

Anita



A Tough Racy Little Free Flight Biplane for 0.5 – 0.8cc Engines. Designed by Brian Peckham.

For sport flying, nothing can surpass the appeal of the well-proportioned biplane. They are extremely compact, rugged and easy to transport. Unfortunately, they are frequently unduly complicated to construct, and this factor discourages many potential builders.

If you are one of these, there is no longer any excuse, for here we present Anita. She is good-looking, simple and can stand any amount of rough treatment. Her flying manners are beyond reproach and when fitted with a 0.5 c.c. diesel she will provide some very pretty flying. For those who prefer a hotter performance, one of the new 0.049 glow engines will fill the bill exactly.

Construction: Commence by cutting the fuselage sides from 1/16 in. medium sheet, marking the positions of the formers and adding pieces of 1/8 in. sq. to the nose and tail where shown. Cut all formers from 3/32 in. sheet, except F. 1 and F.3, which are from 1/16 in. ply, checking that the engine bearers are correctly spaced for the engine to be used. Bend the undercarriage from 14 S.W.G. wire and sew with strong thread to F.3. Cut the wing struts from 1/16 in. ply and cement to F.2 and F.3.

Before assembly of the fuselage steam the sides to help negotiate the double curvature of the fuselage. Start by assembling the sides with F.4, F.5 and F.6, then add the rest of the formers beginning at the rear end. Fit the engine bearers, checking the side-thrust carefully. Add 1/8 in. sq. along the top of the formers.

Now fit the gusset pieces and wing and tailplane dowels.

Plank the fuselage top with 1/4 x 1/16 in., using 1/16 in. sheet for the underside. Tack cement in position the cowling pieces and sand the entire fuselage smooth, shaping the cowling externally. Face the top of F.7 with acetate sheet, cut two pieces of 1/8 in. dowel and attach these to the wing struts with strips of linen, adding 1/4 x 1/16 in. balsa either side of the strut, and sand to a streamline section. Similarly attach two pieces of 1/8 in. sheet to the undercarriage legs as a fairing.

Remove the cowling and hollow internally. Cut the holes for the needle valve and compression screw'. Drill the engine bearers and fit the bolts. Solder a small piece of wire across the bolt heads to prevent their turning and cement the top half of the cowling in position.

Cover the fuselage with lightweight Modelspan and give several coats of sanding sealer, sanding between each coat. Finish with two coats of colour dope and one coat of fuel proofer. Cement the windshield in position and bend the tailskid from 20 S.W.G. wire. Bind the skid to a piece of scrap 1/4 in. sheet and cement in position. The wheels are retained by washers soldered in position.

The wing construction is quite straightforward, all four panels being built directly on the plan. Cut out the dihedral braces from 1/16 in. ply and cement the spars to them carefully, checking the dihedral. Sand smooth and cover with lightweight Modelspan, doped three coats of 50/50 dope and thinners.

The fin is simply cut from 1/8 in. sheet and sanded to a streamline section. Drill a 3/16 in. dia. hole for the tailplane retaining bands and reinforce it with acetate sheet. Finish as for the fuselage.

Tailplane construction is similar to the wing, except that the leading edge is made from two pieces of 1/8 x 1/4 in. balsa set on edge to facilitate bending. Check that both 1/8 in. center ribs are vertical and provide a good fit for the fin. The trailing edge is cut from 1/8 in. sheet, and the tips from 1/4 in. sheet, add the blocks adjacent to T.2 and sand them to shape.

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Cover with lightweight Modelspan and dope as for the wing. Cut a slot in the tissue, for the fin and add the fairing block. Sand to shape to fair neatly into the fuselage and finally fit a 1/8 in. dowel peg to locate with the hole to be drilled in F.7. Check that the tailplane seats square on the fuselage, before cementing the fin in position.

Flying: Before flying, balance the model by supporting it at the point indicated on the plan. Add weights until the fuselage remains horizontal. The glide should be fairly fast and flat. Aim for a gentle turn to the right on the glide, this being accomplished by carefully warping the trailing edge of the rudder. The model should also turn to the right under power. Be sure to carry out initial power tests with the motor throttled well back.

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