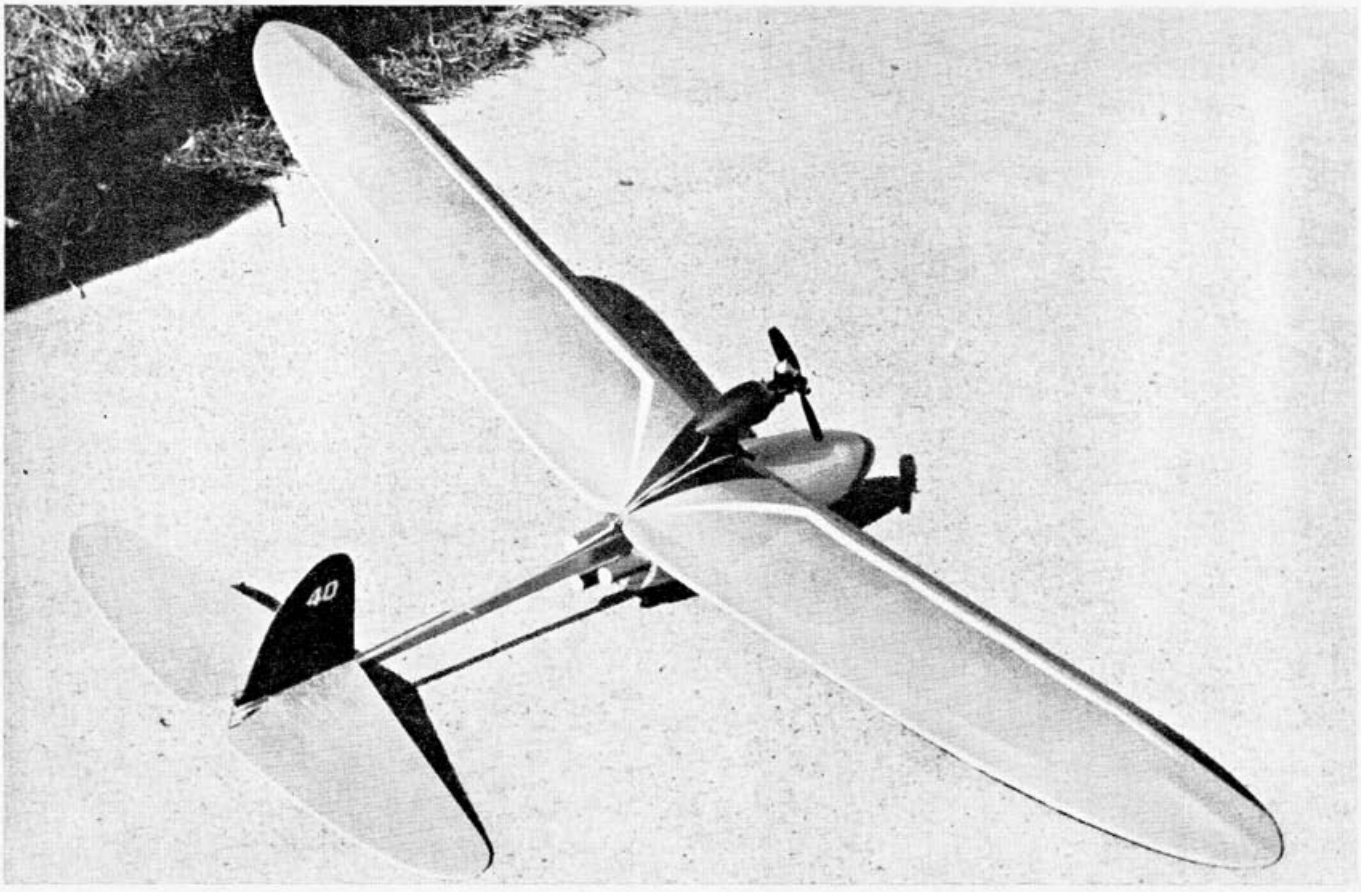


JAVA JOE

By Fred Angel

Sit back, relax, and have a cup of coffee. As a matter of fact, have four . . . and save the styrofoam cups for this R/C sport glider!

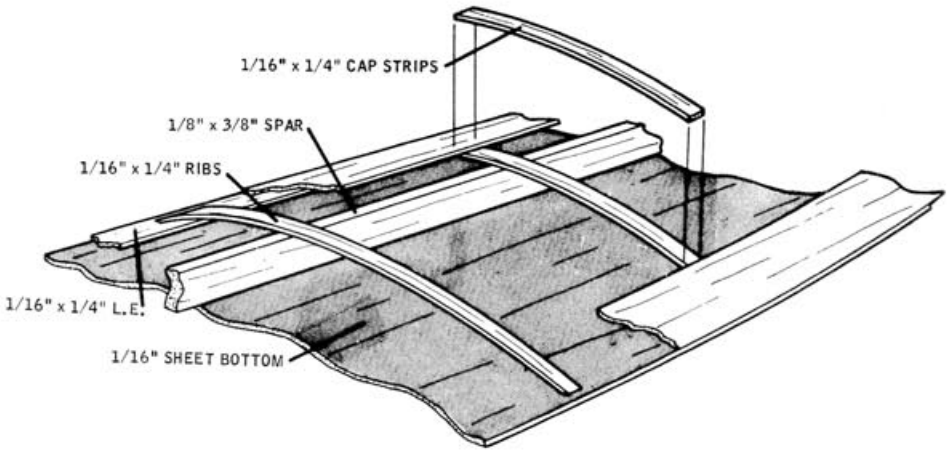
PART of the make-up of a modeler requires that he be dedicated, a natural hoarder, and obsessed with the idea that everything that crosses his path can be used to build or tinker with!

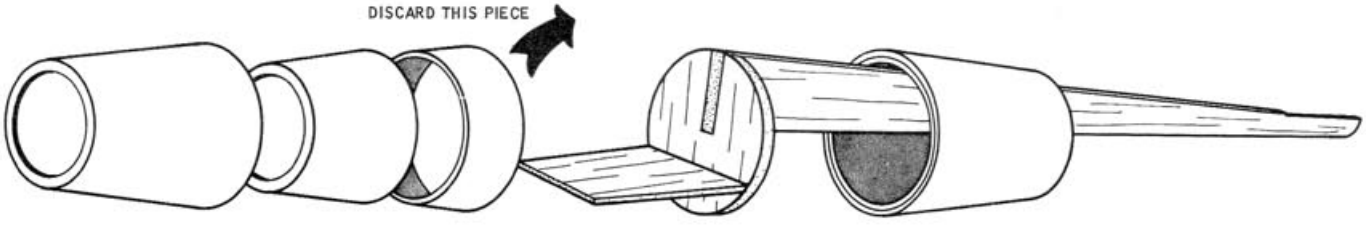
This is how "Java Joe" evolved – two coffees to go and WHAM – a ready-made body, light, strong and fast to build. Fourteen cups later, the model was test flown. Anxious to get it in the air, we removed the prop, glued some colored yarn inside the dummy exhaust tubes and catapulted it, using a large loop of ¼" rubber tied between two sticks. With the yarn streaming out the back, "Joe" looked like a jet-glider. Never heard of one before, but what the heck!

With the Cox .010 up on the pod, it is a pleasure to fly. Basic equipment used in test flying was the C&S 505 and a Mark V Septalette. "Joe" is just the right model for the Juniors in R/C and the low cost makes it an ideal club project.

Construction is easier than many of the "beginner" models. Even the wing deviates from the standard cut-out rib and stringer assembly. Start the wing by tracing the outline on 1/16" medium balsa. Cut this out and use it as a pattern for the opposite side and for the top sheeting. Glue the spar and leading edge strip in place. Cut rib strips from 1/16" and pin over spar as shown on the plan. We admit that this

is not a very scientific airfoil, but it works. Glue the leading and trailing edge top sheeting in place and cap over the ribs with another strip. Build the engine pod and pylon as shown. Before gluing the pod fairings in place, make sure you provide for engine thrust adjustments. Use the wing root as a guide and trace out two root ribs from ⅛" balsa. Glue to each side of the pylon then attach the wing halves with





the correct dihedral. We used epoxy glue on this assembly.

Stab and rudder are cut from medium 1/16" sheet and glued together. Sub rudders can be used under the stab to reinforce the outer edges.

The fuselage is fun to build. First buy a package of styrofoam coffee cups from your local Discount Store or Super Market. These come packaged in a polyethylene bag and you get two dozen for about thirty-nine cents. Or you can order four cups of coffee from your favorite hang-out. Chances are they will have these cups, and after drinking all this brew, you'll spend your evening in bed tossing and turning . . . but you will have the basic body parts! Glue two sets of double cups together. Once again we used epoxy, although white glue will do as long as you use thin coats. These cups nestle snugly inside each other. Trim the front off even and use the open end as a tracing guide for the round 1/4" former. We wasted another cup by splitting it in half the long way and used it as a jig for the sub-floor located in the forward section. Cut the boom from 1/4" hard balsa, sand to shape, and glue the boom and crutch together as shown. The two cup sections are glued to the round former with epoxy glue. The ridge around the mouth of the cups can be sanded smooth when dry.

Glue the nose pieces to the front of the cup, keel to the bottom, and wing saddle to the top. Glue the rudder and stab to the boom and give everything a final light sanding including the cups.

Some of these cups have a glossy, wax-like coating and paint does not adhere to it. There are two methods of finishing the body. First, you can coat the entire structure with Hobby-Poxy Glue. While still tacky, wet your fingers with water and work to a smooth finish. Sand and finish when dry. The second method is to paint on a coat of white glue which has been thinned with water, then follow up with standard doping techniques. The wing is covered with light-weight silkspan and three coats of dope brushed on. Color and trim is best applied by spraying. The stab, rudder and boom were also clear and color doped.

Cut out the hatch and install your equipment. You will find that a set of pen cells just fit nicely into the forward section. The model is extremely light so pick a nice calm day for testing. Balance as shown. We needed a little weight in the tail so we put clay in one of the dummy tubes. If incidence settings have to be adjusted, shim the wing on the saddle.

You'll enjoy "Java Joe" and when you stop for your coffee break, keep your eye out for him . . . last Sunday we found him edging over to a cute little bit of French pastry!