The 'plane on the cover!

A SCALE VERSION OF THE FAMOUS SCOUT FIGHTER DESIGNED FOR ENGINES OF ·5 to 1 c.c.

BY VIC KING

Aged 19 . . . employed at National Physical Laboratories . . . member West Middlesex club . . . keen on rubber, scale, helicopters and contest flying but does not like control-line . . . other interests are swimming and reading, including a study of '14–'18 aircraft.

A PUSHER model is not everyone's choice, and a scale pusher is one of the most difficult selections it is possible to make. The reason for this being the need for so much nose ballast to compensate the engine weight, that wing loading becomes too high for reliable flight. But if the model is relatively small, this difficulty is minimised to a great extent, and in choosing the famous F.E.8. and building to a scale suiting his Mills ·75, Vic King has proven that the pusher can be as realistic and reliable an old timer as any could wish to see.

Few can grumble at its 14½ ounces for 350 sq. ins. wing area, a far more generous loading than we find on many a conventional scale model, and the hundreds that have been fortunate enough to witness the prototype's flights at Fairlop and thereabouts will verify that here's a model that definitely carries the air of 1914-18 about it.

The full-size aircraft has been magnificently portrayed by artist Rupert Moore on the cover, to give builders as accurate a colour guide as possible, and in " Hangar Doors ", Mr. Moore writes further on the subject. The F.E.8. was produced in company with the D.H.2. to combat the " Fokker Scourge " and gave a very good account of itself during its ten months of front-line service. Fokkers were using interruptor gear to synchronise machine guns firing through the airscrew : but with the engine at the rear, such a device was not necessary, hence the series of pusher " Scouts", before we developed the synchronised gun.

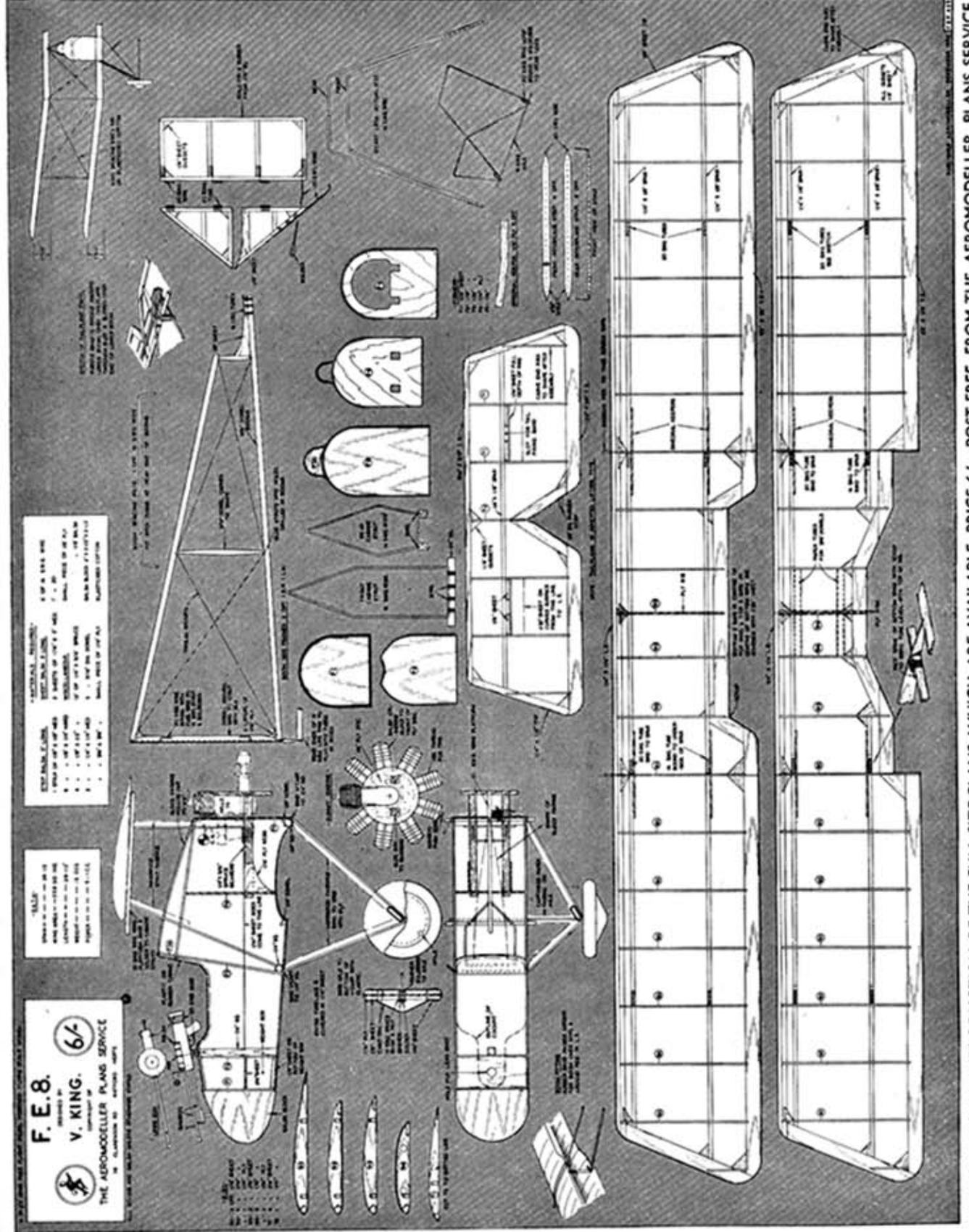
Construction

Cut the **fuselage** sides from sheet, add formers, cement in engine bearers and cover top and bottom with sheet. Insert wire struts then cut outline of cockpit. **Wings** are perfectly conventional, except for the brass tube fittings which must be packed to protrude just outside the wing contour.

Unfortunately the **tailplane** had to be altered slightly from true scale in that it is placed on the model in the inverted position to provide a downward lift. Its construction, like the **rudder** and **fin** halves, is perfectly straightforward. Make certain that the pendulum rudder will swing freely, and that movement is limited by the stop and also by the pendulum arm on the fin. Good quality spruce dowel is essential for the **booms,** which should be glued together and not cemented. It is most important that the brass tube at the end of the boom receives the wire spacing piece smoothly. At the forward ends, the booms are connected to the wings by the tube fittings, and a securing elastic band goes over the top wing as shown. Use elastic thread for the **rigging,** build up a dummy machine gun and engine from scrap, colour à la Rupert Moore, add a pilot, and you are ready for trimming.

Bring the C.G. to 50 per cent. wing chord by adding weight in the ballast box. Check the glide as flat and slow, then get used to the awkward position for flicking the engine. After a time this becomes very easy indeed. Have the engine running at three-quarters throttle (8 in. by 4 in. prop) and launch into wind gently. Avoid a right turn, trim if need be for left hand circles. If there is any tendency to hedge-hop, insert washers under the engine bolts nearest the prop—remember, it's a pusher !

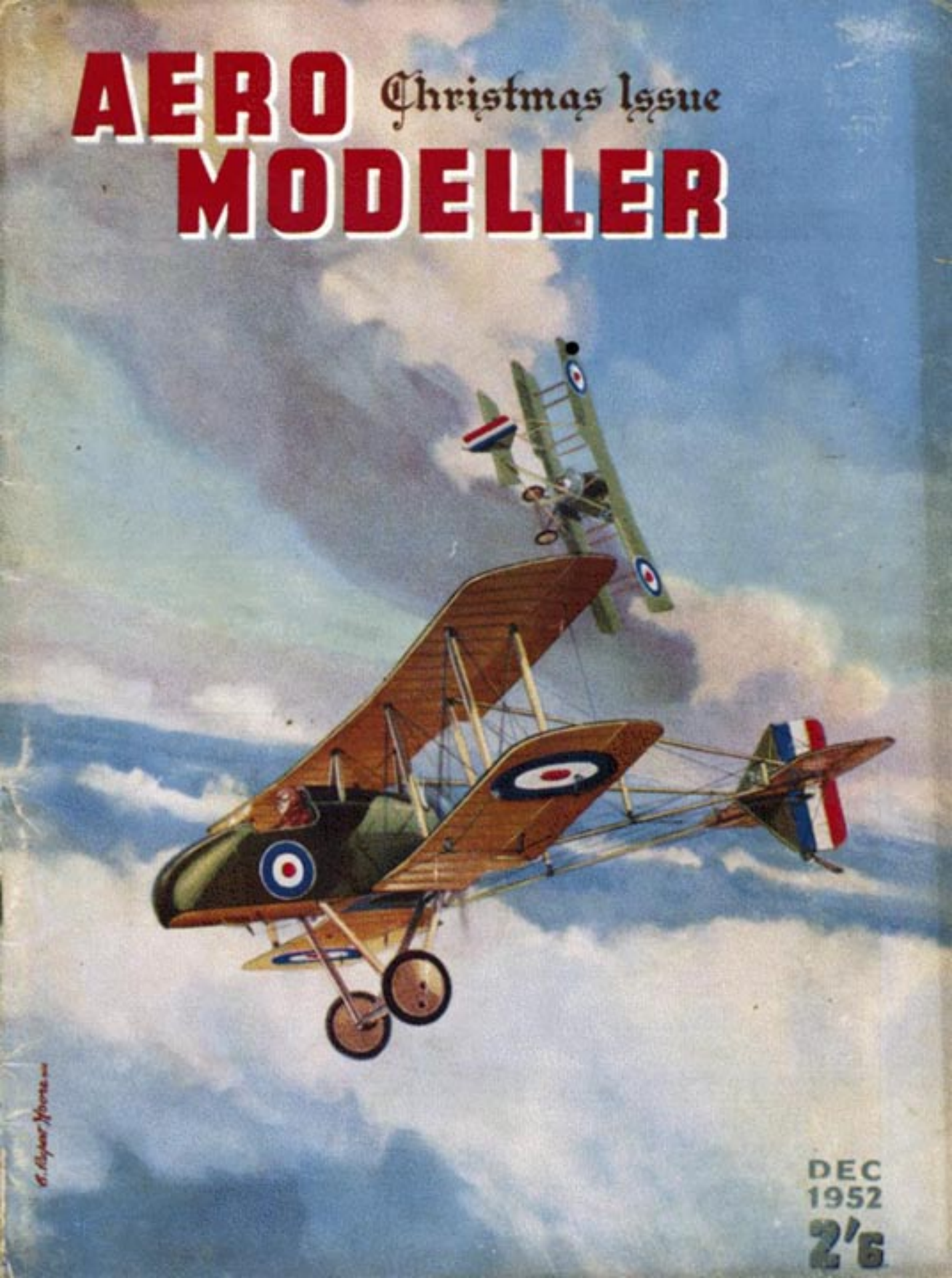
To date, the original has made well over 150 flights without major damage and has frequently shown how it can take a vertical bank without losing height, at times it has even shown itself to be thermal-conscious !



THIS IS A ¼ SCALE REPRODUCTION OF THE FULL-SIZE PLANS WHICH ARE AVAILABLE, PRICE 6/-, POST FREE, FROM THE AEROMODELLER PLANS SERVICE.

AERO MODELLER

Christmas Issue



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