Guide to the Albert Adams Merrill Papers, 1892-1951

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Abstract
Albert A. Merrill was an aviation pioneer and designer. He was born on October 23, 1874 in Hyde Park, Massachusetts. From 1894 to 1911 he worked for Boylston National Bank in Boston, then from 1911 to 1918, as an accountant for T. C. Edwards and Waldron Rand in Boston, finally ending up at Price Waterhouse in Los Angeles. In 1918, he joined the Throop faculty as an instructor in accounting and aeronautics. Merrill left the Caltech staff in 1930 to engage privately in airplane design, but later returned in 1940.

At Caltech, Merrill supervised the design, construction, and operation of a small wind tunnel on campus. It was the first wind tunnel on the west coast, and continued in operation until it was destroyed by fire in the 1930s. He helped to develop
small subsonic wind tunnels operable by one person. A 110-foot long tunnel of this type was built at Caltech in the late 1940s and dedicated to Merrill in August, 1950.

He held several patents for airplane design. One of his earliest was for the 'up only' aileron, which provided lateral control by deflecting upward only and eliminating drag on the down aileron. Accordingly, it eliminated the need for combined use of rudder and aileron, which had been necessary for many years. The Merrill Aircraft Company built the Stagger-Decalage biplane based on his designs, which claimed to land "safely without manipulation of controls and...will not nose dive, stall, or spin."

Throughout his lifetime Merrill was interested in flying. Upon his graduation from English High School in Boston in 1892 and 11 years before the Wright Brothers' first flight, he delivered an essay on aerial navigation. In this essay, he predicted that man would be able to fly in small ships with light, powerful engines within 10 to 15 years. In 1894, he started the Boston Aeronautical Society and was both secretary and treasurer until it disbanded in 1912. Merrill learned to fly in 1911, first at Squantum and later at the Wrights' place in Dayton. He published numerous articles on airplane design and other contemporary topics as well. Merrill died in 1952.

The collection contains biographical material, a small amount on wind tunnels and early flight, reprints of Merrill's articles, manuscript articles, patent specifications, and manuscripts of three books.

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<td>Alexander Kemlin, &quot;The Merrill Movable Wing Stagger Décalage Biplane,&quot; Aviation Engineering, 1931</td>
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