

## Life is compromise

In a matter of days the first combined ORC/IRC Offshore World Championship will begin in The Hague. This event will see a big change in how the results are obtained since the ORC handicap system will be coupled with the IRC system. In fact, for the first time ever the scoring will be calculated using both systems and then the sum of the points will give the final ranking in each race.

In another departure from previous ORC championship regattas the simpler triple-number ORC time-on-time scoring option will also be employed to reflect the strong tidal conditions expected. IRC scoring will as usual employ that system's single-number TCC – again time-on-time as used at every IRC event around the world.

Past ORC championship events have been scored using the more complex Performance Curve Scoring system, but that of course is based on distance not time and assumes zero current across the racecourse. The time-on-time option will be more consistent in this case since by taking into consideration elapsed time it will reflect the tidal conditions of the North Sea. This will mark a big change for veterans of the ORC system as for most it will be a first experience of time-on-time scoring... it will also be a change for IRC veterans who will have their first exposure to (three) multiple rating options.

Overall this should offer both fair results and a promising learning opportunity with inevitable averaging of the pros and cons of both systems. It's hard to predict the final outcome but surely it will be to be identified and comparatively few individual measurements.

In recent years both systems have been improved massively and, despite the fundamental concept behind each being quite different, the actual level of accuracy should deliver close racing between some quite different boats. Moreover, since fleets at major ORC events have been divided into three groups using the CDL calculation (Class Division Length – a measure of actual upwind speed) the battle on the water has become much closer.

For The Hague there are currently about 15 entries in Class A, 35 in Class B and 60 boats in Class C. Despite the total number of entries being similar to the 2017 ORC Worlds in Trieste, the Mediterranean/Adriatic fleet is often more evenly spread over the three classes compared to the fleets in the North Sea and Baltic who make up the bulk of this year's entries (on a down-note, far fewer pure IRC designs have entered than hoped – it would have been very interesting to mix different design approaches on the same courses).

In Class A, despite the small number of entries, there is still a good variety of racing machines – though few if any were specifically designed for ORC. Similarly, it is only the pair of Ker 46s that are proper IRC-oriented boats. Along with a couple of cruiser-racers there are also an old and a new TP52 and a Fast40+ in the 'A' pack and no doubt these will be among the better-sailed boats with more professional crew.



To leeward approaching the top mark at Alassio Week is the Italia 9.98 *Low Noise*, designed by the author and one of the most successful ORC designs of the last few years, winning Class C at the ORC Worlds in both 2015 and 2016. In a super light air regatta *Low Noise* was only finally relieved of her title in 2017 by a Melges 32 specially modified by Cossutti which neatly out-drifted the competition. As well as fast boats, Polli have acquired a reputation as the ORC fleet's equivalent to Reichel/Pugh... speedy boats that are equally easy on the eye

interesting to compare directly what can be considered the two best rating systems on the market?

However, for the event managers this will not be an easy event to pull off smoothly, especially in the absence of a common measurement protocol. Displacement may be one contentious area of 'debate' between contestants... IRC measures displacement simply by hanging each boat on a load cell while ORC deduces displacement mathematically, using freeboard measurements combined with hull offset files provided either by the yacht's designer or through the comprehensive ORC hull measurement process. There will for sure be some differences between the two figures, one calculated and the other measured, and discussion may at times be lively; but for all of us this is a valuable learning opportunity and we should not lose sight of that. Please remember the bigger picture.

As well as hull shape and stability (which ORC still measures through inclining) ORC also takes into account more measured data for the boat, rig and appendages. By contrast IRC primarily requires characteristics (how many spreader sets, for example) a Farr 40 I recently worked on has been optimised specifically for this regatta.

Class C is the most crowded and with the most recent designs. The new oneoff 37-footer *Eesti Meedia* from Maurizio Cossutti, the Waarschip 36 *Hubo* (issue 450) and the Judel-Vrolijk 36 *Nightshift* are purpose-designed for ORC racing and will surely be strong contenders. The four Italia 9.98 Fuoriseries of my own design

Class B, conversely, contains a large number of cruiser-racers and only a few pure racing designs, with several X-41s (Niels Jeppesen) and Landmark 43s (Mark Mills) which will surely cover the upper end of the scoreboard. The X-41 was a competitive one-design class for many years so some of these teams are very good; the Landmarks are at the top of the rating band and should usually have the benefit of clear air off the line. I have worked on some of the X-41s over the past few years to optimise the ORC ratings but without consideration of the new IRC component... this event will be interesting for me too! However,

will all be in this division but without major modification. However, these boats already have a strong track record when well-sailed.

From a designer perspective, designing to a 'mixed' rating system is far more challenging than under one single rule – a difficult task in itself. Some characteristics are rated in almost opposite ways by the two rules but fortunately the majority of differences come down to how much each system weights each measured element.

So the approach that I have used in my own optimisation work for this event has focused on non-rated features that help to maximise physical performance through the water. Of course I also had to find a balance in terms of rated characteristics to keep a good rating vs performance ratio under both systems, but my work has definitely been a case of boatspeed first.

Hopefully with averaging out across two rating systems the results in The Hague will be down more than ever to sailing skill. But whatever happens we will be much wiser once the prizes have been handed out.

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