



The Plymcoupe, produced in 1935 by the Nicholas-Beazley Aircraft Company. (All photos from manufacturer via author)

THE PLYMCOUPE

By J. P. KENNEDY

During the 1930s, there were many attempts to create the low-priced, "flivver" airplane that would have a selling price making it available to vast numbers of the public. A number of the attempts to develop such an airplane were based on the use of automobile engines, namely Ford engines, for such powerplants were readily available at low prices. In 1935, one of the most attractive of these attempts appeared. It was the Plymcoupe.

The Plymcoupe was built by the Nicholas-Beazley Airplane Company, Inc. of Marshall, Missouri. Before its debut in 1935, the idea for the plane had been developing for several years, with the main design work being done by Sven Swanson. A high wing, cantilever monoplane with knee action landing gear, it was powered by a standard Plymouth auto engine which was inverted and mounted in rubber. The only modification to the six cylinder engine was the addition of a gear reduction unit, with a 2 to 1 gear ratio, to drive the propeller at half crankshaft speed--about 1800 RPM.

In all, three of these planes were built, two with the Plymouth engine and one with a Pobjoy engine. When the plane was up for certification, someone in the Dept. of Commerce inexplicably decided that it would have to be stressed for aerobatics. This meant the Plymouth

engine, and certainly the Pobjoy would leave the plane underpowered due to the weight increase necessary to beef-up the structure for aerobatics. With this, and the discontinuance of production by Nicholas-Beazley, the design drifted into limbo although the three completed planes were eventually sold.

It is reported that Mr. Walter Chrysler was very interested in the design, and this was probably due to the fact that it offered him an additional market for engines. The Plymouth engine was to have cost Nicholas-Beazley around \$130.00 each in lots of 100. The instrument panel was also to be purchased from Chrysler, complete except for the altimeter and compass. It was to have been an adaptation of the Plymouth dashboard and included some of the automobile instruments--reworked wherever necessary. Panels were to have cost about \$8.40 each in lots of 100.

On the trials made to test the engine, Mr. Russell Nicholas states that a 200 hour dynamometer test was run with the engine wide open. It was run for a period of 50 hours at about 4000 RPM after which it was torn down for inspection, and then run again for 50 hours. After four such periods, the engine and reduction gear had more than proved themselves.

SPECIFICATIONS FOR THE PLYMCOUPE

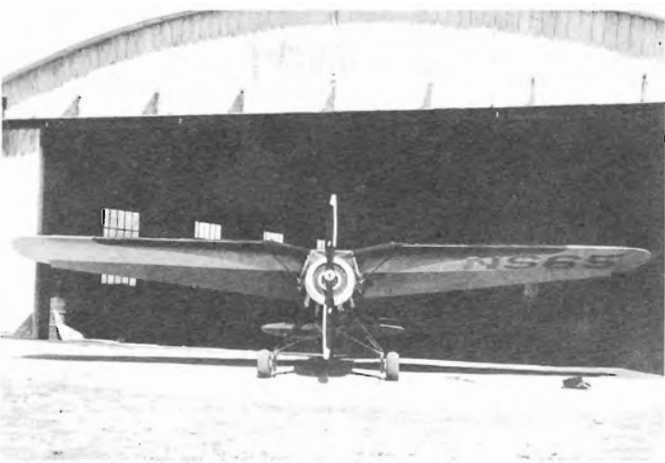
Wing Span	32 ft 0 inches
Chord	8½ ft x 4½ ft
Wing Area	178 square feet
Length	17 ft 9 inches
Height	6 ft 10 inches
Weight Empty	1,075 pounds
Gross Weight	1,611 pounds
High Speed	120 mph
Cruising Speed	104 mph
Landing Speed	42 mph
Landing, touch to stop	200 feet
Service Ceiling	16,000 feet
Climb, pilot only	1,000 ft/min
Fuel Capacity	17 gallons
Oil Capacity	6 quarts
Fuel Consumption	4 gallons/hour
Endurance at Cruising	5 hours



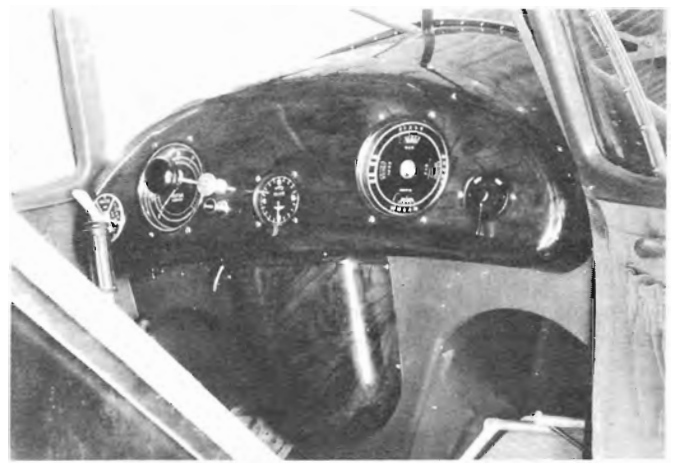
Top view of Plymcoupe showing registration, NS 65.



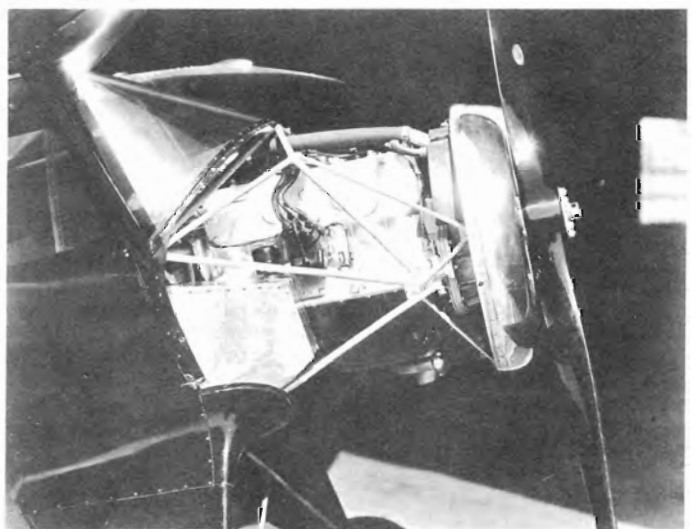
Plymoucoupe with 1935 Plymouth Sedan from which engine, components and trim were taken for use in the airplane.



Front view of the plane in front of Marshall, Mo. hangar.



Instrument panel showing features of auto derivation.



Two photos showing both sides of the Plymouth engine installation in the Plymoucoupe.