



World Leader in Rating Technology

# OFFSHORE RACING CONGRESS



ORC Grand Prix 26  
*Class Rules 2013*

Copyright © 2013 Offshore Racing Congress.

All rights reserved. Reproduction in whole or in part is only with the permission of the Offshore Racing Congress.

Cover picture by courtesy Roger McMillan.

## ***Part 1 - ADMINISTRATION***

### **100 General**

It is the intention that the rules and specifications for the ORC Grand Prix Classes provide close racing without time allowance in grand prix competition and that the yachts designed to this rule be fast, sound and seaworthy, retaining thereby, with a minimum of modification, good value beyond their competitive life as grand prix racers.

### **101 Language**

101.1 The official language of the ORC GP Class Rules is English and in case of dispute over translations the English text shall prevail.

101.2 The word "shall" is mandatory and the word "may" is permissive.

### **102 Abbreviations and Definitions**

|      |                                  |
|------|----------------------------------|
| ERS  | Equipment Rules of Sailing       |
| GP   | Grand Prix                       |
| IMS  | International Measurement System |
| ISAF | International Sailing Federation |
| ORC  | Offshore Racing Congress         |
| RRS  | Racing Rules of Sailing          |

### **103 Authorities**

The sole authority for the GP 26 Class is the Offshore Racing Congress and it shall be maintained and administered at the ORC's discretion.

### **104 ISAF and ORC Rules**

104.1 IMS and ERS shall apply except when changed by these **class rules**.

104.2 Accommodation Regulations as defined in Appendix 1 shall apply.

104.3 Except where used in headings, when a term is printed in "**bold**" the definition in the ERS applies and when a term is printed in "*italics*" the definition in the RRS applies.

104.4 When printed in "***bold italics***" the term is used as measurement taken or recorded by the measurer.

104.5 ISAF Advertising Code shall apply.

104.6 ISAF Offshore Special Regulations Category 4 shall apply.

### **105 Rules Amendments**

Amendments to the GP 26 Class Rules are subject to the submission by the ORC Nominating bodies or GP 26 Class Association and approval of the ORC in accordance with the Articles of Association of ORC Ltd. GP 26 Class Association shall give its opinion about any submission concerning GP 26 Class Rules and ORC will be bounded by that opinion before making final decision.

### **106 Rules Interpretations**

The Class Technical Committee with approval of the ORC Chief Measurer may at any time issue interpretations or correction of the GP class rules. Any such interpretation or correction shall be published and then deemed final unless and until overruled by the ORC Management Committee and Congress.

### **107 Measurement**

107.1 All measurement shall be under the metric system.

- 107.2 All measurements shall be within the limits defined in these **class rules** without any rounding of measured or calculated values (e.g. where a limit is given as maximum 12.5, a measured value of 12.501 would not comply.)
- 107.3 Measurement shall be carried out by an **official measurer** who shall complete the **measurement form** and send it to the ORC.

## **108 Certificate**

- 108.1 Upon receipt of a satisfactory completed **measurement form** and **certification** fee, the ORC will issue a **measurement certificate**.
- 108.2 A boat shall have only one valid **certificate** at any one time. The valid **certificate** shall be only the last issued. The **certificate** shall be valid until 31st December of the current year.
- 108.3 A **certificate** shall be changed upon the change of any measurement recorded in the **certificate** or change of ownership.
- 108.4 A boat shall have no more than two valid **certificates** issued as a result of a change of recorded measurement values in period from January 1<sup>st</sup> to December 31<sup>st</sup> each year.
- 108.5 ORC in agreement with the Class Technical Committee can withdraw any **certificate** in any time when it finds that boat may not comply with intention of these **class rules**. In such a case it will inform the owner about further actions and if needed, appoint the measurer to re-measure the boat.

## ***Part 2 - GENERAL***

### **201 Hull, Deck, Interior Structures/Panels, Keel Support Structures & Rudder**

- 201.1 Permitted materials. Except as specifically noted, construction of the hull, deck structures and interior structures/panels, only the following materials are permitted:
- E-glass
  - Epoxy, Vinylester or Polyester resin
  - Foam Core with minimum density of 75kg/m<sup>3</sup>
  - Balsa Core
  - Wood and Plywood
  - Normal and commercially available resin additives for fairing or adhesive bonding, fairing compounds, and gel-coat
  - Normal and commercially available adhesive materials
- a) Additional to the permitted materials listed above, the keel support structures inside the hull shell may also use the following materials; steel (including stainless steels), aluminum, and carbon fiber with a tensile modulus not to exceed 250 GPa. The keel support structure is limited to the structures specifically associated with support of the keel transverse broaching loads, and longitudinal grounding loads. A keel support structure constructed with carbon fiber is limited to a maximum of 3 transverse frames and 2 longitudinal frames. The longitudinal extent of the structure shall be within 2600mm and 4600mm aft of the stem, and shall not extend above the local sheer height. Mast step and shroud attachment reinforcements may be included as part of the keel support structure.
- b) Additional to the permitted materials listed above the rudder may also use the following materials; stainless steel, aluminum, and carbon fiber with a tensile modulus not to exceed 250 GPa.
- c) Additional to the materials listed above, the keel fin may also use the following materials; steel (including stainless steels), bronze, iron, and carbon fiber with a tensile modulus not to exceed 250 GPa.
- d) The keel bulb material density shall not exceed 11350 kg/m<sup>3</sup> (at 25° C)
- e) Titanium is not permitted in any purpose for the hull, deck, interior structures/panels, keel support structures, rudder, spars, standing rigging, deck equipment and fittings.

f) Carbon is permitted in winches or winch systems only in standard, unmodified production winches.

201.2 **Construction Scantlings.** The boats shall have been designed and built either in accordance with the ABS Guide for Building and Classing Offshore Yachts or, when ultimately published, in accordance with ISO Standard 12215. The designer and the builder, respectively, shall confirm by signed written declarations that the design and build comply. The Owner shall sign the declaration printed on the **measurement certificate**.

201.3 **Hollows in Hull.** Aft of 30% LOA the hull there shall be no hollows in the hull surface below the sheerline. The sheerline shall be a fair, concave curve in profile view and a fair, convex curve in plan view with no double inflections in either view. Hollows generated by any protrusion outside the outer skin of the hull are not allowed. A recess, of a maximum of 20 litres of volume, is permitted in the hull, only in the area of the keel attachment and for this purpose only. The keel (when in position) shall totally fill this recess. Any part of the keel contained in this recess, as well as outside the hull outer skin, is considered keel and will be weighed as keel.

201.4 **Working Deck.** The working deck shall have a positive camber (i.e., convex) and be continuously fair. Except for the coach roof on the cockpit, at any transverse section the deck camber, as measured from a horizontal datum passing through the sheer points, shall be not less than 2%. Trunks and troughs are not permitted. Fittings may be recessed, provided the recess dimensions are not larger than 120% of the fitting dimension.

## 202 Appendages

202.1 Except for a single rudder located aft of the keel, no other appendages moveable while racing are permitted.

202.2 a) The keel fin shall be sealed to prevent any voids within the fin from filling with water. The fin may not be declared or used as a tank.

b) The keel bulb weight shall be recorded as **KBWT** determined by measurement or by detailed construction documentation submitted by the builder declaring the keel bulb weight.

c) For a keel with a fin containing carbon fiber, the keel weight will be recorded as **KWC**.

202.3 Hollows between the sections at **KTHU** and **KTHL** are not permitted.

## 203 Propulsion Engine and Strut Drive

203.1 A propulsion engine complying with Offshore Special Regulations monohull Category 3 is required.

203.2 If it is an inboard engine it shall be a water-cooled diesel provided together with a permanently installed exhaust and fuel supply system and fuel tank(s). The engine and drive train shall be orientated fore and aft, located on the centerline of the boat. Retractable propellers as well as retractable or custom strut drives are not allowed. Only standard, unmodified production strut drives usually supplied with the following engines are allowed: Volvo Penta, Yanmar, Lombardini Marine.

## 204 Rig

204.1 Throughout its length, the mast shall be of continuous section shape with a dimensional tolerance of +/- 3mm from the butt fitting to the upper measurement point of **IG**. There shall be no hollows in the surface except for localized hollows caused by reinforcements within 200mm of fittings and spreader attachments, and hollows resulting from the attachment of an externally mounted sail track.

204.2 Where carbon fiber is incorporated in the construction of any spars on the yacht, this shall be limited to 250 GPa and the walls of the spar shall not be of cored construction.

204.3 If the mast is aluminum it shall have no more than two spreader sets. Masts containing any carbon fibre shall have one spreader set. The sweep-back angle of spreaders shall be not less than 15 degrees. The forward edge of the spreader shall not be aft of a straight line extending from the forward edge of the spreader at the mast side (extended if necessary) and the center of the shroud at the outboard end of the spreader.

- 204.4 Jumper struts and stays, outriggers and halyard locks are not permitted.
- 204.5 Spinnaker pole is not permitted and any headsail flown shall at all times be tacked at the centerline of the yacht. The bowsprit shall be capable of being retracted so that its forward end is not longer than 200 mm forward of the stem. When bowsprit is extended the boat shall be in the process of a continuous hoist, or flaying or dropping the spinnaker. The bowsprit shall also be retracted at the first reasonable opportunity after rounding the leeward mark. Approaching a windward mark without the spinnaker set, the bowsprit shall not be extended until the bow of the boat has passed the mark.
- 204.6 **Standing Rigging.** The standing rigging is subject to the limitations set forth below
- a) **Materials:** The forestay shall be of stainless steel rod or twisted stainless steel wire. The shrouds and backstay may be made of any material except titanium or carbon fiber.
  - b) **Backstay:** Backstays are limited to a single, permanent backstay, which may be of stainless steel or composite fiber construction. The backstay may be adjustable. From the upper attachment point of the backstay there shall be a single part only, of length not less than “P”, the intention being to prohibit any configuration which might simulate double backstays. Below the lower end of this single part, the backstay configuration is unrestricted except that the fixed anchor point of the backstay configuration shall be not higher than 200mm above the working deck.  
  
A “fixed anchor point” is any point where a block or the end of any rope used to tune the backstay is attached. When in tension, the backstay shall form a straight line between the top (mast crane) and bottom fixed anchor attachment points. The centre of any bottom fixed anchor point shall not be above a horizontal plane which is established 0.6 m from the waterline in measurement trim.  
  
Pre bent backstays and/or any system to artificially increase the distance between the straight backstay line and the mainsail roach is not allowed, except for soft battens “flippers”.
  - c) **Forestay:** Except for backstay adjustment, means for adjusting forestay tension while racing is not permitted. Any luff-groove device shall not incorporate carbon fibers in construction.

## 205 Sails

- 205.1 Maximum of five battens are permitted in the mainsail, and no battens are permitted above *MGT* point.
- 205.2 Asymmetric spinnaker luff shall be calculated as:  $ASL = 0.5 * SLU + 0.5 * SLE$
- 205.3 Exclusive of storm sails required by the Offshore Special Regulations, sails allowed on board while racing are limited to:
- 1 Mainsail
  - 2 Jibs
  - 2 Asymmetric spinnakers (including Code 0)
- 205.4 In addition to the standard ORC stamp, all sails shall be stamped by official GP class measurement stamp where sail number, date of measurement, name of measurer and type of sail with appropriate identification per year will be recorded. First set of sails shall be measured in the same year when boat is launched. Maximum number of sails measured in one calendar year (January 1<sup>st</sup> – December 31<sup>st</sup>) for boat when participating to the official GP 26 Circuit is defined as follows:
- 2 Mainsail
  - 4 Jibs
  - 4 Asymmetric spinnakers (including Code 0)

Damaged sails can be repaired, but than shall be re-measured and re-stamped with both ORC and GP measurement stamp where same sail identification will be used.

## 206 Crew weight

The weight of all crew members on board while racing in light street clothes shall not be greater than 340 kg.

## ***Part 3 - MEASUREMENT***

### **301 Changes to the IMS**

301.1 IMS Rules B3.2 and B3.3 are amended as follows:

- a) *SFFP* shall be taken as 0.200 m
- b) *SAFP* shall be normally taken as defined in IMS B2.2(c), but not forward of 12% *LOA* of the aftermost point of the hull

301.2 In addition to the IMS following measurements shall be taken.

- a) *KTHU* shall be the maximum thickness found at a horizontal section located 100 mm below the intersection of the keel root and the hull surface.
- b) *KTHL* shall be the maximum thickness found at a horizontal section located 100 mm above the intersection of the keel blade and keel bulb.
- c) *KTHM* shall be the maximum thickness found at a horizontal section located midway the sections at *KTHU* and *KTHL*.
- d) *KBW* shall be the maximum transverse width of the keel bulb.
- e) *KBL* shall be the maximum longitudinal length of the keel bulb.
- f) *KBH* shall be the maximum vertical height of the keel bulb.
- g) *DSPW* shall be the total weight of a boat in measurement trim recorded to the nearest kilogram.
- h) *KW* or *KWC* shall be the weight of complete keel, including bulb, excluding fasteners to hull recorded to the nearest kilogram. Keel and bulb shall be permanently marked by measurer.
- i) *KBWT* shall be the weight of keel bulb, excluding fasteners to fin recorded to the nearest kilogram.
- j) *SDM* shall be the distance from the bow to the maximum draft section.
- k) *DMT* shall be the vertical distance from the deepest point of keel bulb to the sheerline at the same section.
- l) *FMD* shall be the average of port and starboard freeboards measured vertically from the sheer point to the water level at the section at *SDM* from stem.
- m) *GOA* shall be the distance between the **upper point** on the aft face of the mast to the center of attachment point of the upper end of the backstay.

### **302 Internal ballast and batteries**

Internal ballast, if any, shall not weight more than 9% of Max *DSPW*. Batteries shall not weight more than 2% of Max *DSPW*. The weight and location of internal ballast and batteries shall be recorded on the Measurement Inventory.

### **303 Maximum draft**

The Maximum Draft of the yacht shall be calculated as  $DHKM = DMT - FMD$ .

### **304 Measurement Inspection**

Following tolerances will be acceptable on the measurement inspection during an event:

|                      |           |
|----------------------|-----------|
| <i>DSPW</i>          | +/- 10 kg |
| <i>KW</i>            | +/- 5 kg  |
| <i>FFM, FMD, FAM</i> | +/- 2 mm  |

## Part 4 - TABLE OF LIMITS

### 401 Limits

All measurements shall be within the limits defined in the following table:

|              | <i>Min.</i> | <i>Max.</i> | <i>Rule</i> | <i>Description</i>              |
|--------------|-------------|-------------|-------------|---------------------------------|
| <b>Hull</b>  |             |             |             |                                 |
| LOA          | ---         | 7.900       | IMS B3.1    | Length Overall                  |
| MB           | 2.200       | 2.550       | IMS B3.4    | Maximum Beam                    |
| DSPW         | 1000        | 1100        | GP 301.4(g) | Displacement as Weighed         |
| DHKM         | ---         | 1.900       | GP 303      | Maximum Draft                   |
| FFM          | 0.920       | 1.000       | IMS E3.1    | Freeboard Forward               |
| FMD          | 0.810       | 0.890       | GP 301.4(l) | Freeboard at Maximum Draft      |
| FAM          | 0.730       | 0.810       | IMS E3.2    | Freeboard Aft                   |
| <b>Keel</b>  |             |             |             |                                 |
| KW           | 450         | 500         | GP 301.4(h) | Keel Weight                     |
| KWC          | 430         | 480         | GP 301.4(h) | Keel Weight with carbon fin     |
| KTHU         | 0.065       | ---         | GP 301.4(a) | Keel Thickness – Upper          |
| KTHM         | 0.060       | ---         | GP 301.4(c) | Keel Thickness – Mid            |
| KTHL         | 0.055       | ---         | GP 301.4(b) | Keel Thickness – Lower          |
| KBW          | ---         | 0.395       | GP 301.4(d) | Keel Bulb Transverse Width      |
| KBWT         | 375         | 445         | GP 301.4(g) | Keel Bulb Weight                |
| <b>Rig</b>   |             |             |             |                                 |
| P            | ---         | 9.900       | IMS F2.1    | Mainsail Hoist                  |
| IG           | ---         | 9.250       | IMS F3.1    | Height of Genoa Hoist           |
| ISP          | ---         | 11.150      | IMS F3.2    | Height of Spinnaker Hoist       |
| BAS          | 1.150       | 1.250       | IMS F3.4    | Boom Above Sheerline            |
| MWT          | 45.0        | ---         | IMS F4.6    | Mast Weight                     |
| MCG          | 3.00        | ---         | IMS F8.3    | Mast Centre of Gravity          |
| MDT1         | 0.072       | ---         | IMS F4.1    | Max. Transverse Mast            |
| MDL1         | 0.125       | 0.150       | IMS F4.2    | Max. For-and-Aft Mast           |
| MDT2         | 0.7*MDT1    | ---         | IMS F4.3    | Min. Transverse Mast            |
| MDL2         | 0.7*MDL1    | ---         | IMS F4.4    | Min. For-and-Aft Mast           |
| TL           | ---         | 1.900       | IMS F4.5    | Taper Length                    |
| GOA          | ---         | 0.400       | GP 301.4(m) | Backstay Gantry Overhang        |
| CPW          | 1.800       | ---         | IMS F6.3    | Chainplate Width                |
| E            | ---         | 3.850       | IMS F5.1    | Mainsail Foot                   |
| BD           | ---         | 0.192       | IMS F5.2    | Boom Diameter                   |
| J            | ---         | 2.900       | IMS F6.1    | Foretriangle Base               |
| TPS          | ---         | 4.800       | IMS F7.2    | Tacking Point of Spinnaker      |
| FSP          | ---         | 0.054       | IMS F6.4    | Forestay Perpendicular          |
| <b>Sails</b> |             |             |             |                                 |
| HB           | ---         | 0.20        | IMS G2.1    | Mainsail Top Width              |
| MGT          | ---         | 1.00        | IMS G2.1    | Mainsail 7/8 Width              |
| MGU          | ---         | 1.70        | IMS G2.1    | Mainsail 3/4 Width              |
| MGM          | ---         | 2.65        | IMS G2.1    | Mainsail 1/2 Width              |
| MGL          | ---         | 3.35        | IMS G2.1    | Mainsail 1/4 Width              |
| LPG          | ---         | 3.10        | IMS G4.1    | Jib Perpendicular               |
| JGU          | ---         | 0.85        | IMS G4.1    | Jib 3/4 Width                   |
| JGM          | ---         | 1.60        | IMS G4.1    | Jib 1/2 Width                   |
| AMG          | ---         | 7.10        | IMS G6.5    | Asymmetric Spinnaker Mid Girth  |
| ASL          | ---         | 12.50       | GP 205.2    | Asymmetric Spinnaker Luff/Leech |



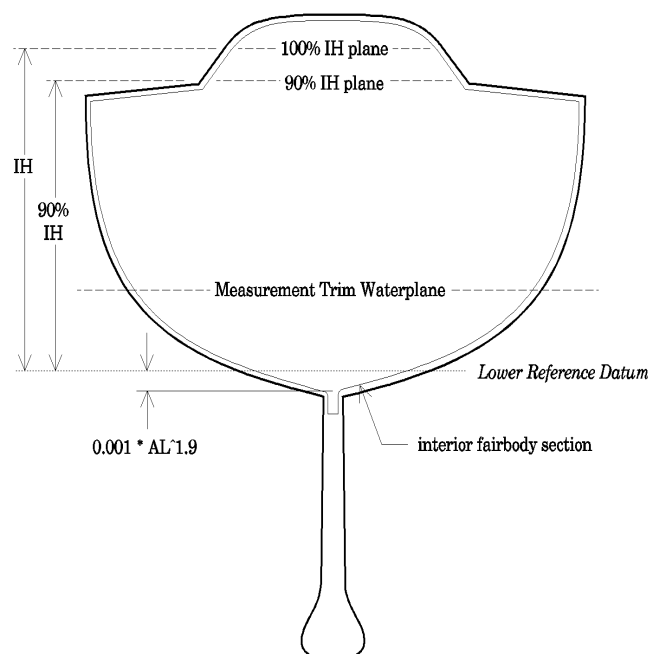
# Appendix 1 - ACCOMMODATION REGULATIONS

## A1 Introduction

The purpose of these regulations is to ensure that boats meet the minimum standards of accommodation in order to provide for comfort of crews and stowage of gear, maintain long term value and to prevent unrated performance advantage from stripping hulls for racing.

## A2 Interior Volume shall comply with following requirements:

1. **Lower Reference Datum.** A level datum, parallel to the waterplane in measurement trim, shall be established at a height of 0.050 m above the inside of the hull surface, projected if necessary, at the deepest interior fairbody section which, for this purpose, shall not be found outside the 90% IH overhead area (see A2.3 below). This level is independent of the actual height of the cabin sole.
2. **Overhead Area at Full Interior Height:** At a height 1.22 m above the level established in A2.1 there shall exist under the overhead a plane of length not less than 1.11 m and area not less than 0.374 m<sup>2</sup>, ignoring deck beams and deck stringers. The aft extent of this area at the centerline shall lie not forward of a point located 4.345 m aft of the stem.
3. **Overhead Area at 90% Interior Height:** At a height 1.10 m above the level established in A2.1 there shall exist under the overhead a plane of length not less than 1.50 m and minimum area 1.186 m<sup>2</sup>. At this defined plane there shall exist a rectangular area for length of 1.185 m and width not less than 0.79 m. Deck beams and deck stringers may be ignored.



All types of cut-outs and fitting recesses penetrating into the volume defined by 2 and 3 are forbidden. Only control lines may pass into the coach-roof volume.

## A3 A Cabin Sole shall extend fore and aft over a length which provides convenient access to lockers, berths, galley, head, navigation area and other components making up the yacht's interior.

## A4 Berths. Minimum number of berths is 2. Each single berth should be at least 1.83 m in length and at some point at least 0.55 m in width. A double berth shall be at least twice the width of a single berth. The ends of berths may taper as required by the hull shape. Mattresses are to be fitted to all such berths.