



0. THE FIRST FLIGHT - Story Preface

1. WILBUR AND ORVILLE WRIGHT

2. AIRCRAFT CONTROL

3. LIFT AND DRAG

4. KITTY HAWK

5. THE FIRST FLIGHT

6. FLYER 3 and OTHER FAMOUS FLIGHTS

7. THE FIRST ROCKETS

8. EXPERIMENTAL PLANES

9. THE SOUND BARRIER

10. THE SPACE RACE

11. THE FIRST MAN & WOMAN IN SPACE

12. ALAN SHEPARD'S FLIGHT

13. JOHN GLENN'S ORBIT

14. DEATH IN THE COMMAND MODULE

15. TO THE MOON

16. APOLLO 11

17. APOLLO 13

18. THE SHUTTLE'S DESIGN FLAW

The photographs of the Wright Brothers, at the controls of Flyer 1, are now maintained at the Library of Congress (LoC). This since-improved image depicts the first flight which took place on December 17, 1903. [The LoC provides this description](#): "Photograph shows the first powered, controlled, sustained flight. Orville Wright at the controls of the machine, lying prone on the lower wing with hips in the cradle which operated the wing-warping mechanism. Wilbur Wright running alongside to balance the machine, has just released his hold on the forward upright of the right wing. The starting rail, the wing-rest, a coil box, and other items needed for flight preparation are visible behind the machine. (Orville Wright preset the camera and had John T. Daniels squeeze the rubber bulb, tripping the shutter.)" Click on it for a great view.

On December 17, 1903 these [normally cautious](#), deliberative, methodical, [bicycle-shop-owning](#) brothers did something surprising. They disregarded every aspect of safety to become the world's first powered flyers.

The wind was strong that morning - gusting between 20 and 30 miles per hour. The Wright brothers had lots of reasons to delay their flight. The wind chill over the ocean would be about 4 degrees Fahrenheit - pretty cold for someone flying unprotected on Flyer 1.

Just [three days before](#) Wilbur, winning a coin toss to see who would fly first, had taken the controls of Flyer 1 only to make a [misjudgment](#) at launch. Will's telegraph describing the misadventure, [recorded by his father](#) on December 15, says it all.

But even though weather conditions were extremely unfavorable on the 17th, the brothers wanted to be home for Christmas. In an uncharacteristic action that has amazed historians ever since, the Wrights put safety second and passion first. It was time to [fly their new airplane](#). John Daniels, a member of the Wright's crew, recalled those tense moments:

After a while they shook hands, and we couldn't help notice how they held on to each other's hand, sort o'like they hated to let go; like two folks parting who weren't sure they'd ever see each other again.

At about 10:30 a.m. Orville, who had lost the coin toss to Wilbur on the 14th, [took the controls](#). The wind was gusting at about 27 miles per hour. Launching from a homemade track apparatus the brothers called their "Grand Junction Railroad," Orville flew 120 feet in twelve seconds. Since no one had ever flown before, the Wright brothers knew they were taking a chance. They had their [life-saving crew](#) standing by.

The crew witnessed the first time a human being ever flew a plane, under his control, from the ground, through the air, and back safely. But the short flight was jerky and unsteady.

Orville, like his brother three days before, didn't have a good handle on the controls. Inventing a plane was one thing; actually flying it in real time was something else. They wanted to test Flyer 1 again.

Wilbur flew next. His flight took him 175 feet. Orville was pilot-in-command of the 200-foot third flight. The last flight - ever - of Flyer 1 was amazing. Wilbur had a good feel of the controls. He flew fifty-seven seconds and covered 852 feet before he landed, breaking the rudder frame, after he lost control in a wind gust.

Hand-carrying Flyer 1 back to the launching point, the brothers nearly lost the plane and one of their helpers, John Daniels (who had photographed the first flight). With the wind continuing to blow, the men put the plane down so they could rest. A sudden wind gust picked up one wing and, with Daniels caught in the bracing wires as he tried to protect the plane, it rolled again and again.

Daniels escaped without injury, but Flyer 1 looked like a heap of kindling wood and torn cloth. It was later put back together and donated to the Smithsonian Institute where it is today - in the National Air and Space Museum.

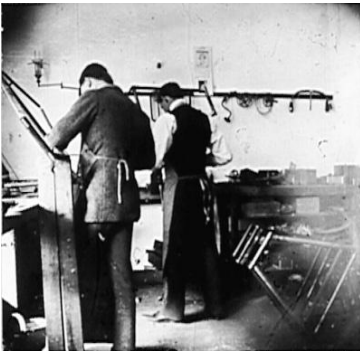
See Alignments to State and Common Core standards for this story online at:

<http://www.awesomestories.com/asset/AcademicAlignment/THE-FIRST-FLIGHT-History-of-Flight>

See Learning Tasks for this story online at:

<http://www.awesomestories.com/asset/AcademicActivities/THE-FIRST-FLIGHT-History-of-Flight>

Media Stream



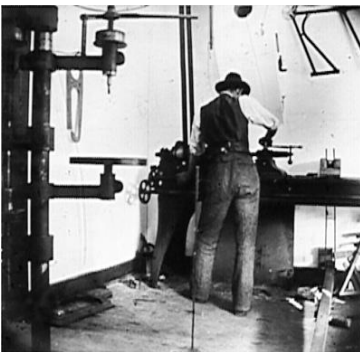
Wright Brothers - Working in Their Shop

Image online, courtesy U.S. Library of Congress.

PD

View this asset at:

<http://www.awesomestories.com/asset/view/Wright-Brothers-Working-in-Their-Shop>



Bicycle Shop - At the Work Bench

Image online, courtesy Wikimedia Commons.

PD

View this asset at:

<http://www.awesomestories.com/asset/view/Bicycle-Shop-At-the-Work-Bench>

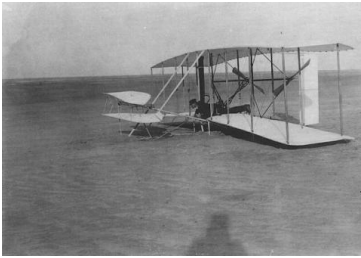


Wright Brothers at Kitty Hawk

Image online, courtesy wright-brothers.org website.

View this asset at:

<http://www.awesomestories.com/asset/view/Wright-Brothers-at-Kitty-Hawk>

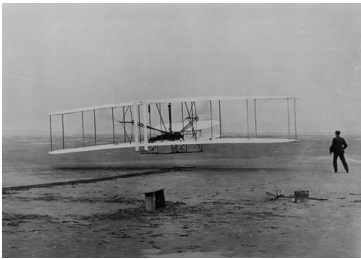


Wright Brother's First Attempt

Image online, courtesy wright-brothers.org website.

View this asset at:

<http://www.awesomestories.com/asset/view/Wright-Brother-s-First-Attempt->



Orville Wright - At the Controls

Image online, courtesy Library of Congress.

PD

View this asset at: <http://www.awesomestories.com/asset/view/Orville-Wright-At-the-Controls>



Wright Brother's Life-Saving Crew

Image online, courtesy wright-brothers.org website.

View this asset at:

<http://www.awesomestories.com/asset/view/Wright-Brother-s-Life-Saving-Crew>



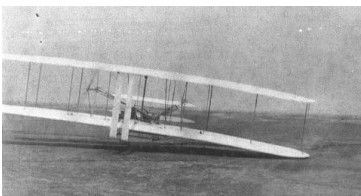
View of the Wright's First Powered Flight

Image online, courtesy the U.S. Library of Congress.

PD

View this asset at:

<http://www.awesomestories.com/asset/view/View-of-the-Wright-s-First-Powered-Flight>

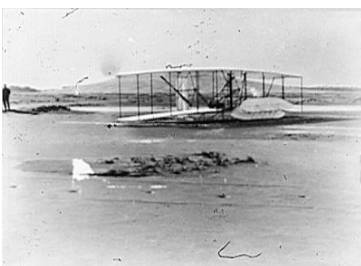


Wright Brother's - Photo Taken of the Third Flight

Image online, courtesy wright-brothers.org website.

View this asset at:

<http://www.awesomestories.com/asset/view/Wright-Brother-s-Photo-Taken-of-the-Third-Flight>



Damage While Landing on the Third Flight

Photograph, described above, online courtesy Library of Congress.

PD

View this asset at:

<http://www.awesomestories.com/asset/view/Damage-While-Landing-on-the-Third-Flight>



THE FIRST FLIGHT

View this asset at: <http://www.awesomestories.com/asset/view/THE-FIRST-FLIGHT>



Wright Brothers - First Flight

Video by NASA. Clip online, courtesy NASA.

View this asset at: <http://www.awesomestories.com/asset/view/Wright-Brothers-First-Flight>