



The panoramic canopy swings open towards the right side of the plane and only the center part of it opens.

**Landing Gear —**

Tricycle gear with the nose wheel controlled by the rudder pedal. The main gear is a leaf spring type.

**Engines —** Rowena or Stihl.

Weight 6.5 kg (14.3 lbs., each) complete with hand starter. One cylinder, two cycle with 137cm<sup>3</sup> of compression. Maximum power (each) — 9 h.p. at 7,000 rpm. Each engine is fitted with a Tillotson diaphragm carburetor which allows running in any position.

**Propellers —** Diameter - .680m - 26.8 in.

Pitch - 18° at 70% of the radius

Static rpm - 5,500 rpm

Track - 3kg/hp - 6.6 lbs./h.p.

Cruising rpm - 6,000 rpm

The blades are cut from 6mm duraluminum, profiled and twisted. Hub design allows a ground adjustment of pitch from 15° to 21°.

**Fuel Capacity —** 20 to 25 liters - 5.2 to 6.6 gallons

**Weights —** Total empty weight - 65 kg (143 lbs.)

Gross weight - 170 kg (374 lbs.)

**CONSTRUCTION**

One of the really unique features of Michel Colomban's Cricri is the method of construction. The wing and tail surface ribs and much of the interior of the fuselage are sawed from sheets of a rigid plastic foam material named KLEGECELL 100. The outer shell is aluminum sheet bonded to the inner structure. The end result is a smooth, near rivetless surface and a strong, lightweight airframe.

(Editor's Note - This process is similar to that used by Dick Schreder in the construction of the wings of his sailplanes. Dick will be at Oshkosh this summer to demonstrate.)

The wing contains 70 identical ribs. They are cut slightly oversize from KLEGECELL 100 and finished with a belt sander to the exact shape. Eight hours of labor was involved.

All the ribs are glued to the "I" beam spar made of AV4G-1 and the wing skin — a single sheet for each wing panel — is glued in place by an unusual process. First, the skin is held against the leading edge with rubber bands, then the top and bottom surfaces are rolled into position over the ribs. The whole thing is wrapped in a nylon sheet with the ends sealed by means of strips of wood squeezed together by clamps — forming an airtight bag. Into an opening in the bag is inserted a household vacuum cleaner hose. The vacuum cleaner is plugged into a source of 110 volt current to keep it running at low speed (in France 220 volts is standard) — this maintains a suction of 20 to 30 cm of a colored liquid circulating in a clear plastic tube that serves as a manometer.

When the suction bag is completed, one hose is inserted into the bag and the other stays out in free air. When the difference in level reaches 200 to 300 kg/m<sup>2</sup> of even pressure on the wing skin it is pulled in snugly to the ribs forming the proper airfoil. Then it is simply a matter of waiting a few hours for the bonding to take place — and an occasional check to be certain the vacuum system is still working. The tail surfaces were built using the same system.

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