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Fitting Handrails, Handrail Wooden Top

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Sundowner – 25

The pins arrived and I thought I had better do this and 'get it over with' as I thought it would be somewhat messy and fiddly: and of necessity to be done in one sitting.

All of the holes in the deck received a blob of araldite and I placed the rail and uprights, inserting them one at a time into the deck holes. The spring meant that some would not stay there, so I decided to place one pin in each upright progressing from the bow down each side. Placing the pins turned out to be a complete pain: they are 5 to 6mm long and I had to use tweezers to get the points in the hole in each upright, and then give them a tap to 'jab' the point in, then use a small rivet set punch (ie a 75mm long piece of steel with a dimple in the end) to tap them home. It was a good job I bought too many, as I think about 10% pinged off into the darker recesses of the workshop, 10% bent and were useless and 10% had manufacturing defects! They were of course trying to penetrate birch ply with a covering of epoxy-soaked cloth. Eventually I got one pin in each flange all the way round, with one place (top of the rear cabin) enjoying 'extra spring' that had to be tamed with a little careful bending. If any uprights fail prematurely, it will be the last one on the port side before the step to the rear deck: it seems to be holding the spring down. In the photo above you can see a brass pipe on top of the rudder shaft: this is part of the future rear flag staff and will be stabilised by a bracket to the rail top: more of this later.



It all looked OK, so I made three more rounds of the deck with the rest of the pins. The rivet set did a



reasonable job, but I then went round them all with a flat punch to make sure they were home, and also to encourage the soft brass flange to take up the shape of the deck. The use of pipe cleaner and

tissue and meths cleaned off the surplus glue and a dab of 'silver grey' paint on each pin head completed this bit.

And so on to the wooden topping for the rails. The first bit was steaming and bending (edgewise) the strips to suit the bends they had to make. This was similar to other strip wood bending and the result was bent strips of mahogany that go round the remaining curves without splintering, at least for the top of the rails. I also epoxy glued the preformed bits of wood I made to go round the sharp curves too into place and then started going round the rail with wooden capping. It uses so many clamps that I have to do it in stages (I have more but larger clamps, but the rail might collapse under the weight).



Once these were in place I removed the excess glue (with a little rotary sanding drum in my mini drill - I found 50 of these with mandrels for £4 on Ebay and they seem to last) as filing or hand sanding a lot might put too much strain on the mountings of the rail. I then bent smaller width pieces to the sides to hide the metal edge. This is starting to look like overkill, but it is more or less the last main task to do, and it is prominent.

The curves around the rail descending to the rear deck are too tight to bend the strip around the edges of them: I tried steaming it, but it was too much for the thin wood edge on at this radius, so I have had to cut them to shape out of the 2mm 'plank' I acquired at the same time as the strips.

The need for clamps was even more pressing (pardon the pun) for the side pieces...I have had these plastic crocodile clip type for years: battle worn but still work well for jobs like this! Note the engineering clamps too, necessary to apply a lot of force as epoxy allows the bits to slide under their weight unless held in place firmly at least at the ends.



I also started to run out of epoxy glue: that's easy thought I, a quick trip to one of the many DIY outlets near us should solve that one. Well, no one sells the 24-hour setting time araldite (or equivalent) near us, it's all '5 minute' stuff (must be the fast pace of modern life) and this is no good for this job. It took well over 5 minutes just to *apply* the glue to the longer strips, let alone fiddle with the clamps to get it secure in place, so that's another few days of waiting for it to come from a more specialist place. Why epoxy? Well, it is a good gap filler and feels somehow much more substantial than superglue (for example) that will stick it but a good nudge later might dislodge it, and I am always doubtful of its use on bare wood.

Eventually, I had worked my way around the rail and could think of finishing it. The mini-drill and sanding drum took most of the surplus off, and a *fine* file and sandpaper did the rest. Following the same practice as for other dark wood trim, I then stained it. Although it is mahogany and has some colour, I wanted it to look like the other trim, so a tentative and light dose of wood dye was applied. An aside here: if you want to know what wood will look like when clear finished, wet it with a bit of water! I learned that one when ages ago I went to a specialist timber yard and asked the man what a piece of wood would look like finished: he spat on it and rubbed it in and said like that...

Fortunately, there was no epoxy 'witness' anywhere that did not stain or show and so I then applied a coat of shellac to seal it and a couple of coats of varnish rubbed down between each as per the rest of the trim. This completed the woodwork.

The last refinement was to add simulated rail hinges and lock by the wheelhouse (for people to get on and off!). I have a bit of very thin copper sheet (or it might be bronze foil?) that I superglued around the rail at these points to look like the bronze on the real thing: it should patinate in time to look darker. The photo shows this fitting and the bit of rail... the rest will be visible shortly (I hope) when I show the finished boat! At this point, I discovered that one (and fortunately only one...) of the uprights got fixed with its hole for the wire 90 degrees wrong. Oh well, I cannot change it now, but I might be able to disguise it... it is one of the ones by the 'hinges' and has a chain fixing to match the hinged bit.



The last bit of the handrail was stringing the middle 'wire' (plastic coated 0.7mm stainless steel cable as for the mast stays). This is continuous in two parts, one round the stern and terminating at the aft posts by the 'hinged rail', and the other round the bow, leaving a gap where the hinged bit is, filled by a chain. It looks OK, although it is fair to say that an additional hinged bit is also evident on the starboard side near the stern, but I did not think this would add much so I left it off. The photo shows the chain portion on the port side. The faulty upright is the one on the right, with the disguised attachment. The chain, by the way, is a piece of stainless steel jewellery chain sold for crafts in short – and cheap - lengths.

