

## Crunch time

ORC enters 2016 in good shape with net growth in live certificates looking like 6-7% year on year and over 100 certificates now issued to the ORC Superyacht rule, which was being continually refined through 2015 and will make its 'official' debut in April in Antigua.

The process of responding to constituents about their requests for improvements to the rule system has also been working well, and at the 2015 AGM many requests were analysed and approved by the International Technical Committee (ITC), and in turn by the Congress. This feedback loop is vital, as it results in not only a more accurate VPP, but a more user-friendly system.

More good news is that the changes to the VPP for 2016 have been minor, including small tweaks to the aero model in downwind sail coefficients and upwind jib depowering. The end result across the test fleet of 2,000 ORCi certificates has been a very slight speeding-up of the fleet in general, but with 95% of the boats having their General Purpose Handicap (GPH) change by less than 0.5%.

There are therefore no clear winners or losers in boat types, just a refinement to make the racing closer than before. The general philosophy to 'not fix what is not broken' seems to be working.

complement to their own VPP work. The ORCi database and VPP enable designers to compare multiple candidates efficiently as well as against the competition. I must underline the 2016 VPP is in a very different place compared to the IMS days – which is good news for everyone involved.'

The issue of rule stability as a driver of development also resonated in the discussions in Geneva, and Ker and Carkeek both emphasised that this is vitally important. 'It's now more than three years since the last big ORCi handicap changes,' said Carkeek.

'Some of us may remember the IMS days when every year there was a significant re-shuffling of the feet. The number and scope of annual rating changes have been significantly reduced and the changes are more consistent, giving owners confidence to purchase or build an ORC yacht with competitive longevity.'

But the bottom line is: will this stability generate new orders? Aside from some nice designs from Maurizio Cossutti, for Baltic-based clients, and some recent production designs from Matteo Polli, it has to be said that the ORC system has inspired very little new design work. However, Carkeek and Ker both disagree, with

Carkeek saying, 'We should start to see a lot more new ORCi boats being built as people find renewed confidence in the rule being able to support modern stable, fast and fun boats. This healthy development, combined with the latest technology, bodes well for some exciting new builds.'

Indeed, one of Carkeek's own new designs is getting interest, which is perhaps a glimpse of some positive progress. 'The latest VPP changes only came into effect recently, but already we're seeing raceboat enquiries and our new ORCi 450 was created to address this interest.'

'The brief for the 450 is an optimised inshore/offshore racer with the ability to also compete under IRC. The boat is similar in many ways to the successful C40s, C47 and C54 we've raced predominantly under IRC and HPR – however, we've also won some races under ORCi. The success of these designs prompted new orders and there's no reason we can't now do the same under ORCi.'

But can these boats find traction in a market where production designs have always dominated? Carkeek thinks so, and cites the new 450 as an example of a new generation of series-built speedster. 'We work hard on our production engineering to help lower cost and increase accuracy and consistency, but always without compromising overall performance.'

'This boat's structure does include pre-preg carbon and Nomex, but a hybrid style of construction is employed that also includes infused laminates. We're always looking at ways to improve our product and there are many exciting new materials and application processes that will soon become the norm on raceboat builds.'

With current class splits, a boat like this may indeed be a competitive new Class A entry in ORC championship competitions, such as the 2016 worlds in Copenhagen and 2016 Europeans in Porto Carras in Greece. With luck, we will find out in a few months. *Doobs Davis* □



**It is of more than the usual degree of importance that Shaun Carkeek should find the third customer that he needs before pressing the button to build what will be the first ever purpose-designed ORCi racer – the new ORCi 450. The ORC rule has yet to be tested by a fully optimised ORC raceboat; to date the winners under the rule have been the TP52s, dominant at the larger size and professionally campaigned optimised cruiser-racers in the small boat classes. This will be interesting... hopefully**

More recently at the Yacht Racing Forum in Geneva there was also an upbeat mood about the way the rule system is finding a balance between giving existing boat types a chance while starting to encourage new designs. Presenters at the forum included ITC members Jason Ker and Shaun Carkeek (who did admit to a vested interest in wanting the ORC rule system to succeed, appearing as it does to suit his preferred lighter-displacement design style.)

On the technical level, both Carkeek and Ker thought the VPP was now achieving good accuracy. 'The latest VPP predicts well, especially in the sensitive areas; certainly we're seeing closer competition between different yacht types,' said Carkeek, adding that, 'some changes introduced last year involved new residuary resistance models based on a CFD base boat with multipliers... and it worked' (a process Jason Ker was closely involved in).

When asked about working with a VPP-based system, Carkeek said, 'Most designers view working with a VPP rule as a natural