

“Did not Professor Langley's flying machine go to the bottom of the Potomac River?”

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Well, not all of Professor Langley's flying machines wound up at the bottom of the Potomac. Most were rescued — Samuel Pierpont Langley intended soft landings in the water. And yes, there was more than one, some launched from houseboats using the first catapult. This wasn't a "spur of the moment idea"— his research dates back to 1885, when he and William R. Ludewig were launching stuffed birds from a spinning merry-go-round. ¹ If Samuel Langley's test flight at Widewater in the fall of 1903 had been a success, the Wright brothers would be a footnote in aviation history, Kitty Hawk, N.C., would offer little more than sand dunes with an ocean view, and Virginians would be driving cars with "First in Flight" license plates. ²

One colleague who was well acquainted with Langley, and participated in Langley's flight research, writes at Langley's death in 1906 "...his original purpose was not to construct a flying machine, but if possible to determine the laws governing flight." ³

From 1891-95 he built four model flying machines, all unsuccessful. Finally, on May 6, 1896, he had his Model 5 ready: a steam-driven, quarter-size aerodrome. If it would fly, the pioneer work was done.

With friend Alexander Graham Bell (and his camera) inventor Langley & assistants went to a secluded spot on the Potomac, ¹ near Chopawamsic Island in the Potomac near the present-day Quantico Marine Corps Base. ² At the rocket signal, Aerodrome No. 5 rose without a quiver, flew at 25 m.p.h. for over a minute ¹ and covered a distance of about three-quarters of a mile. ² Its steam exhausted, it nosed gently down to the water. Months later, No. 6 was flown successfully. ¹ Langley's model planes for those experiments had a wingspan of about 14 feet and were powered by a small steam engine. According to Bell, they reached a height of 100 ft. ²

In 1898, the War with Spain had Congress excited and, hoping Langley could develop a device that would help win the war, appropriated \$50,000, to supplement a previous Smithsonian Grant of \$23,000. It would seem that the secrecy attached to the project stirred much of the derision that followed. Most of the development was shrouded, and Langley and his team could say little publicly, much less talk to the press.

The 'aerodrome' the team rushed to test flight was modeled after the early successful models, except it had a wingspan of nearly 50 feet, was 52 feet long and 11 feet tall, and weighed 750 pounds. Stephen M. Balzer and Charles Manly had developed a water-cooled radial engine that generated 52 horsepower, and this was geared to two pusher propellers. Immediately after its launching at Widewater at about 12:15 p.m. on Oct. 7, 1903, the aircraft, carrying its pilot, Professor Charles M. Manly, plunged into the Potomac at a 45-degree angle. Manly swam to the surface unhurt. ²

Two months after the Widewater experiment, Langley's flight team tried again— this time closer to Washington near where the Anacostia River empties into the Potomac. Just after takeoff, the Aerodrome A reared up, collapsed upon itself, and smashed into the water, momentarily trapping Manly underneath the wreckage in the freezing Potomac before he was rescued, unhurt.

"Langley again blamed the launching device. While the catapult likely contributed some small part to the failure, there is no denying that the Aerodrome A was an overly complex, structurally weak, aerodynamically unsound aircraft." ²

The Aerodrome A craft which came to be known as "Langley's Folly" wound up in the Smithsonian shortly afterward. In actuality, many of the newspapers referred to the craft as "The Buzzard" in their derisive reports.

Out of money, humiliated and tired, Langley could pursue the plans no further, and died in 1906.

Wilbur and Orville Wright, after their successful flight, managed to sew up most all the aeronautical patents. In 1914, extremely frustrated in his attempts to build a plane because of the Wright patents, aviation pioneer Glenn Curtiss unearthed "Langley's Folly" from the Smithsonian, installed a powerful new motor and flew across Lake Cayuga in New York. ¹ With a few modifications Curtiss completed several more successful straight line flights. ²

Almost immediately, The Smithsonian changed the placard on "Langley's Folly" to read:

"Langley Aerodrome. The original Langley Flying Machine of 1903, restored. In the opinion of many competent to judge, this was the first heavier than air craft in the history of the world capable of sustained free flight under its own power, carrying a man. This aircraft slightly antedated the machine designed and built by Wilbur and Orville Wright, which, on December 17, 1903, was the first in the history of the world to accomplish sustained free flight under its own power, carrying a man." ¹

Which was the way it remained until the 1940's when the footnotes and politics were all negotiated and the original Wright Brothers Plane was returned from the Science Museum in London.

But that's another story.

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1 From The Bulletin Index, 28 December 1933 http://www.clpgh.org/exhibit/neighborhoods/northside/nor_n113.html

2 <http://www.chopawamsic.com/First Flight.htm>

3 Miscellaneous Scientific Papers of the Allegheny Observatory--New Series. No.19, by John A Brashear; Reprinted from Popular Astronomy, Vol. XIV, 1906. http://www.clpgh.org/exhibit/neighborhoods/northside/nor_n112.html