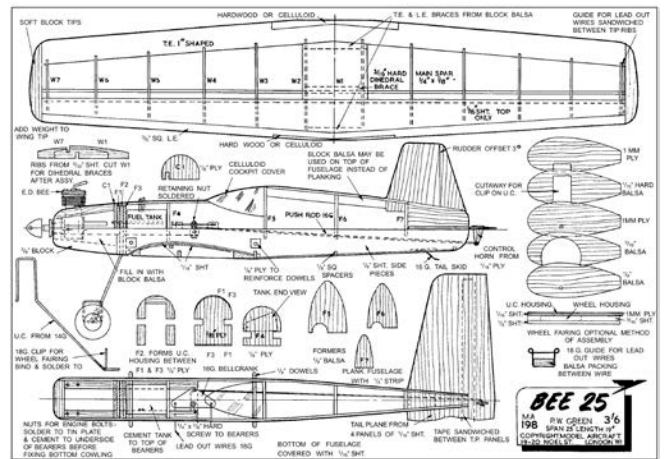
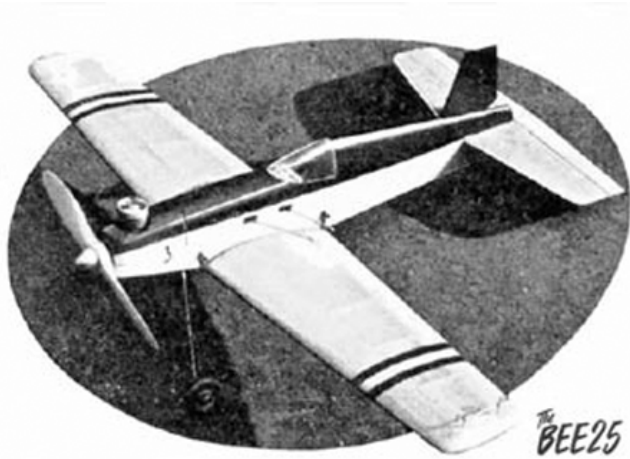


Bee 25



A tough good looking control line model for 1 c.c. engines by P. W. Green.

The Bee 25 model started as an idea for a Christmas present for a youngster interested in modelling and was designed to be as robust as practicable. The model was built in about a week and since that time has put in dozens of hours flying. The unusual design features of a fuselage planked with 1/8 in. sheet and the heavily constructed wing do not detract from the performance, which is quite lively. The model takes off after a short run and will perform wide loops.

Building Instructions

The first step is to make the fuel tank from tinplate. Then drill the bearers and the two small pieces of tin, and bolt the engine on as shown in the plan. This method permits trouble-free use of holding-down bolts and is well worth the extra effort of soldering. Cement the formers F1, 2, 3 in position and fit the bell crank assembly. (Remember to mask off the exhaust ports and fuel and air intakes on the engine.) The engine, bearers, bell crank assembly and the formers F1, 2, 3 now form one complete unit.

Cement on fuselage sides, and when they are dry, pull them in at the rear and fit the wedge-shaped balsa end-piece, then cement in the remaining formers. Remove engine and seal ends of pipes of tank, then plank over formers with 1/8 in. strip from F1 to F7, sand smooth, and then trim off planking flush with these formers, and cement in the balsa tail block, remembering to leave 1/8 in. space for the tailplane. Then build the cowling from block with C1 pinned in

position. When dry, fair in the blocks to conform with planking. Fit the ply reinforcement pieces and dowels, then fit in sheet at wing-seat position. Immediately after cementing this sheet in position, fit the wing and strap on with rubber bands, making sure that there is no excess cement between wing and wing seat sheeting. This method ensures an accurate wing-fit to fuselage, and any small discrepancies may be filled in with scrap balsa. Fit the block beneath bearers at nose, allowing for clearance at bottom of crankcase and drill the 3/16 in. diameter drain hole.

Fit the 1/8 in. square spacers to the bottom of the fuselage fit the tailskid, and then cover the fuselage underside with 1/16 in. sheet with the grain running athwartships. When dry, sand the whole fuselage down and cover with lightweight Modelspan. Carefully run a razor blade between formers C2 and F1 and flush with top of bearers to remove cowl, cut clearance for cylinder head and check for fit with engine fitted, and also drill the hole for the needle valve. Cut away tissue from 1/8 in. gap at tail end, remove distance pieces and check tailplane for fit and line-up with wing. Fit a cockpit cover and if desired, a dummy dashboard, this is simply made from a semi-circular piece of card painted black, with white card discs stuck on to it before the dope dries. The tailplane is simply constructed from four panels of 1/16 in. balsa with a strip of linen tape sandwiched between for a hinge. The control horn is made in 1/16 in. ply. The fin is made from 1/8 in. sheet balsa with about 3 deg. offset. The wing is made in normal manner and the center section and leading edge is sheeted with 1/16 in. balsa on the top only. Spats are optional, but, in my opinion, worth the extra effort to

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make. When all the balsa and ply cut-outs are laminated in the correct sequence a pocket is produced in the spat to take the wheel, which also fits on to the 8 gauge wire yoke, which is bound and soldered to undercarriage leg. The undercarriage is made from one length of 14 gauge wire bent to an inverted " U " shape at top to suit the pocket formed between F2 A and B formers. This arrangement makes the undercarriage and the spats detachable. The model is flown in a normal manner and the usual flying instructions apply.



An Elfin 1.49 powered version of the BEE 25.

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