



Messerschmitt at the Beginning: An Icon is Born

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AT THE AGE OF 15, “Willy” Messerschmitt, who would eventually become a near-legend during WW II, started his apprenticeship with a group of “free-flight” enthusiasts in his hometown of Bamberg, in Bavaria. It was 1913; some 10 years after the Wright Brothers had flown, when Messerschmitt joined with the 33-year-old architect Friedrich Harth in experiments to perfect the art of the sailplane. Following on the principles founded by the Wrights and their German predecessor Otto Lillienthal, this small band of self-taught aeronautical engineers endeavored to understand and test their ideas in flight.

D-887's high aspect ratio wings are a clue to its heritage of Messerschmitt sailplane designs that preceded it.



A succession of monoplane designs, beginning with the model S 1 (*segelflugzeug*), undertook to achieve longer distance, higher altitude flights controlled by wing warping and variable wing incidence angle. Similar to what we now call hang gliding, succeeding models S 2 through S 7 sought to improve controllability, and to develop construction methods that were lightweight, yet durable. Harth was the most experienced, and consequently, was the group's test pilot. The young Messerschmitt's apprenticeship matured to that of a partner during construction of the S 3 glider, and progressed through succeeding models to become sole constructor, as his partner was called to service during World War I.

Willy Messerschmitt's education paralleled his experiments, graduating from high school in 1917, and continuing as an engineering

student at the Technical University in Munich, between 1918 and 1923. He forged a partnership with Wolf Hirth and adventurously began his own company, Flugzeugbau Messerschmitt Bamberg, to build more sophisticated structures and advanced control schemes. His designs incorporated aerodynamic improvements with covered fuselage, internal control systems, and finally, separate tail-mounted pitch and yaw control surfaces.

It was at this juncture that the 26-year-old turned his attention exclusively to powered flight from sailplanes. Operating in an extremely difficult economic environment, he recognized that his best chance at commercial success lay in very economical, lightweight aircraft of necessarily low performance. The next design, the M 17, (M denoting the change to motorized) refined the experiences gained in the lightest possible structures,



Above: The M 17's upper fuselage is scalloped inward to provide a limited forward view for the plane's pilot and passenger.

Below: The view from the cockpit directly forward is blocked by the instrument panel. The replica's controls are minimal: The upper yellow lever selects high altitude ignition, the lower yellow lever is the throttle. The T-handle (lower left panel) is the fuel shutoff. On the right, the round black switch selects ignition on or off. Of note are the four bolts that secure the wing center section to the fuselage.



Above: EADS Heritage Flight operates the M 17 exclusively from the grass surface at their Manching Flight Test Center. *Elo* is so-named for Messerschmitt's younger sister Eleanor.

Right: The Bristol Cherub was one of two available engines a customer could select from. Developed in 1923, it could develop 28 horsepower at 2500rpm in early versions. The hand-hammered aluminum cowling was removable with a series of cotter pin style fasteners. A 26-liter fuel tank sits directly behind and above the engine, affording a gravity feed system.

and best aerodynamic principles to create a commercially viable product, classified as a "light two-seat sportplane." As many as eight M 17s were built and sold, as either a trainer for the nascent airline industry, or as sport planes to be flown in competition. The M 17s were powered by either the 24-horsepower ABC Scorpion engine, or the 28-horsepower Bristol Cherub.

The only existing

original M 17 hangs in the Deutsches Museum, in Munich, registered D-779. Its contemporary, D-887, won first prize in the 1926 "Süddeutschland" competition, and was subsequently flown by owner Eberhard von Conta from Bamberg, Bavaria over the Alps to Rome, over a nine-day period, covering 1620 km in 14 hours and 20 minutes of flight time. To commemorate the accomplishments of the



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young designer's work, the Messerschmitt Stiftung (foundation) commissioned construction of one last M 17, utilizing an original Bristol Cherub powerplant, in 1994. Flown for the accompanying photographs by EADS Heritage Flight pilot Marc Frattini, the M 17 is displayed and flown throughout Bavaria during the summer show season. †

