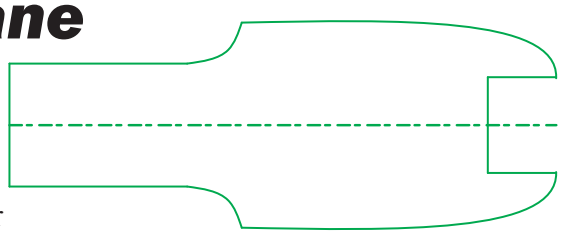
Hydroplane



A. Create Rectangle.

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

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

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 AutoCursor Origin override
Click OK.

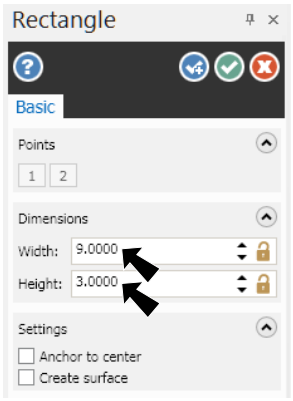


Fig. 1

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 VIEW click **Show Grid** Show Grid and **Snap to Grid** Snap to 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.

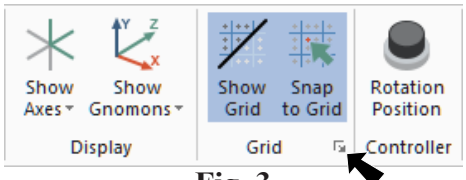


Fig. 3

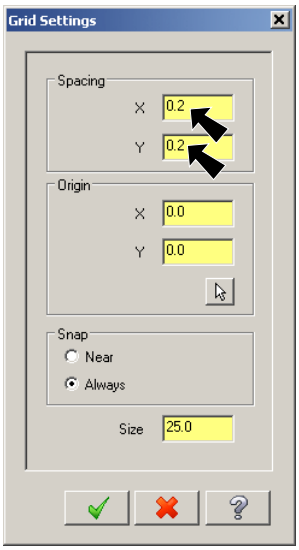


Fig. 4

http://www.cudacountry.net email:cudacountry@hotmail.com

D. Set Line Attributes Center Line.

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 **center line**, **Fig. 5**.

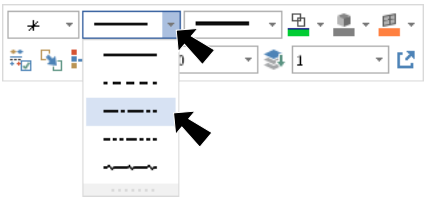
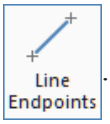


Fig. 5

E. Create Horizontal Center Line.

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

.

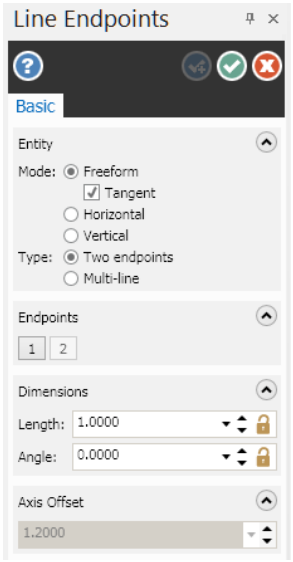


Fig. 6

Step 2. In the Line Endpoints function panel:

Sketch a horizontal line across rectangle from midpoint of line, **Fig 7**

Click OK .

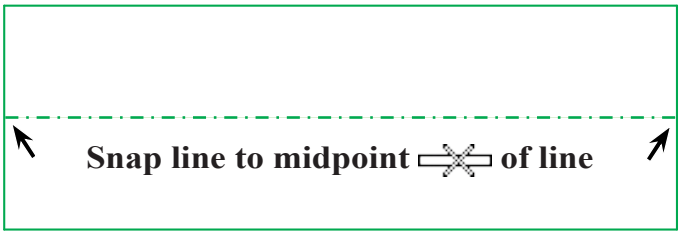
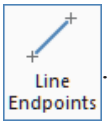


Fig. 7

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.

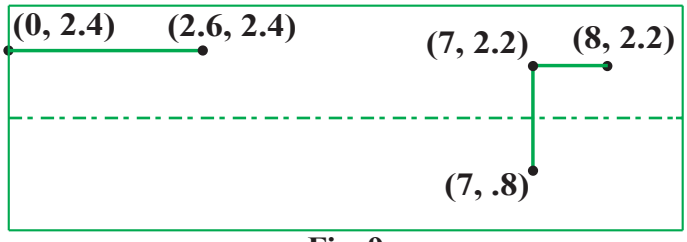


Fig. 9

G. Sketch Hull Splines.

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

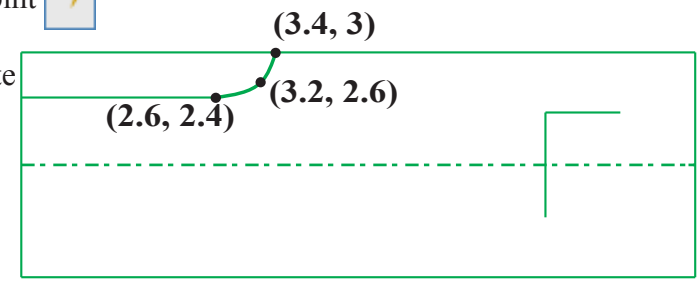


Fig. 10

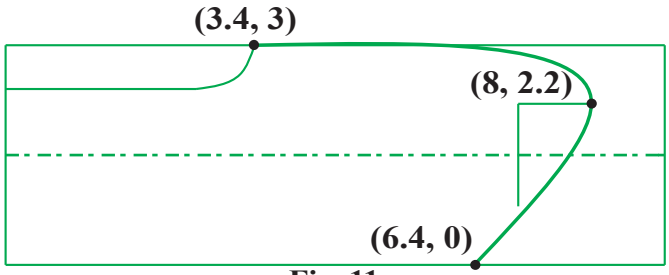


Fig. 11

Step 3. Save (**Ctrl-S**).

H. Trim Spline.

Step 1. On the Wireframe tab WIREFRAME

click **Trim Break Extend** Trim Break Extend.

Step 2. In the Trim Break Extend function panel:
under Type, **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.

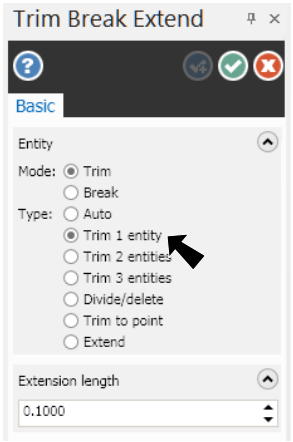


Fig. 12

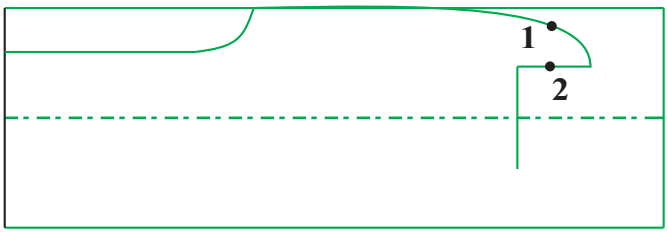


Fig. 13

I. Mirror Starboard Hull.

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

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

Step 3. In Mirror dialog box:

Select **Copy**, **Fig. 15**

Click **Line**

Click **centerline**, **Fig. 14**

Click OK.

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

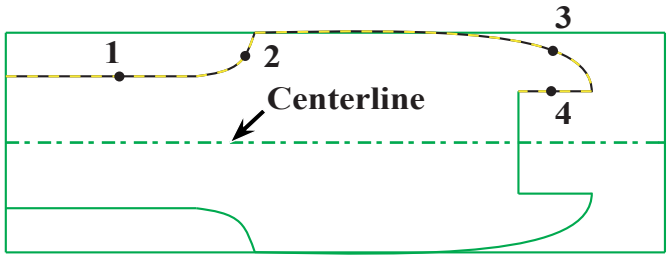


Fig. 14

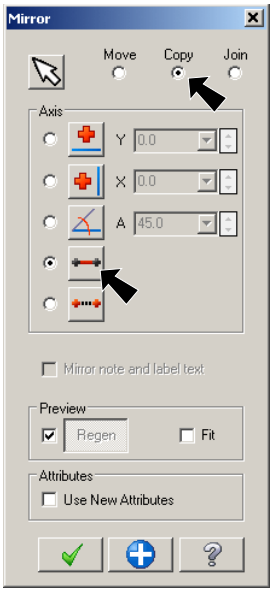


Fig. 15

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 WIREFRAME click **Rectangle** Rectangle.

Step 3. In the Rectangle function panel:

under Dimensions, **Fig. 16**

Width 9

Height 1.4 and press ENTER

Press **spacebar** to activate Fast Point

Key-in **0**, **-3** 0,-3 and press ENTER **twice**

Click OK.

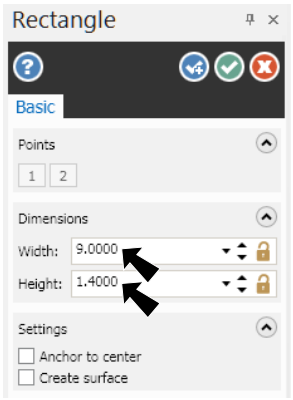


Fig. 16

Step 4. Fit (**Alt-F1**).

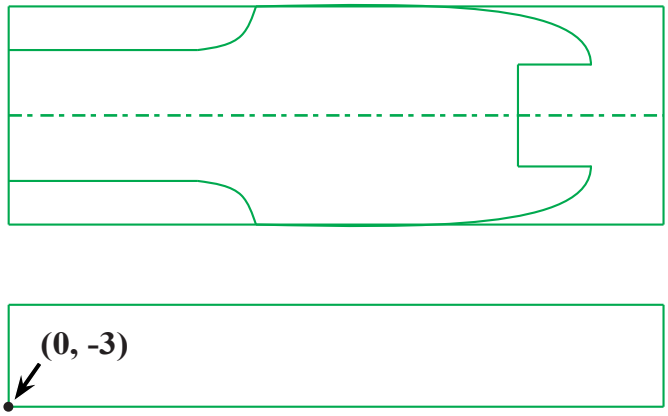


Fig. 17

K. Sketch Side View Hull Spline.

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

Step 2. In the Spline function panel:

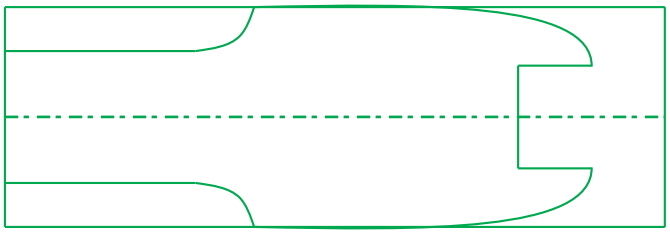
Press **spacebar** to activate Fast Point

Key-in coordinates in **Fig. 18**

Press ENTER after each coordinate

Or use tracking in Status Bar to determine spline points

Click OK .



Step 3. Save (**Ctrl-S**).

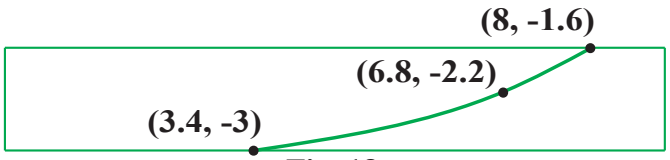


Fig. 18

L. Delete Lines.

Step 1. Lines 1 through 4 are no longer needed. Select lines and press **Delete** key **Fig. 19**.

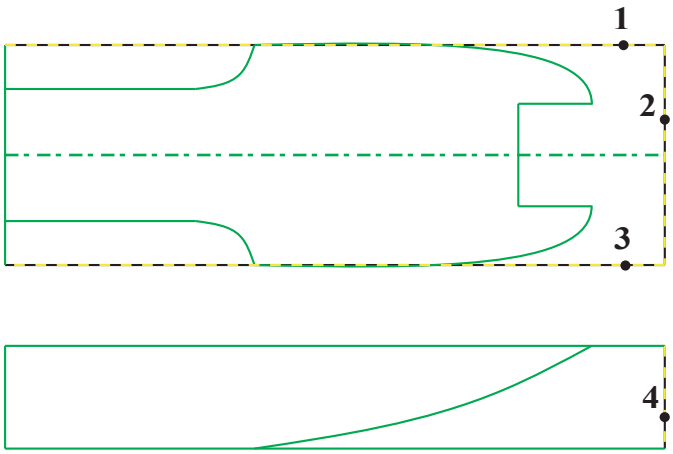
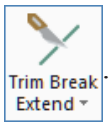


Fig. 19

M. Trim Hull Lines.

Step 1. On the Wireframe tab WIREFRAME click **Trim Break Extend** 
.

Step 2. In the Trim Break Extend function panel:
under Type, **Fig. 20**
select **Trim 1 entity**
Trim 4 lines. Click line to trim at Position 1, then trim to Position 2, **Fig. 21**. Repeat at the other 3 lines.
Click OK when done.

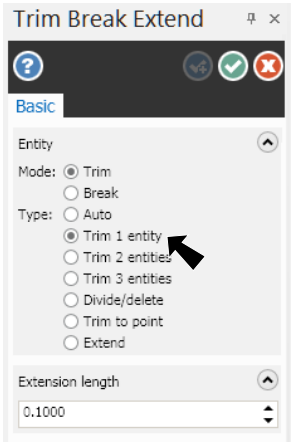


Fig. 20

Step 3. Save (**Ctrl-S**).

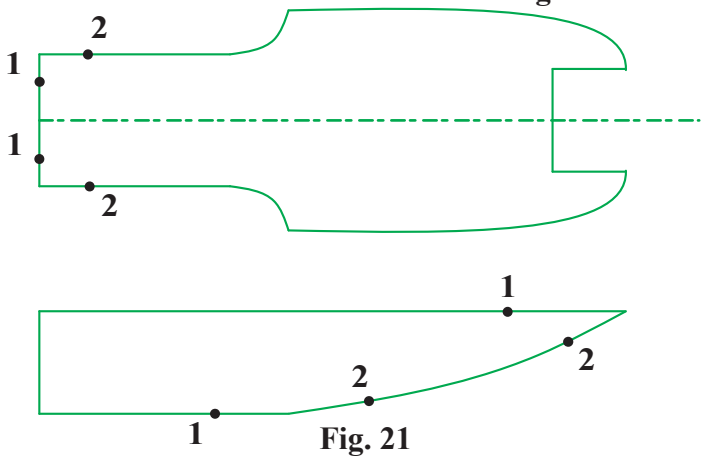


Fig. 21

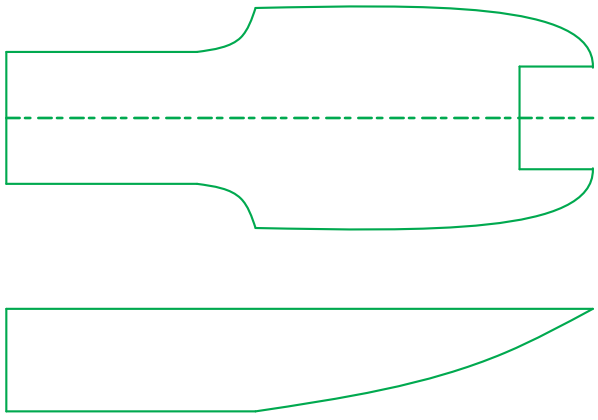


Fig. 22