

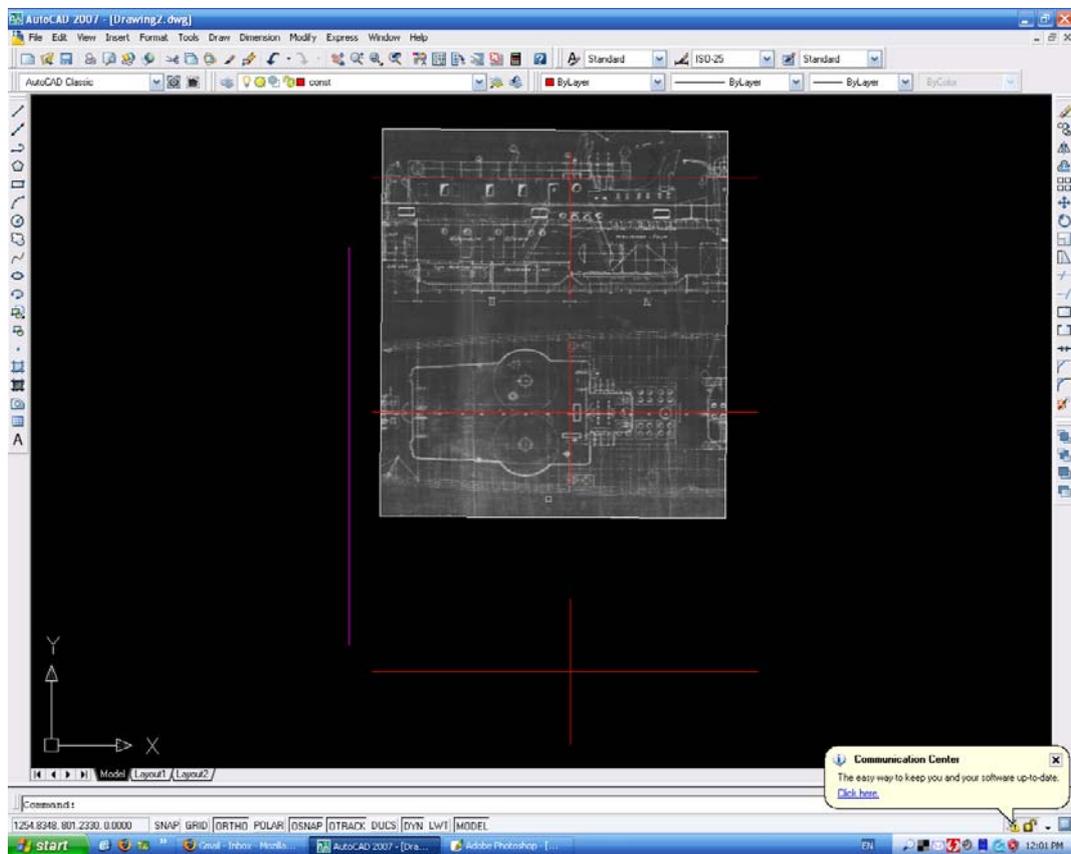
DRAWING SHIPS SUPERSTRUCTURES FROM EXISTING IMAGE FILES - PART 3

INTRODUCTION

The aim of this brief tutorial is to show how to generate a set of Superstructure plans from an image (.bmp .jpeg .pdf etc) to a more accurate AutoCAD drawing. As mentioned in Part 1 though, we must decide what the drawing is to be used for. As mentioned earlier, if we want to produce a full drawing, then there are other steps to be taken.

1 Insert Image into AutoCAD and Draw Reference Lines

Following the steps outlined in Part 1, **insert rotate** and **scale** the image into AutoCAD. The example below shows what we should have – remember, as clear as possible to aid drawing new lines.

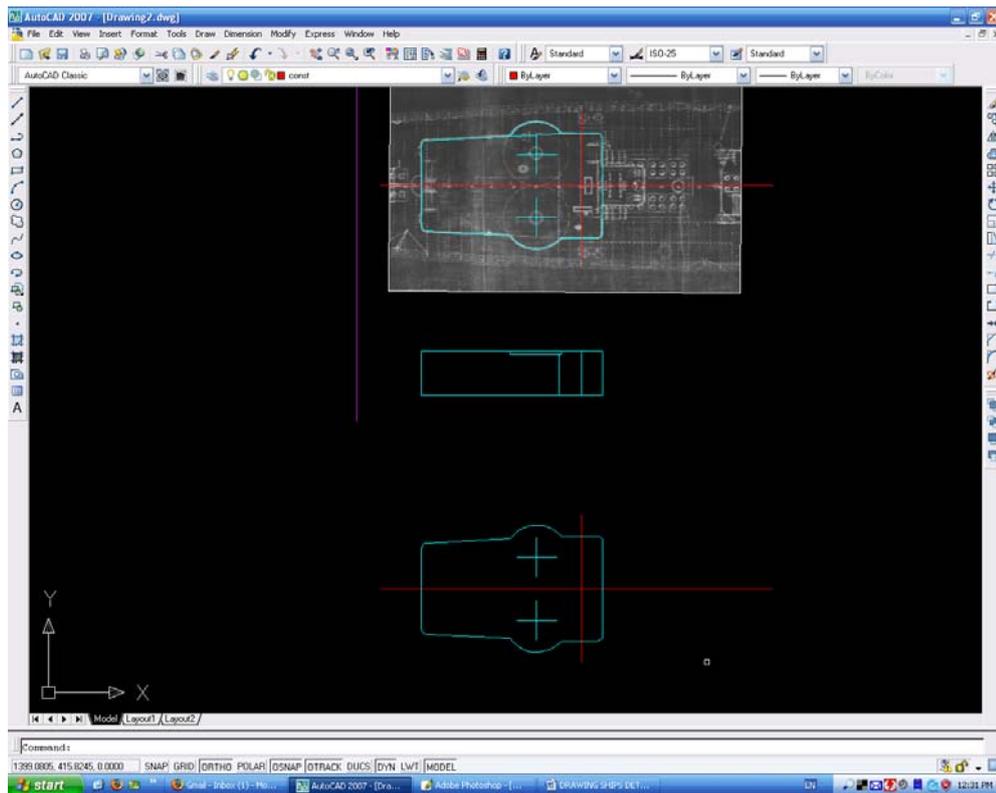


We don't need many reference lines here – 2 will do. One on the centreline, and one on a station line. We have also drawn the reference line down the left hand side (shown in magenta) to where we will **copy** to and place the new drawing.

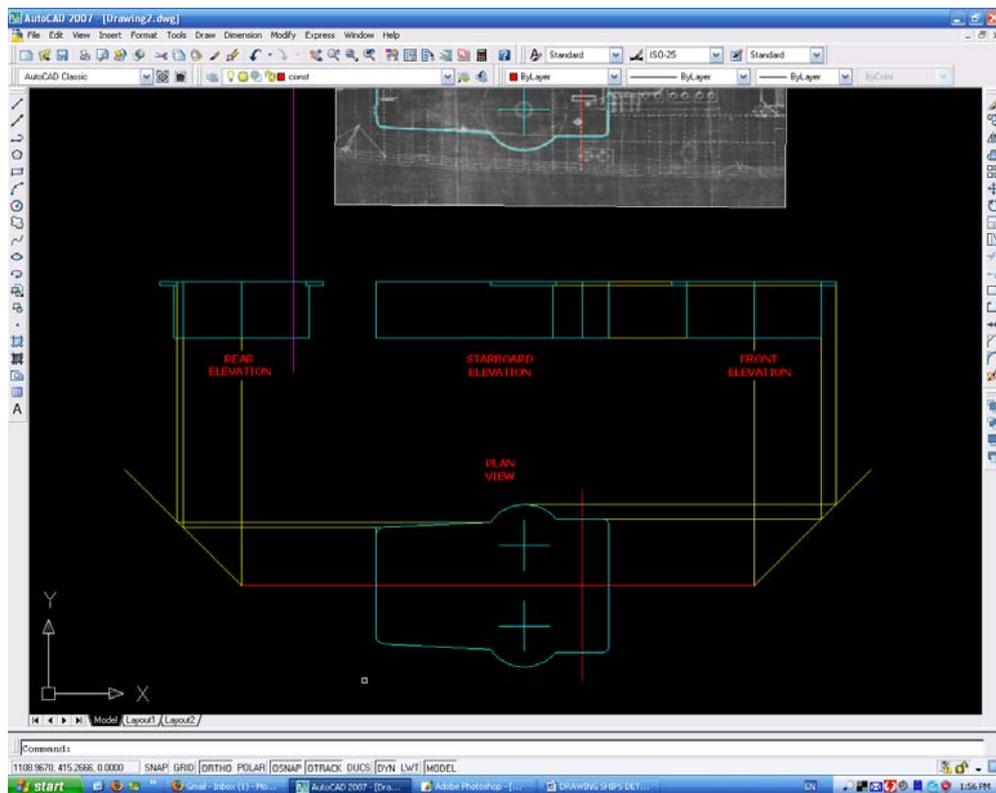
2 Draw Outlines

Copy the plan view outline and the starboard view outline to the new drawing below. At this point, you will notice that often the lines don't line up. This is because all drawings were hand done – and draughting skills varied. In general, European drawing is of better quality than American ones, German ones in particular being

very good. Where we need to realign lines, always try to use a station line as the reference, and adjust accordingly.



Next we draw a line at 45° to our base line then transfer lines across (shown yellow below) to create the third view, **mirror** the half view, then do the same for the other end view. Practise using the AutoCAD commands. We now have the outline of the deckhouse in all three views.



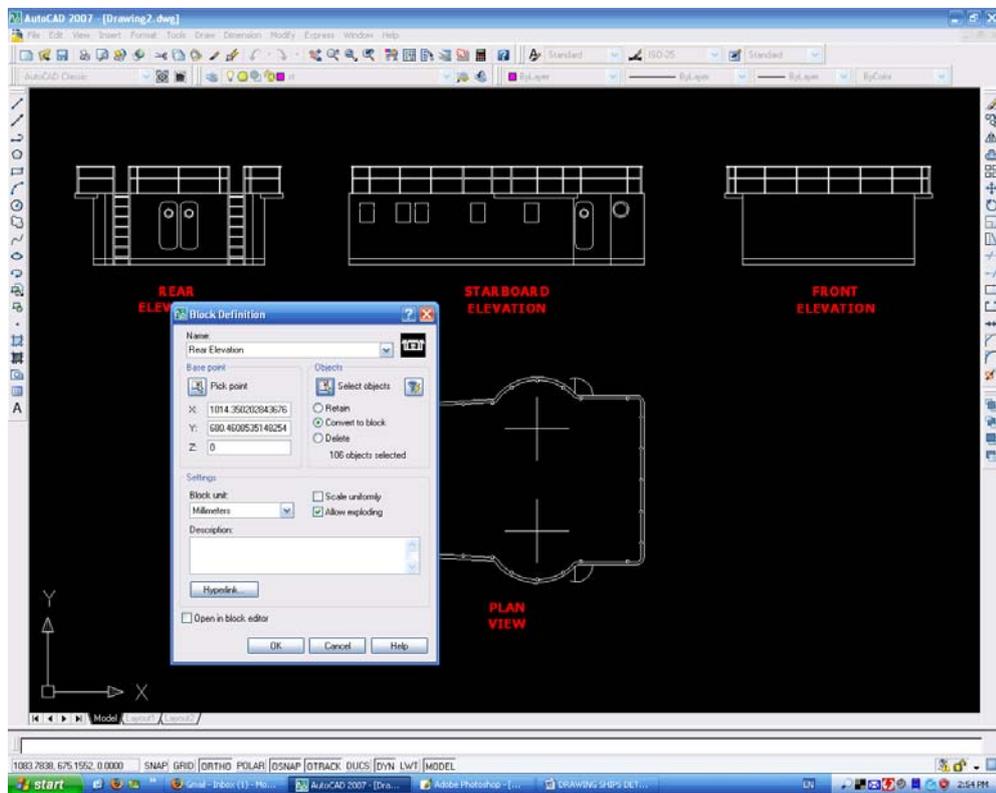
Finally, add all the other smaller details, using the steps above. We can also copy across the part views giving positions if we want to create outlines to help in our

modelling. As we have been drawing in full size, we now need to decide if we will want to save the detail for use in other drawings. If we don't, we **rescale** to our model scale (as mentioned previously), **save** and **print**. On the other hand, we may decide to save the plans as a block, so we can reuse them in another drawing.



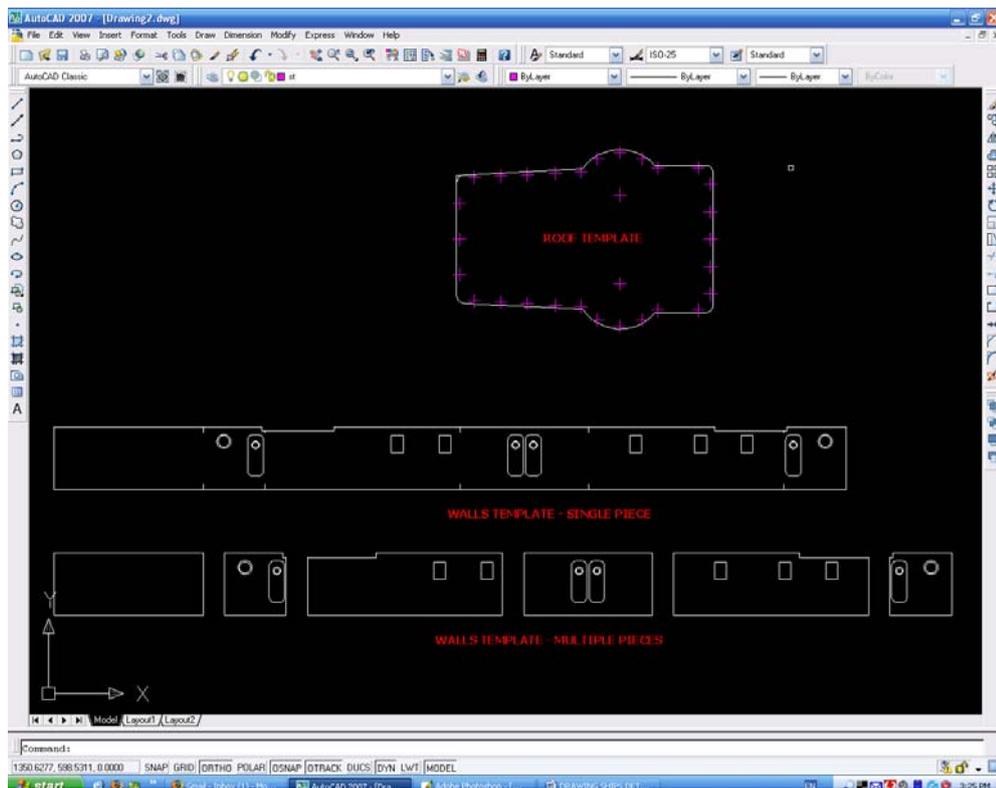
3 Draw Blocks

We will **draw, block, make** the deckhouse using 5 blocks, one each for the individual views and finally one block of all the blocks. Sounds complicated, but isn't. These blocks will be called Rear Elevation, Starboard Elevation, Front Elevation, Plan View, and the final block will be called Deckhouse. This lets us manipulate the blocks later on when we wish to re-use them.



4 Draw Templates

I will finally quickly show you how to manipulate the drawing to give templates for modelling. We wish to create a template for the roof and one for the walls, so we can cut them out of plasticard. Explode all the blocks, then copy the roof plan and erase everything but the outline. I always add centreline crosses to show me where the stanchions are located. Finally, do the same for the wall elevations. You can separate the individual walls or cut them out as one. Both are illustrated below.



Rescale the drawing to our model **scale**, **save** and **print**. If the parts are complicated, I print out on copy paper with a sticky side – peel paper off the plasticard when finished cutting out. If wanted, you can also offset the card thickness on the roof plan and re-use as a base. This is especially useful if modelling a large superstructure such as that found on a battleship.

In Part 4, I will guide you through generating drawings of ships smaller, more intricate details.

As a matter of interest, the boat is a WWII German minesweeper.