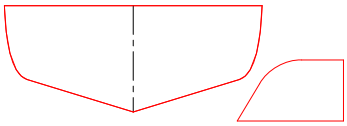
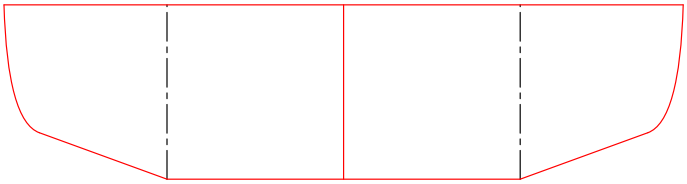
Chapter 12 Export DXF to Illustrator



A. Export Fuselage/Tooth Sketch as DXF".

Step 1. Open your **FUSELAGE** part file.

Step 2. Roll the rollback bar to below the **Cut-Extrude1**. To rollback, click **Fillet1** in the Feature Manager and click **Rollback**  from the Content toolbar, **Fig. 1**.



Step 3. Click **Cut-Extrude1** in the Feature Manager and click **Edit Sketch**  on the Content menu, **Fig. 2**.

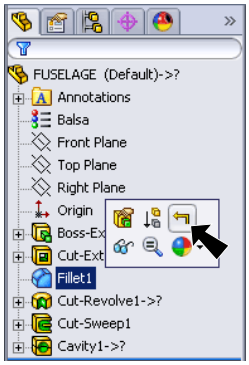


Fig. 1

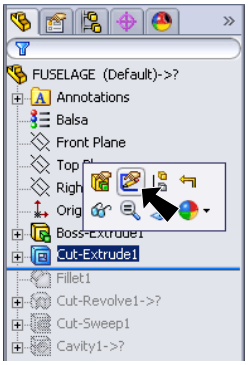


Fig. 2

Step 4. Click **Normal To**  on the Standard Views toolbar. (**Ctrl-8**)

Step 5. Click File Menu > Save As.

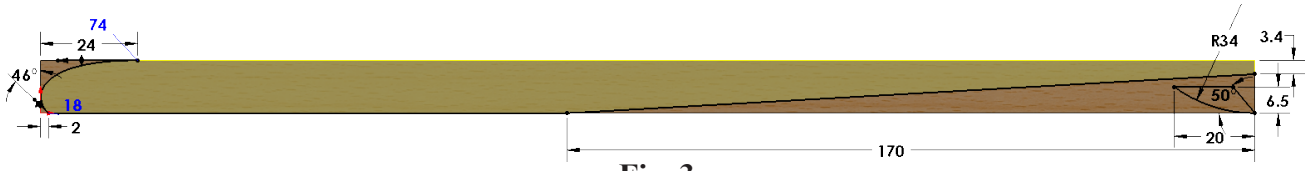


Fig. 3

Step 6. In the Save As dialog box, change **Save as type: to Dxf** and click Save, **Fig. 4**.

Step 7. Click **Save the Document without rebuilding**, **Fig. 5**.

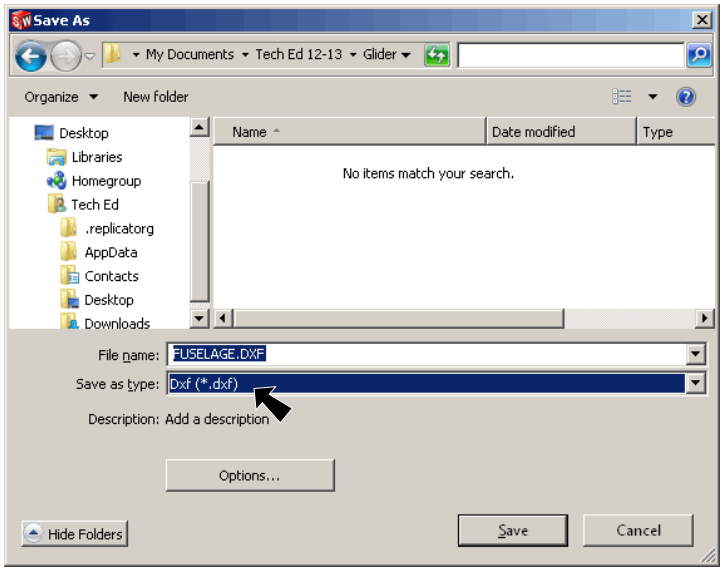


Fig. 4

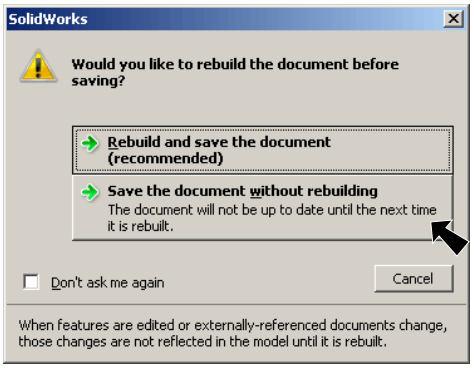


Fig. 5

Step 8. In the DXF/DWG Property Manager set:

under Export, **Fig. 6**

click **Annotation views**

under Views to Export

check **Current**

click OK  .

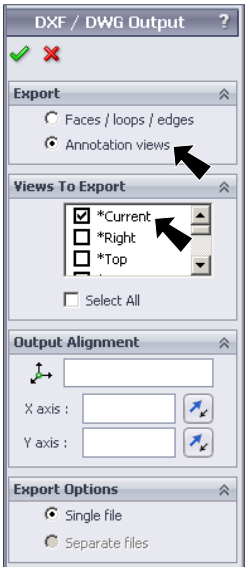


Fig. 6

Step 9. In the DXF/DWG Cleanup dialog box:

Use the **Zoom to Area**  in the View toolbar to drag a zoom window around the **front of fuselage**, **Fig. 7** and **Fig. 8**.

To **pan**, hold down **Ctrl key** and drag with middle mouse button (wheel).

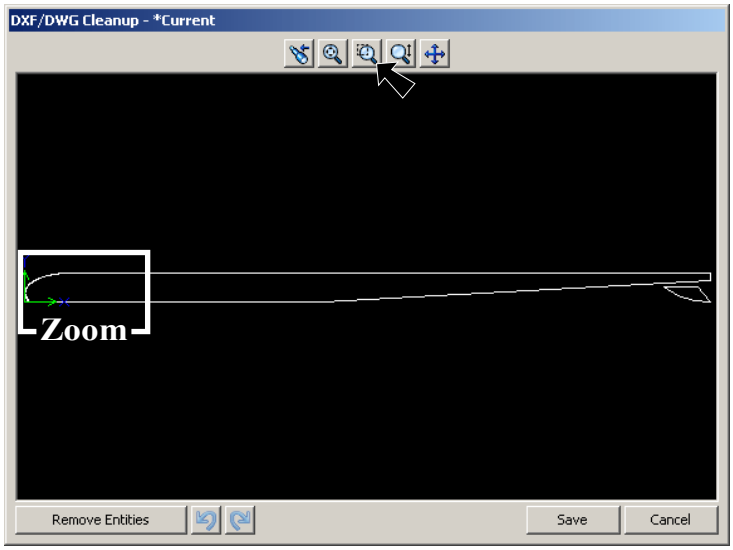


Fig. 7

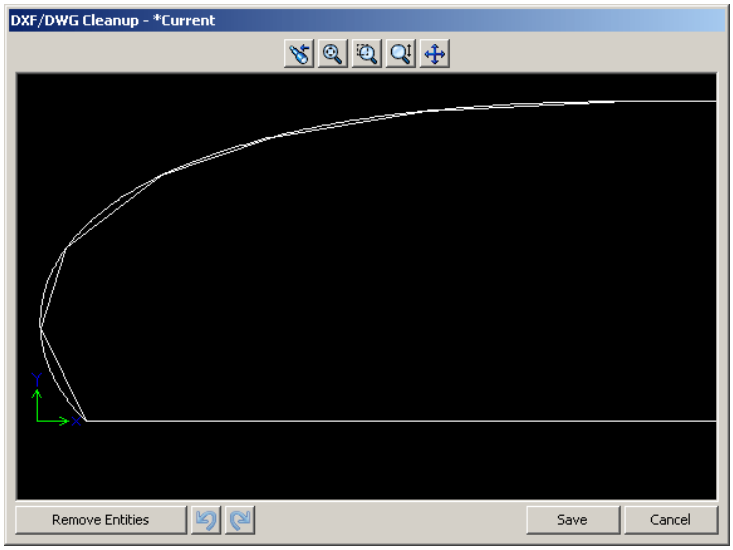


Fig. 8

Step 10. Remove the segmented spline.
To remove, **select the segmented spline** and click **Remove Entities**, **Fig. 9** and **Fig. 10**.

Step 11. Click Save, **Fig. 10**.

Step 12. Close the Fuselage part file and **Don't Save**. Use File Menu > Close. **Don't** exit SolidWorks.

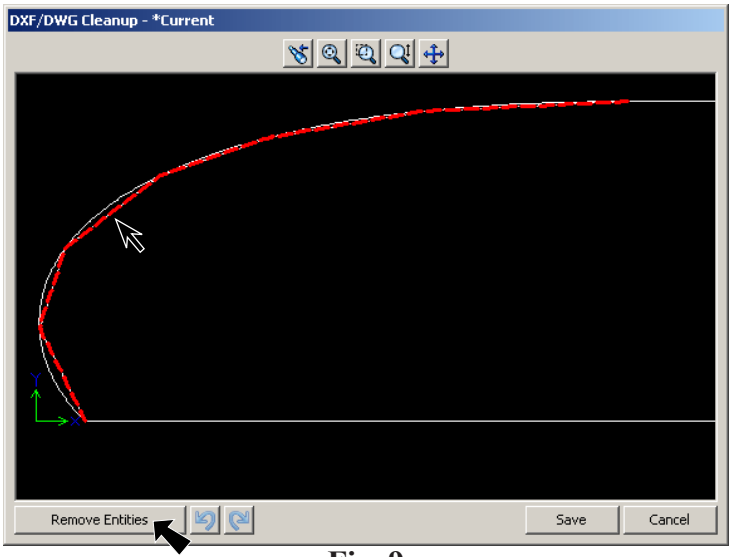


Fig. 9

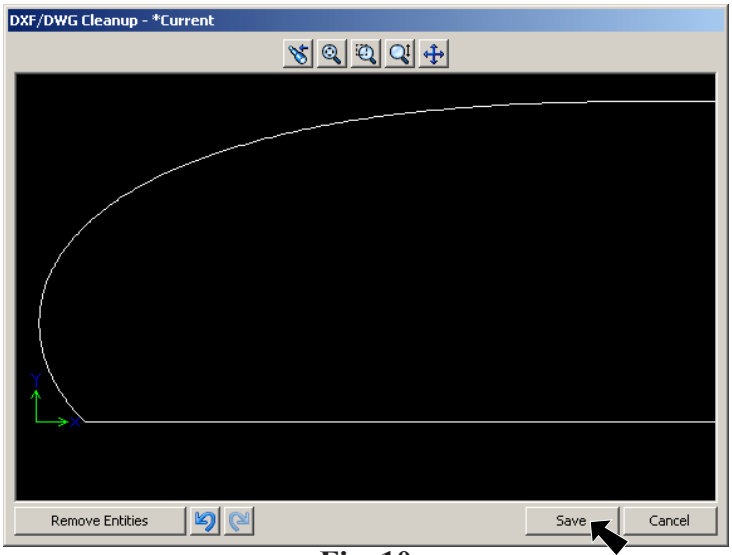


Fig. 10

B. Open Fuselage DXF in Illustrator.

Step 1. Open your **FUSELAGE.DXF** file in Adobe Illustrator.

Step 2. In DXF/DWG Option dialog box:
under Artwork Scale, **Fig. 11**
select **Original Size**
set units **Millimeters**
set **Unit(s) = 1**
and click OK, **Fig. 12**.

Step 3. Click Edit Menu > Preferences > Unit & Display Performance.

Step 4. Set units to **Millimeters**, **Fig. 13**.

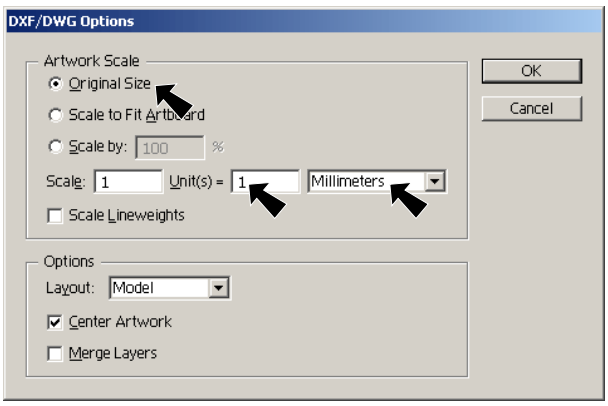


Fig. 11

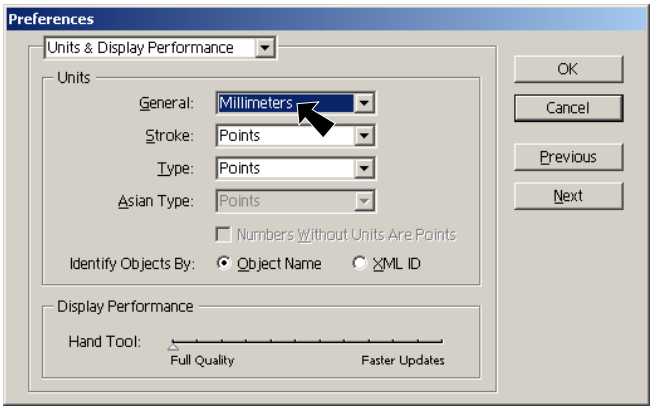


Fig. 13

Fig. 12

C. Delete Duplicate Lines.

Step 1. Delete **two** lines across bottom of Fuselage that are on top of lines (duplicate), **Fig. 14**. To delete, click a line and press Delete key on keyboard.

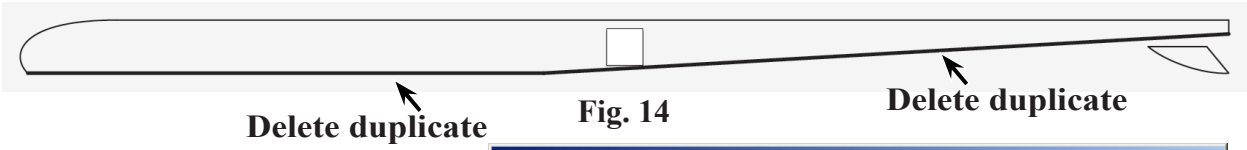


Fig. 14

D. Set Artboard Size.

Step 1. **Double click Artboard Tool**  in the Tools panel, **Fig. 15**.

Step 2. In the Artboard Options dialog box set:
Preset: **Fit Artboard to Artwork bounds**, **Fig. 16**
click OK, **Fig. 17**.

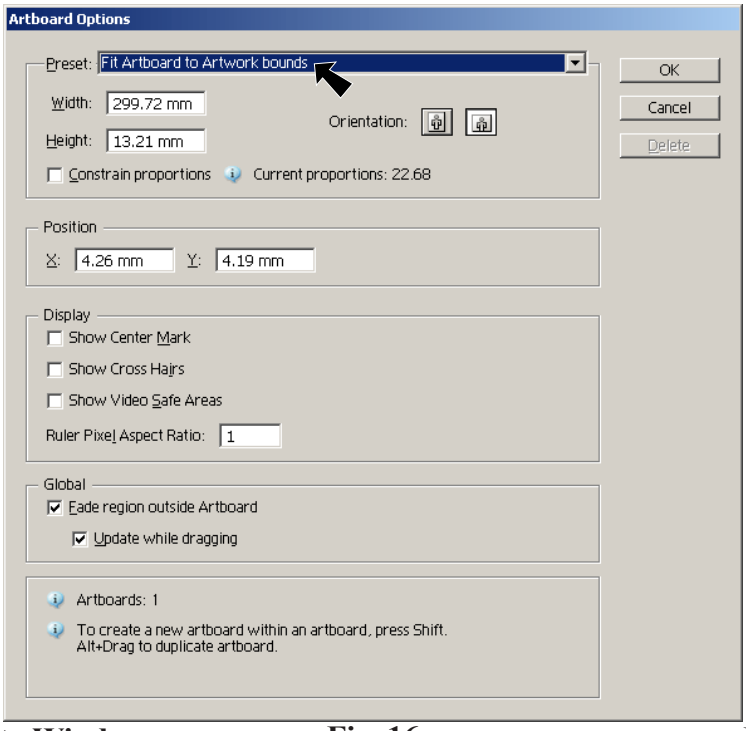


Fig. 16

Fig. 15

E. Set Color and Line Width.

Step 1. Press **Escape** key to deselect the Artboard.

Step 2. Use **Ctrl-0** to **Fit Artboard to Window**.

Fig. 17

Step 3. Use **Ctrl-A** to select all.

Step 4. Click Window Menu > Swatch Libraries > Default Swatches > Basic RGB.

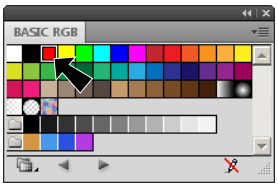


Fig. 18

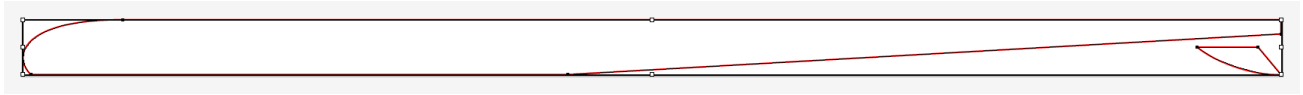


Fig. 19

Step 5. Click the **Red** swatch in Swatch panel, **Fig. 18**.

Step 6. Key-in **Stroke .001** in the Control Panel, **Fig. 20**.

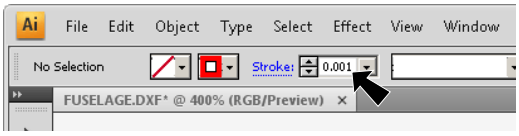


Fig. 20

Step 7. Save the Illustrator file. Use **Ctrl-S** and click Save.

Fig. 21

F. Export Wing as DXF".

Step 1. Back in SolidWorks, open your **WING** part file.

Step 2. Suppress features below the **SketchedBend1**. To Suppress, click **Cut-Sweep1** in the Feature Manager and click **Suppress**  from the Content toolbar, **Fig. 22**.

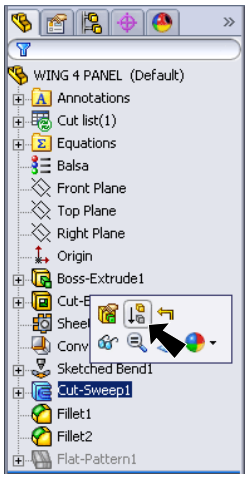


Fig. 22

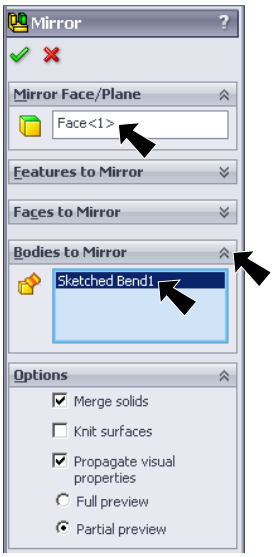


Fig. 23

G. Mirror Sheet Metal.

Step 1. Click **Mirror**  on the Features toolbar.

Step 2. In the Mirror Property Manager set:

under **Mirror Face/Plane**, **Fig. 23**

right click top face of inboard panel and click **Select Other** from the menu, **Fig. 24**

click root face of Wing, **Fig. 25**

expand **Bodies to Mirror**

click the **Wing**, **Fig. 26**

click OK  .

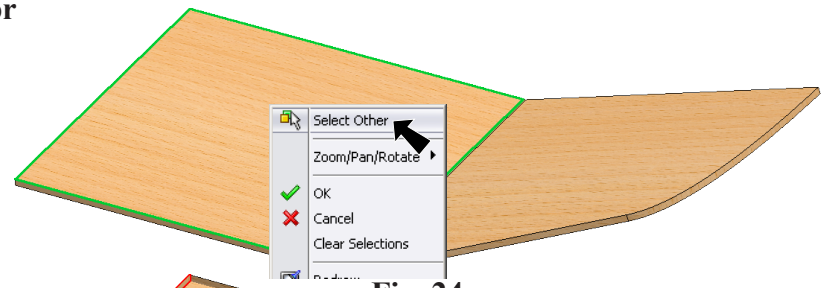


Fig. 24

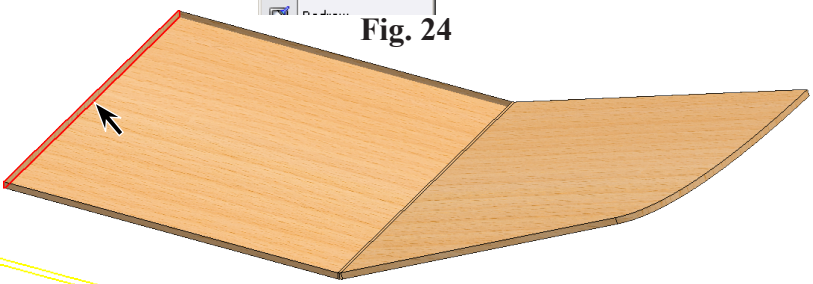


Fig. 25

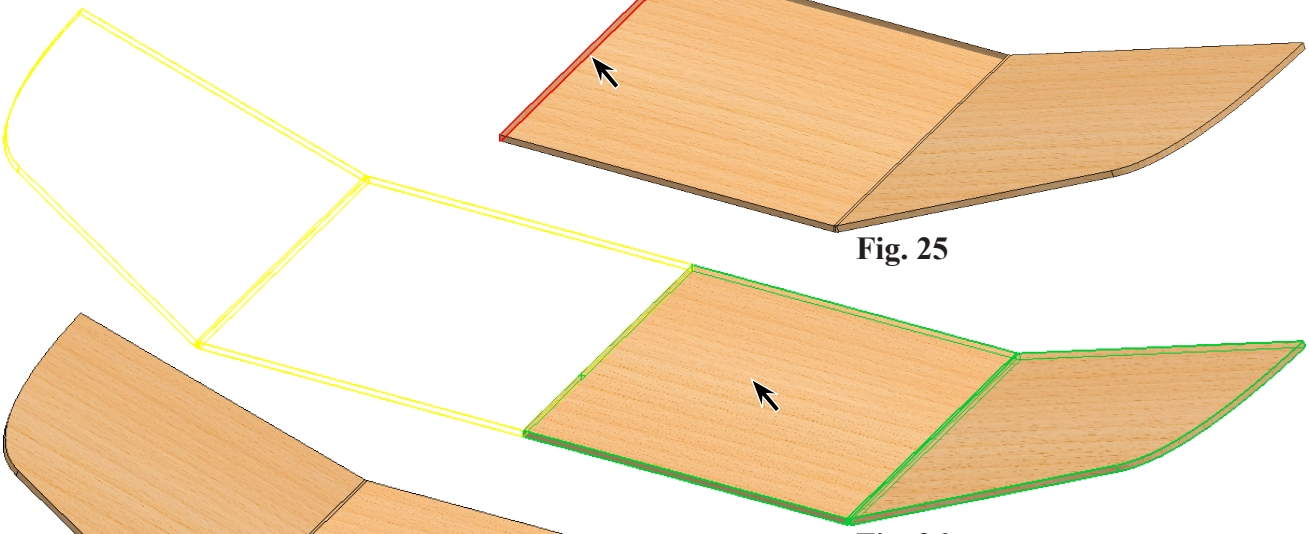


Fig. 26

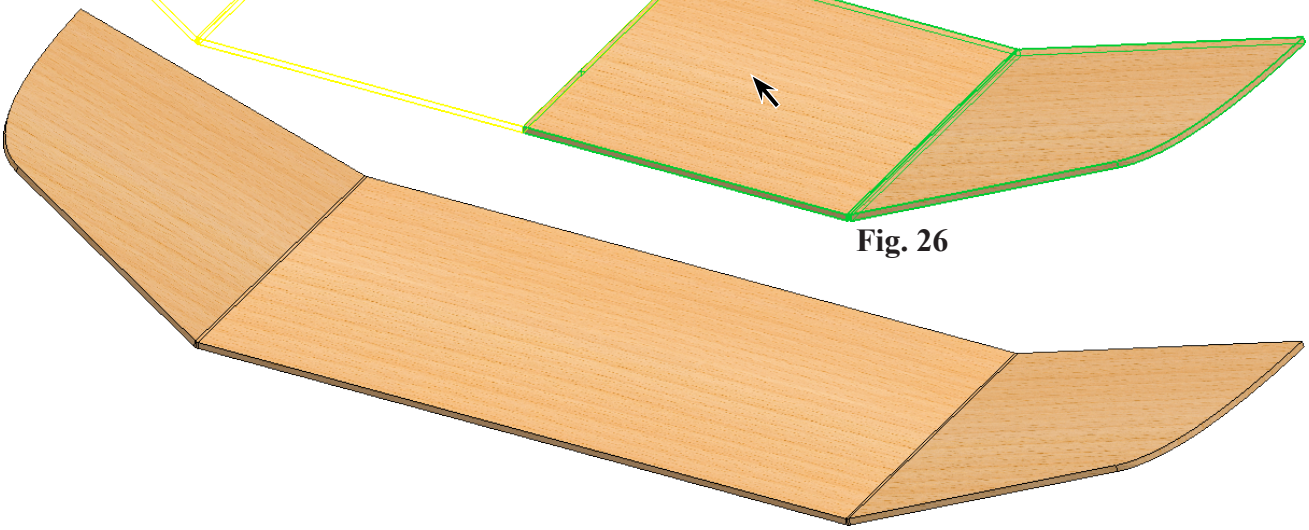


Fig. 27

H. Draw Line.

Step 1. Click the **top face of inboard panel** and click **Sketch**  on the Content menu, **Fig. 28**.

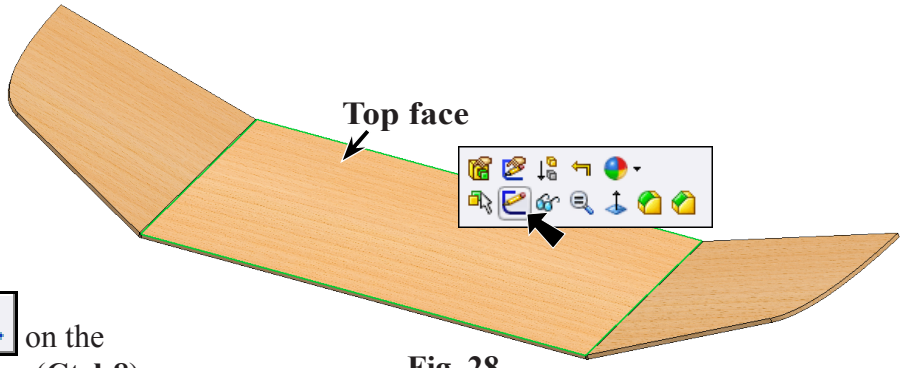


Fig. 28

Step 2. Click **Normal To**  on the Standard Views toolbar. (**Ctrl-8**)

Step 3. Click **Line**  (**L**) on the Sketch toolbar.

Step 4. Draw the vertical line (centerline) down through the Origin, **Fig. 29**. Start from the Mid-point  of edge.

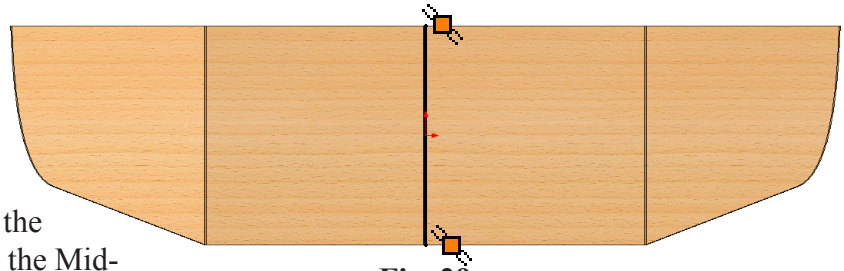


Fig. 29

Step 5. **Do not save Part file**.

I. Save As WING.DXF.

Step 1. Click File Menu > Save As.

Step 2. In the Save As dialog box:
change **Save as type: to Dxf** and click Save, **Fig. 30**.

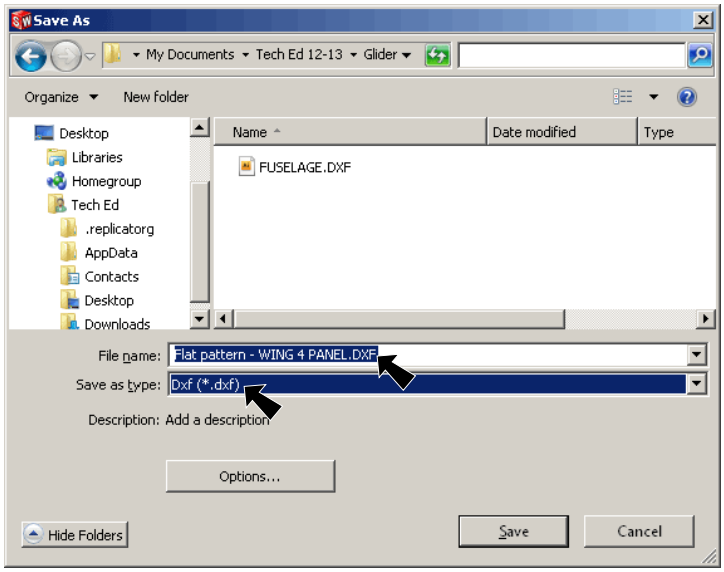


Fig. 30

Step 3. In the DXF/DWG Property Manager set:
under Entities To Export, **Fig. 31**
check **Bend lines**
check **Sketches**
click OK  .

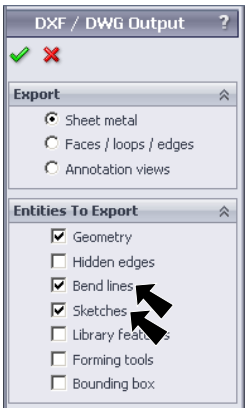


Fig. 31

Step 4. In the DXF/DWG Cleanup dialog box:
Remove the extra line to the right of the centerline. To remove, **select line** and click **Remove Entities**, **Fig. 32** and **Fig. 33**.

Step 5. Click Save, **Fig. 33**.

Step 6. Close the Wing part file and **Don't Save**. Use File Menu > Close. **Don't** exit SolidWorks.

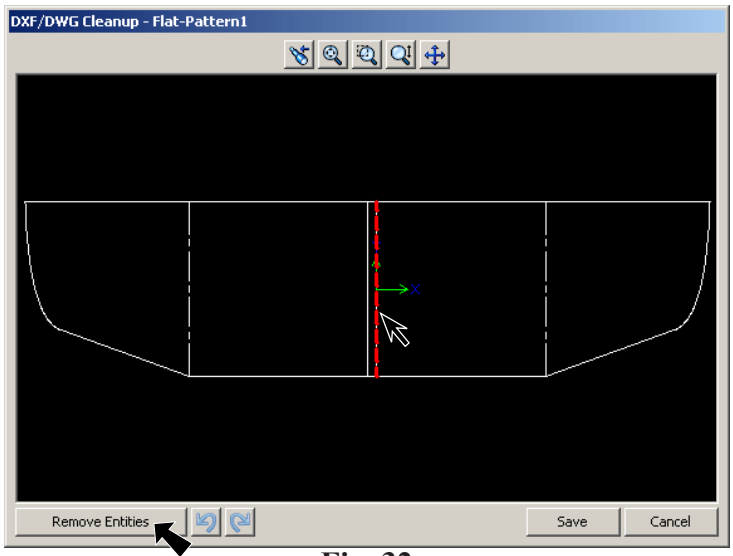


Fig. 32

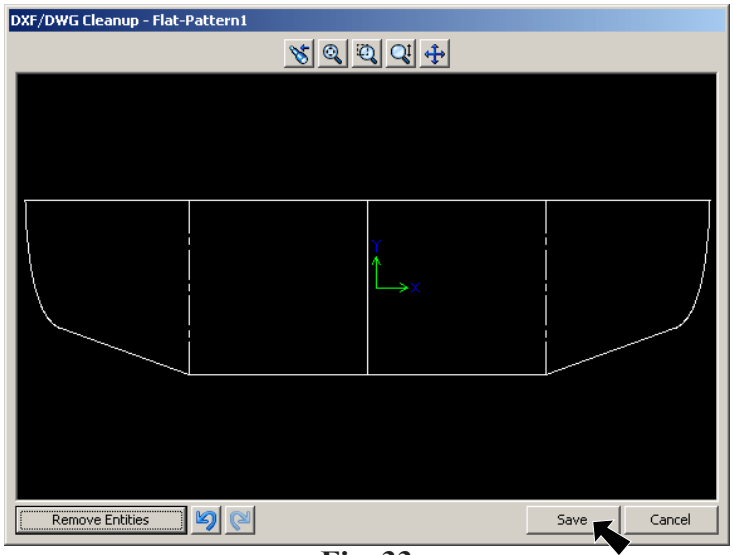


Fig. 33

J. Open Wing DXF in Illustrator.

Step 1. Open your **WING.DXF** file in Adobe Illustrator.

Step 2. In DXF/DWG Option dialog box:
under Artwork Scale, **Fig. 34**
select **Original Size**
set units **Millimeters**
set **Unit(s) = 1**
and click OK, **Fig. 35**.

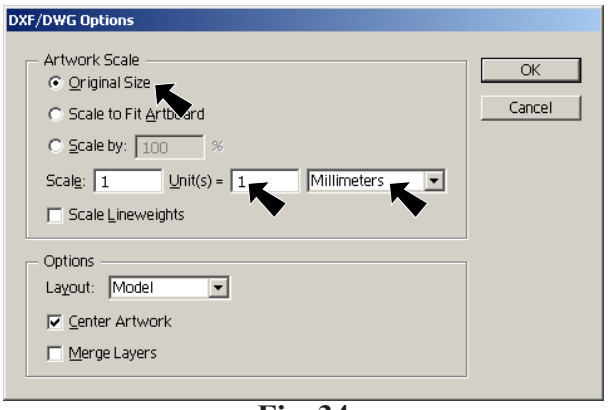


Fig. 34

K. Set Artboard Size.

Step 1. **Double click Artboard Tool**  in the Tools panel.

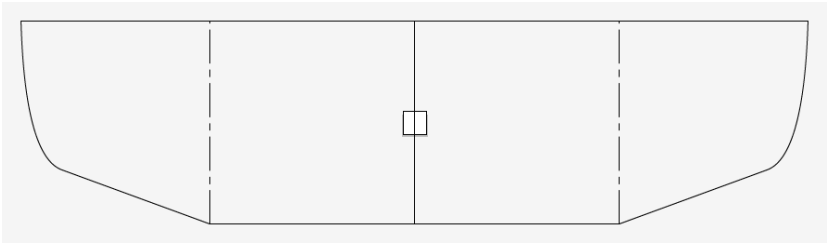


Fig. 35

Step 2. In the Artboard Options dialog box set:
Preset: **Fit Artboard to Artwork bounds**, **Fig. 36**
click OK, **Fig. 37**

Step 3. Press **Escape** key to unselect the Artboard.

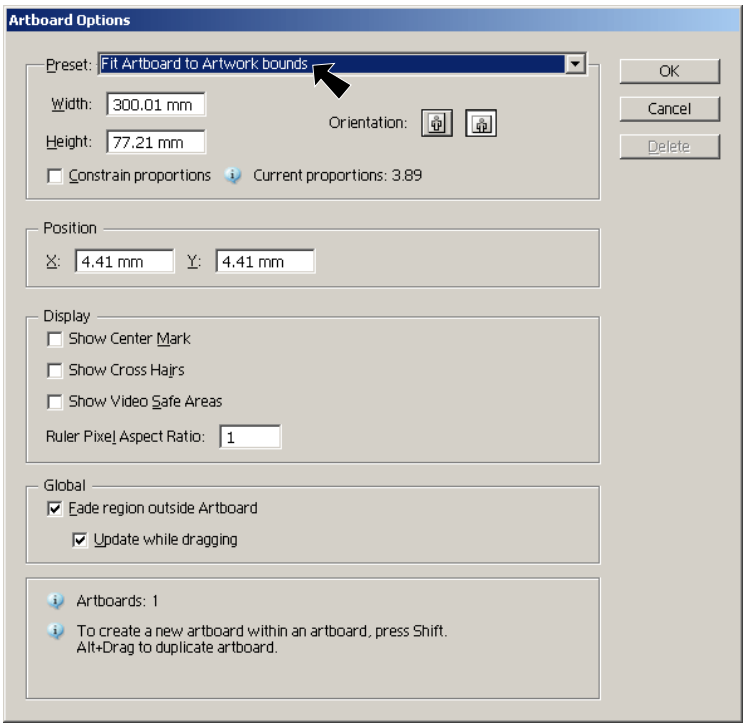


Fig. 36

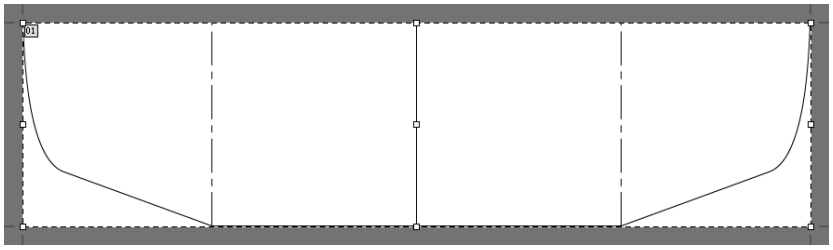


Fig. 37

L. Set Color and Line Width.

Step 1. Use **Ctrl-A** to select all.

Step 2. If necessary, display Basis RGB Swatch panel. Click Window Menu > Swatch Libraries > Default Swatches > Basic RGB.

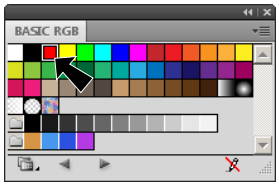


Fig. 38

Step 3. Click the **Red** swatch in Swatch panel, **Fig. 38**.

Step 4. Key-in **Stroke .001** in the Control Panel, **Fig. 40**.

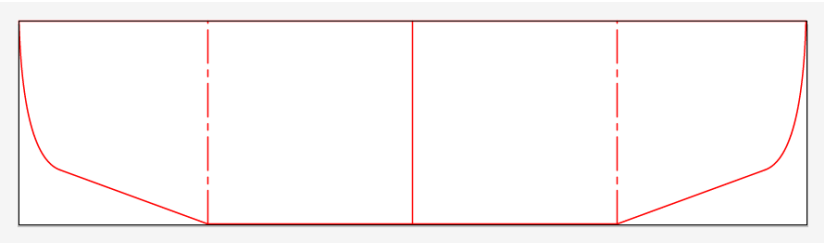


Fig. 39

Step 5. Deselect all. To deselect, click any empty area of the document window or use **Shift-Ctrl-A**.

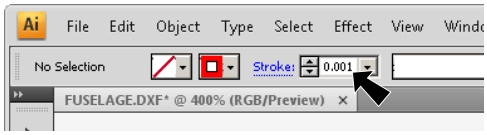


Fig. 40

Step 6. Select **both bend lines** and change to **Black .5 Stroke**, **Fig. 41**.

Step 7. Save the Illustrator file. Use **Ctrl-S** and click Save.

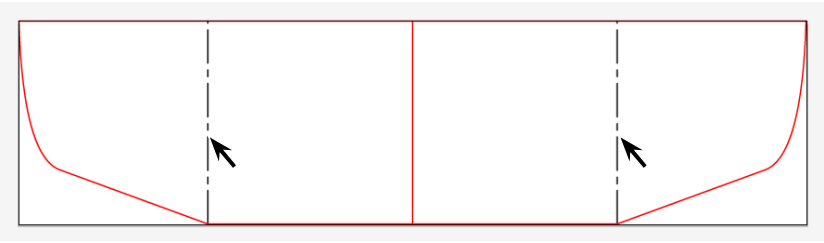


Fig. 41

M. Export Stabs as DXF".

Step 1. Back in SolidWorks, open your **H STAB** part file.

Step 2. Roll the rollback bar to below the **Cut-Extrude1**. To rollback, click **Fillet1** in the Feature Manager and click **Rollback**  from the Content toolbar, **Fig. 42**.

Step 3. Click **Cut-Extrude1** in the Feature Manager and press **Delete key** on the keyboard, **Fig. 43**. Deleting the feature will prevent duplicate lines.

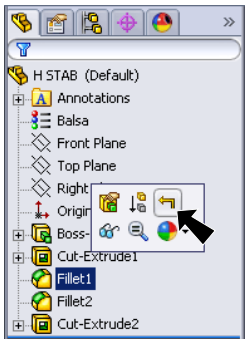


Fig. 42

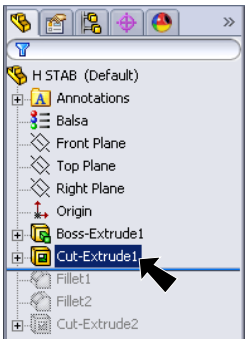


Fig. 43

Step 4. Click **Sketch2** in the Feature Manager and click **Edit Sketch**  on the Content menu, **Fig. 44**.

Step 5. Click **Normal To**  on the Standard Views toolbar. (**Ctrl-8**)

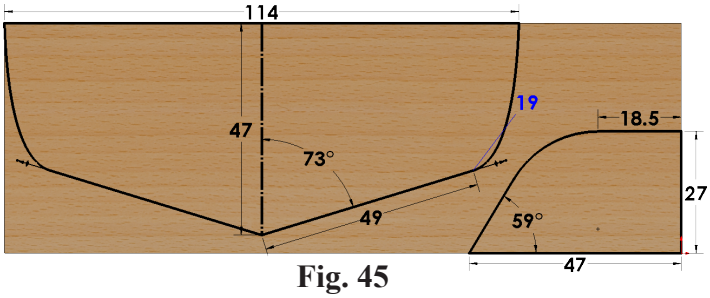


Fig. 45

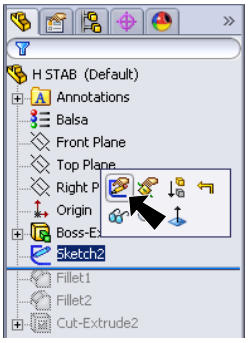


Fig. 44

Step 6. Click File Menu > Save As.

Step 7. In the Save As dialog box:
key-in **STABS** for file name
change **Save as type: to Dxf**
and click Save, **Fig. 46**.

Step 8. Click **Save the Document without rebuilding**, **Fig. 47**.

Step 9. In the DXF/DWG Property Manager set:
under Export, **Fig. 48**
click **Annotation views**

under Views to Export
check **Current**
click OK  .

Step 10. In the DXF/DWG Cleanup dialog box click Save, **Fig. 49**.

Step 11. Close the H Stab part file and **Don't Save**. Use File Menu > Close. **Don't** exit SolidWorks.

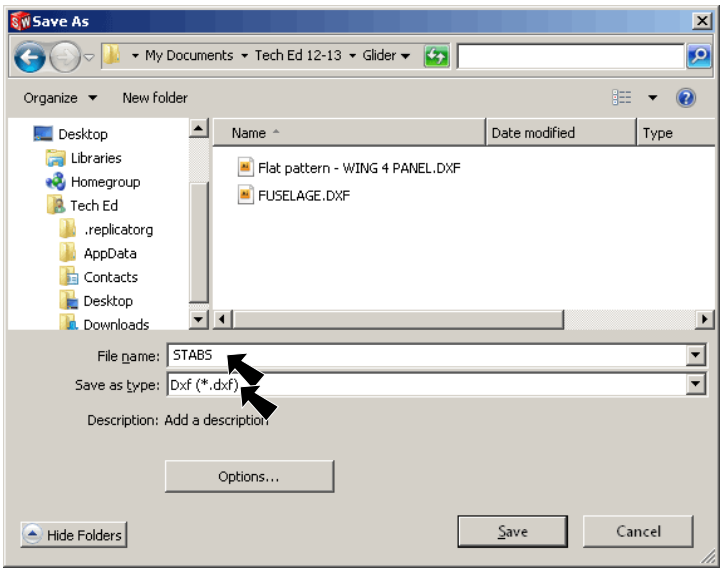


Fig. 46

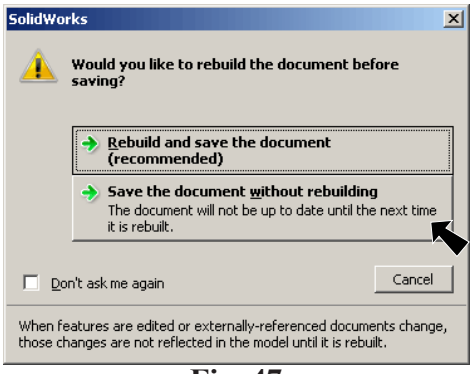


Fig. 47

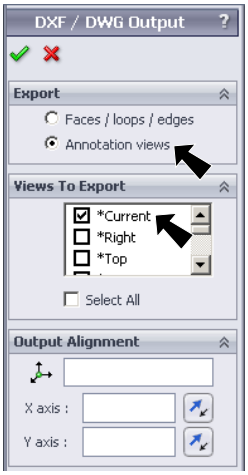


Fig. 48

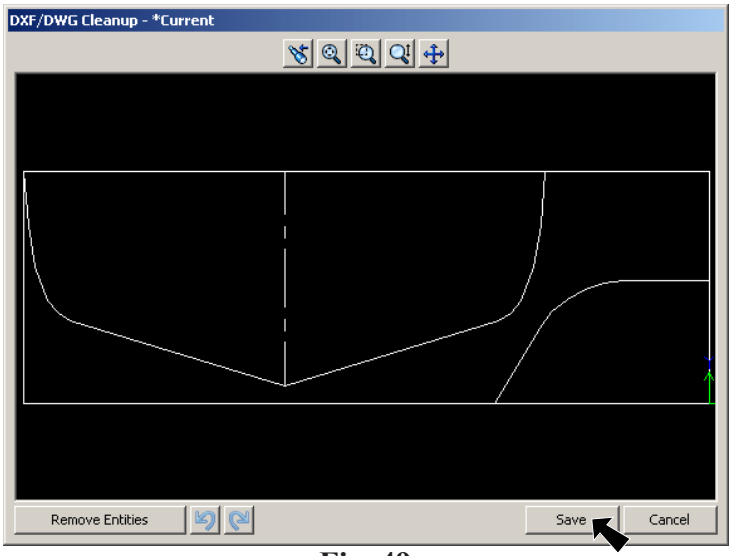


Fig. 49

N. Open Stabs DXF in Illustrator.

Step 1. Open your **STABS.DXF** file in Adobe Illustrator.

Step 2. In DXF/DWG Option dialog box:
under Artwork Scale, **Fig. 50**
select **Original Size**
set units **Millimeters**
set **Unit(s) = 1**
and click OK, **Fig. 51**.

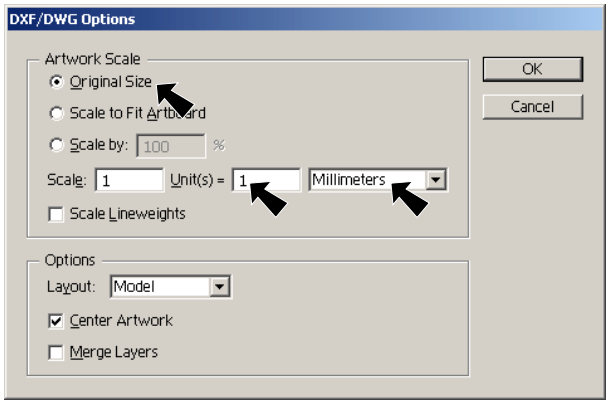


Fig. 50

O. Delete Extra Lines.

Step 1. Delete the **four** line of the Blank feature, **Fig. 51**. To delete, click line and press Delete key on keyboard.

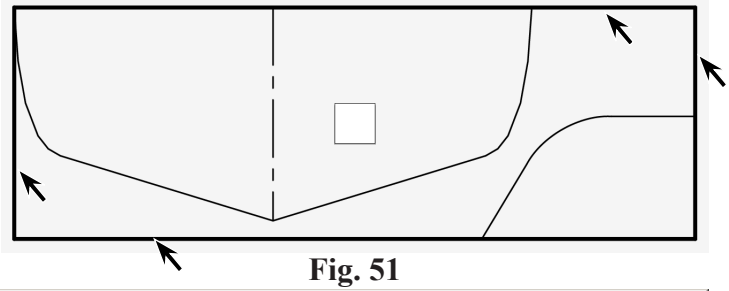


Fig. 51

P. Set Artboard Size.

Step 1. **Double click Artboard Tool**  in the Tools panel.

Step 2. In the Artboard Options dialog box set:
Preset: **Fit Artboard to Artwork bounds**, **Fig. 52**
click OK, **Fig. 53**.

Step 3. Press **Escape** key to unselect the Artboard.

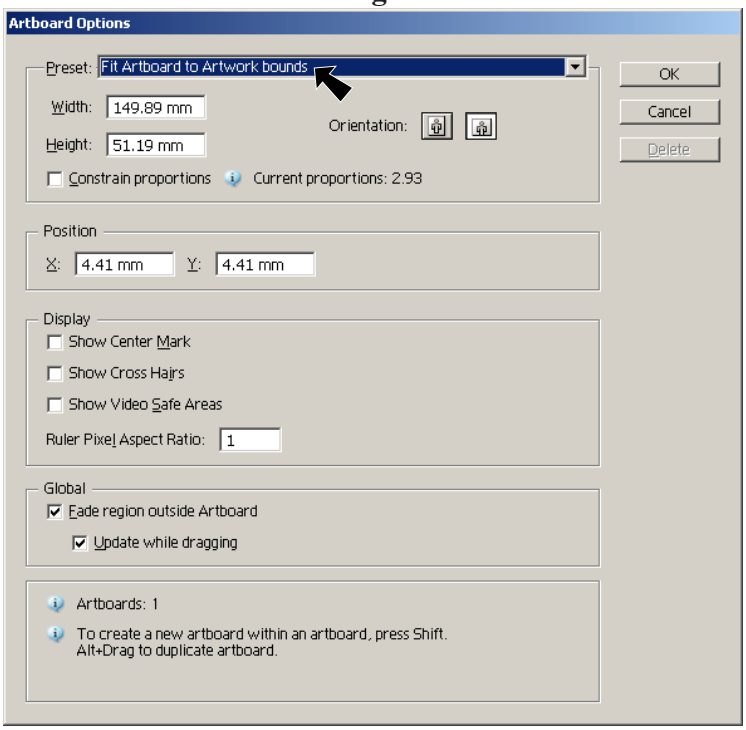


Fig. 52

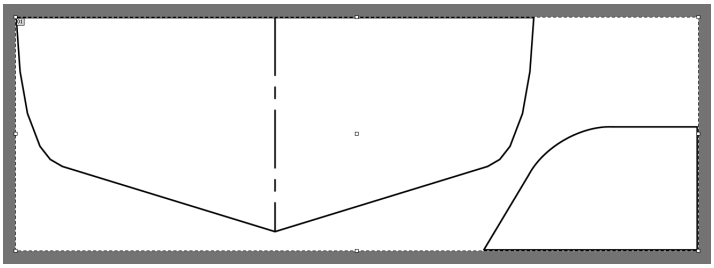


Fig. 53

Q. Set Color and Line Width.

Step 1. Use **Ctrl-0** to **Fit Artboard to Window**.

Step 2. Use **Ctrl-A** to select all.

Step 3. If necessary, display Basis RGB Swatch panel. Click Window Menu > Swatch Libraries > Default Swatches > Basic RGB.

Step 4. Click the **Red** swatch in Swatch panel, **Fig. 54**.

Step 5. Key-in **Stroke .001** in the Control Panel, **Fig. 56**.

Step 6. Deselect all. To deselect, click any empty area of the document window or use **Shift-Ctrl-A**.

Step 7. Select the **centerline of the H Stab** and change to **Black .5 Stroke**, **Fig. 58**.

Step 8. Save the Illustrator file. Use **Ctrl-S** and click Save.

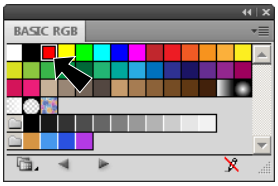


Fig. 54

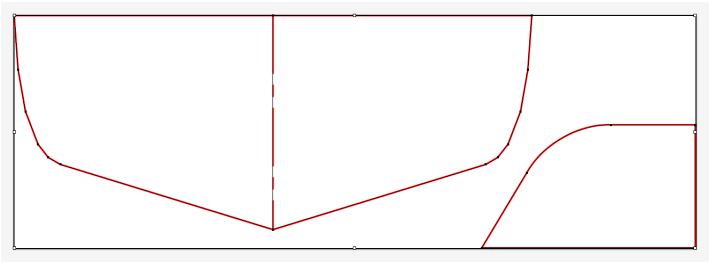


Fig. 55

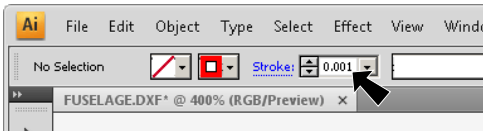


Fig. 56

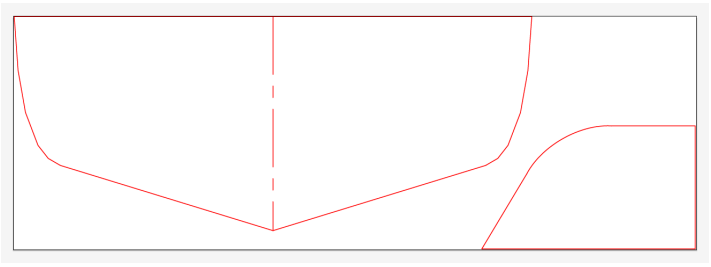


Fig. 57

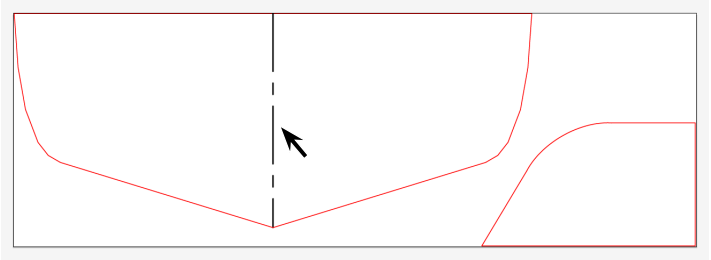


Fig. 58