

THE WOODEN MIRROR – NOW AND THE FUTURE

International Measurer **D Chivers** discusses traditional self-assembly methods...



Wooden Jig

The backbone of the Mirror Class has always been the wooden kits, be they produced by professional suppliers or the amateur. The GRP boat now fills a part of the marketplace and will provide a strong boat for those who wish to choose this route. However, it would be very wrong for the Class to abandon the wooden Mirror and opportunities that it offers for small-scale production, ease of introduction to new countries and a possibly more economic new boat entry into the Class.

The downsides to the wooden kits are seen as the difficulty in producing a 'fast' hull shape, due to problems arising from poor quality materials or panel shape and fit, and the time taken to produce the boat in the modern time-hungry world. This is no criticism of the suppliers of the kits and parts who have to work to patterns they have been given and within specifications laid down.

It would be easy to say "Well, that's the end," and give up, leaving only GRP production, but we believe that this is not necessarily the case. The first thing to address would be the actual kit components and the desired shape. The modern world of computer aided design and accurate laser cut panels allows accurate and repeatable items to be produced. It is possible to have plywood made in different sizes and this could also be investigated to give full length hull panels without joins: a great time saving in construction. We have enough data on which boats should be used to produce the hull panel shapes, and as the data would be taken from existing boats we would know that the boats would measure and be legal Mirrors.

Many amateur builders are daunted by the need to produce a certain shape and the time taken. This could be eased by modifying the building method and ensuring that the correct shape can be built from the kit. The laborious task of wiring panels together is long and arduous so we should investigate alternatives. I would suggest that the method to use on the Mirror would be the peg



David Chivers

FOOTNOTE

The Class is committed to a future with both GRP and wood boats, it is clear both have a place play. Martin Egan's International Technical Group are currently investigating the moving the wood boat forward, particularly in light of modern epoxy technologies. As David rightly points out there is an exciting opportunity to re-capture the days when thousands of Mirrors were built every year, introducing new nations to the delight of Mirror sailing. MCA have recently commissioned licensed wood builder, Duffin Marine, to construct a jig that allows a Mirror to be easily built to a fast shape using an official kit. This is available on loan to homebuilders.



and tab technique as already shown to work by Rob Humphrey's design the H22 some years ago.

The use of tabs pushed through panels and secured by pegs gives a very quick and solid method of forming the hull. The kit should include a building jig to ensure that the hull shape is correct and bow and stern transom angles are fixed. At this point bulkheads, hull side panels, etc, are all assembled and secured with pegs. Then epoxy fillets can be started to secure all the panels in place. Starting on a Friday evening, I see no reason why the completed (undecked) hull shell should not be complete and glued up by Sunday evening. This leaves a week to seal the inside of the tanks and the following weekend could be used to fit the decks, centreboard case and so on. Once a unit is secure, the pegs would be removed and the tabs cut off and the hull faired before painting.

With careful planning and the production of accurate components, it would be possible to drastically reduce the building time of a Mirror and yet also guarantee a fast and competitive boat. This would allow the class to promote itself into new countries where the expense of importing

GRP boats would at least initially be prohibitive and also allow sailors to build new competitive wooden boats on a structured cost basis.

In no way would this be detrimental to the GRP production which has its place and offers a certain product, but it would ensure that all options are available and to spread the class. Obviously there is much work to do to fully examine all the details, but the class cannot lose in investigating its potential.

World Champions

DUFFIN MARINE

Winner of 2007 World Championships, 2007 Nationals, 2006 Europeans and many more...

Wooden hull Mirrors constructed from 'Duffin' kits. Mirror's available from bare hull to fully finished boat. Kits from £795, bare hulls from £1970.

Contact Alastair Duffin at:

2a Manderson Street, Belfast BT4 1TR

Work: 028 9045 7381

Home: 028 9181 9892

duffinmarine@myway.com