Empire Ivy

DAVE ABBOTT reviews one of the latest kits from Mountfleet Models

The Empire Ivy was built by Goole Shipbuilding and Repair Company Ltd. The company was formed by the Cragg Family in 1901 and all work was carried out on the River Humber at Goole. The company changed names and owners over a number of years and was taken over by Swan Hunter and Wigham Richard Ltd in 1967. It was then amalgamated with British Shipbuilding in 1977 and finally closed down and ceased trading in 1984. Quite a long and prestigious history.

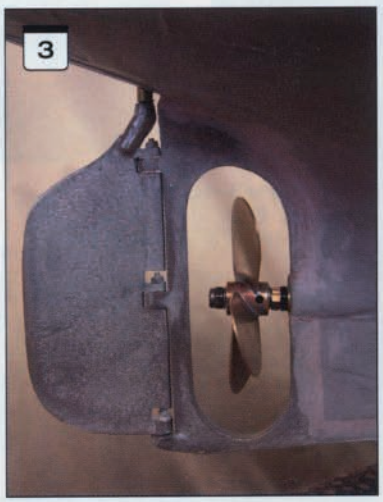
The main difference between the Civilian and the Naval tugs was the construction of the wheelhouse and the colour schemes.

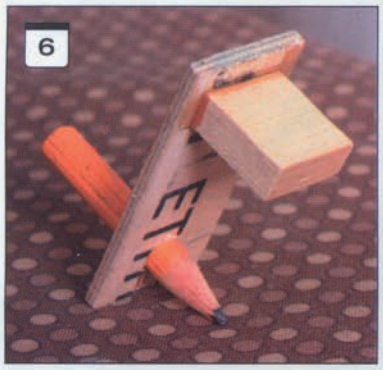
The Kit

The model is produced to a scale of 1:32 giving a LOA of 41.5in (1055mm) and a beam of 9.5in (240mm), with a displacement of approximately 28lb (12.5kg). The hull is a one-piece GRP moulding, as also are the superstructures, ship's boats and funnel. Other materials include wood, deck plating materials etc., and as usual from this company, the normal high quality white metal fittings, all 750 of them. Also included are full size plans and an excellent building manual complete with 12 large colour photographs. The added bonus of this kit is that it can be built either as the Naval or the Civilian vessel - the Flying Tempest in Civilian mode and the Empire Ivy as the Naval version. The drawings, materials and information apply to either version, so it is personal choice which to build. I decided on the Empire Ivy.

The Empire class tugs were part of a massive shipbuilding programme for the Second World War. There were some 146 built under this programme - they were all Government ordered and owned and constructed to several different classifications. Many were sent to UK ports and run by towing companies as part of their own fleets, whilst the rest were managed by the Navy.

Because of the short time scale, the building of these tugs was achieved by simplified building methods; this also contributed to economies in the materials used during building.





Although every other thing in the kit is supplied I was disappointed to find that a 70mm 4-bladed propeller was not included, although it was stated in the introduction book that this was not included in an effort to keep the cost of the kit down. I feel it is a shame not to have included this essential part to make it a complete kit – perhaps even as an optional extra?

Stand first!

Before starting on the kit itself, build a sturdy stand for the model to rest on during the construction, as nothing is worse than having a model rolling around on the workbench. There is no need to profile the shape of the hull for the stand as templates are provided on the full size plans, but do make the stand from some sturdy ply or wood, as when complete the model will weigh in the region of 28lbs(12.5kgs).

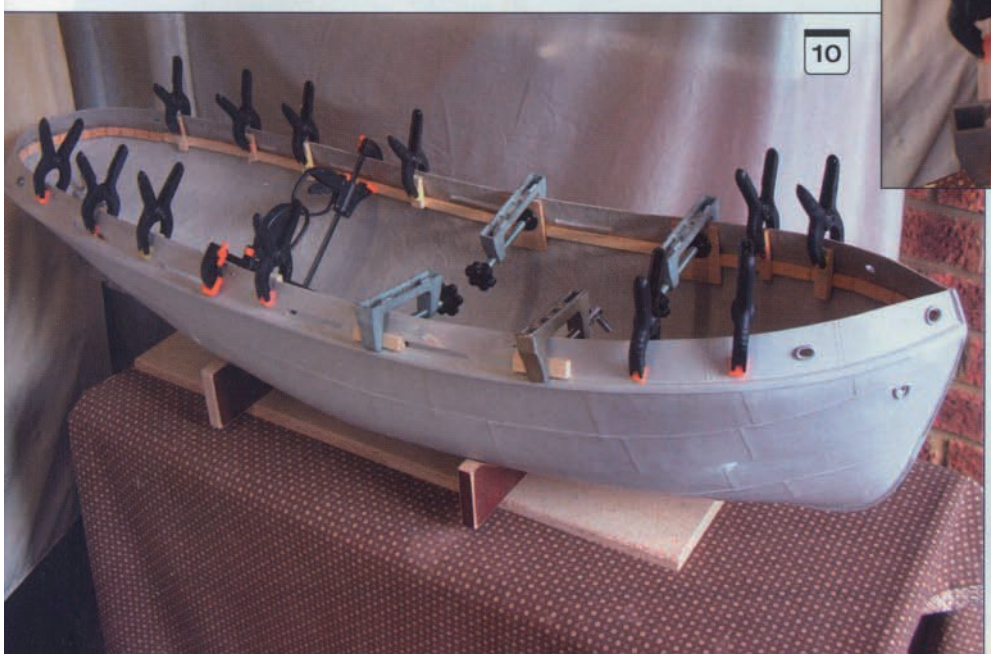
Making a start

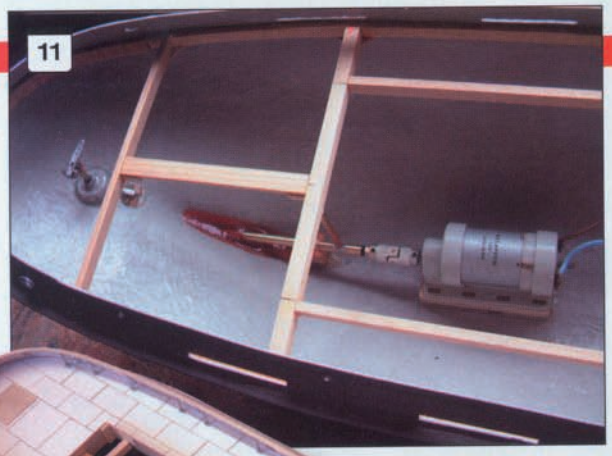
First decision to make is the type of motor to be used, remembering that it is going to have to swing a 70mm 4-blade propeller. I chose to use a geared 12v Decaperm.

The rudder assembly is installed first. Fitting the stern frame and rudder, which are both white metal fittings is probably the most important thing to get right as all the other parts like the prop shaft and propeller all need to be aligned before gluing. **Photos 1** and 2 show the stern frame and rudder held in temporary position while the hole for the propeller tube is drilled. I always find that the best way to drill for the tube is to start with a small drill, enlarge with larger drills, and then use a round file to get to the correct size. Having got the prop tube installed snugly, fit the brass propeller (not supplied in the kit) and make sure that it does not foul the stern frame, as shown in **Photo 3**. At the same time make sure that the motor is in line, then temporarily fit the motor coupling. When completely happy with all this, take apart and glue all the parts previously described. See **Photo 4**. Note that I have soldered into the prop shaft an oiling tube as this helps to keep the water out of the hull and lubricate the shaft. When all the glued parts are set the tiller arm for the rudder needs to be installed. This is another white metal fitting and needs to be fitted to check the free running of the rudder. See **Photo 5**.

Deck

Strip-wood is provided for the frame on which the deck will sit, and a line has to be marked on the inside of the hull, first checking the deck level and then running a line through to the contours of the sheer of the hull. To obtain a correct line, make up a small gauge from plywood and insert a pencil at the correct depth and then run the gauge around the inside of the hull as in **Photos 6** and **7**. Start by fitting the strip-wood around the sweeping parts of the hull and when the bow and stern parts are reached, slots can be cut into the strip-wood so that the shapes can be easily fitted as shown in **Photos 8**, **9** and **10**. When the glue has set on

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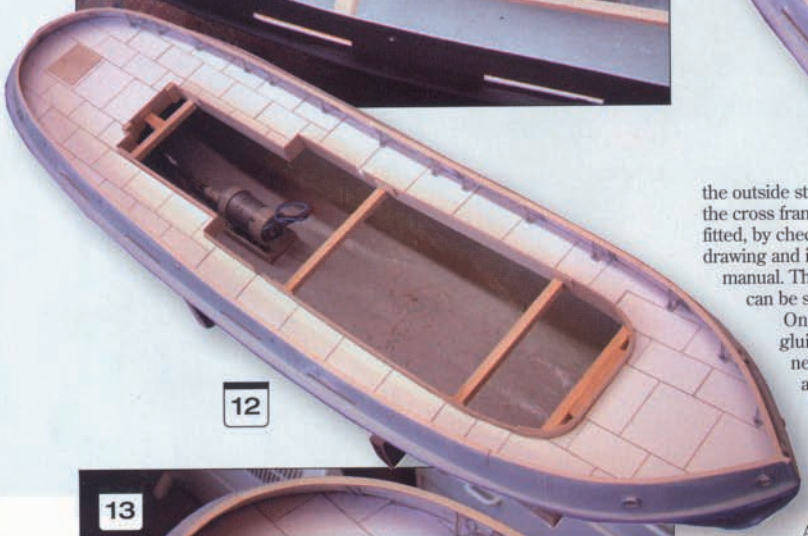
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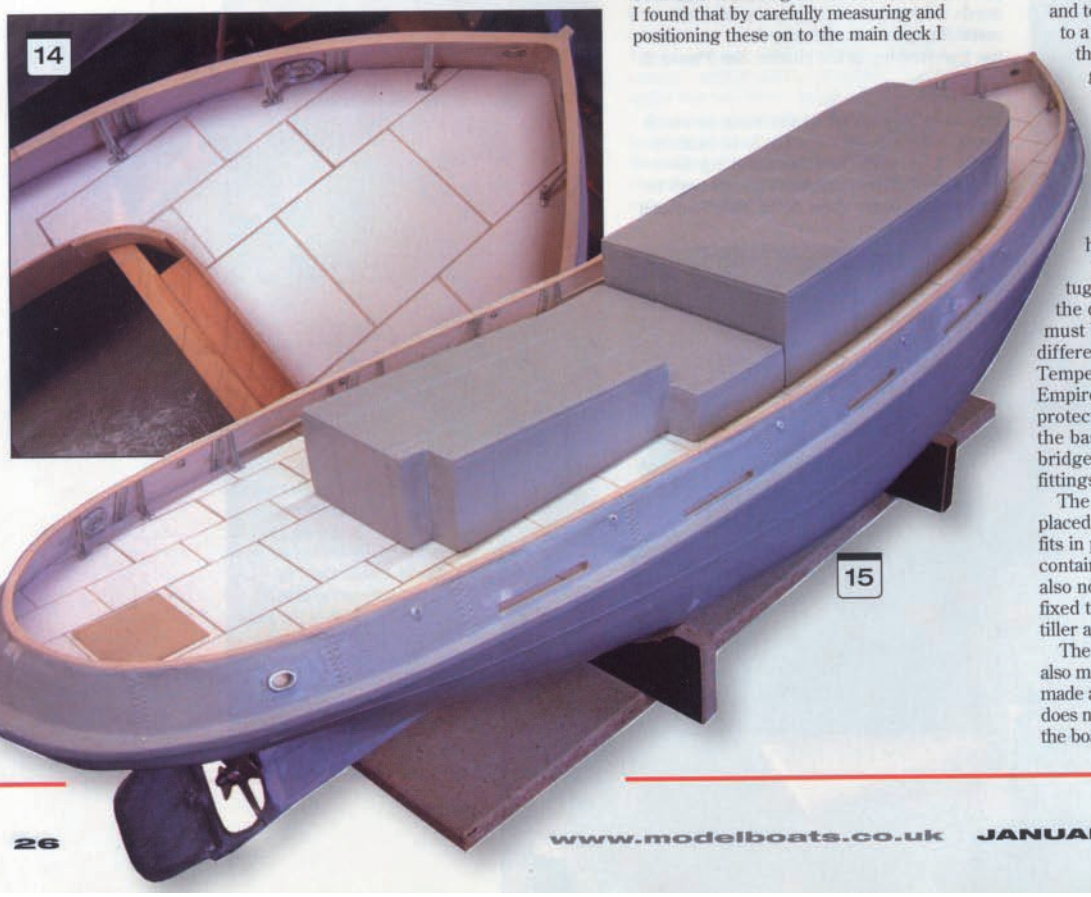
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the outside strip-wood, the cross frames can be fitted, by checking on the drawing and instruction manual. The cross frames can be seen in **Photo 11**.

Once happy with the gluing of the frames the deck needs to be installed. This comes as a two-part section, the first from midships to the bow and the second from midships to stern. A one-piece deck would not be practical to fit due to the inward shapes of the bulwarks at the bow and stern. A template is given for these two decks, but I always cut them oversize and gradually trim them back a bit at a time to get the best fit possible. **Photo 12** shows the decks fitted.

The deck plates were fitted on to the deck by using the white card supplied, this is quite stiff card and should be cut to the shapes indicated on the drawing. The card is simply glued to the wooden deck using PVA glue, leaving a space all round each plate to simulate the joints in the deck surface. When painted and varnished the card becomes completely waterproof and certainly looks the part. **Photos 13** and **14** illustrate the plates at the bow and stern.

Superstructures

Two superstructures make the main parts of the engine room and cabin areas, these are both GRP mouldings of substantial thickness. I found that by carefully measuring and positioning these on to the main deck I could mark around the outside of the mouldings leaving a pencil line on the deck. When the mouldings are removed the pencil mark is revealed. Mark inward to the pencil mark the thickness of the superstructure; this will then give the positions of the coamings which will hold the mouldings in place on the main deck. While still working on the deck the bulwark supports need to be fitted. All these operations can be seen in **Photos 15**, **16** and **17**.

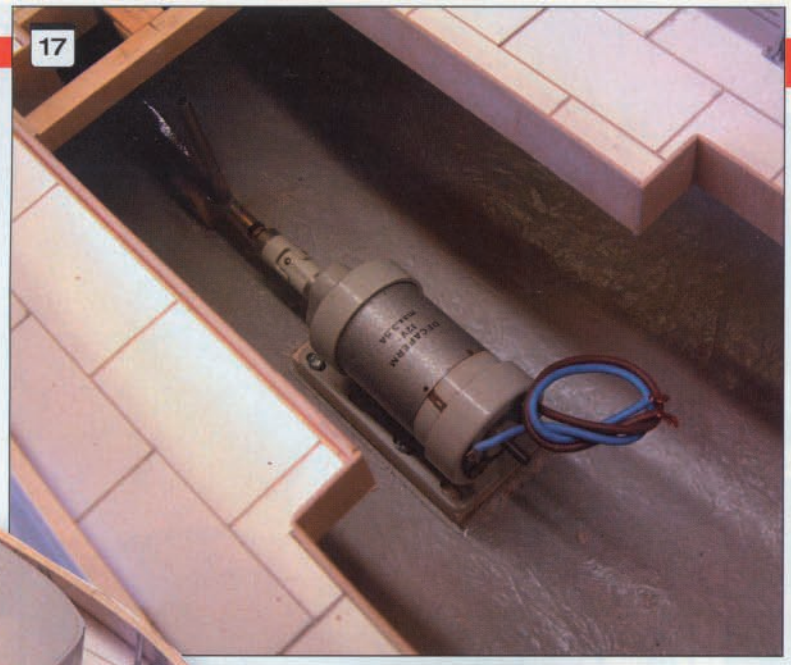
Fittings

Next comes the parts that start to bring the model to life - the white metal fittings - numerous and of very high quality and only a few require cleaning up. Check for the latter and temporarily fix with Blue-tack or similar to a base-board and spray them, which in the case of this particular model is 90% grey. The fittings, some of which have been sprayed are shown in **Photo 18**. The funnel is also a GRP moulding and should be treated in the same way as the other two mouldings, cleaned and sprayed. Pre-drill any holes in the superstructure which require fittings, i.e., portholes, handrails, steam pipes, etc.

The rest of the construction on the tug is straightforward, but at this stage the decision on which version to build must be made, because the wheelhouse is different for each version. The Flying Tempest has a fully open bridge, whilst the Empire Ivy has a semi-open bridge with a protective screen forward. **Photo 19** shows the basic construction of the protected bridge, with most of the building and fittings done.

The stern deck parts are temporarily placed in position to make sure everything fits in place. **Photo 20** shows the rope container, winch and slatted wood grating; also note the access plate with the bollard fixed to it, this is for access to the rudder tiller arm in case of adjustment or slippage.

The tug carries two ships boats which are also moulded in one-piece GRP, and can be made as either open boats or covered. The kit does not include any parts for the interiors of the boats, but does include a covering, this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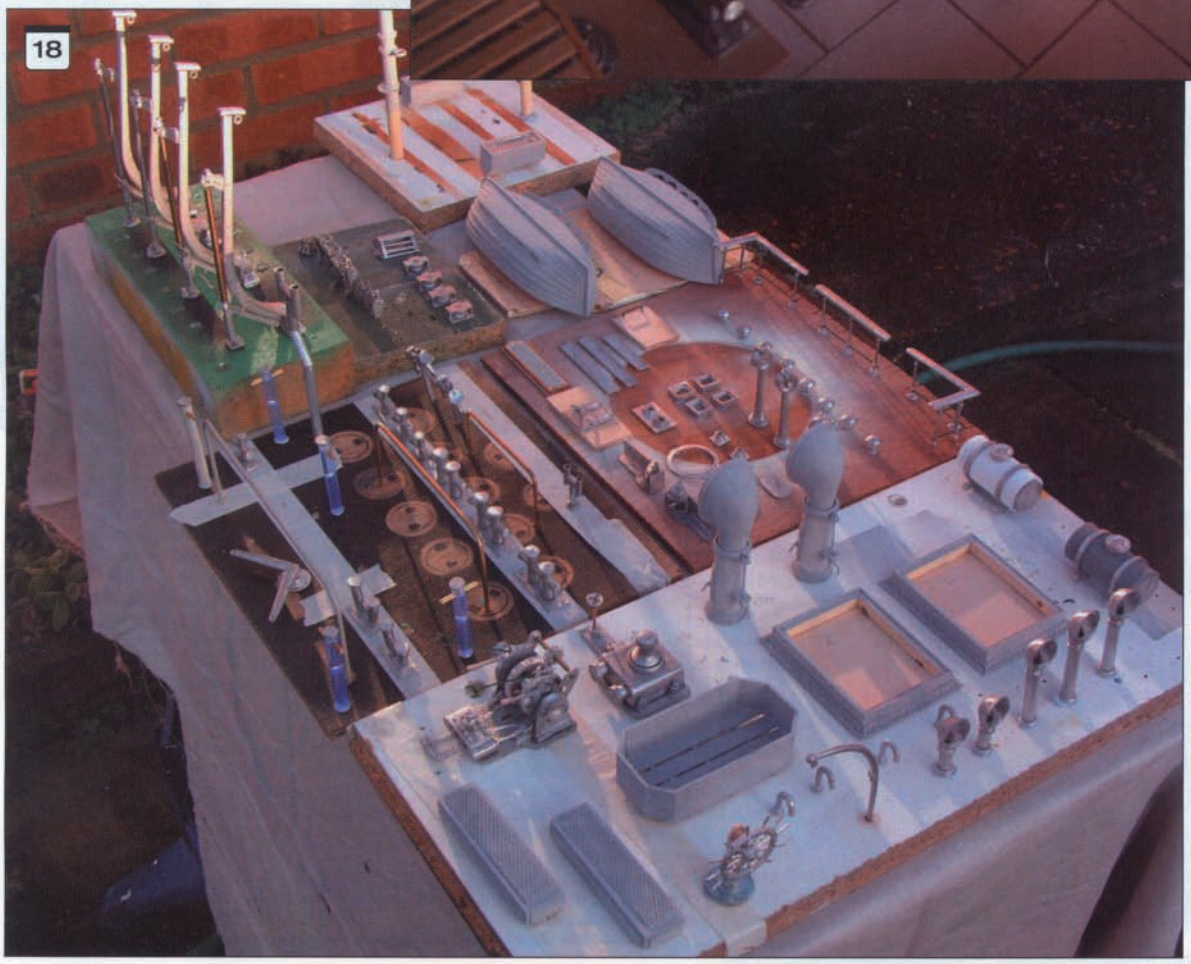
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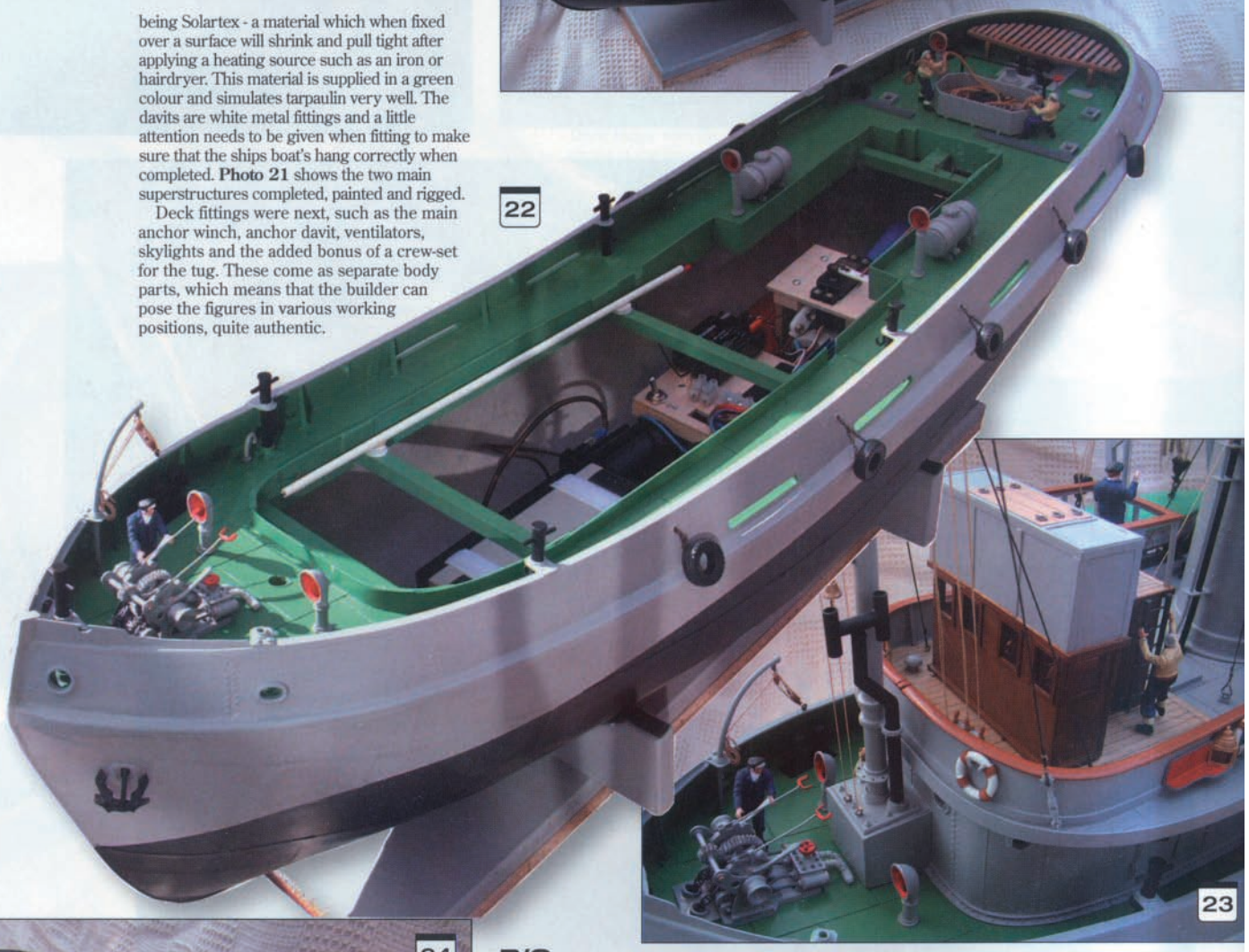
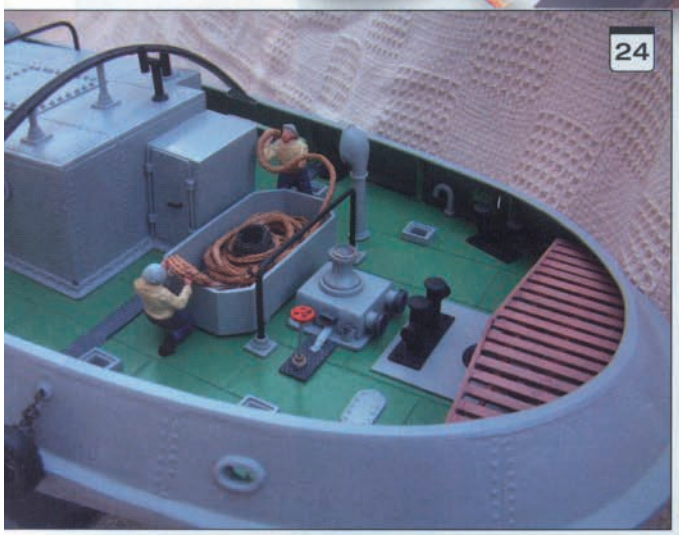
being Solartex - a material which when fixed over a surface will shrink and pull tight after applying a heating source such as an iron or hairdryer. This material is supplied in a green colour and simulates tarpaulin very well. The davits are white metal fittings and a little attention needs to be given when fitting to make sure that the ships boat's hang correctly when completed. **Photo 21** shows the two main superstructures completed, painted and rigged.

Deck fittings were next, such as the main anchor winch, anchor davit, ventilators, skylights and the added bonus of a crew-set for the tug. These come as separate body parts, which means that the builder can pose the figures in various working positions, quite authentic.





R/C

At his stage of the building I find it best to install the R/C equipment. This was a simple operation, a speed controller for motor, and the rudder servo. Most of the R/C installation can be seen in **Photo 22**. As mentioned previously the motor was a 12v Decaperm and the batteries were 12v 12AH sealed lead acid, with a Futaba 2-channel receiver and servo.

Ballasting

Photos 23 and **24** show the finished model ready for ballasting and her maiden launch. As usual the ballasting was done in the domestic test tank (the bath), and even with the sealed lead acid batteries in place a considerable amount of lead ballast was added to bring the model to its correct water-line - in fact the finished weight of the tug was around 28lbs, (12.5kgs) - this brought the hull down to a realistic appearance on the water.

Conclusion

So now to the big test, down to the local lake. Any trepidations. that I had about the performance on the water were soon forgotten, and as with all the other Mountfleet models I have built, she performed perfectly, was easy to control with very tight turning circles and steady as could be on the water.

A fairly uncomplicated model to build, and there were no parts missing in the kit. Full size plans and informative instruction manual were included. A good size which will fit into most cars with no problem; she looks good and performs well on the water. Good value for money. But please Mr Mountfleet, how about a propeller in the next model?

Available direct from Mountfleet Models, Laurel Mount, 79 Holmfirth Road, Meltham, Huddersfield HD7 3DA. Tel: 01484 851569. Price is £235.