

Summary of the changes to the ORC Rules and Regulations as approved at the **ORC Annual General Meeting** held in Busan, Korea on 10 November 2009

VPP – Velocity Prediction Program

- Hydrodynamics A new treatment of overhangs and truncated sterns was introduced.
- *Aerodynamics* The Aero model was improved by using FLAT and REEF parameters in sequence and decoupled, thus making the depowering more related to the way boats are sailed by reducing the sailsøcamber (flattening) and then reducing their area (reefing).
- *Mainsail area* A new internal VPP formula was introduced for calculating mainsail area which better treats square-top mainsails and gives the VPP a more accurate actual sail area.
- *Better SPL/TPS treatment* A new blanketing function will take into account the greater sail area exposed to the apparent wind (less covered by the mainsail) that occurs with a longer pole (SPL) or bowsprit (TPS).
- Dynamic Allowance is further improved with a new UPSA/VOL credit taking into account sail area as MAIN+FORETRIANGLE.
- New default MWT and MCG for carbon masts are defined with $E_{carbon} = 130$ GPa and Default Fiber Rigging weight = 20% of Default rig weight.
- *New penalty for use of non-manual power* to all racing boats is introduced as maximum of 0.5% which can be reduced with the ratio Declared CW / Default CW squared.
- **Double rudder** is now defined from the inputs of manual rudder (rudder distance from bow, span, top and bottom chords and thicknesses), adding only two new inputs: y offset (distance from CL of rudder stocks) and angle of rudder stocks.

IMS – International Measurement System

- *Part H Heavy Items* is deleted, while anchor weight and position as well as jib furler rules are moved to appropriate parts.
- New rules B5.5 and B5.6 defines how anchor weight and longitudinal distance shall be recorded.
- *Propeller Installation* definitions are simplified in *Rule D3.3* and defined as one of three types: Shaft (which includes former õOut of apertureö and õHoused shaftö), Strut drive and In aperture.
- Rule F9.8 changes treatment of carbon masts and fiber rigging. It is no longer mandatory to measure mast weight and VCG for carbon masts as new defaults are introduced in the VPP. Fiber rigging is also recorded and now takes into account by the VPP.
- **Rule G1.4** is amended to better address measurement of square-top mainsails.
- New Rule G1.5 defines oDacrono sails for which credit is given in ORC Club as owoven polyester.



- *Rule G4.4* is changed to allow 5 battens on jibs for boats with LOA > 14.0 m.
- *New Rule 4.6* includes a genoa furler definition for credit that is now extended both to ORC International and ORC Club.
- Accommodation Regulations are completely re-written and renamed to Cruiser/Racer Regulations which now define requirements for a Cruiser/Racer division, while all other boats are now categorized in Performance division (which includes formerly Racing and None divisions). Cruiser/Racer Regulations are now simplified, made easier for use and understanding.

ORC Rating Systems

- Rule 102 is re-worded to provide a more clear definition without changing the substance of the rule.
- Maximum credit for Age Allowance is changed to 15 years (0.975%) from 20 years (1.3%) in Rule 103.1.
- *New rule 103.3* defines the penalty for use of non-manual power for adjusting stays, running rigging or spars.
- *Rule 109.1* is modified with a new formula for the mainsail rated area used internally in the VPP. The measured mainsail area is calculated with the simplified trapeze formula above which divides the luff in amounts of 1/4, 1/2, 3/4 and 7/8. Therefore rated area is adjusted by using actual heights on the luff from tack point to points where mainsail girths are measured. As a result, the amount of roach will proportionally increase the rated area from the measured one.
- *New rule 111.3* describes credits in the VPP for use of a jib furler with sails made of Dacron.
- Rule 113.4(c) changes the treatment of spinnaker rated area when there is no spinnaker aboard. In such cases the boat is rated with an asymmetric spinnaker tacked on centerline with the same areas as the largest headsail.
- Rule 114.5 changes the way a Code 0 is treated if it is the only type of spinnaker in the sail inventory.
- *New Rule 200* is partially moved from Rule 102 defining crew weight requirement as one of the rules applying while racing, clearly separating it from measurement or certificate requirements.
- Reference to Heavy Items IMS Part H is deleted in Rule 201.1.
- Rule 204 is changed to allow use of non-manual power for adjusting stays, running rigging or spars on all boats with LOA > 20 m or Cruiser/Racer boats with LOA Ö20 m.
- *New Rule 206.4* clarifies use of different sail configurations and allows double jibs to be used when no spinnaker is used. Old Rules 207.4 and 207.5 are deleted.
- *Rule 301.1* is changed to allow use of designer hull files for ORC International certificates with defined procedure and validation requirements.
- Reference to IMS Accommodation Regulations is deleted in *Rule 304.1(d)*.



• *New rule 306* allows National Authorities to change rules of Part 3 by their national prescription for national events under its jurisdiction.

ORC International and Club Certificates

- Fiber Rigging as notification õYESö or õNOö is added.
- Heavy Items box is removed
- PLT and PLD for Non-Spinnaker special scoring is added.
- NMP (Non-Manual Power) penalty is added, if any.
- Boat drawing is updated with actual heights where mainsail girths are measured.

Green Book

- Standard Notice of Race and Standard Sailing Instructions are re-worded in some parts and updated with RRS and ISAF Regulations with no substantial changes to the previous texts. The only major change is in SI 10.4 which defines how scoring penalties are applied on an offshore race scored as two races.
- The lower LOA limit for the *Sportboat Class* is changed to 6.0 m.
- Minimum number of production boats in the *ORC 670* class is changed to 5.
- Carbon masts are now allowed in the *ORC 670* class.
- Maximum ballast weight in the ORC 670 class is limited to 6% DSPM.

GP Class Rules

 As IMS Accommodation Regulations are replaced by Cruiser/Racer Regulations, accommodation requirements for each of GP Classes are re-introduced as an Appendix to each of GP Class Rules.