

RS800



The RS800 is that rare thing: a skiff that's practical and popular with real people rather than pro-racer stars.

Jeremy Evans takes a look at the updated version and its turbo-boost sister...

The RS800 is the fastest boat in the Racing Sailboats range. Originally launched in 1999, it was conceived as a more practical entry to skiff sailing than the 49er or International 14, allowing club sailors to experience real performance without requiring a Masters Degree in skiff control or a bumper-sized budget.

Over the past seven years, the RS800 has

become established as probably the biggest twin-wire asymmetric dinghy fleet in the UK. It has a very active class association and a packed calendar, with a week-long national championships sponsored by Gul that gets a regular turn-out of 50-plus boats, having hit a peak of 70 RS800s in 2004 – in 2007 the nationals turnout was beaten only by a bumper anniversary International 14 fleet. Another major highlight of the season is the

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Right Even the smaller mainsail on the standard RS800 needs depowering upwind, and control lines are led to the middle of each rack. Currently the crew is forbidden from playing the mainsheet, which suits many mixed teams with a lighter girl crew.



annual Eurocup, sponsored by Fat Face, last year staged during the last week of July on Lake Garda.

Layout and redesign

So what's new about the RS800? After all, it is a strict one-design class in which all boats are emphatically the same. The answer would have been a lot if ISAF had forged ahead by approving the concept of a girls' skiff for the 2012 Olympics. But extreme conservatism won the day, and the result is that the turbo-charged version of the RS800 which Racing Sailboats developed for 2012 is now sitting on ice, while the standard version will continue to be promoted as Britain's only twin-wire skiff class that guarantees good size fleets.

The big change for the standard RS800 is that Phil Morrison and Nick Peters completely redesigned the cockpit, rejecting former clutter in favour of a minimalist, open-plan layout which encourages both crew to stand up and walk from side to side. The advantage is that there's nothing to get in the way of your feet; the disadvantage is there's less to brace against if you are a bit shaky going out on the wire after a tack or gybe. This new cockpit was approved by the RS800 class association last year, on the basis that it improves

the boat without undermining relative performance between new and old boats.

When you step in over the back, the new layout unsurprisingly has a more modern look than the 'old' boat. The two kick-bars, which worked like ladder steps for the trapeze on either side of the boat, have been removed. Instead, the cockpit floor is completely flat and the side decks are unobstructed. A slight change in technique may be required when the boat changes tacks. Stay on your feet – don't sit down! And above all, move decisively to preserve your balance. The kick-bars are still available as an option – they can be glued down with silicone and removed at a later date.

Girl power

The 2012 RS800 is a different beast. Racing Sailboats initially went for broke with a monstrously huge rig and solid wings for the girls' skiff. The boat sailed quicker than a 49er but was judged a tad too extreme, so they scaled things down by retaining the standard racks and boosting girl-power with a masthead kite and bigger fat-head mainsail. The only other change to the boat was a dedicated skiff-style mainsheet, led off the boom rather than the cockpit floor like the standard RS800.

Sheeting off the boom allows the crew to take a dynamic role in managing the mainsail, keeping the boat level while the driver concentrates on keeping the boat moving at full bore. It might seem like a neat solution to better control of the mainsail, but relies on a crew who has the technical ability and arm muscles to keep that sail right on the edge. Others will simply get left behind, and the crews will get all the blame! RS800 class rules currently forbid the crew from taking the mainsheet, which clearly suits many of the mixed teams.

Another reason the boat may have been suitable for selection as an all-women Olympic class is the current RS800's performance equalisation system, which ensures that sailing weight and leverage are the same across the fleet.

Below The 'Olympic' RS800 sported a fathead mainsail.

Below right As expected, the 2012 version proved quicker both upwind and down, and required extra grunt from the crew with an off-boom mainsheet.



Weight is equalised with added lead, ensuring all boats and their crews weigh the same. Leverage is equalised by adjusting the aluminium racks to different beam settings. Before a regatta starts, every sailor has to lie on a device known as the 'plank' which measures potential leverage on the trapeze. Taller sailors with a higher centre of gravity use narrower racks; shorter sailors with a lower centre of gravity use wider racks. Nick Peters claims that race organisers can equalise a boat in five minutes, ensuring that a fairly wide variety of sizes, shapes and weights can race the RS800 – the key factor that determines performance should be ability, not physique!

On the water

Even though the 2012 version of the RS800 won't be hitting the water any time soon, it was interesting to see how the two boats compared during a sailing session off Hayling Island. Conditions were pretty much perfect, with the breeze building from Force 3-5 in the Solent.

The standard RS800 with the new cockpit was sailed by Stevie Wilson and Emma White. Stevie has done a 49er campaign and is well used to handling an RS800, as is Emma who works in the marketing department of Racing Sailboats. The 2012 version was sailed by Frances Peters and Gemma McIntyre. For both girls, it was the first time they had sailed this boat. Sixteen-year-old Frances progressed through Optimists, Fevas and 420s to become Britain's current youth champion in a 29er. Gemma sailed a 29er for many years, has crewed the standard RS800 as well as 49ers, and was on the lookout for a more powerful ride.

There was no doubt about it – the 2012 boat was faster, both upwind and down. But the standard RS800 is no slouch with a well-documented PN of 822, which makes it the third fastest dinghy class in Y&Y's *Racing Classes Guide*. That means an RS800 should beat everything except an 18ft Skiff or 49er.

But the RS800 is a recreational fun machine for real people – not a grossly over-canvased extreme skiff or dedicated Olympic tool. In light or moderate winds, it is not a particularly difficult boat to sail. Anyone who is reasonably okay on a trapeze should be able to learn to crew the RS800 and have fun, although as the wind picks up that will depend on a reasonably capable helm.

You need to feel relaxed about trapezing to drive the boat from the wire. Frances Peters made helming and trapezing look so easy, lying flat for maximum leverage with the tiller extension in her back hand, or standing up on the rack to take a short walk across the boat. It was impressive, seeing as she's accustomed to driving while sitting down. Unlike a smaller skiff like the 29er, this is essentially a stable boat with a flat-bottomed hull. But the 'stand up and walk' technique may not seem so easy for novice drivers – a good temporary solution may be to squat on the side before going out on the wire, holding the tiller extension on the rack to lock the rudder.

If you haven't helmed on the wire before, it's nothing to be too afraid of. None of that nasty hiking business, straining your stomach and getting drenched by waves. Instead, you are way out on the side, getting an awesome view of that beautiful boat as it tramps upwind. Like any good



PHOTOS: JEREMY EVANS



Left Besides extra main sail area, the 2012 version also carries a masthead kite.

Above top Our experienced crew righted the 800 without too much drama, but it is likely to turn turtle.

Above With a wide, flat bottom, the 800 is relatively stable to launch and recover.

skiff, you've got to sail it fast, flat and free with no pinching allowed.

When you turn downwind, everything relates to reach-to-reach Velcoity Made Good. Bear away as the boat accelerates, to hold the hull flat and sail deep on the apparent wind; luff up to rebuild power as soon as speed drops and the boat feels 'soft'. Twin-wiring with the kite is top choice for VMG, but presents more of a challenge as helm and crew move right aft on the windward rack to lift the bow, with trapeze wires pulling them forward and the spinnaker leading the way. If you let the boat heel too far, it will luff until you lose all control and flip to leeward. So get the boat flat and bear away without delay. If you fail to get enough power in the rig with both crew on the wire, the boat will flop to windward and dump you. It's not so easy for the helm to move in fast while driving the boat, so the crew needs to react in double-quick time.

And despite the fact that trapezing off RS800 racks will generally lift you above waves, you can get washed off by an occasional rogue – as Gemma and Frances discovered.

When it does flip over, like so many modern dinghies, the RS800 has a tendency to invert. Fortunately deep water meant there were no worries about sticking that expensive carbon mast into the bottom. The 800 also overcame the problem of clambering onto a high daggerboard when the boat is on its side – always made more difficult by your trapeze hook getting in the way. Despite being on the light side at 132kgs, and having an oversized rig, the girls pulled the RS800 back upright with relative ease. Even better the RS800 appeared nice and stable as they clambered back on board, and of course the cockpit is totally dry.

The verdict

Gemma McIntyre loved the new cockpit layout, because it makes the RS800 easier to sail like a skiff with no temptation to sit down! Unlike smaller ▶

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PHOTOS: JEREMY EVANS

skiffs, the hull is wide and long enough for two crew to trapeze comfortably without running out of space, particularly at the back of the boat. It also copes well with weight distribution – not too sensitive, just right to sail fast and keep control!

Even the 'small' mainsail on the standard RS800 needs depowering upwind, and Gemma was pleased to have control lines led to the middle of each rack. Either crew can tweak the rig from the wire, with continuous line systems ensuring there is always something to pull.

You can't have everything in this world. Minus points for the RS800 will probably revolve around the fact that it's going to be sticky in light winds. Force 3-4 should provide optimum conditions, with form stability and a reasonably easily-handled rig allowing a good crew to revel in racing the RS800 in a bigger blow. After all, the north end of Lake Garda is renowned for its afternoon Force 4-5! ■

Above The latest version of the standard 800 has a new, simplified deck layout without kick bars – encouraging sailors to stand rather than perch.

Thanks to Hayling Island SC for providing facilities for this test.
www.hisc.co.uk

RS800 specifications

DESIGN:	Phil Morrison in 1999
LENGTH:	4.8m
BEAM:	1.88-2.09m
HULL WEIGHT:	62kg
IDEAL CREW WEIGHT:	127-160kg
SAIL AREA:	UPWIND 16.5sq m
	ASYMMETRIC 27sq m
LATEST PN:	882
PRICE:	£9,850

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COMPARISONS... Where does the RS800 fit in? Here are some alternatives...



■ **29erXX**
Julian Bethwaite's souped-up 29er with twin trapezes and a much bigger rig.

LOA:	4.45m
BEAM:	1.88-2.89m
HULL WEIGHT:	70kg
IDEAL CREW WEIGHT:	120kg
SAIL AREA:	Upwind 15sq m
	Spinnaker 19sq m
LATEST PN:	830***
GUIDE PRICE:	£7,539*



■ **49er**
To keep well ahead of the pack, Julian Bethwaite's Olympic skiff is due to get an even more powerful rig for 2009.

LOA:	4.99m
BEAM:	2.9m
HULL WEIGHT:	94kg
CREW WEIGHT:	146-160kg
SAIL AREA:	Upwind 21.2sq m
	Spinnaker 38sq m
LATEST PN:	747
GUIDE PRICE:	£14,070*



■ **B14**
Julian Bethwaite's B14 claims to be 'the fastest body-swung dinghy in the world'. Extra wide racks take over from trapezes.

LOA:	4.5m
BEAM:	3.05m
HULL WEIGHT:	62kg
CREW WEIGHT:	130-165kg
SAIL AREA:	Upwind 17.2sq m
	Spinnaker 29.2sq m
LATEST PN:	880
GUIDE PRICE:	£8,795**

ANSWER BACK

from Martin Wadhams

Many thanks for the test on the RS800 which, as you point out, is an extremely strong class. Real high performance skiff sailing is something that many dinghy sailors dream about and the RS800 makes it possible. The new deck has been very well received by existing 800 sailors at both ends of the fleet, but you don't have to start with a new boat. Used boats are also selling fast and you should be able to join the class with a boat costing from £4,000 to £8,000.

Large RS800 fleets give close racing at all levels with a particularly high standard at the top end. The performance equalisation system removes the weight and leverage imbalances that otherwise become apparent as skiff classes develop, and this has also been crucial in helping men and women teams become popular and successful in the 800. The high number of mixed teams has also contributed to the great social scene for which the RS800 class is renowned!

The 800 has perhaps the most 'balanced' performance profile across the wind range of all the skiff classes – pretty good in light winds yet still controllable in a Garda blow. And speaking of events, the Gul and Fat Face-sponsored RS Racing Circuit this year includes the big Anniversary Regatta at Hayling and the Eurocup returns to 800 top spot – Lake Garda in July. The association organises regular training sessions, de-briefs from the top sailors, parties and looks forward to welcoming the increasing number of new class members.