

between the leading and trailing edge sheeting. Glue in all capstrips between the leading and trailing edge. Glue the bottom main spar and the trailing edge spar to the sheeting. Position and glue all the ribs to the bottom capstrips and to the trailing edge sheeting. **NOTE:** it is important to align rib W1 square to the building board. Insert and glue in the top main spar. The leading edge sub-spar is cut from 3/16" balsa sheet. Sand this spar on angle so it will follow the contour of the ribs, then glue this leading edge sub-spar to the ribs. Pull up the bottom leading edge sheeting and glue it to the bottom of the ribs and to the leading edge sub-spar. Next, glue the four balsa blocks to the trailing edge sheeting that are used to attach the elevon hinges. Cut four carbon fiber tubes to the indicated lengths. Use balsa scrap pieces to plug the tubes at both ends. This is done so that water cannot enter the wing when operating from water. Insert and glue the carbon fiber tubes to the ribs.

Glue on the top main spar, then the top trailing edge and leading edge sheeting. Glue a hardwood block to rib W1 as shown on the plan. This block is used to secure the screw for the "L" shape metal bracket, which is employed to hold the wing to the fuselage. Glue on the sheeting between the leading and trailing edge over ribs W1 and W2 and W6 and W7. Glue on all top capstrips and the leading edge capstrip. Sand the wing.

Build the other half of the wing using the same process.

The engine nacelle, pylon, and fin are built next. Cut out the four nacelle side pieces. The balsa grain of the rear section of the nacelle side is horizontal. Front section is vertical to make bending easier. Cut out the firewall (F12) and the front plywood ring (F13). Drill holes in the firewall for the engine mount, the fuel lines, and for the throttle's NyRod tube. Glue 1/2" triangular stock to the nacelle sides. Use a razor saw to make a series of cuts into the triangular stock approximately 7/16" deep and 1/2" apart. This will make bending of the sides in the front much easier when gluing the plywood ring in place. Glue the firewall between the nacelle sides. Glue on the top and bottom sheeting. Glue the plywood ring to the front of the nacelle and sand the nacelle to shape. Cut out a square hole for the spruce post in the bottom of the nacelle as indicated on the plans.

The pylon is made in two halves, left and right, to be glued together in a later step. First make the post for each half of the fin. Use two 1/4" x 1/4" spruce sticks glued together to create a 1/4" x 1/2" post. Cut the post to length and pin it to the building board. Glue the bottom rib F11 and top rib F10 to this post directly over the plan. Make certain that both ribs accurately line up with the drawing. Glue the leading edge and the trailing edge of the fin to the ribs and then glue on the sheeting.

Carefully trace the pylon plan onto light paper. Turn the paper over and make sure you can see your traced lines through it. Pin the light paper to the board and build the second side of the pylon over it. Glue the two pylon sides together and run the NyRod throttle tubing through the notches in the top and bottom ribs. Glue on leading edge capstrip, then sand the pylon.

At the bottom of the nacelle, cut a slot for NyRod throttle tubing. Feed the NyRod into this hole and the hole in the firewall so that the tube protrudes into the engine compartment. Glue the nacelle to the pylon rib F11 and the fin's post to the back of the firewall. Glue the fin to the top of the nacelle.

Now for the fuselage: Glue two 1/8" thick and 3" wide balsa sheets together to create one 6" wide sheet. On this sheet, transfer the outline for the fuselage sides, centerline and positions of all the formers, and the square holes for plywood boxes. Cut out the sides. In the fuselage sides, cut out the two square holes for the plywood boxes. On the inside of each fuselage side, glue the plywood doubler that is used to hold the landing gear block. Again, on the inside of the fuselage sides, glue in the 1/2" triangular balsa stock and the 1/4" x 1/4" balsa longerons.

In the radio compartment area, glue in the short 1/4" x 1/4" balsa sticks that will give support to the radio compartment walls. Pin one fuselage side to the building board and position formers F3 to F9 in their indicated location. Using a square for alignment, glue these formers to the fuselage side. **Note:** Former F3 must have 5/32" i.d. brass tubing attached using epoxy and thread. This tubing will accept the nose gear wire. (An accessory nose gear mount could also be used.) You will need to cut a hole in the bottom sheeting to install the nosewheel strut. Be sure to cover this hole with packaging tape before flying from water. Next, align and glue the other fuselage side to these formers. Re-position and pin the fuselage over the fuselage centerline as indicated on the drawing and glue in formers F1 and F2. Next, the square plywood boxes are inserted into their holes and both wing halves plugged into them. Check alignment and then glue the boxes to the fuselage side and to the formers F7 and F9. Unplug the wings and feed the NyRod tubes used for rudder and elevons and the tube for the receiver antenna through the holes in the formers.

Designed by:

Laddie Mikulasko

TYPE AIRCRAFT

Amphibious Delta

WINGSPAN

44-1/2 Inches

WING CHORD

30 Inches

TOTAL WING AREA

801 Sq. In.

WING LOCATION

Mid Wing

AIRFOIL

Symmetrical

WING PLANFORM

Delta

DIHEDRAL, EACH TIP

0

OVERALL FUSELAGE LENGTH

52 Inches

RADIO COMPARTMENT SIZE

9" (L) x 5" (W) x 5" (H)

VERTICAL FIN HEIGHT

13 Inches

VERTICAL FIN WIDTH (inc. rud.)

11-1/2 Inches

REC. ENGINE SIZE

.35-.60 2-Stroke

FUEL TANK SIZE

10 Oz.

OPTIONAL LANDING GEAR

Tricycle

REC. NO. OF CHANNELS

4

CONTROL FUNCTIONS

Rud., Elev., Throt., Ail.

C.G. (from L.E.)

10-1/2 Inches

ELEVATOR THROWS

5/8" Up - 5/8" Down

AILERON THROWS

3/8" Up - 3/8" Down

RUDDER THROWS

1" Left - 1" Right

SIDETHRUST

-

DOWNTHRUST/UPTHRUST

-

BASIC MATERIALS USED IN CONSTRUCTION

Fuselage Balsa & Ply

Wing Balsa, Ply & Spruce

Empennage Balsa

Wt. Ready To Fly 88 Oz. (5 Lbs. 8 Oz.)

Wing Loading 16 Oz./Sq. Ft.