

the
**Henry
Ford**®

Building Stories

A creative writing contest
for students (grades 3-12)

The Wright Brothers





A creative writing contest

Foundational Materials

As you create your story for The Henry Ford's Building Stories: A Creative Writing Contest, use these foundational materials as a starting point. You can and should conduct additional research. Be sure to cite sources in your bibliography.

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All sources in this document are from the collections of The Henry Ford®. For more information on Building Stories: A Creative Writing Contest, please visit: www.thehenryford.org/BuildingStories



Site 1
Wright Home

Source
1

Wright Home Exterior, Original Site, Dayton, Ohio, Circa 1900

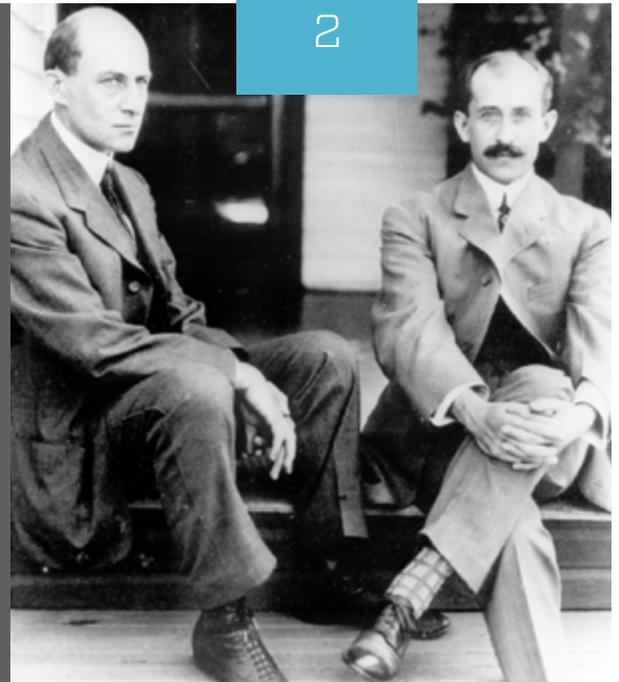


The house, originally located at 7 Hawthorn Street in Dayton, Ohio, was constructed by James Manning, a carpenter. The Wright family bought the home from Manning and continued to make improvements on the home throughout their stay.

Wilbur and Orville Wright at Their Home in Dayton, Ohio, Circa 1910

Source
2

Wilbur and Orville Wright grew up in this house, where they did much of the design work for the airplane. The Wright family loved to learn. They had a library of books from many different authors and thinkers, and they enjoyed spirited discussions and debates. The Wright brothers' mother, Susan, died before they even started their experiments with airplanes. She had always encouraged her sons to work with tools and machines. Their father, Milton, supported his sons in their bicycle business and in their experiments with flight. Neither Wilbur nor Orville attended college, but their sister, Katharine, did. She graduated from college, which was an unusual accomplishment for woman at that time.



Source
3

**Wright Home Parlor Decorated for Christmas, Original Site, Dayton, Ohio,
Circa 1900**



The image shows a decorated Christmas tree in the Wright family home parlor about 1900. The tree is decorated with popcorn strings, ornaments, candles and toys. There are wrapped gifts beneath the tree and other toys like a doll in a doll carriage and a child's sled.

Wright Family Reminiscences - Ivonette Wright Miller

Source
4

Accession EI 186, Wright Home, Box 1 of 2, File Heading: Wright Family Christmas, Wright Family Reminiscences - Ivonette Wright Miller. Benson Ford Research Center, The Henry Ford.

“At Christmastime it was customary to get together Christmas morning, in the early years. When we were old enough to get toys, Uncle Orv and Uncle Will had a habit of playing with them until they were broken, then repairing them so that they were better than when they were bought. I remember one year when the box from our Kansas cousins was opened. One of the gifts was a small mouth organ with horns protruding from it to increase the sound. After the excitement of opening all the presents subsided a bit, Uncle Will, who was sitting on the stairway landing with his long legs stretched out in front of him, started to play the instrument with all the flourishes he could command. He played the melody and accompaniment as if he had done it for years. None of us was aware that he knew how and were all convulsed with the way he carried it off.”

Source
5

Portrait of Katharine Wright as a Young Girl, Circa 1881



Katharine was the younger sister of Wilbur and Orville Wright. She was well-educated at Oberlin College in Ohio, and at the time of the first flight in December 1903, she kept house for her older brothers and father in Dayton, Ohio.

Accession EI 186, Wright Home, Box 1 of 2, File Heading: Wright Home Diary Entries. Benson Ford Research Center, The Henry Ford.

(Katharine to her father 8-22-1900)

“Orv has begun lessons on his mandolin and we are getting even with the neighbors at last for the noise they have made on pianos. He sits around and picks that thing until I can hardly stay in the house.”



Site 2
Wright Cycle Shop

Source
1

Wright Cycle Shop, Original Site, Dayton, Ohio, Circa 1910



The Wright brothers earned a steady income from building, selling and repairing bicycles at this Dayton, Ohio, shop. They used much of that money to pay for their aviation experiments. Their experience building bicycles helped them unlock the mysteries of how airplanes fly. Besides their bicycle business, Wilbur and Orville Wright did much of the hands-on work on their airplane here. Considered the birthplace of aviation, the Wright Cycle Shop is the original building where Wilbur and Orville constructed the Wright Flyer.

Wright Cycle Shop, Back

Source
2

The Wrights' drill press, band saw, and lathe (far right) occupy the back part of the cycle shop. Behind them is a replica of part of the framing for the 1903 Flyer. Wilbur and Orville built the components for their airplanes in the shop, but the planes themselves were too big to fully assembled there. Instead, the parts were shipped out as kits that the brothers put together wherever they did their flying.



Source 3

Wright Cycle Shop Oral Histories: Milton Wright, 1948

Accession EI 186, Wright Cycle Shop, Box 4 of 5, Folder 4 of 8. Wright Cycle Shop Oral Histories: Milton Wright, December 17, 1948. Benson Ford Research Center, The Henry Ford.

“In the years before 1903, I spent whatever time I was allowed playing about my uncles’ bicycle shop. The odor of the glue pot, the spruce shavings on the floor and the many gadgets whose use I did not understand were all a great attraction to a small boy. The matter of fact way in which my uncles used the gadgets and planed the spruce strips and glued them together into ribs for their ‘flying machine’ left me with the impression that all bicycle shops did the same thing. It was all very commonplace. ... History was being made in their bicycle shop and in their home, but the making was so obscured by the commonplace that I did not recognize it until many years later.”

The Wright Cycle Company Report

Source 4

Accession EI 186, Wright Cycle Shop, Box 1 of 4, Folder 2 of 8. The Wright Cycle Company Report 1892-1906. Benson Ford Research Center, The Henry Ford.

“Because bicycles were so expensive, the Wright Cycle Company often arranged for their customers to pay a dollar or two per week until the ‘wheel’ was paid for. Customers received a blue card printed with:

“Rules Relating to Installments”

“1. Purchasers will be expected to pay the agreed amounts at the agreed times unless there are very good reasons for not doing so.”

“2. Purchasers must call to see us at the agreed times whether able to pay or not. For persistent violation of this rule, we will call in the wheel at once.”

“3. Persons out of employment must report regularly every week; otherwise the bicycle must be left with us until the payments begin again.”

WRIGHT CYCLE SHOP

“The Wright Cycle Company’s business journals and ledgers show that the majority of the daily business involved cycle repairs and sales of accessories. ... The Wright Cycle Company would accept special orders for their own models, allowing the customer to choose the size, color and composition of his or her ‘wheel.’ ”

“Winters were slow in the Wright Cycle Company shop, which is why Wilbur and Orville Wright were able to leave the business for their experiments in Kitty Hawk, North Carolina, in 1900, 1902 and 1903.”

Source
5

St. Clair Bicycle Made by the Wright Brothers, 1897-1901



Years of methodical research led to the Wright brothers' first flight. This unusual bicycle measured air pressure. Riding the cycle caused the airfoils to spin the horizontal wheel. The bicycle's imprecise measurements led the Wrights to design and build a wind tunnel instead. Although the Wrights built this St. Clair, it is not the actual bike used in their experiments.

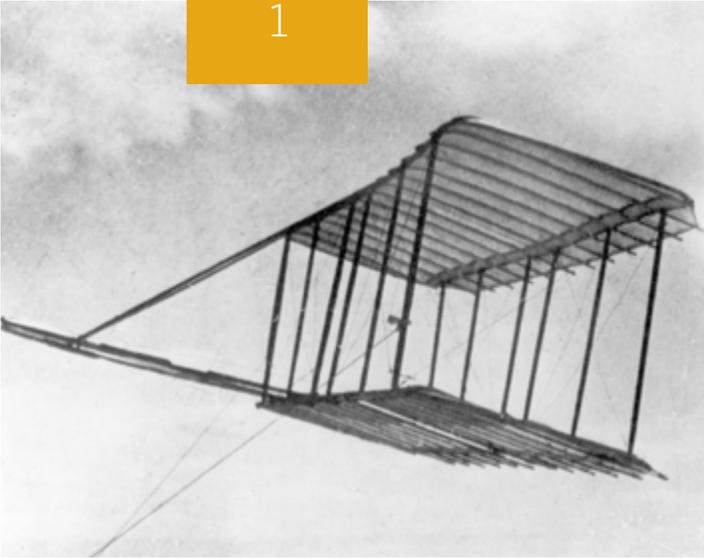


The Wright Brothers' Process of Innovation

In this section, you will see the evolution of the Wright brothers' flying machine. From their 1900 kited glider to the first official public demonstration of their Flyer in 1908, the Wright Brothers were constantly testing and improving their aircraft. The following images from the collections of The Henry Ford show just a few of the steps in the creation of the first powered, heavier-than-air craft. At the end of this section, you will find online resources from The Henry Ford to use for additional research.

Source
1

Experimental Wright Glider Flying 1900



Before the Wright brothers' famous first flight in a powered, heavier-than-air craft, they experimented with piloted gliders. This image of their first design in flight-testing as a kite is one of only three existing photographs of the 1900 glider. Kiting the glider provided valuable performance information that could be incorporated into redesigns and helped the brothers prepare for piloted flight.

Wilbur Wright in Wright Glider in Flight, 1901

Source
2

Before the Wright Brothers' famous first flight in a powered, heavier-than-air craft, they experimented with piloted gliders. Here, Wilbur Wright pilots the second glider at Kitty Hawk, North Carolina. Though the brothers achieved glides of more than 300 feet with this glider, the craft was problematic. Major issues with lift and control sent them back to the drawing board.



Source
3

Wilbur Wright in Wright Glider in Flight, 1902



Before the Wright Brothers' famous first flight in a powered, heavier-than-air craft, they experimented with piloted gliders. Combining previous designs with data from wind tunnel and model wing testing, the Wrights built their third glider in 1902. Here, Wilbur Wright pilots the craft at Kitty Hawk, North Carolina. The brothers had created the world's first fully controllable aircraft.

First Flight of Wright Flyer at Ktty Hawk, North Carolina, December 17, 1903

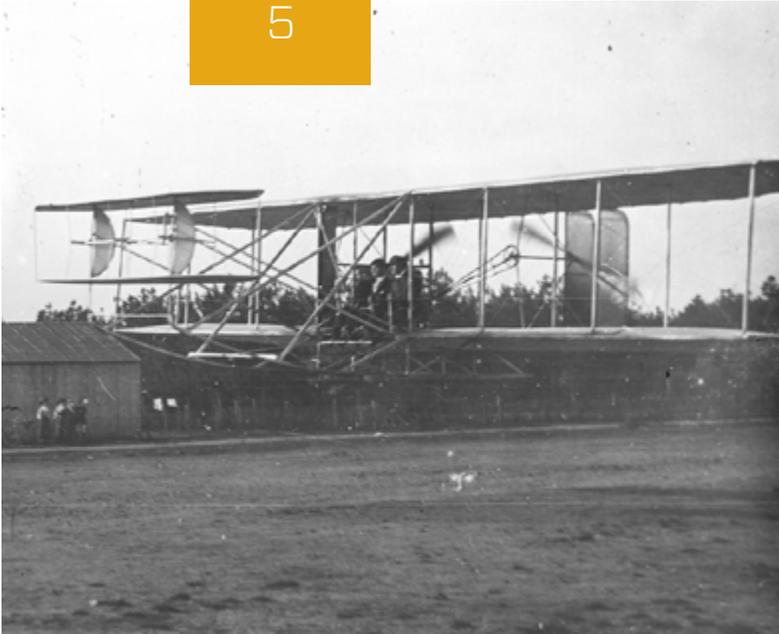
Source
4

When John T. Daniels snapped the shutter on Orville Wright's camera, he captured one of the most significant images ever taken. The photo shows not only the moment of liftoff during the Wright brothers' first flight but also the instant that powered, heavier-than-air flight began. Daniels, a crewman at the Kill Devil Hills Life-Saving Station, had never touched a camera before.



Source
5

**Wilbur Wright and Passenger During a Demonstration Flight,
Near Le Mans, France, August 1908**



The Wright brothers are famous for their first flight in a powered, heavier-than-air craft on December 17, 1903. It was not until August 8, 1908, that they made their first official public demonstration of their unique controllable flyer. This shows Wilbur Wright flying near the ground while taking off at Les Hunandières horse racing track near Le Mans, France.

Online Resources

Source
1

Foundational Materials Expert Set

<http://collections.thehenryford.org/Collection.aspx?collectionid=8517>

A set of artifacts from The Henry Ford's online collections website related to the Wright brothers.

Source
2

Wright Brothers Online Exhibit

<http://www.thehenryford.org/exhibits/wright/default.asp>

This online exhibit features sections on the Wright brothers' childhood, work and accomplishments. It also contains a chronology of their lives and a bibliography to find more information.

Source
3

OnInnovation: The Wright Brothers

<http://www.oninnovation.com/innovators/detail.aspx?innovator=Wright>

Information and oral history interview with The Henry Ford's retired senior curator of transportation, Bob Casey.

Source
4

The Henry Ford's Heroes of the Sky Online Exhibit

<http://www.thehenryford.org/exhibits/heroes/home.asp>

Online exhibit that shares the experiences of people's stories from the first 40 years of aviation.

Source
5

Wright Cycle Shop, Pic of the Month, June 2012

http://www.thehenryford.org/exhibits/pic/2012/12_june.asp

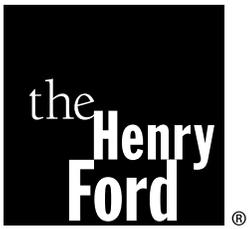
This Pic of the Month article, written by one of The Henry Ford's curators, features information on the Wright Cycle Shop.

Source
6

Caught on Camera: Wilbur Wright's 1908 Flying Demonstration in France, Pic of the Month, August 2008

http://www.thehenryford.org/exhibits/pic/2008/08_aug.asp

This Pic of the Month article, written by one of The Henry Ford's curators, features information on Wilbur Wright's 1908 flying demonstration in France.



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