

Summary of the changes to the ORC Rules and Regulations as approved at the **ORC Annual General Meeting** held in Dublin, Ireland on 06 November 2012

VPP - Velocity Prediction Program

Hydrodynamics

- New upright residuary resistance formulation
- New heeled drag (heeled residuary resistance considering the asymmetry of boat when heeled, appendage size, and leeway to compute induced drag)
- New IMS L calculation

Aerodynamics

- Update on Power function with linkage to apparent wind, so that the reference area is essentially similar to what would be ideal for the wind angle considered
- Improved Shape function with the reference sail area now depending on whether a pole or a bowsprit is used, due to the different space available in either case. Reference area now has a "head angle" relationship as well as being related to ISP and TPS in order to consider the effect of gravity making it harder to fly a lower aspect ratio sail
- Removal of the "Blanketing" term due to the improved Power and Shape functions
- New set of aero coefficients
- "Light ship" measurement trim adopted for the LPP and VPP calculations.
- *Fixed loophole on mainsail roach calculations* is now linked to the E measurement on the boom.
- Quad sails will be measured as a jib/genoa, with the tacking point at the intersection of the luff and leech.
- New default Crew weight formulations based on LSM0.
- Removal of Mainsail Weight and adoption of a new Default Mainsail Weight based on LSM0.
- *New non-manual power penalty* scheme.
- *Offshore Triple-number scoring coefficients* reverted to 2011 formulation.
- Reduced Age Allowance
- Default righting moment updated.



IMS - International Measurement System

- New *rules C3* and *C4* are defining measurement of twin rudders and bilgeboards. This option already existed in the IMS, but was not well documented.
- New "light ship" measurement trim is defined in amended *rule E2. Rule E2.2* defines what items shall be onboard in measurement trim, while *rule E2.3* defines what shall be specifically excluded. An easy explanation of the "light ship" measurement trim would be that if the boat is rotated upside down, everything that falls out shall not be on board. The new measurement trim shall apply for all boats measured after 01.01.2013. There is no need for re-measurement of boats measured before that date, as their "light ship" measurement trim will be calculated by the LPP by deducting all the weights recorded in the measurement inventory but not included in the new measurement trim definition. FF and FA measurements printed on certificate will then adjust FAM and FFM not just for the standard specific gravity, but also for any differences between pre-2013 and new measurement trims. Measurements checks can then be performed in "light ship" measurement trim with certificate compliance checked by a comparison of FF and FA.
- *Rules E3.1* and *E3.2* are amended by adding the possibilty to measure the freeboard to the flotation reference points when these can not be set at the sheerline.
- *Rule F9.11* is amended to better address the use of non-manual power, which shall now be recorded as one of the following:
 - a) "SHEETS" when non-manual power is used for adjusting the clew of a sail or a boom
 - b) "RIG" when non-manual power is used for adjusting the backstay, vang or outhaul
 - c) "YES" is when a) and b) above are used together
 - d) "NO" is when there is no non-manual power used
- New rule F11 sets up changes to the J, ISP and SPS measurements in the case when the jib/genoa is set flying in front of the forestay.
- MSW measurement is deleted, since it is not required anymore in *rule G2.1*.

ORC Rating Systems

- Amendment to the *rule 100.2* allows FA and FF to be adjusted not only for standard specific gracity but also for the differences in measurement trim before and after 01.01.2013.
- Default righting moment is updated in *rule 107.4*
- Age Allowance in *rule 103.1* is reduced by 50%.
- A penalty for use of non-manual power is modified in *rule 103.3* based on what non-manual power is actually used as recorded by the amended *IMS rule F9.12*.



- *Rule 109.3* is deleted since without a MSW measurement it is not needed anymore.
- Rule 204(b) is ammended in accordance with the new scheme of non-manual power penalties set up in IMS rule 9.12 and rule 103.3.
- Rule 205.2 is deleted as obsolete.
- *Rule 305.2* is amended to clarify that crew weight shall not be considered as an issue of compliance with the certificate.

Green Book

- Championship Rule 3.1 is amended by adding a requirement for an applicantion to host an ORC event to specify a best estimate of number of entries expected and the maximum number of yachts that can be accomodated. Furthermore, the application is required to answer the questions posed in the Championship checklist. These should include descriptions, photos or any other information showing the venue and facilities.
- The maximum number of yachts per country, including the host country, shall now be agreed between the ORC and the Organizing Authority as defined in the amended *Championship Rule 6.3*.
- The *Standard Notice of Race* and the *Standard Sailing Instructions* have updated the use of the Low Point scoring system by removing the use of 0.75 point for first place any ties in series points totals can now be solved in RRS A8.
- The expected number of boats and number of available moorings for entries are added to the *Championship Checklist*.

ORC International Certificate

• LCF is added in the Inclining test and Freeboards box.

ORC Club Certificate

• PIPA is added in the Propeller box.