-1973. In 1942 Richard Framme joined the Army Signal Corps as a Captain and rose to the rank of Lt. Colonel by 1948. He retired as the chief engineer of the aircraft instrument landing branch of the navigation division of ARL.

As an engineer Richard Framme participated in the development of the Automatic Radio Compass, (ILS) Instrument-Landing System and won a patent for an Aircraft Radio Navigator.

## **Scope and Content Note**

The Richard Joseph Framme Collection documents the development of aircraft control systems in Dayton Ohio's Wright Field (Wright Patterson Air Force Base) research group. His areas of expertise ranged from radio and microcomputer control systems to instrument landing to the breakdown of metals in tropical environments.

### **Series I: Resume & Biographies**

This series contains material related to Richard Framme's professional careers and include resumes, job searching material and a portfolio from early in his career.

### **Series II: Employment Records**

This series contains records and documents from Richard Framme's career. These papers were mostly practical in nature and document the various job descriptions, organization structures and daily office regulations by which Mr. Framme worked. Also included are personal records dealing with health and finance, mostly in the context of the military or government affiliation he was working under at the time.

### **Series III: Awards and Honors**

This series contains the many awards and certificates presented to Richard Framme throughout his career.

### **Series IV: Research**

This series contains a variety of material which was used by Richard Framme during his career. Material in this series includes newspaper and magazine clippings, minutes, memos, conference notes, blueprints, engineering diagrams, research data, lectures, presentations, aviation history and patents.

### **Series V: Correspondence**

This series includes letters written to and by Richard Framme. All correspondence in this series is professional in nature.

## **Scope and Content Note continued**

### **Series VI: Research Notebooks**

An extensive set of pocket sized research notebook journals make up this series. The notebooks record ideas, have some technical sketches and record some of Mr. Framme's daily activities. The notebooks are arranged in sequential order from 1941 – 1973.

### **Series VII: Photographs:**

This series contains photographs. Most of the photographs are technical in nature, recording the assembly or actions of various aircraft or computer systems.

### **Series VIII: Technical Reports**

This series contains technical reports written, contributed to or received by Richard Framme in his career. The technical reports are arranged in date order and range from 1930 – 1971. The topic of these reports mostly center on the research conducted by Richard Framme and his branch of ARL.

<b>Series I</b>		<b>Resumes &amp; Biographies</b>	
<b>Box</b>	<b>File</b>	<b>Item</b>	<b>Date</b>
1	1	Technological Record	1929-1935
	2	Technological Record	ND
	3	Job Hunting	1932
	4	Identification	?- 1944
	5	Applications	1953
	6	Portfolio	1934?
		U.S. Civil Service Commission – Confidential Inquiry (See oversize Box 13, File 1)	ND
		War Department; Associate Radio Engineer (See oversize Box 13, File 2)	1936
<b>Series II</b>		<b>Employment Records</b>	
<b>Box</b>	<b>File</b>	<b>Item</b>	<b>Date</b>
1	7	Travel & TDY	1940
	8	Travel & TDY	1942
	9	Travel & TDY	1943
	10	Travel & TDY	1944
	11	Travel & TDY	1945
	12	Travel & TDY	1946
	13	Travel & TDY	1947
	14	Travel & TDY	1948
	15	Travel & TDY	1951-1971
	16	Regulations	1940s
	17	Regulations	1950s
2	1	Orders	1930s
	2	Orders	1946-1948
	3	Orders	1949
	4	Orders	1950-1968
	5	Medical	1940s
	6	Organization Structure	1937
	7	Organization Structure – ARL Org- Sic Corp	1942
	8	Organization Structure	1942
	9	Organization Structure	1943
	10	Organization Structure	1950-1971
	11	Organization Structure	ND
	12	Position Descriptions	1950-1964
	13	Training Seminars	1950-1967
	14	Pay	1947-1948
	15	TSELS	1947-1948
	16	WPAFB Personnel Records	Oct. 1935 – June 1949

		Organization Structure: Org Chart Signal Corps Aircraft Radio Lab (See oversized Box 13, File 3)	Oct. 29, 1934
		Organization Structure: Communications & Navigation Laboratory Chart (See oversized Box 13, File 4)	Oct. 3, 1944
OS 73		Communication & Navigation Unit Division Org. Chart (See Oversize Location 73)	ND
<b>Series III</b>		<b>Awards &amp; Honors</b>	
<b>Box</b>	<b>File</b>	<b>Item</b>	<b>Date</b>
2	17	WWII Service	1946
	18	U.S. Army	April 4, 1946
	19	Field Economic Mobilization	March 27- April 7 1950
	20	A.F. Management Certificate University of Dayton	June 18, 1958
	21	The Institute of Radio Engineers	1962
	22	30 years service	1965
	23	Dictionary of International Biography	1984
		Wright Air Development Center Outstanding Performance (See oversized Box 13, File 5)	Jan. 16, 1959
		Certificate of Retirement (See oversized Box 13, File 6)	Jun. 29, 1973
		Certificate of Service (See oversized Box 13, File 7)	Jun. 29, 1973
		Director of Avionics Engineering (See oversized Box 13, File 8)	1973
<b>Series IV</b>		<b>Research</b>	
<b>Box</b>	<b>File</b>	<b>Item</b>	<b>Date</b>
2	24	Newspaper & Magazine Clippings	1950s
	25	Newspaper & Magazine Clippings	1960s
	26	Newspaper & Magazine Clippings	1987
	27	Minutes, Memos & Conferences	1944
	28	Minutes, Memos & Conferences	ND
3	1	Blueprints, Engineering Diagrams & Data	1929
	2	Blueprints, Engineering Diagrams & Data	1931-1932
	3	Blueprints, Engineering Diagrams & Data	1934

	4	Blueprints, Engineering Diagrams & Data	1935
	5	Blueprints, Engineering Diagrams & Data	Aug 31, 1938
	6	Blueprints, Engineering Diagrams & Data	1939-1940
	7	Blueprints, Engineering Diagrams & Data	ND
	8	Blueprints, Engineering Diagrams & Data	ND
	9	Blueprints, Engineering Diagrams & Data	ND
	10	Blueprints, Engineering Diagrams & Data	ND
	11	Lectures & Presentations – Radio Compass	1939
	12	Lectures & Presentations – I.R.E. 14 <sup>th</sup> Annual Con.	1939
	13	Lectures & Presentations	1947-1948
	14	Lectures & Presentations	1948-1949
	15	Lectures & Presentations	1951
	16	Lectures & Presentations	1952
	17	Lectures & Presentations – Presentation to the AGREE	1954
	18	Lectures & Presentations	1957-1962
	19	Lectures & Presentations	1964
	20	Lectures & Presentations	1965
	21	Lectures & Presentations	1966
	22	Lectures & Presentations – Presentation to the AGREE	1966
	23	Lectures & Presentations	1966
	24	Lectures & Presentations	Aug-Oct 1966
4	1	Lectures & Presentations	ND
	2	Lectures & Presentations	ND
	3	Lectures & Presentations	ND
	4	Aviation History – Instrument Landing	1919-1941
	5	Aviation History – Instrument Landing	1919-1941
	6	Aviation History – Chronology General	1900-1993
	7	Aviation History – Chronology General	1900 – 1993
	8	Aviation History	1970s
	9	Aviation History (Rad Cap)	1972
	10	Patents – Supporting Documentation	1941-1950
	11	Patents	1947-1949
	12	Patents – Radio Compass Support Documentation	1971
	13	Patents – Radio Compass	1971
	14	Patents – Automatic Navigators & Indicators	1975
	15	Photography	ND
OS 73		Complete Wing Schematic Time Measuring Set (See Oversize Location 73)	Sept. 17, 1931
OS 73		Automatic Drift Compensator Simplified Schematic Diagram (See Oversize Location 73)	Oct. 24, 1941
OS 73		The Plant Kingdom – showing detailed nomenclature of Fungi-Associated w/Tropical Deterioration	May 20, 1946



		(See Oversize Location 73)	
<b>Series V</b>		<b>Correspondence</b>	
<b>Box</b>	<b>File</b>	<b>Item</b>	<b>Date</b>
4	16	General	1939-1949
	17	General	1950-1959
	18	General	1964-1972
	19	On Military Service	1949-1967
	20	Dr. John H. Bryant	1989-1990
	21	Col. Hobart R. Yeager	1972
<b>Series VI</b>		<b>Research Notebooks</b>	
<b>Box</b>	<b>File</b>	<b>Item</b>	<b>Date</b>
5	1	Calendar	1941
		Research Notebook (See oversize Box 13, File 9)	1929 - 1931
		Research Notebook (See oversize Box 13, File 10)	Jan. 1, 1940
	2	Research Notebook	May – June 1948
	3	Research Notebook 1-A (trip to England)	June 1948
	4	Research Notebook 1	July-Aug 1948
	5	Research Notebook 2	Aug-Sept 1948
	6	Research Notebook (trip to Watson Lab)	Sept – Oct 1948
	7	Research Notebook (Abuse on Claranna)	Oct – Dec 1948
	8	Research Notebook 5	Dec 1948 – Jan 1949
	9	Research Notebook 6 (Father Walsh)	Feb 8-21 1949
	10	Research Notebook	Mar – May 1949
	11	Research Notebook 7	Jun – July 1949
	12	Research Notebook 8	Aug – Nov 1949
	13	Research Notebook 9	Oct – Dec 1949
	14	Research Notebook	Nov 1949 – Sept 1950
	15	Research Notebook	Feb – May 1950
	16	Research Notebook	Mar 1950
	17	Research Notebook	Aug 1950
	18	Research Notebook	Oct – Dec 1950
	19	Research Notebook	Nov – Dec 1950
	20	Research Notebook (Approval of PR's)	1950
	21	Research Notebook	Apr 1951
	22	Research Notebook	1951
	23	Research Notebook	1951
	24	Research Notebook	Jan 1952
	25	Research Notebook (Universal Cornora Control Sys)	1952
	26	Research Notebook	June 1953
	27	Research Notebook	1953

	28	Research Notebook	1953-1954
	29	Research Notebook	Mar – Sept 1954
	30	Research Notebook	Sept – Dec 1954
	31	Research Notebook	Aug – Sept 1955
	32	Research Notebook	1956
6	1	Research Notebook	1956
	2	Research Notebook	1957
	3	Research Notebook	1958
	4	Research Notebook	1959
	5	Research Notebook	1958-1960
	6	Research Notebook	1960 – 1961
	7	Research Notebook	1961
	8	Research Notebook	1962
	9	Research Notebook	1963
	10	Research Notebook	Mar 1964
	11	Research Notebook	1964
	12	Research Notebook	1965
	13	Research Notebook	1965
	14	Research Notebook	1965
	15	Research Notebook	1966
	16	Research Notebook	Apr 1967
	17	Research Notebook	1967
	18	Research Notebook	1968
	19	Research Notebook	1969
	20	Research Notebook	1971
	21	Research Notebook	1971
	22	Research Notebook	1972
	23	Research Notebook	1972
	24	Research Notebook	1973
	25	Research Notebook	June 1973
<b>Series VII</b>		<b>Photographs</b>	
<b>Box</b>	<b>File</b>	<b>Item</b>	<b>Date</b>
7	1	Mechanism for Automatic Loop Rotation	ND
	2	High Frequency Compass; Cover removed. Front View – 1 <sup>st</sup> Model Receiver	ND
	3	Adcock Antennae; High Frequency	ND
	4	Portable Compass Locator Rear View	ND
	5	A-1 Instrument Landing Truck, Front View, Showing New Spot Lighting Installation	ND
	6	Radio Set SCR-274 N (High Frequency Command)	ND
	7	Radio Set SCR-522 ( ); 5432 ( )	ND
	8	Home of ARL Front View (artist concept)	ND

9	Truck showing method of attaching antennae to marker beacon projector.	ND
10	Radio Frequency Bridge Northern Radio	ND
11	Radio Receiver; Part SCR-186-T6; Internal View, Also Continental Dynamotor DM-414-X.	ND
12	Model Tear Drop Housing (Side View)	ND
13	Simon Radio Guide A.N.U.	ND
14	(Radio Compass Unit) – Bottom View – SCR-186	ND
15	Radio Compass – Top View – SCR 186-T6	ND
16	Radio Compass – Assembly – SCR-186-T6	ND
17	Rad. Dir. Complete Assembly	ND
18	Compass Locator – Experimental Model – P-743-23-11	ND
19	Control Box of Radio Compass SCR-186-T6 Bottom View	ND
20	Radio Compass – SCR-186-T6 Control Box - $\frac{3}{4}$ Top View	ND
21	Experimental Model Magneto Compass for Automatic Flight Control	ND
22	E4A Radio Compass Modulator External View	ND
23	E-4A Radio Compass Modulator Serial # AC-35-3 Interior View	ND
24	Ring Cowl Loop	ND
25	Loop	ND
26	High Frequency Receiver – 2 <sup>nd</sup> Model Cover Removed – Front View	ND
27	Rear View, 1 <sup>st</sup> Model Receiver High Frequency; Cover Removed	ND
28	Portable Compass Locator	ND
29	High Frequency Compass, Single Loop with Recorder	ND
30	Pat. Application, D. F. 186-T5 Frig 1d and 1e	ND
31	Assembly Complete with Cables. SRC-242-T2 Fig. 3	ND
32	Indicator Combined Marker Beacon Receptor and Radio Compass	ND
33	Pat. Application, D.F., 186 – T5, Fig 5	ND
34	Radio Compass SCR-276 ARL-870R	ND
35	Marker Beacon AC #32-412 – General View – Antennae Installation	ND
36	Receiver High Frequency Compass Double Loop	ND
37	Truck Opening Antennae brackets	ND
38	Radio Set SCR-578 (Emergency Sea Rescue)	ND
39	Radio Set SCR-277 (Portable Radio Range)	ND
40	Instrument Blind Landing Equipment SCR-251	ND
41	Instrument Landing System, Microwave Type, Patterson Field	ND
42	Experimental Model Magneto Magneto Compass for	ND

		Automatic Flight Control Cover Removed	
	43	Radio Receiver BC-348-J (Exterior Front View); Part of Radio Set SCR-287-A; Wells Gardner & Co., Sample on Order No. 832-Chi-42	ND
	44	Photograph on plastic	ND
	45	Patent Application D.F. 186-T5 Fig. 2, (10/18/1933)	Oct. 18, 1933
	46	Patent Application, D.F., 186-T5, Fig 3. (10/18/1933)	Oct. 18, 1933
	47	Patent Application, D.F., 186-T5, Fig. 4 (10/18/1933)	Oct. 18, 1933
	48	Loop E4 (Compass) Negative Turned on to Mr. Srieg (10/2/36)	Oct. 2, 1936
	49	Signal Corps – Training Film Production Lab (June 1941)	June 1941
	50	Transistor Test Equipment (APR 22 1953)	Apr. 22, 1953
	51	Transistor Test Equipment (APR 22 1953)	Apr. 22, 1953
	52	Transistor Test Equipment (APR 22 1953)	Apr. 22, 1953
	53	Transistor Test Equipment (APR 22 1953)	Apr. 22, 1953
	54	Components of Receiving Set, Radio AN/ARN-30A Procured by Communication and Navigation Laboratory From Aircraft Radio Corporation (May 7 1953)	May 7, 1953
	55	Radio Set AN/ARC-27, Radio Set AN/ARC 34 (Nov. 20 1953)	Nov. 20, 1953
	56	Dudley Grey Signal Generator; Used with High Frequency Ground Antenna. Procured by Communication and Navigation Laboratory RDO R112-80 (Jul 10 1959)	Jul. 10, 1959
8	1	Aircraft Radio Laboratory	1938
	2	Early Interfone Aircraft	ND
	3	Microminiature Computer	ND
	4	Misc	ND
	5	Misc	ND
	6	Misc	ND
	7	Misc	ND
9	1	Retirement ceremony photo album	July 31, 1973
	2	Interior view screened Booth Anu	ND
	3	Gen. Mauborgnes wave coil antennae 3 to 6 megajules	ND
	4	Gen. Mauborgnes wave coil antennae 3 to 6 megajules	ND
	5	Patterson Field Radio Lab Negative #2	ND
	6	Cone of Silence – Marther Beacon Projector (U.H.F.) Installment on Experimental Radio Bldg on Hill	ND
	7	Cone of Silence – Marther Beacon Projector (U.H.F.) Installment on Experimental Radio Bldg on Hill	ND
	8	Cone of Silence – Marther Beacon Projector (U.H.F.) Installment on Experimental Radio Bldg on Hill	ND
	9	Cone of Silence – Marther Beacon Projector (U.H.F.)	ND

		Installation on Experimental Radio Bldg on Hill	
10		Radio Frequency Bridge, Northern Radio	ND
11		SCR-242-T1 Assembly complete with cables	ND
12		Automatic Drift Correction Model	ND
13		Automatic Drift Correction Model	ND
14		Marker Beacon Receptor BC-301 Model T1, T2 Chassis	ND
15		Marker Beacon Receptor BC-301 Model T1 + T2	ND
16		Radio Receiver BC-224 A (Copy of RCA print) Chassis-Rear View – out of case	ND
17		Radio Receiver BC-224A (Copy of RCA Print) Chassis – Front View – Panel Removed	ND
18		Radio Receiver BC-224A (Copy of RCA Print) Chassis – Front View – Panel Removed	ND
19		Radio Set SCR-283 (High Frequency Command)	ND
20		Radio Set SCR-283 (High Frequency Command)	ND
21		Radio Set SCR-283 (High Frequency Command)	ND
22		Radio Set SCR-283 (High Frequency Command)	ND
23		Radio Set SCR-283 (High Frequency Command)	ND
24		Patent Application; DF; 186-T5, Fig 1	ND
25		Mrs. Framme, Blanche's wedding dress	ND
26		Mrs. Framme, Blanche's wedding dress	ND
27		Radio Set SCR-263; 269; 280	ND
28		June 1941 Home of ARL South View (Construct Progress)	June 1941
29		June 1941 Home of ARL South View (Construct Progress)	June 1941
30		June 1941 Home of ARL East View (Construct Progress)	ND
31		Home of ARL North View	ND
32		SIG Corps T.F.P.L. – Under Construction Nov/25/1941	Nov. 25, 1941
33		Recopy negatives of Signal Corps Building (Copy of retouched print May '37)	May 1937
34		Picture ID #000657	ND
35		Picture ID #000567	ND
36		Picture ID #000652	ND
37		Picture ID #000535	ND
38		Picture ID #000391	ND
39		Picture ID #000765	ND
40		Picture ID #000392	ND
41		Picture ID #000393	ND
42		Picture ID #000394	ND
43		Picture ID #000643	ND
44		Picture ID #000395	ND
45		Picture ID #19251	ND
46		Radio Compass SCR-276-A	ND
47		ARL-870R-42	ND

	48	Radio Compass SCR-276	ND
	49	Picture ID #000666	ND
	50	Picture ID #000658	ND
	51	Picture ID #000653(2 Copies)	ND
	52	Picture ID #000656(2 Copies)	ND
	53	Picture ID #000651(2 Copies)	ND
	54	Picture ID #000649(2 Copies)	ND
	55	Picture ID #000649	ND
	56	Picture ID #000650(2 Copies)	ND
	57	Picture ID #000667	ND
	58	Picture ID #000647	ND
	59	Picture ID #000559	ND
	60	Picture ID #000560	ND
	61	Picture ID #000561	ND
	62	Picture ID #000562	ND
	63	Picture ID #000563(2 Copies)	ND
	64	Picture ID #19167	ND
	65	Picture ID #000488(2 Copies)	ND
	66	Picture ID #000659	ND
	67	Picture ID #000645	ND
	68	Picture ID #000655(2 Copies)	ND
	69	Picture ID #000615	ND
	70	Picture ID #000646	ND
	71	Picture ID #000660	ND
	72	Picture ID #000661(2 Copies)	ND
	73	Picture ID #000661	ND
	74	Picture ID #000817	ND
	75	Radio Set SCR-274-N (High Frequency Command)	ND
	76	ARL Wright Field, Dayton, Ohio	ND
	77	Aircraft Radio Laboratory (Front View)	ND
	78	Aircraft Radio Laboratory (small)	ND
	79	Picture ID #000532	ND
	80	Radio Set SCR-578 A	ND
	81	ARL-871R-42	ND
	82	Radio Set SCR-578 (Emergency Sea Rescue)	ND
	83	ARL-872R-42	ND
	84	Radio Set SCR-277 (Portable Radio Range)	ND
	85	ARL-874-R-42	ND
	86	Picture ID #001574 (instrument landing system)	ND
	87	Picture ID #000654(2 Copies)	ND
	88	Picture ID #000090	ND
<b>Series VIII</b>			
		<b>Technical Reports</b>	
<b>Box</b>	<b>File</b>	<b>Item</b>	<b>Date</b>
10	1	Relay Time Set, Bell System	Nov. 1930

	2	Time Measuring Set	Feb. 6- Apr. 21 1931
	3	Relay Time Test Set	Apr. 1, 1931
	4	Work Done at Gen Instr. Corp	Oct. 14, 1933
	5	Work Done at Halson Radio Corp	Apr. – May 1934
	6	Air Board Report on Communications	Dec. 1934
	7	Time Record; Radio E-4 MD Compass	Oct. 15, 1935
	8	Radio Compass	Oct. 18, 1935
	9	Laboratory Tests and Analysis of Radio Compass	Jan. 15, 1936
	10	Evaluation of Radio Compass SCR-242	Oct. 1, 1936
	11	Mechanical Inspection of Radio Products Co. Sample Radio Compass	Dec. 1, 1936
	12	Mechanical Inspection of RCA Sample Radio Compass SCR-242-T1	Dec. 1, 1936
	13	AFRL Test Report	Dec. 1, 1936
	14	Compilation of Data for the Evaluation of Radio Compasses	Dec. 1, 1936
11	1	Mechanical Inspection & Photographs Radio Compass SCR-242-T3 Test Report No. 14-B	Feb. 9, 1937
	2	Mechanical Inspection & Photographs Radio Compass SCR-242-T4 (Radio Products)	Feb. 9, 1937
	3	Performance Tests & Air Navigational Radio Compass	Feb. 10, 1937
	4	Performance Tests, Communication and Navigational Radio Compass	Feb. 10, 1937
	5	Radio Compass R.C. 5-T INT.TEL & TEL CO	Apr. 3, 1937
	6	Performance tests on the French design of radio compass furnished by IT&T Co.	Feb. 1, 1938
	7	Test Report No. 33 Mechanical Inspection of Radio Compass – SCR-242-B	Feb. 28, 1938
	8	AFRL Report No. 34 Radio Compass SCR-242-B (Elect. Tests)	May 6, 1938
	9	AFRL Test Report No. 30 Radio Compass SCR-246-T1 (Pursuit Type)	May 6, 1938
	10	Indicator-Radio Compass	Oct. 26, 1939
	11	Description of Instrument Landing Systems Aircraft Radio Laboratory	Sept. 3, 1940
	12	Instrument Landing 700 MC Wavemeter	Dec. 14, 1940
	13	Instrument Landing 750 Wave Meter	Jan – Apr 1941
	14	Parts List for Instrument Blind Landing Equipment	Sept. 18, 1941
	15	Radio Compass Dual Automatic Bearing	Sept. 27, 1941
	16	Instrument Approach Landing System	1941 & 1943
	17	Frequency Receiver for Localizers	Jan. 17, 1942
	18	ARL Engineering Report Performance Characteristics of Portable Localizer Equipment Radio Set SRC-591-( )	Oct. 30, 1942

12	1	Inspection Instructions for Radio Transmitting Equipment	Apr 9 – May 5 1943
	2	Dyeing (Vat) and Finishing of Duck and Tent twill	Apr. 20, 1943
	3	Instrument Landing System	Oct. 1943
	4	Testing Methods Tropicalization	1944
	5	Testing Methods Tropicalization	1944
	6	Radio & Instrument Hook-Up	March 7, 1944
	7	Tropicalization Handbook	March 20, 1944
	8	Bibliography on the effects of moisture on metal (ARL)	May 20, 1944
	9	Bibliography Regarding Weather, Climate, Meteorology and Air Analysis	Jun. 15, 1944
	10	Difficulties Encountered with Electronic Equipment in Humid Climate	Oct. 1944
	11	Application of Moisture and Fungus-Resistant treatment to Electrical Communication Equipment	Jan. 27, 1945
	12	Operational Requirements	Jan. 23, 1950
	13	Development Summary & Applications of a Micro-Miniaturized Flight Director Computer	Mar. 12, 1965
	14	Equipment, Electronic, Criteria for the Utilization of Micro/Molecular Electronic Technology	Dec. 1, 1967
	15	ASNAC-40 Exhibit ASD – WPAFB, Ohio	Jan 22-23 1968
	16	U.S. Air Force Participation in the DoD Advisory Group on Electronic Devices	Nov. 24, 1971
	17	RADCAP AW6	1972
	18	Air Corps System of Instrument Landing (Type A-1)	ND
	19	Considerations Pertaining to Instrument Landing Systems	ND
	20	ANNEX A Functional Area: Transceivers	ND
	21	ANNEX A Functional Area: Transceivers	ND
	22	How To	ND
	23	How To	ND
		Performance Requirements for Speech Inverter (See oversize Box 13, File 11)	Apr. 1931
OS 73		Electron Tube Development & Standardization Activities (See Oversize Location 73)	ND
13	1	U.S. Civil Service Commission – Confidential Inquiry	ND
	2	War Department; Associate Radio Engineer	1936
	3	Organization Structure: Org Chart Signal Corps Aircraft Radio Lab	Oct. 29, 1934
	4	Organization Structure: Communications & Navigation Laboratory Chart	Oct. 3, 1944
	5	Wright Air Development Center Outstanding Performance	Jan. 16, 1959
	6	Certificate of Retirement	Jun. 29, 1973
	7	Certificate of Service	Jun. 29, 1973



	8	Director of Avionics Engineering	1973
	9	Research Notebook	1929 - 1931
	10	Research Notebook	Jan. 1, 1940
	11	Performance Requirements for Speech Inverter	Apr. 1931