The Pfalz D.III was the first original design from Pfalz Flugzeugwerke (airplane factory). Prior to WWI, Pfalz Flugzeugwerke produced Morane-Saulnier monoplane designs under license. In September 1916, Pfalz began producing the LFG Roland D.I and D.II fighters under license. In November 1916, Rudolph Gehringer was hired as Pfalz's chief engineer, and immediately began work on an original fighter design.

The Pfalz D.III is a single engine biplane with a plywood monocoque fuselage. The first prototype was built in April 1917 and then type tested by the German military in May. After successful testing, Pfalz was directed to halt production on the Roland fighters and begin manufacturing to the new design. Like the Roland design, the D.III has a plywood monocoque fuselage, which consists of: two layers of thin plywood strips, placed over a mold to form one half of a fuselage shell. The fuselage halves are then glued together, covered with a layer of fabric, and doped. This construction method gives the fuselage great strength, light weight, and smooth contours compared to conventional construction techniques of the time.

Deliveries to German Fighter Squadrons (Jastas) began in August 1917. In November 1917, Pfalz began producing the D.IIIa with relatively minor changes including a larger horizontal stabilizer, modified lower wing tips and machine guns repositioned to make it easier for the pilot to clear the jammed guns. Deliveries of the D.IIIa began in December and continued through May 1918. The D.IIIa remained in front line service until the end of WWI.

The D.IIIa on display is a full scale reproduction, built in 1987 by Ronald J. Kitchen. It was added to the Cavanaugh Flight Museum collection in December 2012.

ENGINE (ORIGINAL)	Mercedes D.II, 160 h.p.
ENGINE (AS DISPLAYED)	Ranger L-440, 200 h.p.
ARMAMENT	Two 7.92 mm Spandau LMG 08/15 machine guns
WING SPAN	30 feet, 10 inches
LENGTH	22 feet, 10 inches
HEIGHT	8 feet, 9 inches
MAX TAKEOFF WEIGHT	2,045 pounds
MANUFACTURED BY	Pfalz Flugzeugwerke GmbH
REPLICA BUILT BY	R. Kitchen
FIRST BUILT	1917
MUSEUM'S Dr.1 BUILT	1987
ON DISPLAY AT	Cavanaugh Flight Museum, Addison Airport (KADS), Dallas, Texas
MAXIMUM SPEED	102 mph
RANGE	210 miles
SERVICE CEILING	17,500 feet