

The author squeezes into his Flea (He's a trick photography expert, folks!)

THE name *Flying Flea*, or better yet *Pou Du Ciel*, will remind old-timers of the days when nearly every basement carpenter had a *Flea* under way. This radical departure in the ultra light plane field was dreamed up by a quiet little Frenchman, Henri Mignet. He officially unveiled it to the aviation world at the Paris Aero Show way back in 1934 and within two years "Fleas" were swarming over the European Continent. They were just catching on here in the United States when the craze died out as fast as it had started. Possibly the main cause for this was the fact that due to so many being constructed by inexperienced persons, there were a few serious crack-ups.

Regardless of the faulty jobs turned out by some of the basement workshops, the design has a great deal of merit. The ships were powered with motors ranging in size from 20 to 35 hp, and ready to fly, checked in at the phenomenally light weight of 250 lbs! No wonder they could take-off, fly, land again and come to a stop within a distance of 300 ft.

The model *Flying Flea* weighs all of 7 oz. yet it is plenty sturdy and can take the roughest treatment because of its compactness. By devoting just a little extra time to the novel paint job as used on the original model you will be well rewarded when the modelers gather around to stare at it.

Begin fuselage construction by cutting out the two sides from 1/16" sheet balsa

with the grain running lengthwise from F-1 back to the tail. The grain runs vertically from F-1 to the nose. This joining of opposing sheets is necessary because the nose curves to quite an extent.

Cut out the formers from 1/16" and 1/8" sheet as called for on the plans, and join them together with the 1/8" sq. longerons, making sure that they dry at the correct angle. With the sides cut to shape cement them to formers F-1 and F-2 for initial alignment. When dry bring the rear of the fuselage sides together and glue. Apply cement to the longerons between F-1 and F-2, and between F-2 and F-3. Trace the top of the nose section from F-1 forward and cut from 3/32" sheet. Since the bottom piece is curved as well as slanted up, it is foreshortened on the plan, so it will be necessary to make this section 1/8" longer than shown. Before mounting the top nose cover, cut out a piece of hard balsa 1/8" by 3/4" for reinforcement of the motor mount. Be sure to cut the slit in both it and the fuselage nose section in order for the motor mount to slip firmly in place when the time comes for mounting. Bend and cement the sides of the nose to the fuselage top. The bottom of the nose section runs from the motor mount to the nose and is glued in place at this time.

A straight piece of .040 steel wire is cut off for the landing gear. Bind and cement the landing gear to a piece of hard 1/8" x 1/4" x 2-5/16" balsa. Now cut a notch

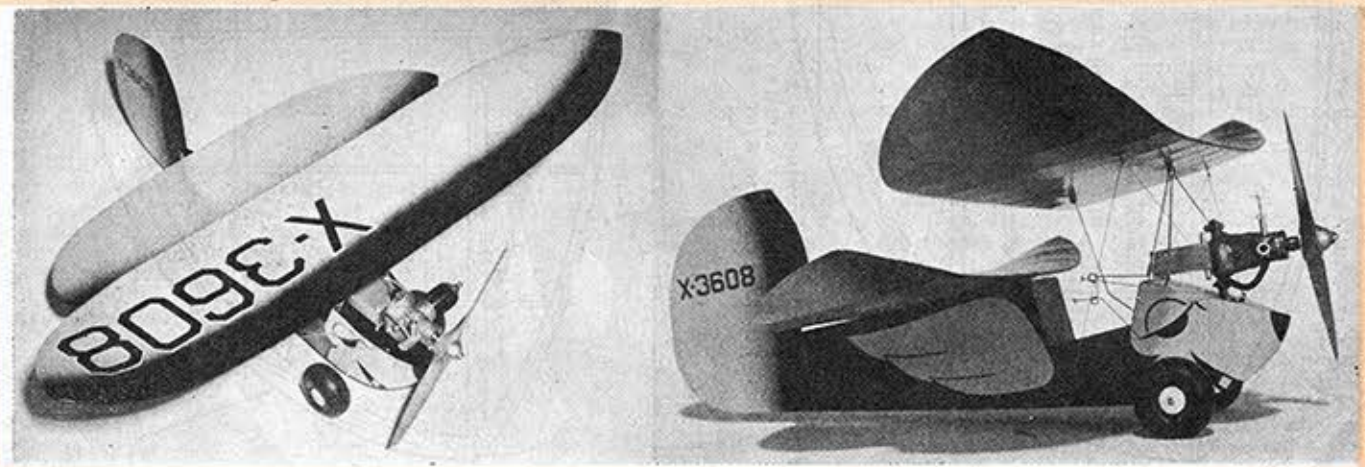
1/16" deep for the landing gear to fit up into the fuselage sides and glue the whole assembly in place. Don't spare the glue here. A washer slipped over the axles and cemented to the fuselage will help to secure it.

The wing mount braces are bent from 1/16" diameter steel wire, making sure to bend them to the correct angle as seen on the side view of the drawings. The main brace is first wrapped with thread all along the parts which extend into the fuselage. This wrapping allows the glue to hold it securely as it can't when applied to a metal surface only. Apply a liberal amount of glue to the wrapped portion and also to the curve of the fuselage at F-1 and slip this wing mount in place.

While drying, cut out the motor mount of 1/8" plywood with the main grain running lengthwise, and drill the two holes for mounting the motor. Cement this mount into the slot at the fuselage nose section. For extra reinforcement where it connects at the bottom of the fuselage, glue in a couple of 1/8" x 1/4" strips crosswise.

Cut out the bellcrank and mount to former F-1. After this has been accomplished you may cement the remaining portion of the fuselage bottom. Cover the top of the fuselage and bottom of the nose sections with 1/16" sheet with the grain running crosswise.

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The Flying Flea

By CHARLES HOLLINGER

