

The name is milton,
wilbur and orville also



**ASSIGN
BUSTER**

The airplane is one of the most technological advances in the world today, and it all started with these two astounding brothers. The Wright brothers, Wilbur and Orville, are from Dayton, Ohio where they made many aircrafts, such as gliders, airplanes, and much more. Along with that they also made some engines, too. In fact, Wilbur and Orville Wright were the first people to fly a successful airplane by working hard together and going through trial and error. Orville and Wilbur Wright were brothers who created the Wright Company.

Wilbur was born near Millville, Indiana on April 16, 1867, while Orville was born four years later in Dayton, Ohio on August 19. Orville fit the stereotype of flying much more than his brother because of his interest in technology and science. Wilbur was quiet and knowledgeable while he was his father's favorite child.

Speaking of their dad, whose name is Milton, Wilbur and Orville also had some more amazing family. This included their sister, Katherine, and mother, Susan. Milton wasn't home most of the time because he was a bishop in the United Brethren Church, but he still sent many letters home. Sadly, their mom died from tuberculosis in the summer of 1889. ¹ Surprisingly, the Wright brothers' education left much to be desired. Unlike Milton, who went to a small college in Indiana where he studied hard, Wilbur and Orville never got a college education. In fact, they didn't even make it to their high school graduation due to their family schedule. But their sister Katherine did.

² Moving on, the Wright brothers used airplanes and wind tunnels to help them fly. Airplanes are aircrafts that are able to fly, and can be put into

two categories. The first are heavier-than-aircrafts (which are heavier than air) or lighter-than-aircrafts (which are lighter than air). Wind tunnels were created in 1871 by Francis Herbert Wenham to replicate the movements of an object in flight with large tubes with air moving inside them. ³ This was used to test and predict what the aircraft would do during the actual flight so they could make adjustments depending on that. Wing-warping was a new design that the Wright brothers had discovered in 1899. They realized that when an approaching rush of air hit one side of the aircraft at a greater angle than the other then it would make it rise then bank, because it would create a larger lift on that same side. ⁴ Although, if the pilot was skilled enough, he could keep balance and turn well if he moved the wings in a certain way.

This was a breakthrough for Wilbur and Orville. Another event that also happened in 1899, was when Wilbur sent a letter to the Smithsonian Institution on May 30 and when they invented the Wright Kite. In the letter to the Smithsonian, Wilbur wrote that he and his brother, Orville, figured that human flight was achievable and then stated that they wanted to pursue testing in the field of aviation. Next, Wright Kite was created in July where it was flown by Wilbur. It was a biplane, which is an aircraft with two main wings assembled on top of each other, with a 5-foot wingspan (the maximum extent of the wings).

It was designed with wing-warping control and the Chanute-Herring glider.

⁵ The next Wright brothers aircraft was called the Wright Glider, and after that was the Wright Glider number 2. The Wright Glider was created in

1900 with a wingspan of 17 feet (5.2 meters) and weighted 52 pounds (24 kilograms). It flew well, but the Wright Glider #2 wasn't so lucky.

With a 22 ft. wingspan and weighted 98 pounds, this was the most disappointing and problematic aircraft. Mostly because the elevator control (which controls the aircraft's pitch) was too sensitive. However, the Wright brothers weren't going to give up just yet. After the unsatisfactory performance from the Wright Glider #2, they attempted at another one that was much better. This glider was made in 1902 with a thinner airfoil and was fully controllable. It also had longer and narrower wings and had a 32 ft.

wingspan and weighted 117 lb. A year later, they made the first airplane in the world. The Kitty Hawk was the Wright brothers (and the world's) first airplane and it was powered with the 1903 Engine. The Kitty Hawk was first flown December 17, 1903 where it had the first sustained and controlled flight with an airplane. The 1903 engine was first used for the Kitty Hawk and had the standard (at the time) 4-4-4 design because of the four cylinders that were four inches each. This engine had speeds up to 12 horsepower.

Later they made another airplane that was very similar to the Kitty Hawk, but with a few minor changes. The Flyer #2 was practically like the Kitty Hawk, except that it was powered with the 1904-1905 engines and had a few other changes. With a flatter camber and stronger skids, the Flyer #2 was the first airplane to fly in a complete circle. It flew over the Huffman Prairie on November 16, 1904. This aircraft flew while using the 1904-1905 engines and eventually had production of 24 hp. They built two horizontal engines at first,

one was used in the Flyer #2 and the other was put aside to test and experiment with.

As most people would think, there was also a Flyer #3. Next up, was the Flyer #3, and the bent-end propellers that were used until 1915. In 1905, the Flyer #3 was constructed and was the world's first truly practical airplane. It had easier control because of the lengthened canard (which is when the main wing of a fixed aircraft is placed forward and in turn causes less drag)⁷ and rudder (which is a flat blade that is on the end of the airplane and can be moved horizontally to change the direction of the airplane)⁸