

## Bedtime reading for the superyacht sailor

The 2016 edition of the ORC's Superyacht Designer VPP (DVP) and Superyacht Sailor Services is now online. Just as the ORC VPP is the heart of the ORC rating system, the ORC Superyacht VPP forms the core of the ORC Superyacht Rule (ORCsy). The software is also accompanied by the ORC manager program that includes an editor utility program for entering and editing measurement data as well as an offset editor for editing hull offset files; these hull files must be provided by the user, since only rating officers have access to designer offset files in the rating system (which are protected by copyright).

Input data in DXT and OFF file formats can then be used to produce the hydrostatic data and polar diagrams to predict boatspeed between 6 and 20kt true wind speed at a range of true wind angles.

The ORCsy designer version uses the same software as is used to issue Superyacht certificates, the only limitation being the ability to print actual certificates. However, the results data includes all the ratings and time allowances shown on a certificate, together with a complete set of calculated hydro and aerodynamic data.

Like the ORC DVP, the ORCsy DVP is also Windows-based with a user-friendly interface and standard Windows functions. There has also been early discussion of a Mac version for us MacKids...

Any designer may process design data through the VPP to analyse rating effects, and the software is therefore essential to anyone contemplating an ORCsy design project. However, a subscription will not give access to existing hull data without the written permission of the relevant designer, though rig measurements can be obtained through ORCsy Sailor Services. This web-based portal for Superyacht data is analogous to the regular ORC Sailor Services system with circa 87,000 measurement files now online.

This data access allows users to not only check their own certificate data, but also to run test certificates online to check the effects of measurement changes.

The access to the Superyacht data, however, is a bit more restricted, and is limited to registered users in the system already approved by the ORC. An annual subscription to the ORCsy DVP costs €1,000 while

the price of the new VPP for current ORCsy DVP subscribers is €700. New features of the 2016 version of ORCsy include:

- 1. new wind ranges for allowances including 6kt TWS
- 2. new sailing displacement computation for 'fully measured vachts'
- 3. new treatment of headsails including non-luffed sails
- 4. better evaluation of non-spinnaker handicaps
- 5. more accurate evaluation of long sprits for spinnakers
- 6. revised added resistance in waves for 'rough' allowances
- 7. fine-tuning of the tacking allowance (based on SA/DSPL ratio)
- 8. new treatment of multiple headsails when set together
- 9. new formulation for (powered) winch speeds
- 10. evaluation of resistance of centre/daggerboard(s) when not raised downwind
- 11. fine-tuning of aero model of old-style gaff schooners
- 12. fine-tuning of ketch aero model
- 13. better evaluation of rigging windage
- 14. a more correct evaluation of propeller projected area for both exposed and strut drives

'The 2016 ORCsy was tested in the recent Superyacht Antigua Challenge,' said ORCsy manager Paolo Massarini, 'and the racing was quite close; so we're very happy with this edition of the rule. However, we are always observing and working to keep improving the package.'

Yacht captains, owners and team managers are registered automatically to the ORCsy portal when they submit an ORCsy application. Designers, sailmakers and other team members may request permission to obtain registration credentials by writing to orcsy@orc.org.

The benefits of ORCsy registration include:

- Get scale drawings of the rigs and sailplans of various boats
- Get copies of any valid ORCsy certificate in the fleet
- Research the effects of changes using test certificates

Test certificates in the ORCsy system are only €50, and there are no restrictions on the number of tests that are permitted.

Dobbs Davis



With a displacement of five tonnes the Neo 400 ORC design from Giovanni Ceccarelli is no Fast40, but it's still got plenty of get up and go for a dual-purpose yacht with a full – if extremely light – interior. The Neo 400 is a semi-production design with plenty of carbon pre-preg in all the areas that matter. At 40 foot the ORC (Neo 400, X-Yacht etc) vs IRC (Ker40+ etc) crossover remains... intriguing!

AX BANCH