

(Left to right) Sue Henderson, Chris Hornung and Phil Hornung traveled to Texas to see the aerodrome in person before transporting it to the Stafford airport. (Photo courtesy The Langley Flight Foundation.)

Stafford's Hornungs take a flier on reproducing historic aircraft

by Kathy Knotts | Apr 30, 2024 | ALLFFP, History, Stafford, Technology

The Wright Brothers would not have made it without Samuel Pierpont Langley. The fact that many don't know his name is an issue Stafford County history buffs Chris Hornung and his father Phil hope to resolve.

The Hornungs, along with Stafford Museum and Cultural Center Executive Director Sue Henderson and Stafford Commissioner of Revenue Scott Mayausky, formed the Langley Flight Foundation in 2021 with a goal to "commemorate the life and accomplishments of Professor Samuel Pierpont Langley, with a major emphasis on his heavier-than-air sustained mechanical flights in Stafford County, Virginia."

They are revealing a full-sized replica of Langley's Aerodrome No. 5 at the Stafford Regional Airport next week.

Langley, best remembered for his work with the Smithsonian Institution, was also an inventor, astronomer, physicist and aviation pioneer.

In 1896, his aerodrome was the first aircraft to achieve heavier-than-air sustained mechanical flight on a 90-second trip over the Potomac River. With a wingspan of 14 feet and weighing about 25 pounds, this marvel of wings and steam was launched from atop a houseboat off the coast of Chopawamsic Island and flew approximately 3,300 feet before coming to rest in the water.



The Langley Aerodome was powered by a steam engine and launched off a boat. (photos courtesy The Langley Flight Foundation)

Seven years later, in 1903, the Wright Brothers successfully achieved powered flight at Kitty Hawk, North Carolina. Langley made two more attempts that same year in Stafford but was unsuccessful.

Phil Hornung has been championing the project for years. While looking for a location to build the Stafford Regional Airport, he created a presentation for the Stafford Historical Society detailing the history of aviation in the area when he discovered this remarkable event.

"There was no mention of it anywhere in Stafford County," Phil Hornung recalled. "And it was a big deal. Alexander Graham Bell was there to witness this."

The father and son duo are devoted to Stafford history, serving on various boards and associations. They remain dedicated to the preservation of Stafford's history and culture, so it was natural that an effort to focus more local attention on the county's place in aviation history became a passion project.

"After I made the presentation to the Stafford County Historical Society, within a couple of months, the chief curator from the Smithsonian Air and Space Museum sent me an e-mail that said, 'Phil, I understand you're interested in Langley. What can I do to help you?," Phil Hornung recalled.

With assistance from the Smithsonian, the Hornungs used photographs to better understand the aerodrome's design. There were no blueprints to help them. The finished aircraft was produced by Kip Motor Company in Texas.

"It would be hard for you to imagine really what it looked like. The only way to convey that is to reproduce it," Phil Hornung said. "This version is more accurate than the version that hangs in the Smithsonian."

The aircraft will be attached to the airport's ceiling with a pulley system so it can be lowered to eye level, giving visitors a better understanding of how the craft works.

The replica aerodrome and exhibit <u>will open to the public</u> May 11 with interactive kiosks that tell Langley's story and trace the evolution of human flight.

"At the time, this was a revolutionary accomplishment," Chris Hornung said. "For the first time in history of man, somebody figured out how to build an airplane, put an engine on it, strap it to a ship, launch it in the sky, and it flew for a minute and a half. And it proved to the world that someday we would be flying."

The late 1800s were filled with aviation inventors learning from each other's successes and failures, the Hornungs said. They said pioneers in those days shared information with each other because understanding how flight works was a collective effort.

"The feat that Langley achieved — in a lot of ways, thanks to his role at the Smithsonian — he was able to demonstrate this in a way that inspired the Wright brothers to pursue aviation," Chris Hornung said.

The Langley Flight Foundation hopes the aerodrome exhibit will lead to a larger appreciation for aviation and science education in the county. The Hornungs noted they are working with Stafford's school division, and they also hope to use the display to bolster economic development.

The foundation hosted 160 fifth graders at Stafford Airport in November for the inaugural Aviation Careers Expo of Stafford Day. The students participated in aviation-based experiments and learned about aviation careers from partners such as Ace Flight Solutions, United Airlines, the Federal Aviation Administration and NASA.

The Hornungs also noted that the Aviation and Integrated Management Center pathway was recently approved at North Stafford High School and is slated to begin in 2026. Schools Superintendent Thomas Taylor expressed his enthusiasm at the relationship between the schools and the Langley Foundation. "I cannot say enough how proud we are of this partnership. As aviation emerges as a promising career field, this collaboration serves as a strategic bridge, guiding students toward this dynamic industry," Taylor said. "Beginning with ACES day in elementary school, where aviation careers are introduced, we lay the groundwork for a seamless launch into promising careers for students after graduation. Through this vertical pipeline, we not only inspire curiosity but also provide tangible avenues for exploration and growth, fostering a new generation of aviation enthusiasts and professionals."

"I think it is great for Stafford," Phil Hornung said. "I mean, why not an aviation program where the first aircraft flight in human history took place?"

Learn more about Langley and the exhibit at <u>https://www.langfound.org/</u>.