

## Specifications Documents Archived from Website May 2016

### 1. RS800 Development 21 Jan 07

Following discussions at the AGM held during the 2006 Nationals, the Technical committee discussed the various areas of the 800 build that should be targeted for improvement. The changes laid out below seek to solve or help to solve these issues.

These changes are all incorporated in a prototype RS800 available for the members to view or sail over the next 6 weeks. Some or all of these changes, depending on your collective opinion, will be packaged as a proposal to be voted on during March 2007.

None of these changes will affect the performance of the boat, thus maintaining the one-design fundamental principle.

Deck moulding:

1. Dagger casing - moulded in to hull, "flush" at base. Full height rubber "crash pad" insert to rear. Top and bottom slots tailored to board. Dip forward of slot to ensure top leading edge of board stays above deck on running aground. This will match with an increase in the height of the leading edge of the foil.

Benefit: Less damage to board and boat on running aground. Reduced leaks, smooth raising/lowering of board.

2. Foredeck - Re-shaping, and slightly raising, foredeck under chute to lose launch tube. Pole "slides" on deck. Extra non-slip further fwd of the mast.

Benefit: Cost saving, reduced leaks, and reduced "pooling" of water in light airs for heavier crews. No need for progrid forward of wings.

3. Sidedeck / kickbars - reduce width of sidedeck and lower sidedeck kickbar. Increase angle on sidetanks. Remove floor kickbars. Introduce optional floor kickbars, inserts in floor for easy fit.

Benefits: Easier ergonomics with same "sit-in" feel. Easy tailoring to differing wing widths or sailing styles. More contemporary look. Easier, quicker to mould, less chance of voids.

4. Tubular outer wing bars - replace outer wing section with tube.

Benefit: reduced cost, wider radius to stand on when wiring. Easier to progrid.

Changes 2-4 do enable a weight saving, enabling extra reinforcement and process tolerances to be built in. EG double pads under fittings, extra bond paste in gunwale and shroud points, more resin in void risk areas etc. We would hope to add a tissue against the gel of the hull to reduce print through and increase dent resistance.

The Mast:

1. Replace all internal sleeving with external "laminated in" wrap. Benefit: stronger and visible reinforcement.

2. Alloy masthead sheave box.

Benefit: Does not bend/distort eventually allowing halyard to slip off sheave.

3. T-terminals for shrouds / uppers / traps. Silicone bungs to seal. Benefit: Quicker to build, neater.
4. Fixed / "welded" spreaders: Detachable and retrofittable. Benefit: No tweakability - fixed in keeping with equal leverage nature of the boat. Much stronger, bigger "footprint" on the mast (less load on rivets etc). Cleaner look.
5. Loose p-clips for the halliards, lead through holes in spreaders, maintaining external halliards. Benefit: Looks better, cleaner, p-clips don't twist and jamb halyard.
6. Neater arrangement for the adjustable uppers, involving cheek block on mast.

The sails:

1. Harder wearing spinnaker cloth tried and rejected because too stiff and adds to friction. (Comments from Andy Jeffries, Spod, and Graham Simmonds). Webbing "through the cringle" reinforcement at corners.
2. Main and jib: Colour co-ordinated reinforcement and taping. (the grey's match!). Extra reinforcement to all areas - corners, luff, batten pockets, cringles.
3. Solid boltrope so it feeds into feeder easily and is consistent width because very small tolerance with mast track.
4. Jib battens now removable with Velcro keepers. Good for when you break a batten.

Important: It is not required to vote on the sail detail, but improving the longevity of the sails was part of the overall process. The shape and performance of the sails is identical.

## 2. Outcome of Membership Vote - Changes to RS800 Class Rules 7 Jan 05

Following discussions at the 2003 RS800 Nationals, and class postal vote it was agreed that a number of boats would trial the rear mainsheet system for the 2004 season. The reason for the trial and proposed change was that the current RS800 main is very heavy to sheet in, making it difficult for smaller helms. Further to a successful trial, the RS800 class then voted on allowing the rear mainsheet system to be introduced on a permanent basis as an alternative to the existing centre mainsheet system.

The vote has now closed and 46 votes were received. Thanks to those who took the time to vote. 38 of the voters (83%) agreed that the changes should be made to the RS800 class rules.

The new rules are outlined below. The full rules are now on the website under documents and will be in your 2005 Yearbook. If you would like to receive a hard copy of the revised rules, please contact the RS Office.

New paragraph 1.3.26: The mainsheet arrangements may be modified as follows: the use of a rear mainsheet system and twin tiller extensions is permitted as an alternative to the centre mainsheet system. Specifically, A velocity ratio of 2:1 is used mounted on a bridle at the aft of the boat / outboard end of the boom, then running parallel to the boom to a rolling block located on the boom, in line with the final

turning block located on the floor of the boat, and must then pass through the final turning block mounted either on the cockpit floor or on a turret, in accordance with 1.3.19. The use of a plastic sleeve along the boom to guide the mainsheet and the use of a gybing strop are permitted. The addition of fittings on the boom is permitted as is the addition of a rope, rolling block and cleat between the in board end of the aft of the wings to prevent the leeward tiller from getting trapped under the wing, new holes may be drilled in the aft of the wings for this purpose. Apart from those specifically mentioned above no additional holes may be made in the boat and all ropes are to be led from existing fittings on the boat.

New clause 2.9: If the rear mainsheet system and twin tiller extensions are being used then the helmsman must take the mainsheet at all times and the mainsheet must be taken from the final turning block mounted either on the cockpit floor or on a turret, in accordance with 1.3.19.

Specifically the mainsheet may not be taken by the crew up wind and may not be led directly from the boom.

### 3. Outcome of Membership Vote - Changes to RS800 Class Rules 13 Mar 03

Further to the consideration of RS800 committee, Rules Co-ordinator, and other interested parties, the rule changes below were suggested. Thanks to everyone who took the time to vote.

#### Spreaders

##### New Rules

2.7 The lower spreaders shall be 460mm +/- 10mm in length, when measured from the centre of the shroud wire along the spreader to the wall of the mast. From a line between the centre of both main shrouds at the spreader ends, the distance to the aftermost edge of the sail track will be 150 mm +/- 10 mm when measured without loads on the mast or supporting stays.

2.8 The upper spreaders shall be 360 mm +/- 5mm in length, when measured from the centre of the shroud wire along the spreader to the wall of the mast. The spreaders will either be free swinging or fixed, limited swing is not permitted. When the upper spreaders are fixed, then from a line between the centre of the both upper shrouds at the spreader ends, the distance to the aftermost edge of the sail track will be 145 mm +/- 10 mm when measured without loads on the mast or supporting stays.

#### Weight/Leverage Equalisation

##### Amended Rule

3.2.1 Correction for Combined Righting Moment (CRM): The righting moment of each crew member will be measured on a Class Association approved measurement beam. The beam shall be 2 metres long and used in conjunction with Class Association approved scales. Each crew member must (in turn) lie flat, facing upwards, upon the beam with arms folded such that hands touch elbows. The reading from the scales for the two crew members will be added and then multiplied by 2 to give the CRM. This figure and the Combined Crew Weight (CCW) will then be looked up on the Righting Moment Correction Chart to determine the rack hole settings that shall be used. Rack holes are numbered from 1 to 16 starting from the innermost position. The CCW and the CRM are to be rounded up or down to the nearest whole number for rack hole position.

3.2.2 Use this table to determine the number of corrector weights to fit for a given CCW:

### Combined Crew Weight

Corrector weight in Kg No of corrector weights

151Kg or more None No correctors

148-150.9 Kg 3Kg 1 corrector

145-147.9 Kg 6Kg 2 correctors

142-144.9 Kg 9Kg 3 correctors

139-141.9 Kg 12Kg 4 correctors

138.9 Kg or less 15Kg 5 correctors

### New Rule

3.2.3 One intermediary rack bar per side, as supplied by the manufacturer, may be used in twin trapeze mode. The intermediary bar will be positioned in board of the outer rack beam and outboard of the side deck. The intermediary bar will be located securely and its position cannot be altered whilst racing. When used, the intermediary bars will be deemed to be equivalent to one corrector weight, for equalisation purposes as outlined in rule 3.2.2

There were 23 returned votes, all of which voted in favour of all the above changes.

The RS800 Class Rules in the 2003 Yearbook are therefore out of date. Anyone requiring a revised class rule should contact the RS Office.

It is intended to put the new rule into play for the Fat Face Racing Circuit event at Datchet on 29/30 March. It is intended that there will be a class meeting after racing on this Saturday at the Chew Valley Fat Face Racing Circuit event, where the new rules will be explained. However this event will be raced under the old rules.