

Milan, 20<sup>th</sup> September 2017

This message is addressed to the following parties

Owners

Yacht Captains

Team and Program Managers

Yacht Designers

Sailmakers

Navigators, helmsmen and tacticians

Super Yacht Racing Association board

and all parties present in the ORCsy database.

Please be so kind to forward it to any party you believe important in this field.

Dear ORCsy users

After 9 successful events in 2017 (SuperYacht Challenge Antigua, Swan Cup and Loro Piana Caribbean Regatta in Virgin Gorda, St Barth Bucket Regatta in St. Barth, Loro Piana SY Regatta in Porto Cervo, SY America's Cup in Bermuda, SY Cup in Palma, Candy Store Cup in Newport and Maxi Yacht Rolex Cup in Porto Cervo) the ORC would like to update you on the situation of our handicap system.

As "leader in rating technologies", the ORC first of all is glad to provide a way to enjoy racing together with other different yachts so important and unique as yours.

ORC is financing a continuous research as well as a constant presence of its technical Super Yacht team at all events and is aiming to continue to develop and update such a delicate and exclusive rating system.

The ORC Super Yacht rule is less than 3 years old and after the first 2 encouraging seasons in 2015 and 2016 the ORCSY team is still working hard and focused to improve the level of accuracy of ORCsy VPP, the "Velocity Prediction Program" that forms the core of the ORC Super Yacht rating system.

Trying to summarize (recap) the key features, the principal characteristics introduced in the 2017 new ORCsy VPP are the following:

- *The leeway calculation for shallow boats has been revised to better assess their higher induced drag.*
- *A better evaluation of separation drag for deep keel boats has been introduced*
- *Following the ITC suggestions implemented in the 2017 ORC INT VPP, the added resistance in waves has been revised with a reduction of energy curve in light winds*
- *A fine tuning of added resistance for slots in Centerboards*
- *Evaluation of reduction of L due different bending of hulls according to construction material*
- *High Froude Number Residuary Resistance revision*
- *The revision of the heel angle at which sail forces are computed (the so called PHIUP function) will reduce the maximum heel angle at which the VPP runs*
- *Headsail set flying (Code 0) treatment revision with a different depowering routine that prevents the VPP to use this kind of headsail in strong wind conditions. In addition, one headsail set flying won't be accounted as an additional headsail on board*
- *Evaluation of missing endplate effect for Headsails Tacked on Sprit*
- *More accurate windage assessment of gaff sailplans with a lot of rig*
- *Introduction of a VPP run for very small working inner jibs.*
- *Revision of the Tacking allowance, including D/L term and long skeg in rudders*

- *Revision of gyradius adjustment for MCA-approved boats assessing a more wide weight distribution with increased added resistance in waves*
- *Introduction of measured PIPA (Propeller Installation Projected Area) to improve the evaluation of added resistance of propeller installation*
- *Reduction of 50% of the Sy factor (allowance for very high VCG boats)*
- *Revision of light wind allowance composition (decreasing the weight of 6 kts allowance)*
- *Introduction of measured mast section windage*
- *Evaluation of a more detailed sails weight that will avoid to declare the weight for each sail on board*

The above features are all included in the current used VPP (2017).

In addition the ORC SY dedicated team further developed all typical tools and services part of the ORC SY system:

1. *A Web based Sailor Services to allow skippers, captains and owners to make test certificates for their boats and access all certificates of other boats.*
2. *The new 2017 ORCSy rule book.*
3. *The ORCSy VPP Documentation*
4. *The measurement guidance explaining how to fully measure a boat.*
5. *Web based explanation on the printout of the certificate.*
6. *Class break worksheets for Race Organizers.*
7. *Post processing of all measured and declared boat applications.*

During the 2017 season the VPP was slightly adjusted for some small bugs requiring an urgent fix. Nevertheless, the ORC Team would like to keep the rule stable during a season and concentrate any development works on the following 2018 release only.

In fact the ORC SY team is already evolving and testing the 2018 ORCSY VPP together with Jim Taylor technical assistant of SYRA.

The following new features are under analysis and test to be possibly implemented in 2018:

1. *Light boats (high LVR) residuary resistance fine tuning*
2. *Dynamic and Tacking allowances revision*
3. *PHIUP factor revision*
4. *Refinement of propeller installation area (PIPA) for 3 and 4 blades propellers, including the default calculation*
5. *Better assessment of boats without spinnaker but with only headsails set flying*
6. *Improvement of resistance calculation for vertical centerboards*
7. *Dynarig assessment improvement (MALTESE sailplan)*
8. *Allowances ranges revision*
9. *Penalty for boats not fully measured*
10. *Revision of allowance for the sail inventory*
11. *Ketches/Schooner aero fine tuning*
12. *Furling vs non furling jibs aero assessment*
13. *Mizzen Staysail effect revision*
14. *Owner's driver allowance*
15. *Cruising interiors definitions*
16. *Corinthian VPP development*
17. *Re-wording of the ORCSY rule*

We hope that this short update of the ORCSY VPP status will help in understanding the huge amount of research, development, testing and work behind our system.

We also hope that this update will enhance the transparency of our system that ORC is so proud of.

Looking forward to continue to serve you in the best possible way, we send you our best regards

ORC SY team