The Wright Brothers:

Inventors of the Airplane and Manned, Powered Flight

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The Wright brothers are two of the most influential and important inventors in both world and American history. In the first decade of the twentieth century, their invention of the airplane and manned, powered flight changed the course of the world and would eventually lead to jets flying at four times the speed of sound, passenger planes carrying hundreds of people at a time across oceans, and ultimately humans walking on the surface of the moon. Unfortunately, this invention also had negative impacts as well. For example, wars were transformed from man versus man conflicts at a battle site to being able to kill many people at once without ever having to have a person step foot there. Overall, the Wright brothers’ invention has vastly improved the lives of billions of people.

Wilbur Wright was born on April 16, 1867 in Millville, Indiana with Orville following 4 years later on August 19th, 1871 in Dayton, Ohio. Their father, Milton Wright, was a Bishop of the United Brethren of Christ. Throughout their childhood and into adulthood, the brothers were inseparable. Their personalities were very complementary with Orville being very enthusiastic and creative and Wilbur being steadier, thoughtful, and perseverant (Wright Brothers Biography).

The brothers’ interest in flying really started around 1896 when a famous glider pilot named Otto Lilienthal died. The brothers took an interest and decided to learn everything they could about aerodynamics and gliding. In 1900, they set up near the town of Kitty Hawk, North Carolina to begin testing their own glider designs and to gather their own data. They quickly realized that a lot of the information out there was inaccurate. So in 1901, they returned to Dayton, Ohio where they built and used the first wind tunnel in the United States to test over 200 different wing surfaces for lift and drag to come up with the most efficient design. In 1902, they returned to Kitty Hawk and tested their glider more than a thousand times and decided it was time to try and add power (Wright Brothers Biography).

The Wright brothers couldn’t find a manufacturer who would build an engine to the specifications that they wanted so they ended up having to build their own. When it was all done, it had four cylinders and created 12 horsepower. When it was added to the plane, it brought the weight of the plane to around 750 pounds. They took this new airplane to Kitty Hawk in the fall of 1903 and on December 17, Orville Wright made the world's first manned, powered flight in a heavier-than-air craft (Wright Brothers Biography).

The first flight ever by a manned, powered and heavier-than-air machine traveled 120 feet in 12 seconds. This monumental flight was best summarized by Orville Wright when he said:

This flight lasted only 12 seconds, but it was nevertheless the first in the history of the world in which a machine carrying a man had raised itself by its own power into the air in full flight, had sailed forward without a reduction in speed, and had finally landed at a point as high as that from which it began.

The brothers also flew the craft 3 more times on that fateful day with the best flight being the last. On the fourth flight, with Wilbur at the controls, the flight lasted 59 seconds and traveled 852 feet (First Flight).

The brothers would go on to receive a patent on their design in 1906 and form the American Wright Company in 1909. In 1912, Wilbur died at the age of 45. In 1915, Orville retired and sold his rights to the company and worked on experimental projects in Dayton, Ohio until his death in 1948 (Wright Timeline).

Works Cited:

“Commemorating the First Flights of the Wright Brothers, December 17th, 1903.” First Flight Society Online. 26 Nov. 2012 http://www.firstflight.org/shrine/wright\_brothers.php

“Wright Brothers Biography.” Encyclopedia of World Biography. 26 Nov. 2012 http://www.notablebiographies.com/We-z/Wright-Brothers.html>

“Wright Timeline.” Wright Brothers Aeroplane Company. 26 Nov. 2012 http://www.Wright-Brothers.org/History\_Wing/Wright\_Story/Wright\_Timeline/Wright\_Timeline\_1900\_1909.htm