



Headquarters Bulletin

From AAHS CEO Jerri Bergen

The AAHS Facebook Page Rebuilt!

After six months of haranguing the faceless “support group” of Facebook to get our long-languished Facebook page restarted, we took it on the chin and JUST STARTED OVER. On Facebook as “AmericanAviationHistoricalSociety” (all one word), our new page has all its links working, and we have new social media feeds being built to help us reach other audiences. Check in often—you’ll find upcoming events and more current posts of AAHS activity!

AAHS HQ Getting Some Storage Space!

With our headquarters building getting uncomfortably full with incoming collections and donations, a benefactor of AAHS and Flabob Airport has offered to develop some permanent storage for AAHS, via the placement of four 40 ft. containers on a concrete pad placed directly behind the HQ building. These 40 ft. containers, with lighting, insulation, air conditioning and a watershed roof, will allow AAHS to store its entire library collection in an organized way, and allow our interior headquarters building to be devoted to our image archive, research, and the processing of our collections. Our library will still be fully accessible, and we have every volume already identified in our online book catalog system. Pictures will come soon on the AAHS website!

Another Notable Collection Being Processed at AAHS

The estate of Frank Strnad, longtime aviation historian, AAHS member, and author of *A Picture History of Aviation on Long Island 1908-1938*, bequeathed his papers and photo collections to AAHS and the New England Air Museum, of which he was a longtime member and volunteer restorer of several aircraft. Ninety-three banker boxes were shipped from Long Island to AAHS HQ, where volunteers are carefully sorting, identifying and cataloging his files, much of which includes aviation history the Long Island area. These materials, conserved by AAHS, will be available for future researchers of aviation history.

AAHS Field Trip

AAHS volunteers and interested parties will be getting a personal behind-the-scenes tour of the Planes of Fame Museum on Saturday, July 19, with AAHS Associate Editor Adam Estes, who is also a volunteer docent at Planes of Fame. Adam, who’s been a docent at POF for the past seven years, has a detailed knowledge of POF’s aircraft collection and its other aviation resources, such as its book archive, which will also be part of the tour. Pictures and a view of the tour will be available soon on AAHS’s Facebook page, <https://www.facebook.com/AmericanAviationHistoricalSociety> →



History's Most Influential Aircraft

Our Second Nominee

(Cont. from No. 25-06)

We left the Wright brothers in December 1905, with Wilbur having flown just seconds less than an hour and covering an estimated 24 miles through the air. Only one more flight was made, a circle of the field that was cut short by impending darkness. The Flyer was placed in storage, where it would remain for the next two and a half years. Without question, the Wright brothers had achieved one of the greatest engineering breakthroughs in history. What to do about it was something else entirely. The brothers, as one author put it, “worked on the one hand to sell the airplane and on the other to keep it a secret from the world.” Without a contract in hand, they steadfastly refused to reveal even the slightest detail of their flying machine to any of the governments that had expressed interest. By the same token, no bureaucrat was apt to agree to those conditions, even if no payment would be made until the goods were delivered and successfully demonstrated.

Nonetheless, negotiations with various entities continued. There were nibbles but no bites. To be ready when one came, construction of improved Flyers was started, while work continued on a 30 hp motor. By 1907, European interest had perked up considerably. In mid-May, Wilbur sailed for England enroute to Paris. Anticipating success, in July a new Flyer was crated and shipped to France. In August chief mechanic Charlie Taylor joined Wilbur, followed by Orville three months later. In all, talks would go on for six months in Paris, Berlin, and London. By December first, the vagabonds were back in Dayton. Not an airplane had been sold.

As more became known, or conjectured, about the Wright Flyers, the inevitable imitators began to appear. The French were not much beyond where the brothers had been after returning from Kitty Hawk, but they were making real and rapid progress. Closer to home other rivals were incubating, although their presence would not be felt for some time yet. Meanwhile, the War Department had created a Division of Aeronautics within the Signal Corps, headed by a few air-minded Army officers. The Division had no purchasing power of its own, but on December 5 Wilbur was in Washington to confer with a branch that did. The budget was miniscule, but two days before Christmas, Signal Corps Specification No. 486 announced “Advertisement and Specification for a Heavier-than-air Flying Machine.” The stated requirements closely resembled what Wilbur Wright had laid out as the capabilities of the latest model Flyer. A contract was drawn up accordingly and on February 10, 1908, Orville signed on behalf of the Wright brothers. For the sum of \$25,000, an aircraft meeting the Signal Corps requirements would be delivered not later than August 28. In March, an agreement was reached with a French syndicate to manufacture Wright aircraft in Europe.

Return to Kitty Hawk

With orders at last in hand, the brothers turned to the task of delivering and demonstrating two new airplanes on two continents. Wil would go to Europe, Orv would manage the Army contract. But neither had flown for two and a half years. The 1905 Flyer was taken out of storage and shipped to the old Kitty Hawk testing grounds. By early May, the machine had been set up, now sporting two upright seats. (So critical were performance margins that all the previous Flyers, including this one, had the pilot lying prone on the lower wing to reduce wind resistance as much as possible.)

Unlike 1903, the press were now well aware of the Wright brothers and their flying machine. Fantastic accounts emerged even before Wilbur managed a first hop of 22 seconds on May 6. The Flyer proved balky at first. Eleven flights were made on the 8th, but only a couple exceeded a few seconds in duration. The kinks, whatever their nature, were worked out and on May 14, mechanic Charlie Furnas became the world’s first airplane passenger, with Wilbur at the controls on a 28 second joy ride. In a bit Orv took Charlie up again, this time for a four minute circuit back to the takeoff spot. The day’s finale was to be an hour-long flight, duplicating the successes of 1905. The controls on the Flyers were, to use a modern phrase, “not intuitively obvious.” After about seven minutes, Wilbur became confused and “pulled the wrong lever,” diving rather than climbing to avoid a sand dune as he had intended. He was shaken and bruised but the Flyer was seriously damaged.

The wreckage was eventually crated and shipped back to Dayton, but timing was becoming critical. Wilbur went straight from Kitty Hawk to New York, where he boarded a liner for France on May 21. Orville returned to Dayton by way of Washington, D.C., stopping to inspect the grounds at Ft. Myer, where the Army acceptance trials would take place. Wilbur arrived in France to discover that the airplane shipped the previous year was in complete disarray, the victim, it was later determined, of overzealous customs agents. Seeking to avoid unwanted attention in Paris, he eventually set up shop at a field outside Le Mans, about 125 miles southwest of the capital. Back in Dayton, Orville and Charlie Taylor worked on the Army Flyer and began construction of others expected to be sold in Europe.

“The Most Wonderful Flying Machine That Has Ever Been Made”

Wilbur took more than two months to repair his Flyer and tune the engine to his satisfaction. On August 8, he was ready. A decent size crowd was present, including newspaper reporters and members of the Aéro Club de France. Using the catapult launch system devised in 1905, he made a one minute forty-five second flight, making a pair of sweeping turns, first left then right. The time was insignificant; others had already done far better. But the ease and precision in which Wilbur banked into the Figure 8s was truly astounding—not at all like the clumsy and laborious flat turn circles that a few Frenchmen had finally managed.

Any doubts were now erased. Not only had the Wrights flown as they claimed all along, but their three-axis control system was clearly superior to anything else in the air. The crowds grew, and tabloids world wide heralded this marvelous breakthrough. “The most wonderful flying machine that has ever been made,” proclaimed London’s *Daily Mirror*. Through August 13, Wilbur made 14 flights at Le Mans, mostly short duration hops to sharpen his flying skills and to ascertain the Flyer’s reliability, before moving operations to a more spacious field a few miles away.

Orville, meanwhile, had arrived at Ft. Myer to prepare for the upcoming army demonstration trials. A few days were required to assemble the machine and complete ground tests. On September 3 the two brothers, continents apart, flew. Wilbur logged over ten minutes, while Orville’s first effort lasted only a minute ten seconds, ending with a rough landing and a broken a skid when he “pulled the wrong lever,” just as Wilbur had done in the final warm-up at Kitty Hawk back in May. But both were in the air again on the 4th, and although the flights were short, the crowds were aware they were witnessing history. On the 5th, Wilbur stayed up for almost 20 minutes, his best time so far. Orville flew on the 7th and 8th, gaining confidence with every lap around the field.

Triumph and Tragedy

On September 9, 1908, Orville Wright put on the most extraordinary flying exhibition the world had yet seen. In the morning, he circled the Ft. Myer grounds 57 times in 57½ minutes, a world’s record, a record that stood for only a few hours. Refueled and relaunched, he zoomed overhead for an hour and three minutes. To finish the day’s work, Lt. Frank Lahm took a seat beside Orv for a six-minute aerial excursion, that one a record for a two-person flight. The younger brother continued his tear in the air, breaking his own records daily, one after another—and making front-page news at every step. The 13th being a Sunday there was no flying, then high winds put a temporary stop to Orville’s run. Wilbur, with the somewhat inferior 1907 machine, continued to wow the crowds at Le Mans, breaking the French endurance record on the 16th with a 39-minute flight after which he took his first European passenger aloft.

Back at Ft. Myer, Lt. Thomas E. Selfridge was scheduled as the next Army observer to fly. The Wright camp was suspicious of Selfridge, a principal in the Aerial Experiment Association, the group founded by Alexander Graham Bell which included Glenn Curtiss. Only months before, Curtiss had managed to keep the AEA’s “June Bug” in the air for a minute and 42 seconds, long enough to cover a little over 5,000 feet and win the Scientific American Cup. Compared to what the Wrights had done years before, it was a paltry performance, but here was a serious competitor—and one that seemed to infringe on the Wright’s patent.

To refuse the Army’s request was out of the question, so on September 17 Orville reluctantly prepared to take Selfridge on his scheduled flight. The outcome was historic in the worst possible sense. After a few minutes in the air, a propeller blade cracked lengthwise, skewing the aircraft and entangling a bracing wire. The Flyer faltered, momentarily appeared to correct itself, then nosed forward into the ground. Onlookers raced to extract the occupants from the wreckage. Both were immediately transported to hospital. Orville survived, but sustained serious injuries that would plague him for the rest of his life. Tom Selfridge never regained consciousness.

Epilogue

The crash at Ft. Myer and Selfridge’s death were blows to the development of aviation in every respect, but Orville had left an indelible mark. He was, as George Squier put it, “the man who showed the world that mechanical flight was an assured success. No one seems to realize at this close range what a revolution the flights portend. The problem is solved, and it only remains to work out the details.”

As if to validate Squier’s comments, just four days after Orville’s crash Wilbur broke his brother’s recent records with a one hour thirty minute flight. For the remainder of the year, he went on to make well over a hundred flights in France, carrying dozens of passengers, including the first woman and the first newspaper reporter. Tributes, medals, and honors to the brothers poured in from every corner, along with occasional prize money for Wilbur, some of it substantial. To close out his *tour de force*, Wil would try for the Michelin trophy (and the 20,000 French francs that accompanied it) for the longest flight of the year. On December 31, with snow on the ground and bundled against freezing temperatures, he rounded the prescribed triangular course for two hours and 18 minutes.

The problem of flight was indeed solved, and the details Squier alluded to would quickly follow. The French were fast learners—and they were jealous. By 1910, the patented Wright design was clearly obsolescent, surpassed in performance by machines that more closely resembled how airplanes looked in the decades after. But it was in 1908 that the Wright brothers, by coordinating pitch, yaw, and roll, showed the world how to fly. For that reason, we consider the Flyers used in those demonstrations—rather than the historic 1903 example—to be among history’s most influential aircraft. As noted, we’re talking about two separate airplanes, of essentially the same design but differing in detail. Years later, Orville called these airplanes the 1907 model: “All the flights made by Wilbur in France and Italy . . . in 1908 and 1909, and by me at Fort Myer in 1908 . . . were made with this 1907 model.”*

*The Papers of Wilbur and Orville Wright, vol. 2, reprint ed. McGraw-Hill, New York, NY (2001) pp.1193-1195.

To Learn More

Biographical material on the Wright Brothers is extensive; material relating specifically to their aircraft much less so. A comprehensive Wright brothers bibliography (144 pages) can be downloaded from the [AAHS website](https://www.aaahs.org). A very useful chronology, including a listing of flights which could be identified, can be found at the same location. On the web, <https://www.wright-brothers.org/>, billed as a virtual museum but seemingly now static, remains a good source of information. The “[Wilbur and Orville Wright Papers at the Library of Congress](#)” contains more than 49,000 digital images documenting the lives of the Wright brothers and their work. →

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On the track at Kitty Hawk, 1908 (LOC)



Wilbur at Le Mans, 1908 (Wright State U.)



17 September 1908. Lt. Thomas E. Selfridge, nearest the camera, and Orville Wright just before takeoff. (Wright State U. archives.)



The Fort Myer crash scene. (Wright State U.)