

Technical Committee report

As agreed at the 2014 AGM the Technical Committee recently met with Ian Teasdale of The Boatyard at Beer (BYAB) to agree changes on behalf of the Class related to construction techniques and durability of the hull and spars.

The output of the meeting was as follows –

Hull

- 1) There is currently a weak point in the design of the centreboard case as the case is built as a separate component and bonded (top and bottom) when the hull and deck are brought together. The joints are a source of potential leaks. In future the builder will ensure that the case is glassed to the bottom of the hull and laminated over at the bonding stage to improve durability and reduce the potential for leaks. The shape of the case will not be altered.
- 2) The centreboard case eye is also a source of potential leaks and is troublesome to fit and use when replacing the centreboard retaining elastic. For future builds the eye and centreboard retaining system will be removed from the centreboard case allowing an easier build and a smoother and symmetrical internal face of the centreboard case. The cleat in front of the centreboard case will be replaced by an eye to provide a simple retaining point.
- 3) Those with older boats will have noticed that crazing occurs in the gelcoat in the deck mould down the centre of the boat behind the mainsheet takeoff point. In time this crazing becomes worse and may eventually require the whole area to be cut out and rebuilt. This is caused because currently only a thin sheet of plywood supports the deck mould from the centreboard case down the centre of the boat to the transom. To alleviate this issue the plywood support will be replaced by a lightweight core cell material (closed cell foam) with three additional internal bulkheads (with drainage channels) built across the boat in future builds. This will create a much stronger floor with very little or any weight gain to the hull due to the lightness of the material with the additional benefit of not being prone to rot. This method has already been used within the RS700 build.
- 4) The Technical Committee recognised that there is merit in adjusting the way in which a painter/tie down point (the 'bow eye') is currently fitted. At this stage a conclusive view has not been reached and discussions with BYAB continue to seek an optimum solution, which might include moving the eye below the gunnel or further back on the deck.
- 5) The mast base mushroom fitting has already been improved with cut outs around the circumference to make it less likely to become loose.
- 6) The hole through the hull to drain the mast pot will be coated with epoxy to stop water ingress through the wooden base on which the mast pot is fixed.

- 7) The mast rake is now measured very carefully by BYAB using a template with a fixed length of cord used to set the angle up to the transom.
- 8) The transom strength may suffer over time if the ply wood stringer down the centre of the boat starts to rot. This will be less likely with the new closed cell foam core.
- 9) The BYAB could fix a slightly thicker piece of ply to inside of the transom into which the rudder fittings are screwed. On discussion it was felt that using bolts here may cause more damage and be harder to fix if you run aground. Some of the current issues around the fittings working loose may be related to fixing a bracket onto the rudder fittings and using this to support the mast, boom and lighting board while towing.
- 10) No alternative options or changes were felt necessary for the toe straps or fittings used.

Spars

- 11) The cut for the top and bottom sections appear to be in a different place for every mast which means they are not interchangeable. BYAB will attempt to secure a specification change with Superspars such that the masts are cut to a jig and thus be interchangeable.
- 12) The current gnav roller does not fit the mast profile which can cause compression cracking of the mast. BYAB will source a gnav roller to match the mast profile to alleviate this problem and confirm the cost for any new roller which we have suggested needs to be cheaper than the RS100 roller.
- 13) The carbon boom as currently supplied has a rough section where the clew strap runs making outhaul adjustment difficult. BYAB will attempt to secure a specification change with Selden such that the surface beneath the clew strap is smooth, or provide an after-delivery solution.
- 14) The carbon boom as currently supplied is longer than the original alloy one making it more likely to drag in the water when heeling. BYAB will attempt to secure a specification change with Selden which either delivers a shorter boom or mitigates the boom length with a diagonal cut to the boom end. (The latter solution would be tested first within the class to ensure the boom is not weakened or made more dangerous as a result).
- 15) The top of the mast may be sealed by removing the roller fitting and using some silicone sealer if required to stop water getting into the mast at the top. The old mast fittings meant the mast used to be sealed.

The Committee is of the opinion that a members' vote is not necessary to approve these changes, as they do not contravene Class Rules 4.2 and 4.3 which are repeated below, and are made solely to improve the longevity, finish and build simplicity of the boat, not for any performance gains.

- 4.2 The external and internal mouldings including the "Hull" of the "RS One Design" shall only be produced by a Licensed Builder from production moulds taken from the Master plugs held by the Copyright Holder.
- 4.3 All other equipment comprising "Spars", "Sails", "Foils", rudder stock, tiller, fittings, toe strap mountings, spinnaker chute mouldings, whether original or replacement shall be those supplied by a licensed RS dealer except as specifically authorised by the individual class appendix to these Rules.

Before any of the above changes go into production the Technical Committee will review cost implications to ensure that the purchase price of new boats is not materially affected. Once finally agreed, the BYAB will plan to build to the new specifications once orders are received.

We invite comment on the above. As we want to move things along quickly and work in harmony with the builder, we ask that any objections to the above are made within the next two weeks.

Technical Committee

Richard LeMare

David Acres

Matt Sargent

Fleet Chairmen

Pete Ellis

Steve Bolland