During a conversation with well known modeler Bob Isaacs, the subject of applying decals to stick and tissue free flight models came up. Bob told me that he used a product called Solvaset (more commonly employed by plastic modelers - Editor) over his decals, and that they came out looking as if they were painted on the model and not just "stuck" on. According to him, the Solvaset had no adverse effect on the model's Japanese tissue covering. Of course, he was speaking about old fashion water slide decals and not the peel and stick variety so common these days. Unfortunately, I cannot find the product here on the Cape, so I have not been able to test out his claims concerning its effectiveness. I did, however, surf the net and find some info that may be of use to fellow FAC'ers. Here's the piece that I came up with.

"There are two different types of water slide decals made. One type is printed on plain decal paper, while the other has each individual decal printed on decal film which is then applied to a paper backing. With the first type, you must trim as close as possible to the design of the decal you're going to apply, otherwise the excess decal paper may be visible after it dries on the model. You can cut as close or as far away as you like from the decal design with the second type, and no excess will be visible after it dries."

"Which ever type you use, cut the selected decal from the sheet and place it on the model where you would eventually like it to be. Lining things up and visualizing what you want to do before you put the decal in water is very important to successful application. Once you put the decal in water, things can get difficult."

"To begin with, very lightly wet the area where the decal will sit with lukewarm water. Use a small paint brush for this job. Wetting the area will help to reduce air bubbles under the decal, and allow you to maneuver it around more easily. Now, place the decal in a bowl of water and allow it to soak. After about 20 or 30 seconds, you should be able to move the decal around on the paper backing. If not, put it back into the water for about 10 to 15 seconds more. Once you can move the decal, place it along with its paper backing on the tip of your Index finger. With a pair of tweezers, slide the decal away from the paper backing so that an edge of the decal is overhanging the paper a tiny bit (do not completely remove the decal from the paper backing yet). Next, reapply the tweezers to the backing paper only. What you should have at this point is a decal which is free to slide in any direction on the backing paper. You are now ready to apply the decal to the model."

"Place the exposed edge of the decal on the model, then while holding it in position with your paint brush, slide the paper backing out from under it. Once you have removed the paper backing, use the paint brush to position the decal. Pushing on the edge of the decal is most effective. When the decal is in place, push out any air bubbles trapped under it by rolling the
bristles of the brush towards the decal's outer edge. Finally, put the model down and let the decal dry. Remember, the decal you just applied is very fragile. If you touch it before it dries you will probably ruin it. Usually, I let my decals dry about an hour before applying another unless I know I can do it without disturbing the one I just applied."

"Instead of water, you can also use Solvaset to wet the area where the decal will be placed. Be aware, however, there is an advantage and a disadvantage to using Solvaset instead of water. Using water allows you unlimited time to adjust and line up your decal where you would like it, but it does not completely eliminate air bubbles under the decal (it only helps to minimize them). Using Solvaset eliminates air bubbles almost entirely, but you only have about 20 seconds max before it softens the decal to the point that it's almost impossible to maneuver. Fast work is a must when using this product. You could try diluting the Solvaset (75% solution to 25% water) to slow down the softening action. I've heard that others have had luck doing this, but I've never actually tried it myself."

"Sometimes, the Solvaset makes the decal appear as if it's wrinkling. This is normal. The decal will set flat on the model when it dries. Should it appear that the wrinkles are not coming out on their own, you will have to get them out yourself. Before you attempt to move the decal, carefully brush on some water (no more than 1/2 drop or so). Carefully use your paint brush to drag the decal from the outer edges away from the center of the wrinkled area. The decal's position on the model should not be compromised by this. You should only have to move part of the decal a distance equal to the thickness of the wrinkle.

After the decal has dried, inspect it for air bubbles that you missed. If there are any, carefully make a very tiny hole in the bubble with a pin and brush on some more Solvaset. Make sure it gets in the pin hole and under the decal. The Solvaset will soften the decal again and make it set to the surface of the model. Since the decal is soft and wet once more, you should allow it to dry thoroughly. Drying times vary. I recommend at least an hour or so. Well, that's all I can tell you about applying decals to models. Remember, patience and persistence will prevail."

The piece that this article was based on was written by Joe Czapiga of Danville Junction, ME, a member of the Great Falls Model Railroad Club.