



A 150 SQ. IN. STUNTER FOR 1.5 c.c.

BY

LES HOWELL

Member St. Albans M.A.C. . . . de Havilland Draughtsman . . . aged 23 . . . a modeller for 12 years . . . main interests are Stunt, Glider and F/F Power; but if time permitted, would indulge in all types . . . also a keen photographer.

POPULARITY of the smaller 1.5 c.c. diesels now exceeds that for any other engine capacity. This fully aerobatic and very slick stunter is especially designed for either the Allbon Javelin or Elfin 1.49, and will go through every manoeuvre in the stunt schedule at almost 60 m.p.h.

Built with a fixed wing, its 28 inch span is not over-large for transport, and the rigid structure provides a tough job that will withstand the occasional prang. Why not make one for your 1.5, and fly it next week-end?

Construction:

Wing. Build up ribs on 1/8 square spars dry. Add trailing edge sheets making sure structure does not twist in the process. Glue spars. Glue one leading edge sheet to respective spar and leave to dry. When dry, glue to ribs. Repeat for other sheet. One or other of sheets to be chamfered to make good fit at leading edge.

Add control system and complete centre-section sheeting. Add tips and paper tube lead outs. Form attachment ends or lead out wires. Sand smooth. Add tip weight securely.

Fuselage. Make bulkhead and bearer assembly first. Pre-cement fuse sides to this assembly, making sure (by pre-determined line on fuse side) that thrust line is parallel to wing.

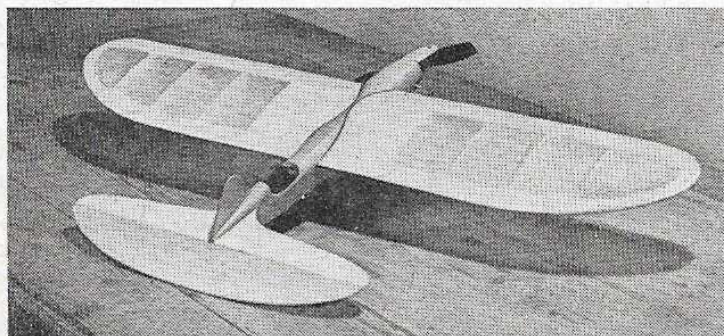
Tailplane and Elevator. Make up as a complete assembly—sanded, covered, doped and hinged. Now assemble fuselage as such: wing; and tail/elevator assembly, making sure all components are square and true in all views. Particularly note to make sure that a "rig" is not present in incidence setup. (A simple jig may be made up for this operation using the fact that top of wing is an undisturbed flat surface at spar).

Complete control system at elevator horn, obtaining required movement. Install undercarriage. Install tank and add fuse bottom. Complete fuse top fairings, and fin, noting particularly reference to front block on plan re-precementing. Add tailskid canopy, engine at 2 degree out-thrust. Make and attach cowl after sanding, covering and doping. Cowl may be alternatively made from hollowed block balsa held in place by press-studs to top block.

Model should be flown on a calm day for first time, 40 foot lines are reasonable for a start. On an 8 x 6 inches P.A.W. cut down to 7 x 6 inches the prototype flies at 55-60 m.p.h.

Note.—Metal cowl to be made of thin aluminium sheet. 22 s.w.g. or thinner prototype cowl was made from a flattened aluminium cigar tube. This is a convenient supply if you know anybody who smokes expensive cigars!

Simple enough? Building time should be no more than ten hours, and any keen aeromod should be able to muster that amount of spare time during a week. Cost is cheap too, even with the new balsa prices, 9/- meets the bill, excluding engine.



The arty heading photo displays Les Howell's prowess as a photographer as well as modeller. Photo flood illumination has caricatured Bumblebug outline, while the natty bug sketch is Les' own decoration which is now painted on top of the port wing. View from above at left shows the attractive lines of this 150 sq. ins. stunter. Colouring is Crimson and Yellow.