

Nice idea (but a sailing brick still won't cut it)

VPP-based rule systems would have you believe that you can bring along any boat of any type and the system will measure it, run the data through the VPP and that using the most sophisticated scoring systems you will enjoy a competitive rating in all conditions...

Not quite. In the real world there will always be features to a boat the VPP does not see and therefore does not rate. And sometimes there are things the VPP is not treating very kindly. Over time the fixes get better but even the most extreme devotee of rating 'science' knows there will always be room for improvement. Meanwhile, clever designers make a living knowing where the edge is between rating fiction and performance reality with clients willing to put their hard earned cash into that process known as 'rating optimisation'.

As championships get more and more competitive, with races won and lost by seconds in corrected time, the market for this process becomes keener. And before crying foul and pointing fingers at the rating systems, consider this: in the old days the solutions presented were much more expensive, namely new boats. Things are more stable now and existing boats can enjoy an extended competitive life with steady updating (and, by the way, good sailing!).

13th in the final race, a score they could not discard due to the event not achieving the minimum five inshore races before a discard came into play.

A look at these designs is interesting: *Sugar*'s DSPL/L ratio is 6.29, versus *Hebe*'s 'lighter' 6.04. Both boats have lots of internal ballast – 514kg for *Hebe* and 200kg in *Sugar* – but *Sugar* is longer, heavier and deeper with a slightly lower stability index, and with 10% more upwind and 20% more offwind sail area. In rating *Sugar* owed *Hebe* some 26pt/hour in medium conditions which meant that as long as she kept in touch *Hebe* would prevail in corrected time... and she did, with an impressive 2-1-2-2-1 scoreline before disaster struck in the last race.

In Class B among the top boats the Swan 42s were prominent, arriving in Croatia fully loaded to win, with pro crews, new sails and, most importantly, years of competitive one-design experience.

All of these boats had been optimised out of class trim, including some teams stripping out the interiors in the ends of the boat. The certificates for the podium finishers reveal sail areas to be within 1m or so, but with glaring differences in displacement – class runner-up Andrea Rossi's *Mela* had added 300kg of internal ballast for the series. This suppressed the rating slightly, and the team earned impressive inshore scores of 1-1-1-1-2, but could not shake off a non-discardable 11th in the first distance race.

It's interesting to add that, unlike Class B fleets in northern Europe (and maybe next year in the US too), no Corinthian team made the top 10 overall.

As usual in Class A the TP52s at the top of the class don't need much help getting away from the mob quickly and easily. Helping them further, Class A was the smallest division with 14 boats this year.

Cossutti was consulted by Roberto Monti's Air is Blue team on how to bring an older 2008-era Judel-Vrolijk TP52 into modern trim with a major round of structural upgrades and keel mods, plus new fibre rigging and a much modified sail plan. *Blue* is deeper by 10cm than the eventual winner Marco Serafini's TP52 *Xio*, a 2011 Botin design that is just that much closer to the current boats. Here too both carried internal ballast – *Blue* 213kg and *Xio* 135kg – and about the same jib and kite areas, with *Xio* having a larger mainsail at a cost of about 20pt in rating.

Meanwhile, Valentin Zavadnikov's Melges 40 *Synergy* was a novel entry in Class A, a boat you would never expect at an ORC championship. But this team were keen to test themselves and have some fun with their light, powerful one-design, particularly on the offshore races. Polli was asked about rating optimisation, but without the time to do a serious makeover his only input was to increase the area of the single daggerboard to give the boat better upwind traction in this upwind-oriented fleet.

Besides Polli's Italia 11.98 *Sugar* in Class C, there was another interesting new design at Šibenik: Mauro Enrico's new Ceccarelli-designed Neo 350 *Neomania*. This wide, flat, low-freeboard design looks sexy, is relatively light and has tons of sail area. Like *Mela* in Class B, their 15th in the first race more or less sealed their fate – but fifth overall in the end ain't bad for a debut effort in the most competitive class at the worlds, counting two thirds and a second in the light air of the final three buoy races. For a light-air series this boat could be dangerous.

Finally, we should appreciate the ORC Worlds as an economic force affecting the industry beyond just Šibenik: in all, Cossutti had seven of his designs at the worlds, with consulting jobs on all plus 16 other boats for new keels, plus ballasting and sail mods including new bowsprits. This plus the projects of Matteo Polli, and no doubt a few others. Not bad work when added to the execution necessary by boatyards, project managers, sailmakers and riggers as well.

Dobbs Davis



MAX RANCHI

Knife to a gunfight... but still a very cool knife. The crew of Valentin Zavadnikov's lightweight Melges 40 *Synergy* had a lot more fun than most when the wind did blow at this year's ORC Worlds in Šibenik. Eighth overall in the 13-strong Class A fleet, this definitely-not-a-conventional-ORC design was, however, only 6pt off 5th having had virtually no optimisation before the regatta aside from increasing the daggerboard area slightly to keep her crew sane amid a fleet of upwind pointers

It's not surprising the two designers most adept at this process in the ORC culture are based in Italy, where the highest percentage of ORC certificates are issued. It's here there is a good series of healthy and competitive regattas, depth of resources and the strongest incentive to win of any ORC fleet anywhere.

Both Matteo Polli and Maurizio Cossutti are expert in knowing what to tweak, and at the 2019 worlds in Šibenik their work was prominently on show. Polli's new Italia 11.98 design *Sugar 3* stole the show in Class C, winning gold with good sailing coupled with Polli pushing this design as close as physically possible to the class upper rating limit. With 50 boats on the starts, and four of six races being windward/leewards, it definitely got you out of the crowds.

'This is really important,' said Polli, racing on *Sugar*. 'You then get clear air and can just sail your own race while the others are fighting. But it comes at a risk – if you get a bad start then you're dead because it's really hard to fight back out to where you can get ahead of your higher rating.'

This happened to *Sugar* in their worst race (seventh). It also knocked back their closest rival *Heme V*, a Czech-based Cossutti-designed M37 that may have won had it not been for a disastrous