DELFTship Version 13.10 Background Images Feature

Part 5
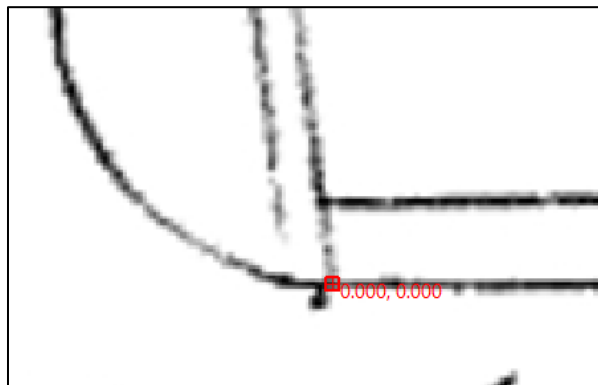## Inserting a New Background Image

Finally! You have arrived at the moment you have been waiting for!

The following steps assume that you:
- Are familiar with the foregoing parts of this guide.
- Have installed the latest version of the DELFTship program.
- Have read DELFTship's manual Hull Modeling section.
- Have loaded a parent model, rescaled it if needed, set all the model particulars, and inserted and displayed stations, waterlines, and buttocks (all in Part 3).

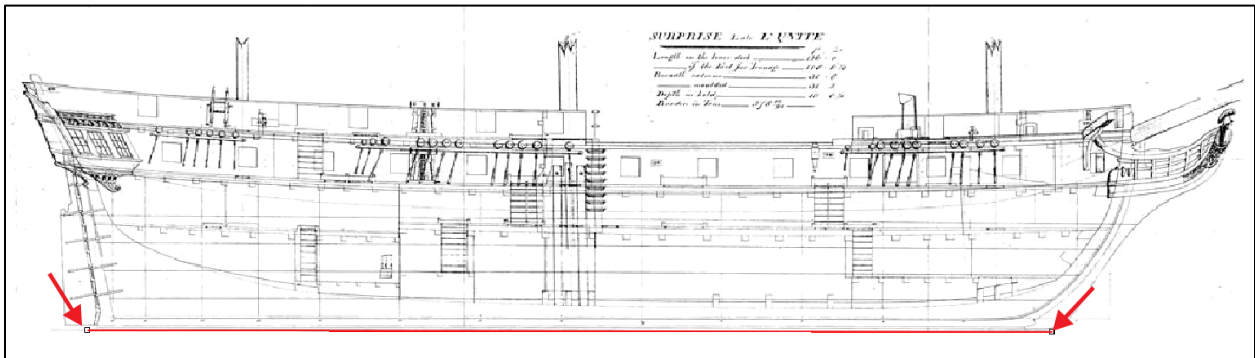**Setting the Origin point and Leveling the Image**
1. Start the DELFTship program and load your model.

2. Click on the **Edit** button in the *Background Images* menu group. The Background Images Editor window displays.

3. Select the image to be used in the model's Profile View first. Depending on your method for loading the image, click on the appropriate button in the Editor's File menu group. You may receive a Confirmation warning if the image is a large one. Take the appropriate action. The image will display in the viewport of the 2D tab of the Editor.

4. Verify that the selected image name is displayed in the "Name" field of the *Edit* menu group and that the "Profile view" is selected.

5. Using the pencil cursor, move the red Origin control in the lower left corner of the image in the viewport to the intersection of the Aft Perpendicular and the plan's Baseline. This location should be clearly seen in the image. Zoom in to ensure a precise setting. The longitudinal Origin is set.

5. Click on the orange Edit tab in the Editor window to display the Alignment control. This is a red horizontal line toward the bottom of the image in the 2D viewport. The control has two "handles," one at each end.

   a. Use the cursor to position the left handle onto the left end of a known horizontal line in the image. Do the same with the right handle (see figure next page).

b. Check the **Align** button in the *Rotate* menu group in the ribbon. If it is active, then the image is not level. If it is dimmed out, then no action needs to be taken to level the image.
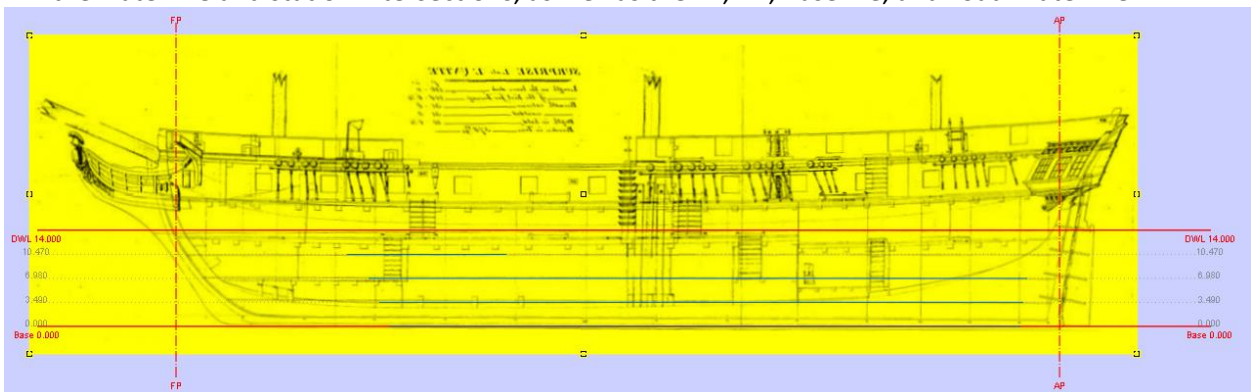

Plan_of_HMS_Surprise.jpg, Wikimedia Commons

c. Click on the **Align** button to level the image.

6. The background image is now ready for positioning and sizing, if needed.

Positioning the Background Image

The final step is to check the position of the image relative to the model's intersections, so that it provides a faithful reference for construction. Recall that preparation for this process includes adding relevant stations and waterlines that will guide adjusting the image and positioning it. If you haven't already added these intersections, you should do so now. Also, display these intersections as described in Part 3.

1. Turn off any layers that display the parent model to remove it from in front of the background image you are adjusting. To do this, open the dropdown list in the *Layers* menu group in the main <u>Home</u> tab ribbon. Then click on all the yellow light bulbs in the list to turn them off.

2. Enter the Editor window again. With your background image selected, click on the <u>3D</u> tab in the Editor viewport. You should see the image highlighted yellow, and the positions and labels of the waterline and station intersections, as well as the FP, AP, Baseline, and Load Waterline.
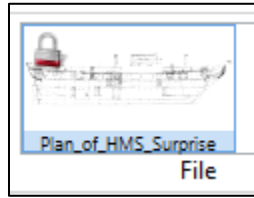

This plan has no regular station lines, so only the AP and FP were used for verifying length.

3. Note that there are 8 handles surrounding the image and one in the center. Use the edge handles to scale the image as needed to align it with the intersections. The default condition for the loaded background image is locked. The padlock on the image in the gallery in the *File* menu

group will be locked. In this state, the image will scale in both length and width when any of the edge handles is moved.

The default condition for images is locked.

4. If, after your best efforts, you cannot make the waterlines and stations align, then you should unlock the image in the gallery so you can scale the vertical and horizontal dimensions independently. Use the center handle to reposition the image as needed.

The image file is unlocked.

5. If you have to temporarily fix the image's position for some other operation, you can click the image in the Editor viewport once and the highlight and handles will disappear, locking it in place. Click it again to restore the handles.

6. When you are satisfied with the position of the model, then switch back to the Editor 2D tab and click on the **Accept** button. This ends the image insertion process.

   Note that after adjusting an unlocked image, you cannot lock the image again. It will return to its original aspect ratio and dimensions.

7. If additional image adjustments are needed afterward, just open the Editor window, select the image to be adjusted in the *File* gallery, and click on the 3D tab to activate the handles on the image in the viewport. Be sure that the intersection lines are visible.

Loading the Remaining Background Images.
Normally, modeling plans include at least a body plan and a halfbreadth or plan-view plan in addition to the profile or sheer plan. These two plans are loaded and adjusted in the same way as the profile plan. The only differences are in the placement of the Origin control and viewpoint assignments.

- For the body plan, the Origin control normally is placed at the intersection of the centerline and the baseline. Assign this image to the "Body plan view" in the View dropdown in the Editor *Edit* menu group. Use the **Aft** or **Front** viewports to align the image.
- For the halfbreadth plan, the origin is placed at the intersection of the AP and the centerline. Assign this image to the "Plan view." Use the **Bottom** viewport to align.

Using this procedure ensure that all three views are properly aligned for your model.

This concludes the DELFTship Background Images Guide