

PAINTING A NON-GAS MODEL — SOME WEIRD STUFF!

By George White

As a relative new guy in this game, I've found myself in a constant hunt for the "best" way to finish the tissue on a model. Advice from "older boys" I respect has covered an amazingly wide range of techniques. When I first started building models again after about a half century absence, I used what I had always knew — get some SIG dope and a good brush and lay the stuff on. If the model needed color, the logical solution was to buy some colored dope and brush that on. It took me a while to figure out why models were heavier than everybody else's and somehow weren't award winning beauties.

I then reverted back to my antique car restoration background and bought a Preval sprayer from the friendly local auto parts store — I didn't want to go through the hassle of using an air brush if I didn't have to. I thinned some SIG clear dope and started spraying my models. If I needed color, I'd use Krylon spray cans. It took me a while to solve the problem of having delicate tail structures turn into pretzels and the models fly like lead sleds.

Then I read that Krylon Crystal Clear spray cans do a nice job on tissue, and I used that for quite a while. It gives a nice finish, but leaves Esaki with a bit of a rubbery texture.

Then my learned friend Al Pardue, who always produces beautiful SAM type models recommended using non-taughtening nitrate dope, available from Aircraft Spruce www.aircraftspruce.com. It reportedly does not continue to shrink after it's applied. Al gave me a formula of 25% dope, 50% dope thinner and 25% hardware store lacquer thinner. I found that mixture, sprayed with the Preval sprayer does a beautiful job with just a couple of coats, is light and leaves the tissue much more firm than Krylon. I haven't had any problems with that formula in terms of blushing, but if you do, just using 75% dope thinner might help that. If blushing continues, a few drops of retarder in the dope will do the job. Paul Grabski, a PFFT member who builds beautiful models says he uses 25% dope and 75% high gloss lacquer thinner purchased from a paint store which caters to the auto body repair business. Buy the best they have and it isn't cheap, but is probably cheaper than dope thinner. High gloss lacquer thinner is slower drying than the cheap stuff you get at the hardware store and thus is less inclined to create "blush" in high humidity.

My next adventure into painting tissue was the discovery of Floral Spray cans, available from Michael's. The stuff uses an alcohol base propellant, which IMHO smells very unpleasant. It seems to be nothing more than dye, and is probably the lightest color finish you can add to tissue. It isn't water proof, so you need an undercoat of either dope or Krylon, but you must use Krylon for any overspray to add more gloss to the finish. Dope cannot be used on top of this stuff. That creates a disadvantage when repairing if you plan on using dope as an underlay on any repair. You must carefully mask off any undamaged tissue in order to dope the new areas. Colors are

somewhat limited, but for non-scale models you can produce some brilliant colors with Floral Spray.

Then, I got hooked on FAC scale jobs. That required being able to not only build extremely light but also to have the model finished in the correct color. My first attempt at airbrushing was putting camouflage on a 24" Boulton Paul Defiant. My English friend Lindsey Smith had produced some beautiful models using Tamiya paint, which is an alcohol based paint, to be thinned with 91% isopropyl (or if you're not cheap, with their brand of thinner). It did a very nice job, although I applied it too thick and the model is heavier than it should be. I'm sure the reader of this rag has never had this happen, but I've found that models actually get damaged and need repair. Tamiya, like Floral Spray requires careful masking of any repair work. Using alcohol, acetone or dope for any repair will ruin any Tamiya paint it touches. Tamiya also seems to be a bit heavy, although I could have perhaps thinned it more than I did on the one application in which I tried it.

For two years my Oklahoma friend Gene Smith tried to convince me I should try thinning Floquil Railroad enamel with dope and thinner. That just seemed too weird to be true. "Everybody" knows that enamel and lacquer based paint do not mix! Wrong! Finally, after reading Gene's July 2007 article in Model Aviation, I decided to try it his way. In that article, Gene quoted Doug Beardsworth's formula for using Floquil as 30% Floquil, 30% of a "clear base" and 40% thinner. His clear base consisted of 40% nitrate dope and 60% thinner with a four drops of Dave Brown Products plasticizer per ounce of dope.

<http://www.dbproducts.com/store/flex.htm>

Gene says that Floquil tends to produce a flat finish, but that can be brightened a bit by a light overcoat of nitrate dope. Doug Beardsworth also said that adding more dope and less Floquil will give a slightly glossier finish. Gene Smith has been using Floquil for years, and only uses about 15% Floquil with the rest dope and thinner. Gene says that some folks pour off the dilutant in Floquil and using the only the pigment, but he found that it made no difference in the result, so he just shakes up the Floquil and uses it as it comes from the bottle.

I tried Doug Beardsworth's formula (although my "base" solution was Al Pardue's formula above) and found it sprays quite nicely. It takes very little to create a nice finish, and since it is mostly thinner the result is very light.

The only drawback in using the Floquil Model Railroad enamel is that the colors seldom exactly match some of the military colors. Gene Smith mixes his colors to get what he wants, but he also sprays some extra tissue for repair matching later.

Then I had a lengthy exchange of emails with Don Deloach, who uses the water based Floquil called Poly Scale. He lets the paint settle for a day or so, pours off the dilutant, then fills the bottle with nitrate dope, mixes it well, then thins that 50% with thinner, and then thins it another 50% for spraying. He says that using this formula on his 24" Kawasaki Ki61 added only 1.1 grams — not bad at all. He also says that the stuff wants to separate in the jar and you have to keep it stirred. I should think that would make it a one-time use operation, and that you need to pay attention and stir the paint in the air brush frequently. I also wonder if instead of pouring dope into the jar with the Floquil, it would be more economical to pour off the

dilutant temporarily, extract a bit of pigment and pour the dilutant back into the bottle so the remainder of the paint would not be ruined, then dilute the extracted pigment in dope and proceed from there. While Testors has a series of military colors in enamels, the beauty of the Floquil Poly Scale is that they have exact colors for various types of aircraft for those who want perfection. Your friendly local hobby shop may not carry Poly Scale because Testors bought Floquil and I understand that Testors offers incentives not to carry the Poly Scale. You can easily order it on line — just Google “Floquil Paint.” Speaking of Testors military enamel colors, Gene Smith says he has used it just like Floquil described above with good results. It comes in tiny 1/2 oz. bottles and he used less than half a bottle to paint a P47 with olive drab.

One caution about all this — when you screw around with nonstandard paint mixes, you want to ensure you thoroughly clean your air brush immediately after using it. While that paint may go onto your airplane very nicely, it may not like the inside of your airbrush if left there until you decide to fire it up again.