

## Charles Taylor: The Wright Mechanic

**W**hen we think of the first powered flight, we think of the Wright Brothers, Orville and Wilbur. But there was another person involved, a person without whom the Wrights may not have succeeded in their quest to be the first to fly. That person was Charles Taylor.

After the success of the Wright Brothers glider flights in 1902, the Wrights were ready for powered flight. All they needed was an engine. But this wasn't to be just any engine; the brothers had specific requirements. It had to develop eight brake horsepower and have a completed weight of not more than 200 pounds. So Orville and Wilbur wrote to automobile and engine manufacturers with their request. After being discouraged by the replies, they decided to take on the challenge of building the engine themselves. Well, not exactly themselves. This is where Charles Taylor takes center stage.

traveling around the world trying to sell their aeroplane, they turned to their trusted friend Charles Taylor to look after the Dayton operation and manage their airport.

It wasn't long after the Wrights hired Charles Taylor to work in their bicycle shop that Charles Taylor was introduced to aviation. It began after one of their returns from Kitty Hawk where they had been busy testing their gliders. The Wrights decided to build a wind tunnel to test some of their theories and asked their trusted employee Charles Taylor to help in the construction. He handcrafted most of the parts of the wind tunnel. But Taylor's greatest contribution became the building of the first successful aeroplane engine. Armed with only a lathe, drill press, hammer, chisel, and some other hand tools, just six weeks after conception the engine was on



monies or other events that honored the brothers. And after leaving the Wrights, he went on living life just as modestly and humbly as before. Even when his luck was down and he was nearly out of money, he never used his connection with the Wrights as leverage to get a job. Needing a job and money, he once applied for a job as a machinist with an aircraft manufacturer when he was in his late sixties and was turned down because of his age. The person interviewing him never knew Taylor's connection with two of the most famous names in avia-

### **“Taylor’s greatest contribution became the building of the first successful aeroplane engine.”**

Charles Taylor, an enthusiastic man who loved cigars and the constant hum of machinery, was no stranger to the brothers. As a machinist, he had done work for them in his own shop prior to coming to work for them. With the enthusiasm of Charles Taylor and the determination of the Wrights, this became a perfect match. Charles Taylor must have impressed the brothers as being trustworthy, because not more than three weeks after being hired, they traveled to Kitty Hawk and left him to run their shop, care for their customers, and even handle their money. After their success at Kitty Hawk in December 1903, the brothers moved their operation to Ohio and built the world's first airport. And while the brothers were

the test stand. Taylor took great care when assembling this engine. He put it together and took it apart over and over again until it worked to perfection. In fact, his craftsmanship and machining was so fine that he produced an engine that not only met the Wrights specifications, it exceeded them (the 1903 engine produced 12 horsepower and weighed 180 pounds). In fact, as restoration shops study original engines built by Charles Taylor and try to reproduce them, they are learning that even with all of our technology, we can't reproduce them as flawlessly as he did in the early 1900s with his primitive tools.

Charles Taylor never shared any of the glory that the Wrights received. He never attended any of the cere-

tion. He even worked for North American Aviation for a while, and not one of his co-workers knew his connection with the Wright Brothers.

It was in the mid 1950s that Taylor was discovered in the charity ward of a Los Angeles hospital. Almost out of money, he was living on social security and an \$800-a-year annuity set up by Orville before his death in 1948. The aviation industry quickly raised funds to have Charles Taylor moved to a private facility, where he spent his remaining days.

Charles Taylor, born May 24, 1868, with only a seventh-grade education, went on to be one of the most famous machinists and engine builders who ever lived. He was aviation's pioneer mechanic. — By Harry Kraemer **AM**