FLORIDA ATLANTIC UNIVERSITY

PROSPECTUS ON THE WRIGHT BROTHERS

AN ASSIGNMENT SUBMITTED TO

DR. GANSON

DEPARTMENT OF HISTORY

BY

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Prospectus

I. Rationale:

**Topic:** Wright Brothers

**Thesis:**
The Wright Brothers persevered until finally achieving a dream that man has had since the dawn of time when at Kitty Hawk, North Carolina, on December 3, 1903, they achieved “First Flight” on a heavier than air “Flying Machine.”

**Central Questions:**

What were the Wright Brothers motivations for building an airplane?

Where did the Wright Brothers get the ideas on how to create a powered flight plane?

What were the set backs of building the plane?

What other competition were they facing in achieving the First Flight?

What did they hope would come out of their success?

**Larger Historical Concerns:**

How did American culture change as a result of Wilbur and Orville Wright’s Plane?

II. Historiography

I intend to use these books as informative sources.

**Progress in Flying Machines** - This book gives an historical review of previous experiments in flying that have allowed man to soar like birds. I can use this to understand experiments that the Wright Brothers used to further progress their cause until they found success.

**Road to Kitty Hawk** – This book discusses man’s quest for flight up to the Wright Brothers success at Kitty Hawk. Understanding past events is very important to understand the motivation for the Wright Brothers’ invention.

**Value of Patience : The Story of the Wright Brothers** – This book describes the patient effort of the Wright Brothers in building their plane.
Wilbur and Orville: A Biography of the Wright Brothers – This is a biography of the Wright Brothers’ life. From this book, we can learn the events that enabled the Wright Brothers to build a plane.

How We Invented the Airplane: An Illustrated History – This is a primary source written by Orville Wright.

Birdflight as the Basis of Aviation – This is a primary source. This book provided the very concepts that allowed the Wright Brothers to create a workable flying machine. The author was the first trained engineer that applied the principles of dynamics to the flying problem.

Eyewitness: Flying Machine – This is a book filled with great illustrations.

Visions of a Flying Machine: The Wright Brothers and the Process of Invention – This is a biography that discusses where the ideas to build a Flying Machine came from and explains the differences in approach and knowledge between the Wright Brothers and the others who were also attempting to construct airplanes.

Flight: Fliers and Flying Machines – This is a great timeline book that traces the steps of aviation to their foundation. This book is good to get a sense of organization of events.


The Published Writing of Wilbur and Orville Wright – This is a primary source that includes technical and popular articles, speeches, interviews, letters, and other writings by the Wright Brothers from their experiments with gliders at the beginning of the 20th century to Orville's death in 1948.

III. Sources

I intend to use primary sources to get a first-hand account of what the Wright Brothers went through in their quest to build an airplane. I also intend to use biographies so that I can further understand their importance and appreciate their accomplishment. The biographies will help to organize events and to provide transitions between those events. I do not foresee any problems because I know the direction that I am headed with my report.
Bibliography


The Wright brothers' experiences with bicycles aided them in their investigations of flight. They used the technology they learned from their bicycle business in their airplanes: chains, sprockets, spoke wires, ball bearings, and wheel hubs. Their thoughts on balancing and controlling their aircraft were also rooted in their experience as cyclists.

Controlling the Aircraft

During the 1901 glider tests, the Wright brothers had discovered that "wingwarping" created unequal drag on the two wings. Key to solving the control problem was the addition of a rudder to the glider design in 1902. They developed a direct linkage between the rudder and warping system. With the success of this system design, the Wrights were ready to move onto a powered aircraft.