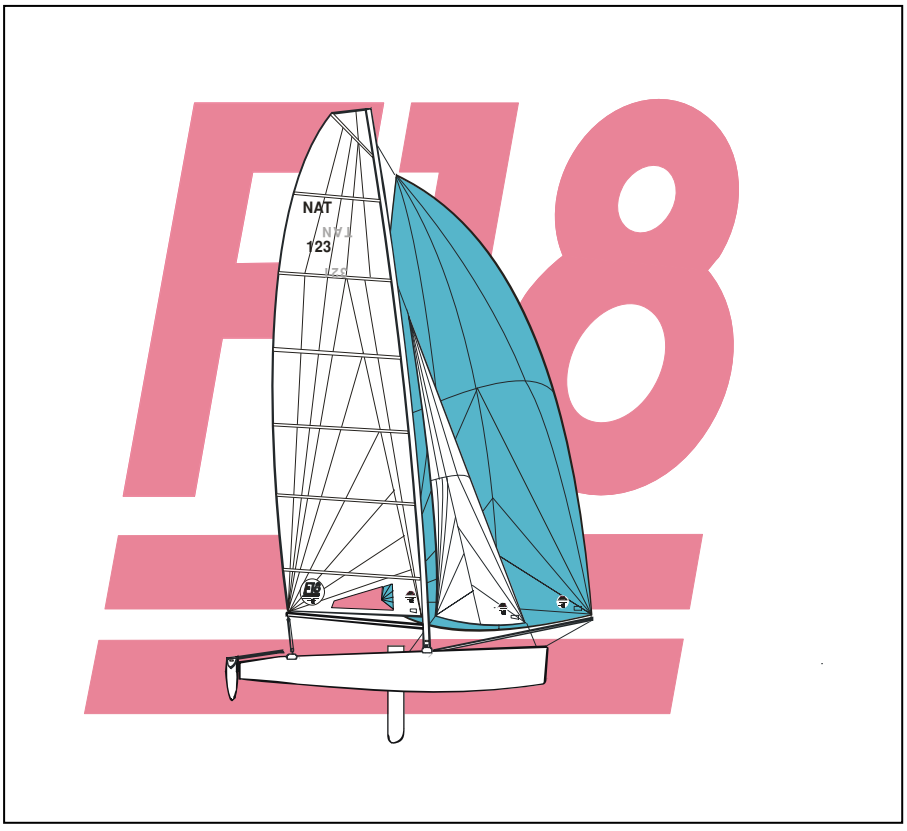
INTERNATIONAL FORMULA 18 CATAMARAN CLASS RULES

2009



The International Formula 18 Catamaran Formula was designed in 1993 by M. Olivier Bovyn and M. Pierre-Charles Barraud and was adopted as a Recognised class in 1996 and as an International Class in 2002.

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INTRODUCTION

THE FORMULA 18 CONCEPT IN A FEW WORDS:

The box measurement rule allows manufacturers to develop catamarans that are competitively priced yet allowing freedom to builders to develop to higher levels of performance. Being open to any manufacturer allows many builders and sail makers to compete and so keep costs to a minimum.

The Class remains aware to keeping development under control, maintaining a good balance between cost and performance. Corrected crew weights allows fairer racing with more ladies involved as helms and crews.

IF18CA measures hulls, hull appendages, rigs and sails which are required to conform to IF18CA standards, such boat parts only being altered to stay in line with current IF18CA rules.

Appendix A. Cloth list issued February 2008-11-21
Appendix B. Class drawings
Appendix C. Championship rules.

PART I – ADMINISTRATION

Section A – General

A.1 LANGUAGE

A.1.1 The official language of the IF18CA is English and in case of dispute over translation the English text shall prevail.

A.1.2 The word "shall" is mandatory and the word "may" is permissive.

A.2 ABBREVIATIONS

A.2.1

ISAF	International Sailing Federation
MNA	ISAF Member National Authority
IF18CA	International Formula 18 Catamaran Association
NCA	National Formula 18 Class Association
ERS	Equipment Rules of Sailing
RRS	Racing Rules of Sailing
IHC	ISAF In-House Certification

A.3 AUTHORITIES

A.3.1 The International Authority of the IF18CA is the ISAF which shall co-operate with the IF18CA in all matters concerning these rules.

A.3.2 Notwithstanding anything contained herein, the IF18CA has the authority to withdraw a certificate and shall also do so on the request of the ISAF.

A.3.3 The IF18CA shall keep a record of the measurers recognized by a NCA, an MNA or ISAF.

A.4. ADMINSTRATION OF THE ASSOCIATION

A.4.1 The Class is administered by the IF18CA.

A.4.2 At National level, an NCA administers the Class, by IF18CA delegation. In countries where there is not an NCA, then IF18CA will cover such duties.

A.5 ISAF RULES

A.5.1 These rules shall be read in conjunction with the ERS.

A.5.2 Except where used in headings, when a term is printed in "**bold**" the definition in the ERS applies and when a term is printed in "*italics"* the definition in the RRS applies.

A.6 CLASS RULES VARIATIONS

A.6.1 At Class Events RRS 87 and ISAF Regulation 26.5(f) apply.

A.7 CLASS RULES AMENDMENTS

A.7.1 Amendments to these rules are subject to the approval of the ISAF in accordance with the ISAF Regulations, and then ratified by the World Council of the IF18CA before implementation.

A.7.2 Amendments shall be placed on one year's notice unless it is considered essential to act immediately to prohibit or penalize an undesirable feature.

A.8 CLASS RULES INTERPRETATION

A.8.1 Interpretation of these rules shall be made in accordance with the ISAF Regulations.

A.8.2 These rules shall take precedence over the Measurement Form.

A.8.3 Any interpretation of these rules required at an event may be made by the International Jury constituted in accordance with RRS (Appendix N). Such interpretation shall only be valid during the event and the Organising Authority shall, as soon as practical after the event inform ISAF, the MNA and the IF18CA.

A.9 INTERNATIONAL CLASS FEE AND ISAF BUILDING PLAQUE

A.9.1 International Class fee shall be paid every year to ISAF.

A.9.2 From 1 September 2009 all new boats shall have ISAF plaques affixed to the boats.

A.10 RECORD OF MEASUREMENT CERTIFICATES

A.10.1 Each NCA shall keep a complete record of all F18 catamarans and sails that have been **certified** within that country.

A.11 BOAT CERTIFICATION

A.11.1 A **certificate** shall record the following information:

(a) Class
(b) **Certification authority**
(c) Sail number issued by the **certification authority**
(d) Owner
(e) **Hull** identification
(f) Builder/Manufacturers details
(g) Date of issue of initial **certificate**
(h) Date of issue of **certificate.**

A.12 VALIDITY OF CERTIFICATE

A.12.1 A **certificate** becomes invalid upon:

(a) the change to any items recorded on the hull **certificate** as required under A.11.1
(b) any alteration to **corrector weights**
(c) withdrawal by **certification authorities**
(d) the issue of a new **certificate**

A.12.2 Any change of ownership shall be recorded on the **certificate**.

Section B – Boat Eligibility

For a **boat** to be eligible for *racing*, it shall comply with the rules in this section.

B.1 CLASS RULES AND CERTIFICATION

B.1.1 It is the responsibility of the **skipper** to ensure that the **boat**, its **spars**, **sails** and equipment are certified and to ensure that they thereafter comply with **rules.**

B.1.2 The **boat** shall:

(a) be in compliance with these **rules**

(b) have a valid **certificate** for platform, mast, sails, appendages

(c) have valid **certification marks** as required

(d) have a completed, signed and dated Measurement Form.

B.1.3 All **certified boats** may be liable to re-measurement at the discretion of the **certification authority** or by an International Jury constituted in accordance with the RRS (Appendix N.) at an event, but only by a measurer**.**

B.2 CERTIFICATION MARKS

B.2.1 A valid Association sticker as required by the IF18CA shall be affixed to each measured item in the required position (see diagram), as a part of **certification marks.**

PART II – REQUIREMENTS AND LIMITATIONS

The intention of these **Class rules** is to ensure that the **boats** are as alike as possible in all aspects affecting performance. The **crew** and the **boat** shall comply with the rules in Part II when *racing*. In case of conflict Section C shall prevail.

The rules in Part II are **closed class rules** where anything not specifically permitted by the **Class rules** is prohibited. **Certification control** and **equipment inspection** shall be carried out in accordance with the ERS except where varied in this Part.

Section C – Conditions for Racing

C.1 GENERAL

C.1.1 RULES

(a) The ERS shall apply.

(b) RRS 49.1 shall not apply.

(c) RRS 50.4 shall not apply.

(d) RRS Appendix G.1.3 (d) shall not apply.

C.2 ADVERTISING

C.2.1 LIMITATIONS

Advertising shall only be displayed in accordance with the ISAF Advertising Code. (See ISAF Regulation 20)

C.3 CREW

C.3.1 MEMBERSHIP

a) Crews are not permitted to enter a Formula 18 event unless they are current members of their NCA.

b) In countries where there is no NCA, the crew shall be member of the IF18CA.

C.3.2 LIMITATIONS

(a) The **crew** shall consist of 2 persons.

(b) The **crew** shall use the sails (as defined in G.2.3) in accordance with the following weight categories:

(1) **Crew** between 115 kg and 130 kg shall sail with the small jib and small spinnaker and then shall carry extra weight equal to half the difference between their actual weight and 130 kg.

(2) **Crew** between 130 kg and 140 kg shall sail with the small jib and the small spinnaker and shall not carry extra weight.

(3) **Crew** in between 140 kg and 150 kg may use the large jib and the large spinnaker and then shall carry extra weight equal to half the difference between their actual weight and 150 kg.

(4) **Crew** weighing 150 kg and over may use the large jib and the large spinnaker without carrying any extra weight.

C.3.3 WEIGHTS

(a) The minimum combined **crew** weight is 115 kg

(b) They are four categories of **crew** weight:

(1) from 115 kg to less than 130 kg

(2) from 130 kg to 140 kg

(3) from 140 kg to 150 kg

(4) above 150 kg

(c) **Crew** corrector weights shall be of metal and securely fastened on the port side, either to the outside of the front crossbeam or to the strut, , and shall be removable for checking.

(d) **Crews** may be weighed at Registration for a regatta if stated in NoR and again at any time by the Race Committee.

C.4 PERSONAL EQUIPMENT

C.4.1 MANDATORY

The boat shall be equipped with a **personal floatation device** for each crew member to the minimum standard ISO 12402-5 (CE 50 Newtons), or USCG Type III, or AUS PFD 2

C.4.2 OPTIONAL

(a) Trapeze harness for each member of **crew**

(b) All other **personal equipment**

C.5 PORTABLE EQUIPMENT

C.5.1 FOR USE

(a) MANDATORY

(1) One righting line of minimum of 4 metres long and 10 mm minimum diameter.

(2) One magnetic steering compass.

(3) Towing line of 15 metres long and 6 mm minimum diameter.

(b) OPTIONAL

(1) Magnetic compasses.

(2) Mechanical timing devices. Mechanical wind indicators.

(3) Electronic devices that provide timing, heading, and heading memory but which do not transmit or receive data.

(4) When required in the Notice of Race, one paddle with minimum total length of 1000 mm plus a paddle blade of minimum 140 mm width over a length of minimum 250 mm, and be clearly fit for purpose.

(c) LONG DISTANCE RACING

(1) When required in the Notice of Race on long distance courses, organisers may require further equipment, such as VHF, mobile

phone, GPS or tracking devices, Emergency Positioning Indicating radio beacons (EPIRB) devices, knife, mirror, whistle, flares, flashlights, first aid set.

C.6 BOAT

C.6.1 WEIGHT

(a) PLATFORM

(1) The minimum weight of the platform shall be 130 kg.

(2) The platform shall be weighed assembled, dry and clean.

It comprises: the **hulls**, the crossbeams, the trampoline, the **dagger boards** or **centreboards**, the steering system, the mainsheet system and jib traveller cars, compass(es), all the equipment normally bolted, screwed or fixed in a permanent manner on the boat and used whilst racing, and **corrector weights** in accordance with C.6.2. The weight shall include the righting line, but not the towing line.

(b) BOAT READY TO SAIL

(1) The total weight of the **boat**, ready to sail, shall not be less than 180 kg.

(2) The weight of the **boat** ready to sail shall be the platform as in C.6.1(a) carrying the equipment normally used for navigation: mast, boom, bowsprit, mast rigging, halyards, sheets, sails including one set of battens, blocks, **corrector weight** defined in C.6.2 and the righting lines, but not the towing lines.

(3) The weights of the platform and of the boat ready to sail, each without **corrector weight**, and the measurement certificate number shall be indelibly written by the measurer in line with appendix B, Diagrams.

C.6.2 CORRECTOR WEIGHTS

(a) A maximum of 7 kg of **corrector weight** is allowed to comply with both platform and ready to sail minimum weights.

(b) **Corrector weight** shall be securely fastened to the outside on the starboard side of the forward beam or to the strut and shall be removable for checking.

(c) **Corrector weight** shall be of metal.

C.7 HULLS

C.7.1 FITTINGS

(a) Hatch covers, and drain bungs if fitted, shall be kept in place when sailing. but may be opened for specific logistical reasons..

C.8 HULL APPENDAGES

C.8.1 FITTINGS

(a) **Rudder** retention devices capable of retaining **rudder** in event of capsize.

C.8.2 LIMITATIONS

(a) Only two **daggerboards** or **centreboards** and two **rudders** may be used during an event, except when a **hull appendage** has been lost or damaged beyond repair. Such replacement may only be made with the approval of the Race Committee.

(1) The two **daggerboards** or **centreboards** shall be fitted in the daggerboard (centreboard) cases, one in each **hull**

(2) The two **rudders** shall be hung on the transoms, one on each transom.

(3) The board cases and the **rudders** shall be in the centre plane of the hulls, and the under water parts of the boards and of the **rudders** shall be symmetrical.

C.9 RIG

C.9.1 FITTINGS

(a) **Sail** and **mast** adjustment fittings may be fitted.

C.9.2 LIMITATIONS

(a) Only one **set of spars** shall be used during an event, except when lost or damaged beyond repair.

(b) Replacement of damaged **spars** may only be made with the approval of the Race Committee.

C.9.3 BOOM

(a) The **boom**, if fitted, may have fittings attached.

C.9.4 BOWSPRIT

(a) The **bowsprit** shall be fixed in a fore and aft position and shall not be adjustable while sailing.

(b) The **bowsprit** may have fittings attached.

C.9.5 STANDING RIGGING

(a) It is NOT permitted while sailing to adjust: mast rake, tension of standing rigging, angle or length of spreaders or diamond wire tension.

C.9.6 RUNNING RIGGING

(a) Running rigging shall be led externally to the **mast spar**.

(b) With the exception of C.9.6 (a), the way of leading running rigging is optional.

C.10 SAILS

C.10.1 LIMITATIONS

(a) The **sail** plan shall consist of 1 **mainsail**, 1 jib, 1 spinnaker which shall be carried aboard. No sail shall be replaced during a regatta, except when a **sail** has been lost or damaged beyond repair, then only with permission of the Race Committee. The Race Committee shall then remove or cross out any event limitation mark attached to the replaced **sail**.

(b) **Sails** shall not be altered in any way except as permitted by these **rules**.

(c) Routine maintenance is permitted without re-measurement and **re-certification**.

(d) Sails shall be allocated to crews with different weight categories according to C.3.2 (b).

C.10.2 MAINSAIL

(a) IDENTIFICATION

The national letters and sail numbers shall comply with the RRS Appendix G.

(b) USE

(1) The **sail** shall be hoisted on a **halyard**.

(2) The **luff** bolt rope shall be in the **spar** groove or track.

(3) The **mainsail** may be loose footed.

C.10.3 JIB

(a) USE

(1) The **sail** shall be set on the **forestay**.

(2) The **tack point** shall not be fixed below the highest point of the bridle wire.

C.10.4 SPINNAKER

(a) USE

(1) The **sail** shall be set between the **mast** and the **bowsprit**.

Section D - Hulls

D.1 PARTS

D.1.1 MANDATORY

(a) Hull shells

(b) Front beam

(c) Rear beam

(d) Trampoline

D.1.2 OPTIONAL

(a) Bulkheads

(b) Sub-decks

(c) The **hulls** may have fittings attached.

D.2 GENERAL

D.2.1 RULES

The **hull** shall comply with the **rules** in force at the time of initial **certification.**

D.2.2 CERTIFICATION

Only the controls, measurements and calculations made by a measurer recognized by the IF18CA, a MNA or ISAF are considered valid.

D.2.3 MODIFICATIONS, MAINTENANCE AND REPAIR

(a) Holes not bigger than necessary for the installation fittings and passage of lines may be made in the **hull**.

(b) Routine maintenance such as painting and polishing is permitted without re-measurement and re-**certification**, providing that the intention and the effect is to polish the hulls only. Any work intended or any other material added with the intention or effect of improving performance beyond the original is prohibited. See RRS 53.

(c) Each **hull** shall have at least one inspection hatch. All other fittings are optional

D.2.4 IDENTIFICATION

(a) Hulls shall have a serial number.

(b) From 1st September 2009, all new **hulls** shall carry the ISAF Plaques permanently placed on the transoms or on the inside of the hulls just below the rear beam.

D.2.5 BUILDERS

(a) A licence is not required.

D.3 HULL SHELLS

D.3.1 MATERIALS

(a) The hull shells shall be built from polyester or vinylester resin, glass fibres, core of PVC or balsa or felt. The combination of wood-epoxy, injected plastic, steel, extruded aluminium profiles of constant section, which shall not be altered, other than locally for fittings, and passage of equipment and normal reinforcement. Epoxy glue is permitted for joining components. Every material that is not expressly permitted is prohibited.

D.4 BEAMS

D.4.1 MANDATORY

(a) Front Beam

(b) Rear beam

D.4.2 CONSTRUCTION

(a) The beams shall be made of extruded aluminium profiles of constant section.

(b) The curvature of the beams shall be limited to a maximum of 15 mm.

(c) The **mast** pivot on the front beam shall be fixed on the centreline of the boat.

(d) When stepped the **mast datum point** shall not be more than 120 mm above the top of the front beam.

(e) The front beam may have a strut and tie of optional material, excluding carbon.

(f) The rear beam may incorporate a mainsail traveller track.

(g) The front beam may incorporate a jib traveller track and/or a self tacking system, and sail adjustment fittings.

(h) A local reinforcement is permitted inside the main beam for the mast step.

(i) Local reinforcements are permitted inside the front beam and the rear beam for supporting fixing bolts.

(j) The **mast** step shall be in a fixed position

(k) The beams may accommodate adjustment fittings

(l) Any holes for fittings may only be as large as necessary to house the fittings.

D.5 TRAMPOLINE

D.5.1 MATERIALS

(a) All types of materials are permitted except netting,

D.5.2 CONSTRUCTION

(a) A single trampoline, which may be in separate sections, shall cover the area between the front beam and the rear beam.

(b) Fittings for the attachment of the trampoline are optional.

(c) A spinnaker bag is permitted.

(d) Storage bags and pouches are permitted.

(e) Stainless steel wire for tensioning trampoline is permitted.

D.6 ASSEMBLED HULLS

D.6.1 CONSTRUCTION

(a) The **hulls** shall be joined rigidly by a front beam and a rear beam.

(b) Sealing strips of any suitable material for centreboard/daggerboard (if fitted) slots are permitted.

(c) Traveller tracks and sail adjustments may be fitted to the **hulls**.

(d) Non slip surfaces, built in or applied to the **hulls**, are allowed.

D.6.2 DIMENSIONS

(a) The maximum **hull length** shall be 5.52 m.

(b) The maximum **boat beam** shall be 2.60 m.

D.6.3 FITTINGS

(a) MANDATORY

(1) Shroud fittings attachments.

(2) Forestay bridle fittings attachments.

(3) Bowsprit fittings attachments.

(b) OPTIONAL

(1) Fittings for the attachment of the trampoline.

(2) Foot loops, toe straps, trapeze gear, crew restraining line.

(3) Centreboard/daggerboard retention/placement fittings.

(5) Inspection hatches.

Section E – Hull Appendages

E.1 PARTS

E.1.1 MANDATORY

(a) **Rudders**

(b) **Tillers**

(c) **Tiller** connecting bar

(d) **Rudder** pins or pintles

(e) **Rudder** gudgeons.

E.1.2 OPTIONAL

(a) **Centreboard**

(b) **Daggerboard**

(c) **Tiller** extension.

E.2 GENERAL

E.2.1 RULES

(a) **Hull appendages** shall comply with the **Class rules** in force at the time of **certification**.

E.2.2 MODIFICATIONS, MAINTENANCE AND REPAIR

(a) **Hull appendages** shall not be altered in any way except as permitted by these **class rules**.

(b) Routine maintenance such as cleaning and sanding is permitted without re-measurement and **re-certification**. See RRS 53.

E.2.3 CERTIFICATION

(a) A measurer recognized by the IF18CA, a MNA or ISAF shall **certify hull appendages** and shall number the **certification mark**.

E.2.3 MANUFACTURERS

(a) Licence is not required to manufacture **hull appendages**.

E.3 CENTREBOARD/DAGGERBOARD

E.3.1 RULES

(a) The **centreboard/daggerboard** shall comply with the **class rules** in force at the time of the **certification**. A measurer recognized by the IF18CA, a MNA or ISAF shall **certify centreboards/daggerboards** and shall number the **certification mark**. There shall be a maximum of one **centreboard/daggerboard** per hull.

E.3.2 MATERIALS

(a) The **centreboards/daggerboards** may be made using epoxy resin, carbon, wood, glass fibre, foam plastics, resins, paints, glues and metal fastenings.

E.3.3 CONSTRUCTION

(a) The **daggerboards/centreboards** shall have no moving parts.

(b) The cross section of each **centreboard/daggerboard** shall be symmetrical about its fore and aft centre line.

(c) Distribution of material of the **daggerboards/centreboards** shall be homogenous. Ballast or mass of whatever nature is not permitted.

E.3.4 WEIGHTS

(a) The maximum weight of each **centreboard/daggerboard** is 5.5 kg. The weight of each **centreboard/daggerboard** shall be noted on the measurement form.

E.3.5 FITTINGS

(a) Pivot bushings and height restraining systems may be fitted.

E.4 RUDDER BLADE, RUDDER STOCK AND TILLER

E.4.1 RULES

(a) The **rudder** blade shall comply with the **rules** in force at the time of **certification**.

E.4.2 CERTIFICATION

(a) A measurer recognized by the IF18CA, a MNA or ISAF shall **certify rudder** blades and shall number the **certification mark**.

E.4.3 MATERIALS

(a) **Rudder** blade may be made using epoxy resin, carbon, wood, glass fibre, foam plastics, resins, paints, glues and metal fastenings.

(b) Materials for the **rudder** stock are optional, except carbon.

(c) The tiller extension may use carbon in manufacture.

(d) The tiller cross bar shall be made of aluminium profile of constant section.

(e) The tiller cross bar may have reinforcement in the central fittings.

(f) The tiller cross bar may have reinforcement to support connection to tiller arms.

E.4.4 CONSTRUCTION

(a) Distribution of the material in the **rudders** shall be homogenous. Ballast or mass use of whatever nature in not permitted.

(b) The cross section of each **rudders** shall be symmetrical about its fore and aft centre line.

E.4.5 FITTINGS

(a) MANDATORY

(1) 2 rudder fittings

(b) OPTIONAL

(1) 2 gudgeons.

(2) 2 pins or pintles.

(3) Pivoting and/or lowering systems.

E.4.6 WEIGHTS

(a) The minimum weight of each rudder assembly comprising blade, stock and tiller is 3 kg. For rudders built before 1st January 1996 correctors may

be added to achieve the minimum weight. The controlled weight shall be noted on the measurement form.

Section F - Rig

F.1 PARTS

F.1.1 MANDATORY

(a) **Mast**

(b) Standing **rigging**

(c) Running **rigging**

(d) **Bowsprit**

F.1.2 OPTIONAL

(a) **Boom**

(b) **Spinnaker** retrieval system

F.2 GENERAL

F.2.1 RULES

(a) The **spars** and their fittings shall comply with the **rules** in force at the time of **certification** of the **spar**.

(b) The standing and running **rigging** shall comply with the **Class Rules**.

(c) The **boom** (if fitted), **bowsprit**, standing and all running **rigging** shall comply with the **Class rules.**

F.2.2 MODIFICATIONS, MAINTENANCE AND REPAIR

(a) **Spars** shall not be altered in any way except as permitted by these **Class Rules**.

(b) Routine maintenance such as cleaning and minor repairs is permitted without re-measurement and **re-certification**.

F.2.3 CERTIFICATION

(a) A measurer recognized by the IF18CA, a MNA or ISAF shall **certify spars** and shall number the **certification mark.**

(b) **Certification** of standing and running **rigging, bowsprit** and **boom** is not required.

(c) Each **mast** shall have a **certification mark** on the starboard side.

F.2.4 MANUFACTURER

(a) Licence is not required to manufacture **spars**.

F.2.5 DEFINITIONS

(a) MAST DATUM POINT

The **mast datum point** is located at the front edge of the mast **spar**, on the longitudinal axis, on the lower end of the profile. See Appendix B.

F.3 MAST

F.3.1 CONSTRUCTION

(a) The **mast** extrusion shall be made of aluminium and shall be of constant section throughout its length.

(b) The **mast** shall have one fixed sail groove, which shall be integral with the **mast spar** and shall be of the same material.

(d) The **mast** shall have heel fitting attached.

(e) The **mast** pivot shall be fixed on the centreline of the front beam.

(f) **Forestay**, diamond wires and shroud tension/rake adjustment devices or fittings are permitted

F.3.2 DIMENSIONS

(a) The **mast** shall be watertight 450 mm above the **mast datum point.**

	Maximum
Mast spar circumference	385 mm
Distance between top of the front beam and bottom of the **upper measurement band**	9100 mm
Distance between the **mast datum point** and the axis of the point of attachment of the highest standing rigging	6750 mm
Spinnaker hoist height	8150 mm
Distance between the top of the front beam and the **mast datum point**	120 mm

F.3.3 FITTINGS

(a) MANDATORY

(1) One masthead fitting which shall include mainsail halyard sheave and locking device.

(2) Heel fitting.

(3) Hounds fittings.

(b) OPTIONAL

(1) Pair of adjustable rake spreader bars and fittings, may be made using carbon fibre.

(2) Diamond stay attachment and adjustment fittings

(3) Spinnaker halyard guide

(4) Spinnaker halyard block and attachments

(5) Gooseneck fittings

(6) Mast rotation control fittings

(7) Mast may have reinforcement at fittings points

(8) Cunningham downhaul fittings

F.4 BOOM

F.4.1 MATERIALS

(a) The **boom,** if fitted, shall be made of extruded aluminium of constant section and inherently straight

F.4.2 CONSTRUCTION

(a) The **boom** extrusion may include a fixed sail groove or track which may or may not be integral with the boom but shall be of the same material.

F.4.3 FITTINGS

(a) Fittings are optional.

F.5 BOWSPRIT

F.5.1 RULES

(a) The **bowsprit** shall be on the longitudinal centreline of the boat.

(b) The **bowsprit** shall be attached to the front beam.

F.5.2 MATERIALS

(a) The **bowsprit** shall be made of aluminium of constant section.

(b) Carbon is not allowed in new "snuffer" attachments after 01.01.07.

F.5.3 CONSTRUCTION

(a) The **bowsprit** shall have an end cap that is smooth, rounded and blunt.

(b) The **bowsprit** may have a "snuffer end" attachment.

F.5.4 FITTINGS

(a) MANDATORY

(1) Attachment points to hulls.

(b) OPTIONAL

(1) Adjustment fittings.

(2) Wind indicator(s).

F.5.5 DIMENSIONS

(a) The maximum length of the **bowsprit** shall be the length from the centre of the front beam to a vertical line touching the most forward part of the hull plus 800 mm, with the **bowsprit** measured when horizontal.

F.6 STANDING RIGGING

F.6.1 MATERIALS

(a) The **standing rigging** may include a pair of diamond wires.

(b) The **standing rigging** consisting of shrouds, **forestay** and bridles shall be of 1 x 19 or 1 x 7 stranded stainless steel wires and shall have a minimum diameter of 3 mm. (Dyform ® or similar materials are prohibited.)

(c) The **forestay** shall be in the centreline of the boat.

(d) Trapeze wires shall be of stranded stainless steel wires, and have a minimum diameter of 2.5 mm.

(e) Trapeze wires may have adjustable height fittings and may include carbon in their block fittings.

F.7 RUNNING RIGGING

F.7.1 MATERIALS

(a) Materials are optional.

F.7.2 CONSTRUCTION

(a) MANDATORY

(1) Mainsail halyard.

(2) Mainsail sheet.

(3) Jib halyard.

(4) Jib sheet.

(5) Spinnaker halyard.

(6) Spinnaker sheets.

(7) **Bowsprit** setting and retraction lines.

(b) OPTIONAL

(1) Mainsail Cunningham line.

(2) Mainsail outhaul.

(3) Jib Cunningham line.

(4) Spinnaker tack outhaul line.

(5) Single spinnaker uphaul / downhaul and retrieval line.

(6) Mast rotation control lines.

(7) Any other adjustment fitting at the option of the crew

Section G – Sails

G.1 PARTS

G.1.1 MANDATORY

(a) Mainsail

(b) Jib

(c) Spinnaker

G.2 GENERAL

G.2.1 RULES

(a) **Sails** shall comply with the **rules** in force at the time of **certification**.

G.2.2 CERTIFICATION

(a) A measurer recognized by the IF18CA, a MNA or ISAF shall **certify** all sails.

G.2.3 DEFINITIONS

The sails corresponding to the different weight categories of crew (C.3.3) shall be identified as follows:

(1) Large Jib with a maximum of 4.15 m²

(2) Small Jib with a maximum of 3.45 m²

(3) Large Spinnaker with a maximum of 21 m²

(4) Small Spinnaker with a maximum of 19 m²

G.2.4 SAILMAKER

(a) Licence is not required to manufacture sails.

(b) From 1st July 2007 and beyond, the material of the **body of the sail** shall be indelibly marked, plaque or label, near the **tack point** by the sail maker together with the year date, the material from which the **sail** was made and a serial number.

G.3 MAINSAIL

G.3.1 IDENTIFICATION

(a) The Class insignia shall conform with the dimensions and requirements as detailed and be placed in accordance with the diagram contained in Appendix B.

G.3.2 MATERIALS

(a) The **ply** fibres shall consist only of polyester materials as detailed in the Sailcloth Appendix.

(b) **Stiffening** shall not incorporate carbon and may consist of:

(1) Corner boards

(2) Battens

(c) **Sail reinforcement** shall comply with Sailcloth Appendix.

G.3.4 CONSTRUCTION

(a) The construction shall be **soft sail, single-ply sail**.

(b) The **body of the sail** shall consist of the same woven and/or laminated ply throughout.

(c) The **sail** shall have a maximum of 10 **batten pockets** extending from **leech** to **luff**.

(d) The **sail** may be constructed so that it can be reefed by means of reefing point(s) adjacent to the **luff**, point(s) adjacent to the **leech** and corresponding point(s) in the **body of the sail.**

(e) The following are permitted: stitching, glues, tapes, bolt ropes, corner eyes, headboard with fixings, Cunningham eye or pulley, battens, **batten pocket patches**, batten pocket elastic, batten pocket end caps, mast and boom slides, leech line with cleat, one **window**, tell tales, sail shape indicator stripes and items as permitted or prescribed by other applicable rules.

(f) From 4 March 2008, a **window** of a minimum of 1 m² shall be placed in the lower third of the sail. This **window** shall comply with the Sailcloth Appendix.

G.3.5 DIMENSIONS

	minimum	Maximum
Sail area (including the side area of the **mast spar**)	-	17 m^2

	minimum	Maximum
Top width	-	1000 mm
Upper width at **upper leech point** 1500 mm from **head point**	-	1290 mm
Number of **batten pockets**		10
Batten pocket width:		
inside	-	25 mm
outside	-	30 mm
The angle between the **luff** and the **head**	-	90°
Window area (from March 2008) to be placed in lower third of sail	1.0sqm	

G.4 JIB

G.4.1 MATERIALS

(a) The **ply** fibres shall consist only of polyester materials as detailed in Sailcloth Appendix.

(b) **Stiffening** shall not incorporate carbon and may consist of:

(1) Corner boards

(2) Battens

(c) **Sail reinforcement** shall comply with Sailcloth Appendix.

G.4.2 CONSTRUCTION

(a) The construction shall be: **soft sail**, **single-ply sail**.

(b) The **body of the sail** shall comply with Sailcloth Appendix.

(c) The jib may have either:

(1) A maximum of four **batten pockets,** no external part of which exceeding 250 mm from the **leech**.

OR:

(2) From 1st March 2007, a maximum of three full length **batten pockets**, which shall have no moving parts and be made of glass fibre.

(d) The **leech** shall not be convex.

(e) The following are permitted: stitching, glues, tapes, corner eyes, headboard with fixings, Cunningham eye or pulley, zips, Velcro and sleeve luffs, battens, **batten pocket patches**, batten pocket elastic, batten pocket end caps, leech line with cleat, tell tales, one window and items as permitted or prescribed by other applicable *rules.*

(f) From 4 March 2008, a **window** of a minimum of 0.3 m² shall be placed in the lower third of the sail. This **window** shall comply with the Sailcloth Appendix.

G.4.3 DIMENSIONS

	minimum	Maximum
Sail area (small jib)	-	3.45 m^2
Sail area (large Jib)	-	4.15 m^2

	minimum	Maximum
Top width	-	50 mm
Batten pocket width:		
outside	-	25 mm
Window area	0.3 m^2	-

G.5 SPINNAKER

G.5.1 MATERIALS

(a) The **ply** fibres shall consist only of nylon or polyester materials as detailed in Sailcloth Appendix.

(b) **Sail reinforcement** shall comply with Sailcloth Appendix.

G.5.2 CONSTRUCTION

(a) The construction shall be: **soft sail**, **single ply sail**.

(b) **Primary and secondary reinforcement** is permitted at the **sail corners** and the recovery points, and have to comply with the Sailcloth Appendix.

(d) The following are permitted: stitching, glues, tapes, corner eyes, recovery line eyes, tell tales, leech lines and items as permitted or prescribed by other applicable *rules.*

(e) The area and the dimensions of the spinnaker (SL1, SL2, SMG, SF) shall be written in an indelible manner near the starboard tack.

G.5.3 DIMENSIONS

	minimum	Maximum
Sail area (Small Spinnaker)	-	19 m^2
Sail area (Large Spinnaker)	-	21 m^2
Ratio of **half width / foot length**	75%	-

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PART III – APPENDICES

Appendix A. Cloth list. issued February 2008

Appendix B. Class Drawings.

Appendix C. Championship rules. To be presented to IF18CA Council in July 2009.