The firsts and frauds of flight

For most of history, human flight was an impossible dream, but by the close of the 19th century, change was afoot.

Several determined men were working hard on this emerging technology, and it was clear that someone, somewhere, would soon develop a powered, controllable aircraft. Who would live on in history as the first to make this technological breakthrough? And would history reward the right man?

In the USA, the aviation inventor with the highest profile was Samuel Pierpoint Langley. With financial support from the US government and the Smithsonian Institution – a group of museums and research centres founded in 1846 – he built the Aerodrome: a sixteen-metre plane with two pairs of wings, one behind the other. On 7 October 1903, amid much fanfare, it was launched from a catapult on the Potomac River near Washington, D.C. It had hardly got airborne, however, before it crashed into the river and the pilot, Langley’s assistant, was pulled – shaken but safe – from the water. A second attempt, on 8 December 1903, ended with similar results.
Just nine days later, Orville and Wilbur Wright took their little biplane, the six-metre Flyer I, to Kitty Hawk Beach in North Carolina, USA. It soared above the wind-swept sands, achieving a flight of fifty-nine seconds over a distance of 260 m. For the two brothers from Ohio, who had been quietly experimenting with flying machines in their bicycle shop for the last seven years, this was a proud moment.

But were they the first to achieve powered, controllable flight, as most history books say? Perhaps not. The rival to the crown is a German-born inventor called Gustave Whitehead (or Weisskopf). On 14 August 1901, more than two years before the Wright brothers’ success, Whitehead is thought to have flown his bat-like Number 21 plane in Connecticut, USA. The flight, which went fifteen metres high and covered 800 m, included a turn to avoid some trees. (1) It was witnessed by the editor of the local newspaper, and articles around the world soon congratulated Whitehead on inventing a successful aircraft.
So why are the Wright brothers highly respected inventors, and Whitehead a forgotten footnote in the annals of aviation history? The explanation is a sorry story of bad luck. (2) Some people criticized Whitehead for not producing photographic evidence of his first flight, and refused to believe that it had really happened. (3) They advised him to organize photos of his next flights, which took place close to New York in January 1902, but bad weather made the photos unusable. He had nowhere indoors to store his plane, and it was destroyed in the harsh winter. Then he ran into financial difficulties after a dispute with his business partner, and had to build engines for other people’s aircraft to make ends meet. He returned to his own aviation designs too late: by then, the Wright brothers’ achievement at Kitty Hawk had taken centre stage.

However, there is another, darker reason for Whitehead’s obscurity. Fast-forward to 1914. Wilbur Wright was now dead, and so was Langley, who had failed to fly his Aerodrome despite the backing of the Smithsonian. The Smithsonian’s director had been a long-time friend of Langley’s and wanted him remembered with honour. He hired an engineer to reconstruct the Aerodrome and prove that it could really fly. After a lot of modifications to the machine, this was achieved, and Langley’s aircraft was given pride of place in the Smithsonian’s museum as the world’s first successful plane.

Orville Wright was understandably furious at this misrepresentation of history. (4) He insisted on exhibiting his own plane, Flyer 1, not at the Smithsonian but at the Science Museum in Britain. (5) In 1948, after lengthy negotiations to bring Flyer 1 home to the USA, the Smithsonian finally admitted making the changes to Langley’s plane. (6) They agreed by contract not to state that any aircraft prior to the Wright plane of 1903 had achieved controlled powered flight.
Lately, experts have looked closely at the evidence for Gustave Whitehead’s flight of 1901. (7) Many have concluded that his claims were genuine, but the Smithsonian insists that his flight never happened. It seems that the Wright brothers’ place in history may not have been won justly, through the agreement of the scientific world, but by a lawyer’s contract.