

Thanks for the Memory

This little Whisstock dinghy caught everyone's eye on the WBTA stand at Southampton; Dick Phillips tells her sad but satisfying story.

With photographs by the author.

hen you offer your services for general boatbuilding and repairs, custom projects crop up in all kinds of ways. Back in 2012, I was asked by Peter Jady to take on a rather poignant boatbuilding job. Peter's father, Roy, had bought plans from designer George Whisstock for a 10'3" (3.12m) dinghy. Though usually built in clinker plywood with epoxyglued lands, with George's blessing Roy planned to build her completely traditionally, with mahogany planking copper-fastened to oak frames.

Roy received the plans, lofted them, lifted the moulds and set up the building jig. He laminated the stem and attached it to the rest of the backbone complete with transom. Then he commenced planking using khaya, an African mahogany, setting out the spacings to give the run of



When the partly planked hull on its building jig arrived at the Willow Bay Boats workshop, Dick's first task was fitting the final planks, nailing and glueing the lands as Roy had done.



the steamed 'timbers' aka frames. **Right:** Inwales were fitted along the sheer and the seat risers slightly below them. planks a fair and pleasing line. Roy carried out all of these processes in a most professional fashion for someone making his first attempt at using a complex set of skills.

Of course, he did not work continually on his project, he had many other interests so the years rolled by. Very sadly, Roy fell ill and passed away in 2011, leaving the final three planks of the hull to be attached. The following year Peter approached John McShea, an ex-student of mine who builds boats in Salcombe, about finishing Roy's dinghy. John was too busy at the time – must be my training – so he mentioned my name to Peter who got in touch with me.

A design with a pedigree

Coming into the world of yacht and boat building in the 1960s, I soon became aware of the aristocracy in the trade and learned the name of Whisstock was synonymous with quality, renowned not only for building fine boats but also designing boats with the reputation of being well-



found, stable craft which performed well. Although the yard in Woodbridge is no longer with us, the name lives on with George Whisstock who carries on the tradition of designing fine craft. So I was keen to get involved in the project and finish Roy's dinghy.

Roy's hull duly arrived on its building jig, along with miscellaneous boards of mahogany and oak, a good range of copper and bronze fastenings, plus all the plans and information that George had supplied to his father. Roy had planked the hull in mahogany but had glued the lands before riveting them up. This created a potential problem: traditional clinker planking with copper fastenings allows the joints to move slightly with the alternate absorption and drying out of moisture in the timber. As the plank lands had been epoxy-glued, it was imperative that no water absorption should take place, as this would split the planks along the grain.

Therefore the only option was to encapsulate the whole hull with several coats of epoxy. The risk of water absorption will also be considerably reduced if the boat is dry sailed – kept on the trailer and covered when not being sailed. Keeping her for extended periods on a mooring would dramatically increase the risk of tension building up in the planking with the danger of splitting.

Making two planks from one

With this in mind I began by finishing off the planking which Roy had almost completed. The planking is 3/8" (10mm) thick with 3/4" (20mm) lands – the overlaps of the planks. After checking that Roy's last planks were consistent in shape from side to side I spiled them and cut them out of the 1" (25mm) boards supplied. These were then cut vertically on the circular saw and planed to the thickness, giving a pair of perfectly matched planks.

Having fitted the planks we nailed them on through the lands following the fastening pattern which Roy had established. This entailed driving two nails, then leaving a space where the nails would be driven after the steamed oak frames had been fitted. As had been done previously, we riveted up the occasional nail to ensure that the plank stayed in place. I then fitted the outer stem as the original planking had been cut off flush with the apron instead of fitting them into a rebated stem, as is done the traditional way. This was made up of solid oak cut to the outer curve of the laminated apron. Eager to get a coat of epoxy on the hull, I trimmed off the edge of the transom and sanded up the outside of the planking, transom and keel.

Having applied our first coat of epoxy resin on the outside of the hull we released her from the building jig and turned her over. Before cleaning up the inside of the hull for coating we needed to rivet up all the land nails; it would be no fun riveting epoxy-coated nails! More nails had to be driven in the places where the body moulds had made their insertion impossible when she was on the jig. Having done all this and applied the resin, we could then machine and steam in the frames, generally known as timbers in traditional construction.

Inevitably, the oak which Roy had intended to use for timbers had dried out far too much for steaming. As I have a good relationship with the local sawmill, we soon had some clean, straight-grained green oak which was perfect for the job. George Whisstock had specified a spacing of 6" (150mm) centre-to-centre for the timbers, this meant that 20 timbers of 1" x ³/4" (25 x 18mm) in section were needed. Selecting the straightest run of grain we cut them to size, planed them up and trimmed a chamfer off the inner edges. After they were steamed in, we fitted the heel wedges where the timbers leave the planking to cross the hog. We then nailed them and spent a day or two wearing ear defenders while we riveted them up.

Inwales, risers and knees

To all intents and purposes, the hull was finished. As soon as the second coat of epoxy resin had cured, we could set the hull up plumb and level ready for fitting out. The first parts to fit are the inwales and risers, the longitudinal lengths of timber which help stop the hull from wracking and twisting. Both are made from the seasoned oak. The inwale fits around the inside of the hull at the sheer and the riser several inches below it to support the thwarts.

On the sheerline we had to fit blocks of oak offcuts at the appropriate places between the inwale and sheerstrake to make provision for fastening knees, rowlock blocks and shroud plates. The longitudinals are through riveted on every other frame, starting from the bow.

To complete the bracing around the sheerline, we fitted three knees – as boatbuilders call these wooden angle brackets – a breasthook at the stemhead and quarter knees at either side of the transom. These we made by mitre joining the two halves of the knee together with a loose tongue let into them across the mitre.



Above: The breasthook is a horizontal knee, made from two arms which were glued together with a hidden tongue. **Below:** Though the thwart is supported by the risers, the pairs of hanging knees have the important function of bracing the hull athwartships.





Finishing the fit-out

George's design calls for a daggerboard to be fitted through the keel; a popular option in smaller dinghies as it takes up less space than a swinging centreboard. Roy had already made provision for this by cutting a slot through the keel and hog. He cut a larger slot into the hog allowing the plywood daggerboard case to be set into it and secured with lengths of timber called grounds or logs on each side. The top of the daggerboard case fits beneath – and is supported by – the midships thwart.

The thwarts themselves are made from solid mahogany and as well as providing seating, they serve the purpose of bracing the boat athwartships – across its width. The thwarts sit on the riser at each end and are attached with oak knees to the sides of the boat. The knees are made in the same way as the breasthook and quarter knees, fastened in with copper rivets and bronze screws.

We decided to put on the gunwale capping at this stage so that we could fit it around the tops of the knees and position the rowlock blocks. These were cut to shape from oak selected to follow the curve as much as possible. The rowlock fittings required a block to be fitted to the planking below the gunwale to support the stem of the rowlock and a pad fixed to the top of the capping to take the rowlock plate. Once this was completed we fitted a 3/4" (18mm) wide rubbing strake to the outer edge of the capping and a 3/8" (10mm) half-round rubber to the lower edge of the sheerstrake to protect its protruding edge.

To complete the interior, we fitted the bottom boards and the mast step. The latter is made from a block of mahogany and is fitted to the hog and housed over the steamed timbers which cross the centreline at this point. The mast passes through the forward thwart and its heel sits in the socket in the top of the mast step. The step was then bedded in and screwed to the hog and keel.

The bottom boards were made in four pieces to make them easier to remove for access to the bilges. The cross braces were made ³/4" (18mm) longer to allow them to be tucked under a covering board fixed along the tops of the frames on the centreline with an oak turn-button to hold them. Both sides were separated under the centre thwart for ease of removal fore and aft.

Peter decided that a gaff rig would suit the boat and George Whisstock had a suitable sail plan. The spars, therefore, consisted of mast, boom and gaff or yard. We made them from clean, straight grained Douglas fir to the specifications on George's plan, with jaws for the boom and yard to fit around the mast. This is a simple and effective solution to keeping the spars in line with the mast yet enabling ease of adjustment and dismantling the rig for trailing.

Afloat – at last

Once the final coats of paint had been applied, the rigging fitted and

adjusted, the Jeckells sails were bent on to the spars and we were ready for her maiden voyage. Peter's sisters, Clare and Helen, had made a special effort to see their Dad's boat take to the water for the first time; Clare from Lancashire in the UK, Helen from Colorado, USA. We launched *Anemone* at The Cobb in Lyme Regis on a not particularly fine evening; it was overcast with a lively blow from the South-West.

Not wanting to disappoint the family but with a little trepidation, I agreed to hoist sail, initially with a reef in the mainsail. After a little tentative reaching back and forth in the relative shelter of the harbour wall, we ventured out into a little more wind. *Anemone* behaved perfectly, to the extent that we shook out the reef and let her have her head. At no point did she feel like heeling over alarmingly and even when we poked her nose out into the less sheltered waters, she kept her impeccable manners.

As we sailed back into the harbour and hauled her onto the trailer, we all agreed, Roy had made the right choice.

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