Covering The Dihedral Joint

From the Summer 2004 Issue of the Capital Area Antique Modelers Association Newsletter, Jim Coffin, Editor

In answer to a question regarding how to apply covering for a wing at the dihedral joint, Gene Wallock offered the following:

1. Always use the following procedure at dihedral joints: I brush on two coats of thin DUCO glue on to the top and bottom of the rib and down the outer side of the rib.

2. I attach the covering of the inner panel to the rib with Acetone. The reason for using Acetone is it evaporates quickly. I overlap the covering over the rib edge and down the rib side. A 1/16 to 1/8 is more than adequate.

3. I apply two layers of thin DUCO to the outer edges, of the covered inner panel dihedral rib, that I'm going to attach the tip covering to.

4. I precut the covering material, using a ships curve, to insure a uniform overlap with the dihedral rib.

5. Line up the covering material on the dihedral rib and spot attach, at the rib center, with Acetone. Go out a couple of bays and spot attach the taut covering, with Acetone, to the LE & TE. This will form a triangle. Now line up the covering at the dihedral rib, make it taut and spot attach to the dihedral rib LE & TE. If everything is wrinkle free, attach the rib dihedral rib covering 100% with Acetone.

You don't have to drown the joints in Acetone because you just want to activate the thin DUCO. Sometimes, I run a coat of thin Duco over the overlap joint.

Dope doesn't stay active long enough to loosen the DUCO joint. I never use dope to attach covering. It'll loosen up with the first couple of coats of dope unless you're doping in the hot sun. I'd be interested in Fred's technique. His covering jobs are a work of art. Thermals, Gene Wallock

Fred's comment: Hi Gene:
(I) Do the same thing except I use full strength Randolph nitrate instead of glue and I cut the curve by eyeball. Cut curve in silk before you wet it. Cutting wet silk is bizarre.