



## Summary of the changes to the ORC Rules and Regulations as approved at the ORC Annual General Meeting held in Puerto Vallarta, Mexico on 8 November 2017

### VPP – Velocity Prediction Program

- **Hydrodynamics**
  - Induced drag formulation updated
  - Transverse movement of the crew was slightly corrected
- **Aerodynamics**
  - Effective height of sail plan increased by 20%
  - Aero coefficient Cd0 (windage of hull and crew) increased by 20%
  - PHIUP coefficient halved
  - Power Function updated

### IMS – International Measurement System

- **Rules B2.2(a)** is modified by introducing more dense station spacing (2.5% of LOA) in aft 15% of LOA in addition to already existing in forward 15% of LOA.
- **Rules B4.1(e), B4.2(l)** and **B4.4(c)** are modified to clarify position of the outboard engine in the measurement trim. If outboard engine is carried on board while racing, it shall be properly secured on its bracket, or stowed on board, with its center of gravity abaft the mast. Its weight and position shall be recorded in the measurement inventory.
- **Rule B7.1** is modified to clarify use of carbon fiber in structural elements.
- **Rules E2.8** is modified to clarify that PD limits for the boom inclining shall be divided by 2 when using formulas in E2.8(a), (b) or (c) that are primarily written for inclining with poles.
- **Rule F10.2** is put in line with the ERS and other IMS rules.

### ORC Rating Systems

- **Rule 101.2** is modified by revising construction material limits to be in line with current boat building technology. Maximum carbon fiber modulus is increased to 320 GPa and maximum temperature applied in the manufacture of hull and deck shell structure is increased to 90°. This new rule is valid for hull shell and deck shell (no restriction on secondary structural elements such as stiffeners that support the hull shell and deck shell).
- Ballast Leeward Recovery (BLR) Index for a boat with water ballast or canting keel is re-introduced in **Rule 106.2**. It represents such a boat's relative ability to recover from a knock down with sails aback, i.e., knocked down with all water ballast or canting keel positioned to leeward. BLR Index is

only calculated by the ORC VPP while its application to limit the entries based on the category of the race is prescribed by the WS Offshore Special Regulation or the Notice of Race.

- Minimum Crew Weight (CW) is introduced in new **Rule 102.3** and modified **Rule 200** to be calculated as: Minimum CW = Maximum CW – (the greater of: 25% of Maximum CW or 85 kg). Minimum CW shall apply only when specified by the Notice of Race and Sailing Instructions.
- Modification of RRS 49.2 in new **Rule 200.2** removes ambiguity in the definition of “sitting” and “the deck” in RRS 49.2 while lifelines must still comply with the Offshore Special Regulations that they shall be taut.
- **Rule 207** is modified to clarify that the mainsail shall be reefed from its bottom part but it also may be reefed with the furling system in the mast.
- **Rules 305.1(a), 305.1(b)** and **305.2(b)** are modified to follow the introduction of a Technical Committee referred to in the Racing Rules of Sailing.
- **Rule 305.2(c)** is modified to clarify application of a scoring penalty when a boat is found in non-compliance with her certificate within range of 0.1 – 0.25% of GPH. The new wording is following more closely the RRS wording on scoring penalties.
- New **Rule 401.3** specifies that the length of the course when used in corrected time calculations shall be recorded to a minimum precision of 0.01 NM.
- Explanations with formulations of how simple scoring options are calculated are added to **Rules 403.2, 403.3** and **403.4**.

## Green Book

- ORC event management website and ORC Scoring software are recommended for use in 2018 with a plan to have it mandatory starting in 2019.
- A requirement for use of a tracking system is introduced in the ORC Championship Rules. For 2019 the TracTrac system is recommended, with a plan to have it mandatory starting in 2020.
- New CDL limits for Class definition in ORC Championships based on the 2018 VPP are as follows:
  - Class A: 16.5 >= CDL > 11.6
  - Class B: 11.6 >= CDL > 9.8
  - Class C: 9.8 >= CDL > 8.6
- Application of minimum crew weight in ORC Championships is added to the Standard Notice of Race and Standard Sailing Instructions
- Other parts of the Standard Notice of Race and Standard Sailing Instructions and ORC Championship Checklist are updated as part of regular housekeeping based on experience from events held in 2017.

## ORC International and ORC Club Certificates

- Minimum Crew Weight is added to the Crew Weight box.
- “Ocean for PCS” pre-selected course is renamed to “Coastal / Long Distance”.
- HHW measurement is added on the boat drawing.