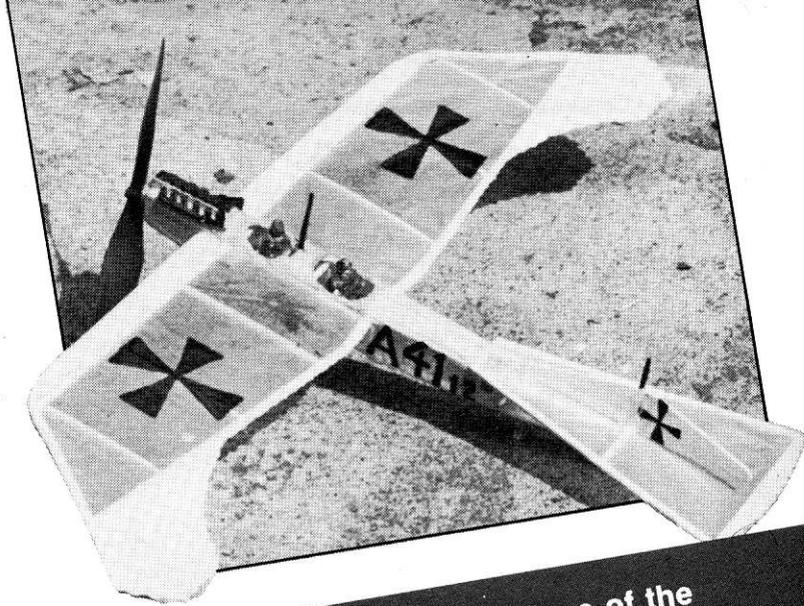


Rumpler Taube



Build this Peanut Scale model of the Rumpler 'Taube' (Dove) based on those of the Imperial German military aviation service around 1914. Original 'Taubes' had a wingspan of 47ft and a weight of 1918 lbs, ours designed by Brian Faulkner has a span of 13 ins and weighs considerably less!

THIS DESIGN has been developed to give long flights and utilises a light airframe which is covered with jap tissue on the fuselage and single surface wing and tail.

Start by selecting light balsa wood sheet 1/16in. thick, this will be suitable for the wing leading edge.

Carefully cut the leading edge 1/8in. wide using a steel rule and sharp razor blade. Now cut out the trailing edge and use a balsa knife to scallop the rear to give the World War 1 'wire doped' appearance. Wing ribs are cut from light, stiff 1/16in. sheet using a 1/32in. ply template, slicing them to be 1/16in. deep. Build the wing using a flat board, using a cyano or indoor cement (Joyplane H.M.G. old type balsa cement thinned down with acetate). Do not use glue which will 'pull' and distort the structure. Cut and glue on the sheet pieces at the rear tips using quarter grained 1/32in. sheet, note the grain direction.

After slicing the fuselage longerons from sheet, or using 1/16 x 1/16in. balsa strip, sand down to 3/64in. square using a fine sandpaper block. After pinning the plan to a flat board lay a thin polythene sheet over it to prevent glue sticking to the paper. Now build as in section AA to form the turtle deck, then glue on the 1/32in. sheet turtle deck. Cut out the cockpits. Make the eight tapered stringers from 1/32in. sheet and glue in place, spacing equally about the centreline.

The dummy engine can be made from soft block balsa, start with the crankcase then add the cylinders from rounded strip, finally glue on the exhaust stub pipes and manifold.

Cut the wing in half at the centre, then carefully locate below the top longerons as shown on the plan with two 1/16in. sq. packers at the upper side of the trailing edge to give 1/16 in incidence. A dihedral of 1/4in. under each wing tip is to be built in.

Build the tailplane in a similar manner to the wing and cement above the top longeron. Cut out and glue on the 1/32in. sheet top and bottom rudders.

Above, this sparrow's view of the peanut 'Taube' gives some idea of the good 'eye-ball' scale achieved with simple materials.

Using fine piano wire, make the undercarriage, and solder after binding with fuse wire at 'B'. Make the wheels, add a small centre tube, then the 1/32in. spokes, sand the rim to a round tyre section. Fit the wheels and solder a small washer or ring of fuse wire to the end of the hub. Protect the wheel with wet paper whilst soldering.

Fix the undercarriage to the fuselage, secure with five minute epoxy glue. Add thin bamboo or balsa strips to the undercarriage legs and epoxy in place.

Cover the wings and tail with white tissue on top. It is advisable to cover the fuselage with jap tissue (white) before fitting the wings.

Water shrink and dope the fuselage, but not the wing or tail.

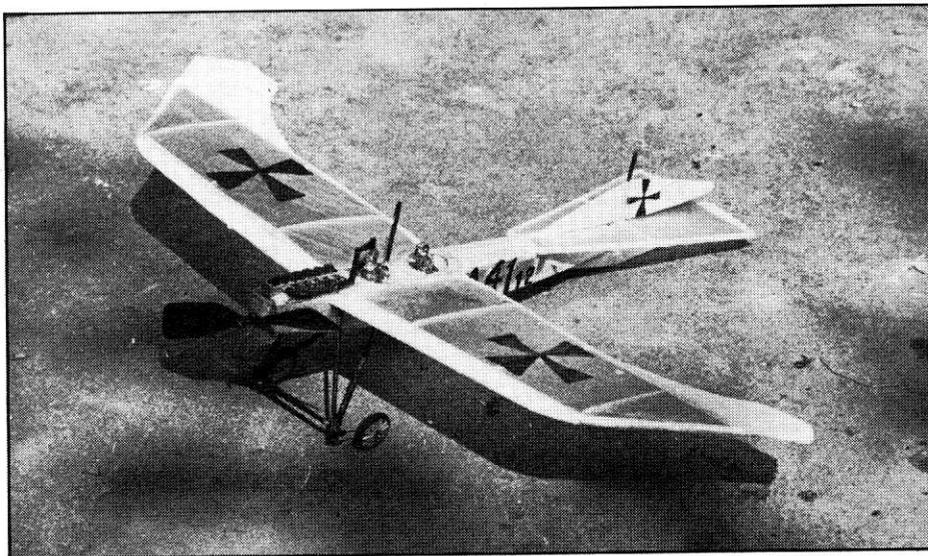
Dope on the crosses and A.41 12 numbers using thinned black dope (or black tissue cut outs). Make a balsa nose block, then epoxy in place. Paint the crankcase silver and the cylinder with exhaust black.

Flying

Careful trimming will be necessary to obtain long flights. The best trim on the original was obtained by using left rudder, giving a 15 foot circle to the left. Down thrust will be needed to control the climb. Carefully bend the 1/32in. sheet wing trailing edge 'flaps' to control the turns, they will act in a similar fashion to ailerons to prevent spinning-in under power.

Only trial and error will give the best trim, tight turns are readily achieved for small halls or a straighter pattern for outdoors in calm weather.

Don't forget to make the pilot and 'General' from polystyrene to give that touch of the 1914 - 1915 period.



Left, build them light to fly them high? A little attention to such detail as the spoked wheels enhances the looks of this good flyer..