## APPENDIX 3

## CARVING KNIFE (mihlhlaraq)

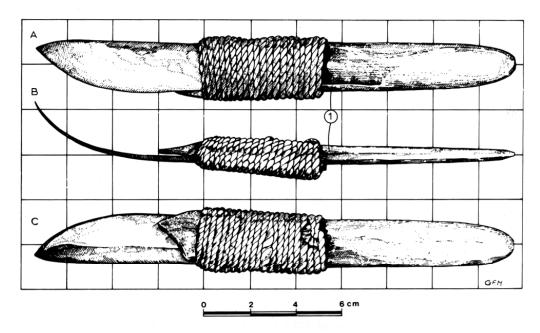


Figure 82. Bottom, side and top views of carving knife made by Dick Bunyan.

The long-handled curved carving knife is an old Eskimo tool that is found across the Arctic from Siberia to Greenland although its general use today has survived only in parts of Alaska. In a survival situation this knife alone could be used to make almost anything a hunter needed. Its curved shape is especially useful in carving masks, bowls, and other items that have concave surfaces, but Dick used it for finish carving (he never used sandpaper) on all pieces. The carving knife Dick made for me is illustrated in figure 82.

The general usefulness of this knife in constructing the Hooper Bay kayak cannot be overemphasized and I strongly recommend that you make one if you are contemplating making the kayak. It is really quite simple and does not require any specialized equipment or tools.

The blade is made from a number 1 animal trap spring, but could be made from a butcher knife blade or leaf spring from a car or other good carbon steel. With a hacksaw, cut out the blade to the shape shown full-size in

figure 83. File it to final shape, but do not sharpen it at this time. Before bending it, some of the temper must be removed to prevent the steel from fracturing. To do this, fire up your Coleman camp stove or something similar (a gas stove burner will work just as well). Lay the knife blade on the burner until the blade gets as hot as possible, then turn the burner off and allow the blade to cool naturally at room temperature until it is safe to touch.



Figure 83. Carving knife blade before curve is put in (shown full-size).

Bend the blade to the shape shown in figure 82 B by holding it over a piece of iron pipe or something similar and pounding it with a ball-peen hammer until the proper shape is achieved. Now grind or file in the blade bevel. Note that the blade is only beveled on one side, not two as in most commercial knives. Save final sharpening until the knife is otherwise completed.

The handle of the original is made from a whale rib, but as they are rather scarce, nevermind being on the endangered list, I suggest you use a good piece of hardwood such as ash, maple, walnut, elm or oak. Exotic woods such as greenheart, ebony or lignum vitae are also good. Shape the handle as in figure 82. Note in the bottom view (A in figure 82) that there is a shallow lip running from the front of the handle well past the lashing. This is made as deep as the thickness of the blade and serves to prevent sideways movement of the blade. A cross-section of this lip is shown in figure 84.

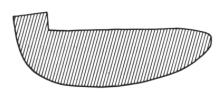


Figure 84. Carving knife handle cross-section at (1) in figure 82.

Lash the blade to the handle with nylon twine ,/16" to 3/32" in diameter. Make this as tight as possible. Now make a small wooden wedge about 1-1/2" long and just wide enough to slip between the lashing and the blade. The wedge should be no more than 1/8" thick at the end. Drive the wedge under all the lashing and the knife is complete except for final sharpening.