# 11:METRE ONE DESIGN CLASS RULES

Version 01. January 2004



The 11:Metre One Design was designed 1990 by Ron Holland and Rolf Gyhlenius and these class rules were adopted by International Sailing Federation (ISAF) 1997.



# 1 **GENERAL**

# 1.1 One-Design Clause

1.1.1 Anything not specifically permitted in these class rules is <u>PROHIBITED</u>.

# **1.2** Abbreviations

- 1.2.1 ISAF International Sailing Federation
  - MAN IYRU Member National Authority
  - ICA International Class Association
  - NCA National Class Association
  - ICF International Class Fee
  - MF Measurement Form
  - MC Measurement Certificate

# **1.3** Authority

- 1.3.1 The authority of the class is the ISAF which will co-operate with the ICA in all matters concerning these class rules.
- 1.3.2 Neither ISAF, the ICA nor the Copyright Holder accept any legal responsibility in respect of these class rules or claims arising there from.

# **1.4** Class Rules and their Interpretation

- 1.4.1 Whenever in these rules the words "class rules" are used, they shall be taken as including the measurement diagrams and the MF.
- 1.4.2 In the event of discrepancy between these class rules, plans or building specifications, the matter shall be referred to ISAF.
- 1.4.3 Amendments to these class rules shall be proposed by the ICA and approved by ISAF which shall consult the Copyright Holder.
- 1.4.4 Any interpretation shall be made by ISAF which may consult the Copyright Holder.



# 2 **ADMINISTRATION**

### 2.1 Language

- 2.1.1 The official language of the class in English and in the event of dispute over translation the English text shall prevail.
- 2.1.2 The word "shall" is mandatory. The word "may" is permissive.

# 2.2 Administration of the class

- 2.2.1 The MNA may delegate its functions, as stated in these class rules, to a NCA.
- 2.2.2 In countries where there is no MAN, its functions as stated in these class rules shall be carried out by the ICA which may delegate the administration to a NCA.

# 2.3 International Class Fee

- 2.3.1 The ICF shall paid to NCA or ICA in areas where there is no NCA.
- 2.3.2 The amount of the ICF is established by ICA.

# 2.4 Licensed Builders

- 2.4.1 Builder shall be licensed by the Copyright Holder.
- 2.4.2 Applications for a Building License shall be made to the Copyright Holder who shall request ICA for support.
- 2.4.3 Should a Licensed Builder supply boats which fails measurement then this shall be considered grounds for withdrawal of the Building License.
- 2.4.4 The builder shall weigh and record the different parts of the boat as specified in the Building Manual before delivery and issue a Builders Declaration.

# 2.5 Registration

2.5.1 The Licensed Builder shall apply to the Copyright Holder for a sail number. The sail number is also used as the official ID number of the boat.

### 2.6 Measures

- 2.6.1 Boats shall only be measured by a measurer appointed by a MAN and approved by the ICA.
- 2.6.2 A measurer shall not endorse any part owned or built by himself, or which he is an interested party or has a vested interest.
- 2.6.3 If a measurer is in doubt of the legality of any part, he shall report accordingly on the MF.

# 2.7 Measurement

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- 2.7.1 Measurements shall be taken in accordance with the "ISAF Measurements Instructions" unless otherwise specified in these class rules.
- 2.7.2 Hull and appendages shall conform with the class rules in force when the boat was first measured while rig, sails and equipment shall conform with the current class rules.
- 2.7.3 Major damages requiring rebuilding or replacement of a gel coat surface shall be inspected and documented by a measurer before the work is commenced. Documentation of the inspection and of the work involved must be submitted when the boat is presented for re-measurement and the work involved shall be added to the MC. The measurer shall use approved templates when measuring keel and rudder. Tolerances shall be equal or smaller than is stated in drawings.
- 2.7.4 Any alleged or suspected alteration to the configuration of the hull, deck, keel, rudder, spars, original fittings or equipment, which are not permitted by these class rules, shall be compared with previous measurements or a sample of 10 other boats.
  - a) The disputed boat shall be accepted if she does not show any evidence of having been altered and if she has dimensions equal to, or between those, of the maximum and minimum dimensions obtained from the sample of 10 boats.
  - b) If there is evidence of any alterations having been made of if the dimensions are greater or less than those of maximum or minimum dimensions obtained from the sample of 10 boats, the matter shall be referred to the MC issuing authority.
- 2.7.5 New or substantially altered sails shall be stamped, signed, dated and numbered near the tack by the measurer. The details including the measurers <u>name and number</u> shall be entered on MC.
- 2.7.6 A boat shall be liable to re-measurement at the discretion of a MAN or race organizing authority.

#### 2.8 Measurements Certificate

- 2.8.1 The owner shall send the Owners Declaration and the completed MF to the ICA together with any fee that may be required.
- 2.8.2 Upon receipt of a Owners Declaration and the completed MF the ICA may issue a MC.
- 2.8.3 For the MC to be valid a current Active Membership Sticker of the ICA shall be attached to the MC.

### 2.9 Change of ownership

2.9.1 Change of ownership invalidates the MC, but shall not necessitate re-measurement. The new owner shall apply to the ICA for a new MC, returning the old certificate together with any re-registration fee that may be required. A new MC shall then be issued to the new owner.



# 3 HULL

### 3.1 General

3.1.1 The hull shell and deck shall only be built in molds approved by the Copyright Holder and in accordance with the Building Manuals and Official Plans.

# **3.2** Painting and fairing

- 3.2.1 The entire surface area of the hull, keel and rudder below the waterline shall be painted. Any type of paint within the limitations of RRS 53 Skin Friction is permitted.
- 3.2.2 Hollows and indentations on the hull exterior as supplied by the builder may be filled in order to achieve a fair surface. Light hand sanding of the gel coat in preparation of the application of an overcoat material is permitted.

# **3.3** Fittings

- 3.3.1 The fittings and equipment installed by a Licensed Builder shall not be replaced by other type, modified or moved except where permitted by these class rules.
- 3.3.2 Boats built before 1 January 1992 may add foot rests in order to achieve similar functions as in boats produced after 1 January 1992.
- 3.3.3 Boats bullet before 1 February 1993 may install a horizontal cockpit support as supplied by a Licensed Builder.
- 3.3.4 Maximum four windows or skin fittings, one each for depth meter and/or knot meter or log and two for marine toilet may be fitted.
- 3.3.5 OCR approved pulpit, pushpit, stanchions and lifelines may be fitted.
- 3.3.6 Mainsheet traveler may be of any model.



# 4 HULL APPENDAGES

### 4.1 Keel

#### 4.1.1 Builder.

- 4.1.1.1 The keel shall be built by a Licensed Builder in accordance with Building Specifications and the Official Plans. The keel shall be fitted in accordance with the Building Manual.
- 4.1.1.2 Hollows and indentations on the keel exterior as supplied by the builder may be filled in order to achieve a fair surface. Light hand sanding of the gelcoat in preparation of the application of an overcoat material is permitted. Removal of gelcoat within 100 mm of aft edge of the keel in order to achieve a fair trailing edge is permitted providing the trailing edge is nowhere less than 8 mm.
- 4.1.1.3 The keel shall be painted.

# 4.2 Rudder and Tiller

#### 4.2.1 Builder.

4.2.1.1 The rudder and tiller shall be supplied by any Licensed Builder and in accordance with the Building Manual and Official Plans.

#### 4.2.2 Painting and Fairing

- 4.2.2.1 The rudder shall be painted
- 4.2.3.2 Hollows and indentations on the rudder exterior as supplied by the builder may be filled in order to achieve a fair surface. Light hand sanding of the gelcoat in preparation of the application of an overcoat material is permitted. Removal of gelcoat within 100 mm of aft edge of the rudder in order to achieve a fair trailing edge is permitted providing the trailing edge is nowhere less than 4 mm.

#### 4.2.3 Fittings

- 4.2.3.1 Tiller extension of any material and length may be fitted.
- 4.2.3.2 The upper rudder bearing may be relocated to achieve alignment with the keel.



# 5 MAST

# 5.1 Manufacturer

5.1.1 The mast shall be supplied by a Licensed Manufacturer. Masts produced before 1992 may move the jumper wires to maximum 300 mm above the upper spreaders.

# 5.1.2 Fittings

- 5.1.2.1 The mast shall be attached to the tabernacle with two bolts with a length of minimum 120 mm and a diameter of minimum 16 mm.
- 5.1.3.1 Measurement bands of contrasting colour and with a minimum width of 20 mm shall encircle the mast. The distance between the upper edge of the lower band and the lower edge of the upper band shall be maximum 11.000 mm.

#### 5.2 Boom

#### 5.2.1 Manufacturer

5.2.1.1 The boom shall be supplied by a Licensed Manufacturer and shall not be modified excepts as permitted by 5.2.3.1.

#### 5.2.2 Dimensions

- 5.2.2.1 A measurement band of contrasting color and a minimum width of 20 mm shall encircle the boom. The forward edge of the band shall not be more than 4150 mm from the aft surface of the mast when the boom is held in the centerline of the boat and at right angles to the mast.
- 5.2.2.2 A maximum set of 20 mm measured to a straight line between the upper edge at the mast and the upper edge at the measurement band is permitted.
- 5.2.2.3 The extension of the upper edge of the boom, when held at right angles to the mast, shall not cut the aft edge of the mast lower than the upper edge of the lower measurement band.

#### 5.2.3 Fittings

- 5.2.3.1 The reefing equipment on the forward end of the boom may be removed.
- 5.2.3.2 Stowage device for the spinnaker pole may be fitted.

#### 5.3 Spinnaker Pole

#### 5.3.1 Manufacturer

5.3.1.1 The manufacturer is optional.

#### 5.3.2 Materials

5.3.2.1 The spinnaker pole tube shall be made of an aluminum alloy extrusion and have the same diameter over its full length.

#### 5.3.3 Dimensions

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5.3.3.1 The overall length, including its end fittings, shall not exceed 4000 mm and the diameter shall nowhere be less than 63 mm.

#### 5.3.4 Fittings

5.3.4.1 Pole shall have bridles for downhaul and pole lift, two piston-type fittings of any kind. Tripping line or lines are permitted.

#### 5.3.5 Weight

5.3.5.1 The weight, including fittings, shall not be less than 5.7 kg.

# 5.4 Standing Rigging

#### 5.4.1 Manufacturer

- 5.4.1.1 The standing rigging shall be of multistrand wire as supplied by Licensed Builder.
- 5.4.1.2 The distance, when racing, between pins at attachment point on the mast, for the forestay, and at attachment point on stemhead fitting shall not be more than 10490 mm and not less than 10400 mm.

#### 5.4.4 Additional rules

- 5.4.4.1 a) The forestay and shrouds including turnbuckles shall not be adjusted while racing.
  - b) The permanent backstay shall be fixed to the masthead crane and backstay bridle.
  - c) A system with minimum equal strength as the permanent backstay adjuster blocks that prevent the mast top to go forward and invert the mast if the blocks breaks.

# 5.5 Running Rigging

#### 5.5.1 Manufacturer

5.5.1.1 The manufacturer is optional

#### 5.5.2 Materials

5.5.2.1 Synthetic rope may be of any material.

#### 5.5.3 Dimensions and Fittings

- 5.5.3.1 The following rigging is permitted:
  - a) Each function of running rigging, except for permanent backstay and running backstays, shall be controlled by one tail.
  - b) One spinnaker halyard of synthetic rope not less than 8 mm diameter. one cleat on the cabin top and/or 1 or 2 on the mast.
  - c) One main halyard of wire not less than 4 mm diameter and/or synthetic rope not less than 8 mm diameter. One cleat on the cabin top and/or on the mast.
  - d) One jib halyard of wire not less than 4 mm diameter and/or rope not less than 8 mm diameter, which shall not intersect the forward surface of the mast above the intersection of the extension of the forestay and mast surface. One cleat followed by maximum one fairlead or block on cabin top.
  - e) One kicking strap (vang) of synthetic rope and/or wire contained in a tackle system. One cleat on the cabin top.
  - f) One mainsail outhaul of wire and/or synthetic rope contained in a tackle system. One cleat on the boom and/or one on the cabin top.



- g) Cunningham control line of synthetic rope in a tackle system. One cleat on cabin top.
- h) One permanent backstay adjuster tackle of not less than 8 mm diameter synthetic rope and a 4:1 minimum power ratio attached to bride. Two fixed cleats on cockpit console.
- i) One control for each running backstay of not less than 8 mm diameter synthetic rope to a winch on the cockpit console in a 1:1 maximum power ratio tackle system. If a double ended system is used one tail shall have a maximum power ratio 2:1 and the fine tune system have a maximum power ratio of 16:1. No winch shall be used together with a double ended system and no hardware shall be installed in front of companionway bulkhead.
- j) Main sheet traveler control line (s) of synthetic rope not less than 6 mm diameter.
- k) One mainsail sheet of synthetic rope not less than 10 mm diameter. One cleat on cockpit console.
- 1) Spinnaker sheets of synthetic rope not less than 8 mm diameter, passing through clutches and the aluminum tubes in the cockpit. One rope clutch on each side of the boat.

#### One of the following two jib sheet systems:

- m) One jib sheet of synthetic rope not less than 8 mm diameter, passing trough the aluminum tube on port side. Power ratio 1:1. One cleat on the cabin top
- m.1) One jib sheet of synthetic rope not less than 6 mm diameter, passing trough the aluminum tubes on foredeck. System behind the mast is free. All hardware and lines shall be on top of the deck and the cabin house and all hardware in front of mast shall be secured fastened to the deck, the jib track traveler or the jib. Maximum two trim tails.
- n) Reefing lines of synthetic rope with block system.
- o) One spinnaker downhaul of synthetic rope not less than 8 mm diameter in minimum 2:1 tackle system. One cleat on the cabin top.
- p) One spinnaker lift of synthetic rope not less than 6 mm diameter. One cleat on the cabin top/and or on the mast.
- q) One jib traveler control line of synthetic rope. One cleat on the cabin top.
- r) Two barber haulers with block for spinnakers sheets of synthetic rope not less than 6 mm. One cleat and maximum two fixed blocks/padeyes on each side of the boat mounted aft of the chainplates.
- s) Each checkstay shall be controlled by a rope not less than 6 mm diameter in a minimum 3:1 ratio tackle system. The tackle with cleat shall be attached to the aft/lower end of the checkstay and the running backstay.
- t) One boom topping lift fixed to masthead crane.



# 6 SAILS

#### 6.1 General

- 6.1.1 Sails shall be made and measured in accordance with the current "ISAF Sail Measurements Rules", except where varied herein. Where a term defined or a measurement given in the IYRU Sail Measurement Rules is used in these rules it is printed in *"italic"* type.
- 6.1.2 The manufacturer of sails is optional.
- 6.1.3. No sail shall be used as an 11:Metre sail unless measure in accordance with 2.7.5.

### 6.2 MAINSAIL

#### 6.2.1 Construction

- 6.2.1.1 The construction shall be: *Soft sail*.
- 6.2.1.2 Type, weight and numbers of *ply* is optional
- 6.2.1.3 The *sail* shall have 5 full lengths battens. A full length batten is defined as a batten from leech to luff.
- 6.2.1.4 The following are permitted: Stitching, glues, tapes, bolt ropes, corner eyes, headboard with fixings, Cunningham eye/pulley, batten pocket elastic, batten pocket end caps, mast and boom slides, leech line with cleat, windows, sailmaker label, draft stripes, tell tales. Sales may be loose footed.

#### 6.2.2 Dimensions

minimum	maximum
	11600 mm
	11450 mm
	3720 mm
	2930 mm
	1600 mm
	160 mm
	160 mm
	100 mm
	minimum

# 6.3 HEADSAIL (JIB)

#### 6.3.1 Construction

- 6.3.1.1 The construction shall be: Soft Sail
- 6.3.1.2 Type, weight and numbers of ply is optional.
- 6.3.1.3 The headsail shall have 3 batten pockets in the leech. Top batten shall be a full length batten. The middle and lower batten may be full length battens. Battens do not have to be removed for sail measurement purposes.

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6.3.1.4 The following are permitted: Stitching, glues, tapes corner eyes, clewboard, jib fasteners, batten pocket elastic, batten pocket end caps, leech line with cleat, windows, sailmaker label, tell tales.

#### 6.3.2 Dimensions

	<u>mınımum</u>	maximum
Luff length		9600 mm
Leech length		8800 mm
Foot length		2950 mm
Foot median		9400 mm
Quarter width		2150 mm
Half width		1500 mm
Three Quarter width		820 mm
Top width		59 mm
Foot irregularity		100 mm
Batten pocket length: Middle and lowermost batten pocket:	<u>minimum</u>	<u>maximum</u>
Inside	500 mm	
Head point to intersection of leech and Centerline of uppermost batten pocket	2170 mm	2230 mm
Head point to intersection of leech and centerline of middle batten pocket Head point to intersection of leech and	4370 mm	4430 mm
Centerline of lowermost batten pocket	6570 mm	6630 mm

6.3.3 The jib shall be attached to the headstay with fasteners, each not wider than 40 mm and not closer together than 450 mm, except within 100 mm from the centerline of a fullbatten pocket whereas the distance is free.

# 6.4 <u>SPINNAKERS</u>

#### 6.4.1 <u>Construction</u>

- 6.4.1.1 The construction shall be: Soft sail, single ply sail.
- 6.4.1.2 <u>The ply fibers shall be of polyester or polyamide.</u>
- 6.4.1.3 The following are permitted: Stitching, glues, tapes, corner eyes, recovery line eyes, sailmaker label.

#### 6.4.2 <u>Dimensions</u>

minimum	maximum	
Leech lengths	12000 mm	12500 mm
Foot length	6800 mm	7000 mm
Foot Median	13000 mm	14300 mm
Half width	6800 mm	7160 mm
Plyweigth of the body of the sail	$35 \text{ gr/m}^2$	

# 6.5 Identification Marks

- 6.5.1 The class Insignia, the sail number and letters, as issued by the Copyright Holder shall be in accordance with IYRR, except where varied herein.
- 6.5.2 The class Insignia shall be red on all mains produced after January 1, 1995, placed above the sail numbers and

shall conform with the following diagram:



# 6.6 <u>Additional Rules</u>

- 6.6.1 Only sails endorsed in accordance with rule 2.7.5 shall be used.
- 6.6.2 <u>A spinnaker endorsed before September 1, 1995, may be measured according to class rules 1993.</u>
- 6.6.3 The mainsail shall not be set so that the highest visible point at the head is higher than the lower edge of the upper measurement band, nor so that the leach or its extension cuts the top of the boom beyond the inner edge of the boom measurement band.
- 6.6.4 <u>The tack of the jib shall not be adjusted whilst racing.</u>
- 6.6.5 <u>Only one set of battens may be used during a regatta.</u>
- 6.6.6 Not more than one mainsail, one jib, one spinnaker and one spare spinnaker shall be carried on board while racing. Only one mainsail, one jib and one spinnaker shall be used during one regatta with the exception that the spare spinnaker shall not be used if the ordinary spinnaker has been damaged to an unusable condition. The spare spinnaker shall not be used in the same race as the ordinary spinnaker. The ordinary spinnaker shall have the number "1" and the spare spinnaker shall have the number \*"\*2" visible on the both tacks.
- 6.6.7 <u>Maximum one new mainsail, one new spinnaker and two new jibs may be measured per calendar year (new sails means all sails not older than 6 months from the day they where first stamped) and boat with the following exceptions:</u>
  - a) The owner of a new boat, which is built during the first six months of a calendar year, may additionally measure one mainsail, one spinnaker and one jib during the calendar year when the boat, was built.
  - b) Stolen or lost sail my be replaced. The measurer shall report this on the MC and to the ICA.
  - c) A severely damaged sail may be replaced. The measurer shall report this on the MC and the ICA.
  - d) A severely damaged sail may be replaced. The measurer shall report this on the MC and to the ICA.
  - e) A boat that is chartered may use any sails as long as they are legal.
- 6.6.8 <u>Anchor(s), optional outboard motor and other equipment shall be securely fixed against movement and stored</u> under the cockpit or on the cabin floor aft of mast support.



# 7 <u>EQUIPMENT</u>

# 7.1 <u>Mandatory</u>

- 7.1.1 <u>A bucket of a minimum capacity of 10 liters.</u>
- 7.1.2 An anchor with or without chain of combined minimum weight of 6 kg. An anchor line with a length 40 m of minimum 8 mm non floating warp. The minimum weight of the anchor shall be 5 kg and the maximum weight of the chain carried shall not exceed 6 kg.
- 7.1.3 <u>At least one fixed marine type compass of magnetic card or digital readout type capable only of instantaneous readout.</u>
- 7.1.4 <u>At lest one paddle or oar, not less than 1200 mm in length.</u>
- 7.1.5 Life jackets for each member of the crew.
- 7.1.6 <u>Al least two pliers or one wrench and a plier capable of disconnecting the standing rigging.</u>
- 7.1.7 <u>One marine first aid kit.</u>
- 7.1.8 Four fenders with a minimum cross section of 200 mm.

# 7.2 <u>Optional</u>

- 7.2.1 <u>One mechanical wind indicator with or without light.</u>
- 7.2.2 Electrical devices to record, measure and calculate average speed, and indicate distance and water depth. One electronic aid for navigation. The instruments shall not be interfaced together.
- 7.2.3 Battery of maximum 20 kg securely fixed.
- 7.2.4 <u>Radios and directions finder.</u>
- 7.2.5 Additional interior and personal equipment.
- 7.2.7 Additional safety equipment.
- 7.2.8 <u>Navigation lights on boat and mast.</u>
- 7.2.9 <u>Watertight port lights may be mounted in cockpit.</u>
- 7.2.10 <u>Watertight hatch on foredeck.</u>
- 7.2.11 <u>An outboard engine.</u>
- 7.2.12 <u>An outboard motor bracket.</u>
- 7.2.13 Cushions for berths.
- 7.2.14 Fixed hardware, mounted in order to optimize the boat to local rules. These systems shall not be used in class racing and no blocks shall be attached.
- 7.2.15 <u>Two extra cleats mounted for the tail from the cabin winches.</u>

# 7.3 Additional rules

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- 7.3.1 The total weight of the crew shall not exceed 350 kg in at least shorts and T-shirt at weight in prior to a regatta. A crew nominated or listed for a regatta or a series of races held over consecutive days including any lay-day, shall remain the same individuals troughout the event unless substitution is authorized by the race committee.
- 7.3.2 One child no older than 10 years is allowed on the boat if he or she has his/her legs in the leg compartment zone and sits in the sating area of the cockpit and wears a life jacket. The weight of this child shall not then be included in the total weight of the crew.
- 7.3.3 While tacking is not permitted to use any part of the rig in order to heel the boat.
- 7.3.4 <u>Permitted hiking. While sitting on the boat the spine shall not lean out more than vertical and no part of the thigh shall be outside the sheerline.</u>