



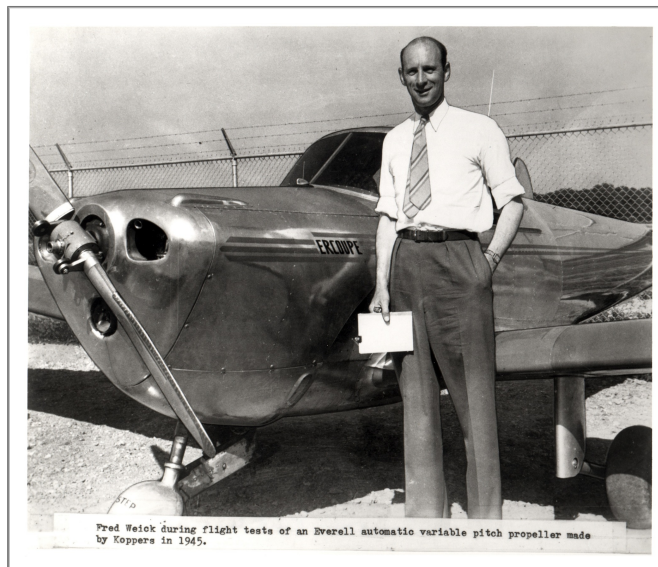
Smithsonian

National Air and Space Museum

Fred E. Weick Autobiographical Transcripts

Kate Igoe

1997



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Collection Overview

Repository:	National Air and Space Museum Archives
Title:	Fred E. Weick Autobiographical Transcripts
Date:	1899-1984 (bulk 1949-1957)
Identifier:	NASM.XXXX.0425
Creator:	Weick, Fred E., 1899-1993
Extent:	0.3 Cubic feet (1 legal document box)
Language:	English .
Summary:	Aeronautical engineer Fred E. Weick (1899-1993) had a profound effect on light aircraft development. He was responsible for the development of NACA's low-drag cowling for radial engines, introduced the concept of "fifty foot obstacle clearance" as a measure of aircraft take-off performance, and was instrumental in the development of several aircraft, including the Piper Pawnee and Piper Cherokee.

Administrative Information

Acquisition Information

Fred E. Weick, gift, 1984, XXXX-0425

Other Finding Aids

http://www.nasm.si.edu/research/arch/findaids/weick/weick_frames.html

Other Finding Aids

http://www.nasm.si.edu/research/arch/findaids/pdf/Weick_Acc_XXXX-0425.pdf

Processing Information

Arranged and described by Kate Igoe, 1997.

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Preferred Citation

Fred E. Weick Autobiographical Transcripts, Acc. XXXX-0425, National Air and Space Museum, Smithsonian Institution.

Restrictions

No restrictions on access

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Biographical Note

Aeronautical engineer Fred E. Weick (1899-1993) had a profound effect on light aircraft development. While working for the National Advisory Committee on Aeronautics (NACA) he developed the NACA low-drag cowling for radial engines (1928) and built a low landing speed aircraft as an independent project sparked by a series of light aircraft design seminars at NACA's Langley Research Center (1931). He introduced the concept of "fifty foot obstacle clearance" as a measure of aircraft take-off performance, which remains a standard measure today. In 1936 he joined Henry Berliner at the Engineering and Research Corporation (ERCO) to develop and market a commercial version of Weick's aircraft. Although the resulting Ercoupe faded in the general aviation slump following World War II, Weick moved to Texas A&M (1948-56) where he developed a series of agricultural aircraft which evolved into the Piper Pawnee series. He remained at Piper until he retired (1956 to c. 1970) and developed the Piper Cherokee with John Thorpe and Karl Bergery. After retirement, Weick remained active in aeronautics, assisting in design studies for Beech Aircraft as well as undertaking private projects in aircraft trim and control.

Scope and Content

This collection consists of transcripts of Weick's dictation for this autobiography, published as *From the Ground Up: Autobiography of an Aeronautical Engineer* (Washington, DC: Smithsonian Institution Press, 1988). A copy of this book can be found in the Smithsonian Library at the National Air and Space Museum.

Names and Subject Terms

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

Subjects:

- Aeronautics
- Aeronautics, Commercial -- United States
- Beech Aircraft Family
- Piper PA-25 Pawnee Family

Types of Materials:

- Correspondence
- Diaries
- Manuscripts

Names:

- Beech Aircraft Corp
- Erco (Engineering and Research Corporation)
- National Advisory Committee for Aeronautics (NACA)
- Weick, Fred E., 1899-1993

Container Listing

Folder 1, Cassette 1	Boyhood; Schooling; US Mail Service; Yackey Aircraft Company
Folder 1, Cassette 2	1923 National Air Meet in St. Louis; Solo Flight; Navy Bureau of Aeronautics; Romance; Army Round-the-World Flight
Folder 1, Cassette 3	Mid. Bu. Aero - Start at NACA; First NACA Conference; Start of NACA Cowling Program
Folder 1, Cassette 4	1927 to 1928; I Build a Sailboat; I Start a Book on Propeller Design; Twenty-Fifth Anniversary of First Flight
Folder 1, Cassette 5	1928 to 1929; The Hamilton Aero Manufacturing Company
Folder 2, Cassette 6	November 1929 to April 1930; Back to the NACA at Langley; Completion of Book on Aircraft Propeller Design; Investigation of Stalling; The Reed Patent Case
Folder 2, Cassette 7	1931 (W-1 begins); Dornier DO-X; East Jacobs Flies in Hurricane Eye; Our Home-Built Experimental Airplane
Folder 2, Cassette 8	May 1934 - W-1, Our Trials; What a place to have to change tapes!; Experimental Steel Propeller; A Vacation from Aeronautics; W-1 Trials to 2 - Control Trials by Us
Folder 2, Cassette 9	September 1935 - W-1A continued; 1936 to February 1937; Start of the Ercoupe; The Detroit News Contest Again; Schwarz Propellers
Folder 2, Cassette 10	February 1937; Getting a 65 hp Engine
Folder 2, Cassette 11	Getting a 65 hp Engine; Pre-World War II; World War II
Folder 3, Cassette 12	1942 - Mrs. Freed - War Years; Mrs. Freed's Unexpected Flight
Folder 3, Cassette 13	End 1944, 1945 - Ercoupe Sale Conference; Quiet Birdmen; Post-War Ercoupe
Folder 3, Cassette 14	1947 - Sanders Takes Ercoupe Erco Experiments
Folder 3, Cassette 15	December 1947 at Los Angeles; Move to Texas; July 1948; Texas A&M; Fly From Home; July 1948 to July 1949
Folder 3, Cassette 16	July 1949 to August 1950; Ag-1 Experimental Agricultural Airplane; Ercoupe Flying; Omnirange Trials; More Ercoupe Flying

Folder 3, Cassette 17	August 1950 to December 1950; Back to the Ag-1; Memphis Meeting; Dispersal Pattern Measuring Station; Still More Ercoupe Flying
Folder 4, Cassette 18	Charlie Zimmerman's Project; Back to the Ag-1; Texas Agricultural Aviation Conference
Folder 4, Cassette 19	Research Sponsored by NACA; More Ercoupe Flying; Back to Research; Second Agricultural Aviation Conference; June 1953; Start of the Ag-2; Consulting for Piper; Article by Langewiesche; Third Agricultural Aviation Conference; Fiftieth Anniversary of First Flight; Ag-3
Folder 4, Cassette 20	December 1953; Pleated Paper Air Filter; European Visits Re: Ag Aviation; Cessna L-19 Duster Experiment; Texas Aerial Applicators Association; Cost of Metal Versus Fabric Covered Airplanes; Trip to Fort Lauderdale; Fourth Ag Agricultural Conference; Lateral Control Near the Stall; Arizona Aerial Applicators Meeting; Ercoupe Activity; End of Book; Automatic Carburetor Air Heater
Folder 4, Cassette 21	July 1955; European Trip Starts; Ag Pilot Training Courses; Fifth Ag Aviation Conference; The Minta Martin Contest; Three Months Visiting Europe; March 1956
Folder 4, Cassette 22	May 1956; End of European Trip; Continuing Research; July 1956 to December 1956; Piper Aircraft Development Center
Folder 5, Cassette 23	January 1951; Preparing to Start with Piper; Light Airplane for Business Transportation; Club Flying; Sixth Agricultural Aviation Conference; Piper up to 1957; Piper Management and History
Folder 5, Cassette 24	April 1957; Starting at Vero Beach; Piper Pawnee Agricultural Airplanes; Start of Pawnee Brave
Folder 5, Cassette 25	Pawnee Brave; January 1957; Piper Cherokee Series
Folder 5, Cassette 26	ATC for First Cherokee October 31, 1960
Folder 5, Cassette 27	PA-32 Series & PA-34; Karl Bergey Leaves; Cherokee Six; Pocono
Folder 6, Cassette 28	1969 Chris-Craft Raid & Piper Organization Changes and Planes to 1984; Piper Organization Again; Lear Siegler; Court Cases and Product Liability
Folder 6, Cassette 29	Lake City - Phoenix Court Case; My Experiments with Firm Trim, University of Michigan, etc.
Folder 6, Cassette 30	Our Personal Flying, 1957 to Present, 1984; Dick's Wedding; Reunion - Grand Canyon; Long Beach; Kitty Hawk and Wright Brothers; Fresno and Palo Alto

Folder 6, Cassette 31	Personal Flying; Fresno and Palo Alto; Langley's Fiftieth; Mexico with Robinsons; Hammondsport - Alaska; Burt Rutan on Way to Herb and Virginia's Fiftieth
Folder 7, Cassette 32	Rutan - Herb and Virginia's Fiftieth; Oshkosh - Home; Our Round-the-World Trip; End of Trip; Organizations: NAA, SAE, ASME, AIAA to Start EAA
Folder 7, Cassette 33	Organizations Continued: EAA
Folder 7, Cassette 34	Organizations Continued: Ercoupe Owners Club, Kelly Viets; Arkansas Picnic
Folder 7, Cassette 35	Organizations Continued: EOC, Flying Engineers, QB; Air Mail Pioneers; Flying Engineers International; Quiet Birdmen; Florida Aero Club; OX-5 Aviation Pioneers; Rotary Club; Silver Wings; AOPA; UFO; NASM
Folder 7, Cassette 36	Air and Space Museum