

From: ["Tandy C. Walker" <tandyw@flash.net>](mailto:tandyw@flash.net)
 To:
 Date: 7/30/2009 4:56:48 PM
 Subject: 140 Sailplane Clear Doping

Comet Sailplane Project

I have been doping most of the day again today. I finally got all 3's in the doping log table. This is really an exhausting part of the modeling process. For example, I timed myself while applying one coat of clear dope on the wing and it took me 1-1/2 hours. I have enough dope on the components now that they have to dry overnight before I can put on another one.

Using 7 ounce olive jars, I prepared two 6 ounces mixes of 40% Randolph's No. 210 clear nitrate dope to 60% Randolph No. 286 clear nitrate thinner with 1/2 ounce of Randolph's No. Y-9910 Universal Retarder. The higher percentage of thinner and the addition of the retarder will insure good penetration of the last few coats of tinted clear dope. To the mix in the jar on the right below, I added 15 drops of Castin Craft yellow dye to get the yellow tint. To the mix in the jar on the left below, I added 12 drops of Castin Craft yellow dye and 6 drops of Castin Craft red dye to get orange tint, which by the way looks almost red in the picture below.



In the doping log shown in the table below, you can see that I am nearing completion. I will be finished clear doping when I have all 2's in the last two columns. I will have put on two coverings and a total 14 coats of clear dope!

Coats of Clear Nitrate Dope

Component	Wood	Polyspan	Silk	Orange Tint	Yellow Tint	Orange Tint	Yellow Tint
Mix	50D/50T	50D/50T	50D/50T	50D/50T	50D/50T	40D/60T	40D/60T
Retarder	None	None	None	None	None	1/2 oz	1/2 oz
Stab	3	3	3	3	3	1	1
Sub Fins	3	3	3	3	N/A	1	N/A
Elevators	3	3	3	N/A	3	N/A	1
Fin	3	3	3	3	N/A	1	N/A
Rudder	3	3	3	3	N/A	1	N/A
Sub Rudder	3	3	3	3	N/A	0	N/A
Wing	3	3	3	3	3		0
Hatches	3	3	3	3	N/A	1	N/A
Fuselage	3	3	3	3	N/A		N/A
Cowl	3	3	3	3	N/A	1	N/A

However, this is going to take me at least two more days because a coat of clear dope has to dry overnight before I can put on another one. This is especially true with the addition of the retarder. The cowl is shown below with its first coat of 40/60 retarded clear nitrate dope. As you can see, the silk finish is a nice rich orange with a fairly high sheen. However, spraying it with satin Klass Kote will produce a matt finish.....Tandy

