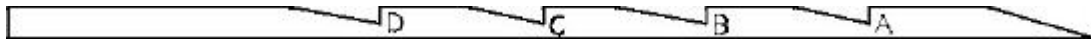


Using a Jog-Stick

This has many uses to help re-create the curves in boats. In this example we are trying to re-create the shape of a bulkhead as part of a re-construction project.

You need –

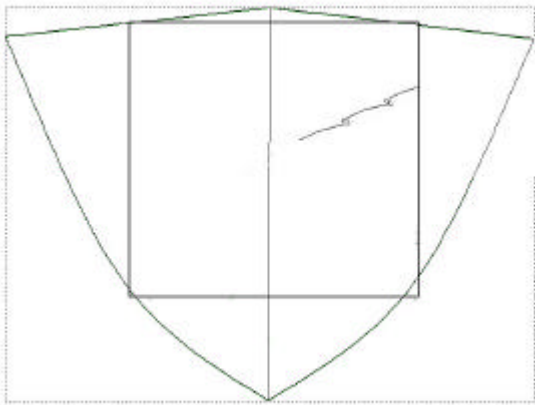
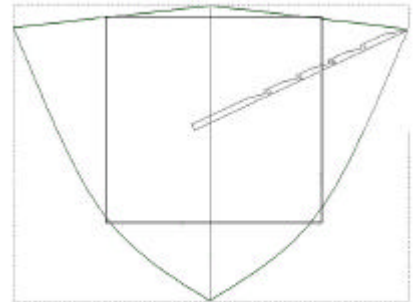
1. A jog stick, slightly shorter than the shortest axis on the bulkhead in question. Mark the notches A, B, C, D as shown. You might end up with a collection of different sizes.



2. A sheet of stout paper somewhat smaller in dimensions than the bulkhead in question.
3. A sheet of stout paper somewhat larger in dimensions than the bulkhead in question.
4. Some sharp pencils.

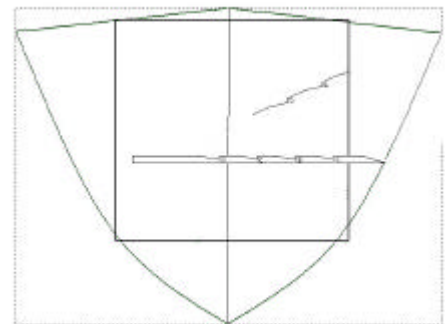
Here's what you do –

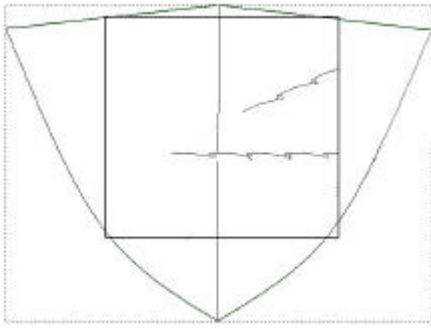
Crawl into the inevitably awkward space (i.e. under the foredeck) and attach the smaller piece of paper with masking tape as shown. Position the point of the jog-stick firmly against the outside edge of the bulkhead where it meets the outer skin. Start with key points like chines, gunwales and other intersections.



Hold the position and trace the notches onto the sheet of paper. Mark the traced line with A, B, C, D to correspond with the notches.

Repeat the process for as many positions as possible around the bulkhead. It would be wise to identify those positions that are key reference points (like chines, gunwales, etc)

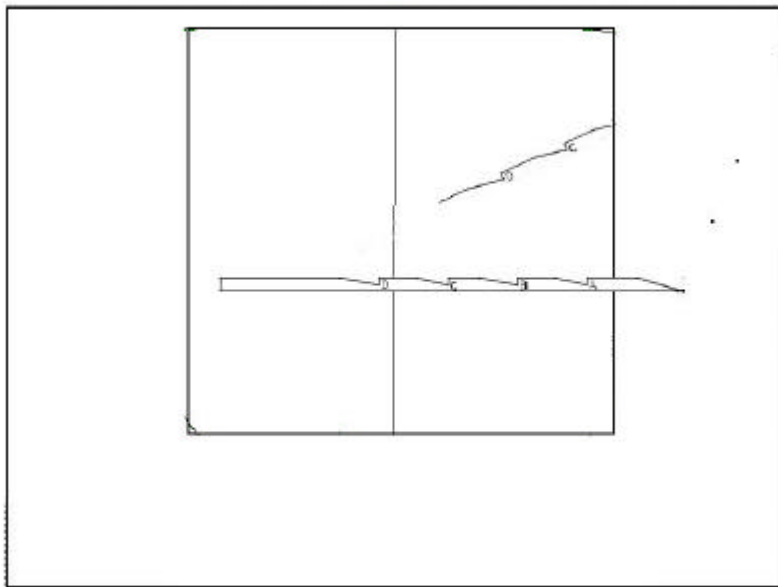
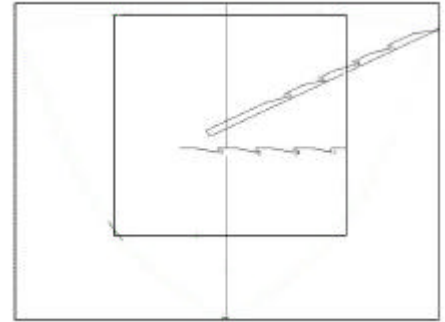




The piece of paper will eventually be covered with lots of zig-zag lines with notches marked A, B, C, D to correspond with the notches in the jog-stick

When you have as many marks as you can manage, remove the paper from the bulkhead and attach it to the larger piece of paper

Line the Jog-stick with the notches on the first line and mark the large sheet of paper where the point of the Jog-stick falls.



Repeat this process until you end up with a series of marks that represent the shape of the original bulkhead. Identify the key reference points (like chines, gunwales, etc).

Attach the larger sheet of paper to a sheet of plywood or MDF. Make sure it is square. Hammer a nail through each of the points. Use a flexible fairing batten to re-create the line.

Carefully measure the x, y, coordinates of the key reference points (like chines, gunwales, etc), and a reasonable number of other points along the curve.

To create a scale drawing (say 20:1) you can draw a grid (say 100 mm squares) on the big sheet of paper and a similar grid (say 5mm squares) on a smaller sheet of paper and use this to reproduce the shape. This won't be much use unless you also transfer the dimensions to the smaller sheet of paper.

John Tennock