



(left) The Wings of History display of the Wright Flyer.

This replica was originally built for Irv Perch, owner of the Morgan Hill, CA restaurant-museum, 'The Flying Lady.' Ownership of the Flyer passed to Vaughn Lamb, one of the Wings of History founders and Mr. Lamb gave it to the Wings of History museum.

The replica is full size and is an accurate, non-flying reproduction of the original 1903 Wright Flyer. It was exhibited in many California locations during the 2003 Wright brother centennial.

Here is more interesting information about the Wright Flyer: We know the Wright brothers did not "invent" the airplane! They did the some of the first engineering analysis of what makes an airplane fly and refined the data provided by earlier pioneers. As a result, the Wright brothers were able to design and fly the first *powered* aircraft! Here are the details in Wilbur Wright's own words:

"Just eighteen years ago, on the seventeenth of December, 1903, after centuries of endeavor, man for the first time was lifted into the air by a power propelled airplane. Flight seems so easy today that one naturally wonders at the long delay in its accomplishment. Yet eighteen years ago on account of the thousands of failures, flying was classed with perpetual motion and the few who expressed belief in its possibilities were looked upon as mentally unbalanced.

Up to 1900, only a few measurements of airplane wings had been made along successful lines. Most flying experiments up to that time had been made on the 'cut and try' plan; and by that plan flight probably would not have been accomplished for centuries yet to come. The problem was not one to be solved by guesswork. Duch-emin about the middle of the last century had published a
or-mula
for calculating the pressure on planes at different angles.
Lilienthal
in the eighties had published his measurements on several curved surfaces with other valuable

scientific work. Langley in the nineties published his measurements of plane surfaces corroborating the earlier work of

Duchemin

. It was to the work of

Lilienthal

that my brother and I were by far most deeply indebted. But owing to various defects in the systems of measuring all of this work, we found it, too in-accurate and too meager

for purposes of design. (continued on page 2)

"In 1901 my brother Wilbur and I, having proved by actual gliding tests the inaccuracy of these tables, began a scientific study of the subject. We designed new tables of measuring instruments and made measurements of hundreds of differing wing surfaces in a wind tunnel. It was due to the accuracy of these measurements that we were able, in 1903, to design a new type of biplane, almost entirely from calculation, which was able to lift itself and operator in the air with a crude motor weighing more than twelve pounds per horsepower. We had already developed a new system of control, the system with which our name has been so largely connected, but this system of control would have been of little use without our wind tunnel work which enabled us to design a machine which would lift itself. "The longest flight on Dec. 17, 1903, was fifty-nine seconds duration at a speed of 30 miles an hour. Today continuous flights of more than 24 hours have been made and speeds in excess of 175 miles an hour reached. Many laboratories in all countries are now at work in this field of science. Who then will Attempt to predict what airplanes can do at the end of another eighteen years?"

Read a fascinating account of airplane design testing at the turn of the century:

[Windtunnel.p](#)

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[You can operate the Wright Flyer's control surfaces with the actual controls in the picture below. \(scroll down\)](#)

[{iframe width="700px" height="500px"}http://www.pbs.org/wgbh/nova/assets/swf/1/pilot-wright-brothers-flyer/pilot-wright-brothers-flyer.swf{/iframe}](#)

