

# CLASSE 9,50

## BASIC RULES

This rule applies to monohull sailing yachts, with the aim of racing offshore in real time.

A monohull is a boat with a single flotation plane at rest or under sail, whose hull depth in any transversal section shall not decrease towards the centre-line.

Current ISAF rules (RCV, ERS & OSR) apply

The Classe 9.50 monohull Class Rules are the open type set out in Paragraph C.3.3 of the ERS (Rules of Equipment for Sailing boats), meaning that anything that is not expressly forbidden, limited or enforced, is authorized.

The Class official language is French.

The Class 9.50 monohulls are aimed to coastal and offshore racing.

Skippers should note that their piloting is not without danger under certain sailing conditions, and that the decision to race is theirs alone, to enforce Article 4 of the RRS.

The safety of the boat and its crew is the inalienable responsibility of the sole owner, or its skipper, which must ensure that the yacht is in a good condition all over, perfectly seaworthy, and that it is manoeuvred by an experienced crew, which has taken the appropriate training and is physically capable of confronting the bad weather.

To enforce article 3 (c) of the RRS and whatever the circumstances of the possible accident, no legal responsibility can be sought from whatever party as regards the ISAF, the ANM (FFVoile), Classe 9.50, or an official measurer of the present rules.

The class must respect the conditions set out in Category C of the Publicity Code of the ISAF Ruling (Chapter IV; 20).

Routing is forbidden while racing.

The Class rule of the Classe 9.50 is applicable from January, 1st of each year to all the 9.50 yachts.

The Administration Committee of the Class has full and exclusive authority to modify and interpret the class rules. The official measurer is responsible for the application of the rules and can insist on a demonstration if necessary.

## Chapter 1

## GENERAL CHARACTERISTICS

### 100. GENERAL COMMENTS

The boat must comply with *all aspects of the 'NF EN ISO 12217 Small Craft – Stability and Buoyancy Assessment and Categorisation – part 2 : Sailing boats of hull length greater or equal to 6 m' for design Category A, as well as the requirements set out in the OSR for Sailing Category 1.*

*In the event of a conflict between the OSR and the NF EN ISO 12217 standard, the latter will prevail.*

The skipper will provide either a compliance certification to the standard issued by the yard, or a solemn declaration for the custom built leisure crafts (appendix 224-A.1 of the new division 224)

These rules are modified in the following way:

- a) 3.03.1 b) «ABS certification », does not apply.
- b) 3.04.3 « IMS Stability Index », does not apply.
- c) 3.04.4 « Stability Standard », replace « can » by « must ». See §301 of these rules.

- d) 3.08.3 « Companionway », does not apply, replaced by the restrictions set by the ISO 12217-2: §6.2.2.2 standard
- e) 3.14.3a « Pulpit Position », modified, see §403 of these rules.
- f) 3.14.7 « Pushpits/Pulpits, Stanchions, Lifelines », modified, see §403 of these rules.
- g) 3.19.1 « Bunks », modified, see §104 of these rules.
- h) 4.01.2 « Hull marking ». Modified, see §307 of these rules.
- i) 4.26.4 f « Working jib ». Modified, see §212.04 of these rules.
- j) Appendix H « Organisation of Ocean Races ». Does not apply.

→ RRS :

- a) §50.4 « Foresails», modified. See §212.03.01 of these rules.
- b) §51. « Movable ballast », does not apply.

## 101. APPENDAGES

The appendages are limited to one keel, fixed while sailing and two rudders (non lifting blades) maximum.

Note: Canards and dagger-boards are forbidden.

## 102. RIG

Canting and pivoting masts are forbidden

Forestays, backstays, runners and shrouds (permanent or temporary) must be fixed to chain plates situated inside the natural intersection of hull and deck. A tolerance of 20 mm is allowed for attached chainplates

Deck spreaders are forbidden

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## 103. SAILS

The total number of sails taken onboard is **limited to 7**, including a storm-jib.

Any material other than woven or laminated polyester is forbidden in the manufacture of the mainsail and jibs. Any material other than Nylon is forbidden in the manufacture of the spinnakers.

The mainsail must display the Classe 9.50 logo, which must be obtained exclusively from the Classe 9.50 committee.

## 104. INTERNAL FIXTURES

In addition to the OSR Cat 1 rules, there must be onboard:

- 1 chart table, permanently fixed
- A minimum of 4 bunks, permanently fixed
- 2 tanks of a minimum capacity of 50 L. for fresh water. They must be permanently fixed and the top them must not be higher than 10 cm above the DWL
- 1 tanks of a minimum capacity of 50L. for fuel, permanently fixed.

## 105. ENERGY

Electrical power is delivered through several batteries of a minimum global capacity of 200 A/h in 12 V for servitude batteries and of 40 A/h for the engine batteries.

These batteries must be watertight. By watertight, one means: of which the acid cannot leak immediately in a horizontal position. They must be fixed for the entire competition, in such a way that they cannot move, whatever the trim of the boat.

These batteries must be electrolytic using lead.

## Chapter 2

### DIMENSIONS

#### 200. DIMENSIONS

The dimensions that must be measured in compliance with the NF EN ISO 8666 standard are indicated by the name EN/ISO 8666 followed by the relevant chapter.

#### 201. LOADING CONDITIONS

The boat loading condition for the measurement trim is the *Light Craft Condition LCC* (in conformity with 6.3 of the EN ISO 8666 standard and 3.5.1 of the EN ISO12217-2 standard) **excluding** the mooring gear (anchor, chain and mooring line) and the loose external equipment (fenders, warps, mooring lines), the life raft and the sails.

#### 202. HULL LENGTH (Lh) : ( EN/ ISO 8666 §5. 2. 2)

**The hull length must not exceed 9,50 m.**

Reminder: This measurement does not include rudders and their fittings, bobstay fittings, devoid of devices designed to lengthen the waterline, nor pulpits and pushpits, solar panels and wind vane autopilots.

#### 203. MAXIMUM BEAM (Bmax) : ( EN/ I SO 8666 §5. 3. 2)

**The maximum beam must not exceed 3,75 m.**

#### 204. MAXIMUM DRAFT (Tmax) : ( EN/ I SO 8666 §45. 4. 4. 1)

**The maximum draft must not exceed 2,40 m** (boat in measurement trim §201)

#### 205. MEAN FREEBOARD

**The mean freeboard must not exceed 1 m.**

The mean freeboard is obtained by dividing the vertical projected area of the topside of the hull (up to the gunwale line as defined in EN ISO 8666 and interpreting the ERS for rounded gunwale) by the hull length (Lh).

#### 206. DISPLACEMENT

**The mass of the must not be less than 2.600 kgs** . This mass is established for a boat in loading conditions §201.

#### 207. SOLID AND WATER BALLASTS

207.01 Solid ballast: Reminder: See OSR §2 03 2a

207.02 Liquid ballast: **The maximum authorised volume of liquid ballast is 900 L. to be distributed symmetrically (450 L. on each side). In case of Bmax < than 3.75, the total volume must stay smaller to ((900 / Bmax) X 3,75 ), to be distributed symmetrically.**

(eg: if Bmax=3.60, ((900 / 3.60) x 3.75 = 937.5 litres)

The vents for each ballast must be located on the deck and have a minimum inside diameter of 25 millimetres. Each vent must have a cap permanently tied close by.

#### 208. MAST (Highest point)

A band measuring a minimum of 25mm in width in a contrasting colour must be affixed around the top of the mast. The lower part of this band will be situated at a **maximum height satisfying the two following measures:  $H_{mast} = (H_{main} + H_{jib} + H_{spin}) / 3 < \text{than } 15m50$ , given that the maximum height of the mast must never exceed 16.50 m** above the water surface. Hmain, Hjib, Hspin are the heights of the mainsail, jib and spinnaker halyard sheaves, taken from the waterline. All measures taken from the waterline apply for the boat in loading condition §201. No point of any set sail may be situated above the lower part of this band. In the absence of such a band, the high point will be the highest point of the tube making up the mast.

### 209. BOOM

The aftermost part of the boom must be further aft of the aftermost point used to determine the Lh, whatever the trim of the mainsail.

### 210. BOWSPRIT

Once in position, the forward extremity of the bowsprit must not exceed the forward extremity of the boat used to determine Lh **by more than 3.00 m**

### 211. SPINNAKER POLE

Once in position, the forward extremity of the spinnaker pole must not exceed the forward extremity of the boat used to determine Lh **by more than 2.00 m**

### 212. SAILS

The sail area is free providing it respects the limitations of the box (mast height, boom length, pole/sprit length). The race number must be worn on each side of the mainsails, jibs, genoas and storm-jib.

Additionally the mainsail must also display the national letters and the logo of the Class, available from the Class. National letters must be above the race number and starboard letters above the port side ones. Dimensions of the numbers and letters are defined by the International ISAF rules (RCV 2005-2008, Appendix G, Article G1.2)

## Chapter 3

## SECURITY

### 300. STABILITY : (EN/ISO 12217)

Reminder:

The boat must conform with all aspects of *the requirements set by the 'NF EN ISO 12217 Small Craft - Stability and Buoyancy Assessment and Categorisation- part 2: Sailing boats with a hull length greater or equal to 6 m' for the design category A*.

The skipper will provide either a compliance certification to the standard issued by the yard, or a solemn declaration for the custom built leisure crafts (appendix 224-A.1 of the new division 224)

The validation of the displacement will be made by the weigh-in (see chapter 301).

The validation of the height of the centre of gravity is based on the 90° test defined in chapter 302.

Within the framework of this check, the measurer will note down the following measurements on his report: Lh, Bmax, Tmax, average freeboard, top point of the mast, following the procedures file supplied by the Classe 9.50.

### 301. DISPLACEMENT CONFORMITY

The weigh-in of the boat in loading conditions §201 will have to be carried out in the presence of a measurer substantiated by the Classe 9.50, with the help of a weight indicator also substantiated by the Classe 9.50

This person will supply the class with a report of the weigh-in

### 302. 90° TEST

This test is aimed at proving that the boat is capable of righting itself from the broached position in its least favourable ballast configuration.

It must be completed in the presence of a measurer substantiated by the Class 9.50

The boat in loading conditions §201 is heeled at 90° and kept in this position with the aid of a strop passed around the mast at the level of the band at the top point of the mast (see §208 of the present rules). For boat whose mast height is 15.50 m, the tension exerted on the strop must not be lower than

140 kg, while if a tension higher than 190 kg is applied the yacht must not have any positive righting moment anymore. These values are only applicable if the band at a height of 15.50 metres. For a boat whose mast is shorter or longer, the force applied to the strop will have to be higher than a moment of  $140 \text{ kg} \times 15.50 = 2170 \text{ kg.m/H}$  but no higher than  $190 \text{ kg} \times 15.50 \text{ m} = 2945 \text{ kg.m/H}$  (ie: For a mast of 14.50m,  $2170/14.50=150 \text{ kg}$  and  $2945/14.50=203 \text{ kg}$ . For a mast of 16.50m 132 kg minimum and 178 kg maximum).

The boat is considered as heeled at 90° when the aftermost points of the sheerlines are situated in the same vertical plane. A certificate, signed by the architect specifying the least favourable ballast configurations must be provided before the test is performed.

### 303. WATERTIGHT BULKHEADS

A watertight collision bulkhead must be installed within 5 and 10% of LWL aft of the forward extremity of Lh and aft of the forward extremity of waterline.

### 304. COMBINED VOLUME OF DECK CAMBER AND ROOF

Its **minimum volume**, measured from the plan passing via the sheer lines (such as is defined in the EN/ISO 8666), must be **at least equal to the boat's maximum beam expressed in m<sup>3</sup>**. The presence of a **coach roof is compulsory**. It must provide **minimum headroom of 1.80 m on a ground area of 2m<sup>2</sup>**.

A certificate signed by the architect mentioning this volume and the minimum ground surface

### 305. BUOYANCY VOLUMES

A **minimum of 2.5 m<sup>3</sup>** of closed-cell foam is required. This volume, divided into a minimum of 4 compartments, must be distributed symmetrically around the boat's centre of gravity. The volume of the sandwich hull shell may be included in this volume of foam (but not the volume of the deck shell, nor that of the bulkheads).

The skipper must supply a file showing the detail and the distribution of the buoyancy volumes signed by the architect, the constructor and by his/herself.

### 306. PROPULSION

An engine with its fixed propulsion of a **minimum power of 13 kW** as well as a propeler must be installed.

### 307. HULL MARKING

The sail number (without its root) must be very clearly inscribed once on the deck (minimum height of 500 mm) and once each side of the hull (minimum height of 500 mm).

### 308. SAFETY MATERIALS

Reminder:

The onboard equipment must conform to the OSR ruling for the relevant race category, such as is modified by the present rules. The location of the life raft must enable its quick and easy launch, whatever the trim of the boat. It will have to be fixed to its designated location, and will possibly be sealed with lead.

## **COST LIMITATION**

### **MATERIALS**

#### **401. HULL, DECK, INTERNAL STRUCTURE AND FITTINGS**

Materials forbidden in the construction of the hull, deck, the interior structure and fittings are:

- Fibres: Carbon fibre, Aramide fibre and S or R Glass fibre (only E Glass is permitted)
- Cores: Nomex and Aluminium alloy Honeycomb cores

#### **402. CHAINPLATES**

Titanium and carbon are forbidden.

#### **403. STANCHIONS, PULPIT AND PUSHPITS**

Any material other than steel is forbidden

*OSR 3.14.3a): delete the terms "forward of the headstay" in the official English version*

#### **404. BALLAST**

All materials denser than lead is forbidden.

#### **405. RUDDERS AND STEERING SYSTEMS, KEEL FIN**

The forbidden materials are:

- Carbon fibre, S or R Glass
- Titanium
- Nomex and Aluminium alloy Honeycomb cores

#### **406. MAST, BOOM, POLE, BOWSPRIT**

The forbidden materials are:

- Titanium
- Carbon fibre whose tension modulus is greater than 245 GPa (manufacturer certification compulsory)

#### **407. LATERAL STANDING RIGGING**

Any material other than steel is forbidden

#### **408. SAIL MATERIAL**

Any material other than woven or laminated polyester is forbidden in the manufacture of the mainsail and jibs/genoas. Any material other than Nylon is forbidden in the manufacture of the Spinnaker.

## **CONSTRUCTION**

#### **409. HULL, DECK, INTERNAL STRUCTURE AND FITTINGS**

Processes involving resin pre impregnated reinforcements are forbidden in the construction of the hull, deck, internal structure and fittings.

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