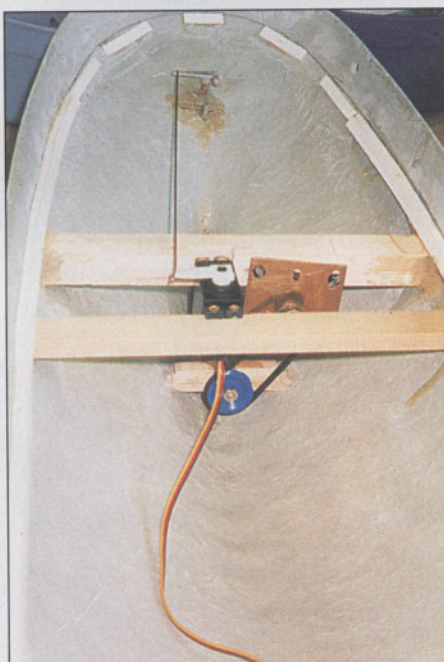


*David Semper builds and reviews the Mount Fleet kit*

# The Pilot



**T**his ship is built on the hull of a standard 86' steel drifter, which makes an excellent pilot boat on this proven design of boats from the North Eastern seas of the U.K. The 'Britannia' was built around 1907 and was operational until well into the 1930s. At a scale of 1:24 the model is 1.09 metres overall with a beam of 0.25 metres. The manufacturers, Mount Fleet Models, have used the same hull as for their trawler and armed trawler, but with much less equipment on the deck of the Pilot Cutter so this is possibly an easier model to build. The usual detail on all of the Mount Fleet models is still there, but there is a little less of it. With plenty of room inside the hull either a steam plant or a small electric motor can be installed as these are easily driven hulls. When completed it makes up into a very attractive and nostalgic boat.



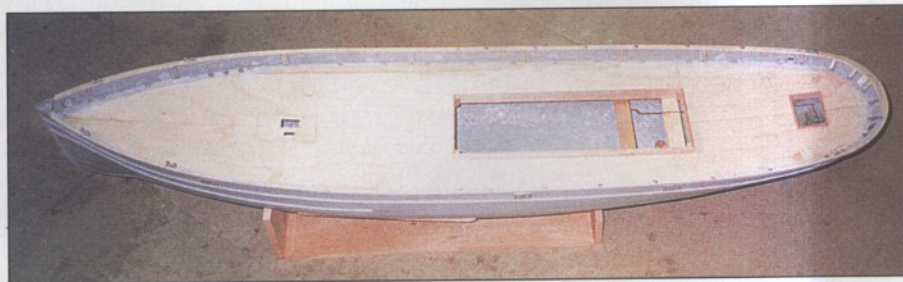
*The motor with the belt drive and steering servo installed.*



*The bulwark rail being kept level whilst the epoxy cures.*



*Stern frame, propshaft and rudder in position.*



*The deck on with coamings round the openings.*



# Cutter Britannia



*The superstructure filed down to the deck curve.*

As usual the kit comes complete with the hull and superstructure in GRP mouldings as well as the rowing boat on the stern. Sufficient timber and printed timber for the decks and saloon is supplied together with bags and bags of white metal fittings etc. The only extra items needed, besides radio gear, are a motor - steam or electric - propshaft coupling, paint and glue. The instructions give a building sequence and basic building details. There is also a full size numbered drawing and parts list. All metal fittings are in one of 14 bags, so don't open these until you are ready for them.

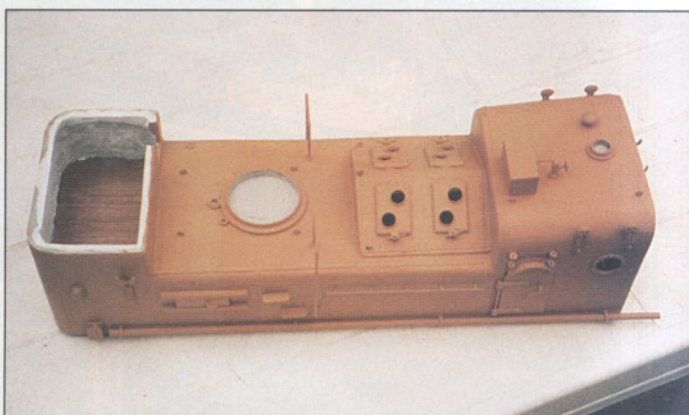
## Kitting out the Hull

The first thing to do is to drill out all the holes in the GRP hull - under size, for the rudder, propshaft, anchor hawser etc. Then to sand down with a drum sander the inside of the bulwarks to remove the high spots. Having done this, the real dusty work is out the way and we can start considering to build.

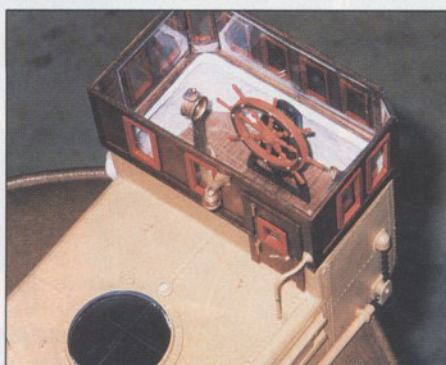
Once you have got the dusty work out of the way, the hole in the boss for the propeller shaft can now be filed out to size. The stern frame casting now has to be cleaned up and holes enlarged in the hull to make it a snug



*The hull now painted and with the deck overlay fitted.*



*The superstructure painted after all the fittings have been attached.*



*The wheelhouse completed.*



*Marking out the funnel, see text.*

fit. The frame, shaft and propeller can now all be checked for clearance and final position. Inside the hull fit some bracing to support the inner end of the shaft. When you are happy with the set up, epoxy all in place.

The next thing is to fit the propulsion. By now you will have decided on electric or steam, and you will have set

the propshaft level or slightly upwards accordingly. The instructions suggest fitting a 540 motor with a 3:1 reduction. I did this and tried it out on the pond with just a battery installed. As this is an easily driven hull I found there was plenty of power to move the boat easily. The reduction was through a belt and two pulleys. This is simple, does away with universal joint couplers and is more silent in running as was usual with steam plants. I also replaced the die cast propeller in the kit with a brass one as I feel these give more thrust and they are already balanced.

After that little experiment, the motor came out and work started on fitting the deck, together with coamings round the openings. Before the deck is finally fixed in, fit the rudder servo to make sure the control rod has clearance under the beams. The only two openings I have in the deck are for the superstructure and over the rudder tiller. The bulwark capping was fitted next. With this on, and the wood sealed, clean up the hull prior to filling in any pin holes in the GRP, followed by a wet and dry rub down. Before painting, more

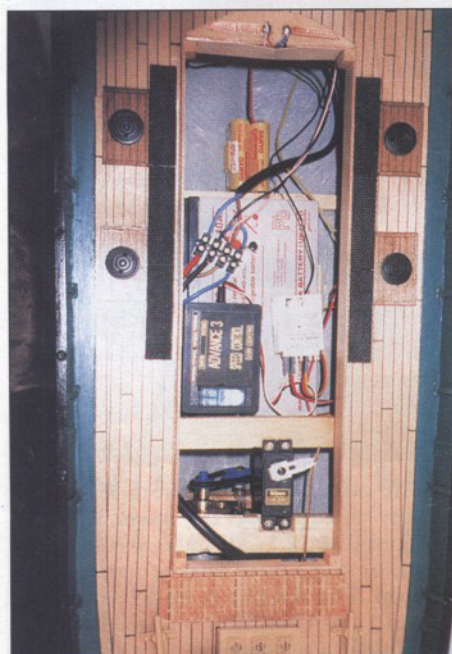


*Completed funnel.*

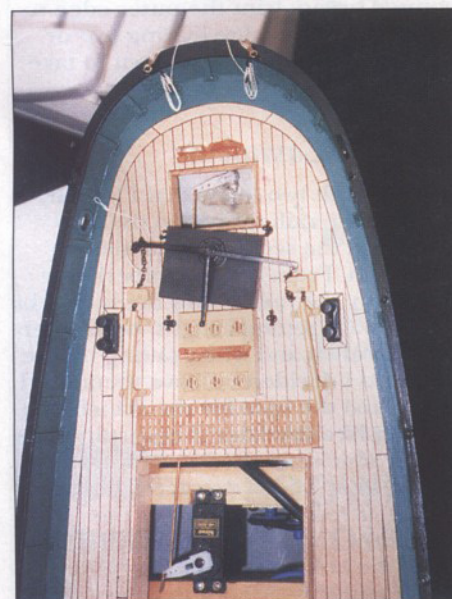




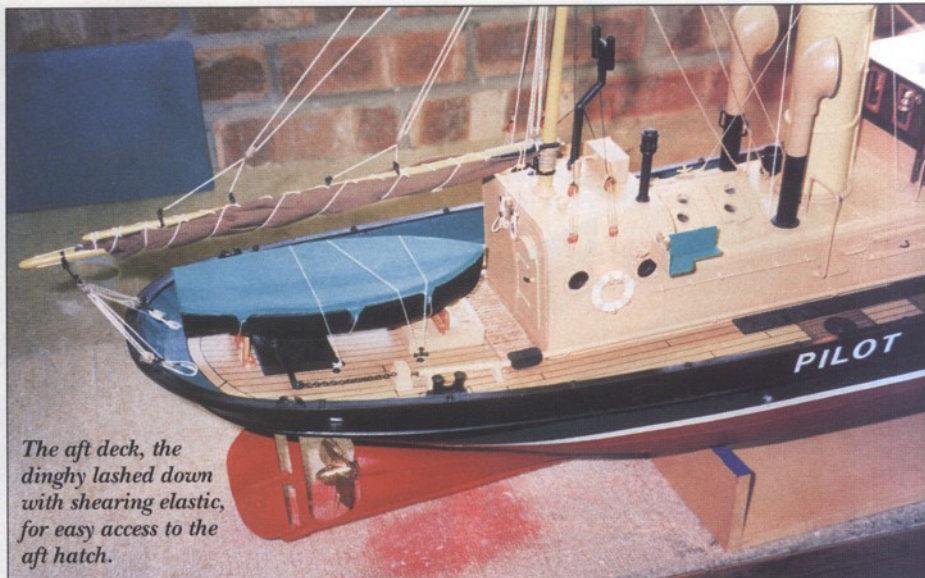
With the masts up the forward lamp fitted, see text.



Battery installed and electronic gear fitted, the black rubber tube over the rear cross member connects to the shaft oiling tube.



The aft hatch removed showing the tiller arm.



The aft deck, the dinghy lashed down with shearing elastic, for easy access to the aft hatch.

detail can be added, such as the bulkhead supports, wash port covers etc. This way you glue material to material and not to paint. After a final clean the hull can be painted.

### Superstructure

The base of the structure has to be cleaned to fit flush with the deck, whilst at the same time the front has to be vertical. This is best done before the deck overlay is fitted so any pencil or tool marks are hidden under the deck. When fitting the coamings in the deck you will have checked for the central position and also that you have a snug sideways fit of the structure. A block of wood at the front end can be fitted outside the coaming to restrict fore and aft movement.

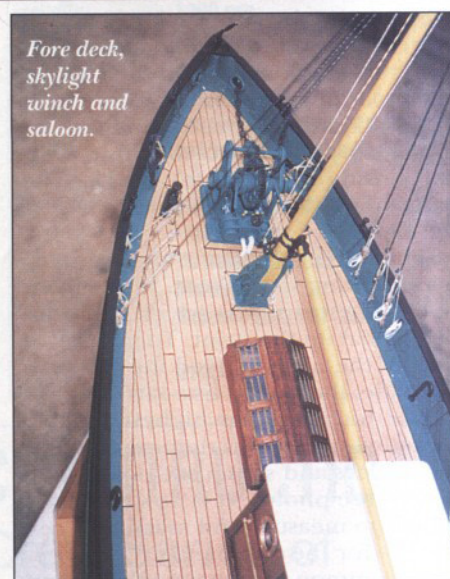
As mentioned before, this pilot cutter is based on the standard steel drifter of the North Sea, and is very similar to the armed trawler 'Osprey' and is in fact built on the same GRP hull with many common fittings. If you feel you would like more detail on building look back in the Jan/Feb 1999 issues of MMI for my review of Osprey.

With the base of the structure set correctly more detailed work can be done and the top of the wheelhouse built. Follow the instructions; but before cutting out, check the top and bottom of the door meet and adjust the top if necessary. Also check that the top half is still vertical and in line with the base.

More detail work can be added before painting and fitting the two halves of the wheelhouse together. The picture shows the structure painted before adding 'sticking out' items like funnel and Nav lights.

### The Saloon and Hatches

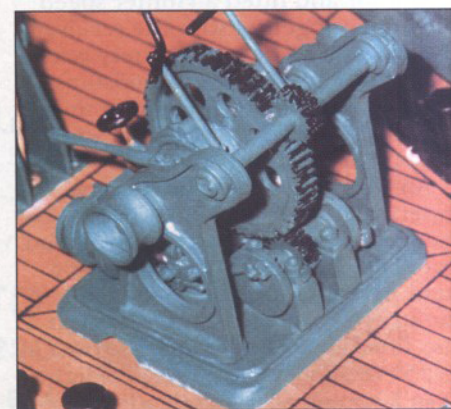
The saloon is built following the kit instructions, but note there is a port and starboard side, so keep an eye on



Fore deck, skylight winch and saloon.

this and check too that the the port-holes are the same height on both sides. I fixed the saloon down to the deck, as there was no need for an opening here.

The skylight I made removable and underneath I put power switches. Likewise the hatch over the rudder was made removable. Keep this hatch as low as possible otherwise the keel of the dinghy may foul the steering mechanism on the top of the hatch. I had to file off the top of the casting to



A close up of the winch.





*The main structure with lights on, the glow can be seen in the skylight.*

give clearance. Where the steering tube joins at the rear duckboard, there is a cast step plate to cover the join, you will possibly find the chequer plate markings are on the wrong side of this. It is an easy matter to mark the top by dropping the casting into a vice and closing it really tight, the vice jaw pattern will then be indented on to the top side.

The funnel was made and painted before fitting to the boat. In the front of this is a steam pipe which needs to be vertical up the front. To get the rake of the funnel I filed the base to an angle, then put a fine saw cut across the base at the highest and lowest points, a rule was then pushed into these nicks and set square on a flat board (see photo). It is now an easy matter to measure and mark off a centre line for the steam pipe.

In common with many other manufacturers these days, for understandable economic reasons, rod for hand rails etc is often supplied as CCMS, copper coated mild steel. However well you paint and protect it damp gets under the copper and it rusts from the inside. So I replaced all this with brass rod to give the model a longer trouble free life.

## Electrics and Lights

Before fitting the masts I installed the motor and fitted a Hunter speed controller, together with the receiver and batteries. The main battery is a 6 volt 10 Ahr battery fitted amidships. This will give plenty of running time and also supply the 6v grain of wheat lamps that I propose to install.

An extra hole was drilled in the superstructure to take the wires from the navigation lights, and at this point I noticed there was no mention of a stern light. I made one and fitted it to the structure just below the aft mast. I also fitted lights in the engine room as well as the galley. To feed these lights I ran a copper strip of self adhesive tape along the underside of the struc-



*The completed model ready for the water.*

ture. This is easily obtainable from dolls house model shops. Up forward I fitted lights to the saloon and under the skylight. I also ran a line up to the mast to feed the mast head light. This is suspended between two lines so it can be run up and down. To feed the power to this, twist together two strands of enamelled copper wire - as used in electric motors - this then looks like a rope line to the lamp.

## Mast and Rigging

With the electrics installed the masts and rigging were fitted. There is enough dowel supplied to square off the base of the fore mast, glue on four pieces of scrap and file down to size. This makes the mast in one piece, and not two as suggested in the instructions Rigging is straightforward but a time consuming job.

## Deck Winch and Dinghy

There is an exploded drawing in the instruction book as well as a description of how to assemble the winch. It can be made in two pieces and then painted before final assembly.

The only other main item left is the dinghy mounted on the stern, which you can fit out, as all parts are supplied, or you can fit with a cover over the top. The dinghy is a GRP moulding and this I found a bit too thick on the inside, so I opted to fit a cover. First glue on a sheet of Plasticard, which will keep it waterproof. Then cover this with some material which I painted green, trim the outer edge so it folds over the edge leaving two or three triangles pointing down to take a tie fixed under the dinghy.

## General Comments

There are two items that I left off, one was the railings round the bulwark, and the second the ladder on the boom. From my past experience of Osprey the rails round the bulwarks were always getting caught, both when on the bench and when sailing on the water, so I decided to leave them off. I have fixed the base for the stanchions so I can fit them later if necessary. The ladder which is lashed to the main boom, to my mind detracts from the model, if you see a photo of the model the first thing that catches your eye is the ladder which to me looks out of place. No doubt that they really carried one and this was possibly the





only place for it, but not on my model.

### *Piece de Resistance!*

A very good friend of mine, Graham Castle from Cornwall, when he heard that I was building the Britannia, sent me a piece of wood that was from the bulwark rail of the

royal yacht HMY BRITANNIA. This I have shaped and used for the main boom. crutch on top of the saloon. Who knows, this model may have had a Royal finger on it!

### *Sailing Trials*

After ballasting the boat it was connected up and tried out. Yes, the small

540 motor with the reduction gearing really moves it, possibly way over scale speed. Going astern was equally impressive. It is a long narrow hull so you can't expect it to turn on a six-pence, but it is responsive in both directions, not really a boat for a tight scale steering course but it would be ideal for a timed trial course. The boat sits well on the water, and to me, looks more interesting than as an armed trawler, but then I'm not a grey ship man! I enjoyed building it, and if you do the same I'm sure it will be a pleasure in building and sailing. Happy sailing.

mm

### Kitbox Data

Mount Fleet	Pilot Cutter Britannia
Length:	1090 mm
Beam:	250 mm
Weight:	7.5 kg
	For electric motor or steam and two function radio control
Manufacturers	Mount Fleet Models Laurel Mount, 79 Holmfirth Road, Meltham, Huddersfield, HD7 3DA.
Tel/Fax:	01484 851569