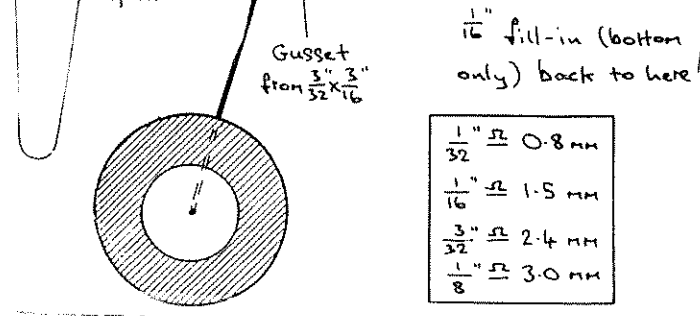
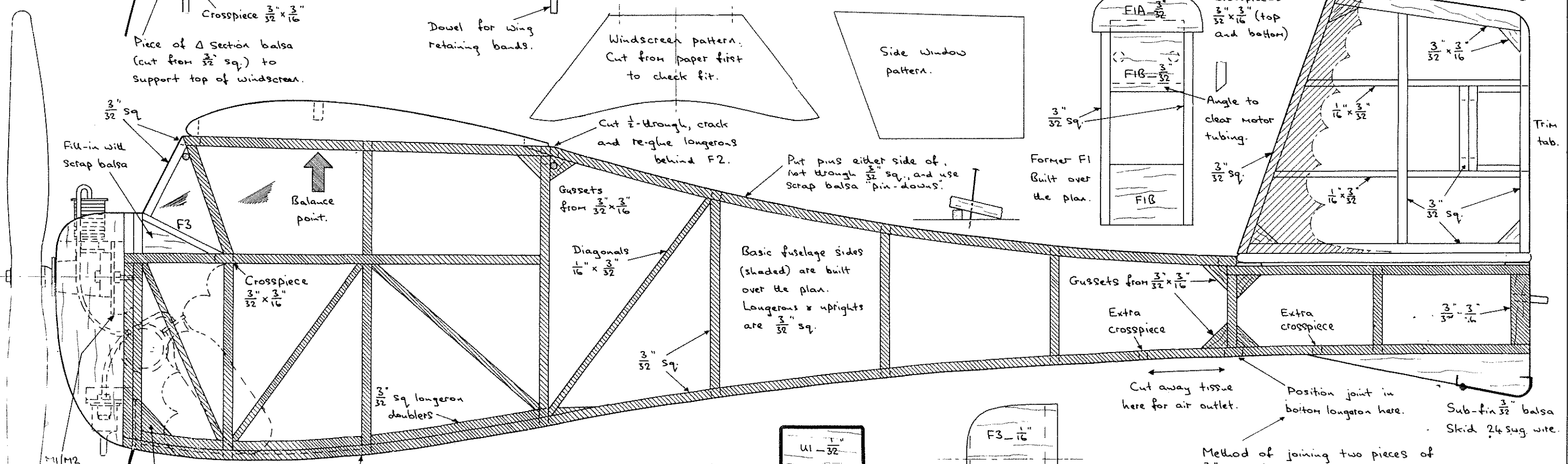
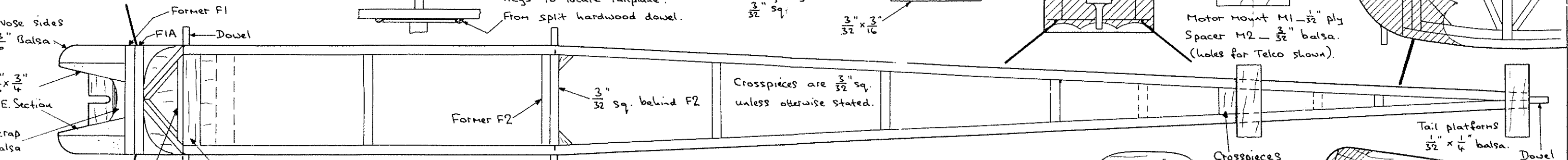
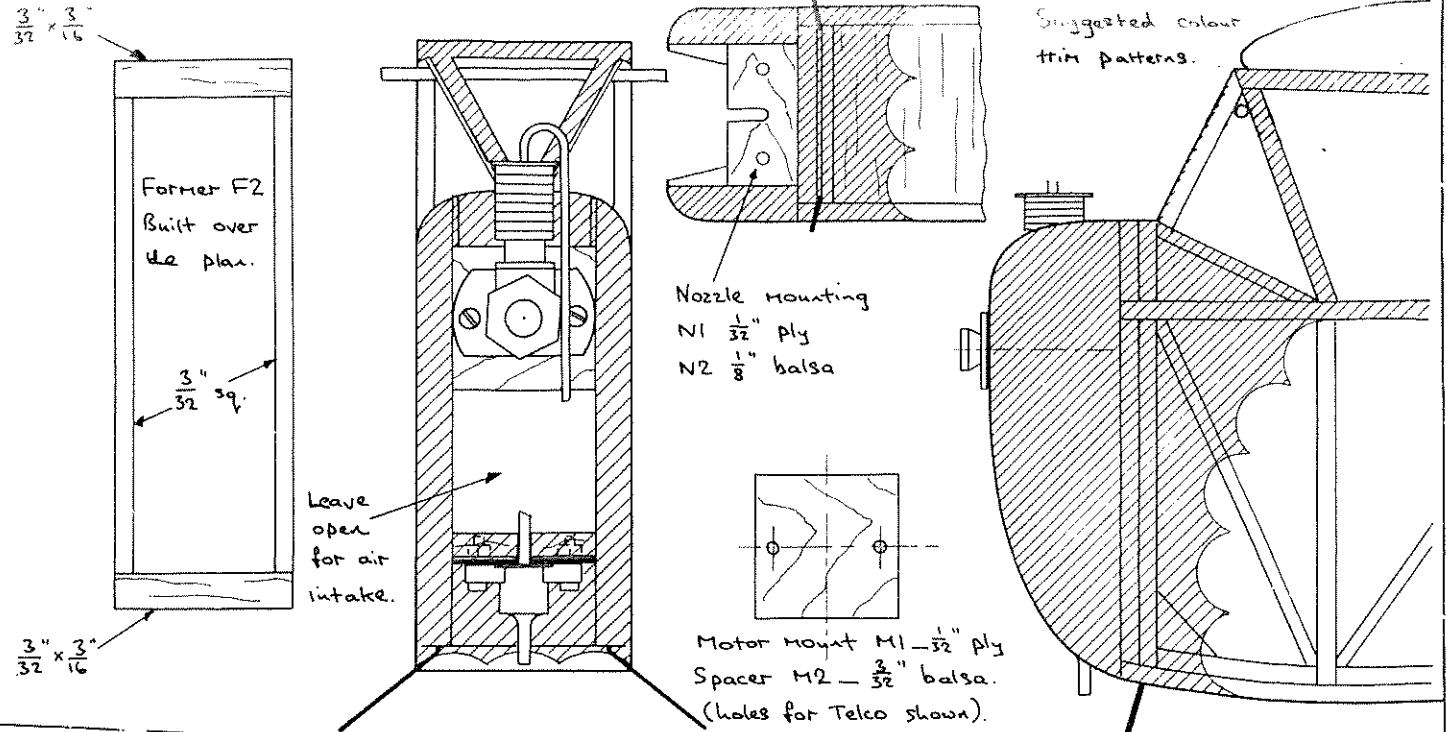
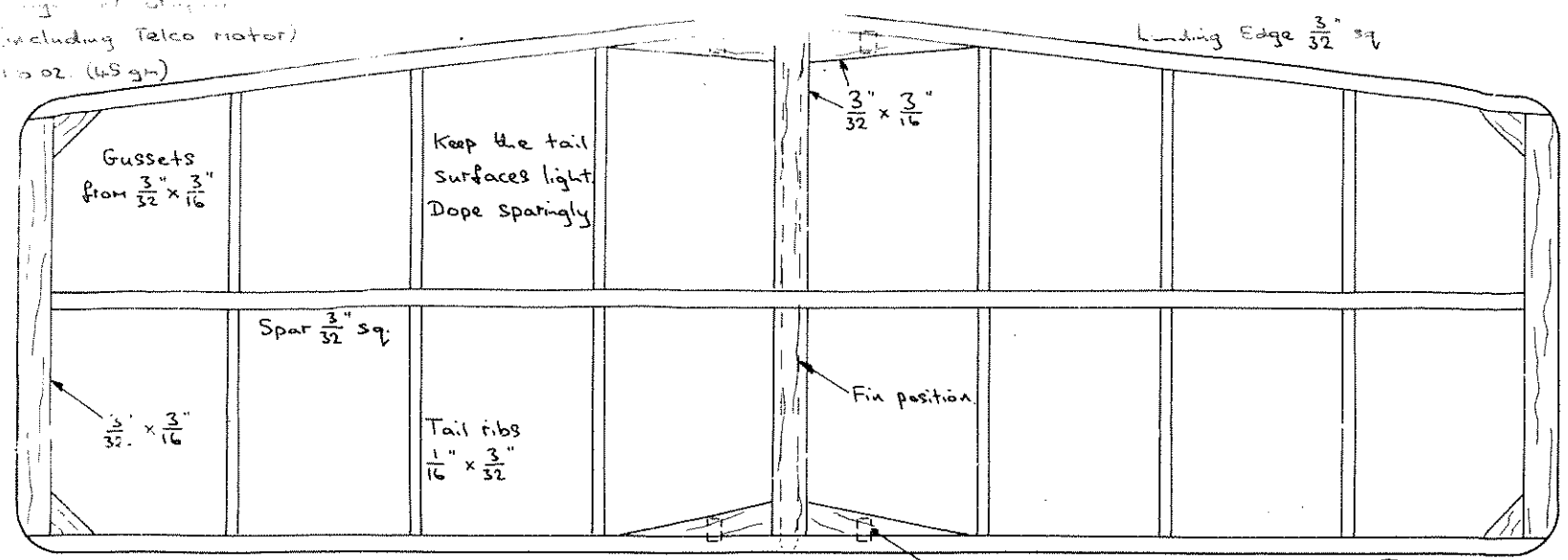
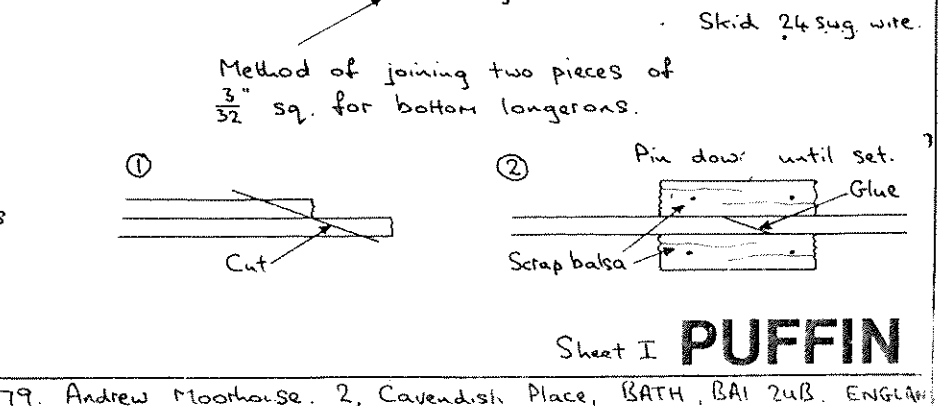
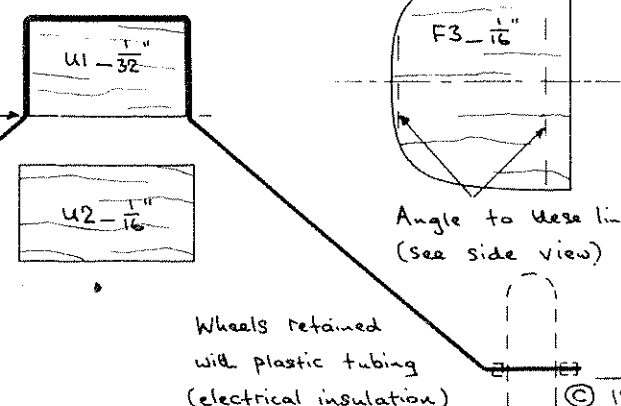
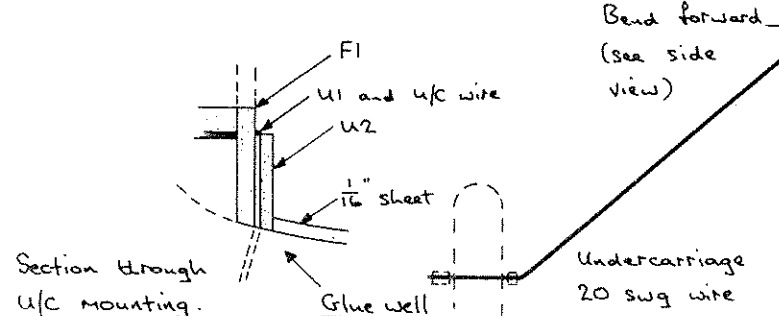


Weight of fuselage (including Telco motor) 15.02 (4.5 gm)



1/32	±	0.8 mm
1/16	±	1.5 mm
3/32	±	2.4 mm
1/8	±	3.0 mm



Before starting to build, study the plans and instructions carefully, and identify all the pre-cut and printed parts, and the different sizes of strip balsa. Choose strips of suitable grade, for each component, e.g. med-hard or hard $\frac{3}{32}$ " sq. for the fuselage longerons, lighter wood for the tail surfaces, and so on.

A PVA (white) glue such as Evo-stik Resin-W or Gloy Titebond is recommended for all "framework" joints. Balsa cement is more suitable for parts like the undercarriage, and 5 minute epoxy will be needed for the motor mounting.

Cover the plan with plastic film, or rub candle wax onto it, to prevent parts sticking to it while building.

Fuselage.
Join together the strips of $\frac{3}{32}$ " sq. for the bottom longerons, as shown on the plan. To obtain the required curvature in the front part of the bottom longerons, stand them in warm water for a time.

Build two identical fuselage sides and the formers F1 and F2 by pinning down over the plan. Join the sides with F1 and F2, and add F1A, F3, the crosspieces back to F2, the scrap balsa fill-in under F3, and the windscreen pieces. (At each stage in building the fuselage check that everything is square and true.) Crack and re-glue the sides behind F2, join them at the tail, and add the remaining cross-pieces.

The motor and (Telco) landing nozzle are

mounted by epoxying 10 b.a. nuts to the back of the $\frac{3}{32}$ " plywood mounting plates M1 and M1. Do this by screwing the motor and nozzle onto the ply plates and applying 5-minute epoxy around the nuts. Do not unscrew them until the epoxy has set hard. The spacer M2 and backing piece N2 must be drilled and cut away to clear the nuts and epoxy. Glue the completed mountings and the $\frac{3}{16}$ " balsa nose sides to the fuselage, add the remaining nose details, and carve and sand to shape.

Bend the undercarriage wire to shape, glue the U/C plate U1 to it, and then securely glue the assembly to the back of former F1, followed by the backing piece U2. Then add the $\frac{1}{16}$ " sheet fill-in to the fuselage underside. At this

stage bend the tubing of the motor unit to the shape shown in the fuselage side view. Be careful not to bend the copper tubing too sharply—it helps to use a circular former ($\frac{3}{8}$ " dowel or similar) when coiling it. Check that the motor unit can be installed by inserting the tank through the opening in F1. The cabin glazing, dowels, sub-fin, and tail platforms are added after covering.

Wings and Tail
Cut out the wing ribs using a sharp knife, and a straight edge where necessary. Make a block of the wing ribs R1 and sand out any irregularities. Build the wing panels over the plan, leaving the spars over-length. Angle the base of the ribs R2, and cut the spar ends as shown in the sectional

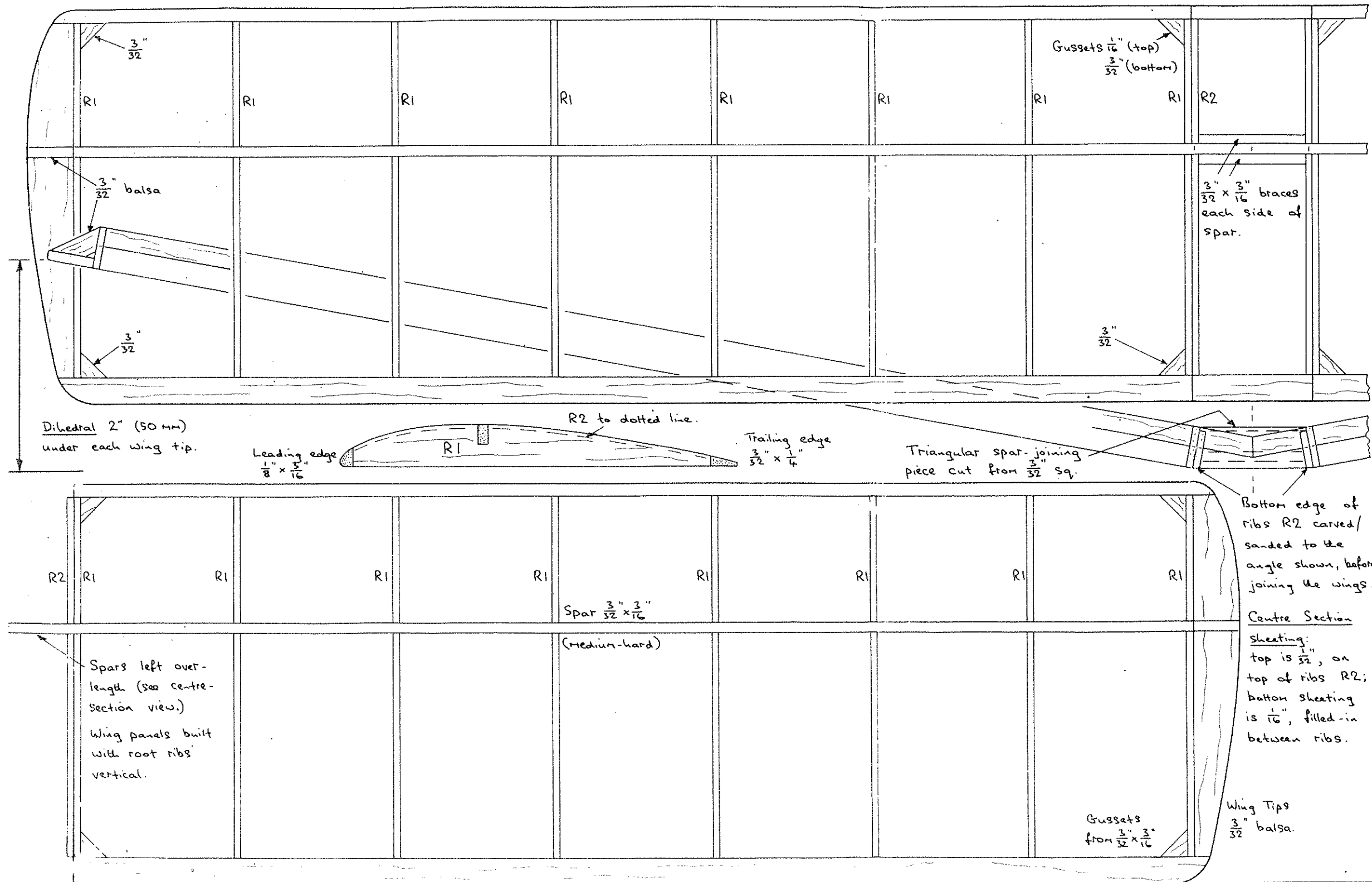
view. Then join the wing panels by building the centre section between them, over the plan, with the wings propped up at the correct dihedral angle. Build the tailplane and fin by pinning down over the plan—don't cut the rudder trim tab free until after covering and doping. Carve and sand the wing leading and trailing edges to section, and round off the tail surface outlines and wing tips.

Covering and Finishing.
The tissue covering can be applied using dope, tissue paste, or watered-down PVA as an adhesive. Whichever method is used, sand all the outside surfaces of the frameworks with very fine sandpaper; also check that the wings and tail surfaces are flat and free from warps before covering.

If using the dope method of covering, give the framework two coats of sanding sealer or dope, sanding between coats. Attach the tissue by laying it over the framework and brushing through with cellulose thinners. Trim off the excess tissue and seal down the edges with dope or sanding sealer. Steam the tissue to shrink it—pin down the flying surfaces for as long as possible while drying, to avoid warps. Use well thinned clear dope (at least 50% thinners) 2 or 3 coats on the fuselage, 1 or 2 coats on the wings, 1 coat on the tail. Again, dope the wings one at a time, and pin down the wings and tail while drying. Thinned banana oil can be used to fully seal the tissue after doping, if required.

Attach the celluloid windows with balsa cement or similar. The colour trim can be cut from coloured tissue and applied by laying it over the doped tissue and brushing through with thin dope or thinners. The window frames may be made from $\frac{3}{32}$ " wide strips of coloured tissue, doped over the celluloid. Drill the celluloid carefully for the front wing dowel—use a pointed needle file or small drill bit to avoid splitting the celluloid. Add the dowels, tail platforms, and sub-fin and skid. Cut the rudder trim-tab free and hinge it with tissue or fine wire. Glue the fin onto the tailplane—check that it is straight and true. The tail unit is held in place by rubber bands which go under the fuselage in front of the tail. Keys (cut from dowel) can be glued onto the tail, to positively locate it on its platforms. Finally, put your name and address on the model.

Flying
The completed model should balance on or just in front of the main spar. Add ballast if necessary, (or move the tank back or forward). Choose a calm day, and long grass if possible, for the first flights. Trim the glide first—pack up the tailplane T.E. if the model dives, or the L.E. if it stalls. The original model climbs and glides to the left, with $\frac{1}{4}$ " left rudder tab. Allow yourself plenty of room downwind when making powered flights, and use a fairly low throttle setting.



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