## Pee Wee Pup

semily. The model is capable of doing a pretry good stunt pattern when fitted with a standard major.

The Joy Products Co. evolved into the Balsa USA Co. that we know today. What is interesting is the fact that Ron Busch, the president of Balsa USA today, was just an applyee in the back room of Joy Products putting together all these fine kits of long ago. This article was only possible because of his enthusiastic help and providing elementary drawings of these early designs.

## **Building instructions**

The two models are similar and these construction notes apply to both designs. Start construction with the fuselage. The fuselage should be made from 1/4-inch medium to hard balsa for maximum durability. Mark and then saw out to size. The cutout for the wing should be made to match the material chosen for the wing. As noted on the field of the drawing, the original kit contained 3/2-inch sheet balsa for the wing which is a minimum size material for the application. It is suggested that hand launch glider stock be used instead. This is commercially available and has the airfoil nicely shaped and ready to go. It is available in both 3- and 4-inch widths to accommodate these designs.

Always remember that in working with control line models one has to keep the angle between the wing and the horizontal tail at 0 degrees or upright vs. inverted flight will be different. This angle can be checked with an incidence meter.

Cut out the wing to the shape shown on the plan and sand it all over to a smooth finish. Drill a small locating hole where the bellcrank goes and glue the 1/16-inch ply reinforcements to the top and bottom. Cut out the lead-out guide and relieve cut the wing to receive it on the inboard wing panel.

Make up the appropriate motor mount and its accompanying back-up blocks to accommodate the landing gear wire. The *Pup* motor mount requires a relief cut to attach it on the fuselage. This cut is best done with a razor saw and then routed out to fit the depth shown on the plan. Install the landing gear and glue up the motor mount and its back-up blocks.

Now install the wing and glue it securely while checking the alignment carefully. Cut out the tail surfaces and assemble the stabilizer to the elevator with polyester dress lining cloth hinges. This material is obtainable at cloth and sewing shops and does not rot like old time cotton hinges that have been the standard for years.

Pre-dope the finish sanded surfaces with several coats of dope before attempting to attach the hinges. Glue the tail surfaces on when the hinges are completed. The vertical fin is glued on with a 1/s-inch offset to help hold

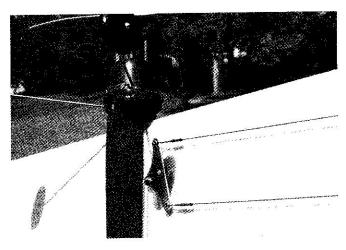
the model to the outside of the flying circle.

Mount the bellcrank and bend up a pushrod to fit with the controls in the neutral position. Lead-out wires can also be made up at this time but do not finish the flying wire attach ends as all the control system will need to be removed for painting. Make provisions for mounting a separate gas tank at this time if one is to be used. Although the *Pup* did not have a tailskid, probably to keep that 75 cent price tag, one is recommended.

Finish the model to suit, but the kit box trim details are recommended to retain the full flavor of the era. Speaking of retaining the original aura of the model, one can use any wheels to suit but the unique wood wheels shown on the plan really set the plane apart. You might take the time to duplicate this style of wheel if you agree.

In reality, most people will use a Cox Babe Bee engine and not one of those shown on the plan. Just be sure to balance the model where it is shown in the side view for best results. A high performance contemporary engine is not recommended for these older designs due to their small size.

After finishing the model, re-install the control system and finish up the lead-out wires. Fly the model on 25- to 37-foot lines of Kevlar® or high tech fishing line for best results. I have had a lot of fun with these models from my childhood, and you will too.



Both the *Pursuit* and the *Pup* were equipped (above left) with the metal Perfect #223 large bellcrank, which is available from Brodak. The original *Pup* (above right) did not have a tail skid but Bill added one, as he also did for the *Pursuit*,



made from .032 wire. Bill has a vintage RR-1 on his *Pursuit* (below left), but any good reed valve ½A will fly it fine. He also favors cloth hinges (below right), but suggests you use polyester dress material, instead of the traditional cotton cloth.

