

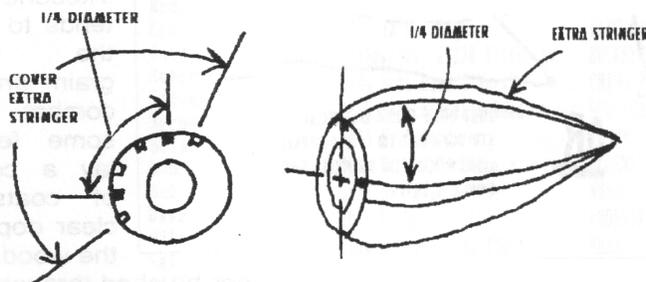
WET TISSUE COVERING

By Tom Arnold

From a June 1995 issue of Cactus Squadron News, Dave Smith, Editor

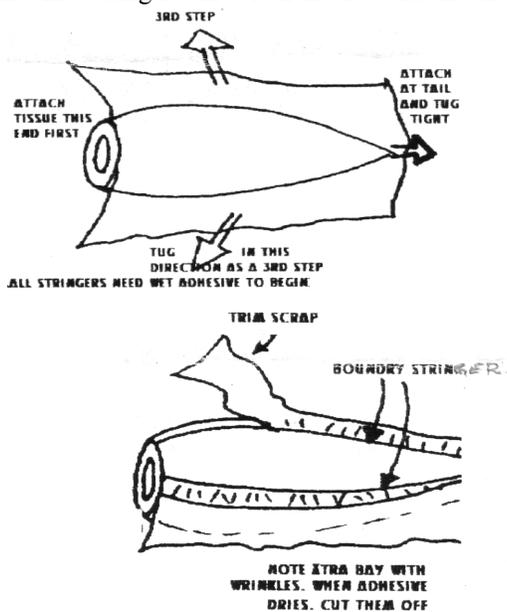
For some reason the practice of wet tissue covering appears to have gotten some undeservedly bad press. "Why" is a real mystery as it ranks as one of the easiest techniques to learn and is faster than the standard dry method. It combines two steps into one and even hides minor goofs.

The secret is getting fine, wet strength tissue that can handle the pulling and the tugging and the editor highly recommends Esaki Japanese tissue. There are other good brands of tissue on the market (Ed Note: few can compete with Esaki,) Ask your fellow modelers about their favorites. The basic technique the editor uses utilizes thinned Titebond for the adhesive, a small hairspray pump atomizer swiped from his wife's dresser and filled with water, and of course the tissue. A circular fuselage remains the most challenging form to cover so let's use that as an example. The thinned Titebond is applied along the stringer and at both ends of the fuselage. Content yourself to cover only $1/4$ of the fuselage circumference (plus one extra stringer) at a time. That's the same as covering only one side of a box frame so being greedy doesn't actually get you that much more.



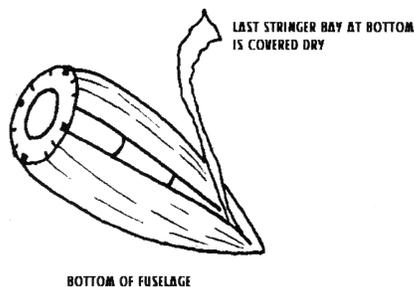
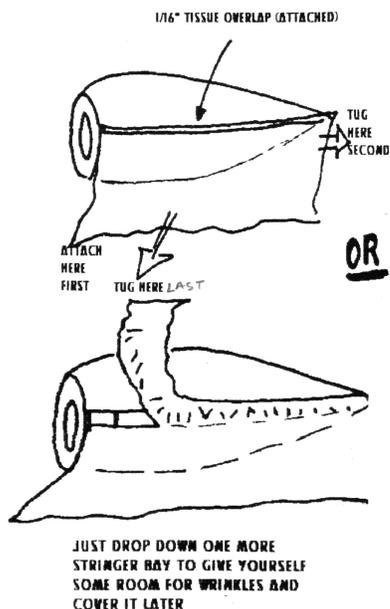
Carefully stretch the dry tissue lengthwise and lay it down on the fuselage. Also run some Titebond along the stringer immediately outboard of your chosen boundary stringer. With the atomizer, spray a mist on the tissue so that it wrinkles with dampness and it will expand slightly. This slight elastic expansion will allow the tissue to cover minor compound curves very nicely. Just gently tug the wrinkles out across the width of the tissue and press the tissue against the next stringer over from your chosen boundary stringer. (Remember that extra stringer on both sides of the quarter-circumference you put Titebond on?) the purpose of this is that as the tissue dries it often shrinks the outside stringers into a slight bow between the former and creates a rash of tiny wrinkles. By making your final attachment one stringer beyond, you can let all the wrinkles in the world collect there and then cut them away leaving your actual boundary stringer nice and smooth.

The subsequent quarter-fuselage strips can then be attached to the boundary stringers and you can work your way around the fuselage. When you get around to the starting point, it is best to cover that last stringer bay dry. Damp tissue laying on that first stringer will soften the titebond and the first strip may pull



loose. It's kind of fun once you get the sequence down to chase those wrinkles around and finally corner the miserable critters and tug them away or cut them out! Some modelers use rubbing alcohol as the wetting medium. The ability to cover compound curves is lessened but so is the shrink power to bend weak stringers. Should you make a mistake, a little water painted on the offending stringer or a squirt from the atomizer and you are back in business. Just keep it all wet and you can work with it as long as you want.

The only drawback to this method is that the thinned Titebond tends to raise the wood grain and to combat this some fellows lay a couple of coats of clear dope on the wood. Of course if



you do that, you can dispense with the white glue and use the thinner-brushed-through-the tissue method of sticking. While not particularly german to wet-tissue covering, remember that if you mark your tissue for single bay covering by laying the tissue along the bay and lightly rubbing the side of the wood pencil lead along the stringers the lead markings don't come off. It's easy to wind up with those marks showing through the misting of color if your aren't aware of it. (Another way to mark the edge of the tissue for covering is to just rub the edge of the tissue across the stringer with your finger or thumb and crease the tissue to mark the cut line--ED from Bob Schlosberg). Wings should be covered dry as usual and shrunk with alcohol for best results. There's just no advantage in wet covering as there's little in the way of compound curves and you'll probably just put a warp in anyway. Not all tissue can be wet covered. Many examples of colored tissue fall to pieces when damp and pulled, so test accordingly. Get those wrinkles!!

(Dave Smith Note: You can also paint the Titebond on the stringers and let it dry. Then apply the tissue as Tom has described and it will soften the glue and stick the tissue down. I personally use this method and have had a lot of success with it. Try it, you'll really be surprised how easy and foolproof this method of covering round fuselages really is!! You can also paint the Titebond.)

Tom Hallman, in a recent Flying Models magazine, has been using a glue stick (Brand UHU) and applies the adhesive to stringers and lets it dry. He then applies the tissue over the stringers and applies a liberal soaking of rubbing alcohol. He claims that this activates the glue and sets it off fastening the tissue securely to the framework. (PFFT Ed. Note: When

using UHU glue stick, do not coat the wood with dope beforehand. The UHU needs to soak into the wood to adhere well, so put it directly on bare wood. You also cannot use alcohol to shrink the tissue if you've attached it with UHU — it will debond the tissue. Floral Spray must be painted onto tissue adhered with UHU in light coats, otherwise it will tend to debond tissue inasmuch as it's alcohol based.)