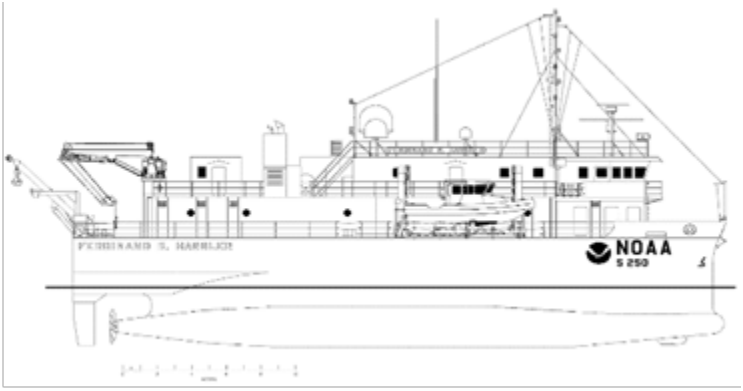
Ferdinand R. Hassler Survey Time Estimation

Standard Operating Procedures



Revision History

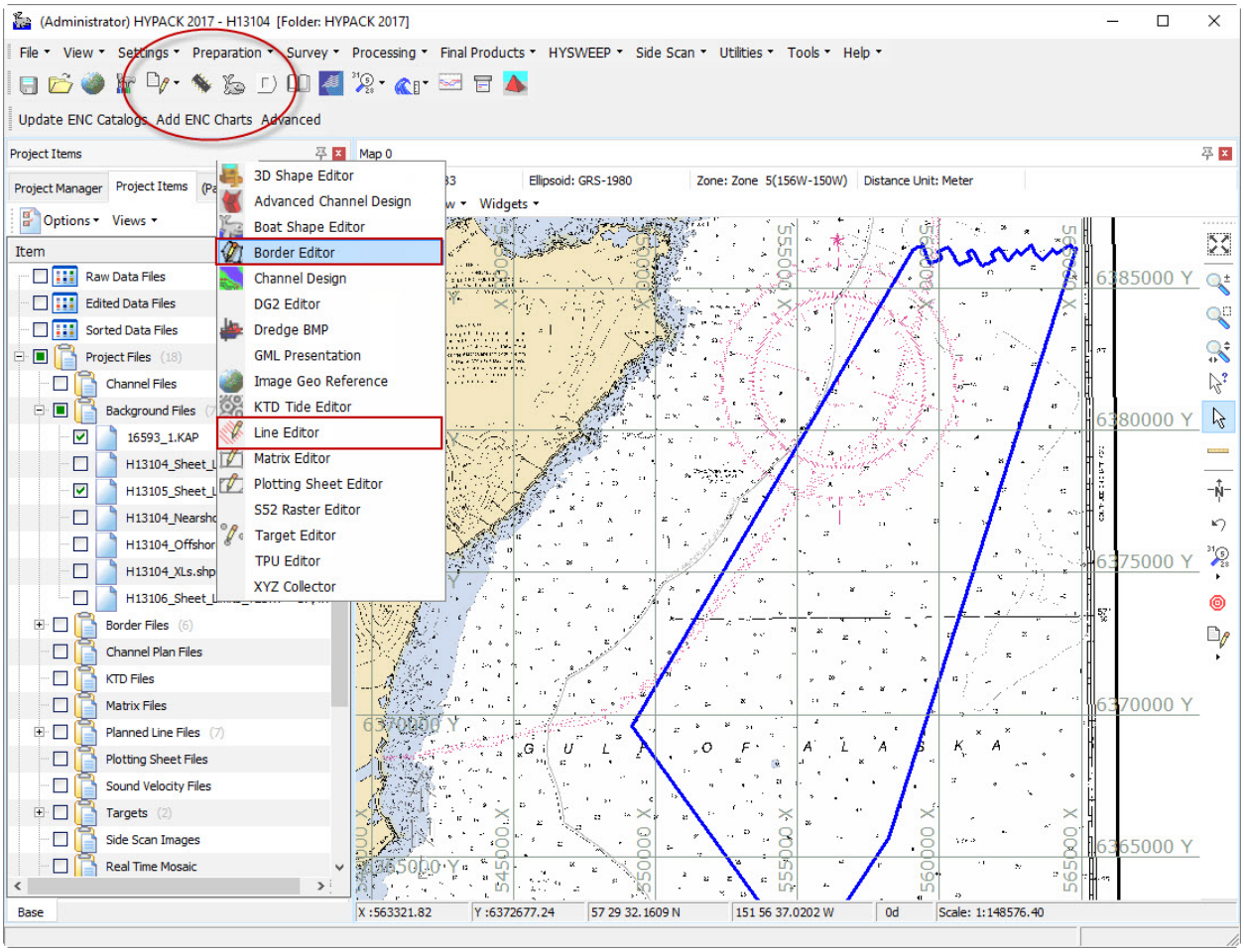
Date	Revision Description (Reason/What)	Updated by
9/11/2012	First Version	PS James J. Miller
5/03/2021	General Updates	PS Charles Corea
11/19/2023	Reviewed	LT Debroisse

(Rough) Survey Time Estimation

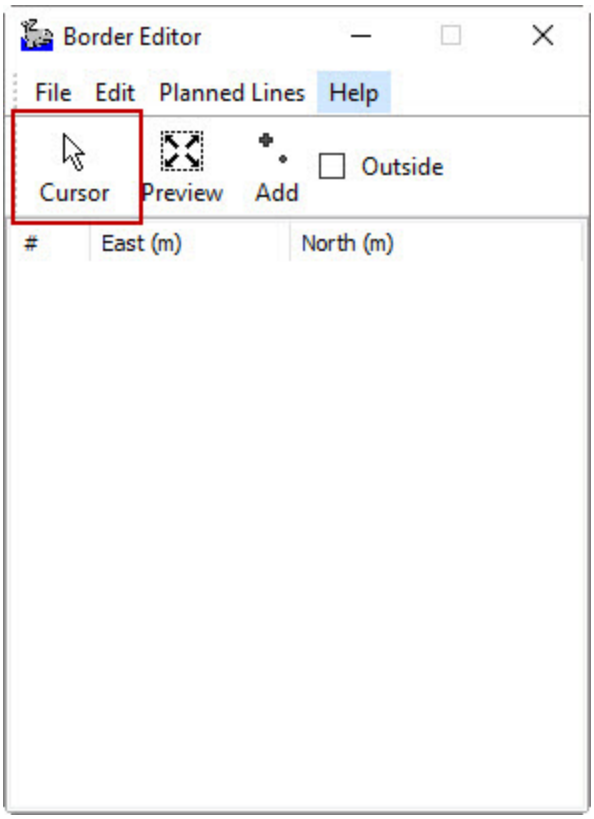
Most of this process is done in Hypack Administrator or shell mode using the Border and Line Editors. This SOP assumes the user is generally familiar with Hypack.

Begin by creating a new Hypack project with the correct geodesy for the survey area and adding the appropriate chart. You will also need to add the sheet limits for the survey in question. This can be in shapefile (.shp) or S-57 (.000) format.

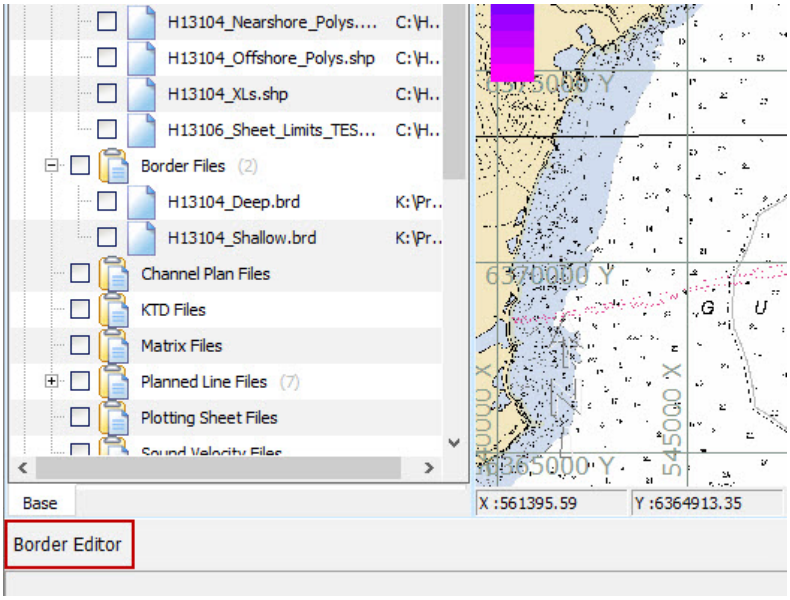
Next, access the editors by clicking the paper and pencil icon or through the Preparation drop-down menu.



Start by creating a new border file by tracing the survey sheet limits that you already brought in, here's how: Open the Border Editor, then click the Cursor icon.

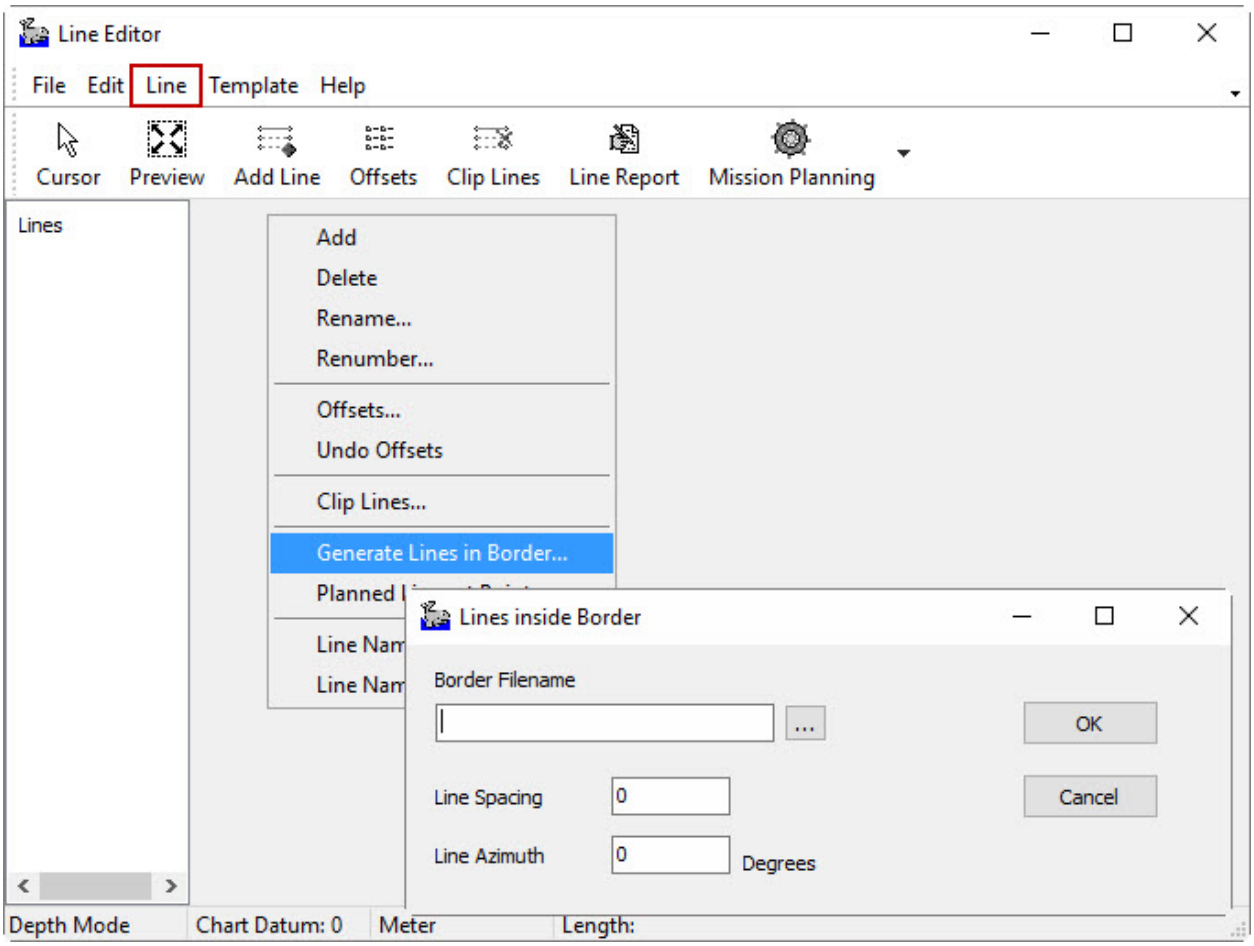


The Editor box disappears and your mouse cursor is now enabled to digitize the sheet. Left click to drop points that trace the sheet limits, when finished click the Border Editor box on the lower left corner of the Administrator window.

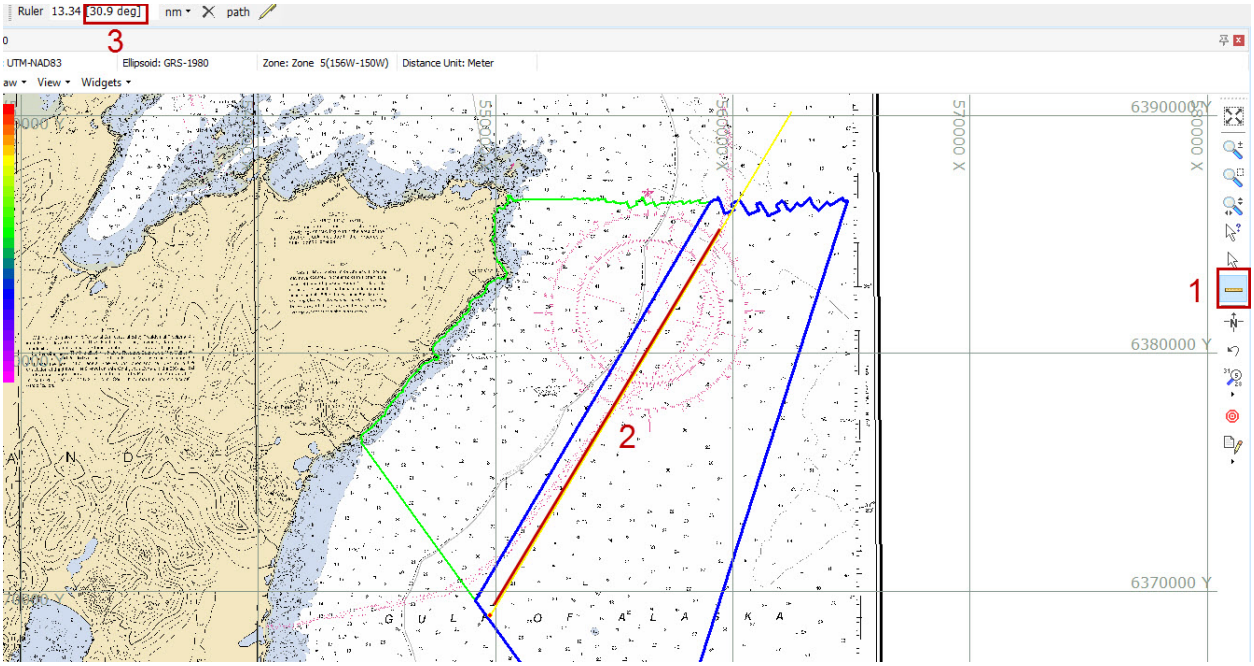


The Border Editor box reappears, click File>Save to save your new border file (.brd).

Now open the Line Editor tool, click Line>Generate Lines in Border.

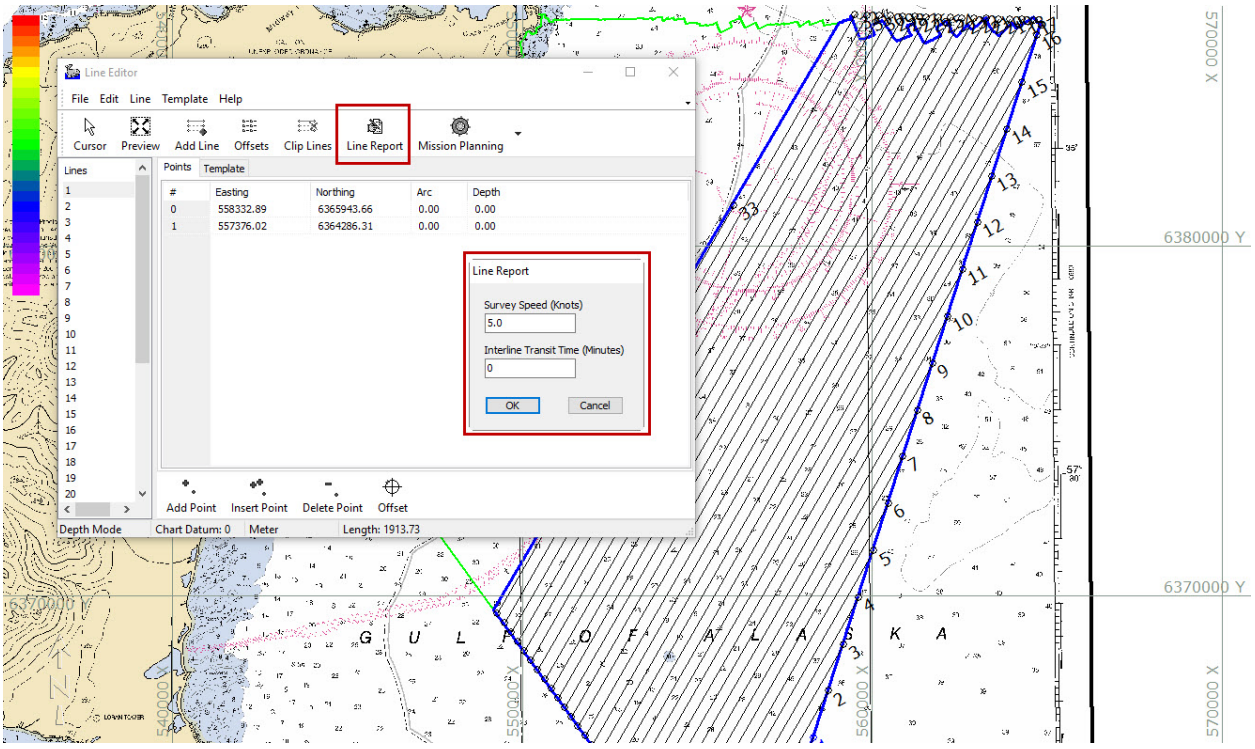


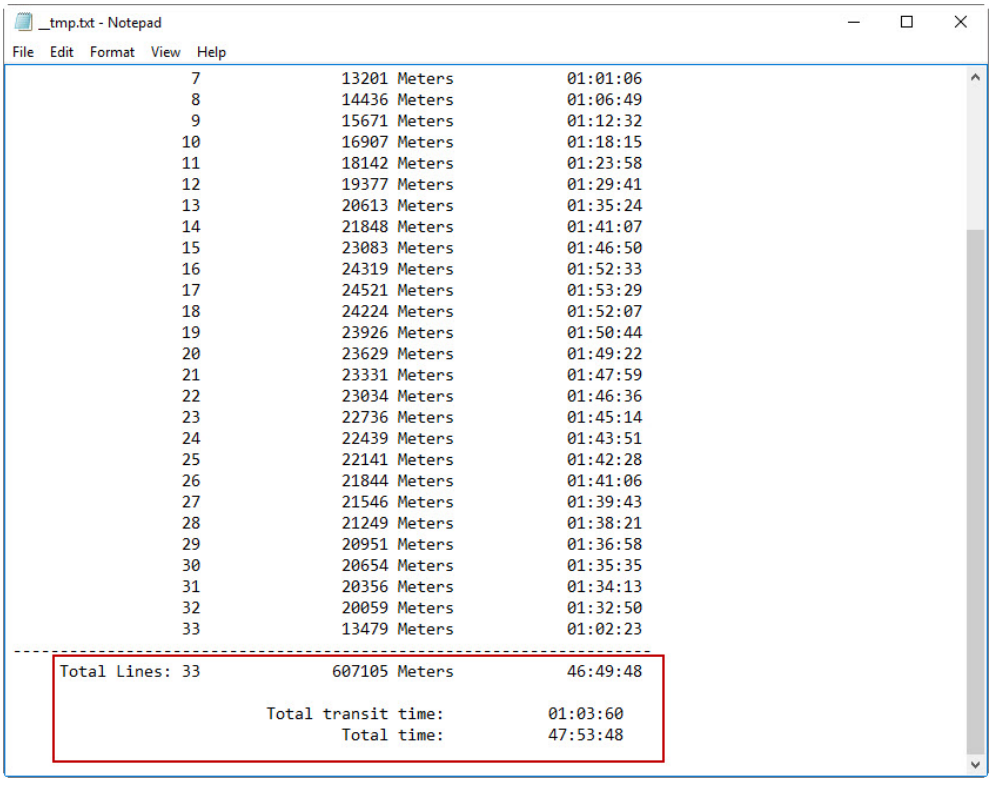
In the Border Filename box, load the new border file created in the previous step. For Line Spacing, enter a distance in meters that is appropriate for the water depth of the area. The depths may vary significantly within the survey area, therefore you will have to use your best judgement in determining line spacing that most reasonably represents the area. Some surveys will have such widely ranging depths that it would be best to create separate border files for deep and shallow areas. Enter a Line Azimuth that best conforms to the direction the lines will be run. Hint: To determine the azimuth, click the ruler icon (1) on the right side of the Administrator window, then left click and drag a line (2) that parallels the direction you want to run and read the angle in the Ruler window (3). Click OK to generate lines.



The Border file should now be filled with lines spaced at a reasonable distance for the water depth(s). You may save the line file if you like by clicking File>Save from the Line Editor.

The final step is to generate the Line Report that will include the total length of planned lines and time to run them. Click Line Report, enter the expected survey speed and time between lines, click OK and see the bottom of the text document generated for details. Save the text file if desired.





And that's all there is to it. Now you have an estimate for the total time that it will take to run all of those lines!