

RECREATING A CLASSIC FIGHTER IN A UNIQUE MANNER

key piece of American aviation history is being reborn in Fitchburg, Massachusetts, as Mayocraft Inc., has completed final assembly and begun taxi-testing of their near-100-percent scale tribute to the Boeing P-26 Peashooter.

The emergence of the Mayocraft Peashooter caps a twodecade quest by aircraft historian Nathan Mayo of Bolton, Massachusetts. His goal has been to build and fly a tribute to the long-forgotten but seminal aircraft designs of the 1930s. According to Mayo, "This was a period in aeronautics that saw the development of modern single-wing, all-metal craft that were the direct predecessors of those that later helped win the Second World War."

Although not an exact replica, the Mayocraft is generally patterned after the famed Boeing P-26. "We tried to be faithful not only to the overall appearance of the P-26, but also to most of the fabrication methods of the time of its manufacture." Mayo went on to say: "The P-26 represented the state of the art for the early 1930s in aircraft design, so we thought it was a eminently worthy subject for a tribute."



The Mayocraft P-26 will capture the spirit of aviation in the 1930s. For further information contact: Christie Mayo, Mayocraft Inc., Bolton, MA 01740, 978-779-6685, nate@thecia.com

Indeed, for a brief time, the P-26 was the Army Air Corps' first line pursuit fighter and the fastest of its type in the world. However, rapid advances in aeronautics at that time soon rendered it forgotten, eclipsed by more powerful designs that drew heavily on the P-26's parentage. Today only two original examples remain (see Air Classics September 2006).

An inspection of the Mayocraft construction details reveals what can only be described as a labor of love. The aircraft's all-metal skin was been carefully hand-formed and shaped in many complex compound curves by Mayo in his shop, which is in essence a small aircraft factory with tools, technology and expertise straight out of the mid-1930s. The craft has over 29,000 rivets, each painstakingly inserted, driven and made flush with the skin. The craft has about one-half million other parts, most of which had to be machined and fabricated from raw metal or cleverly adapted from existing aircraft parts. "In many cases we had three jobs to do for

each piece. First, we had to devise methods to make the production tool or jig or fixture. Then, we had to use those methods to make it. And then, use the tooling or forms to make the final part we needed." detailed Mayo.

Fortunately, Mayo brought to this daunting project his own life-long experience in manufacturing, engineering, and rebuilding historic airplanes, both on his own and for former clients like the Collings Foundation, whose fleet of vintage WWII gircraft appears at airshows nationwide. He devised fabrication methods like pressing into hard rubber and pullforming sheet metal, whose results mimic those from the much larger production machines that would have been found in a 1930s-era aircraft factory. Also, according to Mayo, "For safety and performance's sake we made selected improvements. Alclad 2024-T3 aluminum was used throughout instead of the Dural of the 1930s because the modern alloy is 20-percent stronger.

"The main landing gear wheels and brakes are adapted from a Cessna T-50. The engine exhaust is made from a stainless steel alloy specially formulated for aerospace applications. For a few non-structural elements, in place of metal we formed fiberglass. The engine and propeller are the same as employed in the T-6. We adapted a different airfoil shape to the wing that should make the bird a little easier to fly and land than the original. That sort of thing." Mayo calculated that, because of these improvements and the fact that the Peashooter does not have the armament that was originally needed in the combat airplane, "it will have a performance about 10-percent better than the original."

Last but not least. Mayo credits a small but dedicated aroup of volunteers that have shown up at his shop once or even twice a week for years on end. "Really, without the help of all these people, this project would have never seen completion. Or, it would have at least taken more than my lifetime!" AC

