



7 STAGES OF BUILDING A PILOT CUTTER

Stage 6 Launching and rigging

Lance Whitehead's Cockwells pilot cutter is given her name and takes to the water - but there is still much to do. By *Nigel Sharp*

On 2 November 2009, Cockwells launched the pilot cutter they had been building for Lance Whitehead over the previous 15 months. One of the last jobs to be carried out prior to this was the signwriting on the stern. Lance had actually decided right from the start that he wanted her to be called *Merlin*. However, enquiries with the British Registry of Ships revealed that this name was already in use so, after some consideration, he decided that the name *Merlin of Falmouth* would set his boat apart in an appropriate way.

There was nothing particularly dramatic about the launching process - the boat was merely moved to the bottom of the slipway at a low spring tide and then, towards the end of the flood, she calmly floated off her cradle. This can be a nerve-racking moment for a custom boatbuilder as this is the first time that his calculations regarding the weight of the boat and its distribution are put to the test. However, it was immediately apparent that *Merlin* 'looked right' in that respect, bearing in mind that there was still a fair amount of weight to be added - the rig, chain, fuel, and water, for instance.

Inevitably there was some seepage through the plank seams, but certainly no more than was to be expected. However, taking a cautious approach, Dave Cockwell decided to stay on board that night. He slept



lightly and was conscious of the occasional noise of the automatic bilge pump each time it cut in. If there had been a serious problem he would have been alerted to it and in the best possible situation to deal with it. However, there wasn't, and in the following days and weeks the hull 'took up' very much in the way that was expected.

Bigger rig

Merlin is 3ft (91cm) longer than *Polly Agatha*, Cockwells' previous pilot cutter, but the rigs on both boats are the same size, albeit a fair bit bigger (about 6ft/1.8m on the mainsail luff) than the original rig on *Peggy*, the 1904 boat on whose lines the two boats are based.

The basic construction of the five spars was carried out by Wesley Massam of Noble Masts, well known to Dave Cockwell from his

days building boats in Bristol. The mainmast, topmast, boom, bowsprit and staysail boom were all built of Oregon Pine (imported from the west coast of the USA) and were of hollow construction with the sections held together with resorcinol glue, considered by Wesley (and indeed most timber spar makers) to be more forgiving than epoxy. They were then sealed with one coat of Coelan and delivered to Falmouth so that all the various fittings could be dry-fitted by Cockwells.

The custom-made fittings aloft were all fabricated in mill-finished stainless steel to replicate the look of galvanised steel, just as some of the deck fittings had been. At the top of the mainmast there were four such fittings - the top one included a leather lined 'spectacle band' in which the topmast was held, an attachment point for a peak halyard block and a sheave for the timinogee which supports the middle part of the topsail luff; the next two fittings had further attachment points for blocks for the peak and jib halyards plus the jumper stays, and the lower fitting included the spreader bracket and the throat halyard crane.

At that point there was also a timber bracket to hold the heel of the topmast in place. Another fitting at the top of the topmast included sheaves for the topsail and burgee halyards, and attachment points for the masthead light and wind indicator.

A number of other rig fittings were made of bronze. Where possible they were proprietary items, but most of them were custom-made involving the same processes of designing, pattern making, casting, machining and polishing as many of the earlier article on the deck (CB 262). Cockwells have the experience and contacts to produce these fittings relatively easily.

The gooseneck consisted of two bands, each one in two parts to allow them to clamp around the mast. Between the bands



Left: Leather work on wire
Below: The mainsheet horse and sheet, and the name on the rudder stock cap



Far left: Hounds and spreaders
Left: Deadeye and lanyard



Above: Gooseneck fitting with an extra swivel for the spinnaker pole, roller reefing and belaying pins, all on nine coats of Coelan
Left: Coating the spars
Right: Top of the mainmast



there were two vertical swivels – one aft for the main boom and an additional one forward specially requested by Lance to allow occasional use of a spinnaker pole. All of that was custom made but with the addition of six belaying pins which were available from Davey and Co.

Once all the fittings had been dry-fitted, they were removed and a further eight coats of Coelan applied, before everything was permanently fixed and sealed.

On deck, the mainsheet horse comprised specially-cast end fittings, with studs going through the deck and the hull planking in the counter (with a spacer between) to cope with the considerable loads, linked by a piece of bronze round bar with four rubber buffers each side of the slider to take any shock loads, especially in the event of an accidental gybe.

Traditional winches

A length of bronze T-section track was fitted athwartships just forward of the mast for the self-tacking staysail. Working pilot cutters favoured tackles over winches but as Lance was keen for the sail handling to be as convenient as possible, he purchased a pair of second-hand traditional looking winches from which he had the chrome stripped before polishing the newly-exposed bronze himself. These were fitted outboard of the cockpit coamings so that they could be used for the jib sheets and running backstays.

The standing rigging was stainless steel wire with all the ends (30 in all) spliced, served and leathered. This skilled work was carried out by Dennis Platten whose company, Traditional Rigging, is based in Bristol. The three main shrouds each side, held outboard and clear of the capping rails and bulwarks by the channels on the hull planking, were tensioned by lanyards threaded through specially turned elm deadeyes giving a six-part purchase.

The running rigging was made up from English Braids' polyester in a traditional looking beige colour – generally braid-on-braid for sheets and for running backstay and halyard hardener tackles, and 3-strand for halyards.

All the blocks – around 40 in total – were purchased from Claessons in Sweden. They have ash bodies, nylon sheaves, stainless-

steel pins and galvanised straps. When they arrived at Cockwells they were dismantled, soaked in a mixture of turpentine and teak oil for at least 48 hours, wiped with pure teak oil and, once dry, reassembled.

Sails

The mainsail, topsail, jib and staysail were all made by SKB Sails of Penryn in a cream coloured Dacron, and Lance is keen to expand this wardrobe at some point with the addition of an asymmetric spinnaker.

A couple of weeks after *Merlin* was launched the mast was stepped – on the next big tide so the boat could be brought alongside the quay wall for a reasonable length of time. *Merlin* would soon be ready for sea trials.

Next month: Final completion, sea trials and handover, and a word or two on costs



Left: Merlin is positioned at the bottom of the slipway at a low spring tide to await being floated off her cradle by the flood tide