

large sheet of cardboard or paper. Figure 6 illustrates the process for station 6. Using the heights above baseline (Y direction) and the half-breadths (X direction), plot the points on both sides of the Y axis and connect them. This corresponds to the shape of the outer skin of the kayak. Now draw in the keelson (2.3 by 4.4 centimeters), the stringers (1.0 by 1.2 centimeters) at the chine points, the gunwales (2.2 by 3.5 centimeters), and lastly, the 1-centimeterdiameter rib. (Be careful to keep the lattermost flat across the bottom.) The inside of this rib is the line to use for cutting out the plywood pattern. Numbering the 43 ribs to be bent from 1 at the bow, this form can be used to bend ribs 19 through 28. The other forms can be used to mold ribs as follows:

| Form | Ribs |
|------|-------|
| 2 | 1-3 |
| 6 | 19-28 |

| 8 | 29-33 and 14-18 |
|----|-----------------|
| 9 | 34-38 and 9-13 |
| 10 | 39-41 and 4-8 |
| 11 | 42 and 43 |

Holes drilled through the points marked photograph G as A, B, C, D, and E may be used to lash the hot ribs down to the form until they cool and dry.

With the kayak frame upside down and level, fit a well-shaped rib from the station-6 form into the gunwale mortises at rib location 24. The rib should just touch the keelson, and the flat part of the rib should be level. Put temporary ties diagonally from each gunwale to the opposite bend of the rib to prevent further movement. This rib is important: it will be used to sight in all the rest.

When all is in adjustment, mark, cut, and lash the last keelson joint under deck beam 7. To prevent further movement of the keelson, lash in some

temporary stanchions between it and the deck beams.

Now fit the rest of the ribs, starting with number 23 and working down to number 1, then ribs 25 through 43. Continually sight down the framework as you fit the ribs to check for lumps or hollows. Some irregularities can be corrected with temporary ties, some will require that you fit new ribs.

Once the ribs are all fit and fair, lay four stringers on each side of the keelson. Place tight, temporary lashings in the way of each deck beam, running from gunwale to gunwale over the keelson. Slide the outermost stringer gently over the ribs into its final position. Do this again for each stringer in turn, then sight down the framework to make sure they are symmetrical and fair. Trim the ends of the stringers to the length shown on the line drawing, then check the ribs one more time and