Orville Wright in Arlington, 1908-1909

The Wright brothers first flew at Kitty Hawk, North Carolina, in December 1903. Although no airport was established in Arlington County until 1926, a "first" in airplane flights occurred and flight records were set here one hundred years ago. Orville Wright conducted tests at Fort Myer in 1908, seeking U.S. Government approval of the flying machine he and his brother Wilbur had developed. On September 3 of that year he began circling the field there and set a new record for sustained flight. He bettered this record each successive day until on September 12 he stayed in the air for one hour and fifteen minutes.

On September 17, Wright crashed on the Fort Myer field. A passenger on that occasion, Lt. Thomas Selfridge, was killed, thus becoming the first victim of an airplane crash. Wright himself sustained injuries from which he never fully recovered.

The next year, during June and July, Wright undertook more tests. One of these resulted in the first cross-country flight by airplane. On July 30, 1909, Wright flew his plane from Fort Myer to Shooter's Hill in Alexandria (where the George Washington Masonic Memorial now rises) and back at an average speed of about 43 miles an hour.[1]

The following are four remembrances of those flights. The first is a glowing account of Orville Wright's 67-minute flight of September 9, 1908, written immediately afterward by Gutzon Borglum, a visitor to the area who later sculpted the presidential visages on Mount Rushmore.

> We left town about 3:30 in a Georgetown car; at the bridge we transferred to a Fort Meyer [sic] car, arriving at the 'parade ground' about 4:30—a dusty, fairly level, ungraded plain, paralleling the Arlington Cemetery. At the far end a small shed was pointed out by the motorman as the aviary where the new bird was roosting. A few autos were on the ground, small groups of people moving about or waiting, and an occasional trooper galloped over the space...[W]e alighted at Arlington and in consequence walked the entire length of the field, which was restful. For I was keyed to the breaking point in anticipation of the *first view,* my *first impression* of this air craft, that had for years been the labor and the secret of two simple men in Ohio. The shed is a simple barn-like affair, built of flooring, the end open. Within stood the most unlikely, spider-like frame, with twin cotton covered, horizontal frames, one above the other, about six feet apart. There is nothing about the contraption that

would suggest to the lay mind its possible use, should he find it unattended in a field; nothing that would suggest to him what it might do or that it was built for anything in particular.

It has a motor engine resting on the bottom plane near the center; it has a pair of propellers or fans resembling shaped fence boards stained green; a seat wide enough to hold two, just in front of the engine; the whole directed by two or three wooden levers. Its upward or downward movement, when under power, is controlled by two small planes ten feet in front of the aeronaut; a pair of rudders to the back guide to the right or left.

The machine is put together as casually as a boy would do it and could be duplicated for less than a thousand dollars. Everything about it is as obvious, once seen, as it is amazing. I had conceived nothing of the kind; there was nothing that met the layman's idea of a flying machine. And actually it does not fly, it glides; it is a glider, forced against the air with great power, guided by two sets of rudders, up and down, right and left.

Presently the crowd warned us something was to happen. Wright had arrived—a light-weighted and not over keen looking man—he passed the ropes and entered the shed, put his hand affectionately on the laundered wing of his Pegasus, and said something to his faithful, foreign-looking assistant. Word was passed about, some troopers gathered, and together, much as boys handle a great kite, they dragged the flyer across the field to a little tripod, a derrick, from which hung a weight, and from which, along the ground extended a small rail. Upon this rail resting on a free wheel the flyer was placed.

The hour had arrived; there was some wind, but orders were given and the motor started. The aeroplane resting on the rail was anchored, and the weight suspended from the derrick was raised. Its falling, through rope attachments, aided the aeroplane to get speed instantly—a kind of push off. Everything was ready; held back of all this, by U.S. troopers, some three hundred spectators had gathered. Col. B and Gen W. had joined us and we were all on the anxious tip-toe, watching and noting every move.

As soon as the motor started, the plan gave a slight jump forward. The wind from the propellers drove the hats from the spectators' heads. Wright pulled his cap closely down over his head, took his seat, called to his assistant, and away he slid—close to the ground, much as a duck does as it turns to escape, he swept the weed tops for possibly a hundred yards; then he seemed to mount suddenly, six, ten, twenty feet. At this height he reached the end of the parade ground, turned to the left, and now we saw him in side profile. He crossed the short far end quickly, and as he turned towards us the machine was inclined inward. This Wright does deliberately, or the machine skids as an auto will in turning a slippery corner.

Down he came towards us, head on, passed, and in his return directly over us, the machine did skid, caught in the wind, Round and round he slid for an hour and more. All the wonder was in the start, the ride, and in the most conclusive proof that the plane with power took its place at will and maintained it.

The crowd stood open-mouthed, with murmurs of wonder and an occasional toot from [an] automobile horn; then as he passed over us everybody let go in an uproar of shouting and handclapping. The miracle had happened! Nothing can take this step made into space from man.

Up it went to quieter air. "Why did he not go to New York," "to Philadelphia," "why not fly away," "why fly continuously around?" We were mad in a desire to see "stunts." Nothing seemed impossible.

We grew restless; he could fly as he wished, move as he wished; at the turns the wind coming over the Government stable billowed, and the aeroplane tossed like a ship. Up it went to quieter air. "Why did he not go to New York," "to Philadelphia," "why not fly away," "why fly continuously around?" We were mad in a desire to see "stunts." Nothing seemed impossible.

He had begun late and the sky began to lose its light and we worried about how to tell him the time. Finally his assistant was helped to the room of a small board and then with chalk began with "56," marking the minutes of his flight. He was high up but he saw, and as darkness settled about us he dove down near the roof each round, better to read the numbers. I remarked that this is probably the first sign ever made for sky travelers.

Finally, having made a record, he began his descent from the far end of the field. Down he came, in long sweeps, settling rapidly, then turning upward and down again, on he slid over the tops of the weeds, then stopping so gently—more gently than does a bird.

The crowd broke; everyone raced for the machine. One quaint old lady, who had been left in a small buggy to watch the horse, while her younger folk could be free, whipped up her horse, drove straight to the aeronaut and begged for a shake of his hand. She was one of the few who shook it. Another old couple turned towards their home. "Well," said that old man, "I'm ready

to go now," and his old mate drew nearer to him, smiled, and they disappeared into the night.

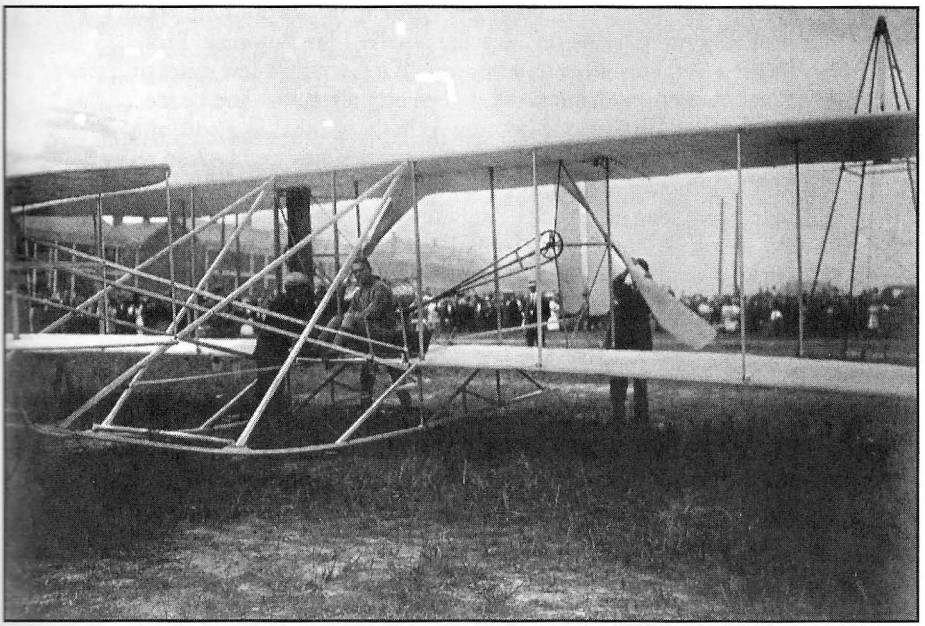
The curious rushed for Wright; the boisterous shouted and tooted their horns; officers, scientists drew together in groups. We had seen the most wonderful demonstration of heavier-than-air flight ever made. We had seen a simple little pair of planes driven against the air, rise to a height above sixty feet; a machine weighing in all about nine hundred pounds, heavy as a horse, glide away, directed at will for an hour.

Ned, it's wonderful. The flights will continue, and next week the President will be back. Some public recognition must be made of these men.[2]

Frank L. Ball, a native Arlingtonian, who served as President of both the Arlington County Bar Association and the Arlington Historical Society, witnessed many of the 1908 and 1909 Fort Myer flights and described them in a 1959 article in the Arlington Historical Magazine, reprinted here in its entirety.

It was four years after their first flight at Kitty Hawk, N.C., before the Wright brothers could get the United States Army sufficiently interested in heavier-than-air aviation to begin expending some money. The first contract called for a machine capable of carrying the pilot and one passenger at a speed of 40 miles per hour in a 10-mile test and of carrying fuel enough for 125 miles. The second test was a continuous flight for one hour. The tests were to be made at Fort Myer in the fall of 1908. The Wrights' bid was to furnish the machine within 200 days at a cost of $25,000. In order to prepare for these tests, the Wrights went back to Kitty Hawk in May, where they assembled their machine in the presence of a number of newspaper correspondents, who had been sent by doubting editors to observe and record the facts. Even so great a newsman as James Gordon Bennett, with his outstanding *New York Herald*, was so skeptical that he sent his best reporter Byron R. Newton to observe the test at Kitty Hawk and to determine whether or not the Wrights were fakers. On May 14, Newton observed Wilbur Wright making a short flight with James W. Fumas as passenger and then Orville made a flight of 4 minutes with Fumas as his passenger. These were the first flights in the history of the airplane carrying two men. Newton was so impressed with what he saw that day that he wrote in his dairy, "Some day Congress will erect a monument here to these Wrights." In November 1932 this prophesy came true when the Wright monument on Kill Devil Hill, erected by an Act of Congress, was dedicated.

Later on that year, Wilbur went to France and Orville came to Fort Myer. There had been changes made in the machine, one



Nine-year old Polly Miller was living in Cherrydale at the time. She later recalled that the Wright plane looked like "a big cage . . . There wasn't anything solid about it . . . it was just wires and canvas. It seemed so small to me. It looked to me like it was awfully dangerous." [Based on an interview conducted by Kim Holien.]

of which provided for the pilot to sit upright on top of the lower plane. Up to this point all flights had been made with the pilot lying on his stomach. Orville's first flight at Fort Myer was on September 3, 1908. The course he followed lies just south and southwest of the present Fort Myer Hospital and covered a large field on which at that time there was no building except perhaps the laundry. He circled this field counter-clockwise. This first Fort Myer flight was witnessed by a great many people, and the crowd was stirred to a very high state of emotion. Some of the many newspaper reporters who criticised him and doubted his claims were so overcome that at least three of the most prominent of them came to him and congratulated him with tears streaming down their cheeks.

Orville continued his flights from day to day, one day setting a new world's record of sustained flight and the next day breaking it by staying aloft a little longer. Most of these flights were of few minutes' duration, but he gradually brought them up until on September 12 he stayed in the air continuously for 1 hour and 15 minutes. In one of these flights in 1908, he took his friend Lt. Frank P. Lahm and they stayed up 6 minutes and 24 seconds. This was the first flight of an Army officer in an airplane.

Of course, there was great excitement in Washington, but probably more in the countryside south of the Potomac. From the first flight on, all of us who were living within a few miles of Fort Myer dropped our work in the early afternoon and headed for the field. In fact, we became so enthused that in a sort of a way we adopted Orville Wright as our own boy and looked on him as almost a member of the family. Looking back, I think I must have seen nearly all, if not all, of the 1908 flights with the exception of the one on September 17.

On that date, Lt. Thomas Selfridge begged that he might be assigned as a passenger. His request was granted, and the two rose from the field in good order and were in the air some three or four minutes when something went wrong with the plane and it took a sudden dive. Wright tried desperately to get control, and when almost to the ground the machine began to right itself. However, it did not quite make it and struck with a terrific crash, killing Selfridge and maiming Wright for life. It was Wright's thought that if he had had just a few more feet he could have gotten the machine in position where it would have landed on its skids, and the tragic results to both men might have been avoided. Selfridge thus became the first victim of an airplane accident. A fine monument is erected to his memory in Arlington Cemetery.

Although severely injured, Wright did not lose consciousness. He was taken to the hospital and on the following day his mechanics, Taylor and Fumas, brought to him the broken propeller and other broken parts, and while lying in bed he diagnosed the trouble that had brought about the accident.[3] This is but one example of the intense concentration of this inventor in improving his product.

With the death of Selfridge and the crippling of Wright and the machine, the tests at Fort Myer ended for that year.

In 1909, Orville Wright came back to Fort Myer to finish his tests. His first flight was on June 28; his last on July 30. Between those dates he was up nearly every day, and as in the year before the whole countryside turned out to view the flights and cheer him on. Again I saw practically all the tests. He completed his endurance test by staying in the air more than an hour. He did this by continuously circling the field. There was left only a cross-country test which called for a flight of 10 miles. The course was laid out from the Fort Myer field to Shooter's Hill in Alexandria—where the George Washington National Masonic Memorial now stands, a little west of the Alexandria railroad station. Everybody knew that Wright would make his attempt the first day the conditions were good. Lt. Benjamin D. Foulois was assigned as a passenger for this trip. On this test he had to maintain a speed of 40 miles in order to receive his $25,000 from

the Government, and there was a bonus added of $1,000 for each one mile per hour average speed over the minimum of 40.

On the day of the flight Wright did not keep his audience waiting very long. It was a bright, warm, calm July day. Official Washington turned out in force. The high brass of the Army, many Congressional leaders, Cabinet members, and Washington society by the thousands, led by Evalyn Walsh and Alice Roosevelt, gathered around the north end of the field. The crowd was so terrific that a battalion of the Fort Myer cavalry had to be called on to keep it back behind the lines and in proper order. On that particular day I went to the Fort Myer grounds with the late Dr. Ralph A. Quick, my older brother, E. Wade Ball, now deceased, and my younger brother, Dallas D. Ball, who is now a resident of Washington. Seeing the immense crowd and with full knowledge that we country men did not have a chance among the big boys, we decided to go to the south end of the field along the area where the old railroad track was.

Wright rose and circled the field once, making his turn right over our heads. He then headed straight for Shooter's Hill. There was a captive balloon to mark his turning point and also a temporary telegraph line set up to record the time of the turning and communicate with Fort Myer. About the time he started, however, a strong wind blew up at the Alexandria end and wrecked the balloon and the telegraph station, and so Wright did not know the exact spot to turn and went well beyond his mark. We watched him as he left Fort Myer until he flew over the Four Mile Run area where there was a depression through the valley and he went out of sight. You cannot imagine a more tense crowd than that composed of all of us as we stood and stared and hoped that he would make the turn and come back safely. This trip was over wooded and rough territory, and there was not a single place where he could have hoped to land safely if anything had gone wrong. We had only a few minutes to wait before the buzz of the engine was again heard and the returning plane came in sight. There went up a terrific hurrah from the crowd and constant cheering from that moment until he landed.

When Wright arrived at the field he feared to land at the north end because of the possibility that the crowd might break through and somebody might be injured. He consequently flew up to the north end, made his turn in front of the crowd, and came directly back where the four of us men were standing and landed in front of us. We rushed over to the plane. My brother Wade was the first person to congratulate him. Dr. Quick, Dallas, and I were right behind him, but before we could quite reach the plane the cavalry charged down upon us and drove us back. You will find in the records that Alice Roosevelt and Evalyn Walsh were the

first to receive and congratulate Wright. This, of course, was the story of the correspondents who were up in the crowd at the north end of the field and naturally were glamorizing these two charming leaders in Washington society. As a matter of fact, Wade was the first to get to the plane and the first to congratulate him. I recall very well that Wright had a very small American flag out on the front of the plane. I recall also that he looked at us as we were running out but that his main attention was on his passenger, and apparently both Wright and Foulois were excited and enthusiastically talking to each other. Thus ended the first cross-country flight in the history of aviation by a heavier-than-air machine—perhaps the most famous event in the history of Arlington County.

Wright had obtained a speed of a trifle less than 43 miles per hour. He thus received a bonus for exceeding his minimum. On August 2, 1909, the machine was formally accepted by the United States Government, and Orville, accompanied by his sister Katherine, set out for Berlin to demonstrate the machine to another government.

Wright never recovered entirely from his accident in 1908, but he continued his intense concentration on the development of the airplane, and of course he goes down in history as one of the great inventors of all times.[4]

Major General Benjamin D. Foulois, Orville's passenger and navigator on the final test flight on July 30, 1909, shared the following recollections with the audience at a ceremony at Fort Myer on August 19, 1966, when a plaque commemorating the first two military flights was being unveiled:

Going back to some of those early days, I was a member of the first flight—in fact, the second flight—that Orville Wright made on the parade ground here. Frank Ryan and myself were standing alongside the ropes that were roping off the crowd. Couple of the elderly women came pushing up behind us. Stood there for a few minutes—finally one of them said, 'Is that all he is going to do?'—turned, and disgustedly walked away. First time they had ever seen an airplane in the air, but I've often wondered whether those women weren't looking ahead a little bit to the days when we were doing acrobatics later on.

It was on this field that we lost our first officer, Lt. Tom Selfridge, September 17, 1908. Orville Wright was put in that old hospital there for seven weeks, recovering from his injuries.[5]

We called off the tests until the following summer when Orville and Wilbur both came to Ft. Myer to complete the tests. The final acceptance test was this cross country speed test which we made on July 30, 1909. I laid out the course from here to

> Alexandria. We had to take advantage of the southerly winds at that time so we could average a speed abounding(?) on the home trip. Not a landing field on it between here and Alexandria and back again except Ft. Myer go(?) ground. The time came to make that test. Orville Wright, in his quiet little voice, asked me if I wouldn't be the observer on that trip and his navigator. He picked me, I found afterwards, because I was the smallest one of the group—less wind resistance, less gasoline to carry—things of that kind so we could average a high speed, with a less bulky man. We took off on the afternoon of July 30, 1909, got about half-way down the course—hit a down trend of air—I might go back a minute and say, when I got into the airplane with him, he quietly turned to me and said, "If we have any trouble on this trip, I'm going to pick out the thickest clump of trees I can find and land in it," which sent a little reminder to me that I'd picked out a course that had no landing fields on it. We got down about half-way on this trip, hit a down trend, and I was picking out that clump of trees he expected to land in about that time and I had to start to navigate him and get him on the course again—turned down at Shooter's Hill, the site of George Washington Masonic Memorial. On the return trip we hit that same down trend and down we went again. Flown back with the best pilot and that sturdy little engine there and came on in over Arlington Cemetery. Swung across the finish line, turned, came in and landed. Somebody asked me as I got out of the plane if I heard that roar of the crowd down there. I said "No, probably a roar of disappointment they expected to see us land over in Arlington Cemetery." After Selfridge's death they all came out here for a Roman holiday and all its bloody trimmings.[6]

Finally, Orville Wright wrote his own very technical description of the July 30, 1909 flight about ten years afterwards:

> Lt Benjamin D. Foulois (now General Foulois) was the observer on this test flight.
> The motor made 1,310 R.P.M. in flight, developing 32 horsepower. The 10 mile course from Fort Myer to Alexandria and return was covered in 14 minutes 40 seconds—an average speed of 42.58 miles. The timing of this flight varied a good deal. Foulois' time, taken on the machine with a stop watch, gave a speed of a little over 42.9 miles. At College Park, on October 9, 1909, the machine showed a speed of 45.8 miles over a course with and against the wind. The flight to Alexandria was made with a quartering wind, so that there was a loss in both directions.[7]

Endnotes

[1]C.B. Rose, Jr, *Arlington County, Virginia: A History* (Baltimore: Port City Press, 1976) p.166.

[2] As published in *The New Dominion*, September/October 1991.

[3] "The only explanation I have been able to work out of the cause of the plunge for the ground is that the rear rudder, after the stay wire was torn loose by the propeller, fell over on its side and in some mysterious manner was caught and held in this position, with a pressure on its under side." From a letter, Orville Wright to Wilbur Wright, Nov. 14, 1908, quoted in McFarland, Marvin W., ed, *The Papers of Wilbur and Orville Wright, Volume Two 1906-1948*, (New York: McGraw-Hill, 1953), pp 937-938.

[4] Frank L. Ball, "The First Cross-Country Flight by Airplane," *The Arlington Historical Magazine*, Vol. I, No. 3, Oct. 1959, pp.37-40.

[5] That building, still intact, is now known as Building 59.

[6] From a transcription made from a recording of his remarks on August 19, 1966.

[7] Orville Wright to Henry S. Molineu, Sept. 10, 1919, quoted in McFarland, T*he Papers of Wilbur and Orville Wright, Volume Two*, p. 961.