

MAKING SLICED RIBS — MORE

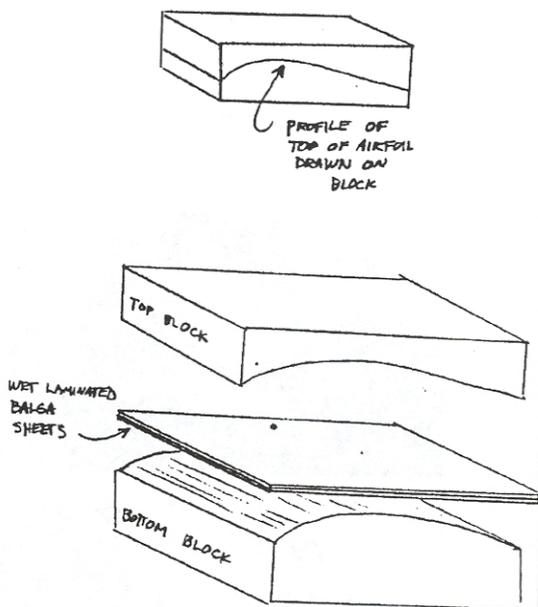
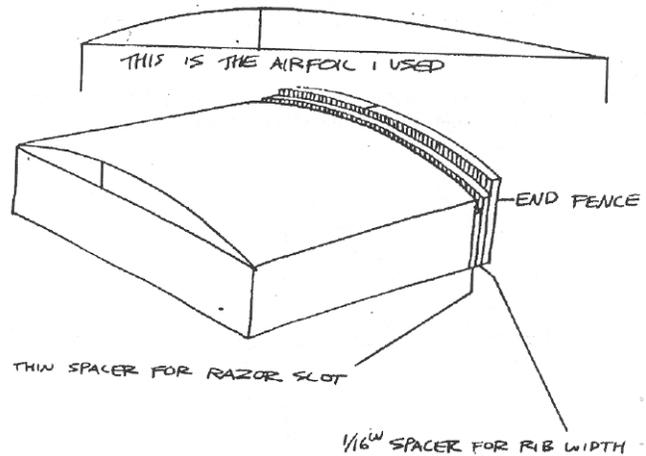
The following two articles were published in the September 2007 issue of Scale Staffel Newsletter, Gerald Sullivan, Editor

Why Didn't I Think of That Department

Laminated wing ribs have a lot of advantages as to strength and weight, but making them can be an exercise in tedium, or frustration. A way to beat both is to use a "forming block" to press a laminated sheet together and then slice the ribs off of it. First take a pine block (2" x 4" will work fine) and draw the top of the airfoil on it's edge. With a jig saw cut along the line such that you have a "top" and "bottom" block. Now lay a couple of sheets of wet balsa with a layer of Titebond between the blocks and squeeze the whole thing together. Stack heavy weights on the forming blocks until dry. Be sure you heavily wax the interior of the forming blocks before you begin the whole process, or you may wind up with your original 2 x 4. When dry, lift the top block off and break loose the formed, curved sheet. Now using a balsa stripper (or the tip below, Ed.) slice off appropriate curved strips using the "bottom" block as a resting table for the stripper. Voila! The top of your wing rib to be pinned to the plan results. Cut appropriate lengths from front and back of the ribs as the wing tapers. The same process can be repeated if a bottom lamination is desired.

Submitted by: Dave Smith, Gilbert, AZ

so the ribs can easily be sliced off. I built the groove by adding pieces to the end as in the sketch. One form will handle a wide range of cord widths. I marked the high point of the airfoil on the form so that I could center the smaller ribs. For tapered wings, I draw a line under the ribs at the high point, line up this mark with the wing spar and trim off the excess. I hold the laminations to the form with a piece of wax paper tapered down fore and aft. Not only are these formed ribs sturdy, but you can make perfectly matched fuselage sides for low wingers (by making special forms, Ed)



Nifty Ways to do Old Things — Wing Ribs (Thanks to Tony Peters, Noo York City)

Sliced ribs are great for saving weight and for the efficient use of wood, but they are very fragile at the front and back where the airfoil shape crosses the grain. I have been laminating the airfoils from sheets on a wood form with a groove at one side