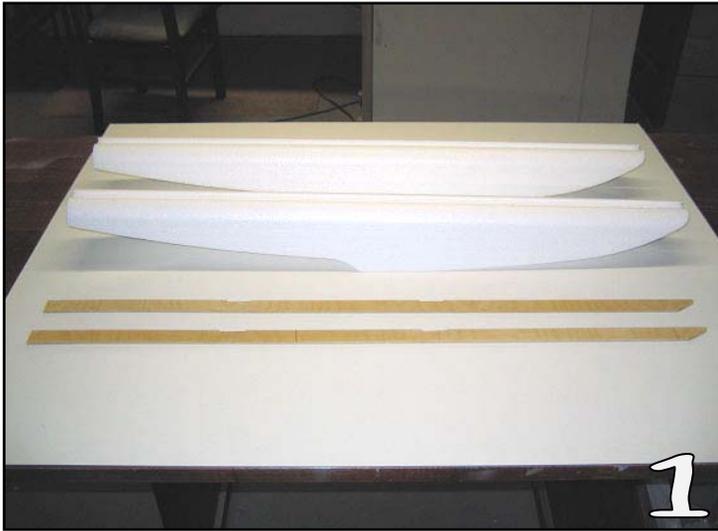


# Float's by Jim Held

The floats being finished are 34" in length for use on the Sig "Something Extra."



Included with the floats are the vertical spars to strengthen the floats. Insert the spar into the pre-cut openings and mark the curve at the front. Remove and cut the spar to shape. Use Titebond II Wood Glue to glue the spars into the slots. Put glue on both sides of the spars and they will slide right in. Keep the tops even with the top of the groove. Clean up any excess glue.



Hard attachment points are made from 1/4" aircraft plywood. Cut 4 pieces 3/4" wide and 4 inches long. The nylon attachment points are Du-Bro Part #156 Nylon Nose gear Blocks for 5/32" wire. Center the nylon blocks on the 4" plywood and drill 3/32" holes. Mount the blocks with No. 6 x 1/2 screws. To position the blocks, measure back 14" from the float tip and mark and then measure back 10" and mark. These marks are the location for the nylon blocks and will position the float step 1 inch behind the

CG or center of gravity on the Sig Something Extra. Next you will need two 1/4" x 3/4" x 36" balsa strips to fill the remaining space along the top of the floats. Cut these to fit keeping the blocks at the correct position. I used Elmers Ultimate Polyurethane glue to attach everything into the top. Spray a light mist of water on the surface to be glued. Don't use too much glue as it expands as it cures. This will provide a strong bond with the vertical spar below. Weight the top of the spars as the glue cures.



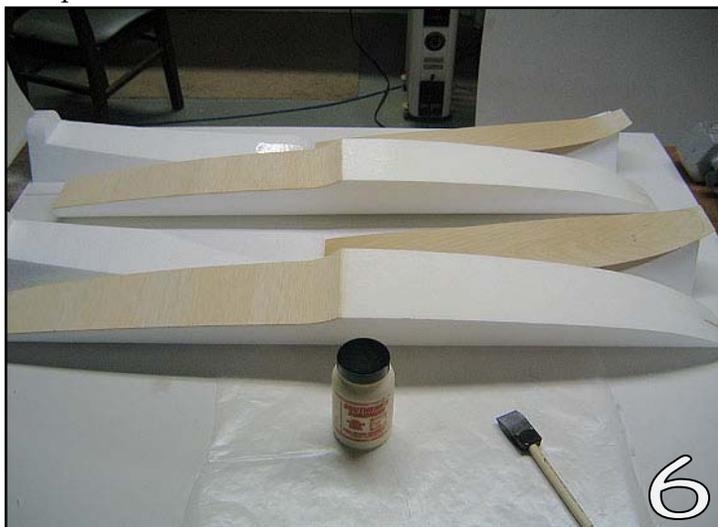
Next step is to make the bottoms. I used 1/16" balsa sheet for behind the step and 1/32 aircraft plywood from the step forward. Cut 4" 1/16 balsa sheet and join 4 sections to form the bottom rears. Make 2. Use Red Devil Onetime lightweight spackling to fill all the little imperfections in the foam on the bottom only at this time. Sand smooth and the bottoms are ready to attach the sheeting. By filling the bottoms and making them smooth will prevent the glue or epoxy from adding excess weight when installing the bottoms.



Use Dave Brown Sorghum for sheeting the bottoms. Sorghum is commonly used for sheeting foam wings and is available at the hobby shop. Sorghum is a contact cement and easy to use. Coat both surfaces with Sorghum using a foam brush and allow to dry before attaching. Place wax paper between the surfaces while you align them and then pull the wax paper out slowly as you allow the surfaces to make contact. Once contact is made you can't move them. You could also use epoxy but I really like the Sorghum.

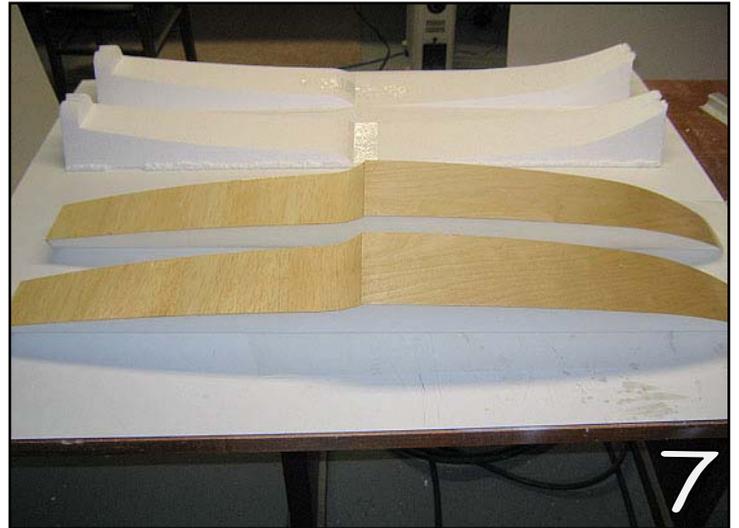


Make a template for the shape of the bottom front and cut the 1/32" aircraft plywood to shape. Soak the front of the plywood in warm water for a few minutes and then place between the float and the bottom form to dry. When dry it will be curved as in above photo and is very easy to attach using the Sorghum. Sand the front plywood edges flush with the foam sides and round the tip to conform to the shape of the foam.



Apply Sorghum to both surfaces and allow to dry one hour and then using waxed paper attach as you

did on the rear balsa sheet. Sandwich the plywood between the float and cradle with weights on top while the Sorghum dries and bonds. Note that the aft balsa has been sanded to the contour of the side of the floats.



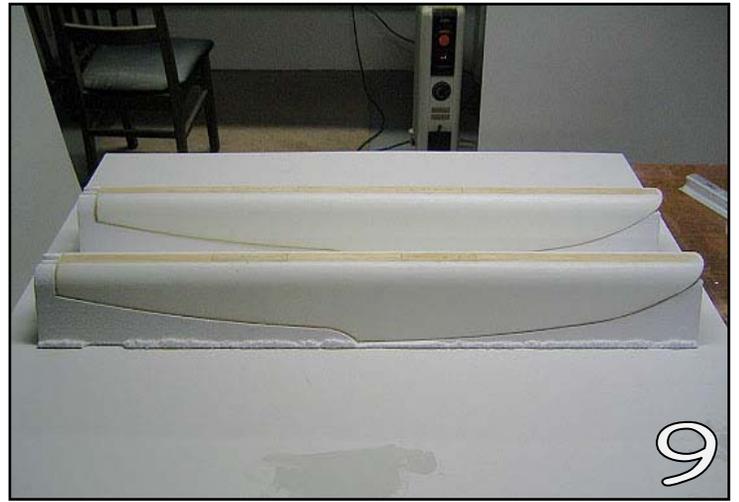
Finish sand the bottom surface with 220 grit and apply the first coat of Pacer Z-Poxy Finishing Resin PT-40. This resin should be mixed 1 to 1 and then thinned with 91% Isopropyl alcohol. I like to add an amount equal to 1 part so you end up with 1/3 to 1/3 to 1/3. Don't add the alcohol until you have mixed the epoxy. Apply with a 1" foam brush but don't leave any excess epoxy on the surface. Excess can be removed with a playing card or a piece of soft foam like the brush. Now it's time to work on the white foam top surface by coating it with the lightweight spackling to fill all the small imperfections. Add some water to the spackling to make a solution that can be applied with a foam brush. Two or three applications may be necessary to obtain a nice smooth surface. Sand between coats until you are satisfied with the surface. I use a flat sanding bar with 220 grit when the spackle has dried, this is a very quick process. It should take no more that 2 minutes for each float. Keep working because the results are going to be fantastic!.



I like to use 1 1/2 oz glass cloth and Z-Poxy finishing resin on the tops. Cut the glass to an oversized shape and smooth out all the wrinkles with a regular paint brush. Apply the finishing resin with a foam brush using the same mixture we used on the



bottom. It takes about  $\frac{1}{2}$  oz. of resin for each float top and I only do one at a time which gives me plenty of time to remove any excess epoxy. After the resin is dry it is easy to trim the glass with a new single sided razor blade. Then sand the edge to finish. Lightly sand the resin with 220 grit to remove any rough spots. Wipe with a tack cloth and apply a second coat of Z-poxy and remove the excess to keep the floats light. If you have kept the first two coats light you may want to do a third coat for a really smooth finish.



The almost finished floats are ready for primer and paint but I'm going to wait for spring to do that. The weight of each float is 8oz. after glassing. I have already used a set of these floats on my Something Extra and the results were outstanding. No water rudder was necessary on mine but is certainly an option if you want to add one. The flat bottom float and the large air rudder on the Something Extra make control on the water very easy. Because the floats are exceptionally light, you can fly the Something Extra the same as you would without them. The floats don't diminish the aerobatic performance of the plane. Enjoy!!

Jim Held