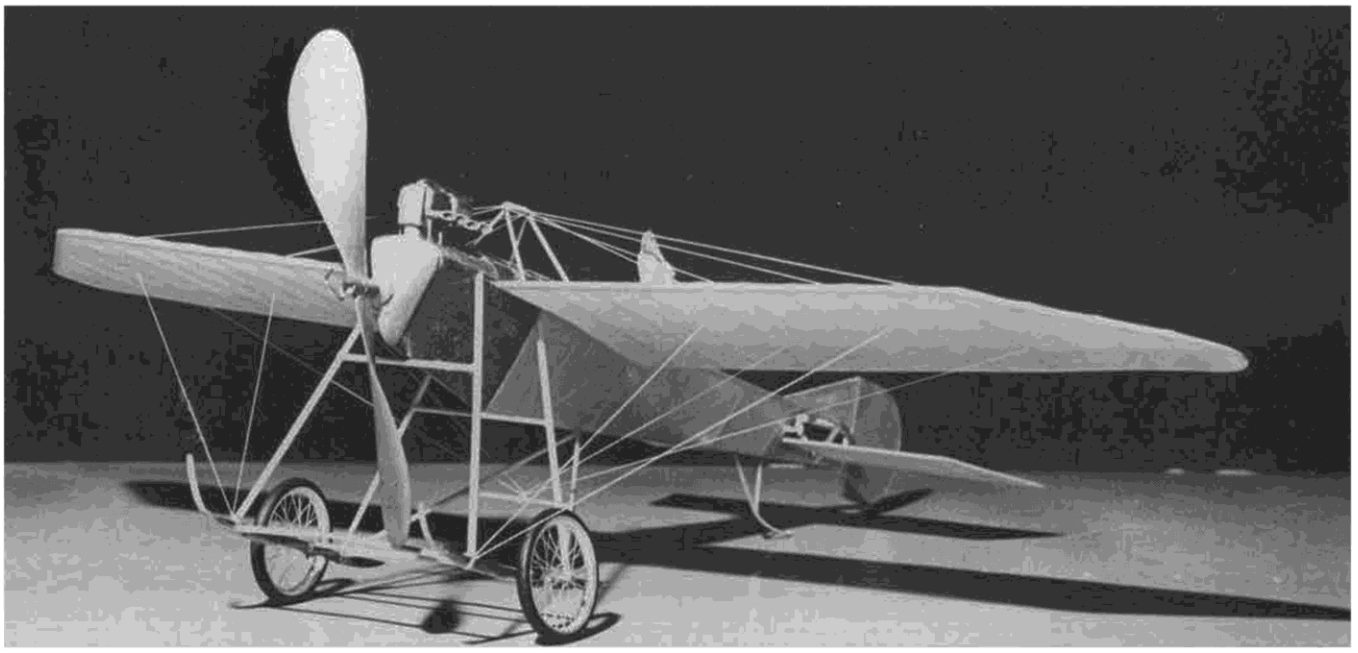


Peanut THE MONOPLANE "HIRONDELLE" *1911

By JEAN-FRANCIS FRUGOLI . . . In France, a Peanut is a "Cacahuete", which doesn't change the way it's built or the way it flies, but it sure would louse up the title of our Parcel Post Proxy . . Somethingorother!

• *This little ship won the Best Workmanship (Foreign) Trophy for the author/designer in the 1976 Model Builder Proxy Peanut Contest. Jean-Francis sent us his excellent inked drawing so we could publish the plans. Unfortunately the drawing is a little too big to fit Model Builder's pages. Rather than reduce the whole plan photographically by 5%, we have taken the liberty of cutting and relocating certain portions of the drawing. It's a tight squeeze, but it's full size!*

Incidentally, Jean-Francis also wrote the article, in English, to go with the drawing, and apologized for his linguistic errors. Proof readers should have it so easy! We have taken the liberty of leaving the article pretty much as is, in order to retain the flavor. wcn

The old aeronautic publications are treasures for the "cacahuetes" builder. Examining a collection of papers published in the journal "L'Aero" (1911-1912), I discovered among other "Belle Epoque" models this aeroplane with racy and elegant lines, designed by Henri Lemaitre et Gaston Legrand. Its name: "L'Hirondelle".

Good areas, good ratios, dihedral, this is, for the French modelers, beginners in Peanut contest, the ideal "cahier des charges" to select a cacahuete model.

My first model was tested outdoors (poor, poor modelers of Marseille who have not your fabulous gymnasiums!) and the flight, after dihedral adjustment, appeared stretched and swift. Really a swallow. My second model was built to enter the famous Model Builder's PPPP. I offer you its description.

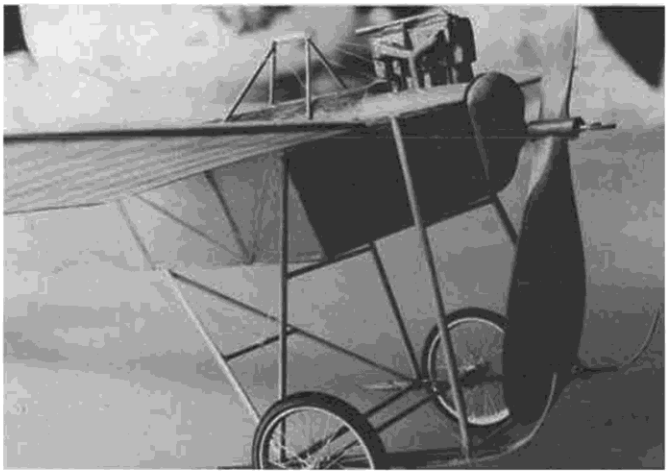
CONSTRUCTION

Building begins with the construction of the two half-wings and stabilizer. So, this elements can dry pinned on the work board while you build the fuselage.

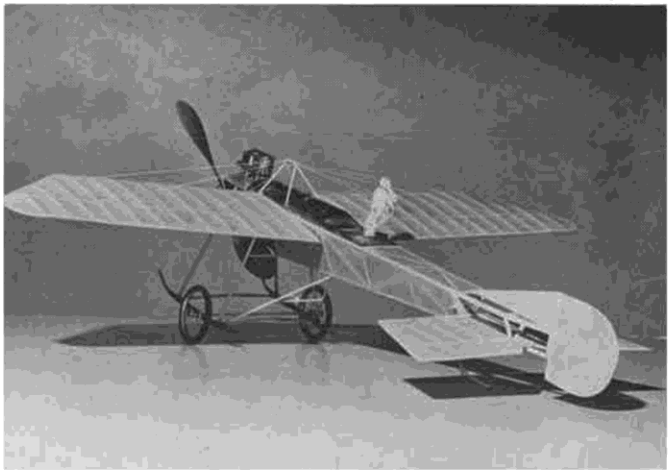
The ribs are 1/32 light balsa, sliced with the help of two shapes. The three tip ribs are only shortened at their leading edge. The wing tips are made with laminated strips glued together but can also be made with formed rattan. The spars (3/64 medium) extend 1/8 inch farther the root rib, and then position the wings when they are fixed.

The first one rests on the spar of the fuselage, the second one under (a small square hole is cut in the covering of the fuselage). So, the incidence angle will be obtained.

Continued on page 82



Close-up photo by Jean-Francis shows landing gear detail and construction of scale engine. Wheels are Hungerford, naturally.



The model has been donated to Model Builder's Peanut Museum, except for the wheels, which were returned to Jean-Francis.

Peanut . . . . . *Continued from page 51*

Of course, the stab must be built as light as possible. Its central part is not tissued.

The fuselage is built on the top view (side and cross pieces of 1/16 sq.) with the help of the formers B and C, then of the pattern D. The rear of the fuselage (after C) will be finished only after the location of the stab.

The formers 1, 2, 3, 4 are balsa covered (1/32 sanded). The cockpit is shaped from 1/4 light balsa. A thin sheet is fitted between A and B. The former A is glued after the fuselage has been removed from the board. The parts of the nose (hard balsa) and of the cowling are sanded to shape. The diagonal riggings are made from 1/64 sq.

The undercarriage is very complicated. This is of course, a particularity of these old planes which had sometimes to land in acrobatic conditions. So, many struts were needed and, at the same time, two "skis", which prevented the spectacular "cheval de bois".

I saw that Bill Hannan used spaghetti to figurate the struts. Me, good Latin, I prefer the spaghetti with tomato sauce. My struts are made with straw (provided by high dry herb . . . but have yet high dry herb?). All the struts are fixed with short axles of piano wire (1/64 dia.) cemented into. Only the struts H are entirely wired (.020). The wheels are Hungerford, of course.

The cabane struts are made in the same way. Silk thread riggings are fixed on it. The tail skid is formed from refined and carved bamboo. Important: As for the other pieces made from it, the varnished face of the bamboo is not sanded.

The rudder is formed around the requisite pattern. The fin is a simple V. Its leading edge is a thin straw. Rudder and fin are glued once the stab is located.

Engine: It is a 40 HP water-cooled Labor Aviation. It is made from balsa sheets and . . . straw (exhausts, valves and pipes). It's not a plane, it's a barn! The crankcase is bright metalic grey (oily aspect), the pipes are copper, the exhausts rusted and the valves, chrome.

Decoration: The balsa sheet parts of the nose, the cockpit and the square parts of the skis have a mahogany color (obtained with a marker and varnish). The nose and the cowling are matt aluminum. The ancient aeroplanes were generally covered with varnished fabric. The covering is made from yellow or white lightly tinted and glossy doped Japan paper. One clear coat is sufficient.

Flight: Because of the design of the wings and the efficacity of the stabilizer, the C.G. location is situated at 40-45% of the chord. The result is a stretch and rapid flight, advantageous outdoors, but the spiral adjustment is not easy. For indoor flights, the C.G. location will be nearer the leading edge, and the incidence angle will be increased. So, once again, a light rear part is necessary. The propeller of my model is a 5 inch Peck shortened to 4-3/8. It turns quickly. The rubber is a loop of 2 x 1 Pirelli winded from 800 to 1,000 turns. A balsa propeller with large blades is preferable for indoor.

Last precision: Giscard didn't come to the U.S.A. with Concorde but with an Hirondelle. You don't believe me? Look at the photographs!

Good flights. •