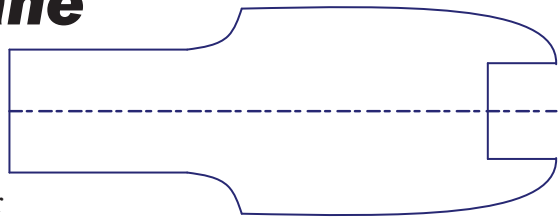


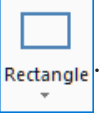



Hydroplane



A. Create Rectangle.

Step 1. If necessary start a new Mastercam file, click New  (Ctrl-N) on the Quick Access Toolbar QAT. Units **inches**.

Step 2. On the Wireframe tab  click **Rectangle**  **angle**.

Step 3. In the Rectangle function panel: under Dimensions, **Fig. 1**
Width 9
Height 3 and press ENTER
Press **O** key on keyboard to select Auto Cursor Origin override
Click OK .

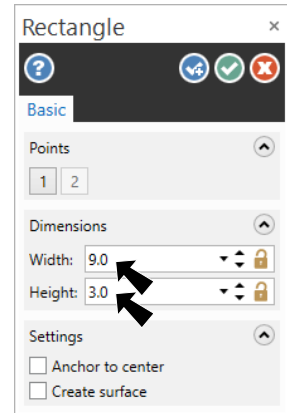



Fig. 1

Step 4. **Right click** the graphics window and click **Fit**  (Alt-F1).

B. Save As "HYDRO"


Step 1. Click **Save As**  (Ctrl-Shift-S) on the Quick Access Toolbar QAT.

Step 2. Key-in **HYDRO** for the filename and press ENTER.




Fig. 2

C. Set Grid and Snap .2.

Step 1. On the View tab  click **Show Grid**  and **Snap to Grid**  **Grid**.

Step 2. Click the **Dialog Box Launcher**  (Alt-G), **Fig. 3**.

Step 3. In the Grid Settings dialog box: under Spacing, **Fig. 4**
X and Y Spacing .2
Click OK .

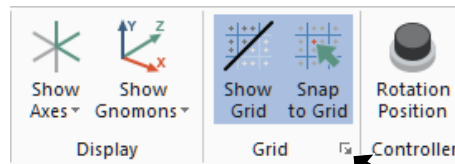


Fig. 3

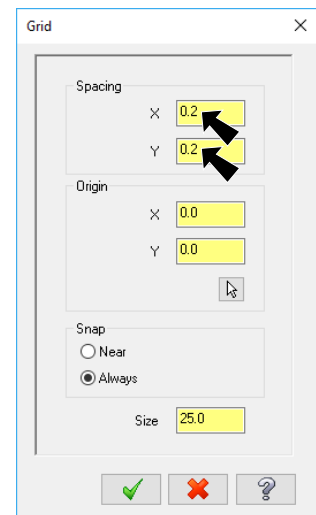


Fig. 4

D. Set Line Attributes Centerline.

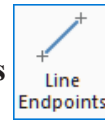
Step 1. Change **line style to center**. **Right click** in the graphics window and on the Mini Toolbar click **Line Style** drop down arrow and select **centerline**, Fig. 5.



Fig. 5

E. Create Horizontal Centerline.

Step 1. On the Wireframe tab **Wireframe** click **Line Endpoints**



Step 2. In the Line Endpoints function panel:
Sketch a horizontal line across rectangle from midpoint of line,
Fig 7

Click OK

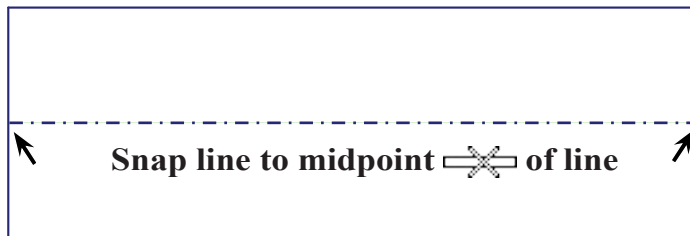


Fig. 7

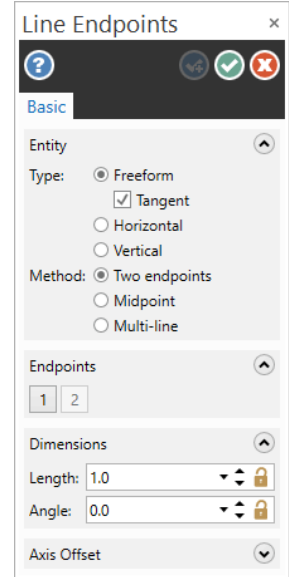


Fig. 6

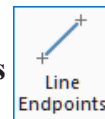
F. Sketch Hull Lines.

Step 1. Change **line style back to solid**. **Right click** in the graphics window and on the Mini Toolbar click **Line Style** drop down arrow and select **solid style**, Fig. 8.



Fig. 8

Step 2. On the Wireframe tab **Wireframe** click **Line Endpoints**



Step 3. In the Line Endpoints function panel:

Press **spacebar** to activate Fast Point
Key-in coordinates in **Fig. 9**
Press ENTER after each coordinate

Or use tracking in Status Bar to locate endpoints

Click OK when done.

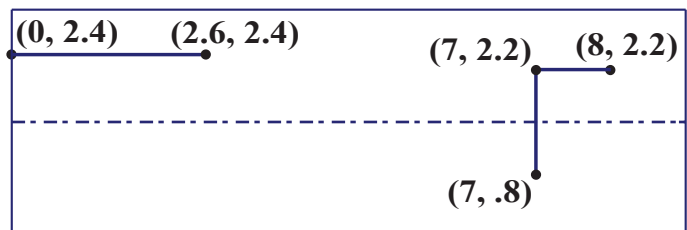
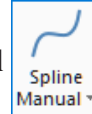



Fig. 9

G. Sketch Hull Splines.

Step 1. On the Wireframe tab  click **Spline Manual**



Step 2. In the Spline function panel:

Press **spacebar** to activate Fast Point 

Key-in coordinates in **Fig. 10**

Press ENTER after each coordinate

Or use tracking in Status Bar to

determine spline points

Click **OK and Create New**

Operation 

Use Fast Point or Tracing to

locate points of second spline

Fig. 11

Click OK 

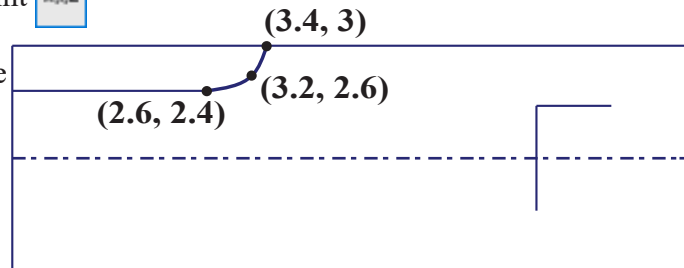


Fig. 10

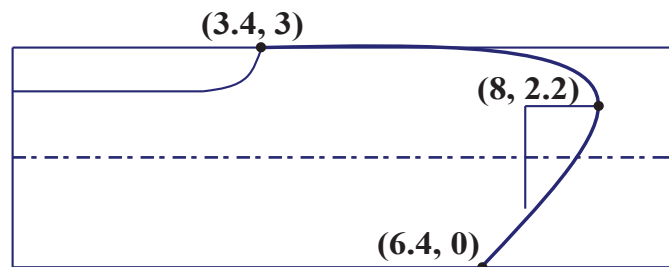


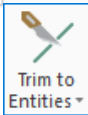
Fig. 11

Step 3. Save  (Ctrl-S).

H. Trim Spline.

Step 1. On the Wireframe tab 

click **Trim to Entities**



Step 2. In the Trim to Entities function panel:

under Method, **Fig. 12**

select **Trim 1 entity**

Trim spline. Click spline to trim at Position 1, then trim to line at Position 2, **Fig. 13**

Click OK  when done.

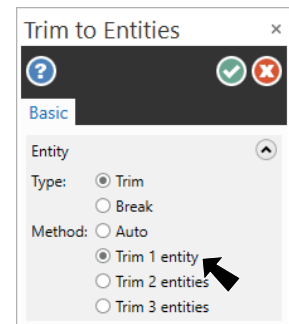


Fig. 12

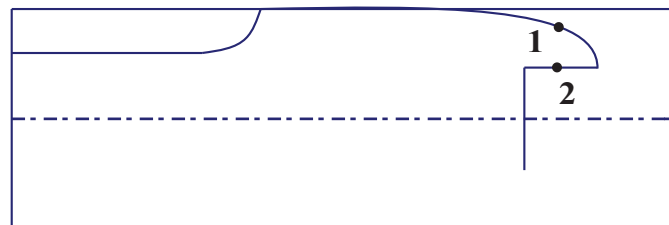
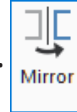



Fig. 13

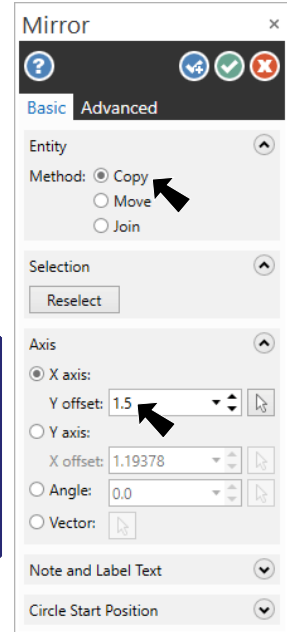
I. Mirror Starboard Hull.

Step 1. On the Transform tab  click **Mirror**



Step 2. Click **splines and lines** and click **End Selection**  (ENTER), **Fig. 14**.

Step 3. In the Mirror function panel set:
 under Method, **Fig. 15**
 select **Copy**
 under Axis
 select **X axis**
Y offset 1.5 (1/2 of height of rectangle)
 Click OK .



Step 4. **Right click** the graphics window and click **Clear Colors**

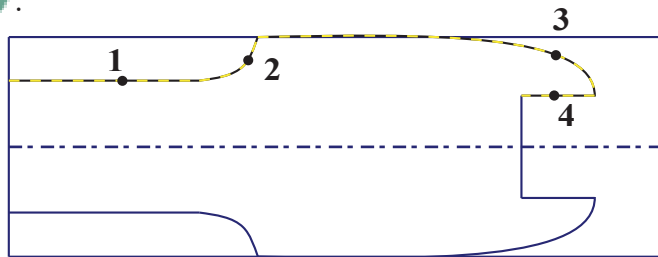
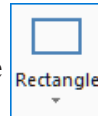


Fig. 14

J. Create Rectangle For Side View.

Step 1. Use the **page down key 4 or 5 times** to zoom out.

Step 2. On the Wireframe tab  click **Rectangle**



Step 3. In the Rectangle function panel:
 under Dimensions, **Fig. 16**
Width 9
Height 1.4 and press ENTER

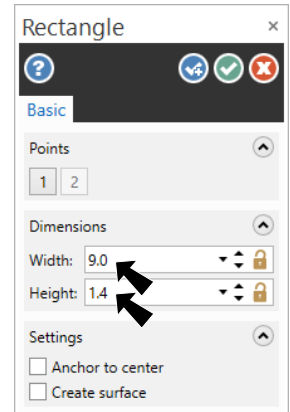





Fig. 16

Press **spacebar** to activate Fast Point 
 Key-in **0, -3**  and press ENTER **twice**
 Click OK .

Step 4. Fit  (Alt-F1).

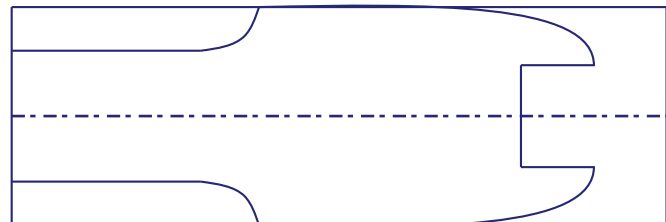
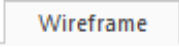
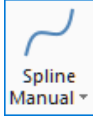



Fig. 17

K. Sketch Side View Hull Spline.


Step 1. On the Wireframe tab  click **Spline Manual** .


Step 2. In the Spline Manual function panel:
under Position, **Fig. 18**
check **Edit End Conditions**.

Press **spacebar** to activate Fast Point .

Key-in coordinates in **Fig. 19**.

Press ENTER after each coordinate. Spacebar, key-in coordinates and press ENTER.

(3.4, -3) 

(6.8, -2.2) 

(8, -1.6)  press ENTER twice.

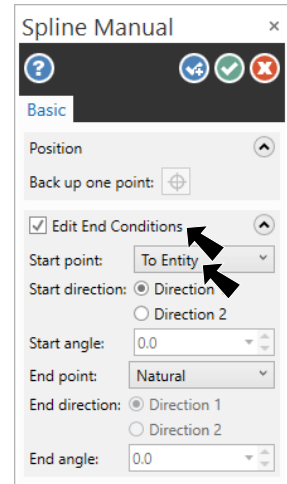


Fig. 18

Step 3. Back in the Spline Manual function panel set:

under Position, **Fig. 18**

Start point: To Entity

Click **bottom horizontal line**, **Fig. 20**.

Click OK .

Step 4. Save  (Ctrl-S).

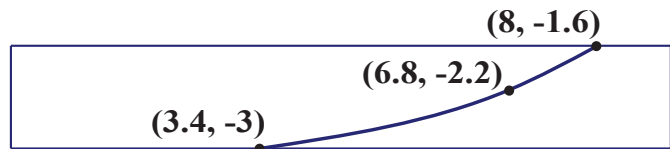
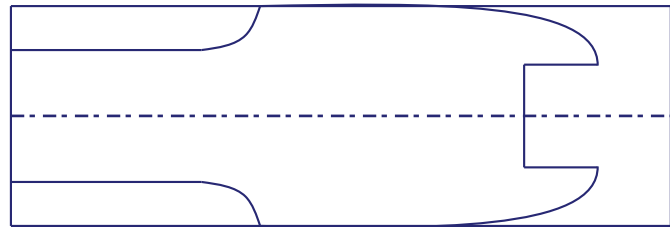
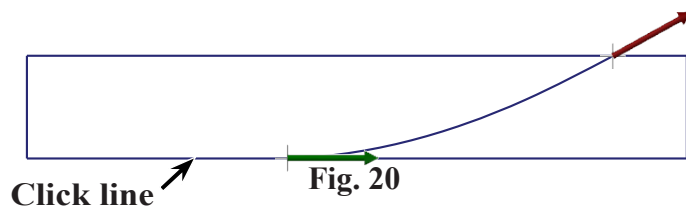
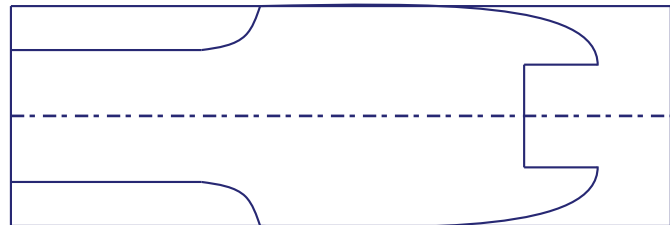


Fig. 19



L. Delete Lines.

Step 1. Lines 1 through 4 are no longer needed. Select lines and press **Delete** key **Fig. 21**.

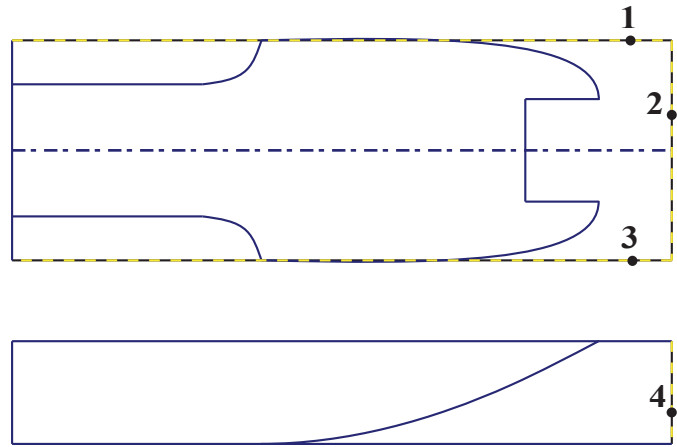
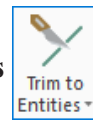


Fig. 21

M. Trim Hull Lines.

Step 1. On the Wireframe tab **Wireframe** click **Trim to Entities**



Step 2. In the Trim to Entities function panel:

under Method, **Fig. 22**

select **Trim 1 entity**

Trim 4 lines. Click line to trim at Position 1, then trim to Position 2, **Fig. 23**. Repeat at the other 3 lines.

Click OK  when done.

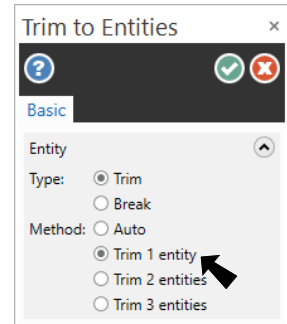


Fig. 22

Step 3. Save  (Ctrl-S).

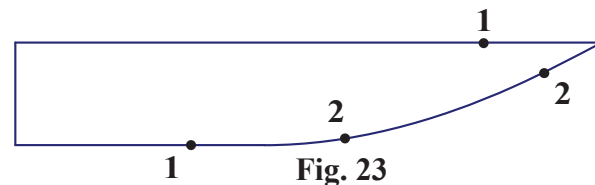
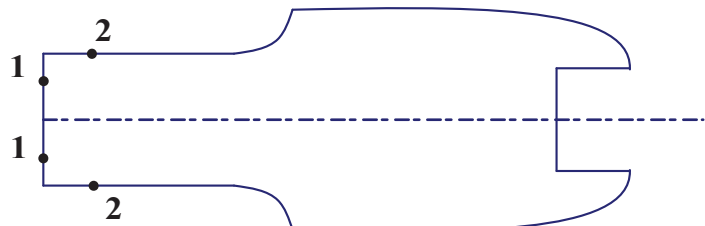


Fig. 23

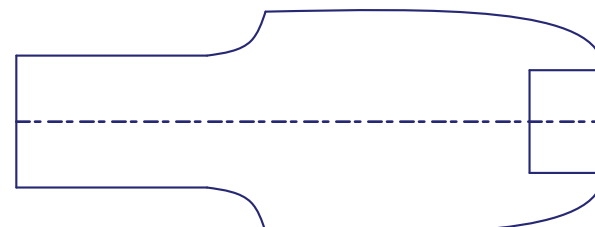


Fig. 24