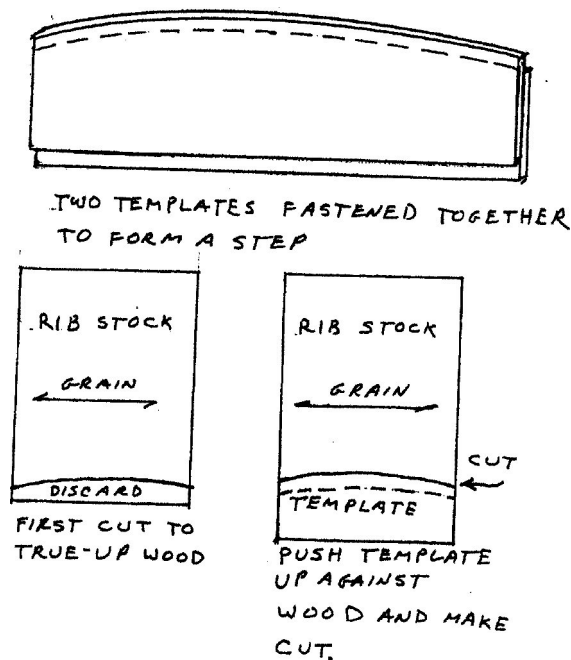


# Sliced/Cut Rib Templates

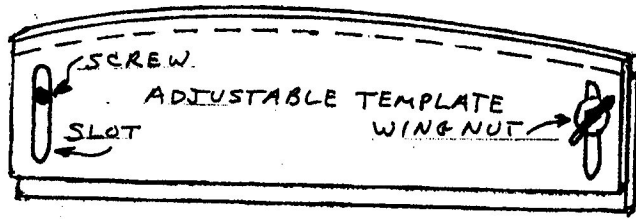
by Gerald Sullivan, Editor of the Scale Staffel Newsletter, San Diego, CA., July 2004

As demonstrated during the July Show and Tell, this article describes a method for easily making sliced ribs using special templates. One of the problems I have encountered in making sliced ribs for indoor planes was to get the ribs to have a consistent height both from rib to rib and front to back of any given rib. I have used templates and spacers to "walk" my way down the stock from which I was cutting ribs. While giving good results, I wanted to do better. I saw this new method some time ago and forgot how to do it. It came back to me one sleepless night.

Start off by making two identical rib templates from your plan. These can be of plastic, aluminum, cardboard, or even balsa if you harden the edge with CyA. Glue or otherwise fasten the two together with the top being higher than the bottom. The amount of overlap will make a little step, and the size of the step will determine the height of the ribs. To use this template, tape a piece of balsa whose width is the same as the desired length of the ribs to your cutting surface. (Grain should be along the ribs.) Start by placing the template on the bottom of the stock and cutting a couple scrap ribs off to get a clean full rib. By pushing the template up from the bottom, ribs can now be cut to the same height as the step of the compound template. Notice that work progresses from the bottom up, rather than the more common top down.



Made from aluminum, slots can be added to the top plate matching holes in the bottom plate and screws and wing nuts can be used to allow one template to make varying heights of ribs. Straight edges can be made in the same fashion that can make constant size wing spars, or even consistent tapered wing spars. A note, if cutting tapered ribs or spars, flip your stock over after each cut to keep the grain of the wood close to parallel with the piece cut off.



This same technique can be used to make symmetrical, semi-symmetrical, flat-bottomed, or even under cambered ribs. In this case make a single top template, and make two identical bottom templates. Build the compound template using the top, and one of the bottom templates placed to form the height of the ribs. (The bottom template of flat bottom ribs is just a straight piece.) To cut these pieces, use the single bottom template to cut off the waste at the bottom of your stock. Nestle the compound template against the stock, and cut off the rib. Repeat by cutting a new bottom curve in the stock and use the compound template to cut a rib.

