

A 45-inch SPAN WAKEFIELD MODEL

THE "Witch" was developed from a peg-legged parasol slab-sider built in 1945. This prototype was slowly and laboriously modified into a more or less normal shoulder-wing streamline slab-sider, which, although weighing around eleven ounces, had quite a good performance. This latter model and the knowledge and experience gained while experimenting with it, were incorporated in "Witch". The construction may seem a little unorthodox in many respects, and some Wakefield builders may criticise it as being rather too solid, but the fact that the original Witch weighs nine and a quarter ounces ready to fly, is compensated for by strength and non-warping flying surfaces. "Witch I" flew away on half turns, immediately before entering the Gutteridge Trophy Contest and has flown consistently well ever since. Throughout the 1949 Contest Season the flights have averaged over three minutes, placing nineteenth in the Flight Cup, eleventh in the Gutteridge, and coming 18th in the Wakefield Trials.

To those who intend building this design, the designer directs the wish that you should construct it exactly as per the plan, test fly it in that form and give it a fair chance,

before making those modifications which, you are quite sure, would improve it one hundred per cent!

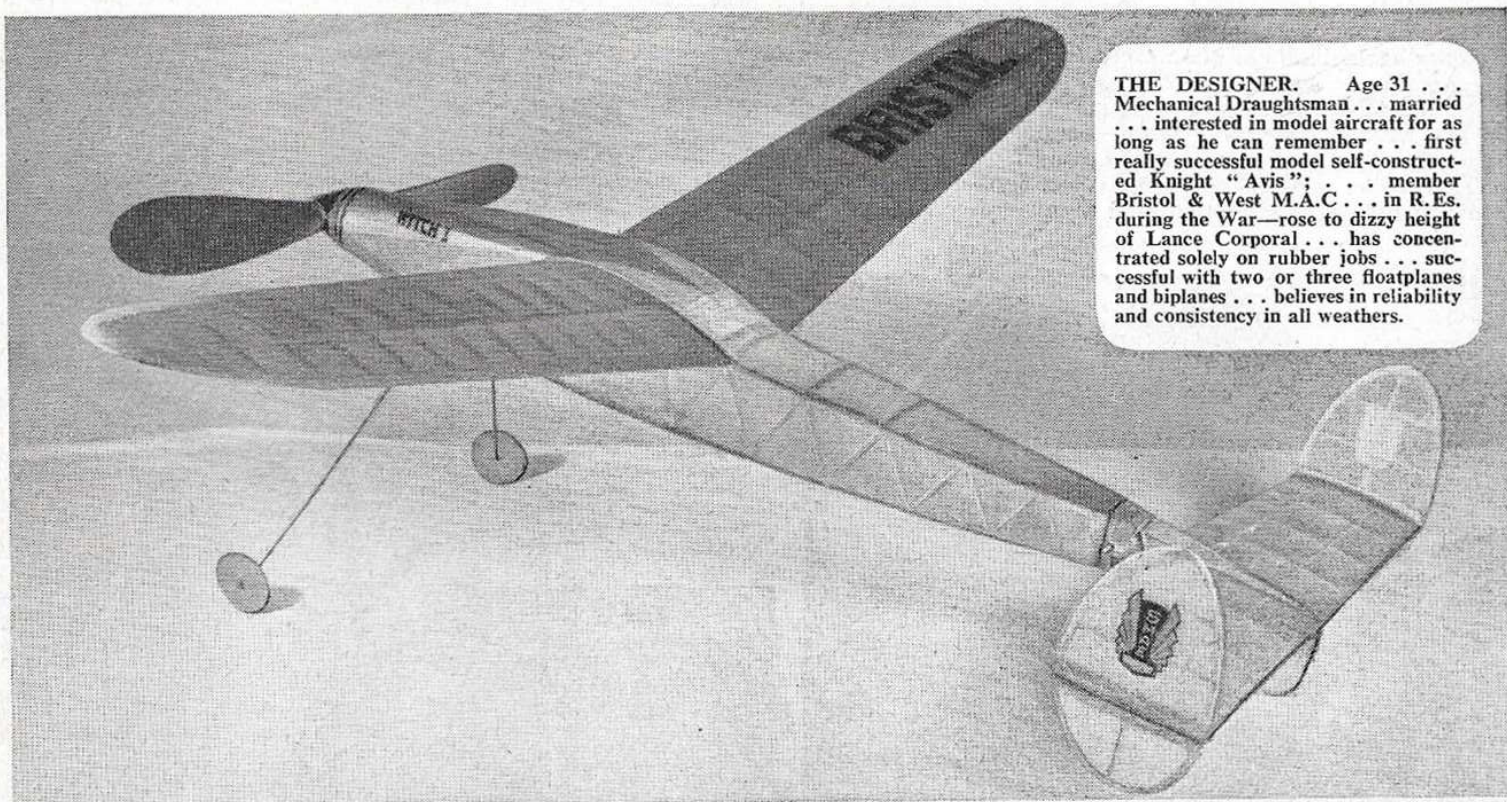
Construction.

As this will be sufficiently clear from the plan, only a few guides will be given here.

The Wing Box is built first, making it rather wider than necessary, so that it can be trimmed to exact length after assembly.

Templates for the sides of the box should be cut from thin, stiff card. The hardest available balsa should be used for the longerons, and the side plate placed on the plan first when building the sides. The Dethermalizer is built in and is of the Flip Up tail type, operated by rubber bands and a fuse.

The wing section is N.A.C.A. 6412 and the tip dihedral is $4\frac{1}{2}$ inches. The prop driving clutch shown in the drawing is perfectly satisfactory and should be a tight screw fit on the shaft. The airscrew used and given on the plan has performed well; it was carved from hard balsa with plywood facings either side of the hub and 1/16th birch binding around the blades to strengthen them.



THE DESIGNER. Age 31 . . . Mechanical Draughtsman . . . married . . . interested in model aircraft for as long as he can remember . . . first really successful model self-constructed Knight "Avis"; . . . member Bristol & West M.A.C. . . in R.E.s. during the War—rose to dizzy height of Lance Corporal . . . has concentrated solely on rubber jobs . . . successful with two or three floatplanes and biplanes . . . believes in reliability and consistency in all weathers.