Laminating Balsa Outlines

By Steve Hales

From the Jan. 1996 issue of The Max Out the newsletter of the the Magnificent Mountain Men, Rick Pangell editor.

Following is a method I have used for several years now, but first a little history. Before trying to laminate balsa I read everything I could find on how to do it. The accepted method was to first soak your strips in ammonia, then attach to the form and let it dry. After it dries, glue each strip together. I did this and found that it was a real chore using water based glues as the strips would open up and would have to be reattached to the form. Also on light balsa the glue would be hard to sand compared to the balsa.

Then I started using Cyano-acrylate glues while the balsa was still on the form. Boy did this make them hard to sand, added a lot of weight, and half the time I glued the darned thing to the form even though I protected it with wax. But it was faster!

After all this experimenting I decided that what I needed was a one step soaking/gluing process to make laminating much easier. So I started testing all of the waterbased glues for compatibility with ammonia. Most of the glues would curdle in ammonia, but I finally found one that would dissolve! After most experimenting I found that it didn't destroy the glue and after the ammonia evaporated it would still bond the wood together. This was perfect! The glue is Wilhold Industrial Grade Woodworking Glue. It is a white glue in a bottle with red lettering. It looks very much like all of the other white glues.

Instructions:

- Get everything ready to laminate, cut strips, etc.
- Mix a small batch of ammonia and glue to a water consistency.
- Take a paintbrush and liberally paint the mixture onto the strips.
- Wrap and attach the strips to your form and let it dry.
- Take them off the form and install on your model!
- Benefits:
- The ammonia dries faster than water.