MACCHI 308 By Bill Blake from Model Aviation Summer 1950 a 44” FF version of a famous Italian light-plane ED Bee power.

Glancing through a foreign aviation magazine recently, I chanced across some photographs and data of an interesting-looking Italian light-plane—the Macchi 308. The proportions seemed ideal for a F/F scale model, so I got out the drawing board and started work. The problem of translating the information on the real aircraft was solved by enlisting the aid of the proprietor of the local Italian restaurant. Briefly, the Macchi 308 is a side by side two seater—fitted with dual control. The power unit is either a 65 or 85 h.p. Continental. The tricycle undercarriage is non-retractable, with a steerable front wheel. Flaps are provided for low speed stability and as air brakes when landing. The main framework is of wood, with ply covering.

The model presented here has been especially designed to suit the reliable little ED Bee. Other diesels of similar capacity may be used if desired, but anything more powerful will create trimming problems. The drawings on the adjoining page are one-quarter full size. Either draw them up or send off to the publishers for a print of the original plan. Full-size patterns for most of the sheet parts are given at the back of the book.

Build the model in the following sequence.

FUSELAGE

Commence by building the two side frames of1/8” square balsa—minus the F14 pieces. Remove from the plan when dry, slice apart with a razor blade, and join together in the usual way to form a box frame. Now add the F14 pieces and the front formers (Pl, FI and F2). The front undercarriage leg should of course be attached to F1, before the latter is cemented in place. Attach the remaining formers to the upper and lower sides of the basic framework.

Now add the main undercarriage frame and fill in the space between formers F4 and F4a with 1/16” sheet as shown in the front view of the U/C installation. Use plenty of cement for this fixture.

The 1/8 X 1/16” stringers come next. Sight along each one and correct any “waves”’ due to slight errors in the position of the former notches. The reason for the scalloped formers is simply to prevent the tissue from touching at these points. Nothing spoils the appearance of a scale model more than former “ridges.”

Now bolt the engine to the aluminium mounts and install a free flight tank. Sheet cover (in between the stringers) back to F4. Carve the top cowling from soft block and make it detachable for access to the fuel tank. The front cowling is also carved from block and hollowed out as indicated. This latter component is located on two bamboo pegs (glued into Pl). On the original model, the cowlings are held on with dabs of cement and the joints broken when required. Alternatively, Sellotape may be used.

Cover the entire cabin top with medium soft 1/8 sheet. This strengthens the fuselage and provides a good seating for the detachable wing.

Build up the wheel spats from four pieces of ¼” sheet and sand to a streamline shape. Drill for the axle and fit each spat by holding the wheels inside and threading on to the wire. Build up the fairings and fillets from scrap balsa. Spats are always vulnerable and may be omitted in this case if desired—as they are only an optional extra on the full-size machine anyway. .

WING

This is of conventional construction. Begin by cutting out all the ribs. The three centre section ribs are of 1/8" sheet. Attach the ribs to the lower 1/8 square spar. Next add the leading and trailing edges—followed by the "D" braces and the tips.

Half cut through the L.E., T.E. and spar (outside the centre section ribs), and block up each tip 2 ½". Now add the top ¼" square spar. Give the broken joints a liberal coating of cement and reinforce the spar joints with scrap balsa sheet.

TAILPLANE AND FIN

Join two pieces of medium soft 3/32" sheet (edge to edge) for the tailplane and add 1/8" square strips to the top surface. When dry, sand these strips to an airfoil section. Line up on the fuselage and add the soft block fairing as indicated.

The fin is also made from 3/32" sheet. Note the hard balsa straighteners.

When sanded to a streamlined section, cement to the tail plane fairing.

COVERING

Cover the whole model with heavy weight Modelspan. Finish with two coats of clear dope and one coat of banana oil. A light coat of coloured dope may be added over this if desired. Authentic colouring is all cream, with red registration numbers and decoration.

FLYING

Trim by slight incidence adjustments to the tail plane. Try to achieve a fairly flat glide. The original flies best in left-hand circles. Only very small rudder offset may be used, in view of the large area. Slight motor offset is useful in obtaining correct trim.