



I M O C A

Class Rules

2004

INTERNATIONAL MONOHULL OPEN CLASSES ASSOCIATION

OPEN 60' ISAF INTERNATIONAL CLASS

OPEN 50' ISAF INTERNATIONAL CLASS



INTERNATIONAL MONOHULL OPEN CLASSES ASSOCIATION
IMOCA
OPEN 60 Ft CLASS RULES 2004
OPEN 50 Ft CLASS RULES 2004

PREAMBLE:

The Monohull Open 50/60 feet Class was registered as “**Recognised Class**” by the **INTERNATIONAL SAILING FEDERATION** (ISAF) in 1998.

In 2001, the Open 60’ Class has been registered as “**International Class**” by the **INTERNATIONAL SAILING FEDERATION** (ISAF), and the Open 50’ Class has been registered as “**Recognised Class**”.

The aim of these rules is to establish the restrictions, the exclusions and obligations which shall be respected by Open 50/60 foot Monohulls when taking part in offshore ocean sailing competitions. This is to ensure that the elements relative to safety are of an acceptable standard level and at least identical for all competitors.

However, these rules are evolutive, and must be developed in such a way to encourage technological speed innovations as well as research and application for new techniques in matter of safety at sea.

Note:

- 1 - A black side bar indicates significant changes in 2004.
- 2 - The ISAF Offshore Special Regulations are included in the 2004 edition of Imoca Class Rules.
- 3 - Most of articles of the Class Rules are the same for the both Classes Open 60’ an Open 50’.
When a rule is specific to Open 50’, it is specified in a separate article, printed in italics

CONTENTS

SECTION A – ESSENTIAL RULES

- A.1: Type of Class Rules
- A.2: Abbreviations
- A.3: Authority
- A.4: Identification
- A.5: ISAF advertising code
- A.6: Language
- A.7: Interpretation
- A.8: Spare number
- A.9: Responsibility
- A.10: Spare number
- A.11: Date of application / Duration of validity of text

SECTION B – MEASUREMENT PROCEDURES

- B.1: Measurers / Official software
- B.2: Responsibility
- B.3: Plan submission
- B.4: Measurement boat trim
- B.5: Measurement weather conditions

SECTION C – HULL AND DECK

- C.1: Definition
- C.2: Hull number - Modification
- C.3: Length overall
- C.4: Draught
- C.5: Structure of boat
- C.6: Lay-out of boat
- C.7: Unsinkability
- C.8: Ballast, keel and daggerboard
- C.9: Water ballast

SECTION D – RIGGING / SAILS

- D.1: Fundamental Rules
- D.2: Canting mast on lateral plane
- D.3: Halyards
- D.4: Storm and heavy weather sails
- D.5: Additional rules

SECTION E – MINIMUM STABILITY STANDARDS

- E.1: Self righting
- E.2: Initial heel angle
- E.3: Angle of Vanishing Stability
- E.4: Stability curve area ratio

SECTION F – TESTS AND MEASURES RELATING TO STABILITY

- F.1: Boat weighing
- F.2: Self-righting test (180°)
- F.3: Initial heel angle test (20°)
- F.4: Stability tests (90°)

SECTION G – NAVIGATION EQUIPMENTS

- G.1: Engine
- G.2: Batteries
- G.3: Compass
- G.4: Marine radio / Navigational position fixing device
- G.5: Navigational documents
- G.6: Anchors
- G.7: Flashlights
- G.8: Tools and spare parts

SECTION H – SAFETY EQUIPMENTS

- H.1: Stowage chart
- H.2: Draining
- H.3: Emergency water
- H.4: Survival fixing points
- H.5: Life rafts
- H.6: Lifebuoys
- H.7: Pyrotechnic signals
- H.8: Lifejackets
- H.9: Safety harness and safety lines
- H.10: Soft wood plugs
- H.11: Fire extinguishers
- H.12: Foghorn
- H.13: Radar and radar reflector
- H.14: EPIRBs
- H.15: Emergency transmission
- H.16: Watertight hand-held marine VHF transceiver
- H.17: Hand-held radar transponder beacon
- H.18: First aid manual and first aid kit
- H.19: Heaving line
- H.20: Diving equipment
- H.21: Yacht's name
- H.22: Personal equipment
- H.23: Personal survival equipment
- H.24: Watertight emergency container
- H.25: Hull marking
- H.26: Fluorescent paint

APPENDIX TO THE CLASS RULES

- A. Special provisions
- B. Rules evolutions agenda
- C. Contents of first aid kit
- D. Measurement protocol for 50' and 60'

SECTION A - ESSENTIAL RULES

A.1: TYPE OF CLASS RULES

The Class Rules of Monohull Open 50' or Monohull Open 60' are open, which states that **anything not specifically prohibited, limited or imposed is permitted.**

A.2: ABBREVIATIONS

ISAF	International Sailing Federation
MNA	ISAF Member National Authority
IMOCA	International Monohull Open Class Association
ERS	Equipment Rules of Sailing
RRS	Racing Rules of Sailing
OSR	ISAF Offshore Special Regulations
COLREG	International Regulations for the Prevention of Collision at Sea
ISO	International Organization for Standardization
ABS	American Bureau of Shipping

A.3: AUTHORITY

A.3.1: THE INTERNATIONAL AUTHORITY

The international authority of the Class is **ISAF** which shall cooperate with **IMOCA** in all matters concerning these Class Rules.

A.3.2: IMOCA

IMOCA is the association granted in agreement with ISAF and responsible for administering the Classes of Monohull Open 50' and Monohull Open 60', and for working and publishing the Class Rules in collaboration with ISAF.

All Class procedures, in particular the issue of Class Measurement Certificate, Class Insignia, and allocation of Sail Numbers are defined in the Class Regulations.

A.4: IDENTIFICATION

The Class insignia / logo shall be placed on both sides of the mainsail, between the headboard and the sail number.

The international association for the both classes, **IMOCA**, shall allot sail number.

The size of nationality letters and sail numbers shall be not less than:

Height:	750 mm
Width:	500 mm (with the exception of One and India)
Thickness:	100 mm
Space between letters:	150 mm.

A.5: ISAF ADVERTISING CODE

In accordance with paragraph 20.6.2 (ii) of the ISAF Advertising Code, the two Classes are registered category C of advertising.

A 2.30m diameter circle on each side of the bottom third of the mainsail shall be free of advertising.

A.6: LANGUAGE**A.6.1: Official languages:**

In accordance with article 33 of the Constitution of **IMOCA**, English and French are the two official languages of the Class. In the case of any discrepancies about a translation, the Executive Committee will decide.

A.6.2: Obligation and permission:

The words “shall” and “must” are mandatory, the words “may” and “should” are permissive.

A.7: INTERPRETATION

Any request for interpretation of the Class Rules shall be made in writing and shall be dealt with as defined in the ISAF Rules and the Class Regulations Section C - 5.

In the case of any doubt about the conformity of a new system or about the accordance of an unused process, a request can be lodged to the IMOCA Chief Measurer.

Himself, if he thinks necessary for safety reasons, can refer to the ISAF Technical Committee, which is also required to keep strictly the case confidential. The answer to the request shall be made my post mail, as soon as possible.

Measurement or application procedures under these Class Rules may be clarified through amendments issued by the Technical Committee.

A.8: SPARE NUMBER**A.9: RESPONSIBILITY**

The Safety of a yacht and her crew is the sole and inescapable responsibility of the owner, or her skipper, who must ensure that the yacht is fully found, thoroughly seaworthy and manned by an experienced crew who have undergone appropriate training and are physically fit to face bad weather.

He must be satisfied as to the soundness of hull, spars, rigging, sails and all gear.

He must ensure that all safety equipment required is adequate, function properly and properly maintained, regularly checked, cleaned and when not in use be stowed in conditions in which deterioration is minimised and readily accessible.

He must ensure that the crew know where it is kept and how it is to be used.

A.10: SPARE NUMBER**A.11: DATE OF APPLICATION / DURATION OF VALIDITY OF TEXT**

These Class Rules are applicable from **March 1st, 2004.**

To allow boats already constructed to be awarded a measurement certificate, special provisions are stipulated in appendix to these rules.

Except in a matter of proven extreme urgency, and in such circumstance in consultation with the ISAF, no modification to the rules regarding essential structures and appendages (mast, keel, etc...) shall be made before the **Annual General Meeting** which closes the financial year 2004 (AGM April 2005).

SECTION B – MEASUREMENT SESSION

B.1: MEASURERS / OFFICIAL SOFTWARE

B.1.1: Measurers:

Official Class Measurers are listed in an appendix to the 2004 Regulations. They shall comply with the prescriptions of chapter H-1 of the **ERS**.

Moreover, the data, measurements and information they collect with a view to awarding a measurement certificate shall remain confidential.

The Chief Measurer must make a detailed report about each test done to issue a measurement certificate.

Measurement certificates issued by the Chief Measurer are available for consultation on the Class web site.

B.1.2: Official software:

The official software used for the stability calculation is the software named Hydro/2 from Aerohydro Company, included the regular update.

B.2: RESPONSIBILITY

The presence of the skipper of the boat is mandatory during the measurement process. This person is responsible for all necessary operations.

Additionally, the provision of a complete set of plans and of all technical documentation which may be required for the awarding of a measurement certificate are the responsibility of the skipper or a representative thereof.

B.3: SUBMISSION OF PLANS

The skipper, or his/her representative, shall supply the Chief Class Measurer with the following documentation:

- The relevant Offset File of the hull, deck, roof and appendages.
- Flooding Calculations for each watertight compartment.
- Buoyancy Volumes longitudinal distribution diagram.
- Any other documents which the measurer shall deem necessary.

B.4: MEASUREMENT BOAT TRIM

B.4.1: Light equipment measurement boat trim:

Hull equipped as follow:

Shall remain fixed:

- Mast(s), standing rigging including runners, spanker boom(s), kicking strap, **all forward sails furlers, and all mast running rigging (halyards, topping lifts, etc...)**. **A list of all this gear will be recorded by the measurer.**

- Fittings permanently fixed to the deck and mast(s), **exemption of the standard B spherical antenna for picture transmission, which can be not fitted. The AVS calculation being without this antenna, if it is fitted, an inclusive weight will be deducted for this calculation.**

- Fixed layouts.
- Batteries, electric circuits, piping.
- Electronic equipment fixed to fittings.
- Keel (s) and mast (s) positioned along the vertical axis of the boat.
- Centreboards and all movable fittings at their highest position.

Shall not be onboard:

- All sails.
- Portable deckware and running rigging.
- Anchors, lines and chains.
- All safety gear.
- Forward deck gear including any jib or spinnaker pole.
- All movable equipment.
- All supplies, fresh water and fuel containers, navigation equipment, clothes, stores, personal gear, etc...

Shall be emptied:

- All permanently fitted fresh water tanks.
- All permanently fitted fuel tanks.
- All permanently fitted water ballast tanks and associated pipes.

This procedure defines the fore and aft trim of the boat on the water. Measures of fore and aft freeboards would be recorded by the measurer.

In case of modification of the mast, keel, accommodations, rudders, deck, roof, the Chief Measurer shall be immediately informed. If necessary, a new measurement certificate shall be issued.

B.4.2:**Capsize trim:**

As above, but without:

- Mast, standing rigging, boom(s), kicking straps, foresails furlers and halyards, and electronic deck devices as radar antenna on crossbar.
- Fittings permanently fixed to mast(s).

B.5:**WEATHER MEASUREMENT CONDITIONS****B.5.1:****Conditions**

Measurements taken afloat shall be in calm water; less than 15 mm ripples and less than 10 knots of wind, without current. The salinity of the water would be recorded by the measurer, and computed to 1,025 for the calculation of draught and stability.

B.5.2:**Measurement protocol**

The measurement protocol which shall apply to Open 50' and Open 60' Class is stated in appendix to these rules.

SECTION C – HULL AND DECK

C.1:**DEFINITION**

Under this rule, a monohull is defined as a boat whose flotation plane at rest or under sail remains continuous in its transversal section, and whose hull depth in any transversal section shall not decrease towards the centre-line.

C.2:**HULL NUMBER – MODIFICATION****C.2.1:****Hull number – ISAF Registration:**

In accordance of article 9.4 of agreement ISAF/IMOCA, a hull number shall be moulded or punched into the transom of the boat. This number, delivered as described in Regulations C-4-1, will include the hull date.

C.2.2:**Modification:**

Any modification to the boat relating to the sections and articles C, D, E, F, G and H, made after the Class Certificate issue date, shall be declared in writing to the Class Chief Measurer, who will decide, according to the importance of the modification, or to the acknowledgement of the weights and the gravity centres of the replaced equipments (in the case of dismasting for example), if new measure, partial or total re-measurement are necessary or not.

Any modification made without following this procedure will invalidate the Certificate.

C.3: LENGTH OVERALL

The overall length (LOA) of a 50 foot boat shall be between 48 feet (14,630m) and 50 feet (15,240m), and of a 60 foot boat greater than 50 feet but not exceeding 60 feet (18,288m).

The measurement of overall length, realised boat ashore in a trim as defined in B-4-1, include the whole hull but not spars and fittings.

The combined fore and aft spars length shall not exceed the overall length of the hull by more than 6 feet (1.829m).

A boom, with or without sail, protruding aft, is considered to be a spar which shall be measured in the axis of the boat and in the most disadvantageous position.

A bow sprit protruding beyond the bow is considered to be a spar which shall be measured horizontally from the stem of the boat to the vertical point of its overall extremity when it is extended to its maximum point beyond the bow, in the axis of the boat.

C.4: DRAUGHT**C.4.1: Draught for Open 60':**

In the light equipment measurement trim as defined in B.4.1, the draught is limited to 4,50m.

Ashore measurements combined with afloat measurements shall be used to determine the maximum draught of the boat.

C.4.2: Draught for Open 50':

In the light equipment measurement trim as defined in B.4.1, the draught is limited to 4,10m.

Ashore measurements combined with afloat measurements shall be used to determine the maximum draught of the boat.

C.5: STRUCTURE OF BOAT**C.5.1: STRUCTURAL FEATURE**

The boat shall be constructed in such a way as to be able to stand, without irreparable damage, the forces of nature which it is intended to have to face in the course of races classified by the **ISAF OSR** in category 0.

On request by the measurer, the architect, together with the builder, shall be in a position to produce boat structural calculations to **ISO 9000 norms** (ISO 12215).

Mechanical resistance tests on the most demanding parts of the boat may be requested, particularly when asking for a renewal of the measurement certificate

Architects are advised to apply significant coefficients of safety, at least similar to those stipulated in the **ABS Guide**, particularly as far as the fixings of the keel and strains due to ballast are concerned. The Class Technical Committee is able to supply the relevant information on request.

The deck/hull unit shall be capable of being rendered rapidly and completely watertight by a single person acting alone.

C.5.2: REPAIRS / MODIFICATIONS

Any significant repairs or modifications to the hull, deck, coach roof, keel or appendages on a boat shall be realised in accordance with the same norms as above, and the measurer is allowed to require a written certificate.

C.5.3: COCKPITS

Attention is drawn to ISO 11812

a) General requirements:

Cockpits shall be structurally strong, self-draining quickly by gravity at all angles of heel and permanently incorporated as an integral part of the hull.

They must be essentially watertight, that is, all openings to the hull must be capable of being strongly and rigidly secured.

A bow, lateral, central or stem well shall be considered a cockpit.

b) Volume and bottom level of cockpits:

Designers are invited to consult articles 3.09.7 and 3.09.4 of the **ISAF OSR**, which shall apply.

c) Draining:

Cockpits shall be self-draining by gravity by using appropriated openings or adequate drains. At 0° of heel, and 0° of longitudinal trim, the cockpit draining time, when filled to the working deck, shall not be greater than 3 minutes. Draining time may be checked in real conditions or calculated by referring to ISO 11812.

Bilge pumps outlet pipes or pipes shall not be connected to cockpit(s) drains.

C.5.4: WATERTIGHT BULKHEADS

Any required watertight bulkhead shall be strongly built to take a full head of water pressure without allowing any leakage into the adjacent compartment.

a) Watertight bulkheads for Open 60':

Of several volumes, shall divide the boat from stem to stern, they shall be transverse at least 5 in number and create 6 watertight compartments with an access for a person. They shall be not more than 5 metres apart. The first stem watertight bulkhead shall be located within 15% of overall boat length and abaft the forward end of the waterline. The passage of various cables, pipes or ducts shall not compromise the watertight characteristic of the compartments.

b) Watertight bulkheads for Open 50':

Of several volumes, shall divide the boat from stem to stern, they shall be transverse at least 4 in number and create 5 watertight compartments with an access for a person. They shall be not more than 5 metres apart. The first stem watertight bulkhead shall be located within 15% of overall boat length and abaft the forward end of the waterline. The passage of various cables, pipes or ducts shall not compromise the watertight characteristic of the compartments.

c) Crash box:

A watertight box, filled with closed cell foam, capable of being destroyed in a frontal collision without endangering the integrity of the boat shall be fitted aft of the bow.

C.5.5: WATERTIGHT ACCESS HATCHES:

In all circumstances, the boat shall be accessible from stem to stern by way of watertight hatches. These hatches shall permit, whatever the position of the boat in the water, upright or capsized, complete access to the boat, from stem to stern and inversely, with any of the compartments flooded and without any of the other compartments becoming so. **These hatches shall have their locking mechanism permanently fitted.**

C.5.6: ESCAPE HATCHES

The boat shall have two exits. One exit shall be located forward of the foremost mast (except where structural features prevent its installation). The second one shall be located astern, allowing access to, and exit from, the boat, whatever its position in the water.

This hatch shall be situated above the water line, whatever the position of the boat, and be provided with a closing system with interior and exterior controls operating the same locking mechanism.

Grab handles shall be fitted on the outside, above and below the astern escape hatch, close to the skirt and the deck to ease exit from the boat on to the deck, or on to the hull in the event of a capsize, and equally return to the inside.

As substitute of the forward hatch, it is strongly urged to install a floor cockpit hatch whenever possible. This hatch shall be positioned in such a way that when the boat is capsized, it shall remain open without allowing any leakage into the hull when allowing a crew member to get through it.

C.5.7: COMPANIONWAY HATCH

A companionway hatch shall be fitted with a strong securing arrangement which shall be operable by a sole person from the exterior and the interior including when the yacht is inverted.

C.5.8: HATCHES

No hatch forward of the maximum beam station shall open in such a way that the lid or cover moves into the open position towards the inside of the hull (excepting ports having an area of less than 0.071m²).

Hatches shall be arranged as to be above the water when the hull is heeled 90 degrees. They shall be permanently attached, and capable of being firmly shut immediately and remaining firmly shut in a 180 degree capsized.

C.6: LAYOUT / EQUIPMENTS

Working deck definition: a working deck is all safely area, where any crew member is obliged to stand, or to cross frequently, or to go frequently in the aim of realising the usual manoeuvres necessary for sailing the boat. It may be several working decks, providing that the passage between two did not exceed 500mm.

C.6.1: PULPITS, STANCHIONS and LIFELINES**a) General requirements:**

Attention is drawn to ISO 15085 norms.

Pulpits and stanchions shall be permanently installed. When there are sockets or studs, these shall be through-bolted, bonded or welded. The pulpit(s) and/or stanchions fitted to these shall be mechanically retained without the help of the lifelines. Without sockets or studs, pulpit(s) and/or stanchions shall be through-bolted, bonded or welded.

Stanchion bases shall not be situated outboard of a working deck. For the purpose of this rule a stanchion or pulpit base shall be taken to include a sleeve or socket into which a stanchion or pulpit tube is fitted but shall exclude a base plate which carries fixings into the deck or hull.

Pulpits, stanchions and lifelines shall not be made of Carbon fibre.

Lifelines required shall be "taut". As a guide, when a deflecting force of 50 N (5.1 kgf) is applied to a lifeline midway between supports, the lifeline should not deflect more than 50 mm.

b) Pulpits:

Boats shall have bow and stem pulpits.

The bow pulpit shall be forward the head stay. Pulpits may be fixed in part to the fore appendages.

The bow pulpit may not cross forward the head stay, providing the gap between the forward upper rail and the head stay is not more than 300mm.

In any case, a closing system between the two forward upper rails and crossing ahead the head stay shall be capable of being installed.

Lifelines arranged in accordance to vertical opening may be considered as an adequate substitute of the stem pulpit.

Upper rails of pulpits shall not be at no less height above the working deck than the upper lifelines (minimum 600mm) and essentially the same height above the waterline as is the upper lifeline at the forward part of the cockpit.

No vertical opening shall exceed 380mm height.

Upper rails in bow pulpits may be openable but shall be secured shut whilst racing.

c) Stanchions:

Stanchions shall be straight and vertical.

However, within the first 50 mm from the deck, stanchions may be displaced horizontally

(Cranked) from the point at which they emerge from the deck or stanchion base by not more than 10 mm, and they may be angled to not more than 10 degrees from vertical from any single point above 50 mm from the deck.

d) Lifelines:

Lifelines shall be supported on stanchions, and shall be continuous around a working deck. Lifelines may be substituted by horizontal rails in pulpits. Lifelines shall be permanently supported at intervals of not more than 2.20m and shall not pass outboard of supporting stanchions

Provided the complete lifeline enclosure is supported by stanchions and pulpit bases effectively within the working deck, lifeline terminals and support struts may be fixed to the hull aft of the working deck.

Lifelines need not be fixed to a bow pulpit if they terminate at, or pass through, adequately braced stanchions set inside and overlapping the bow pulpit, provided that the gap between the upper lifeline and the bow pulpit does not exceed 150 mm.

Number and height: boats shall have no less than taut double lifelines. The upper lifeline shall be at a height of no less than 600 mm (**recommendation of 800 mm**) above the working deck. The intermediate lifeline shall be not less than 230 mm above the working deck. No vertical opening shall exceed 380 mm.

Diameters, required material: All mandatory Lifelines shall be stranded stainless steel wire of minimum diameter of 5mm. Lifelines shall be uncoated and used without close-fitting sleeving. Grade 316 stainless wire is recommended.

A taut lanyard of synthetic rope may be used to secure lifelines at each end provided the gap it closes does not exceed 100 mm.

All wire, fittings, anchorage points, features and lanyards shall comprise a lifeline enclosure system which has at all points at least the breaking strength of the required lifeline wire.

C.6.2: JACKSTAYS / CLIPPING POINTS**a) General requirements:**

Jackstays together with clipping points and static safety lines shall enable a sole crew member to clip on himself before coming on deck and unclip after going below. This whole set also shall allow whilst continuously clipped on, to move readily between the working areas on deck and in the cockpit(s), including being able to cross the deck athwartships, with the minimum of clipping and unclipping operations. It shall also enable two-thirds of the crew to be simultaneously clipped on without depending on jackstays.

Warning attention must be drawn on U bolts as clipping points, because they can lead unclipping plain snaphook.

b) Jackstays:

Jackstays shall be attached to through-bolted or welded deck plates or other suitable and strong anchorage, fitted on deck, port and starboard of the yacht's centre line to provide secure attachments for safety harness.

They shall be made of, stainless steel 1x19 uncoated wire of minimum diameter 5mm without any sleeving, or webbing of equivalent strength (20kN breaking load).

c) Clipping points:

Attached to through-bolted or welded deck plates or other suitable and strong anchorage points adjacent to stations such as the helm, sheet winches and masts, where crew members work for long periods.

C.6.3: TOE RAIL / FOOT STOP

A toe rail of minimum height 25 mm shall be permanently installed around the working deck, except in way of fittings and at the vertical of the transom. The toe rail shall be fitted as close as practicable to the vertical axis of stanchion bases but not further in board than 1/3 the local half-beam.

C.6.4: HAND HOLDS / HAND RAIL

The following shall be provided:

- **Hand holds:** adequate hand holds shall be fitted **in the interior** of boat so that crew members may move about safely at sea.
- **Hand rail:** the boat shall be equipped with a fixed handrail along the skirt or at the hull/transom junction, which acts as a grab-rail to facilitate climbing back on to the boat in the event of falling overboard.

C.6.5: BOW FAIRLEAD

A bow fairlead, or equivalent device, closed or closable and a cleat or other securing arrangement, suitable for towing shall be permanently installed.

C.6.6: NAVIGATION LIGHTS

Navigation light shall comply with **COLREG 72** (International Regulations for the Prevention of Collision at Sea) and shall be mounted so that they will not be masked by sails or the heeling of the yacht. Navigation lights electric power shall be equivalent to 25 W.

Navigation lights shall not be mounted below deck level and should be at no less height than immediately under the upper lifeline.

Reserve navigation lights shall be carried and comply with COLREG 72. They shall have an alternate wiring separated from the one used for the normal navigation lights.

Spare bulbs for navigation lights shall be carried, or for lights not dependent on bulbs, appropriate spares.

For boats with rotating mast, masthead navigation lights are forbidden, except if they remain in conformity with COLREG 72 whilst rotating.

C.6.7: EMERGENCY STEERING

Emergency steering shall be provided as follows:

An emergency tiller capable of being fitted to the rudder stock. These rule apply only in the case of sole rudder.

Crews must be aware of alternative methods of steering the yacht in any sea condition in the event of rudder loss. At least one method must have been proven to work on board the yacht. A measurer may require that this method be demonstrated.

C.6.8: MAST STEP

The heel of a keel stepped mast shall be securely fastened to the mast step or adjoining structure.

C.6.9: SEA COCKS or VALVES

Sea cocks or valves (quarter turn valves or knife valves) shall be permanently installed on all through hull openings below the water line except integral deck scuppers, shaft log, speed indicators, depth finders and the like, however a means of closing such openings shall be provided.

- C.6.10:** **BUNKS**
Three bunks shall be installed on board.
- C.6.11:** **COOKING FACILITIES**
 A cooking stove permanently installed or securely fastened with safe accessible fuel shutoff control capable of being safely operated in a seaway.
- C.6.12:** **DRINKING WATER**
 When not specified in the Notice of Race the quantity of drinking water on board at the start of a race shall be, in the absence of a water maker, at least 9 litres per person per 1000 miles or, when a water maker is on board at least 3 litres per person per 1000 miles.
- C.7:** **UNSINKABILITY**
- C.7.1:** **Essential rule:** In the event of all compartments being completely flooded, the boat shall remain unsinkable.
- C.7.2:** **Unsinkable volume :**
 The boat shall possess a total volume for unsinkability, expressed in m³ not less than 130% of the boat displacement in m³ as recorded in F – 1.
 Included in the calculation of this volume are:
 - The combined volumes of any fixed elements waterproof to the water.
 - 50% of the volume of the water ballast tanks, **except central water ballast tanks. (ballasts whose centre of gravity is aligned on the longitudinal axis of the boat).**
 - The combined volumes of structural lockers when they are filled with closed cell foam.
 - Additional buoyancy volumes of closed cell foam, non-removable, laminated, or glued directly to any part of the hull structure.
- C.7.3:** **Longitudinal distribution of buoyancy volumes:**
 These fixed volumes shall be approximately distributed proportionally among each watertight compartment.
 The skipper, or his/her representative, shall supply a diagram for the unsinkable volumes.
- C.8:** **BALLAST, KEEL and DAGGERBOARD**
The use of tungsten is prohibited for boats build after January 1st, 2005. (launch date, boat ready to sail)
- C.8.1:** **Canting keel:**
 When the boat is equipped with a canting keel, this shall be capable of being manoeuvred manually from the inside of the boat, whatever her position in the water. Strong and easily removable keel angle device shall be in place on both sides and at all times to limit the canting of the keel to the value found when performing the initial heel test (20°) as described in F – 3. These devices shall be capable to be sealed. A specific locking device allowing the keel to be restrained along the axis of the boat and independent from the master device shall be permanently installed.
- C.8.2:** **Daggerboard (s):**
 Centreboard and daggerboard trunks and the like shall not open into the interior of a hull except via a watertight inspection/maintenance hatch of which the opening shall be entirely above the waterline of the yacht floating level in normal trim.
- C.9:** **WATER BALLAST**
 The boat may be equipped with water tanks and associated permanently fitted plumbing. All ballast tanks shall be integral to and within the hull. This movable ballast shall be of sea-water only, to the exclusion of any other liquid.
 It shall be possible to fill, empty and transfer manually the water in the ballast tanks, whatever the position of the boat in the water.

SECTION D – RIGGING / SAILS

D.1: FUNDAMENTAL RULES

The boat must be properly rigged.
Shrouds shall never be disconnected.

D.2: CANTING MAST IN A LATERAL PLANE

Canting masts in lateral plane are forbidden.

D.3: HALYARDS

No mast shall have less than two halyards, each capable of hoisting a sail.

D.4: STORM and HEAVY WEATHER SAILS

a) Materials:

Aromatic polyamides, carbon and similar fibres shall not be used in a storm jib but spectra/dyneema and similar materials are permitted.

b) The following equipment shall be provided:

- A storm jib of area not greater than 5% height of the fore triangle squared, and luff maximum length 65% height of the fore triangle.
- The storm jib shall have sheeting positions on deck.
- The storm jib shall have a strong securing method, which does not comprise or depend upon a luff groove device, for attachment to a stay. The use of a storm jib with a free luff is authorised.
- The storm jib must be of highly visible coloured material.

D.5: ADDITIONAL RULES

D.5.1: Poles:

When set in their most forward fixing position, they shall not extend beyond the vertical of the overall extremity of the authorised bowsprit.

D.5.2: Fixings of rigging:

The forestays, backstays, runners, lower shrouds, permanent or temporary, shall be connected to the boat within the surface delimited on the sides by the sheer line (as defined by the ISAF OSR), at the bow by the stem and at the stern by a line joining the aftermost points of the sheer line to port and to starboard.

D.5.3: Fixings of tacks and clew-lines:

The fixing points of the tacks and clew lines of hoisted sails shall not be rigged outside and beyond the overall extremity of the authorised spars.

D.5.4: Outriggers:

In a change to rule 50.3 of the RRS, the use of outriggers is allowed.

SECTION E – MINIMUM NORMS OF STABILITY

The first sentence of rule 51 of the **RRS** is replaced as follows: “Any shifting of weight with the aim of altering control or stability is permitted within the limits fixed by the current rules.”

Inside the boat, batteries excepted, all other heavy items capable of damaging the boat or injuring a crew member must be securely fastened to the boat at all time, except when being moved around.

Food supplies, fuel and water jerricans, safety and deck gears and spares can be packed in boxes and moved around if securely fastened to the boat.
Sails can be moved around freely. Sail bags shall not be watertight.

Rule 52 of the **RRS** is replaced as follows: "With the exception of the manoeuvring and trimming of running rigging and spars, an energy source other than manual force may be used to manoeuvre the movable appendages of the hull, and for the emptying, filling and transferring the water of the ballast tanks."

Boats shall satisfy the following minimum norms:

E.1:

SELF-RIGHTING

During the measurement process, the skipper must physically demonstrate that the boat, once capsized, is capable of self righting without outside help.

This test is mandatory for the issue of the first Measurement certificate.

It is not mandatory for the renewal of the measurement certificate, except if significant modifications concerning the success of the test have been realised. This is left to the judgement of the Class Chief Measurer.

The Class Chief Measurer shall issue for each test a detailed report describing the relevant operations necessary for self-righting. In case of change of skipper, a copy of this report shall be transmitted to the new skipper.

E.2:

INITIAL HEEL ANGLE

From the vertical axis, due to the displacement of shifting weight: the amplitude from one extreme to the other, measured as described in F-3 shall not exceed 20°.

E.3:

ANGLE OF VANISHING STABILITY (AVS)

This angle shall not be less than 127,5°. This angle is calculated from the theoretical curve of stability, derived from measurements taken during stability test and from information by the designer.

The volume of the mast, which may be watertight wholly or in part, is not taken into account.

E.4:

STABILITY CURVE AREA RATIO

The positive area under the stability curve shall be at least 5 times greater than the negative area.

SECTION F – TESTS AND MEASURES RELATING TO STABILITY

F.1:

BOAT WEIGHING

Boat trim: like described in B.4.1.

The load cell used by the measurer shall carry a valid certificate of calibration.

F.2:

SELF RIGHTING TEST (180°)

Boat trim: like described in B.4.2

The hull floating upside down, that is to say with the deck turned through 180°, shall right itself and come deck upwards without any intervention externally to the boat.

This test shall be undertaken with the skipper inside the boat. The skipper may, without leaving the interior of the boat, operate any mechanism to initiate the righting up of the boat. In such circumstances, that is to say an active self righting system activated from within the boat, the presence of a second person is recommended.

This person shall not interfere in any way in the act of righting the boat.

The use of specific devices implies that such systems can be reset without any external help at least three times in a row and in a less than two hours. This is left to the judgement of the measurer.

Deliberate flooding of compartments is forbidden. As an exception, a boat with a fixed-keel may fill allocated forward ballast tanks providing both the following conditions are met:

- The allocated forward tanks shall be capable of being filled with the boat inverted and emptied with the boat upright.

- When upright with the allocated forward ballast tanks full, the forward freeboard shall be not less than 75% of the forward freeboard (as measured in B.4.1) with the forward ballast tanks empty.

F.3: INITIAL HEEL ANGLE TEST (20°)

Boat trim: like described in B.4.1.

The configuration of loading inducing the maximum heel on each side shall be required. The total of two measurements shall not exceed 20°.

F.4: TESTS OF STABILITY (90°)

Boat trim: like described in B.4.1.

With mast(s) and keel held in their vertical axes, the boat is pulled over her side at 90°, and held in this position by a stop around the mast. The measurements taken shall then be repeated by undertaking the same manoeuvre on the other side. The averages of the measured data will be recorded.

F.4.1: inclining force:

The load on the stop is recorded by use of a load cell. The place of the stop is also measured. These data are used to establish the vertical position of the boat's centre of gravity under this condition.

The load cell used by the measurer shall carry a valid certificate of calibration.

F.4.2: measurement of freeboards:

Forward and aft freeboards are recorded with the boat heeled at 90° to establish the longitudinal position of the boat's centre of gravity under this condition.

SECTION G – NAVIGATION EQUIPMENTS

G.1: ENGINE

a) Engine for Open 60':

The boat shall be equipped with a fixed in-board motorised propulsion system, with a minimum power output of 27 HP.

b) Engine for Open 50':

The boat shall be equipped with a fixed in-board motorised propulsion system, with a minimum power output of 10 HP.

c) General requirements:

The engine shall be securely covered, and the exhaust, fuel supply systems and fuel tank(s) permanently installed.

The engine shall have adequate protection from the effects of heavy weather.

When an electric starter is the only method for starting the engine, a separate battery, the primary purpose of which is to start the engine, shall be provided.

Each fuel tank shall be provided with a shutoff valve. Flexible tank is not permitted as a fuel tank.

d) Propulsion unit:

It shall be located below the waterline, as close as possible to the axis of the boat, and shall neither retract nor fold away. It shall be permanently in the running along the hull water flow.

G.2: BATTERIES / GENERATOR**a) Batteries:**

Shall be of a waterproof type or have electrolyte gel and shall not be moved during navigation. They shall be fixed in such a way as to be held fast, whatever the position of the boat in the water. They may be sealed into their compartments at the start of a race.

All types of battery charger are allowed, except those relying on fissionable materials.

b) Generator:

A separate generator for electricity can be installed. However, when a separate generator is carried it shall be permanently installed, securely covered, have adequate protection from the effects of heavy weather. It shall have permanently installed exhaust and fuel supply systems and fuel tank(s), with shutoff valve(s). Flexible tanks are not permitted.

A portable generator shall never be operated inside a yacht.

G.3: COMPASS

A marine magnetic compass, independent of any power supply, shall be permanently installed and correctly adjusted with deviation card.

A compass in addition to that required above shall be carried on board.

G.4: MARINE RADIO / NAVIGATIONAL POSITION-FIXING DEVICE

The following, in good working state, shall be provided:

a) A VHF marine radio transceiver. It shall have a rated output power of 25W, equipped with a **fixed** antenna.

An emergency antenna must be carried on board.

b) A Sat Com transceiver.

c) A radio receiver capable of receiving weather bulletins.

d) A direction finding radio on 121,5 MHz for man-overboard recovery, or any equivalent equipment on 121,5 MHz.

e) An automatic position fixing device (e.g. GPS).

f) A standard C terminal interfaced with GPS and equipped with the relevant software for polling and data reporting.

This device must be in perfect working order and installed in such a way as to avoid any possible deterioration. The Inmarsat C antenna must be attached at least 55 cm above the deck and in such a way as to be totally unobstructed within a radius of 60 cm around the antenna regardless of the yacht's position (hilt or other).

g) An echo sounder or, for lack, a lead line.

h) A speedometer or distance measuring instrument (log).

G.5: NAVIGATION DOCUMENTATION

Navigational charts (not solely electronic), light list and chart plotting equipment shall be provided **relating to the current race**.

G.6: ANCHORS

Two ground tackles, with one of which shall be ready for immediate use, shall be carried on board.

a) For Open 60', moorings shall combine:

The total weight of the two moorings shall be greater than 75 Kg.

b) For Open 50', moorings shall combine:

The total weight of the two moorings shall be greater than 50 Kg.

G.7: FLASHLIGHTS

The following shall be carried on board:

- A watertight high-powered flashlight or spotlight with spare batteries and bulbs.
- A watertight flashlight, with spare batteries and bulb.

G.8: TOOLS and SPARE PARTS

Tools and spare parts, including effective means to quickly disconnect or sever the standing rigging from the hull shall be provided.

SECTION H – SAFETY EQUIPMENTS

H.1: DURABLE STOWAGE CHART

A durable stowage chart shall be provided and shall be displayed in the main accommodation where it can best be seen, clearly marked with the location of the principal items of safety equipment.

H.2: DRAINING

The boat shall be equipped with a system of two permanently installed manual bilge pumps, one operable from above, the other from below deck, with a minimum capacity per pump of 4,5 litres per cycle and with a system of electric draining with a minimum total capacity of 3000 litres per hour. Both systems shall allow the emptying of each watertight compartment from the outside, **whatever the position of the boat in the water**, except the compartment for the batteries, which shall be emptied with a manual system.

No bilge pump may discharge into a cockpit unless that cockpit opens aft to the sea. Bilge pumps shall not be connected to cockpit drains.

Bilge pumps and strum boxes shall be readily accessible for maintenance and for clearing out debris.

Unless permanently installed, each bilge pump handle shall be provided with a lanyard or catch or similar device to prevent accidental loss.

Two buckets of stout construction each with at least 9 litres capacity shall be carried on board. Each bucket to have a lanyard.

H.3: EMERGENCY WATER

At least 9 litres of drinking water for emergency use shall be provided in a dedicated and sealed container or container(s).

H.4: SURVIVAL FIXING POINTS

External solid anchorage points, allowing the attachment of the life raft, the watertight container, individual grab bags and distress beacons, shall be provided in the vicinity of the aft escape hatch.

H.5: LIFERAFTS**a) Life rafts:**

Two life rafts shall be carried on board, one outside, built in respect of SOLAS norms, one inside. The two life-rafts must be accessible whatever the position of the boat in the water. The inside one shall be able to pass through all openings in the watertight bulkheads and all escape openings including the transom escape hatch. The inside life raft shall conform at least with OSR category 1, and shall be constructed with an insulated floor and capable to be inflated at a temperature of -15° C.

When racing with numerous crew members, the total capacity of the two life-rafts shall permit the evacuation of the entire crew.

b) Stowage:

The SOLAS life raft shall be stowed on the working deck or in a purpose-built rigid compartment, opening into or adjacent to the cockpit or working deck, or through the transom, and containing only this sole life raft. In the case of a compartment, it must be watertight or self-draining and have a cover capable of being easily opened under water pressure.

c) Recovery time:

Each raft shall be capable of being got to the lifelines or into the water within 15 seconds.

The life raft end of painter shall be permanently made fasten to a strong point of the boat.

d) Servicing and inspection:

Every life raft shall have a valid annual certificate, and a certificate (or copy) shall be kept on board.

Notwithstanding the specified servicing periods, the life rafts shall be carefully, frequently inspected externally, and taken for servicing if there is any sign of damage or deterioration.

H.6: LIFEBOYS

The following shall be provided within reach of the helmsman and ready for instant use:

- A lifebuoy with a self-igniting light and a drogue or a Life sling with a self-igniting light and without a drogue.
- A lifebuoy equipped with a whistle, a drogue, a self-igniting light and a pole and flag. The pole shall be carried on board permanently extended, except that automatic extension (e.g. by compressed gas or spring action) is permitted provided the device activates fully in less than 20 seconds. The pole and flag shall be attached to the lifebuoy with 3 m off floating line. It shall be so constructed that the flag flies at least 1.8m off the water.
- At least one of the lifebuoys shall depend entirely on permanent (e.g. foam) buoyancy.
- Each inflatable lifebuoy and any automatic device (e.g. pole and flag extended by compressed gas) shall be tested and serviced at intervals in accordance with its manufacturer's instructions.
- Each lifebuoy (or life sling) shall be fitted with marine grade retro reflective material.

H.7: PYROTECHNIC SIGNALS

Pyrotechnic signals shall be provided conforming to SOLAS LSA Code Chapter III Visual Signals and not older than the stamped expiry date (if any) or if no expiry date stamped, not older than 4 years.

Shall be provided:

- 6 red parachute flares SOLAS LSA III 3.1 norms
- 4 red hand flares SOLAS LSA III 3.2 norms
- 4 white hand flares (SOLAS LSA III 3.2 norms recommended)
- 2 orange smoke flares SOLAS LSA 3.3 norms

H.8: LIFEJACKETS

Each crew member shall have a life jacket conform to his relevant national regulations, and each life jacket shall be as follow:

- Equipped with a whistle.
- Fitted with marine grade retro-reflective material
- Compatible with the wearer's safety harness
- If inflatable, regularly checked for air retention
- Have one spare air capsule
- Clearly marked with the yacht's name.

H.9: SAFETY HARNESS and SAFETY LINES

Attention is drawn to ISO 12401 norms.

a) Safety harness:

Each crew member shall have a safety harness.

A crew member's harness and life jacket shall be compatible.

b) Safety lines (tethers):

Each harness shall be equipped with a safety line not more than 2m long with a snaphook at each end. In addition, at least 30% of the crew shall each be provided with either a safety line not more than 1m long, or a mid-point snaphook on a 2m safety line.

Attention must be drawn on U bolts as clipping points, because they can lead unclipping plain snaphook. For this reason the use of snaphooks with positive locking devices is strongly recommended.

H.10: SOFT WOOD PLUGS

Soft wood plugs, tapered and of the appropriate size, shall be attached or stowed adjacent to the appropriate fitting for every through-hull opening.

H.11: FIRE EXTINGUISHERS

Fire extinguishers, at least two shall be provided, readily accessible in suitable and different parts of the yacht. One shall be close to the engine.

H.12: FOGHORN

A foghorn shall be provided.

H.13: RADAR and RADAR REFLECTOR

The following equipment, in good working state, shall be provided:

a) Radar:

Radar fitted with powerful alarm. The radar unit shall be fixed at a height of at least 5 metres above the water line.

b) A fixed active radar transponder (9.2 – 9.5 Ghz).**c) A radar reflector.****H.14: EPIRBs**

Boat shall be equipped of two SARSAT COSPAS 406 MHz Epirbs portable distress beacons, classified as long-life. These beacons shall include a 121.5 MHz transmitter, be coded and registered with the name and MMSI number of the boat and shall be tested and serviced at intervals in accordance with its manufacturer's instructions. They shall be fitted with a line at least 3 metres long of 1000 daN minimum breaking strain.

H.15: EMERGENCY TRANSMISSION

Boat shall be equipped with an emergency device which, whatever the position of the boat in the water, allows the erection of a VHF aerial and transmissions from the distress beacon and the radar transponder (9.2 – 9.5 GHz frequency).

H.16: WATERTIGHT HAND HELD VHF TRANSCEIVER

A waterproof hand-held VHF transceiver, with spare batteries, shall be carried on board.

H.17: PORTABLE TRANPONDER RADAR

A radar transponder beacon (9.2 – 9.5 GHz frequency), portable and self-powered shall be carried on board. This beacon shall be fitted with a line at least 3 metres long of 1000 daN minimum breaking strain.

H.18: FIRST AID MANUAL and FIRST AID KIT**a) Manual:**

A First Aid manual shall be provided. In the absence of a National Authority's requirement, the latest edition of one of the following is recommended:

- International Medical Guide for Ships, World Health Organisation, Geneva, or
- First Aid at Sea, by Douglas Justins and Colin Berry, published by Adlard Coles nautical, London, or
- Le Guide de la medecine à distance, by Docteur JY Chauve, published by Distance Assistance BP33 F-La Baule, cedex, France. An English translation is available.

b) First aid kit:

A First Aid Kit shall be carried on board. It shall reflect the likely conditions and duration of the passage, and the number of people aboard the yacht. Before the start of a race, the skipper shall have undertaken at least once in the past five years a medical training reflecting the conditions of race. This training is strongly recommended for crew members.

It is strongly recommended to follow the prescription of Appendix C to the Class rules.

H.19: HEAVING LINE / THROWING SOCK

A heaving line of 15m – 25m length shall be readily accessible to the cockpit, and a Speedline or equivalent style rope launch shall be on board.

H.20: DIVING EQUIPMENT

One diving bottle (e.g. Spare Air bottle) or equivalent shall be on board.

H.21: YACHT'S NAME

Yacht's name shall be on miscellaneous buoyant equipment, such as lifejackets, oars, cushions, lifebuoys and life slings etc...

Marine grade retro-reflective material shall be fitted to lifebuoys, life slings and lifejackets.

H.22: PERSONAL EQUIPMENT

The following equipment shall be carried on board for each crew member:

- Two packs of mini flares or two personal location lights (either SOLAS or strobe), one shall be attached to, or carried on, the person when on deck at night.
- A foul weather suit with hood.
- A knife.
- A watertight flashlight.

H.23: PERSONAL SURVIVAL EQUIPMENT

Before the start of a race, the skipper shall have undertaken personal survival training at least once in the past five years. This training is strongly recommended for crew members.

One set of Survival Equipment shall be provided for each crew member to include:

- An immersion suit in accordance with Solas 74/83 standards and prEN 1913, which thermal insulation without liner shall be greater than 0.75 immersed Clo.
- A personal 121.5 MHz distress beacon (PLB) for use with the on-board DF equipment.

H.24: WATERTIGHT EMERGENCY CONTAINER

A watertight emergency container shall be carried on board. It shall be fitted with strong handles and with a line of 1000 daN minimum breaking strain. It shall contain at least:

- A watertight hand-held marine VHF transceiver with spare batteries.
- A hand-held watertight transceiver operating on aviation frequencies with spare batteries.
- An Iridium mobile phone with spare batteries
- A waterproof hand-held GPS with spare batteries
- A watertight flashlight with spare bulb and batteries
- A knife
- Cyalume type chemical light sticks
- Fluoresceine seamark
- A watertight strobe light with spare batteries
- 4 distress parachute flares
- 6 hand flares (3 red / 3 white)
- 2 floating orange smoke
- High energy food
- A survival blanket for each crew member

H.25: HULL MARKING

To assist in SAR location, sail number shall be displayed in a highly visible manner, once on the deck and once on each side of the hull. The sizes of the characters shall be not less than:

Height:	900 mm
Width:	600 mm
Thickness:	120 mm
Space between characters:	180 mm.

H.26: FLUORESCENT PAINT

To assist in SAR location:

- Keel (s), rudder (s), blade(s), and at least a minimum of 2 m² of the bottom below the waterline shall be entirely covered with special fluorescent paint.
- At least 2 m² of the surface of the deck shall be covered with a brightly highly visible coloured paint (e.g. dayglow pink, orange or yellow).

APPENDIX TO THE CLASS RULES

A – SPECIAL PROVISIONS:

1°) notwithstanding article C.5.4, boats launched before the 1st may 2000 may be equipped with only 3 watertight bulkheads, provided that in this case the boat has an unsinkable volume of 145%; or with only 4 watertight bulkheads, provided that in this case the boat has an unsinkable volume of 137,5%.

2°) notwithstanding article E.4, the positive area of the stability curve of boats launched before 1st January 1999 may be only 4 times greater than the negative area, instead of the 5 times greater as required in the class rules.

3°) notwithstanding article E.3, the angle of vanishing stability of boats launched before 31st December, 1996 may be less than 127,5°, provided that they have a GZ greater than 1,375 m (GZ : horizontal distance between the centre of gravity and the centre of the hull below the water line, as tested at 90°).

4°) notwithstanding article C.5.6, astern escape hatch, a different provision may be accepted for boats launched before 31st December, 1994, and on which the installation of such a hatch is physically impossible.

5°) notwithstanding article C.6.3, for boats built before 1st June, 2004, the toe rail may be installed only around the foredeck from abreast the mast (cf. OSR 3.17.1)

These authorisations are delivered only after request in writing to the Technical Committee.

B - CLASS RULES EVOLUTIONS AGENDA

(See Class Regulations § C.I)

Listed at the Technical Committee request, the agenda below is a list of items susceptible to be modified or incorporated into the Class Rule at the next Class General Meetings.

The date showed in bracket is the date of the Class General Meeting to which these proposals and their date of implementation will be submitted for a vote.

Therefore skippers and owners of already existing boats have at an early stage the possibility to take into consideration these foreseen changes before undertaking the modifications needed to put their boat into conformity with the Class Rule.

Designers of fore-coming boats are also invited to directly incorporate these changes during the designing stage.

The agenda will be kept up to date on the IMOCA Website. For further information, please contact the Class.

List of Items:**1°) Measurement protocol:**

This protocol shall be written and proposed by Imoca skippers and then validated by the Class Chief Measurer. The guiding principle shall be to preserve the “open” spirit of the Class. The protocol will have to be as detailed and exhaustive as possible for each operation which could be carried out for the measuring of Imoca boats.

(AGM 2005)

2°) H.5.b: Solas life raft stowage:

The current rule must be rewritten to take account of the various configurations of the boats. This modification will be made in a spirit of increased safety.

(AGM 2005)

3°) G.1: Engine / Power supply:

G.1 a) and b): engine power: This disposal is susceptible to evolve to proceed to a traction test. Adequate values are at the present being investigated by the Technical Committee.

(AGM 2005)

4°) F.3: Initial heel angle test:

A new configuration is at the present being investigated.

(AGM 2006)

■ C. CONTENTS OF FIRST AID KIT:

*NOT AVAILABLE ON THIS FILE
AVAILABLE ON PRINTED YEAR BOOK VERSION*

■ D. MEASUREMENT PROTOCOL FOR 50 AND 60 FEET:

Unavailable in this version.