

# David Boddington's QUEST

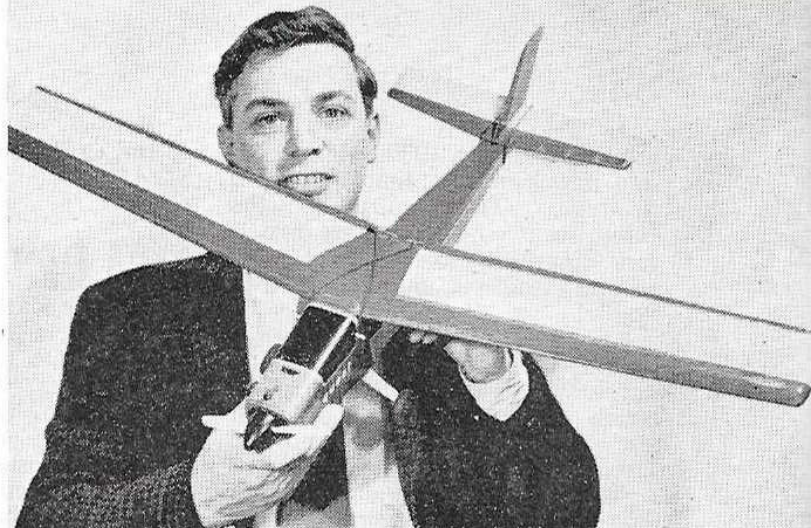
35½ ins. Span Single Channel  
Radio design for ·5-·8cc.

**T**RY to organise a building schedule before you start this project, and keep to the programme, don't start on all the interesting parts and leave the dull items until last. Cut out all your sheet parts before commencing building and build the wings and tailplane first. You should find construction straightforward with no particularly difficult parts. Choose the balsa wood carefully for lightness and evenness, especially the fuselage sides.

Wings are constructed in two sections and joined together with dihedral braces. After soaping the drawing, pin down a piece of ¼ in. x ⅜ in. trailing edge. Cut ½ in. square hard lower spars to length and pin in position. Cut wing ribs by the blocking method, afterwards cutting the root ribs due to the narrow spacing of this rib. Glue ⅜ in. and ⅛ in. wing ribs in position shown and check that all are vertical except for the root rib, which should be angled from the root rib template. Glue the top spar in position. Fix the top trailing edge in position and glue the leading edge in position. When dry remove from the plan and sheet in the upper surface of the wing from the rear of the top spar to the leading edge and from root rib to the tip. Add ½ in. soft balsa tips and sand paper, together with the leading edge to smooth contour. Construct the second panel in a similar manner.

When both panels are set cut slots in the first three ribs to receive the dihedral braces. Check these for accurate fit and then glue into position on one wing panel. When dry add the second wing panel to the projecting dihedral braces, glue thoroughly and pin down, prop up the opposite wing tip to 2¼ in. to obtain the correct dihedral angle. Hold firmly in position until dry, pinning the two root ribs together. Sand and prepare for covering and glue trailing edge stock reinforcement. Cut ailerons from hard ⅛ in. quarter-grain sheet and sand and prepare for painting. Ailerons should be sewn to the wings after all parts have been covered, doped, and fuel proofed.

Construct the basic tailplane frame from ¼ in. x ¼ in. strips ½ x ½ in. T.E. stock as shown on plan



remembering to prop up T.E. to allow for symmetrical section. When dry, remove from plan and add ½ in. square to rib position and ½ in. sheet to centre section on aerofoil section.

Fin and Rudder is straightforward construction of ⅜ in. sheet sanded to slightly tapering T.E. and rounded L.E. A trim tab may be fitted if desired.

Mark on the sanded fuselage sides, the positions of formers and strengthening longerons and uprights. Glue the ½ in. sq. and ⅛ in. x ½ in. longerons and uprights and ½ in. x ½ in. top and bottom doublers in position. When the sides are dry glue the formers F.2, 3, 4 & 5 in position ensuring that they are square with the sides. Add the ¼ in. soft balsa sheet to the lower and upper nose area. Glue internally to the battery compartment to the rear of F.2, the ⅜ in. bottom sheet and the side framework, ⅛ in. sheet latex or synthetic rubber sheet to act as shock absorption for the DEAC cells. Note: Plastic foam is not sufficiently resilient for lining purposes but ideal for holding the batteries loosely in position within the battery compartment. Add top ¼ in. plywood nose block. Draw in the fuselage ends and glue in position formers F.6, and the tailblock with 1 mm. ply plate end, and ½ in. sq. cross members. When all is set top and bottom ⅛ in. and ⅜ in. sheeting can be added, including the ⅛ in. ply for the main undercarriage and the 16 gauge piano wire tail skid bound to ⅛ in. ply if a conventional two wheel u/c is to be fitted.

**Covering and Finish.** The model should be covered in lightweight nylon or heavyweight tissue. Pin down all flying surfaces when doping to prevent warps. Colour dope should be kept to minimum as this represents wasted weight but the model should be thoroughly fuel proofed to avoid seepage of fuel into the structure, particularly beneath the engine.

**Escapement Installation.** The escapement is mounted on a ⅛ in. ply former in the normal way with ½ in. sq. guides to slide the escapement in and

Left: the Radio compartment is roomy, receiver fits sideways in forward section. Conquest escapement on sliding ply former at rear. Centre, Escapement mounted to actuate ailerons as sketched on plan with ply former raised for inspection, at right it is in position with links engaged on aileron extension rods.

