



DXF Boat Shapes in HYPACK Survey

By John Lindberg

Most HYPACK® users running HYPACK® SURVEY know how to create boat shapes in the BOAT SHAPE EDITOR and display these shapes in HYPACK® SURVEY. A little known feature is the ability to display a DXF boat shape. This comes in really handy for DREDGEPAK® users who may already have a CAD drawing of a dredge, or for the user who is very proficient in CAD and would like to create their own custom vessel shape.

It's very easy to create a simple shape in CAD. It is just a matter of creating a series of polylines to outline the shape of the vessel. Use polylines to add additional entities of the drawing. These polylines can be created on any layer. In Figure 1, I had been given a DXF file of a 27-foot SeaArk, and I am using a CAD program called DraftSight.

FIGURE 1. *The SeaArk Drawing in DraftSight*

Note the origin position. The XY origin of the drawing is located down between the engines. When creating your boat shape, be sure to start your boat shape with the XY axis located at the vessel origin, typically located at the COG of the vessel.

By default HYPACK Survey colors all the DXF objects black. If you choose to use colored objects, choose the RGB schemes rather than the standard 255 color DXF palette. HYPACK Survey now takes advantage of the expanded color selection. The objects colored with the standard 255 color DXF palette will display black in HYPACK Survey.

In the example below, I changed the reference of the drawing to the COG of the boat. I also deleted some of the polylines, created a couple hatched area, and changed the object colors using the expanded color palette.

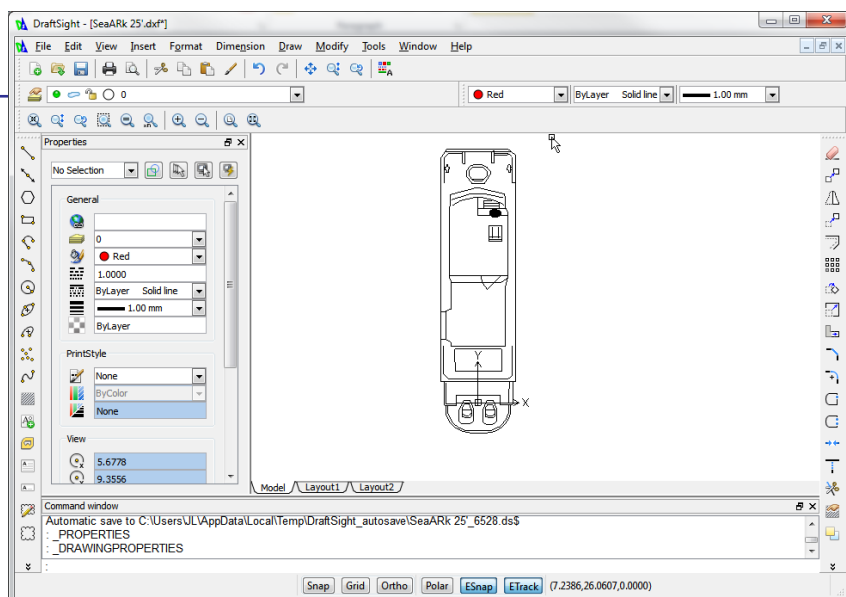


FIGURE 2.

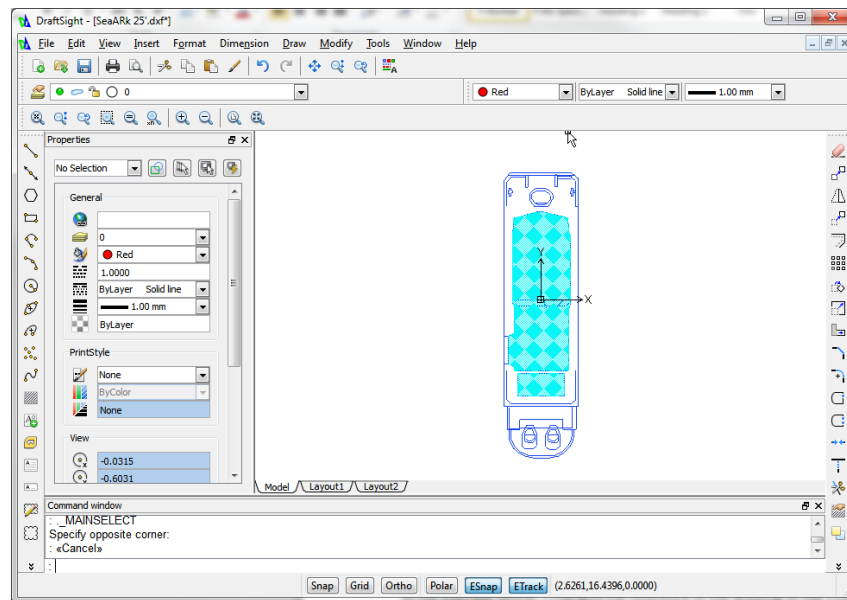
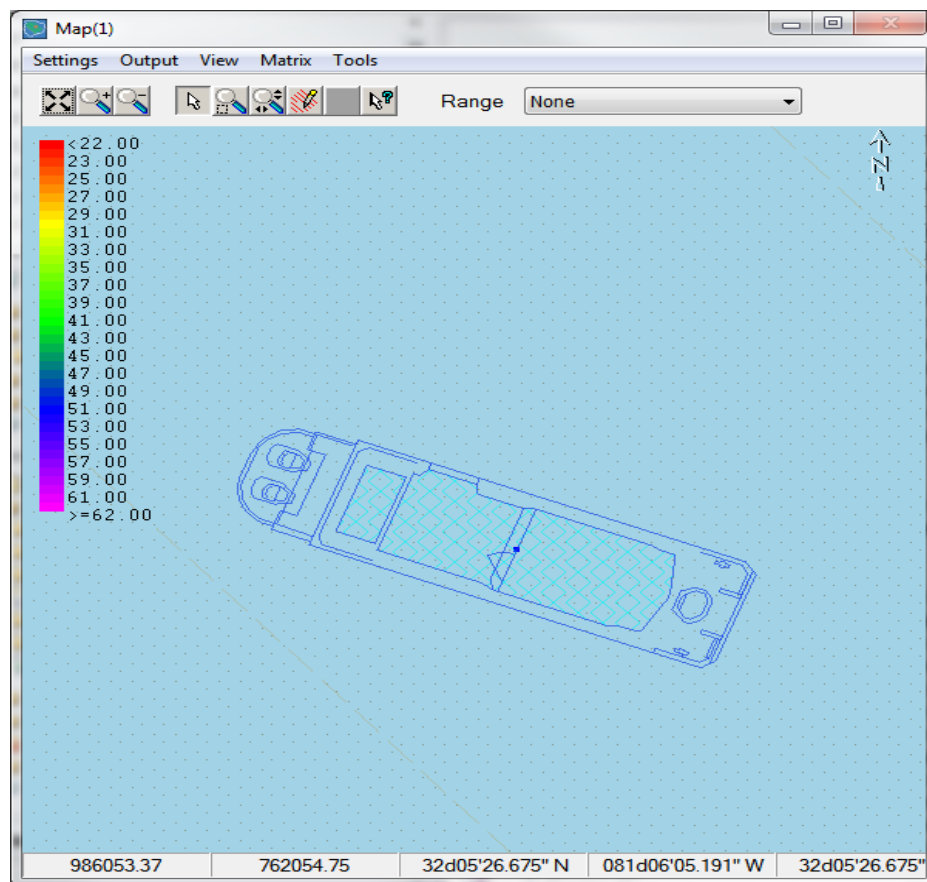


FIGURE 3. Here is the Shape as Displayed in HYPACK® SURVEY:



In addition to using the colors created in CAD, you can also assign the perimeter polyline of the vessel to a layer called “HULL.” Once this is created you can use the Perimeter and Fill color options under HYPACK Survey’s VESSELS menu.