Matching Paint to Tissue with Artist’s Chalk Paint???

By Mike Isermann

A couple of years ago I was introduced to the wonderful world of tissue chalking. It was that day that my quest for specifically colored tissue changed from a fleeting dream to a reality. Before chalking came along we only had four choices: sticking with the seven colors that Esaki tissue comes in; purchasing aftermarket colored Esaki for a small fortune; using domestic tissue (cringe!!) or painting the darn tissue. Can you say heavy wing loading? If I am going to paint an airplane it’s going to be an R/C job, not a stick and tissue model. Although there were a number of choices available, none were that attractive. Chalking changed all that. Now we can have any color under the rainbow for a small weight penalty and a little extra work.

Now you guys know how hard it is to match paint to tissue colors. And covering every inch of an airplane with tissue is not always the best route to go. Face it, there are some parts on an airplane that are just to much work to cover with tissue. There are also camouflage paint schemes that cannot be completely done with chalk. An example is dappling or sponging one color over another. This technique was very popular on German and Japanese aircraft. You may use rubbed on chalk as a base coat, but there is no way to apply the other color to the tissue. So we use paint, right? Okay, that’s were the hard part begins - paint matching. Mix, test, mix, test, mix… D**n it, dump and start again. I never seem to get it right. I’ve even gone so far as to go to Home Depot to use their paint matching system on one project. By the way, if anyone needs some JCI matched orange paint I have enough to cover your entire plane about 150 times. That was an expensive as well as ridiculous quest for perfection. These are perils of a discerning eye…

Anyhow, paint matching was hard enough with standard Esaki colors. Chalked tissue became a whole new game. I had to buy paint colors just for mixing. I was beginning to think I would never find an answer and was going to have to settle for mediocrity when the proverbial light bulb came on. I was in the middle of covering a German Bf 109 Messerschmitt and I began to wonder how I was going to match the splinter camouflage chalk job I had just rubbed into the tissue. The German’s would use camouflage schemes consisting of two or three paint colors and would blend the colors down the sides of the fuselage into an underside color, usually blue or gray, using a dappled effect.

I started contemplating to possibility of making my own paint. What is paint anyway? It’s a pigment, typically a finely ground powder, and a liquid vehicle or “binder.” That seemed simple enough. So I began to experiment. Using sandpaper, I ground up some of the artist’s chalk I was using for the splinter camouflage scheme and poured the powder into a small mixing jar. Then I added some nitrate thinner and then some nitrate dope. I mixed the ingredients gently together and like magic, it began to look like paint. I added some more dope to get the consistency similar to chocolate milk and loaded it into my airbrush hopper.

The first batch was a little chunky (a lot of spitting) so I dumped it out and ground more chalk
with a finer piece (220) of sandpaper. I then mixed a batch to the same consistency and sprayed a test area with the “paint.” It went on every well and had some of the same characteristics as other model paints. After practicing a while getting used to how it flowed through the airbrush I then sprayed dapples on the tissue of my Messerschmitt. They went on like a dream! And talk about a match! It was perfect!!! I also sprayed the balsa air scoop and the balsa spinner. It was great not to have to cover those parts!

One thing I learned about this technique is to not mix a large batch at one time. For some reason the paint will only last one day. Apparently the nitrate thinner, dope or both bleach the chalk particles over night and leave you with a cream colored paint the next day. There are no such effects on the painted surface. In fact, the paint is the same color today as it was when I painted it a year ago. Another thing you don’t want to do is spray it directly on styrene or styrofoam. The dope and thinner will eat these products. I suppose you could coat the foam parts with a non-corrosive acrylic paint first.

On of the benefit of this technique is that the paint dries as fast as nitrate dope so there is not real waiting time once you paint the airplane. The dope does a nice job locking the chalk particles on the surface of the tissue.

If you are at odds with a color mixing chart as I was and you like your paint to match the tissue color you selected, then I would recommend you give this technique a try. I think you will be pleased. And if, for some reason, you don’t like what you have painted, nitrate thinner will take it right off, no problem. Then again, you could use your computer printer to color your tissue, but that’s another topic for later. So what do you have to loose? (besides one color and markings point in FAC competition because your accuracy was off costing you a kanone and some bragging rights ) – No big deal (grin)

Thermals, OOS MIKE