



0. KITTY HAWK - 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 Wright Brothers National Memorial at Kill Devil Hills, North Carolina. It commemorates the world's first powered flight which took place on December 17, 1903.

Once the Wright brothers were able to achieve sustained and controlled flight, based on their calculations and field tests, they constructed a larger version of their 1902 glider. They called it the Flyer. Most folks today know it as *Flyer 1* or the *Kitty Hawk*.

But Flyer 1 would be an airplane, not a glider. Will and Orville needed to figure out how to use a propeller in the air. Although they looked at shipbuilding literature, it didn't help them. There was no theory of propulsion. At the time, no one truly understood a propeller is nothing more than a wing rotating on its axis which lifts the plane forward.

Once the Wright brothers reasoned through this fundamental tenet of self-propelled flight, they were ready to build their power source. It was a 4-cylinder, 12 horsepower gas engine they built with the help of their mechanic, Charlie Taylor. (Be sure to follow the links in this paragraph to view NASA-created animations depicting how *Flyer's* engine actually worked.)

The Wright brothers had been in a race to see who could develop the first heavier-than-air powered flying machine. Samuel Langley, the distinguished secretary of the Smithsonian Institute, had developed an Aerodrome. When it crashed on launch, Langley left future experiments to the Wright brothers.

Langley wasn't the only competition the brothers faced, however. They had to press forward. It was time for another trip to Kitty Hawk and Kill Devil Hill.

See [Alignments to State and Common Core standards for this story online at:](http://www.awesomestories.com/asset/AcademicAlignment/KITTY-HAWK-History-of-Flight)

<http://www.awesomestories.com/asset/AcademicAlignment/KITTY-HAWK-History-of-Flight>

See [Learning Tasks for this story online at:](http://www.awesomestories.com/asset/AcademicActivities/KITTY-HAWK-History-of-Flight)

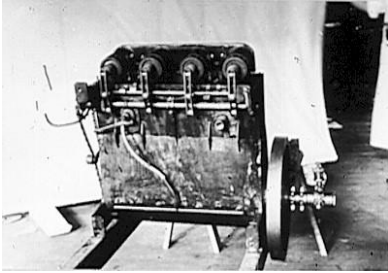
<http://www.awesomestories.com/asset/AcademicActivities/KITTY-HAWK-History-of-Flight>



Flyer-1

Image online, courtesy wright-brothers.org website.

View this asset at: <http://www.awesomestories.com/asset/view/Flyer-1>



Wright Brother's Aircraft Engine

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

PD

View this asset at:

<http://www.awesomestories.com/asset/view/Wright-Brother-s-Aircraft-Engine>

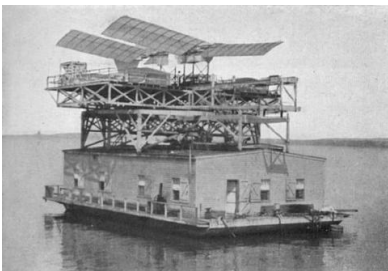


Samuel Langley

Image online, courtesy the Smithsonian Institution website.

PD

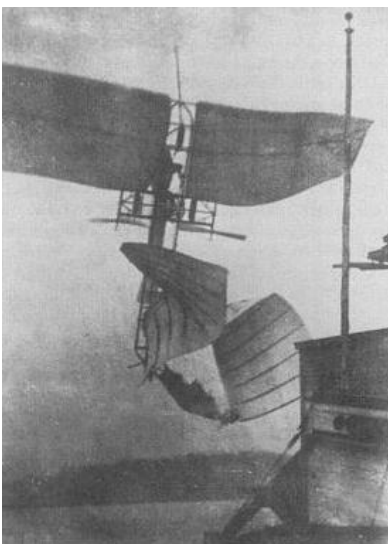
View this asset at: <http://www.awesomestories.com/asset/view/Samuel-Langley>



Langley's Aerodrome

Image online, courtesy wright-brothers.org website.

View this asset at: <http://www.awesomestories.com/asset/view/Langley-s-Aerodrome>



Langley's Failed Attempt to Fly - at Launch

Image online, courtesy wright-brothers.org website.

View this asset at:

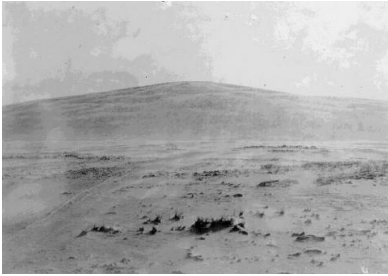
<http://www.awesomestories.com/asset/view/Langley-s-Failed-Attempt-to-Fly-at-Launch>



View of Kitty Hawk

Image online, courtesy the 456fis.org [website](#).

View this asset at: <http://www.awesomestories.com/asset/view/View-of-Kitty-Hawk>



View of Kill Devil Hill

Image online, courtesy wright-brothers.org [website](#).

View this asset at: <http://www.awesomestories.com/asset/view/View-of-Kill-Devil-Hill>



KITTY HAWK

View this asset at: <http://www.awesomestories.com/asset/view/KITTY-HAWK>