

# My Finishing Techniques

by Gene Smith

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When Dave asked me to write an article for the Cactus Squadron newsletter on my finishing technique, I felt like a high school physics teacher being asked to comment on the theory of relativity when Albert Einstein was a member of the group. There is no doubt that Bob Schlosberg is the Einstein of free flight scale model finishing. Anything less than one of his finishes is a compromise in quality.

That said, here is my compromise. I pre-shrink and pre-finish the tissue on pine frames. If the fuselage is basically square, the fuselage is also covered in the pre finished tissue. If the fuselage has compound curves, I still pre-shrink the tissue on frames but spray the color after covering the fuselage. Be sure to sand the framework to your satisfaction (tissue and dope will not hide any bumps). I do not pre-dope any of the structure.

Select the Japanese tissue of your choice. I try to start with tissue close to the color I want for the plane and use Floquil Model Paints to accentuate that color. I have two frames of 1/2" by 1" pine. Each frame is the size of a half sheet of tissue. The edge of the tissue is doped to the frame with the shiny side of paper up. When the dope has dried, shrink the tissue with water or rubbing alcohol spray. This procedure takes most, but not all of the shrink out of the tissue.

When the tissue is dry, I spray on two or three light coats of the accent color. This makes the whites whiter and helps prevent reds from fading. Sounds like an ad for a laundry detergent! Ha! I am not trying to get an opaque finish. I want just enough pigment to accentuate the color. Let the color dry 24 hours. This removes most, but not all, of the shrink from the dope. The tissue will be nice and tight on the frame. It is tempting to apply flat framework (like tail feathers) directly to the back of the tissue while it is still on the frame. Don't do it. The tissue is under considerable tension and will warp your tail feathers. Don't ask me how I know!

I use a mix of nitrate dope and Floquil model railroad paints. The dope is thinned to spraying consistency and a small amount of Floquil added to the dope, approximately 80% dope, 20% pigment. Some people let the Floquil settle to the bottom of the Floquil bottle, pour off the diluent and use only the pigment. I have never bothered with that. I just shake up the Floquil and pour it in. If you put in too much pigment, you will have to thin the spray. If you did not put in enough, it will take an extra coat or two to get the color you want. Sometimes I add a few drops of castor oil to the mix to minimize shrinkage.

Model Master paints from Testor's also mix well with nitrate dope. They have a great selection of military colors but are more expensive than the Floquil colors. I heard that Testors bought

Floquil and immediately discontinued Floquil's aircraft color line. One way to handle the competition.

When the dope has dried, cut the tissue from the frame and apply it to the model's framework using purple UHU glue stick. Because the nitrate/color layer is so light, the tissue applies as if it were not painted. The purple color of the glue stick goes away as the glue sets. Be sure to use fresh glue stick and be compulsive about capping it after each application. It dries very rapidly and once the glue in the applicator becomes tacky instead of slick, it is harder to use. If you apply the tissue a little crooked and want to adjust it, use a small brush to apply rubbing alcohol to the offending area. It will reactivate the glue so you can reposition the tissue.

Wing struts should be covered with tissue. I do not hesitate to use the pre finished tissue for these structures. The tissue is still pliable enough to cover these surfaces. I usually cover nose blocks with unshrunk tissue and spray the color on later. If you have not already discovered it, spit works great for wrapping tissue around compound curves.

The above procedure of applying the tissue to a frame and then shrinking and doping the tissue has all but eliminated warping of the wings and tails of my models. We have a lot of humidity in Oklahoma during the summer, and dry air in the winter. These extremes combine to cause warped surfaces unless you prepare for them.

Fuselage structures are not as prone to warps. I will still preshrink the tissue on the pine frame, but spray the color after covering the fuselage if it has compound curves. Shrinking on the frame does not remove all shrink from the tissue, so you still have a little shrinkage left for getting out that last wrinkle. When you need to shrink tissue already on the model, use a light spray or mist of rubbing alcohol. If you let it sit on the tissue, it may loosen the glue stick. Quickly evaporate the alcohol with aid of a hair dryer. This lets the tissue shrink before the alcohol loosens the glue.

Be sure to save scraps of the painted tissue to use for repair patches. It saves time spent getting the spray gun out again or trying to match a mixed color.