

THE THREE THAT MADE HISTORY



ORVILLE WRIGHT

Made the first of four flights on December 17, 1903.



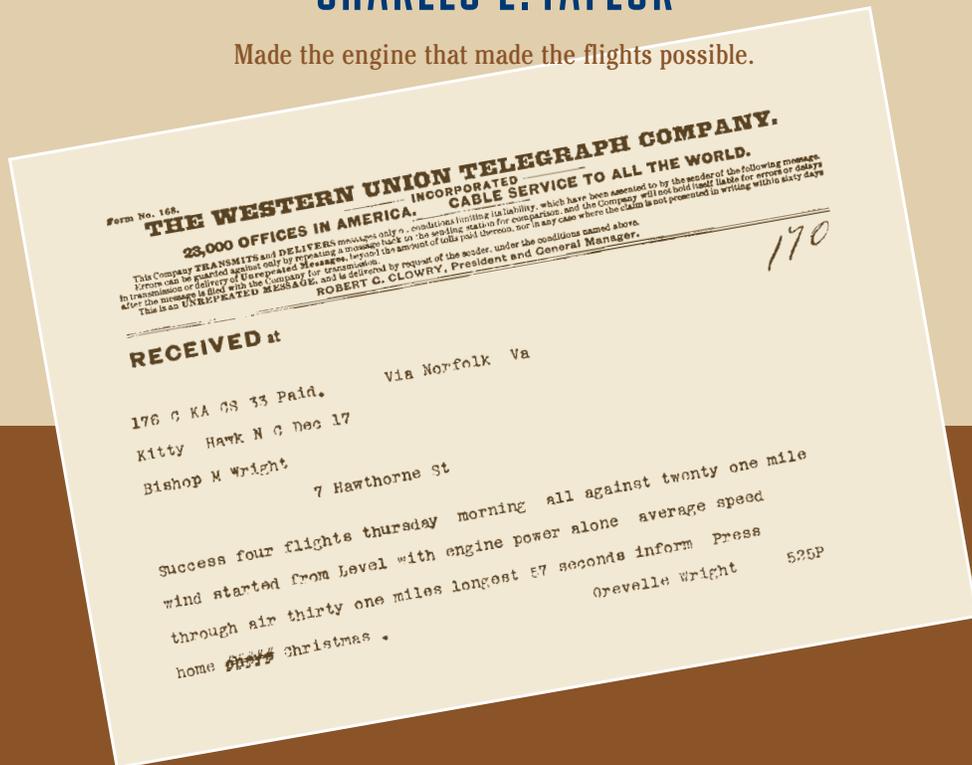
CHARLES E. TAYLOR

Made the engine that made the flights possible.



WILBUR WRIGHT

Made the longest flight on December 17, 1903.



CHARLES E. TAYLOR, MASTER MECHANIC

“Wilbur and Orville Wright made the first successful glider, but Charles E. Taylor, with nothing to work with but his hands, his head and his heart, made the motor that made it an airplane.”

— Chaplain at Charles Taylor’s funeral.

In 1901 Charles E. Taylor was hired by Wilbur and Orville Wright to serve as superintendent of their bicycle shop in Dayton, Ohio. An efficient mechanic, and invaluable to the Wrights’ business, Charlie’s expertise as an experimental machinist became evident in 1903 when he constructed the engine that powered the Wright Flyer on its historic flight at Kitty Hawk, North Carolina on December 17, 1903.

Charles E. Taylor became the first aircraft mechanic through close collaboration with Wilbur and Orville Wright. The three sketched designs and Taylor fabricated the engine using only the drill press, lathe and hand tools found in the bicycle shop.

In 1904 Wilbur and Orville moved their operations to a location near Dayton called Huffman Prairie. Taylor resumed his duties there, where he focused exclusively on airplane construction, maintenance and site management. He continued to support the Wright Brothers’ efforts to develop aircraft until 1911, when he accompanied Cal Rodgers on the first successful coast to coast flight.



Charles Taylor working in the shop at the West 3rd Street Wright Brothers’ factory.

Charles E. Taylor evaded the aviation spotlight for most of his life, although he was interviewed for and central to a number of articles in 1930’s and 1940’s flight magazines. After his death on January 30, 1956, Taylor was buried at the Portal of Folded Wings in Burbank, California, a resting place for aviation pioneers.

In 1965 Taylor was inducted by the United States Air Force Museum into the Aviation Hall of Fame as the world’s first airplane mechanic. Today the Federal Aviation Administration bestows the Charles Taylor Master Mechanic Award upon those aircraft mechanics that have served the aviation industry for at least 50 years, 30 of which have been as a certified mechanic or repairman.

“In just six weeks from the time the design was started, we had the motor on the test block testing its power. The ability to do this so quickly was due to the enthusiastic and efficient services of C.E. Taylor, who did all the machine work in our shop for the first as well as for the succeeding experimental machines.”

— Orville Wright, from a 1913 article in Flying Magazine

1903 ENGINE

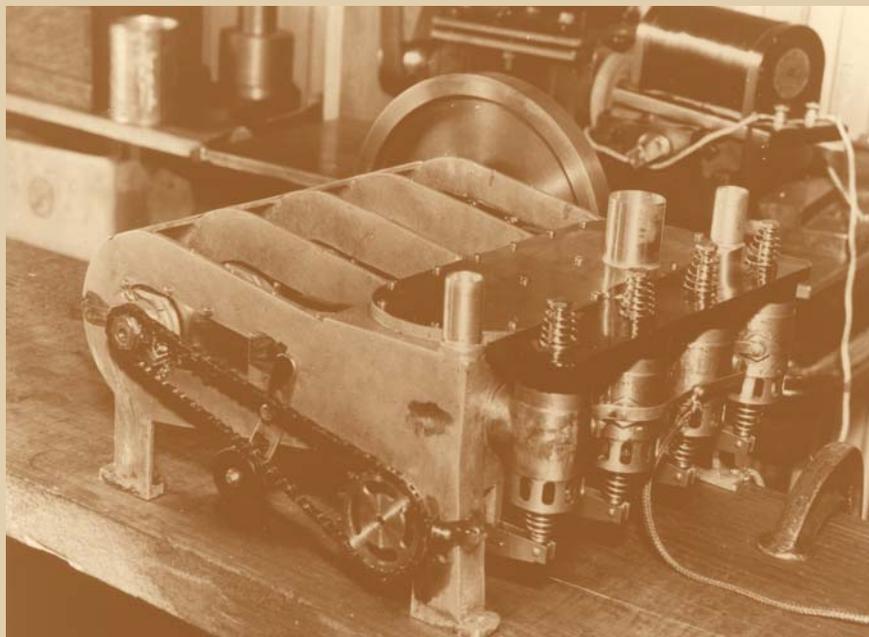
BUILT BY

CHARLES E. TAYLOR

As the Wright Brothers developed plans for their aircraft, they contacted a number of engine manufacturers throughout the U.S., including the Grant-Ferris Company in Troy, NY, requesting an engine that would meet their specifications. When their efforts to find an existing engine were exhausted, the brothers decided that they would construct one from their own designs.

The horizontal configuration of the four-cylinder gasoline engine was determined, in part, by the modest tools available in the Wrights' bicycle shop, which included a drill press and metal-working lathe. Without formal engineering data or blueprints, Taylor produced the engine based on discussions with the Wrights about the construction of particular parts, and the sketches that ensued.

Emerging from this process was a 200 cubic inch, four cylinder, four stroke engine weighing about 200 pounds and producing about 12 horse power at take off. Carburetion consisted of a copper fuel line dripping gasoline through a tin can, which had both ends removed and was soldered onto an intake plenum common to all four intake valves. There were no provisions for a throttle, leaving the engine limited to one speed. Ignition occurred through a set of points in each combustion chamber. This arrangement, known as 'Make and Break Ignition,' was common during the era before spark plug construction became reliable. A truly experimental machine, this engine was a tribute to Charles Taylor's mastery of mechanics.



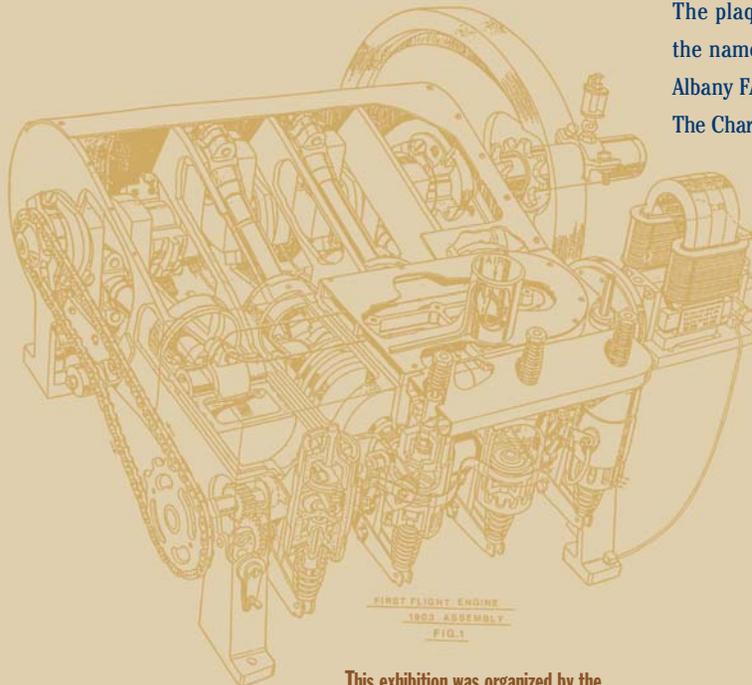
THE CHARLES TAYLOR MASTER MECHANIC AWARD



To insure an enduring tribute to our first aviation mechanic and honor present day mechanics for their dedicated service to aviation, The Federal Aviation Administration (FAA) has created a lifetime achievement award in Charles Taylor's name.

This award consists of a certificate and a pin, as well as the inscription of each recipient's name in a leather bound 'Role of Honor' maintained at FAA Headquarters in Washington, D.C.

To be eligible, a mechanic must have served the aviation community for a minimum of fifty years, thirty of which as a certified aviation mechanic or repairman. A notarized letter of nomination sent to the local FAA office and three letters of recommendation from fellow mechanics or repairmen are required. Following a review of the applicants by a panel of FAA inspectors, the award is publicly presented at an FAA or aviation industry function. The plaque installed here displays the names of those mechanics in the Albany FAA District that have received The Charles Taylor Master Mechanic Award.



This exhibition was organized by the Adirondack Chapter of the Professional Aviation Maintenance Association and the Albany Flight Standards District Office of the Federal Aviation Administration.