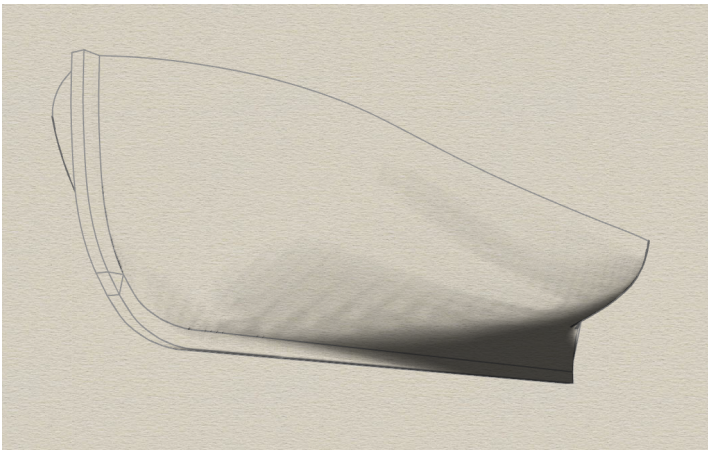
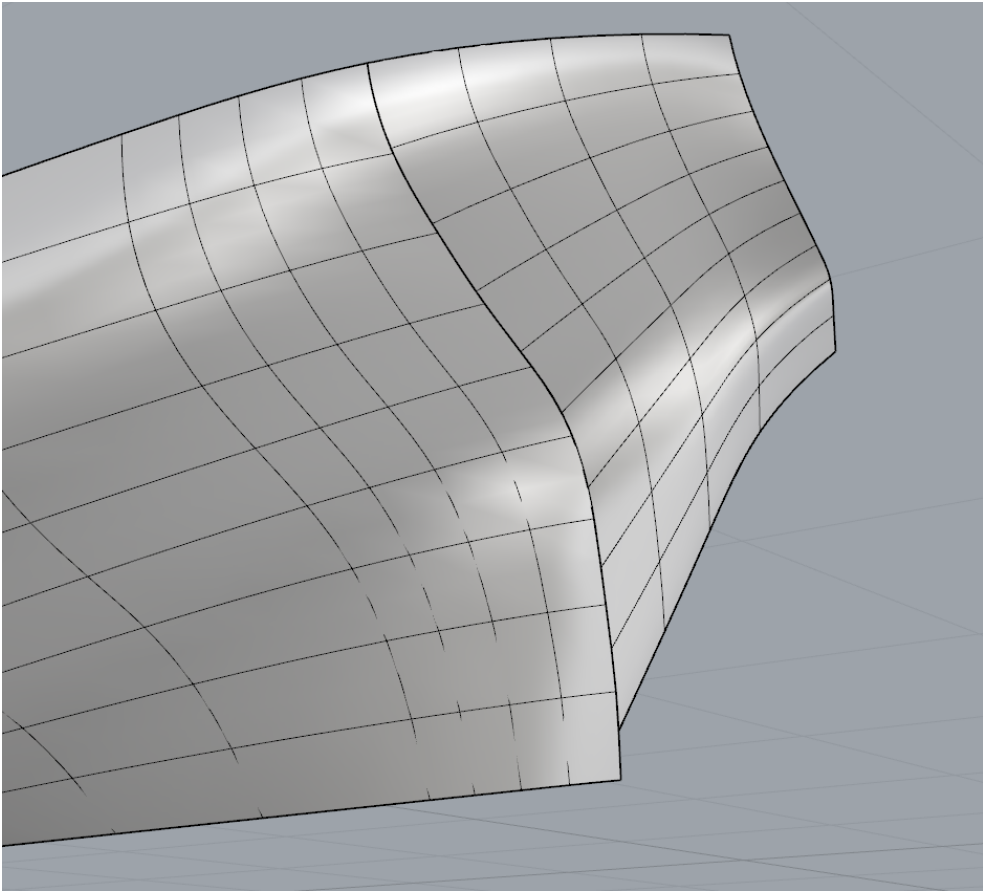
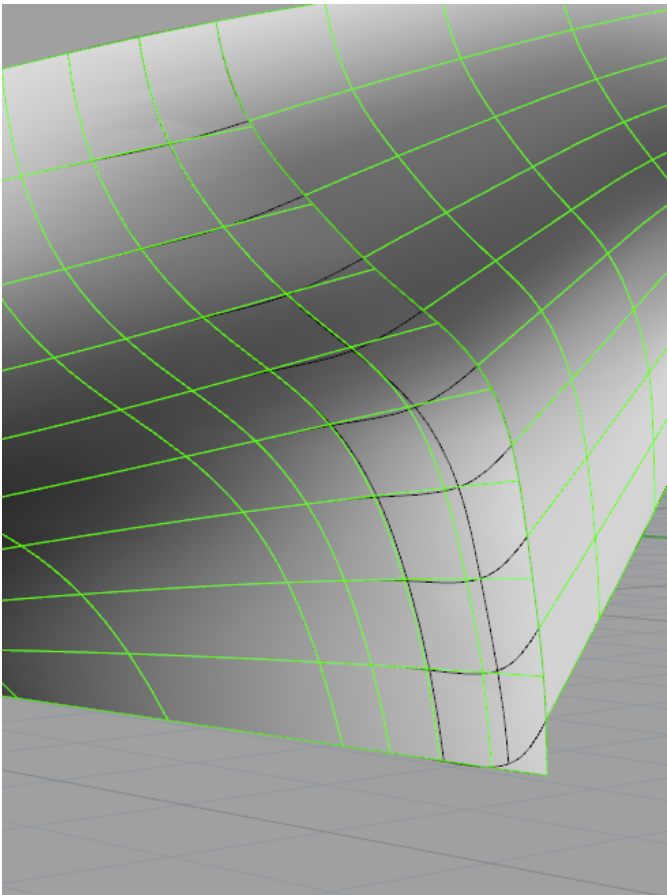


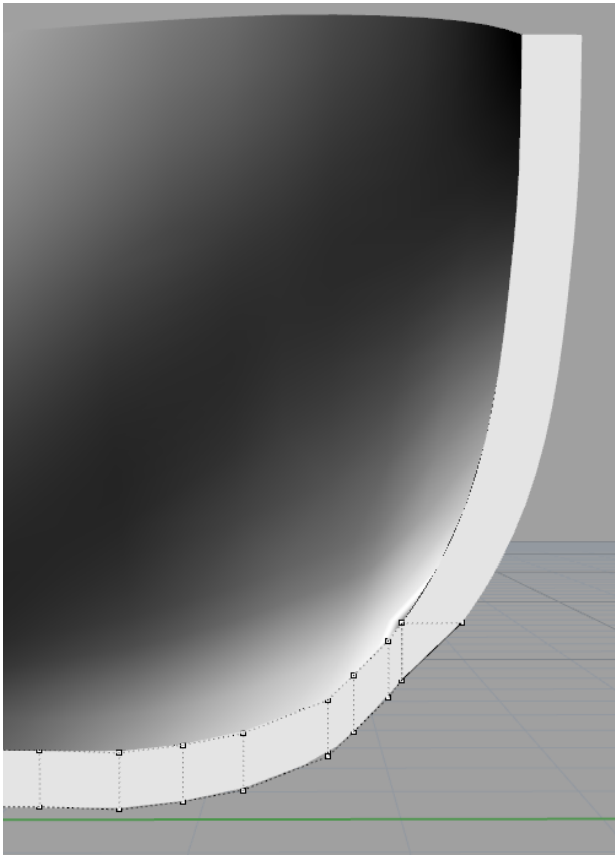
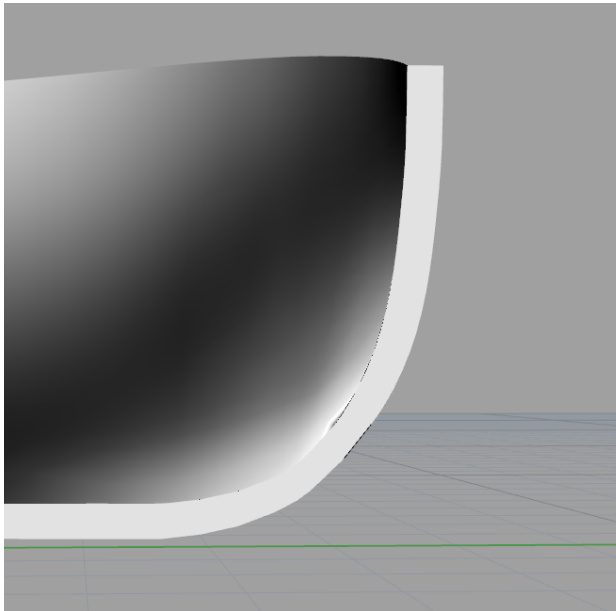
Below is the one patch of the hull that is non-continuous. Due to the centerboard of the ship taking a jog upwards to meet the rudder, there is a corner near the stern, which required a patch to complete the segment past the corner. The surfaces ended up being actually nearly continuous on the first try, and attempting to merge them changes the corner, as shown below (in green).



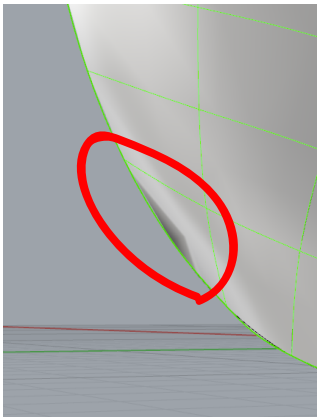
Above is the entire hull rendered in “artistic mode” in two perspective views to demonstrate the overall level of fairing achieved, which was all done on the first pass aside from the minor fixes and blemishes described below.



The two images below show the before and after of refining the centerbaord that protrudes like a spine along the bottom of the hull. There was a slight kink (corresponding to where the knot is as described in the lower left) which had to be ironed out using the surface control points.



Here we can see a small knot in the surface, which is a result of the two edges of the curve network near the bow being tangentially continuous where they meet (this is expected as from the bowsprit to the tiller in the rear is a smooth curve). It is only visible in shaded or rendered mode, or with a high density wireframe. This means that when exporting just the geometry as a mesh - for instance an STL file - the knot is not captured.



And finally, below we have the front/back split view of the splines in Rhino overlaid on the plans. This was the first and only iteration, as the resulting mesh worked out really well. The only fixes that had to be made were related to other things such as how the network was defined or the ccenterboard extruded.

