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More Wheelhouse Design and Making

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Sundowner – 14

The wheelhouse is the obvious bit of 'deck furniture', and since it has relatively large windows and is quite self-contained (I am modelling it as a removeable box), it adds interest if it also visually contains the same items as the real thing. What this all means is of course that not only must the wheelhouse look right outside, it needs to look OK from inside as well (at least, through the windows). The design I have adopted is to make the wheelhouse box in two halves: one essentially 'above deck level' with all the windows, and the other 'below deck level' with the furniture and controls (and a model skipper eventually). The two U shaped frames form a good join, and I have glued brass M3 threaded inserts into the top bit to mate with long M3 bolts in the lower half to hold them together. The way it is working out is that everything above the join is dark wood, varnished and glazed but with few 'artefacts', while the bottom 'box' bit contains the dash panel, wheel, gauges and switches and seats, steps etc. I have found some photos of the interior (some from a video) that allow me to get it more or less right and it is steady progress adding these bits and pieces in a sensible order. This is the stage when there are lots of small jobs, none of them really taking much time, but also lots of waiting for glue to dry, wood dye to dry and eventually paint and varnish to dry. The first photo shows the real cabin interior that I am 'mimicking'. Note that the camera was evidently a fish eye and there is a lot of distortion that makes scaling things awkward!

The second photo, is actually a clip from a video, and was the only picture I could find of the



wheelhouse rear view. The white 'hole' to the right of the chaps knees is the hatchway downwards to the rear cabin and does not seem to have a door (and access in the real thing must have been a bit of a contortionists dream!). My model will have a black painted 'hole' to represent this! Again, lens distortion makes the sizes and distances confusing.

I don't know if you have ever tried dolls house making (I haven't) but it appears 1/12th scale is a 'standard' scale: this is the marine version - maybe I can find some dolls house printed cotton material to match for the curtains and seat covers!

Thanks to the multitude of bits all being made as 'units' but not yet assembled, this means that I now have a large pile of parts at various stages of manufacture. Most are now dyed, cut to shape, tried in place etc but not yet glued. In particular assembling the kit of parts for the upper works from the last instalment has not yet taken place, however I have cut out all of the tenons in the uprights to fit the U-frames essentially by temporarily fixing all three frames together and cutting the tenons in one go. This way hopefully the uprights will all fit and be vertical.

In the photo you can see the dark bits are the upper parts for the wheelhouse with all the tenons cut, and to the left and right the lighter bits are some of the internal furniture (I did not dye them quite as dark as I thought it would look too dark inside, like the prototype).



The next stage is in two parts: for the lower bit, finish all the tables, cupboards, dash panel etc and glue them in. I will varnish them in situ when glued. I can then start fiddling around making things like a steering wheel, controls, gauges and a polished brass compass binnacle!

The upper part needs assembling and gluing. I have checked each joint fits OK separately, but not together yet... I will screw the top to the bottom bit (via the M3 bolts and plates I made: you can just see two of the plates in the lower horseshoe piece in the photo) whilst gluing though to make sure neither part twists during the assembly, spoiling the fit together. Masking tape between the two will hopefully stop any glue getting between them and making the join premature and permanent!

I started on this by gluing four of the uprights to the three U frames and standing back and looking at it in position on the deck. This is a 'warts and all' description, so herewith my honesty! The wheelhouse looked far too high when I had glued these together and put them in position on the deck. Some head scratching and work with dividers and rulers on photos to check the height revealed another error where I had misread a ruler: what's that old adage about measuring twice and cutting once....? The key to the discovery was a photo I found of an 'average looking man' standing



against the wheelhouse. My wheelhouse height was correct if he was seven feet tall, so I had a little rethink. Now this is where the gods smiled: the inaccuracy in my measurements was in the height of the upper window half of the wheelhouse: my windows looked 'portrait' in shape where, if anything, they were less high than square on the photos. I had about 14mm (fortunately!) of surplus height I could lose quite easily by cutting the uprights down and remaking the upper tenon on each. I don't like mistakes hanging around leering at me for long, so I cut the uprights I had glued close to the roof U frame and cleared out the remnants, cut down the same four uprights (they were still long enough) and reglued it all....and the wheelhouse looked right. I carried on gluing some more uprights in stages, resulting in the photo (you can see two clamps and some 'empty' places for more uprights). The witness as to how much I reduced the height is shown by the over long uprights in place: I have yet to cut them down to roof height. The observant will notice that there are U frames continuously through where the doors (and roof hatches) each side go. I am not making them to open, but from the inside (ie through the windows) the presence of the U frames blocking access will be obvious, so when it is all

glued and firm, I will cut away the middle and upper frames and hope the wheelhouse retains its shape...

All cut out now and still the right shape...next jobs include the roof and panelling and then the glazing. The roof is easy in that it is like a small deck (and will have the same finish) however one minor subtlety is you can see both sides of it - one through the windows – and it is this that adds a little difficulty. The roof beams are varnished dark wood (already dyed in the photos) and the roof itself is white: and I don't fancy trying to pull a straight line between white and dark on the roof beams inside a box. The solution is to paint the roof insides first, but avoiding the bits where glue will have to go, so I drew round the beams on the roof as a guide and then painted the visible bits leaving bare wood for the glue in due course. This yet again highlights the fact that such building is a planning challenge as well as a technical one, and, if I am honest, this is almost as interesting as the building itself.



As well as the roof are the wooden 'planked' panels below the windows. I do NOT propose to cut them individually from 'planks' but to use scribed plywood. This has a number of advantages, not the least it is quicker and easier, and one disadvantage. The photo shows a partly scribed and dyed piece of ply cut roughly to width (later to be cut to suit each panel) and whilst showing the technique, it also shows the disadvantage! The dyed ply is fine in appearance where the grain is all straight and this represents planks well, however where the grain shows a large feature (only occasionally thank goodness, but not obvious until it is dyed) this makes an obvious mark that crosses adjacent 'planks' when in real life the planks are independent. I have already made the dashboard backing and planked table top above it (see later article) and put quite a lot of work into it and only now realise that it has a similar grain mark across planks! That is staying there I am afraid to say, I can't face remaking all of this now!

