CUTTING TISSUE LETTERS & NUMBERS

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When I was a wee-little Junior my first introduction to covering models as taught by my dad was to keep it simple. Kind of like buying a model T, but in red! I remember vividly the day I talked dad into using white epoxy paint for our gas model fuselages and all of a sudden we had some color changes.

Dad and I used to fly a lot with Earl and Marty Thompson, members of the Oakland Cloud Dusters. I remember always enjoying going over to their house and seeing what they were building. Earl was a fabulous builder and those skills all went down the gene pool straight to Marty. Marty would cut all his own letters, mix colors on the same panel, add striping, and shadow his lettering.

I soon found I was spending the time and enjoying the results much like I remember seeing Marty enjoy his. I quickly found out that nothing was too hard to accomplish as I cut my own AMA emblems, shadow pieces for my numbers, and pin striping like the pro's. Often, I had wing and tail surface visions like a painter looking for a canvas. One of my prized tissue exercises was my Top Kick A-1 glider with the AMA emblem on the wing and the OCD emblem on the tail. Many of the fliers would just look and shake their heads thinking I'd spend way too much time on something that could get torn on the first test flight. In actuality, it really doesn't take that much time. All it takes is a template and a brand new sharp razor blade.

With the advent of a computer in every home this process becomes even easier. I first start by going into Word or Power Point and typing in the letters and numbers I wish to cut. The next task is to pick the font you desire. Here lies the first hint. If you're new to this select a font that is thick, doesn't have sharp turns in an 'S', and doesn't have any serifs. An example of this type of font is shown in the 'Avenger' sample photo, Figure 1. The font used was 'Rockwell Extra Bold' and makes for easy cutting.



Once the font is determined print the letters and numbers and cut into strips like those shown in Figure 2. Next, cut comparable sheets of tissue the same general size of the strips with the pattern letters to be cut. I like to leave the tissue sticking out past slice the raised tissue to flatten it down. I have found that it is the paper pattern for the tape to hold down. You might only be in need of one set of numbers, but I always cut two to three sets.



When you build another model you have the letters ready to go and if a tissue repair is required you have that too.

Figure 2

I tape the pattern on top of the tissue sheets with three to four pieces of tape at the edges and on long ones in the center too. In figure 2 you'll see two cutting tools. The X-Acto knife works great for those tight-radius situations like the inside curves of the 'S'. I find the straight razor works good for the longer straighter cuts. Of course, it's all a matter of what you're used to.



Figure 3

Figure 3 shows placement of my thumb during cutting. Since the pattern paper isn't fully taped down I find holding the point from which you are cutting away from helps keep the paper template from bunching up.



Figure 4

Once the letters are cut I take the one set I need and set them aside for application. The others go into an envelope for future use. Figure 4 shows the beginning steps for application. I typically apply the letters after the first coat of dope so that they get the same amount of final coats to equally seal them. To apply the letters I use a 50% thinner/dope mixture. Lay the letters in position and brush a small amount of dope over the top of the letter to position each one. On letters like the 'M', in Figure 4, I try to keep the letter flat and apply the dope without moving the tissue. A small soft brush works good for this while using a stiff haired acid brush adds a level of difficulty. In this figure you'll see how the letters are raised off the surface at the bottom ends. I position all the letters so that if I have to remove one it's easier to do with only a small attachment area to loosen up with thinner.

Once the letters are in place I use the 50% mixture of dope to apply the rest of the letter. Occasionally, you'll find a small lifted spot in the letter. If you don't take it out during the first application then it will be there permanently or you'll have to often best to pick up the wing surface, in this case, and rotate it around to get differing angles of light on it. Any imperfection will easily be seen and you can lift and re-apply the letter to the desired flatness before the dope hardens.



Figure 5

This same method of application works well with the application of stripes and double letters for shadowing effects. For those of you not familiar with my tissue schemes, all of my models have the right tail and wing tip colored a different color and a wide black stripe in between, Figure 5. To accomplish this I lay the pieces on a piece of wax paper with an 1/8" overlap and brush a 50% dope mixture between the two overlapping tissue layers to bond them together. Once thoroughly dry I lift the combined sheet and cover the model in normal fashion.

Whew, is all this really worth it? Only you can decide. Just keep one thing in mind. When you're sitting around the house with little to do give it a try. Dressing up a model with some self-cut lettering, striping, and numbers adds a little pizzazz and doesn't really take that much effort. My wife has recently purchased a Cricket cutting machine for cutting paper letters in a vast array of fonts for photo scrap booking. New toy.....you know what that means. Stay tuned!