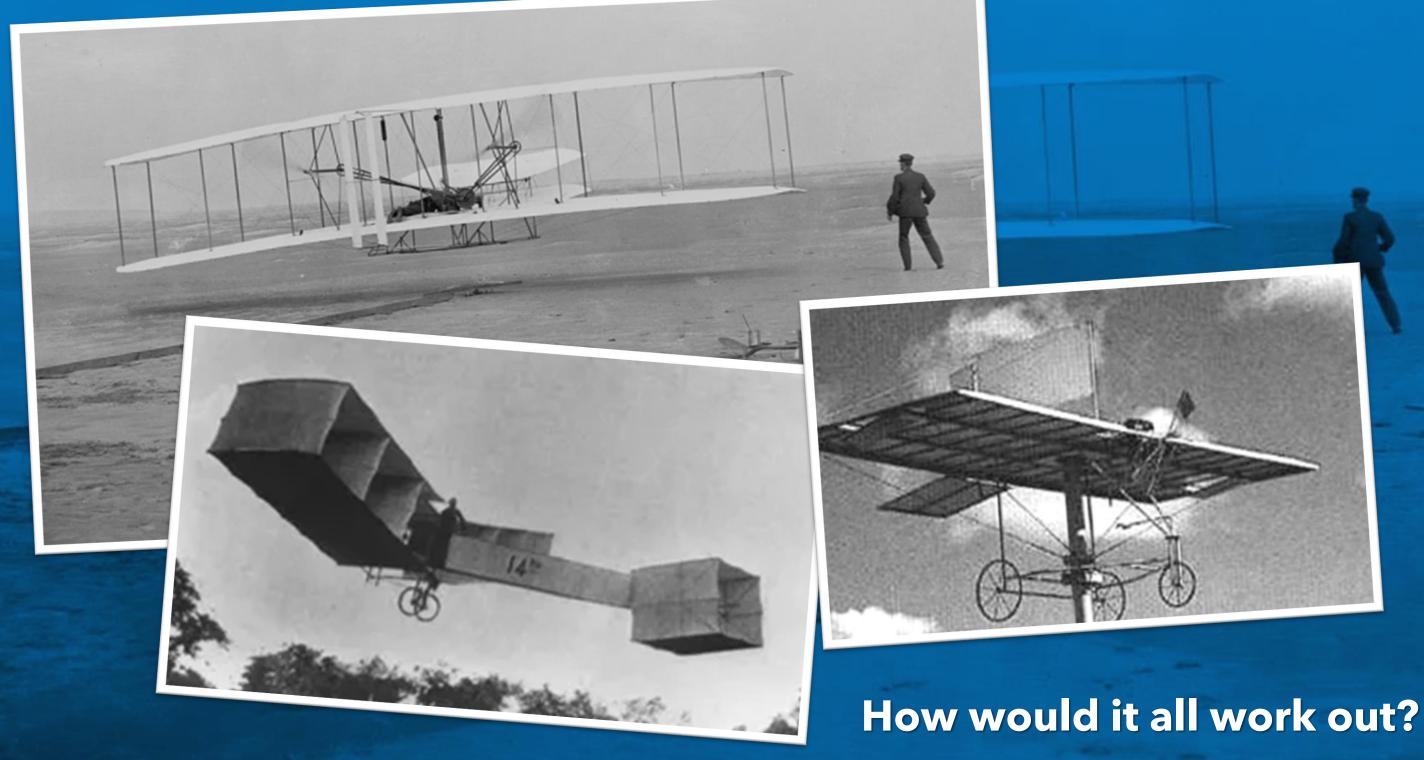
## **The Wright Brothers - Part 2**

**On December the 17<sup>th</sup> 1903 Wilbur and Orville Wright flew for the first time** But no one believed them! And rumours began from others around the world who claimed to be first.







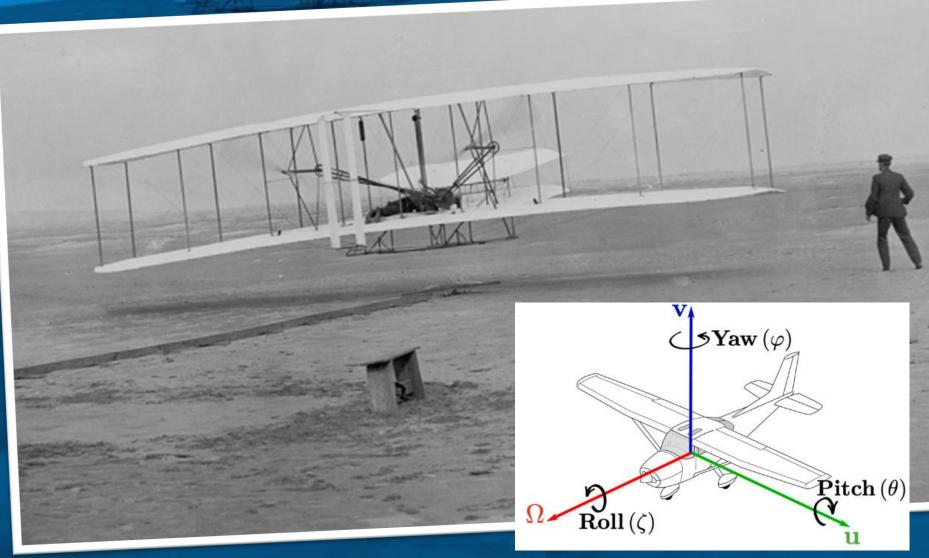
#### Why didn't they receive immediate fame?

Two problems. It was not "officially" documented and also, what does it mean to actually "fly"? People had been "flying" for a few years using gliders, and in balloons for over 100 years. So, what had to be decided was; What does it mean to actually fly?

The decision was; powered, prolonged, controlled flight in a heavier-than-air aircraft.

Many had tried and failed. But the Wright brothers had an airplane that could do this, unfortunately, it was now in pieces after being smashed by the wind after their 4<sup>th</sup> controlled straight-line, unofficially documented flight.

Others claimed to be the first, but the Wright brothers, because of their photograph, do have the most credible shot at being the first controlled and documented. Let's look at the other contenders.

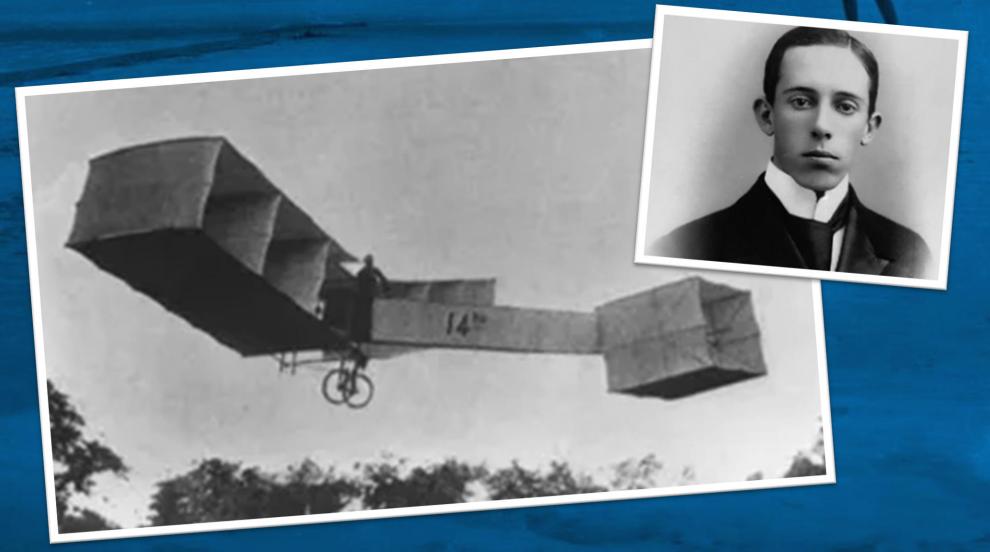


#### In Brazil

Alberto Santos-Dumont, a Brazilian aviation pioneer, gained fame for his early flights in balloons. Most Brazilians will swear he was the first to achieve powered flight in 1906. However, the Wright Brothers, did achieved sustained, controlled flight earlier, predating Santos-Dumont's great efforts.

Despite his contributions to aviation and popularizing flight in Europe, especially in France, Santos-Dumont did not achieve the same level of innovation in aircraft design and control systems as the Wright Brothers. Thus, while he was influential, his claim to being the first to fly a powered airplane is proven false.

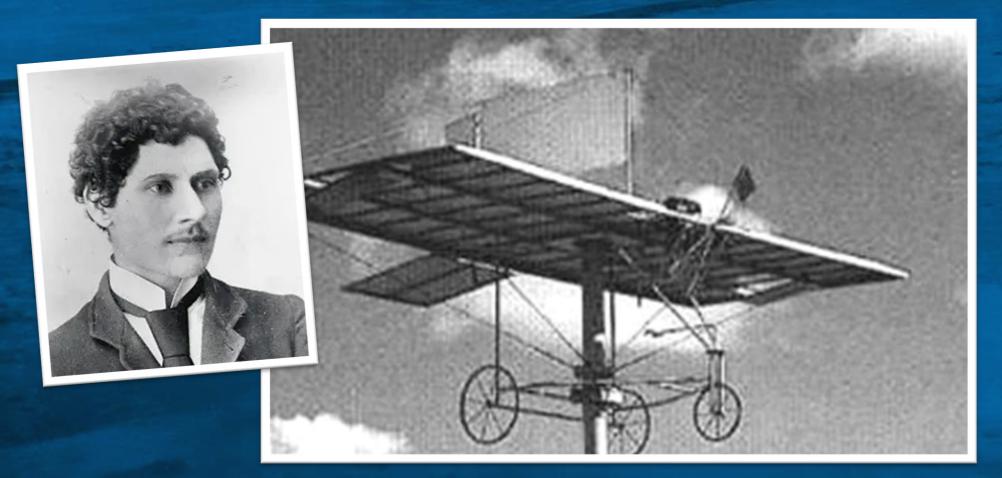
This photograph shows his aircraft, the "14-bis", a boxy biplane taking off in front of witnesses on October 23rd 1906, It managed a height of 2 metres and travelled 197 feet. But it lacked the Wrights' advanced control mechanisms, limiting its maneuverability.



#### **In New Zealand**

Richard Pearse, a New Zealand aviator, is believed to have made a powered flight on March 31, 1903, in Waitohi, New Zealand, several months before the Wright Brothers. His aircraft was an advanced design for its time. However, eyewitness accounts explained his flights were short, uncontrolled "hops", and not well-documented. Sadly Pearse did not leave conclusive evidence. But in a 1915 letter to a newspaper, he admitted that he *"hadn't even considered proper control systems until 1909"*, further confirming that his early flights were not fully controlled or practical.

While he was an aviation pioneer, as we will see, historical proof confirms the Wrights as the first to achieve true powered flight.

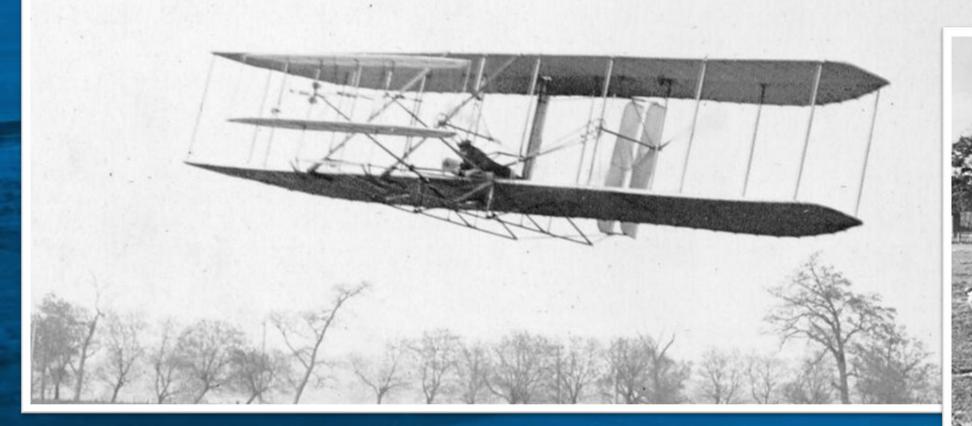


This is a photo of his Monoplane of 1903. Closely missing out on world fame. He is sometimes recognized as introducing the Aileron control system in 1909. But these are now credited to other pioneers Henri Farman and Robert Esnault-Pelterie.

#### So who WAS first? Back to Ohio - The Wright flyer 2

The Wright brothers, now knowing flight was possible, returned to Ohio and quickly started work on the Wright Flyer 2. A slightly larger more powerful version of the first craft. However, worried about rich inventors stealing their design, they quickly patented their 3 axis control system and continued to work in secret till they were ready to give a fully documented, official flight.

They developed a catapult system to assist takeoff. When it was ready in 1904, they began test flights.



Top - The Wright Flyer 2. Right – The catapult launch system.



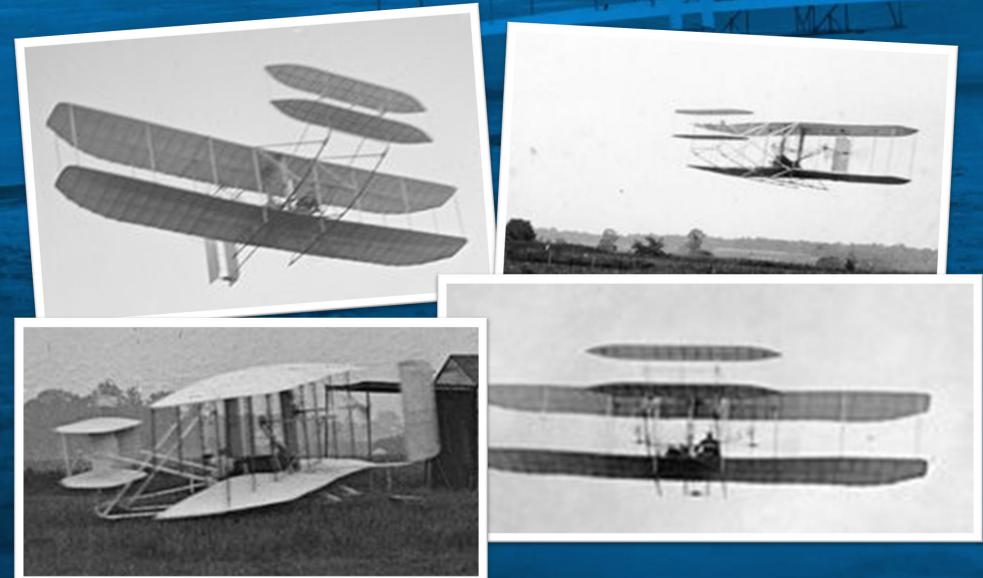


### Wright flyer 2 - Success!

On the 9th of November 1904 Wilbur and Orville after several test flights finally managed to fulfill the definition of flight: powered, prolonged, controlled flight in a heavier-than-air aircraft.

They flew circles all around the field in full control, staying up over 5 minutes and travelling over 3 miles. They had done it! They could fly!

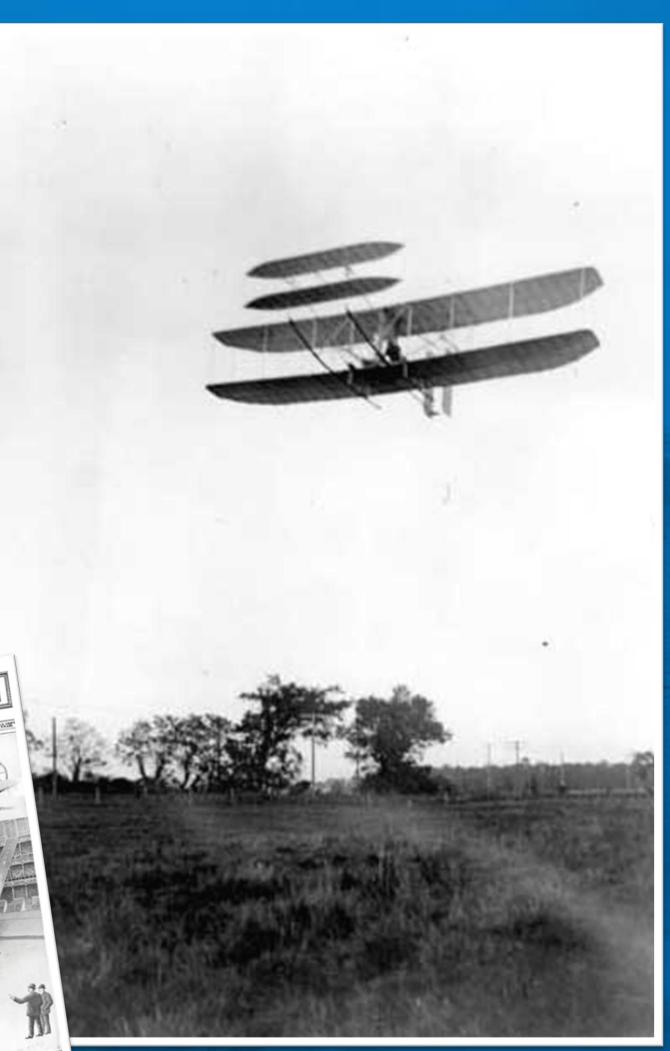
But they weren't ready to reveal their invention yet. They quickly worked on the Wright Flyer III, with more power, and with upright seating. Yet again testing it in secret.



On the 5th October 1905, Wilbur flew 24 miles (38 kilometers) in just under 40 minutes, longer than the total duration of all the flights of 1903 and 1904. Four days later, they wrote to the Secretary of War, offering to sell the world's first practical airplane. Left: Wright Flyer III

#### No one is interested?

But the Army were not interested! The brothers were shocked and dismayed at the lack of interest in their flying machine. The 40-minute test flight had been witnessed by Amos Root, a technology enthusiast and he wrote about the amazing feat he had seen in his column in a Bee-Keeping Magazine. He passed it on to "Scientific America" magazine, but they turned the story down! As a result, no one outside of Ohio really new about their achievement.

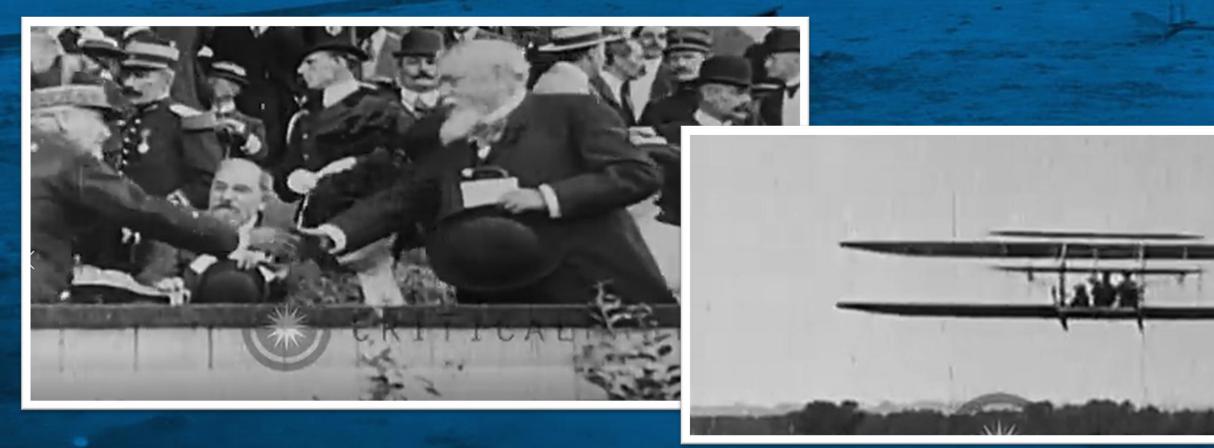




### **Bad press in Europe... But then fame!**

In Europe, but in France particularly, there were many flight enthusiasts, but no one had managed to accomplish true flight yet. When rumours of the Wright brothers reached Europe no one believed their claims of flight. Newspapers ran negative stories calling them, "Bluffers!" Fed up, Wilbur shipped a new two seat Wright Flier to France deciding this was the opportunity they were waiting for; a big reveal in front of a large crowd!

On August 8, 1908 he gave a demonstration flight in front of a large crowd at the Le Mans horse racetrack – The world was shocked! **It was true!** – all was forgiven! The French public was thrilled by Wilbur's feats of circles and figure 8's high in the sky and flocked to the field by the thousands to see them again! The Wright brothers instantly became world-famous over 4 years after their first flight in Kitty Hawk.



#### Finally recognition.

Suddenly orders for Wright Fliers came flooding in! Rich millionaires wanting their own "Wright Flyer". The brothers opened a flight school in the south of France, full of rich would-be-pilots! They were invited to fly before Kings and Queens.

The US Military, suddenly deciding they were interested, gave them a very lucrative deal. They were millionaires practically overnight.

In October 1908 they flew over New York and around the Statue of Liberty – Infront of over 1 million people – all were astounded that flight, after all these years – *was* a reality.



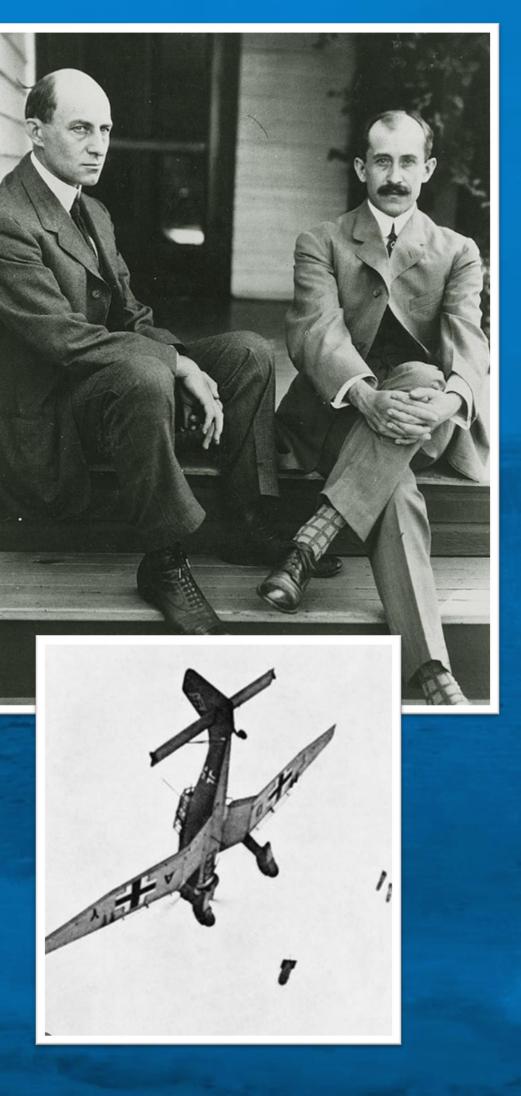
#### **Troubles soon follow**

However, as they suspected copycats started to build their own aircraft based on the Wright's designs. Even though their flight control design had been patented, people didn't care.

Orville and Wilbur now were so busy in court battles trying to claim what was theirs, they hardly ever flew anymore. But they couldn't hold back the enthusiasm for flight! Back-garden-shed enthusiasts were now building all different sorts of weird and wonderful aircraft. The age of flight taking the world by storm.

Orville, stressed and tired of the constant legal battles, became ill and died in 1912 at only 45. Wilbur lived on but not as a pilot or inventor. He worked for the newly set up FAA (Federal Flight Authority). He died in 1948 age 76.

Sadly, he lived long enough to witness and deplore what his invention did in the two World Wars.



# **Congratulations!** You have completed the history of the: Wright Brothers part 2

### Homework.

Design your own flying machine! Send in your pictures to history@nathanandhazel.com

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