

MS-302, Levitt Luzern Custer Papers

Collection Number: MS-302

Title: Levitt Luzern Custer Papers

Dates: 1886-1968, 2001

Creator: Custer, Levitt Luzern, 1888-1962

Summary/Abstract:

Levitt Luzern Custer was a Dayton-area aviator and inventor, and an associate of Orville Wright. During his lifetime he engaged in pioneering balloon experiments, served as an official timer for flight trials, collaborated with Orville Wright on various projects, and invented a wide range of mechanical machines from the statoscope to amusement park rides. The Levitt Luzern Custer Papers document many of his achievements as well as those of other early aviators, such as the Wright Brothers. There is information on early aviators such as the Early Birds who flew before 1916 are also preserved. Patents, blueprints, photographs, and correspondence are also a rich source of research.

Quantity/Physical Description: 9.25 linear feet and 8.08 GB

Language(s): English

Repository:

Special Collections and Archives, University Libraries, Wright State University, Dayton, OH 45435-001, (937) 775-2092

Restrictions on Access: Original film is in frozen storage for preservation. To view content of film for reference, patrons should use the digitized files of the VHS tapes made from the original film (E-archives ms302_e0004). For higher quality reproductions, patrons may request digitization of the original film for the associated costs. Use of digitized content is subject to conditions governing use. There are no other restrictions on accessing material in this collection.

Restrictions on Use:

Copyright restrictions may apply. Unpublished manuscripts are protected by copyright. Permission to publish, quote, or reproduce must be secured from the repository and the copyright holder.

Preferred Citation:

[Description of Item, Date, Box Number, Folder Number], MS-302, Levitt Luzern Custer Papers, Special Collections and Archives, University Libraries, Wright State University, Dayton, Ohio

Acquisition:

This collection was donated to the Wright State Special Collections and Archives by Levitt Luzern Custer's son, James Custer, in August of 2000.

Existence and Location of Copies:

Films in the collection were transferred to S-VHS tape by Special Collection and Archives circa 2000. The VHS tapes were digitized for reference only in a compressed file format (mp4) in 2019. For higher quality reproductions, patrons may request digitization of the original film for the associated costs.

Existence and Location of Originals:

The original Autograph Album in Series IX, is owned and located with the family. TIF files and reference prints of the autograph album were created for the collection in 2001.

Other Finding Aid:

The finding aid is available on the Special Collections & Archives, Wright State University Libraries web site at <https://libraries.wright.edu/special/collectionguides/files/ms302.pdf>. It is also available in the OhioLINK Finding Aid Repository at <http://ead.ohiolink.edu/xtf-ead/>.

Physical Characteristics and Technical Requirements: A computer is needed to view digital files of film (low resolution in mp4 format) and TIF files of the autograph album.

Related Material:

MS-1, Wright Brother's Collection

Processed by: Jeffrey A. Landis, June 2001

Revisions:

The collection was updated by Sherri Derringer, September 2005 and Lynda Kachurek, May 2008. The finding aid was re-formatted by Victoria Penno, February 2013. Finding aid revised by Allie Edmonds to reflect digitization of VHS tapes for reference, and film placed in frozen storage for preservation, March 2019.

Arrangement:

The collection is arranged into nine series:

Series I: Biographical, 1910-1968

Series II: Patents, 1909-1936, 1942

Series III: Aviation Materials, 1915-1962

Series IV: Publications, 1908-1958

Series V: Photographs, 1910-1960

Series VI: Wright Brothers Materials, 1903-1953, undated

Series VII: Scrapbooks, 1886-1956

Series VIII: Films, 1948-1951, 1954

Series IX: Digitized Aviation Autograph Album dated 1945-1962, 2001

Biographical/Historical Note:

Levitt Luzern Custer was born on July 27, 1888 in Dayton, Ohio. As a young boy, he frequented the Wright Brothers' Bicycle Shop, where he met the acquaintance of Wilbur and Orville

Wright. Katherine Wright was his Latin teacher at Steele High School. This began a long friendship with the Wrights, particularly Orville.

Custer attended Central District School and Steele High School, both in Dayton. He then attended Otterbein University in Westerville, Ohio, and the Massachusetts Institute of technology in Cambridge, Mass.

After briefly working for the National cash register Company, he founded the Custer Specialty Company in 1916. There he developed mechanical devices such as the statoscope, cars, motorized invalid chairs, power scooters, and various amusement park rides.

Custer was also a figure in aviation. He was a pioneer in flying and racing hot air balloons. His father Levitt Elsworth Custer had done the same. Custer also became an official timer for the national Aeronautic Association and the Federation Aeronautique Internationale. Custer officiated with Orville Wright at world record flight trials at McCook Field and Patterson Field, both near Dayton.

Custer was a member of the Dayton Engineers' Club; Early Birds; National Association of Amusement Parks, Pools, and Beaches; Kiwanis; and Free Masons. Custer was also a member of the Westminster Presbyterian Church.

Custer had three sons, James, Randall, and Donald from his first marriage. In his second marriage to Gladys Mills he had one son, Don. He died in 1962.

Scope and Content:

Levitt Luzern Custer was an early aviator and this collection shows his accomplishments. There are early patents from his inventions, log books from when he timed for air races and photographs of his activities and the other famous aviators he worked with. Some records are missing that were probably destroyed in the 1965 fire that consumed his company.

Series I, Biographical, contains biographies written by and about Levitt Luzern Custer. Correspondences are also included within this series, and include letters from R.W. Schroeder, Walter R. Brookins, and J.H. Doolittle, all early aviators. Of particular interest are the files of his inventions.

Series II, Patents, includes original patents, most of which belong to Custer. Some other patents belong to his father, Levitt Elsworth Custer and another inventor John H. Hammond. Of major importance is the invention of the statoscope, a devise used to measure the change in altitude for a balloon, dirigible and other aircrafts.

Series III, Aviation Materials, contains materials related to aviation, excluding documents relating to the Wright Brothers, which are found in Series VI. Included in Series III are log books and information on the Early Birds, as well as some newspaper clippings.

Series IV, Publications, contains magazine and news publications. Of major interest is a souvenir copy of *The Dayton Journal* printed in the air from the balloon "Hoosier" on June 29,

1909. The original of this is found in the scrapbook found in Box 9, Series VII. Aviation journals such as the Aero Club of America's journal are also within this series.

Series V, Photographs, includes photographs of ballooning, aviation, famous early aviators, and inventors such as Henry Ford. The photos encompass the years 1910-1960.

Series VI, Wright Brothers Material, holds some very extraordinary materials. A photograph of the first flight with a signature by Orville Wright is preserved here along with other photos. Dedication documents, booklets, and other memorabilia are also found in this series.

Series VII, Scrapbooks, is two scrapbooks belonging to the Custer family. In these, are clippings, documents, and photographs of major events, such as clipping of the work of the Wright Brothers, photographs of the 1913 Dayton flood, and certificates awarded to Custer.

Series VIII, Films, contains brief 16-mm reels of aviation races, C.F. Kettering's 75th birthday party, and Dayton sporting events. In the final box are S-VHS copies of the 16mm original film. The S-VHS tapes are digitized for reference only and available in the E-Archives.

Series IX, Digitized Aviation Autograph Album dated 1945-1962, includes 258 digital scans and prints made from an album of aviation autographs collected by Custer. The original album spans 1945-1962, and was loaned to Special Collections and Archives in 2001 to digitize and then returned to the family. Each page was digitized and the file name corresponds to the page number. A few pages are blank. Custer collected the autographs at special events and club meetings, such as Early Bird Day at Governor's Island in 1954. Entries by notable aviation figures often include the date signed, a personal note to Luzern Custer, and accomplishments in the field of aviation. It is truly a Who's Who of aviation history.

Subject Terms:

Persons/Families

Beachey, Lincoln, 1887-1915
Brookins, Walter R., 1889-1953
Custer, Levitt Luzern, 1888-1962
Doolittle, James Harold, 1896-1993
Ford, Henry, 1863-1947
Kettering, Charles Franklin, 1876-1958
Harris, Harold R., 1897-1989
Wright, Orville, 1871-1948

Organizations/Corporate Names

Early Birds of Aviation (Organization)
Custer Specialty Company – Ohio -- Dayton

Places

Dayton (Ohio)

Subjects (General)

Amusement rides --1919-1939

Hot air balloons

Inventors – Ohio – Dayton – 20th century

Material Types

Newspaper

Photographs

Electronic records (digital records)

Acetate film

Patents

Occupations

Engineer

Inventor

Collection Inventory

Series I: Biographical, 1910-1968			
<u>Box</u>	<u>File</u>	<u>Description</u>	<u>Date</u>
1	1	Biographical Documents	1944, 1962, undated
	2	Correspondence	1910-1968
	3	Miscellaneous Files	1937-1962
	4	Inventions	1935-1958
	5	Blueprints and Drawings	1949-1959
Series II: Patents, 1909-1936, 1942			
<u>Box</u>	<u>File</u>	<u>Description</u>	<u>Date</u>
2	1	Patents	1909-1910
	2	Patents	1910-1915
	3	Patents	1919
	4	Patents	1922
	5	Patents	1927
	6	Patents	1930
	7	Patents	1931
	8	Patents	1933
	9	Patents	1935
	10	Patents	1936
	11	Patents	1942
	12	Miscellaneous Patent Documents	undated
Series III: Aviation Materials, 1915-1962			
<u>Box</u>	<u>File</u>	<u>Description</u>	<u>Date</u>
3	1	Articles	1960-1962
	2	Log Books	1915-1939
	3	Log Books	1939-1946
	4	Log Books	1944-1945
	5	Log Book on Barograph Tape	1924
	6	Early Birds' <i>CHIRP</i> Magazine	1953
	7	Early Birds' Correspondence	1960
	8	Early Birds' Photographs	1948-1959
	9	Early Birds' Memorabilia	1939-1959
Series IV: Publications, 1908-1958			

<u>Box</u>	<u>File</u>	<u>Description</u>	<u>Date</u>
4	1	Brochures	1908-1954
	2	<i>Dayton Journal</i> article	1909
	3	Aviation Journals	1910-1919
	4	<i>Aero Club of America</i> book	1911
	5	Aircraft Product Catalogues	1919
	6	Rule Book	1922
	7	<i>International Air Races</i> Monthly	1924
	8	Prague Conference Report	1925
	9	Flier of the Song "The Aviator"	1927
	10	Bookmarks	1935
	11	Aeronautics Annual Report	1938
	12	Page from <i>Who's Who in Aviation</i>	1943
	13	Newspaper Articles	1953
	14	Air Show, Dayton Directory and Log	1954
	15	Congressional Record	1958
	16	Army Air Service Report	undated
Loc 41	Fol 2	<i>National Aeronautics Association Review</i>	1924

Series V: Photographs, 1910-1960

<u>Box</u>	<u>File</u>	<u>Description</u>	<u>Date</u>
5	1	(1) L.L. Custer and Balloon "Luzern" (2) W.R. Brookins at Simms Station	1910 1910
	2	National Balloon Race, Kansas City	1912
	3	(1) Lincoln Beachey, photo with inscription (2) Descriptor from the back of frame signed by L.L. Custer (3) Photograph of frame descriptor	1914 undated undated
	4	(1-3) Original and composite photos of flight off Reibold Building Dayton, Ohio (4) Copy of negative of Lt. John Macready's World Altitude Record (5) Descriptor from back of frame of photo of L.L. Custer	May 2, 1923 undated undated
	5	Photos and descriptors of World Altitude Record By Lt. John Macready	1924
	6	Steam Heat Head with L.L. Custer, Dayton Power And Light	1955
	7	General E.W. Rawlinger, signed	1957

	8	Brig. General Frank P. Lahm, signed with note from L.L. Custer	undated
	9	Photo and copy of notable businessmen	undated
	10	Portrait of L. L. Custer	undated
	11	Photographs taken at Custer Specialty Co.	1939
	12	Photos of Amusement Park Ride	1959-1960
	13	Military Equipment	undated
	14	Portrait of Randall Custer, L. L. Custer's son	undated

Series VI: Wright Brothers Material, 1903-1953, undated

<u>Box</u>	<u>File</u>	<u>Description</u>	<u>Date</u>
6	1	First Flight Photo, signed by Orville Wright	1903
	2	Wright Flyer booklet	1910
	3	Dedication of Wright Home and Shop	1938
	4	Wright Brothers Hill dedication	1940
	5	Presentation of Wright 1903 Flyer to Smithsonian	1948
	6	Drawing of Wright Motor Crank Case	1950
	7	50 th Anniversary of powered Flight	1953
	8	Orville Wright portrait signed	undated
	9	Photographs, including Orville Wright, Henry Ford, Charles F. Kettering	undated
	10	Manuscript by Custer <i>My Intimate Association with the Wrights</i>	undated
	11	Christmas Card from Orville	undated
	12	Other Memorabilia	undated

Series VII: Scrapbooks, 1886-1956

<u>Box</u>	<u>File</u>	<u>Description</u>	<u>Date</u>
7	1	Volume 1 of Scrapbooks (Photocopies in Box 8A, File 1)	1886-1913
8	1	Volume 4 of Scrapbooks (Photocopies in Box 8A, File 4)	1946-1956
8A	2	Photocopies of Volume 2 of Scrapbooks	1910-1928
8A	3	Photocopies of Volume 3 of Scrapbooks	1929-1945

Series VIII: Films, 1948-1951, 1954 Note: To view content of the films, use the mp4 files made from VHS tapes of the films for reference (E-archives ms302_e0004)

<u>Box</u>	<u>File</u>	<u>Description</u>	<u>Date</u>
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9	1	Air Race Cleveland Sept.4, 5, 6, 1948. Cleveland, Ohio: Levitt Luzern Custer, September 4-6, 1948. 1 film reel: (2:48); silent, color; 16mm.	1948 September 4-6
	2	UD vs. St. Louis Football 1948. Levitt Luzern Custer, 1948. 1 film reel: (1:27); silent, color; 16mm.	1948
	3	Universal Church North Chicago, July, 1949; Wright Field, 1948; Air Show/ Horse Race. Chicago, Illinois; Dayton, Ohio: Levitt Luzern Custer, 1948-1949. 1 film reel: (0:14); silent; color; 16mm.	1948-1949
	4	Marseilles, France; Oil Tanker; Edwin Shuey's 50 th Anniversary May 1949. Marseilles, France: Levitt Luzern Custer, 1949. 1 film reel: (1:22); silent; color, 16mm.	1949
	5	Gene Core Don Airplane 1950. Unknown place of publication: Levitt Luzern Custer, 1950. 1 film reel: (1:20); silent; color, 16mm.	1950
	6	Detroit Air Races Aug. 17-18, 1951; Kettering-75 th Birthday. Detroit, Michigan: Levitt Luzern Custer, 1951. 1 film reel: (1:21); silent; color, 16mm.	1951 August 17-18
	7	National Air Races Dayton Airport Sept. 4, 5, 6, 1954. Dayton, Ohio: Levitt Luzern Custer, 1954. 1 of 2 film reel: (1:23); silent; color, 16mm.	1954 September 4-6
	8	National Air Races Dayton Airport Sept. 4, 5, 6, 1954. Dayton, Ohio: Levitt Luzern Custer, 1954. 2 of 2 film reel: (1:24); silent; color, 16mm.	1954 September 4-6
	9	Tighe "TY" and the Dayton Ducks. Unknown place of publication; Levitt Luzern Custer, 1950. 1 film reel: (1:22); silent; color, 16mm.	1950
10	1-9	Copies of 16mm reels onto S-VHS (Digitized as mp4 files for reference only in E-Archives ms302_e0004)	circa 2000
Series IX: Digitized Aviation Autograph Album dated 1945-1962, 2001			
<u>Box</u>	<u>File</u>	<u>Description</u>	<u>Date</u>
11	1	CDs of 258 digital scans of Aviation Autograph Album with entries from 1945-1962 (use digital prints in Box 11, File 2 for reference or see E-Archives ms302_e0001-e0003 for TIF files)	2001
	2	Digital prints of all autograph album pages with entries from 1945-1962	2001