

AEROSPACE EDUCATION

NEW YORK WING, CIVIL AIR PATROL

817 St- Avenue (*Re:ar*), Garden City NY 11530-4856

Tue. Eve. 516-222-9140 FAX 516-222-9146 nywg@juno.com

THE WRIGHT TRAVEL GUIDE

Kill Devil Hills near Kitty Hawk, North Carolina

This is the place where it happened! There is a monument at the top of Kill Devil Hill and a marker at the spot where the first powered flight actually lifted off. There are additional markers where each of the four flights of December 17th 1903 landed. There is also a visitor center/museum maintained by the National Park Service. Replicas of the two buildings that the Wright Brothers had built have been reconstructed. The originals had been destroyed by storms and the wood scavenged by local residents. The sand dunes have been planted with grass to prevent them from blowing away in future storms. There is an airstrip within view of the site. Pilots can bring their aircraft to see where their great-great grand daddy was born.

Washington, DC

The National Air & Space Museum of the Smithsonian Institution houses the original 1903 Wright aircraft. They also exhibit the "Vin Fiz," the modified 1911 Wright Model EX that Cal Rogers used on the first coast to coast flight. The trip took seven weeks (about 80 hours of actual flight time). It seems unfair to call this aircraft, "the original Vin Fiz" as it had crashed and been repaired so many times that few parts made the entire trip from Sheepshead Bay, Brooklyn, New York to Long Beach, California. The Smithsonian tends to change the artifacts that it has on display. While the original "Flyer" is permanently ensconced in the "Milestones of Flight" gallery by the main entrance and the "Vin Fiz" is nearby, other Wright items may be put on display or removed from time to time.

Detroit, Michigan

Greenfield Village at Dearborn, Michigan is just to the southwest of Detroit. Henry Ford obtained the Wright Brothers' home on Hawthorn Street and their shop on West Third Street in Dayton and had them moved to this outdoor museum and equipped them as they had been originally, using replica furnishings and fixtures if originals could not be obtained.

Dayton, Ohio

This is Wright Brothers country. The USAF Museum is at nearby, Wright-Patterson AFB. The museum has a replica of the "Flyer" that was sold to the Army in 1909, thus becoming the world's first military airplane. They also have a modified Model B Flyer. The Model B was the first aircraft manufactured in quantity by the Wrights. Huffman Prairie/Simms Station, just northeast of Dayton near Wright-Pat, was a cow pasture that the Wright Brothers rented in order to practice flying and improve their aircraft. A monument to the Wrights is located there.

Carillon Park is at the southern end of Dayton by the Great Miami River. In Wright Hall, it has the 1905 "Flyer ." It is about 60% original and 40% reconstructed from original Wright drawings under the supervision of Orville. This was the airplane that the Wrights flew at Huffman Prairie and was a great improvement over the one that they had flown at Kitty Hawk. The bicycle that the Wrights used to test airfoil shapes before they built a wind tunnel is also on exhibit as well as a replica of the wind tunnel. A replica of the balances that they used with the wind tunnel is exhibited. The original balances are in the Franklin Institute, Philadelphia, Pennsylvania.

The Wright Cycle Shop, on the west side of the Great Miami River, has been reconstructed (the original building was moved to Greenfield Village) and is now operated by the National Park Service.

London, England

The Science Museum at South Kensington, London, exhibited the original Wright "Flyer" for many years. They returned it to the U.S. following World War II. Before sending it, they made careful drawings from which they reconstructed an excellent replica. They have it hanging from the ceiling with its wings warped as though it is in the process of making a turn. They also kept a small piece of an original spar, which is proudly displayed in a glass case.

For very serious researchers:

The Library of Congress, Washington, DC has around 30,000 items relating to the Wright Brothers, occupying 53 linear feet of shelf space.

Wright State University at Fairbom, Ohio (about halfway between Dayton and Springfield) is the repository of an extensive quantity of Wright material not directly related to the aircraft.

THE WRIGHT READING GUIDE

Omega G. East: Wri2ht Brothers National Memorial North Carolina \$4.50 U.S. Government Printing Office, Washington, DC 20402

This is really a pamphlet, only 64 pages, but highly recommended. Part of the National Park Service "Historical Handbook" series, it contains all the important information about the Wright Brothers and over 50 pictures.

Marvin W. McFarland: The Papers of Wilbur and Orville Wright
2 vols. \$104.95 Ayer Company Publishers, Inc. 6 Lower Mill Road, North Stratford, NH 03590

After the death of Orville Wright, the Wright Brothers' letters, diaries, notebooks, drawings, and other papers relating to their aircraft were given to the Library of Congress and are now stored in 120 containers. Librarian of Congress, Marvin McFarland, went through this great mass of material and selected those things that he felt were most important for the book. Among other things, the book has a diagram of the kite that Wilbur designed and flew to test his wing- warping theory and documents relating to the many court cases regarding the Wrights' patents.

Your public library may have this book in its research collection. If you can't find it listed in the catalogue under McFarland, try looking under the title or under Wright.

Fred c. Kelly: The Wright Brothers
\$8.95 Dover Publications, 31 E. 2nd St., Mineola, NY 11501

Originally published in 1943, this book appears on everyone's bibliography. The most important feature of this book is that Kelly actually interviewed Orville Wright and worked with him in writing the book. Some scholars feel that since Wilbur had long since passed away, the book is inclined to reflect Orville's thinking at the expense of others. However, the Wright family was a bunch of letter-writers and kept diaries (lots of travel and no telephones). They may have no longer been alive, but their thoughts and feelings did make their way into the book.

Harry Combs & Martin Caidin: Kill Devil Hill: Discovering the Secrets of the Wright Brothers
\$16.95 Tern Style Press, Ltd., P.O. Box 4436, Englewood, CO 80155

Harry Combs, an engineer, a pilot, and president of Gates Learjet received a gift of the McFarland book from astronaut Neil Armstrong. After reading it, he became so inspired that he had to explain to the world what the Wright Brothers had accomplished from an engineer's point of view. He obtained the assistance of well-known aviation-writer and radio commentator, Martin Caidin (also a pilot) to write this book. The Wright Brothers achievement is analyzed step-by-step with diagrams, where necessary to clarify the explanations.

Fred Howard: Wilbur and Orville: A Biography of the Wright Brothers
\$17.95 Dover Publications, 31 E. 2nd St., Mineola, NY 11501

Fred Howard worked as an assistant to Marvin McFarland and often rode the same commuter train with Fred Kelly. He knew that not too many people would buy the McFarland book because of the cost and he felt that other books focused on the Wrights, but neglected to mention other people who desired to fly, but were unsuccessful for various reasons. His book covers a little family history, but he clearly states that it can be skipped over.

Tom Crouch: [The Bishop's Boys: A Life of Wilbur and Orville Wright](#)
\$21.95 W.W. Norton & Company, 500 5th Ave., New York, NY 10110

A number of years ago, Tom Crouch was talking about writing a book about Octave Chanute. He never seemed to have gotten the book published, but he did put a lot of detail about Chanute in [The Bishop's Boy's](#). There is a lot about the Wright family, too. One reviewer didn't like having to wade through all the family stuff just to get to the part he was interested in. Actually, he could have skipped over the parts that didn't interest him. The beauty of this book is exactly that it ~ describe family life in the late 19th and early 20th century. Wilbur was born only a couple of years after the Civil War. For people interested in history as well as the invention, this is the ideal book.

Richard P. Hallion: [The Wright Brothers: Heirs of Prometheus](#)
Out of print. Smithsonian Institution Press, Washington, DC

Air Force Historian, Richard P. Hallion was curator of Science and Technology at the Smithsonian's National Air and Space Museum at the time that he assembled this delightful anthology which is, unfortunately, out of print at the present time. It contains a marvelous, and unintentionally humorous, piece by the editor of a bee-keeping journal who had observed the Wrights fly at Huffman Prairie and compared their aircraft to a locomotive without wheels, but with wings instead. There are short pieces by Paul Garber, Marvin McFarland, Tom Crouch, Charles H. Gibbs-Smith, and others plus a 44 page picture section. Also included is the article by Orville Wright entitled, "How We Made the First Flight."

Howard S. Wolko: [The Wright Flyer: An Engineering Perspective](#)
Out of print. Smithsonian Institution Press, Washington, DC

Five sections by five different writers analyze various technical aspects of the Wright airplane.

Leonard S. Hobbs: [The Wright Brothers' Engines and Their Design](#)
Smithsonian Institution/U.S. Gov't Printing Office Washington, DC

This small book goes into some detail about the Wright engines and their creation. It is illustrated with diagrams and photographs, including photographs of the dis-assembled engine.

Orville Wright: [How we Made the First Flight](#)
Free? FAA Officer of Public Affairs Aviation Education Program
800 Independence Ave., SW, Washington, DC 20591

This originally appeared as a magazine article. The FAA reprinted it as a booklet with a foreword by Paul Garber, a bibliography, and photos.

Ivonne W. Miller: [Wright Reminiscences](#)
\$5.95 USAF Museum Foundation
P.O. Box 33624, Wright-Patterson AFB, Ohio 45433

Ivonne Wright Miller was the daughter of the Wright Brothers' brother, Lorin, and grew up a few blocks away from the house where Wilbur and Orville lived with their father and sister. She put down her own memories and collected stories from others who had known her famous uncles. The book rambles and mentions the names of people without always explaining who they were, but it is a wonderful "I knew them" account.

Grover Loening, after whom CAP's Grover Loening Award is named, was a young engineer who worked for Orville Wright before leaving to start his own business where he would, later, hire a young World War I Naval veteran named Roy Grumman. Loening tells what it was like to be hired by and to work for Orville Wright.