

The Wright Brothers in North Carolina

By Stephen Kirk

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Do students in countries halfway around the world know about Charlotte, Raleigh, and other big cities in North Carolina? Probably not. But they've heard of Kitty Hawk, a village that was home to only a handful of people a century ago. We can thank the Wright brothers for that.

Wilbur Wright was born in Indiana in 1867. Orville Wright was born in Dayton, Ohio, four years later. During their boyhood in Dayton, they published and printed a small newspaper. As adults, they opened a shop where they designed, built, and repaired bicycles.

The Wright brothers enjoyed making kites and playing with a helicopter toy their father gave them when they were boys. Later, they followed the news of glider experiments in America and Europe. In 1899 Wilbur began to gather information about flight. He also wrote the United States Weather Bureau to learn about wind speeds in different places around the country. Flying a glider into a strong, steady breeze helps keep it in the air.

The Weather Bureau told Wilbur about Kitty Hawk on the Outer Banks. Wilbur then wrote the Kitty Hawk weather station to ask about the area. He received a warm reply from the local postmaster, Bill Tate. Kitty Hawk had more to offer than just strong winds, Tate told Wilbur. It also had soft sand for landing a glider and friendly people who would be willing to help. And it was an isolated place where Wilbur could get the privacy he wanted.

Wilbur arrived in Kitty Hawk to begin his glider experiments in September 1900. Orville joined him a couple of weeks later. They stayed briefly with Bill Tate's family and then lived in a tent set up on the sand. When they returned in the fall of 1901, they constructed a small wooden building to house their glider. They came for a third time in the fall of 1902. The Wright brothers stayed in North Carolina only a few months at a time. They returned to Dayton each year to run their bicycle shop and to design a new glider for the next season. They built the glider parts in Dayton, shipped them to Kitty Hawk, and assembled the craft there.

Three things were necessary for powered flight. The Wright brothers had to design wings that could keep an airplane in flight. They also needed a control system to steer left and right, move up and down, and bank one wing higher than the other. Finally, they needed a light but powerful engine and propellers to push the craft.

By the end of the 1902 season, the Wrights were making glides over six hundred feet long. Their wings kept them in the air, and their control system allowed them to steer and

land safely. Back in Dayton that winter, they built an engine and two propellers, the final elements they needed.

The Wright brothers had a good deal of trouble during the 1903 season in Kitty Hawk. They arrived in early September but weren't ready to try their powered craft for more than three months. That was mainly because they kept breaking engine parts. They had to ship the parts to their bicycle shop in Dayton for repairs and wait until they were returned.

On December 14, they were finally ready to try their powered airplane. Several of their friends from the local lifesaving station came to witness the event. So did two boys and a dog. The Wright brothers flipped a coin to decide who would make the first flight. Wilbur won. But when he tried to take off, he steered the craft upward too quickly, and it crashed.

The Wright brothers were tempted to head back to Dayton for Christmas, but they decided to make one more try. On December 17, some of their lifesaver friends came again to help move the heavy craft and to serve as witnesses. It was now Orville's turn. Just after 10:30 that cold morning, he made the first powered airplane flight in history. It lasted twelve seconds and covered 120 feet. An hour after that, Wilbur made a short flight. Then Orville flew 200 feet. Finally, at noon, Wilbur made a flight that covered 852 feet and lasted nearly a minute. After that, the craft was flipped over by the wind and was damaged beyond repair. But the Wright brothers had achieved their goal.

Over the next several years, the Wright brothers improved their designs and made longer flights in Dayton, in Europe, and in other places. They returned to Kitty Hawk in 1908, when they made the first two-person flights in history.

The Wright brothers became the first international celebrities of the twentieth century. Kings and millionaires wanted to meet them. Songs, poems, and plays were written about them. Some people even began to dress like them. But they always remained humble, private men who cared little about money.

Wilbur died in 1912, at age forty-five. Orville remained a spokesman for flight until his death in 1948. He returned to Kitty Hawk several times in his later years and kept up his friendship with Bill Tate.

The airplane would have been invented without the Wright brothers, but it might have taken ten or twenty more years. This would have had important effects on World Wars I and II, when airplanes were used in combat.

The years since 1903 have seen great advances in flight. Airplanes crossed the oceans and flew faster than the speed of sound during Orville Wright's lifetime. And it was only twenty-one years after his death when Neil Armstrong walked on the moon. To honor the Wright brothers, he carried a piece of their 1903 plane with him.

Many people have contributed to the story of flight, but the Wright brothers wrote the first chapter.

At the time of this article's publication, Stephen Kirk worked as an editor at John F. Blair Publisher in Winston-Salem. The company printed his book, *First in Flight: The Wright Brothers in North Carolina*, in 1995.