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# Wright "B" Flyer Civilian vs. Military Versions

The year was 1910, and Benjamin Foulois, the sole Signal Corps pilot at the time, evaluated the 1909 (Military) Flyer at Ft. Sam Houston in Texas. The Wrights had already experimented with placing the longitudinal control (canard) on the tail of the aircraft. A 1909 Wright Transitional Model A flew for a brief period with both a canard and a rear-mounted elevator. The new "B" model sported a conventional rear-mounted elevator, wheels on the undercarriage, and levers to control the wing-warping (lateral control) of the aircraft. All of the "B" Model aircraft purchased by the Signal Corps were controlled with levers and relied on wing warping.



The "Iron Bird" or "Brown Bird," operated by Wright "B" Flyer organization since 1982, is copied after a civilian Wright Modified "B" Flyer owned by Howard Rinehart. This

Wright Modified "B" Owned by Rinehart (A "Civilian" Flyer)

aircraft was modified with ailerons for lateral control and control wheels replacing the lever controls. Rinehart's aircraft in the National Museum of the USAF also has an eight-cylinder Rausenberger engine. For many years volunteers have referred to this aircraft as the "Military Flyer." It is, in fact, a distinctly civilianstyle Flyer. Rinehart used it for flight instruction in 1916. Our "Valentine Flyer," which uses wing-warping and lever controls, is representative of the 1911 Wright "B" Flyers purchased by the Signal Corps. The Wrights did not incorporate ailerons until 1915 (Model K) and did not replace levers with a control wheel until 1913, although some versions of the Model C had two control wheels mounted on a single yoke.



Capt Chandler and Lt Kirtland in "Military" Wright "B" Flyer—with Lewis Machine Gun

'civilian" and "military" Wright "B" Flyers is further blurred by the fact that the first Wright "B" to be used "operationally" by the Signal Corps was a 1910 "B" Model on loan (\$1 per month) from Robert J. Collier. On March 3rd, Foulois and Phil Parmalee flew the Wright "B" from Laredo to Eagle Pass in two hours and ten minutes. On their return

The distinction between

flight, they splashed into 4 feet of water in the Rio

Grande. The wrecked airplane was returned via wagon, proving the wisdom of the requirement to be easily transportable. Later that month, Congress authorized \$125,000 to purchase three Wright and two Curtis aircraft.

Incidentally, in 1915, Howard Rinehart took two "civilian" Wright "B" aircraft and a Wright HS fuselage tractor to Monterey to fly for Pancho Villa. Thus, in its early years the Wright "B" was used for observation on both sides of the skirmishes along the US-Mexican border. In February 1914, due to a large number of accidents and deaths, an Army board at the Signal Corps Aviation School, San Diego, condemned all pusher airplanes. This recommendation basically condemned all Wright aircraft, which were all pushers.

Our new Wright "B" Flyer, currently under construction, will be much more representative of the "military" version (much closer to the Valentine than to the "Brown Bird"). Conventional control sticks will be used to control the aircraft instead of the traditional levers. To understand why, come visit the hangar and attempt to fly the simulator using two joy sticks. It becomes very apparent why a single control stick is preferable. PAGE 2

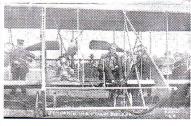
## James Clifford Turpin Wright "B" Pilot

In 1908, Dayton native James C. (Cliff) Turpin graduated Purdue University with a degree in Mechanical Engineering. Turpin was also a member of Phi Delta Theta fraternity. Upon graduation, he returned to Dayton to work with



his father in the motorcycle business: New Era Motorcycles, which went into production in Dayton in 1909. Turpin had shown a keen interest in the work the Wright's were doing in their shop before, dur-

ing, and after graduation from Purdue. A later biography states, "Clifford became interested in the activities of the Wright brothers as he would walk out West Third Street and pass their shop, occasionally stopping in to watch them at their work. He soon became acquainted with both brothers who observed his increasing interest in what they were doing." In the fall of 1909 the Wrights offered Turpin fulltime employment. This put him on the ground floor of the birth of aviation. By June 1910, Turpin was no longer con-



tent working on and building better engines; he wanted to fly! "A Dayton newspaper dated August 1910 carried the headline, 'Society Man to Turn Aviator'." Turpin soon joined Walter Brookins, Arch Hox-

sey, Spencer Crane, and Phil Parmalee as one of Wrights' earliest pilots. Parmalee and Turpin learned to fly together and became best of friends; both were Big 10-educated: Parmalee from U. of Michigan, Turpin from Purdue. Both went on to fly with the Wrights' exhibition team and both instructed at Huffman Prairie. Among their students were



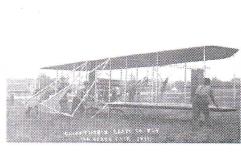
such notables as Hap Arnold. In those early days, the Wrights paid their aviators \$20 per week and \$50 for each day they flew. The Wrights had strict rules, however: no flying on Sunday, and

no drinking or gambling. The Wrights demanded \$1000 per day that the exhibition team members flew at a meet and

received \$6000 per man for a standard one-week event. Crowds at the events numbered into the thousands and tens of thousands. Prize "purses" could be as high as \$80,000 (Chicago, 1911). During these early days folks wishing to go for a ride in the Wright "B" often paid as much as \$500 for a ride, quite a sum of money in 1910!

Turpin and Parmalee set many records in the Wright "B". At Asbury Park, New Jersey, Turpin flew to 9,400 feet. It took him two hours and forty-five minutes to reach that height. Later, Turpin was asked about an attempt to fly over Pikes Peak: "Well, you can never be sure of that, but we're going to try. It's this way: I prefer to save any possible boasts until the thing has been done." According to the Colorado Springs Gazette, "Turpin was the second aviator in history to ascend over a mile, and in his fourteen month career in the thrilling profession, he has dazzled more crowds than any other man, with the possible exception of his partner, Parmalee, and one or two others."

On May 30<sup>th</sup>, before a crowd of people in Seattle, Washington, Turpin crashed into the stands and luckily, survived. According to the L.A. Times, "When Turpin's machine struck the grandstand and tumbled into the crowd, knocking people left and right, Turpin was hurled sideways out of his seat (seatbelts were not used yet!). Although not badly injured, the right side of his face struck the piano wire brac-



ings and steel tubular frame." Parmalee went on to Yakima, Washington, for another contracted exhibition, and on June 1<sup>st</sup>, he attempted flight in heavy winds.

The aircraft was "upset" and he crashed into an apple orchard and died instantly from a crushed skull. At this point, five of the nine men who had served on the Wright exhibition team formed in 1910 had died in crashes. A sixth would die in a 1928 crash. Turpin was devastated by the loss of his close friend, Parmalee, and never flew again. He married an actress and lived a happy, full life. He lived to be 79 years old and shunned publicity and membership in exclusive flight organizations.

In December of 1949, when Hap Arnold discovered where Turpin was living, there was a quick exchange of letters. "It would be grand to see you again to get together for a little 'hangar flying'." Arnold died January 15, 1950. The letter to Turpin had been among his last acts." PAGE 3

#### Wright "B" Flyer Schedule 2008

May 9: Police Memorial, Dayton June 2-5: Cedarville June 28: WPAFB Tattoo June 29-30: Fairborn Heritage Days July 11: Le Mans, France July 18: Farnborough, UK July 19-20: Dayton Vectren Airshow July 20: NAHF July 22: Hagarstown, IN August 17: Oakwood August 22-24: Indianapolis Air Show September 12: 34th TFS Reunion October 5: NAHA @ Urbana

### **100 Years Ago**

The [Wright] brothers' contracts with the U.S. Army and a French syndicate depended on successful public flight demonstrations that met certain conditions. The brothers had to divide their efforts. Wilbur sailed for Europe; Orville would fly near Washington, D.C. Facing deep skepticism in the French aeronautical community and outright scorn by some newspapers that called him a "bluffeur", Wilbur began official public demonstrations on August 8, 1908 at the Hunaudières horse racing track near the town of Le Mans, France. His first flight lasted only one minute 45 seconds, but his ability to effortlessly make banking turns and fly a circle amazed and stunned onlookers, including several pioneer French aviators, among them Louis Bleriot. In the following days Wilbur made a series of technically challenging flights including figure-eights, demonstrating his skills as a pilot and the capability of his flying machine, which far surpassed those of all other pilot pioneers. The French public was thrilled by Wilbur's feats and flocked to the field by the thousands. The Wright brothers catapulted to world fame overnight. Former doubters issued apologies and effusive praise. "L'Aérophile" editor Georges Besançon wrote that the flights "have completely dissipated all doubts. Not one of the former detractors of the Wrights dare question, today, the previous experiments of the men who were truly the first to fly ... "[45] Leading French aviation promoter Ernest Archdeacon wrote, "For a long time, the Wright brothers have been accused in Europe of bluff...They are today hallowed in France, and I feel an intense pleasure...to make amends."[46] On October 7, 1908, Edith Berg, the wife of the brothers' European business agent, became the first American woman airplane passenger when she flew

## Structural Tests Wright "B" Flyer

Wright "B" Flyer volunteers recently completed an important milestone



on their schedule to ship a new aircraft to France this summer. On February 10th, the volunteers placed nearly 8,000 pounds across the "upside down" wing structure to simulate maximum loads inflight. A special structure was constructed to hold the wings and the increased load. Over 7,600 pounds of the weight consisted of 40# salt pellet bags.

The wing section successfully passed the test and has since been

unloaded, coated, and will soon be covered with fabric.



Wright "B" volunteers have been working 6 days per week to complete the new Wright "B" in time to place in the "box" and ship to France. The crew has dubbed the new aircraft the "B in the Box."

with Wilbur—one of many passengers who rode with him that autumn.

Orville followed his brother's success by demonstrating another nearly identical flyer to the <u>United States Army</u> at <u>Fort Myer</u>, Virginia, starting on <u>September 3</u>, <u>1908</u>. On <u>September 9</u> he made the first hour-long flight, enduring 62 minutes and 15 seconds.

On <u>September 17</u> Army lieutenant <u>Thomas Selfridge</u> rode along as his passenger, serving as an official observer. A few minutes into the flight at an altitude of about 100 feet (30 m), a propeller split, sending the aircraft out of control. Selfridge was killed in the crash, the first person to die in powered fixed-wing aircraft. Orville was badly injured, suffering a broken left leg and four broken ribs.<sup>[48]</sup> The brothers' sister Katharine, a school teacher, rushed from Dayton to Washington and stayed by Orville's side for the many weeks of his hospitalization. She helped negotiate a one-year extension of the Army contract. A friend visiting Orville in the hospital asked, "Has it got your nerve?" "Nerve?" repeated Orville, slightly puzzled. "Oh, do you mean will I be *afraid* to fly again? The only thing I'm afraid of is that I can't get well

soon enough to finish those tests next year."<sup>[49]</sup> Deeply shocked by the accident, Wilbur determined to make even more impressive flight demonstrations; in the ensuing days and weeks he set new records for altitude and duration. In January 1909 Orville and Katharine joined him in France, and for a time they were the three most famous people in the world, sought after by royalty, the rich, reporters and the public. The kings of England, Spain and Italy came to see Wilbur fly.

Wright "B" Flyer, Inc 10550 Springboro Pike Dayton Wright Bros. Airport Miamisburg, Ohio 45342 Phone: 937-885-2327		Non Profit Org U.S. Postage <b>PAID</b>
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