

• George Owl is a well-known race plane designer who is not constrained by what everyone else is doing in race plane design. As a consequence, the Owl does not have helmet cowls like most of the others. There is a good 3-view of the Owl in the 1970 *Racing Planes Annual* by Reed Kinert, on page 62. The real plane is white with metallic green trim, and our model is of the airplane when it was owned and flown by John and Joan Alford and was named "Pogo."

Construction of the model follows conventional techniques. It was built with scale tail surfaces, which may appear to be small, but are entirely adequate. The model was built with a symmetrical airfoil section on the wings. There is no pitching moment due to the airfoil camber line, so if the center of gravity is kept fairly well forward, the wing will have no unstable tendencies. In fact, with a little reflex at the trailing edge it could be flown as a flying wing. The horizontal tail then can be used as a trimming device, and is not really required for stability. Of course, it contributes to the stability as well.

There is nothing very difficult about building the structure of the model, but I will admit that the color trim takes quite a bit of time. The model was covered with white tissue, then given two coats of clear nitrate dope. The green trim color is put on using a Staedtler Lumocolor 357 permanent felt pen. These pens are made to be used on clear acetate sheet to make colored view graphs, and the colors are beautifully transparent. They go on doped surfaces with ease and are waterproof and permanent.

They do take a good deal of care to get the trim colors on exactly in the right place. Something to guide the pens is essential, but on the curved surfaces, rulers or drafting triangles are too stiff to work well. I used some fairly soft vinyl sheeting to make straightedges and curves which will conform to the surfaces of the model. I obtained the vinyl sheet from a pocket protector which is used to carry pens in your shirt pocket. The material is thick enough to guide the felt pen point and soft enough to bend around cowling corners. It can be



POGO

By WALT MOONEY . . . A fast-flying model of one of the hottest Formula One racers ever built. Demands careful building and trimming.

cut to make patterns for complex curves.

The striping, numbers and spinner are green. The glare shield forward of the canopy is black. Propeller is silver with red tips. Of course, the wheels should be flat black.

A pilot really looks nice in a model. Carve one from styrene foam or balsa and paint it with plastic model paint and install it in the cockpit before you install the canopy.

Use a thin black Staedtler (No. 317) pen to outline the flying surfaces and the area on the wing reinforced for cockpit entry. This area has a black silhouette of a barefoot print to indicate its use.

Now that we've discussed the final touches, we'll touch on the construction of a few areas that are worth noting.

First, the fuselage is narrower at the bottom than the top. The cowl is carved to shape from solid blocks cemented in place on the basic framework. Aft of the cowl, the top decking is 1/32 sheet balsa. One piece is used from the cowl to the aft end of the cockpit. Two pieces are required in the headrest area, one to do the basic top fuselage and the second to make the headrest portion. And finally, one last piece for the aft end of the

fuselage.

The wings have a symmetrical airfoil. This means that the leading and trailing edges would have to be set up above the plan during assembly if the conventional sheet ribs notched for spars were used. With sliced rib construction the wing can be started with the leading and trailing edges pinned to the plans. Install one side of the ribs, cementing them to the leading and trailing edges. When dry, remove from the plan, cement the spars in place, and then install the other side of the ribs. Wing tips are carved from soft balsa blocks.

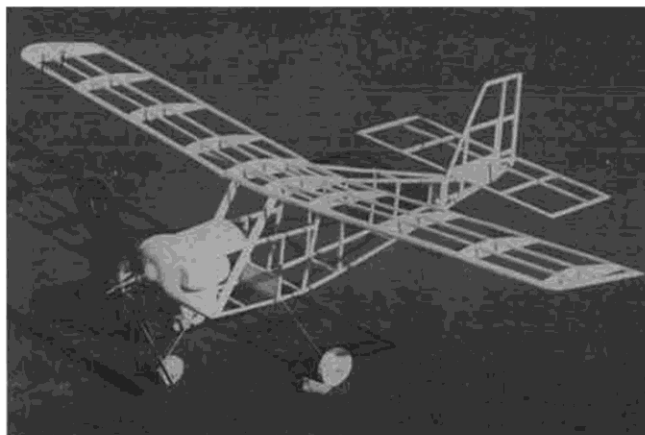
A plastic propeller six inches in diameter and a nylon thrust bearing (both available from Peck-Polymers) are used.

The model in the photos weighs 1 oz. exactly with a loop of 3/16 rubber ten inches long. It will fly quite well on this power. If you really concentrate on keeping it lighter, it can probably be built for a total weight of 3/4 of an ounce and fly on 1/8 rubber.

Have fun with your Pogo Racer. •



"Pogo" is the name given to the Owl Racer when it was owned by John and Joan Alford. Color is white with metallic green trim.



Walt's next Peanut will be the Aerosport Quail. He'll do a "glue part A to part B" article on it, as it's a good beginner's model.