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To: [Undisclosed-Recipient:](#)
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Subject: 81 Sailplane Tail Covering Complete

Comet Sailplane Project

One of the modelers on my distribution list asked me why I double cover silk over Polyspan Lite. Here is the answer I provided him. I believe there are three good reasons to double covering silk over Polyspan Lite:

(1) It extends the life of the silk covering almost indefinitely and prevents the silk from ever crazing with age.

(2) Silk over Polyspan Lite is probably three times stronger than just silk itself, it adds very little additional weight, requires fewer coats of clear dope, and there is no evidence that the Polyspan Lite covering is even under the silk.

(3) Polyspan Lite does not have the problem of dope seeping through the covering and globing up on the underneath side with the first couple of coats of clear dope like silk does. By covering with Polyspan Lite first with three coats of dope, you have a base on which to lay the silk. Once you over cover the Polyspan Lite with silk and apply one coat of clear dope, the silk fills almost immediately with absolutely no globing up on the underneath side of the silk.

This afternoon I finished covering the Sailplane's fin, rudder, and sub rudder with orange silk over Polyspan Lite. the first coat of clear dope was without retarder to set the silk on the Polyspan doped surface. Then I applied two more coats of clear dope with retarder in it as shown below. The results look really good to me.

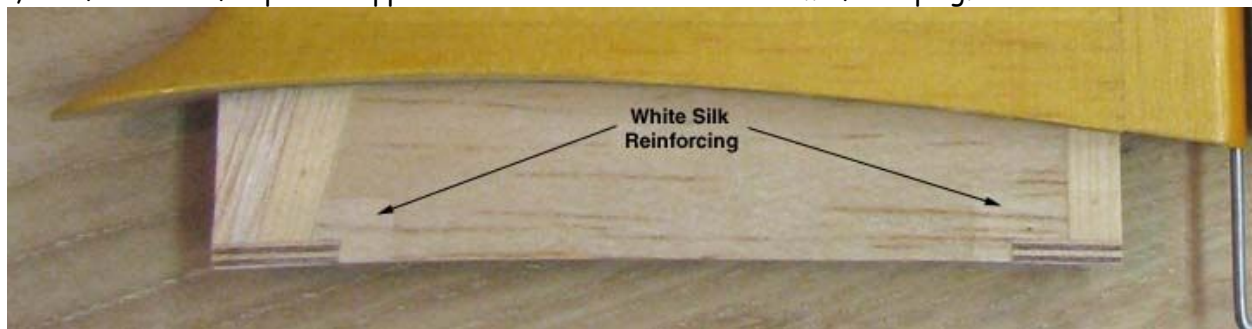


Gene Wallock Tip: Keep some Acetone in a small covered jar for cleaning out your brush periodically when doping. The Acetone is fast acting and removes the dope quickly. However you must keep the jar covered because the Acetone evaporates rapidly. Also, the Acetone is great for removing the clear dope build up on your fingers from when you rub in the dope on the edges with your fingers while covering.

Here is close up of the fin's front fillet covered with orange silk over Polyspan Lite.



I also want to point one other covered area. I covered the 2-56 threaded plywood inserts on the bottom of the fin with white silk for additional reinforcement. I did not cover the fin's complete "plug" that fits down into the stab slot in order to prevent the fit from binding. The covering is really not required because as you can see, the fore and aft spruce supports extend down to the bottom of the plug.



I took this picture especially for Thomas Ryan. He was concerned about the rudder tiller's brass tube bearing CA'd to the trailing edge of the fin in the beginning. As you can see in the picture below, balsa was filled in on either side of the brass tube. Two layers of Polyspan Lite covers the area, and two layers of silk covers the area. The brass tube is well fixed to the trailing edge of the fin.



I still have the sub fins that attach to the bottom of the stab to go. They are not even covered with Polyspan Lite yet. I have been ignoring them because of the wire protector that has to go on the bottom edge. However, I have started start work on doping and sanding them and I hope to get them covered tomorrow.....Tandy