

Using a Unique Rib Cutting Template and Other Jigs for a Perfect Wing

In the 35th Annual Report of the National Free Flight Society Symposium 2002, there is an article by Chuck Markos describing the construction of a unique rib cutting template, as well as how he developed jigs for I-beam spars and geodetic ribs. The article is a virtual “how to” for those who strive for great accuracy in the fit, strength and alignment of their wings. One innovative idea is the use of the plastic used in hinged compact disk packaging for the rib template. This plastic is softer than Plexiglas. Since the plastic is transparent, he traces to top of the airfoil curve onto the plastic, then scores the plastic on both sides. He then saws the plastic along a line about 1/8” outside the scored airfoil lines so that the plastic will snap away along the scored lines.

If the airfoil is undercambered, he turns the template over and traces the curvature of the undercamber and trims it the same way. After sanding the template smooth, he lays the template over sheet balsa and cuts individual ribs, making them slightly longer than the finished ribs will be. He pins all the ribs together, lightly sands out any imperfections, and ensuring the block of ribs are square, sands the leading edge square. There is much more to the article, and I highly recommend your purchase of the Symposium, which also contains other articles of considerable interest. You can get a copy from Robert McLinden, P. O. Box 7967, Baltimore, MD 21221. The price is \$29 including postage for NFFS members, and \$34 including postage for non-members.