Interior Fittings, Compass, Dashboard, Lighting

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

Sundowner – 16

More fiddly progress this time: it seems never ending, but it does have some sort of satisfaction! I have finished the windows on the wheelhouse – including a couple that cracked after I installed them, presumably owing to stress but manifested a lot later than at the time of fitting! I can't decide whether to change them for new ones or leave them as 'realistic' features! They don't photograph well to show here, so that's maybe a good sign. Just the roof to go (after I varnish the internal woodwork). I did notice that with a simulated roof (ie a piece of card) the internal details of the wheelhouse are hard to see owing to the dark. That is a pity as I have spent quite a time on them: so, I have ordered some white 8mm diffusing LEDs to make some internal lights (that look like the real ones I hope) and that work…more later on this!

In parallel, I have been adding bits to the dashboard, including the compass binnacle (real one photo left) that is an assembly of brass bits: the hard part was not particularly making the bits for it, but assembling them so that soft solder did not show. It looks OK (photo right) except that I put the iron compensating bits on at the wrong angles! I don't suppose that will affect anything. My banana fingers do not help for this sort of activity. This leads nicely on to the bit I was putting off, making the steering wheel. This is a traditional brass and dark wood ships wheel, but scaling to around 55mm diameter. Just too large to make an approximate look alike, and just too small to make manufacture of something more accurate comfortable! I decided how to I would make it, and this involved as many parts as the real thing really. The photo shows the kit of bits I have made, with the ruler for scale. I turned each of the spoke and handle pieces on the lathe (because I have one). Turning some wood around 3.5mm diameter is a little below the capacity and grace of my 5" lathe, but it sufficed. I imagine that a file and an electric drill would also suffice: I thought of doing this, but in the end used the lathe but with files for shaping, only using a parting tool for getting the lengths right. Past experience has taught me that wood turning is heavily dependent on the wood type, especially when producing very fine details. I did not think

that beech, mahogany and other things I had lying around would do. The wife has not noticed yet, but one of her chopsticks (it looks like bamboo) is missing: these are very hard, the grain is unidirectional and they turned up very nicely without splinters. After I took the photo, I dyed them dark and the wood took this very well too. Just got to assemble them now! The wheel rim will be cut out when the epoxy I used to reinforce the brass pins holding the brass rims on is set.

I have had a bout of gluing and epoxy coating, where I fitted the wheelhouse roof and then covered it, like the decks, with epoxy coated cloth; and since I mixed up too much resin (to make sure I did not need to 'scrape the sides' – see earlier article), I coated the underside of the lower half of the wheelhouse. I also epoxy *glued* the bits of the wheel together with the aid of a jig to hold the hub central to the rim, and so I effectively put at least a 24-hour delay into everything I was working on: photos of these when they are all set! This meant casting around for something constructive to do, and since the LEDs came in the post, I made the internal lamps. Bearing in mind the possible need to replace the LEDs in the future, I could not 'pot' them: I stuck the LEDs and their resistors and wires together with solder, replying on the component lead stiffness to hold them apart. On the subject of LED life, I have never had an un-abused bare LED fail. By this, I mean one that I included into a basic circuit with a current limiting resistor (omitting this makes the LED 'abused' if it survives at all!). The claims on LED bulbs as used in the home initially reflected the naïve or deliberately misleading claims by manufacturers for 100,000 hours plus life. I don't know if you have ever taken a failed 240V LED bulb apart: I have, as part of my ' 'satiable curiosity', and it has the LEDs of course, but it also has many surface-mounted IC chips and it is these that wreck any hope that you only need to buy an LED light bulb once! The art of calculating 'mean time between failure' is obviously lost on manufacturers. My lamps are nylon turned up bodies with a space for the resistor, wires, the LED base and a rubber pad to insulate the internals from the painted brass bracket used to secure them to the roof. They work fine on 6 volts: however, I suspect that they might be a little dim, but we shall see when I can touch the wheelhouse bits again. Turning up the voltage is not really the way to make an LED brighter (except once…), so if they are *too* dim, I will have to change them for 'ultrabright' ones, but these are not diffused.

Most of the epoxy has now set, so on with the fiddly bits again. I have more or less completed the dashboard and its instruments and controls now. The wheel ended up all right and the result meets my 6-foot rule at least! It remains to be seen whether I can light it all enough to see it. There are a few further bits inside the wheelhouse to go, including upholstery and curtaining with some reasonably close match dolls house material I found online. Whether I can stitch at 1/12 scale is another matter though (it's hard enough at 1:1). The photos of the wheelhouse of the real thing show that it is *carpeted* and with a light colour too. I am not going to buy some dolls house carpet for this, and so I am experimenting with some old terry towelling I found at home. More on this later. The photo shows the result minus carpet, with a mug of coffee for the helmsman…I have added a suitable mug (made from a bit of brass and wire for the handle) like this to most of my locos and it seemed appropriate here too. I also need to add the many commemorative plaques that Sundowner displays on the dashboard (see photo in earlier article). It would be overkill (and expensive) to make these from etched brass and in any case, I can't read them from the photos and some are images not text, so I am going to cheat and get a print from my

screenshots of photos suitably reduced: Rymans seem to offer colour prints of pdfs etc, so we shall see if these will be good enough.

Footnote to the above, I tried the wheelhouse lights in the closed in wheelhouse, and they are very little use with the ‘standard’ 8mm diffuse LEDs. I ordered some ‘ultrabrite’ clear 8mm LEDs with supposedly 6 or 7 times the light output and swapped them over. They are better but still glimmers in the dark: what you would expect I suppose from around 60 Milliwatts. Next stop, miniature COB LEDs that claim to be 1 watt each, so I have ordered some. They will need more power, will get hotter etc. so nothing is perfect.