Alexander Petroff Papers

Collection Summary

Title: Alexander Petroff Papers
Call Number: MS 89-15
Size: 3.25 linear feet
Acquisition: Donated by Genevieve Petroff
Note: None
Restrictions: None

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Restrictions
None

Content Note

A major part of this collection is comprised by photographs gathered by Alexander Petroff of military and civilian aircraft, especially Cessna and Curtiss-Wright designs, manufactured in the late 1920s and early 1930s. The collection also includes technical reports authored by Petroff and others.

Biography

Alexander Petroff was a native of Russia who left his native land during the 1917 Revolution. He came to the United States and taught aeronautical engineering at the University of Michigan before becoming the first director of the aeronautical engineering department at the University of Wichita. He later became an engineer with Cessna in Wichita and taught at several universities.
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### Detailed Description: Box and Folder Listing

#### Series 1 – Writings by Petroff

#### Series 1.1 – Technical Reports

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<td>“Response of the HFB-1 to a Sudden Reflection of the Control Surfaces,” 1952.</td>
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“Non-dimensional Comparison of Take-off and Landing Distances,” 1956.


“Effect of Wing Area and Weight on Cruise Velocity of the Model 310,” 1959.


Several articles on fuel control and efficiency


Correspondence to Petroff at Cessna, 1961-1963.

Letter from P. B. S. Lissaman, Northrop Corporate Labs, Hawthorne, California, to Petroff, La Jolla, California, March 16, 1970.

Several letters from NACA to Petroff concerning various projects.

Cessna publication, Cessquire, 9-17-1954

Cessna study on “A Look at America’s Newest Volume Industry in 1970.”

“Designing Tomorrow’s Personal Plane,” n.d.


“Dirigibles: Aeronautical Opportunities for the ’70s and ’80s,” n.d.
Box 1 FF 22 “The Next 50 Years in Aerospace Education,” 1964.

Series 5 – Governmental Aviation Reports

Box 2 FF 1 National Advisory Committee on Aeronautics Report no. 408 -- “General Formulas and Charts for Calculation of Airplane Performance,” 1932.

Box 2 FF 2 Office of Naval Research, November 1, 1951 -- “Lower Speeds for Fixed-wing Aircraft.”

Box 2 FF 3 “Calculations of High Speed of a Military Airplane,” n.d.

Box 2 FF 4 Untitled fragment


Box 2 FF 7 Units of Weights and Measures, Department of Commerce Reports, 1936 and 1960.

Box 2 FF 8 Report on MX-772, supersonic Ram, jet-powered missile, n.d.

Box 2 FF 9 “Efficiency of Personal Aircraft at Cruising and High Speeds,” n.d.

Box 2 FF 10 Various reports on fuel and propulsion systems for civil aircraft. n.d.

Box 2 FF 11 “Importance of the Turbopropeller Engine for the Multi-purpose 4- to 6-seater Light Aircraft,” n.d.


Box 2 FF 13 “Rigorous Performance Prediction Without Drudgery” by Elliott G. Reid, circa 1939; and airplane performance and design charts.

Series 6 – Magazines


Box 2 FF 15 Aeronautic Engineering Review, 1955-1958, and other articles from various sources.

Box 2 FF 16 Patent Digest, 1959.

Also contains other patent information including U.S. and foreign.

Series 7 – Aircraft Photographs Taken from Magazines
“Inter-Avia,” 1933 -- contains various photographs, such as the Douglas DC-1, Conquest 101, and Wilbur Wright.

Curtis Wright public relations photographs

World War II air combat photographs clipped from magazines and articles on the Cessna M 319

**Series 8 – Cartoons and Other Drawings Related to Aircraft**

“Wattson’s Quips,” cartoons showing life at Cessna

Cartoons

Mechanical drawings and images, mostly of Curtiss airplanes

Unidentified sketch from World War II

Miscellaneous mechanical drawings and photographs

Miscellaneous sketches and photographs

**Series 9 – Teaching Materials**

Clippings related to aerospace engineering at Wichita State University. “Wichita Businessman to Fight for Aeronautical School Here,” n.d.; two photographs of engineering students; a list of engineering graduates; and an article on Dwane Wallace, University of Wichita graduate, aviation engineer and Cessna executive.

Correspondence related to Brazil program, 1965.


University of Michigan-Brazil program book, n.d.

Correspondence and other items related to Indonesia program, 1963.

Lecture note fragment, n.d.

**Series 10 – Photographs**

**Series 10.1 – Photographs of Curtiss Military Aircraft, 1928-1943**

Curtiss F9C-2, 1932

Curtiss O2C-1, 1931; Curtiss O2C-2, 1933
| Box 5 | FF 3 | Curtiss XP-6H, 1933 |
| Box 5 | FF 4 | Curtiss X03C-1, 1934 and 1935 (Navy) |
| Box 5 | FF 5 | Curtiss F11C-2 (with 500 lb. bomb), 1932 |
| Box 5 | FF 6 | Curtiss Hawk-Army P-1C, 1929 |
| Box 5 | FF 7 | Curtiss Army Y0-40, 1932 |
| Box 5 | FF 8 | Curtiss A-12 Shrike, 1933 |
| Box 5 | FF 9 | Curtiss S0C-1 Flagship, 1935 and 1936 |
| Box 5 | FF 10 | Curtiss Y10-40B monoplane, 1933 |
| Box 5 | FF 11 | Curtiss Falcon-Army, 1930 |
| Box 5 | FF 12 | Curtiss X0-1G, 1930 |
| Box 5 | FF 13 | Curtiss Challenger, 1928 |
| Box 5 | FF 14 | Japanese Hawk, 1930 |
| Box 5 | FF 15 | Curtiss XF9C-1, 1931 |
| Box 5 | FF 16 | Curtiss YA-10, 1932 |
| Box 5 | FF 17 | Curtiss XF8C-7 Cyclone, 1930; Curtiss XF9C-2, 1931 |
| Box 5 | FF 18 | Curtiss Y1A-18, 1937 |
| Box 5 | FF 19 | Curtiss Condor bomber XB-2, 1927; Curtiss Army B-2 Condor bomber, 1929 |
| Box 5 | FF 20 | Curtiss P-40-N, 1943 |
| Box 5 | FF 21 | Curtiss XS3 C-1, 1932 |
| Box 5 | FF 22 | XPT-5 Curtiss Challenger engine, 1928 |
| Box 5 | FF 23 | Curtiss XF11 C-1, 1932 and 1933 |
| Box 5 | FF 24 | Curtiss XA-14, 1935 |
| Box 5 | FF 25 | Curtiss XF13C-1, 1933 |

**Series 10.2 – Photographs of Cessna Military Aircraft and Unidentified Military Aircraft**

| Box 5 | FF 26 | Unidentified Cessna military aircraft |
| Box 5 | FF 27 | Miscellaneous unidentified military aircraft |
Box 5 FF 28 Contains a postcard of Bristol “Bull-dog,” n.d., Royal Air Force

Box 5 FF 29 Contains photographs of Navy dirigible, 1932, and Mayflower II, Goodyear, n.d.

Series 10.3 – Photographs of Curtiss Private and Commercial Aircraft, 1923-1936

Box 6 FF 1 Curtiss Fledgling Wright J-6 engine, 1929

Box 6 FF 2 Curtiss Robin, various engines, 1929

Box 6 FF 3 Curtiss Kingbird, 1929 and 1930

Box 6 FF 4 Curtiss XP-934, 1932

Box 6 FF 5 Curtiss DES 60-A, 1936

Box 6 FF 6 Curtiss XS2C-1, Wright R-1510 engine, 1933

Box 6 FF 7 Curtiss Condor #3, 1931

Box 6 FF 8 Curtiss P-6E, 1932

Box 6 FF 9 XPT-5 Curtiss Challenger engine, 1928

Box 6 FF 10 Seaplanes: Curtiss Wright Duck, 1932; Curtiss Columbian Falcon, 1928; Curtiss Robin seaplane, 1929

Box 6 FF 11 Curtiss Y0-40A, 1932 and 1933

Box 6 FF 12 Curtiss Falcon OJ-E, 1930; X0-16, 1930; Conqueror Falcon water-cooled engine 1930; and mail plane, 1930

Box 6 FF 13 Curtiss Model 10 Waco, n.d.

Box 6 FF 14 Curtiss Y1A-8A, 1932

Box 6 FF 15 Curtiss T-5942, n.d.

Box 6 FF 16 Curtiss Carrier Pigeon II, 1923

Box 6 FF 17 Cuban Hawk P-6, Wasp engine, 1930

Box 6 FF 18 Curtiss X53C-1, 1932

Box 6 FF 19 Curtiss XA-8, 1931

Box 6 FF 20 Curtiss YP-20, 1930

Box 6 FF 21 Curtiss YA-8, 1932

Box 6 FF 22 Curtiss YF9C-2, 1931

Box 6 FF 23 Curtiss Teal, 1930
Box 7 FF 1 Curtiss Standard C-6 motor, n.d.
Box 7 FF 2 Curtiss Thrush, various engines, 1929
Box 7 FF 3 Curtiss XP-23, 1932
Box 7 FF 4 Curtiss 1930 Hawk, water-cooled Conqueror engine, 1930
Box 7 FF 5 Curtiss Export Hawk, 1932; Curtiss Export Falcon, 1933
Box 7 FF 6 Curtiss XF11C-2, 1932
Box 7 FF 7 Curtiss YA-10, 1932
Box 7 FF 8 Curtiss Y10-40B, 1933
Box 7 FF 9 Curtiss Travel Air Speedwing, 1932

Series 10.4 – Photographs of Various Private and Commercial Aircraft

Box 7 FF 10 A-W Cessna Warner-Scarab engine, c. 1930
Box 7 FF 11 Lincoln AP cabin, Kinner engine, n.d., and Bristol “Lucifer school” n.d.
Box 7 FF 12 Macchi M-39, Fiat AS-2 motor, set world record for seaplane at 512 kilometers per hour in 1928 (picture from L’Anee Aeronautique, 1927-1928)
Box 7 FF 13 Henri Farman winning German aviation contest in January 1908 flying a Voisin Brothers aircraft with Antoinette-Levavasseur motor (picture from L’Anee Aeronautique, 1927-1928)
Box 7 FF 14 Unidentified Cessna, c. 1950s
Box 7 FF 15 Postcard of tri-motored Fokker flying over New York Central Railroad, n.d.
Box 7 FF 16 Early airliners: Junker’s Grossflugzeug G38 D2500; Imperial Airways “City of Glasgow” and “City of Karachi;” Bristol freight carrier; and Mohawk Aircraft Corporation. Kinner 50 hp.
Box 7 FF 17 Junker’s Ganzmetall-Grossflugzeug G24, n.d.
Box 7 FF 18 Doriner flagship, n.d.

Series 10.5 – Miscellaneous Photographs

Box 7 FF 19 Miscellaneous unidentified aircraft
Box 7 FF 20 Unidentified pilots
Box 7 FF 21 Pictures of model airplanes
Box 7 FF 22 Unidentified drawing
Box 7 FF 23 Unidentified helicopter

Box 7 FF 24 Building pictures, some identified, some of Cessna in Wichita

**Series 11 – University of Michigan**

Box 8 FF 1 Contains “The First Fifty Years (A Fragmentary, Anecdotal History),” Department of Aeronautical and Astronautical Engineering, University of Michigan, October 1964.

**Series 12 – Translations**

Box 8 FF 2 Contains the translated notes written by Petroff from a Russian book by Golubev.

Box 8 FF 3 Contains several letters to P. B. S. Lissaman at Northrop Corporate Laboratories concerning translations Petroff did from a book by Golubev for the company. The letters are dated from May 13, 1970 to October 30, 1970.

Box 8 FF 4 Contains the translated notes written by Petroff from a Russian book by Golubev.

Box 8 FF 5 Contains the translated notes written by Petroff from a Russian book by Golubev.

Box 8 FF 6 Contains three letters from P. B. S. Lissaman of Northrop Corporate Laboratories to Petroff. One letter, dated March 26, 1970, tells that Lissaman received Petroff’s book on aerodynamics by Golubev and suggested that an English translation of the book be made. He also asked Petroff if he would be interested in making the translation. Another letter, dated December 11, 1970, thanks Petroff for translating the first three chapters, which were the most important to him. The other letter, undated, wishes Petroff a Merry Christmas.

For information, please contact us at:

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