



□ 5. Remove the wing and finish drilling the holes with a #10 (13/64") drill bit through the wing mount blocks. Tap the holes with a 1/4-20 tap. Add a couple drops of thin CA to the holes to harden the threads, then re-tap the holes after the CA has fully cured.

### **BUILD THE WING FILLET**

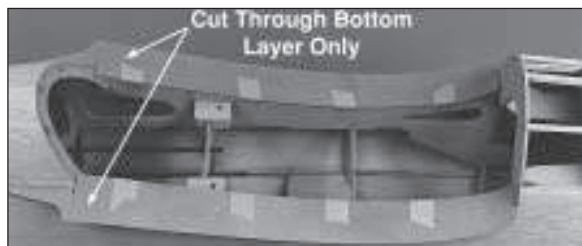


□ 1. With the wing bolted to the fuselage. Mark a reference line on both sides where the wing trailing edge and leading edge contacts the fuselage. Remove the wing from the fuselage.



□ □ 2. Place a straight edge on the fuselage at the indication marks you made in the previous step and draw a line from the rear indication line about 3" aft.

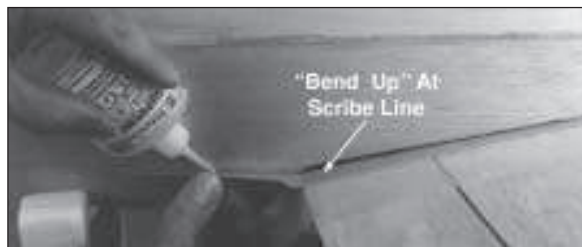
□ □ 3. Trial fit a 1/32" plywood **Wing Fillet Base** on the wing saddle of the fuselage. Make adjustments if required. Use a hobby knife with a #11 blade to **lightly** scribe a line on the fillet base from the corner where it meets the rear of the fuselage out to the edge—cut only through the bottom layer of the three-ply plywood.



□ □ 4. Tape the fillet base to the plywood saddles in a few spots.

□ 5. Perform the previous three steps for the other fillet base.

□ 6. Tape a layer of waxed paper or plastic food wrap to the top surface of the wing in the wing saddle area. Bolt the wing firmly onto the fuselage. Check to make sure there is no interference with the wing saddle and make adjustments if required.



□ 7. With the wing bolted to the fuselage, carefully "bend-up" the portion of the wing fillet at the scribe line and align it on the fuselage with the line you drew earlier. When the wing fillet is in position, glue the wing fillet to the fuselage with medium CA.



□ 8. Use a sharp knife or a Moto-Tool with a sanding drum to adjust the "curve" of both the fillet bases so it meets the trailing edge of the flap.

**NOTE: The wing fillet may be built up with small balsa blocks or you may use the technique described below.**



□ 9. Cut the 24" x 1/4" balsa triangle stick half. Mark both halves every 1/2" for the first 4" then two more marks 1" after that. Use a razor saw to cut about 3/4 the way through the triangle stock at the marks.



□ 10. Glue the triangle stock to the fillet base and the fuselage with medium CA.



□ 11. (Optional) Use the template on the plans to make two sets of wing fillet braces from left over 1/8" lite ply. Glue the braces to the fillet and the fuselage sides. This will make the fillet more durable in case of rough handling during transport.



□ 12. To make finishing of the fillet easier, remove the wing from the fuselage. Cut a tapered piece of 1/16" sheet balsa as shown in the photos. Test fit it against the wing saddle and refine the fit. A little concave curvature on the side that contacts the plywood wing fillet helps.



□ 13. Make another of sheet balsa to fit behind the first piece in the "corner" of the fillet. These pieces don't have to fit very accurately; we are just trying to fill some of the space and save a little on the amount of filler.



□ 14. Now the fun part! Get out the balsa filler (Hobbico HobbyLite recommended) and begin building up a smooth fillet. This should be done in at least three layers letting the previous layer fully dry before applying the next. **Hint:** Wet your fingers when forming the final layers and you will really be able to "feather in" the fillet to the fuselage. This will require minimal sanding in the end.

### **BUILD THE WING BELLY PAN**

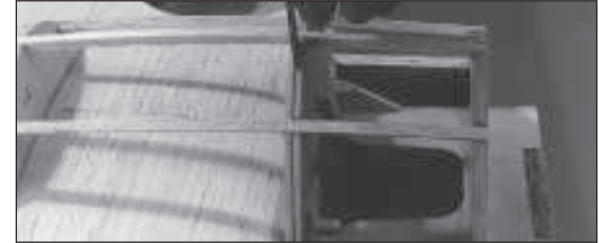
□ 1. Bolt the wing to the fuselage and set the model upside down on your building stand. Reference the plans for the locations of the die-cut 1/8" plywood **Belly Formers 3-C** and **4-C** then mark their position on the bottom of the wing.

□ 2. Test fit **5-E** and make sure that when in position at the trailing edge of the wing, it is the same height as 5-D. Make adjustments to 5-E if required then glue it to the **wing only**. Cut a 3/16" square stringer to fit between 5-E and F-1. Glue the stringer to 5-E and F-1 only.



□ 3. Position **2-C**, 3-C and 4-C, under the stringer at their proper locations. You may have to bevel the lower aft edge of 2-C so it will fit between the wing and F-2. Glue 3-C and 4-C **but not 2-C** to the wing.

□ 4. Place two more 3/16" stringers in the notches from 5-E to F-1 then glue the stringers to all the formers **except 2-C**.



□ 5. Adjust the position of 2-C so you can place a shim such as a metal ruler or a piece of 1/32" plywood between 2-C and F-2. Glue 2-C to the stringers and the wing.

Skip to step 1 "Sheet the Belly Pan" if you are not going to install the releasable drop tank.



□ 6. Glue a 3/16" square stringer to the side of the middle stringer between 2-C and 3-C (just like you did for the tail wheel installation). Cut a notch in the middle stringer to allow actuation of the Great Planes release mechanism (remove the aft post from the release mechanism). Glue another 3/16" stringer to the other side of the middle stringer.