and ferrying people across bays, streams, and rivers. (Six people were once seen in Hooper Bay in a kayak crossing a stream—two in the cockpit sitting back to back, one prone in the forward hull, one prone in the after hull, and one each prone on forward and after decks.)

Although kayak skin covering seldom lasted more than a season, the frame was good for many years if kept in proper repair. New kayaks were built piecemeal during late winter or early fall.

Building and Using the Bering Sea Kayak Today

When I first arrived in Hooper Bay in 1976, I was fortunate to find 69-year-old Dick Bunyan, who was a skilled kayakmaker with over 20 kayaks and two umiaks (open skin boats) to his credit. He agreed to construct a kayak frame for the National Museums of Canada from driftwood, using intermediate technology—a few modern hand tools, plus steel-bladed traditional items such as an adze and curved carving knife. I arrived in Hooper Bay on a Friday, and the next day Dick started working on the kayak.

He selected a large stump from a pile he had gathered in back of his house and, using an axe and wooden wedges, split it into pieces that would be suitable for the curved deckbeams of the kayak. He explained through an interpreter that maximum strength was obtained by using wood with a grain that was already curved the way the finished piece would be. I, too, set immediately to work filming, photographing, measuring, and recording all relevant details of the construction, and continued this routine every day for the next month until the frame was completed.

Dick Bunyan's adze was made from an old hatchet blade; with it he could shape a piece of wood to look as though it had been smoothed with a plane. No sandpaper was ever used. The curved carving knife, made from a muskrat trap spring, was the perfect tool to hollow out all concave surfaces.

Dick's only measuring device was a 75-cm-long stick that was used to transfer measurements first determined anthropometrically. For example, the diameter of the hole in the bow is equal to the width of the closed fist with the thumb outstretched; the diameter of the cockpit coaming is equal to the distance from the armpit to the first joints of the fingers that grip the coaming. All parts of the kayak were similarly measured. (Each community had its own standard set of anthropometric mea-



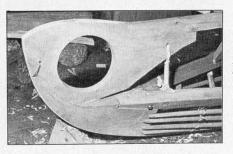
Left—The gunwales were fashioned from a driftwood log, squared up with a hatchet and adze, halved with a circular saw, and carved to fit.

Below—Dick Bunyan bending a kayak rib without steaming it. His teeth act as a clamp to prevent the outer fibers from splitting while crushing the inboard ones to facilitate bending.





Left—Dick watches Aloysius fit the crucial first rib in the kayak.



Left—The upper and lower bow pieces are faired and tied together. The ends of the stringers fit snugly against the concave portion of the lower bow block to prevent chafe against the cover.