Bending Basswood
By Gerald Sullivan
*Originally printed in the November 2003 issue of the Scale Staffle (San Diego) newsletter, Gerald Sullivan, editor.*

I have used the "soak in water for hours" and the "add ammonia" method to bend basswood and found that it taxed my patience and resulted in split and broken pieces. I decided to do a little research and so looked on the Web. There were over 300,000 (Google) hits on wood bending and over 30,000 and 10,000 when the terms balsa and basswood were added. Most of the information was for bending large stock for furniture, etc. There were a few references to bending wood for models, including a reference to use a microwave oven.

First of all, I wanted to make some laminated wing tips out of 1/16" basswood and followed these steps: Prepare a bending form by copying the plan showing the tip of the wing. Use contact cement to attach it to a piece of 1/4" foam board.

After cutting the foam out and allowing extra length for the ends of the laminating pieces, cover both sides with transparent post office packaging tape to protect the surfaces from the masking tape that will hold the laminating pieces while drying. Now to the quick part. Select a tall jar about 2.5" in diameter by 7" tall. It must be tall enough to allow the wood to be completely covered. Fill the jar with cool water and place it in a small "overflow" dish. Weight one end of a piece of 1/16" x 3/16" x 6" basswood with a clip made from a small piece of lead and place it upright in the waterfilled bottle. Place the bottle/disk into the microwave. (Yeah, I know metal is not supposed to go into a microwave, but this small amount did not seem to cause a problem.) Select full power for 3 minutes, which will allow the water to form small bubbles but not come to a rolling boil. Remove the bottle (use potholders, it is hot) and fish out the stick. Quickly wrap and tape the stick onto a second bottle (see foot note) and secure it with masking tape. Place back into the microwave for about 1 minute. Upon taking off the masking tape, the wood will feel like it is still damp, but it will be pliable. It then can be taped to the bending form with masking tape. The second and following layers can be done in succession, adding each layer over those on the bending form. Let them dry over night, of if they seem dry enough, remove and glue between the layers, and let then dry. A word of caution: Always start with cool water, because if the water is warm, it will boil furiously during the 3-minute cooking. ###

PFFT Ed Note: A further word of caution about boiling water in a microwave. Be very careful not to have your face over the bottle when you remove
it from the microwave and especially when you stick something into the water to retrieve the wood. Sometimes boiling water will explode upward when disturbed after being boiled in a microwave — hence his warning that you should always start with cool water to not allow the water to boil too vigorously. This caution applies to making coffee in a microwave as well.