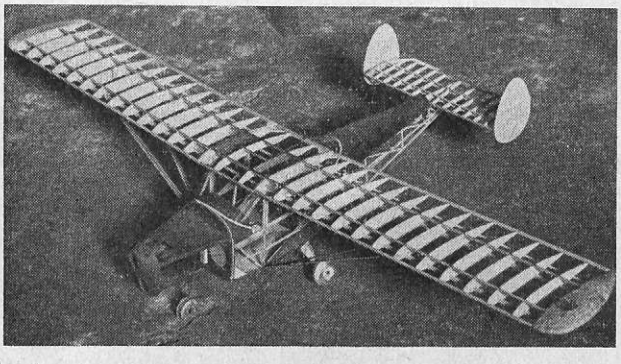
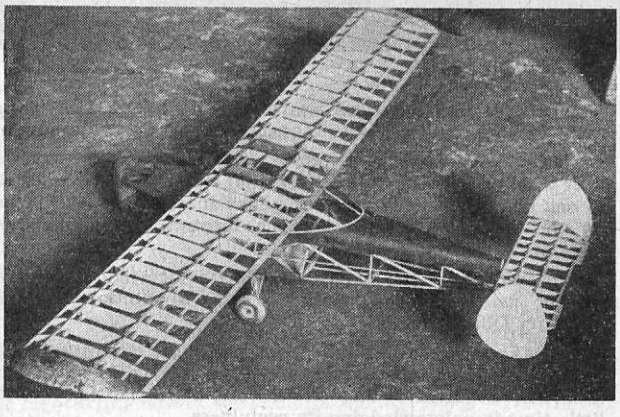
A 1½ inch to 1 foot Flying Scale Power Model of the CHRISLEA SUPER

ACE

Designed by E. J. RIDING





IN choosing the Chrislea Super Ace as the subject for a Scale Model, a departure from the orthodox has been made in that the machine offers opportunities for investigating the flying characteristics of a tricycle undercarriage as applied to model aeronautics.

The actual construction of the model is simple and straightforward, and constant reference to the G.A. drawing, the photographs of the model in various stages of construction together with Mr. Moore's cut-away drawing should ensure that the modeller encounters nothing in the way of building snags. Indeed, the only part of the construction that is liable to cause any difficulty to even a beginner in this sphere of model building is, as usual, the soldering of the undercarriage assembly.

The model is as near scale as is compatible with successful flying, the dihedral, sizes of tail surfaces and wing section being correct to 1/8th scale.

As an experiment, the use of stiff cartridge paper for the entire fuselage decking aft of the wing has proved very successful, and after nearly three months' exposure to all sorts of temperatures and conditions of humidity it has so far refused to form wrinkles. The saving in weight has been considerable, since one is able to do away with intermediate formers.

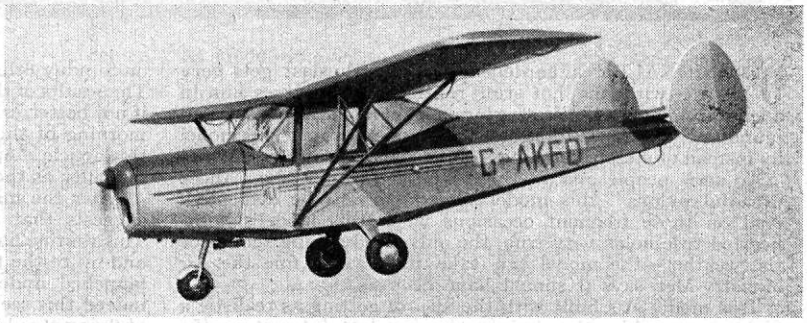
The test flying of the model is carried out in the usual way, i.e. by gliding it until by the addition of small amounts of ballast to the tail end of the machine a straight and steady

On the left : Two views of the model less engine and cowlings prior to covering. Basically the construction of the airframe follows closely upon the lines of those of the full sized machine.
Comparison of the two lower photographs will show how scale effect has been preserved. The impression that the model (right) has more dihedral than the original is caused by the position of the camera in relation to the model.

"Aeromodeller" Photos

Two flying shots taken at Eaton Bray recently would deceive anyone but a disbeliever! Unfortunately the only "pilots" available had 1914–18 period flying clothing, and were consequently unsuitable for the "Ace". See here how final details such as exhaust stubs, venturis, control horns, etc., add to the realism of the model.

Below, a close-up view of the engine mounting and (right) a further shot of the model, this time shown at rest on the take-off base.



glide is obtained.

With a small amount of fuel in the tank the model should then be allowed to take off under power, correcting each tendency to dive or stall by giving downthrust or upthrust to the engine, whichever the case may be. The bolt holes in the engine bearers should be drilled so that the engine takes up a position whereby it has about three degrees sidethrust to counteract torque effect.

Before releasing the model on its first power flight check that the wheels are revolving freely, and that the nose wheel is lined up with the main undercarriage wheels. Slight directional control can be exercised by deflecting one or both rudders.

The finished model should be given two coats of clear dope, followed by two of aluminium, preferably using a spray gun. The registration letters, fuselage flash and decking are royal blue, their positions and size being shown on the G.A. drawing.

The inside of the nose compartment should be liberally coated with grain filler, sanded down and then treated with several coats of clear or red undercoat dope to ensure that the woodwork is well protected against the action of fuel oil.

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