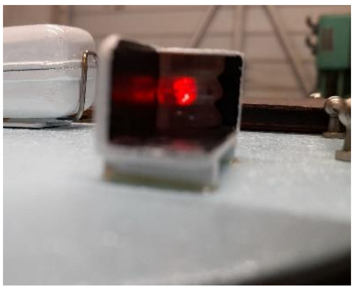
Finish Wheelhouse, Mast and Supports

This document was written by Paul Naylor and is published here for FMES online viewing, and was written during 2025.

Sundowner – 18

Finally: I have completed and closed up the wheelhouse! Well, I could open it again, and a look at the photos suggests I need to, to let the cleaner in to get rid of the dust and bits: the camera certainly makes this sort of thing more obvious!

The lights all work, and although the inside of the wheelhouse roof is a bit of a rats nest of fairly fine wires, they are out of view and are not glued in etc to allow them to be removed if (or when: the LEDs are Chinese) they fail and I need to open them up again. I took a few photos: the clarity heavily dependent on reflections, dazzle and my aiming. I could not get both navigation lights in the same shot, so just to prove it works, the red (port) one is a close up…and it needed to be, because 'ultra-bright' green LEDs are a lot brighter than red ones. For those following the saga, the power for the lights will come from the radio control receiver/servo batteries, and not the life raft on the roof: so, there are wires dangling inside the hull for connection, although I may try to make brass contacts that are made automatically when the wheelhouse is in position. It is highly unlikely in practice that the navigation lights will be on when the wheelhouse lights are (night vision for the helmsman), but I could not face making separate wiring and switches for each, so they are demo only (I had made them, so I might as well wire them in!).



Apart from experimenting with sprung brass contacts, here endeth the wheelhouse build: now for more deck ornaments and more fiddling with little bits of metal. On the list are:

Fairleads and bollards to tie the boat up to

Winch (and decisions about the anchors)

Mast supports and masts (with minimal rigging as later photos show that sails were not used)

Complete the rudder and actuator (and servo) fitting

Miscellaneous coils of rope and fenders

And last but certainly not least as they are feats of mass manufacture (and prominent) are the 24 portholes (see earlier!) and 38 (yes thirty eight) stanchions and their handrails.

Nameplates and a few other things that I have doubtlessly forgotten right now….

The seat cushions - that I have just remembered while making this list - could be combined with a visit from the cleaner, so I have done this now…the pattern is the same in principle compared to the real thing, but an exact match was beyond me! For the record, they comprise dolls house cotton material glued to bits of polystyrene pizza base (no stitching required!) and two sided sellotaped down to the cabinets. I decided not to fit curtains (the real thing seems to have a few on the wheelhouse windows) as they will make the windows even harder to see through, even when open.

On with the list: I have assembled the rudder and its 'actuator'. It is nice and free with no hint of binding (at the moment…) so a servo should manage it without any issues. Note the gap between the retaining nut and the lever arm though that will need 'filling' with a suitable spacer, or lengthening the thread portion for the nut.

I have also made the basic mast support frames. I wanted to use 16g brass, but I didn't have any, so I opted for stainless steel. Twice as strong, and twice as hard to make (it's tough stuff), and there are some stainless steel wire cleats to silver solder to it (rather than soft solder if brass), that will be harder to get right. Ideally, I want to retain the matt grey colour of the stainless as that mimics the real ones well without paint, but we will see. The masts on the real thing are designed to be lowered to go under bridges etc, and I will try to replicate this for transport. They seem to fold over the roof of the wheelhouse, and a slight problem is that the rigging wires to stabilise them are fine at the front (two each side and one to the bow: in the latest iteration) as they are secured to the deck, but the rear ones (three) are secured to the rear removeable hatch/skylight and the wheelhouse roof so how to keep them tight without pulling these bits upwards but still allow removal will keep me awake no doubt. At least they will not be required to stabilise the masts at this scale. The arrangements of the masts inside the supports are a matter of conjecture as I can't find any close-up photos of this detail. It is not 'rocket science' however, so I will make something that works! The masts are made from the same 12mm beech that I made the wheelhouse from (it is nice and straight) and cutting them out and rounding them off was a matter of a few minutes with a spokeshave and sandpaper. The foremost mast is longer than the aft one. I have also silver soldered the wire cleats to

the supports…thus destroying the nice matt finish. Next steps on the masts are to glue in a brass bush where the pivot is and establish the correct geometry of the tail end: the masts are vertical naturally, but the deck where the supports are is not horizontal, so I will need to make corrections and then make up a removeable pin to secure them upright and allow them to tilt when required. There is also a bit of turned decoration at the mastheads (that I will make 'unscrewable' so I can later add fixing points for the guy ropes under them: I have glued in some brass bar with M3 threaded holes into the mast tops for this) and then I can dye and varnish them and mount the lot on