

CAUDRON RENAULT RACER

RENAULT ENGINE 370 H.P.

WHITE PAPER STRIP DOPED TO
EITHER SIDE OF BODY FOR TRIM

SOLID BALSA

HOLLOW OUT

SOLID

EXHAUST STACKS ON OPPOSITE SIDE
OF BODY

CUT NUMERALS FROM
WHITE PAPER AND DOPE
TO EITHER SIDE OF
BODY

SCALE PROPELLER

CARVE FROM SOLID
BLOCK OF BALSA

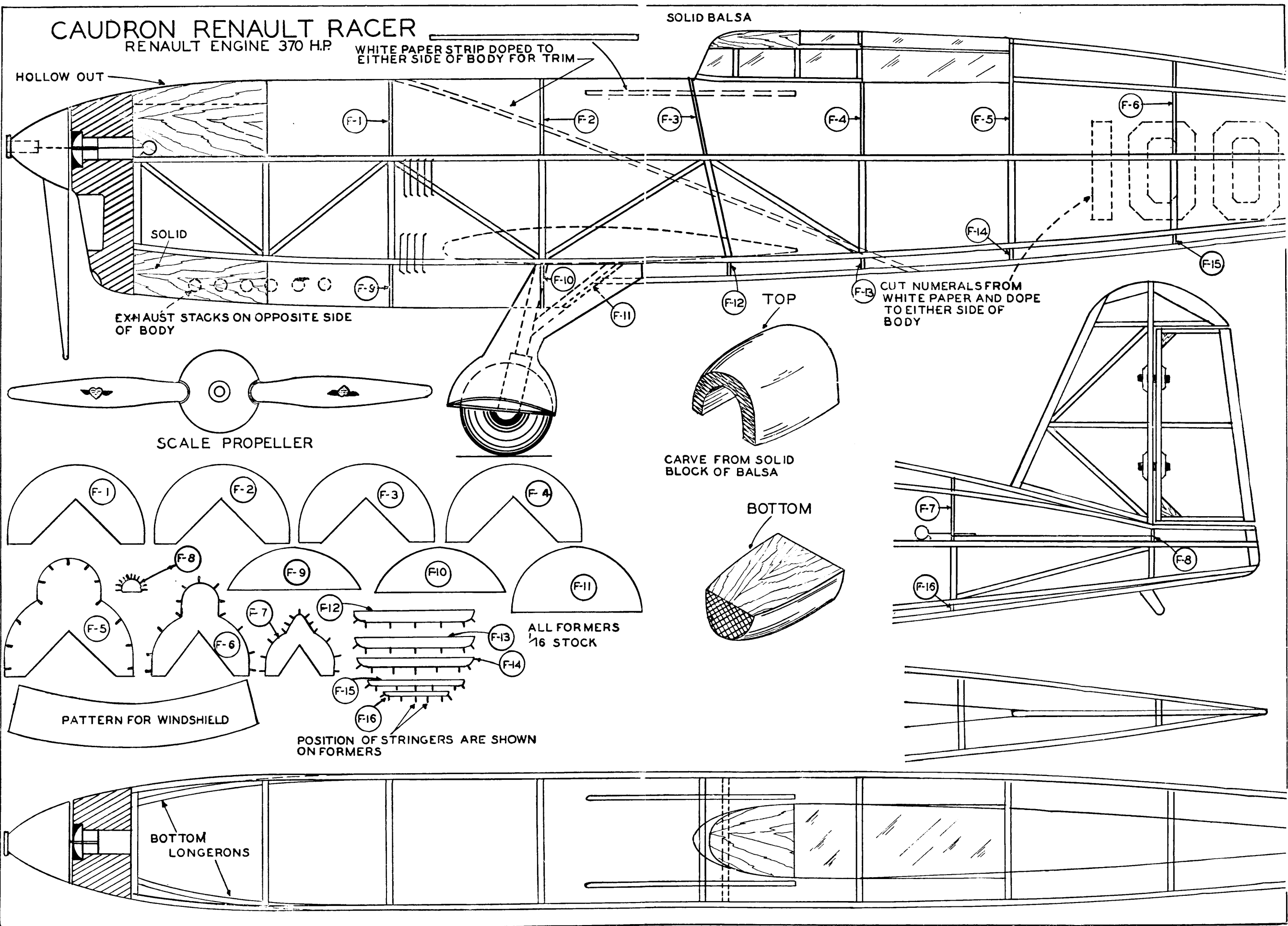
BOTTOM

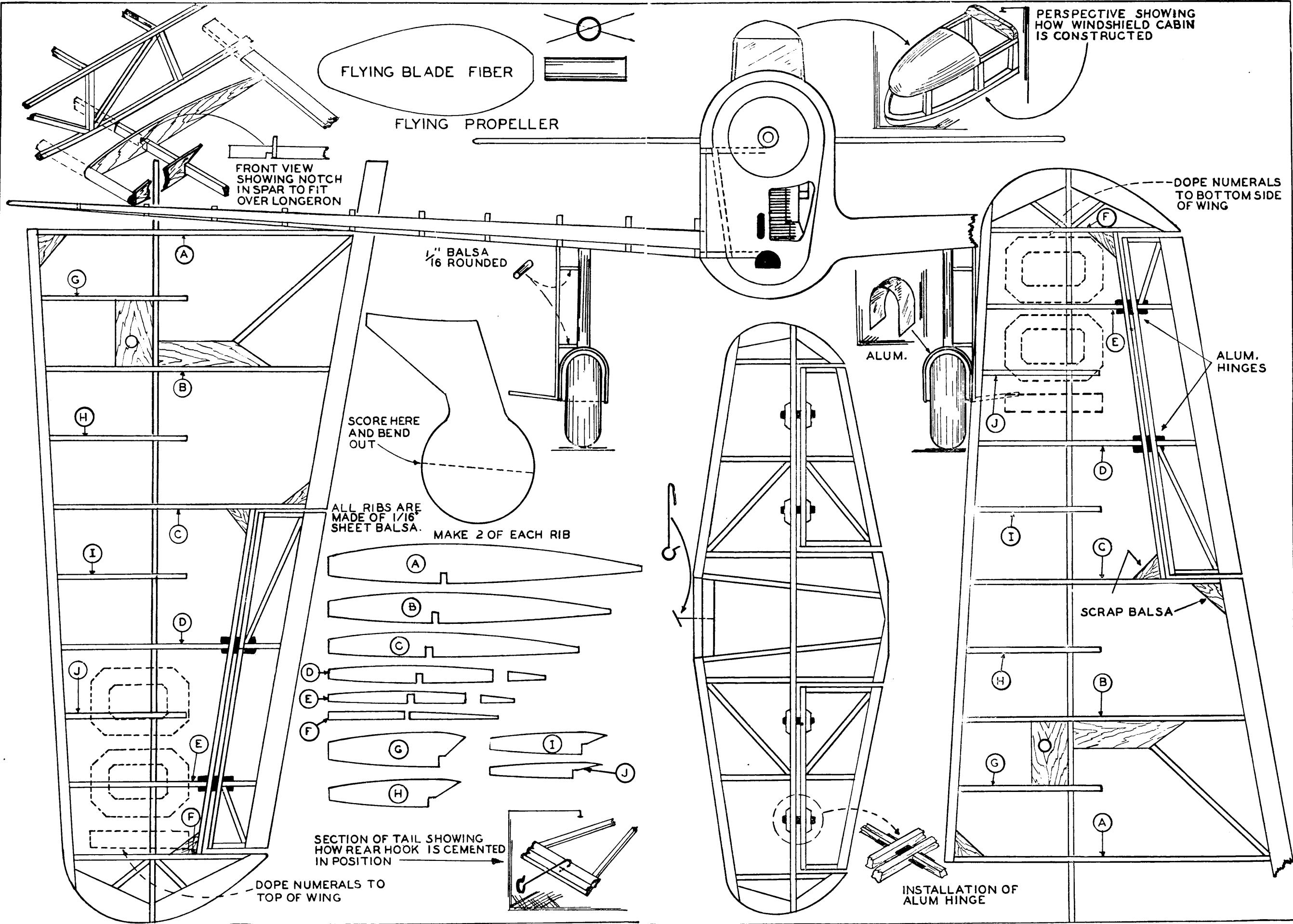
ALL FORMERS
1/16 STOCK

PATTERN FOR WINDSHIELD

POSITION OF STRINGERS ARE SHOWN
ON FORMERS

BOTTOM
LONGERONS





Building the Caudron-Renault Racer

by

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Compare this completed Caudron-Renault model with the photo of the full size plane on page 17. The model and large ship are identical.

THE Caudron Renault Racer, flown by Lt. Michel Detroyat, of France, won the Thompson trophy at the International Air Races of 1936. This ship is of French design and it is capable of very high speed. You will find it very easy to construct. Due to its clean and ultra streamline design, this model makes an unusually attractive display.

COLOR SCHEME

Entire ship—dark blue.
Striping, numerals, etc.—white.
Other small details—black.

CONSTRUCTION OF FUSELAGE

Place a sheet of ordinary wax paper over the plan to prevent cement from sticking to it. Construct one side of fuselage at a time. The longerons, vertical and diagonal braces, etc., are held in place until securely cemented, by inserting straight pins on either side of strips.

When two fuselage sides are completed, both are pinned to top view of plan; in such a manner, that the top longerons face down and the sides are at right angles with the table. The cross-members now are cemented in place, forming a rectangular fuselage.

Cut formers from $\frac{1}{32}$ -inch sheet balsa

and cement in their respective positions as shown on plan. Select a soft piece of balsa for nose block, carve and sand to shape. Stiff paper is used for covering the fuselage around motor and top of fuselage to cockpit. The positions of all stringers are clearly shown on formers. $\frac{1}{16} \times \frac{1}{4}$ -inch balsa re-enforcements are cemented to bottom longerons to receive hinge wire, which in turn is cemented to landing gear struts.

CONSTRUCTION OF WINGS

Cut all ribs from $\frac{1}{16}$ -inch balsa. Pin center spar in position on plan. Cement ribs in their proper locations. The leading and trailing edges are cut and

sanded to shape and cemented to the ribs. The wing panels carry movable ailerons, which are a great help in controlling the flights. Make wing tips from $\frac{1}{16}$ -inch balsa.

ELEVATOR AND RUDDER

These are built up from $\frac{1}{16}$ -inch balsa strips. Select $\frac{1}{16}$ -inch flat sheet balsa for tips, etc. These are constructed upon the plan and removed when thoroughly dry so they can be sanded to a smooth finish.

LANDING GEAR

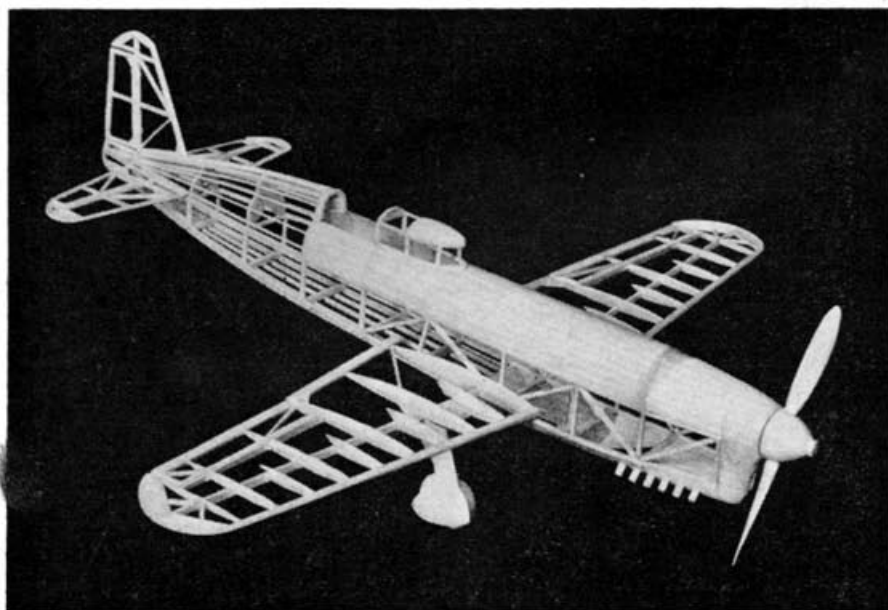
Select a strong grade of balsa for the landing gear struts and round to shape. Force a pin through aluminum U shape piece into strut. Top of strut is cemented into hole of block fitted to wing. Drill holes in aluminum, to receive axle, before bending to shape.

COVERING THE MODEL

Apply tissue to the various framework members, using a light grade of model airplane dope to fasten it to outer edges. Stretch tissue as tightly as possible to remove all wrinkles. When edges have dried, apply coat of water to tissue. When all water has dried completely, tissue will become taut. May we suggest that you pin wings, elevator and such upon a flat surface to keep from warping.

Next, apply coat of clear dope to all surfaces. Now apply colored dopes. Note: do not try to cover frame when it is completely assembled. Wings, elevator, etc., are cemented to fuselage after they have been completely covered with tissue. Care should be taken in doping to avoid bare spots or excessively heavy local deposits that weigh down the model.

(Concluded on page 73)



The framework of the Caudron-Renault before covering. This will assist you in assembling your model.

Caudron-Renault Model

(Continued from page 47)

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The wings, elevator, rudder, etc., now can be cemented in their correct positions. Work in a very small paper fillet between root of wing and side of fuselage.

TESTING AND FLYING

Two types of propellers are used on this model. One, which has a wide blade, is made of fiber. This type of blade causes the motor to turn at fewer r.p.m. and better flights result. By twisting the blades, the pitch can easily be adjusted. The balsa scale propeller

is used for exhibition purposes only. Six strands of $\frac{1}{8}$ -inch flat rubber are sufficient to fly the model.

With the rubber motor and flying propeller in place, gently launch your model over tall grass. By this method, you can see if your model is properly balanced. If model glides a short distance, and nose rises abruptly, it will be necessary to add weight to bottom of nose block. If model dives, add weight to tail.