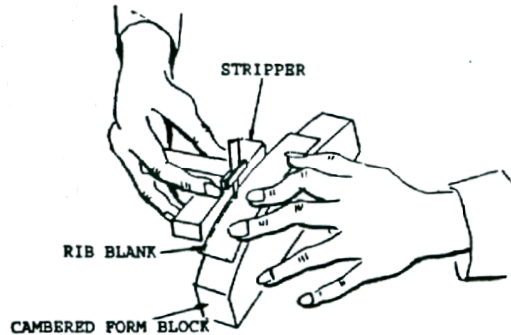


LAMINATED WING RIBS

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Until recently most ribs on lightweight indoor models have been sliced from sheet balsa using a template. One disadvantage of this technique is the possibility of the ribs splitting along the grain which inevitably runs across the rib camber line close to the leading and trailing edge. More recently ribs have been made by hot forming a balsa sheet on a camber block, using a technique similar to that used for forming propeller blades. The ribs are then sliced off the edge of the cambered blank as shown below.



Although this approach obviates the splitting problem there can be a tendency for the ribs to gradually straighten and lose their camber.

This note describes a method for laminating ribs which not only avoids the two problems described above but also results in ribs which are stiffer for a given weight.

The laminated ribs are formed in a similar way to the hot formed ribs described above except that they are laminated from two layers of sheet balsa bonded with wallpaper paste. In this case, of course, the sheet used has a thickness of half the final depth of the finished ribs.

The adhesive is very dilute and is prepared by dissolving two teaspoonfuls of "Solvite All Purpose Paste" powder in a half pint of water. The two laminations are generously painted with the paste, (they are not soaked), placed together and gently pressed between two paper towels to exclude excess paste. The laminations are then placed over the cambered form block between two layers of kitchen silicone paper, (ordinary grease proof paper will not prevent sticking). The lay-up is then held down to the form block with a pair of rubber bands and an additional layer of 1/16th sheet as shown below.

