Effective date: 2019-12-15

Status:

# Class Rules

## International Formula 18 Class Association



The International Formula 18 catamaran formula was developed in 1993 by Olivier Bovyn and Pierre-Charles Barraud and was adopted as a Recognised Class in 1996 and as an International Class in 2002.

# INDEX

# INTRODUCTION

*This introduction only provides an informal background and the International Formula 18 Class Rules proper begin on the next page.*

*The overall objective of the Formula 18 class is to offer popular, exciting, safe and fair racing in 18-foot catamarans.*

*The class' further objective is to keep development under control, maintaining a good balance between cost and performance. Being open to any manufacturer promotes competition and keeps costs to sailors to a minimum.*

*The platform weight allows robust construction, increasing longevity. It also facilitates adding interchangeable parts to the platform, for example for use as a foiling catamaran outside F18 racing.*

*The use of crew extra weights allows for fairer racing with more women and youth involved as helms and crews.*

*Formula 18 platforms, hulls, hull appendages, rigs and sails are measurement controlled.*

*Rules regulating the use of equipment during a race are contained in Section C of these class rules, in ERS Part I and in the Racing Rules of Sailing.*



PLEASE REMEMBER:

THESE RULES ARE **CLOSED CLASS RULES** WHERE IF IT DOES NOT SPECIFICALLY SAY THAT YOU MAY – THEN YOU SHALL NOT.

COMPONENTS, AND THEIR USE, ARE DEFINED BY THEIR DESCRIPTION.

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

### A.2 ABBREVIATIONS

A.2.1

| | |
|---|---|
| WS | World Sailing |
| IF18CA | International Formula 18 Class Association |
| NCA | National Formula 18 Class Association |
| ERS | Equipment Rules of Sailing |
| RRS | Racing Rules of Sailing |

### A.3 AUTHORITIES

A.3.1 The **class rule authority** of the class is WS which shall co-operate with the IF18CA in all matters concerning these **class rules.**

A.3.2 The **certification authority** of the class is the IF18CA.

A.3.3 The **certification authority** may delegate its authority to certify to an official measurer who is recognized by the **certification authority**.

A.3.4 Notwithstanding anything contained herein, the **certification authority** has the authority to withdraw a **certificate** and shall also do so on the request of WS.

### A.4 ADMINISTRATION OF THE CLASS

A.4.1. WS has delegated its administrative functions of the class to the IF18CA. The IF18CA may delegate part or all of its functions, as stated in these **class rules**, to an NCA.

### A.5 CLASS RULES CHANGES

A.5.1 At events organised under these **class rules** RRS 87 and WS Regulation 10.5(f) apply.

### A.6 CLASS RULES AMENDMENTS

A.6.1 Amendments to these **class rules** are subject to the approval of WS in accordance with WS Regulations and the IF18CA in accordance with its constitution.

A.6.2 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.7 CLASS RULES INTERPRETATION

A.7.1 Interpretation of these **class rules** shall be made by WS, in consultation with the IF18CA, and in accordance with WS Regulations.

A.7.2 Interpretation of these class rules at an event shall be carried out in accordance with RRS (Appendix N). The organising authority shall, as soon as practical, inform WS and the IF18CA of an interpretation.

## A.8 INTERNATIONAL CLASS FEE AND WS BUILDING PLAQUE

A.8.1 The IF18CA shall pay the International Class Fee.

A.8.2 WS shall, after having received the International Class Fee for the **hulls**, send the WS Building Plaques to the IF18CA.

## A.9 CERTIFICATION

A.9.1 A **certificate** for a **boat** or a **sail** shall record the following information:

(a) Class
(b) **Certification authority**
(c) **Certificate** number issued by the **certification authority**
(d) **Hull** or **sail** identification
(e) Confirmation of presence of builder's or sailmaker's declaration (see D.2.5(b) and G.2.4(b))
(f) Date of issue of initial **certificate**
(g) Date of issue of **certificate**
(h) **Corrector weight**, if required.

## A.10 INITIAL CERTIFICATION

A.10.1 For a **certificate** to be issued to a **boat** or a **sail** not previously **certified**:

(a) **Certification control** shall be carried out by the **official measurer** who shall complete the appropriate documentation.
(b) The documentation and **certification** fee, if required, shall be sent to the **certification authority**.
(c) Upon receipt of a satisfactorily completed documentation and **certification** fee, if required, the **certification authority** may issue a **certificate**.

## A.11 VALIDITY OF CERTIFICATE

A.11.1 A **certificate** becomes invalid upon:

(a) the change to any items recorded on the **certificate** as required under A.9.1(a) through (g)
(b) any increase of **corrector weights**
(c) withdrawal by **certification authority**
(d) the issue of a new **certificate**.

### A.12 RE-CERTIFICATION

A.12.1 The **certification authority** may issue a **certificate** to a previously **certified boat** or **sail**:

(a) when it is invalidated under A.11.1(a) or (b), after receipt of the old **certificate**, and **certification** fee if required.

(b) when it is invalidated under A.11.1(c), at its discretion.

(c) in other cases, by application of the procedure in A.10.

### A.13 RETENTION OF CERTIFICATION DOCUMENTATION

A.13.1 The **certification authority** shall retain the original documentation upon which the current **certificate** is based.

## 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 The **boat** shall:

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

(b) have a complete set of valid **boat** and **sail certificates**.

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

### B.2 BUOYANCY CHECKS

B.2.1 A race committee may require that a **boat** shall pass a buoyancy test.

### B.3 CLASS ASSOCIATION MARKINGS

B.3.1 The **mainsail** shall carry the class insignia in the required position (Appendix C).

# 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 as F18 is a measurement-controlled class. The **crew** and the **boat** shall comply with the **class rules** in part II when *racing*. In case of conflict, section C shall prevail.

The **class 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 (regards: c**rew** position; lifelines).

(c) RRS Appendix G.1.3 (d) shall not apply (regards: national letters and **sail** number on a gennaker).

### C.2 ADVERTISING

C.2.1 LIMITATIONS

(a) Advertising shall only be displayed in accordance with the WS Advertising code.

### 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, **crews** shall be member of the IF18CA.

C.3.2 LIMITATIONS

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

(b) The **crew** shall be dressed in underwear or swimming costume without shoes when weighed.

C.3.3 WEIGHTS

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

(b) **Crew** weighing less than 150 kg combined shall carry extra weight equal to half the difference between their actual weight and 150 kg.

(c) C.3.3(b) does not apply if the **crew** uses both the Small Jib (maximum **sail** area 3.45 m2) and Small Gennaker (maximum **sail** area 19.00 m2), and provided these **sails** have been certified before 16 December 2018.

(d) **Crew** extra weights shall be of metal and securely fastened on the port side,

either to the outside of the front beam or to the strut and shall be removable for checking. Any weight of the **boat**, ready to sail, in excess of 180 kg will count towards **crew** extra weights.

(e) **Crews** may be weighed at registration for a regatta and may be reweighed at any time by the race committee.

C.3.4 LONG DISTANCE RACING

(a) The **crew** shall be able to re-right the **boat** after a capsize. They may be asked to demonstrate their ability to do so.

## C.4 PERSONAL EQUIPMENT

C.4.1 MANDATORY

(a) The **crew** shall wear a **personal floatation device** to the minimum standard EN393, ISO 12402-5 (CE 50 Newtons), 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, minimum 4 metres long and 10 mm minimum diameter

(2) One steering compass.

(b) OPTIONAL

(1) Steering 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 by the notice of race for 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.5.2 NOT FOR USE

(a) MANDATORY

(1) A towing line minimum 15 metres long and 6 mm diameter if required by the notice of race.

(b) OPTIONAL

(1) When required in the notice of race, one strong paddle with minimum total length of 1000 mm. The paddle blade shall be minimum 140 mm wide and minimum 250 mm long.

## 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. It comprises: the assembled **hulls**, the Trampoline, the **hull appendages**, tiller, tiller extension, main **sheet** and jib **sheet** systems, compass(es), **corrector weights**, righting line and all equipment and control lines normally bolted, screwed or fixed in a permanent manner on the **boat,** not to include 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 with the **rig** as in C.9 and a set of **sails** with battens as in C.10.

C.6.2 CORRECTOR WEIGHTS

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

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

(c) **Corrector weights** 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.

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

C.7.2 MODIFICATIONS, MAINTENANCE AND REPAIR.

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

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

## C.8 HULL APPENDAGES

C.8.1 MANDATORY

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 board cases, the **daggerboards** or **centreboards** and the **rudders** shall be positioned in the centre plane of the **hulls**, and the underwater parts of the boards and of the **rudders** shall be symmetrical.

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

## C.9 RIG

C.9.1 FITTINGS

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

C.9.2 USE

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

C.9.3 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.9.4 BOOM

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

C.9.5 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) The **bowsprit** shall have an end cap that is smooth, rounded and blunt.

C.9.6 STANDING RIGGING

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

(b) The **forestay** shall be attached on the centreline of the **boat**.

(c) **Trapeze** wires may have adjustable height.

C.9.7 RUNNING RIGGING

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

(b) With the exception of C.9.7 (a), the way of leading **running rigging** is optional.

## C.10 SAILS

C.10.1 LIMITATIONS

(a) The **sail** plan shall consist of one **mainsail**, one jib and one gennaker which shall be carried aboard. S**ails** shall not 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**.

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 with a **halyard**. The arrangement shall permit

hoisting and lowering of the **sail** whilst afloat.

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

(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 apex of the bridle wire.

C.10.4 GENNAKER

(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) Fittings

## D.2 GENERAL

D.2.1 RULES

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

D.2.2 MODIFICATIONS, MAINTENANCE AND REPAIR

(a) Modification, maintenance and repair of **hulls** is permitted, without re-**certification**, provided these parts continue to comply with these **class rules**.

D.2.3 CERTIFICATION

(a) The **official measurer** shall certify the **hulls** and shall number and affix **certification marks** to the transoms.

D.2.4 IDENTIFICATION

(a) **Hulls** shall have a serial number.

(b) **Hulls** shall have WS Building Plaques affixed to the transoms.

D.2.5 BUILDERS

(a) A licence is not required.

(b) Builders shall supply a builder's declaration, confirming that the **boat** was built to rules in force at the time of manufacture (See Appendix A).

## D.3 HULL SHELLS

D.3.1 MATERIALS

(a) The **hull** shells may be built from epoxy, polyester or vinylester resin, wood, injected plastic, glass fibre, glue, gel coat, paint and/or metal fastenings. A core of PVC or balsa or felt may be used.

(b) Vinyl or other film may be applied to the **hull** surface (see RRS 53).

D.3.2 CONSTRUCTION

(a) **Hulls** may be symmetrical or asymmetrical.

(b) The **hull** shells may be altered locally for fittings and passage of equipment and normal reinforcement.

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

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

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

(g) A local reinforcement is permitted inside the front beam for the **mast** step.

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

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

(j) The beams may accommodate adjustment fittings.

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

## D.5 TRAMPOLINE

D.5.1 DEFINITIONS

A Trampoline is an item of equipment with the primary function of carrying the **crew**, which covers the area between the front beam, the rear beam and the **hulls**.

D.5.2 MATERIALS

The type of material used is optional, provided that the body of the sheet of material is capable of being folded flat in any direction without damaging other than by creasing.

D.5.3 CONSTRUCTION

(a) The Trampoline shall consist of one or more sheets of material.

(b) Vertical separation of sheets is permitted. The maximum vertical distance between the outer surface of separated sheets shall be 200 mm.

(c) The Trampoline may partly cover the front beam, the rear beam and/or the **hulls**.

(d) The following are permitted: stitching, welding, glues, zips, tapes, hook-and-loop fasteners, slides, bolt ropes, storage bags, pouches, holes, fittings and items as prescribed or permitted by other applicable *rules*.

### D.6 PLATFORM

D.6.1 CONSTRUCTION

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

(b) 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.

(c) The **boat** centre plane is the vertical longitudinal plane of the **boat** that passes through the centre point of the front and rear beams.

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) Fittings for adjustment of **sails** and **rig**

(3) Foot loops, toes straps, **trapeze** gear, **crew** restraining line

(4) Fittings for **rudders**

(5) **Centreboard/daggerboard** retention/placement fittings

(6) 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) **Centreboards**

(b) **Daggerboards**

(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) Modification, maintenance and repair of **hull appendages** is permitted, without re-**certification**, provided these parts continue to comply with these **class rules**.

E.2.3 CERTIFICATION

(a) The **official measurer** shall certify the **hull appendages** and shall number and affix the **certification marks** near the upper end of the **hull appendages**.

E.2.4 MANUFACTURERS

(a) Licence is not required to manufacture **hull appendages** (See D.2.5(a)).

## E.3 CENTREBOARD/DAGGERBOARD

E.3.1 RULES

(a) There shall be a maximum of one **centreboard/daggerboard** per **hull**.

E.3.2 MATERIALS

(a) The **centreboards/daggerboards** may be built from epoxy, polyester or vinylester resin, carbon, wood, glass fibre, foam plastic, glue, gel coat, paint and/or metal fastenings.

E.3.3 CONSTRUCTION

(a) The **centreboard/daggerboard** shall have no moving parts.

(b) The cross section of each **centreboard/daggerboard** shall be symmetrical about their centreplane.

(c) The **centreboard/daggerboards** shall not protrude more than 1400mm from the bottom of the **hull** and shall be fitted so that they cannot protrude below this level.

(d) Curved **daggerboards** are not allowed. The manufacturing tolerance is 10mm of curvature over the total length of the board.

(e) The centre of mass of the **daggerboards** shall be above 50% of the length of the board measured from the top of the **daggerboard**. **Ballast** or mass of whatever nature is not permitted.

(f) **Centreboard/daggerboards** may be angled outwards at the keel from the **boat** centre plane. **Centreboard/daggerboards** shall not be angled inwards at the keel from the **boat** centreplane, except where this is caused by the curvature of the front beam, as per rule D.4.2(b).

E.3.4 WEIGHTS

(a) The maximum weight of each **centreboard/daggerboard** is 5.5 kg.

E.3.5 FITTINGS

(a) Pivot bushings, height restraining or adjusting systems may be fitted.

### E.4 RUDDER BLADE, RUDDER STOCK AND TILLER

E.4.1 MATERIALS

(a) The **rudder** blades may be built from epoxy, polyester or vinylester resin, carbon, wood, glass fibre, foam plastic, glue, gel coat, paint and/or metal fastenings.

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

(c) Materials for the tiller extension are optional.

(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.4.2 CONSTRUCTION

(a) The centre of mass of the **rudders** shall be above 50% of the length of the **rudder** measured from the top of the **rudder**. **Ballast** or mass use of whatever nature is not permitted.

(b) The cross section of each **rudder** blade shall be symmetrical about their centre plane.

E.4.3 FITTINGS

(a) MANDATORY

(1) 2 **rudder** fittings.

(b) OPTIONAL

(1) Pivoting and/or lowering systems.

E.4.4 WEIGHTS

(a) The minimum weight of each **rudder** assembly comprising blade, stock with fittings and tiller is 3 kg.



# Section F – Rig

### F.1 PARTS

F.1.1 MANDATORY

(a) **Mast**

(b) **Standing rigging**

(c) **Running rigging**

(d) **Bowsprit** including snuffer mouth

(e) Gennaker snuffer bag

F.1.2 OPTIONAL

(a) **Boom**

## F.2 GENERAL

F.2.1 RULES

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

(b) The **standing** and **running rigging** shall comply with the c**lass rules**.

F.2.2 MODIFICATIONS, MAINTENANCE AND REPAIR

(a) Modification, maintenance and repair of **spars** is permitted, without re-**certification**, provided these parts continue to comply with these **class rules** and, with respect to the **mast**, provided the Mast Area is not increased.

F.2.3 CERTIFICATION

(a) The **official measurer** shall **certify** the **mast** and shall number and affix the **certification mark** to the **mast** near the bottom edge of the **mast** extrusion on starboard side.

F.2.4 MANUFACTURER

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

## F.3 MAST

F.3.1 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 C.

(b) MAST AREA

The Mast Area is the area calculated by multiplying the **mast** extrusion length by the half circumference of the **mast spar**.

F.3.2 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 an integral form of the **mast spar** and shall be of the same material.

(c) The **mast** shall have masthead fittings, which shall include the mainsail sheave and locking device.

(d) The **mast** shall have a 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.3.3 DIMENSIONS

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

(b) The distance between the top of the front beam and the **mast datum point** shall

not exceed 120mm.

| | Maximum |
|---|---|
| **Mast spar** circumference | 385 mm |
| Distance between **upper point** and front beam | 9100 mm |
| **Shroud height** | 6750 mm |
| **Gennaker hoist height** | 8150 mm |
| Top of the front beam to **mast datum point** | 120 mm |

F.3.4 FITTINGS

(a) MATERIALS

(1) Carbon fibre is only allowed in cleats, turning blocks and spreaders construction.

(b) MANDATORY

(1) Hounds fittings.

(c) OPTIONAL

(1) Pair of **spreaders** and fittings.

(2) Diamond stay attachment and adjustment fittings

(3) Gennaker **halyard** guide

(4) Gennaker **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**.**

F.4.2 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.

F.5.3 CONSTRUCTION

(a) The **bowsprit** may be fitted with a gennaker retrieval system. This system shall not be of carbon fibre on boats certified after 1 January 2007.

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 length of the **bowsprit** shall not exceed the distance 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** shall be of stranded stainless steel with the exception of **bowsprit** bridles and **trapeze** which may be of rope.

(b) Fittings, such as cleats, blocks may be made from/or include carbon fibre in their construction.

F.6.2 CONSTRUCTION

(a) MANDATORY

(1) A **forestay** and **forestay** bridles of 1×19 or 1×7 stranded stainless-steel wire of minimum diameter 4 mm.

(2) **Shrouds** of 1×19 or 1×7 stranded stainless-steel wire of minimum diameter 4 mm.

(3) **Trapeze** wires of stranded stainless-steel wire or rope of minimum diameter 2.5 mm.

(b) OPTIONAL

(1) A pair of diamond wires of 1×19 or 1×7 stranded stainless-steel wire of minimum diameter 4 mm.

(2) The **bowsprit** bridles may be of rope of minimum diameter 2.5 mm.

## 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) Gennaker **halyard**

(6) Gennaker **sheets**

(7) Gennaker retraction lines.

(b) OPTIONAL

(1) **Rig** adjustments

(2) **Sails** adjustments

# Section G – Sails

## G.1 PARTS

G.1.1 MANDATORY

(a) **Mainsail**

(b) Jib

(c) Gennaker

## G.2 GENERAL

G.2.1 RULES

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

G.2.2 MODIFICATIONS, MAINTENANCE AND REPAIR

(a) Modification, maintenance and repair of a **sail** is permitted, without re-**certification**, provided it continues to comply with these **class rules** and, with respect to the **mainsail**, provided the **sail** area is not increased.

G.2.3 CERTIFICATION

(a) The **official measurer** shall certify each **sail** and shall affix the **certification mark** near the tack point of the **sail** on starboard side.

(b) For measurement the battens shall be placed in the **batten pockets** without tension.

(c) When measuring the bolt rope of the **mainsail** shall be excluded.

G.2.4 SAILMAKER

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

(b) A sailmaker's declaration is required with each **sail** (See Appendix B).

(c) Each **sail** shall have a plaque or label near the **tack point** that shall be completed by the sailmaker, indelibly marked, with name of manufacturer, materials used, date of manufacture and serial number.

## G.3 MAINSAIL

G.3.1 MATERIALS

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

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

(1) Corner boards

(2) Battens.

(c) **Sail reinforcements**

(1) **Primary reinforcement** shall be any woven polyester, or any cloth as detailed in the cloth list

(2) **Secondary reinforcement** shall be any cloth as detailed in the cloth list.

(d) The **window** shall comply with the cloth list.

G.3.2 CONSTRUCTION

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

(b) The **body of the sail** shall consist of the same woven **ply** or laminated **ply** throughout with the exception of the **window** which may be different.

(c) The number of **batten pockets** is optional.

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

(e) A **window** shall be placed in the **sail**.

G.3.3 DIMENSIONS

| | Maximum |
|---|---|
| **Sail** area and Mast Area, combined | 17.00 m² |
| **Top width** | 1000 mm |
| **Upper width** at **upper leech point** 1500 mm from **head point** (Appendix C) | 1290 mm |
| Angle between the **luff** and the **head** (Appendix C) | 90° |
| **Window** (Appendix C): shortest distance between | |
| – **head point** and **window area** edge | 7630 mm |
| – **clew point** and **window area** edge | 480 mm |
| – **tack point** and **window area** edge | 440 mm |
| **Tabling** width | 115 mm |

## G.4 JIB

G.4.1 MATERIALS

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

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

(1) Corner boards

(2) Battens.

(c) **Sail reinforcements**

(1) **Primary reinforcement** shall be any woven polyester, or any cloth as detailed in the cloth list.

(2) **Secondary reinforcement** shall be any cloth as detailed in the cloth list.

(d) The **window** shall comply with the cloth list.

G.4.2 CONSTRUCTION

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

(b) The **body of the sail** shall consist of the same **woven ply** or l**aminated ply** throughout with the exception of the **window** which may be different.

(c) The jib may have either a maximum of four battens**,** no external part of which exceeding 250 mm from the **leech**, OR a maximum of three full length battens**,** 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 and items as permitted or prescribed by other applicable *rules*.

(f) A **window** shall be placed in the **sail**.

G.4.3 DIMENSIONS

| | Maximum |
|---|---|
| **Sail** area | 4.15 m² |
| **Top width** | 50 mm |
| Batten width (full length battens) | 40 mm |
| **Batten pocket** outside **width** | 80 mm |
| **Window**: shortest distance between | |
| – **head point** and **window area** edge | [XXX] mm |
| – **clew point** and **window area** edge | [XXX] mm |
| – **tack point** and **window area** edge | [XXX] mm |
| **Tabling** width | 115 mm |

## G.5 GENNAKER

G.5.1 MATERIALS

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

(b) **Sail reinforcements**

**Primary** and **secondary reinforcement** is permitted at the **sail corners** and the recovery points.

(1) **Primary reinforcement** shall be any woven polyester, or any cloth as detailed in the cloth list.

(2) **Secondary reinforcement** shall be any cloth as detailed in the cloth list.

G.5.2 CONSTRUCTION

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

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

(c) **Laminated ply** of any sort is not allowed anywhere in the gennaker. This includes **leech, luff** and **foot** tapes, corner patches and retrieval points. Reinforcing tapes to secure eyelets or rings are allowed at gennaker corners and

retrieval points. Tapes may be polyester or spectra.

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

G.5.3 DIMENSIONS

| | Minimum | Maximum |
|---|---|---|
| **Sail** area | | 21.00 m² |
| Ratio of **half width** / **foot length** | 75 % | |

Appendix A.

# International Formula 18 Class Association

## Builder's declaration of rule compliance

In accordance with the International Formula 18 Class Association (IF18CA) Class Rules, I declare that the platform which has been issued the serial number ……. has been constructed in full compliance with the IF18CA Class Rules on the date of …….

I confirm that compliance with the rules has been established, and technical data sheets on materials shall be made available to IF18CA Chief Measurer at their request.

| **Builder Declaration** | |
|---|---|
| Full Name: | |
| Representing: | |
| Signature: | |
| Date: | |

Appendix B.

# International Formula 18 Class Association

## Sailmaker's declaration of rule compliance

In accordance with the International Formula 18 Class Association (IF18CA) Class Rules, I declare that the following sails have been constructed in full compliance with the IF18CA Class Rules on the date of ……..

| **Sail** | **Serial No** |
|---|---|
| Mainsail | |
| Jib | |
| Gennaker | |

*(strike through all that do not apply)*

I confirm that compliance with the Class Rules has been established, and technical data sheets on materials shall be made available to the IF18CA Chief Measurer at their request.

| **Sailmaker Declaration** | |
|---|---|
| Full Name: | |
| Representing: | |
| Signature: | |
| Date: | |

## APPENDIX C. CLASS DRAWINGS

B.3 CLASS ASSOCIATION MARKINGS

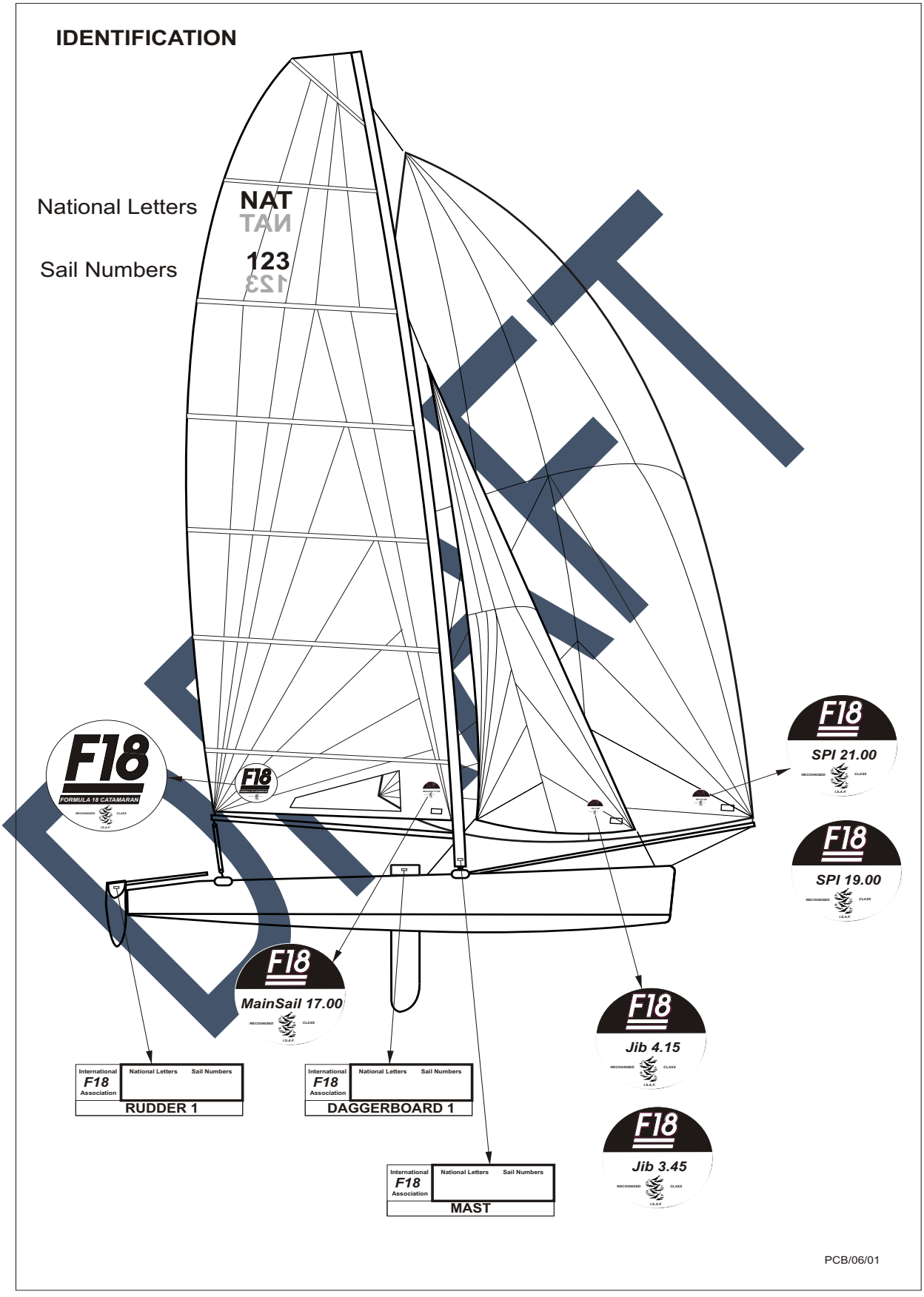
D.4 BEAMS

D.6 ASSEMBLED HULLS

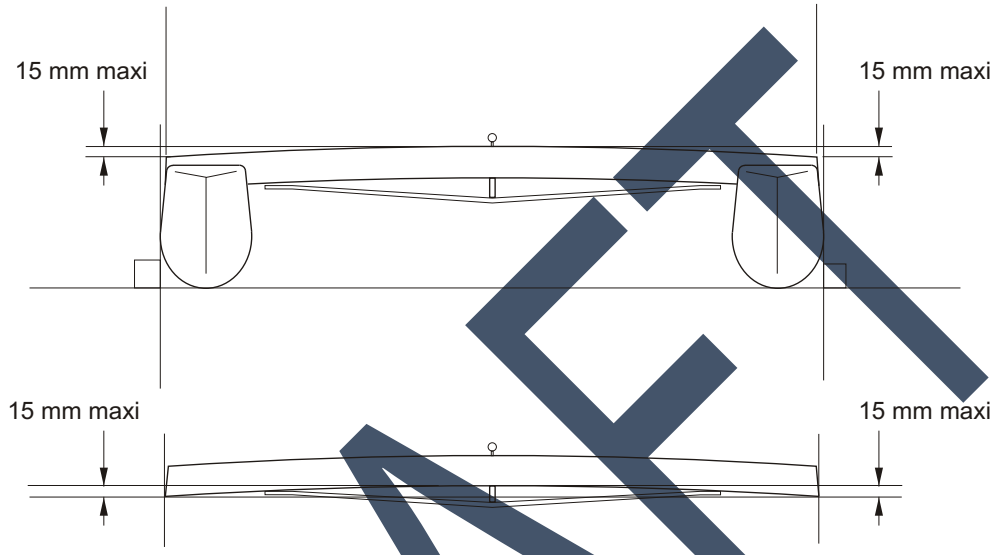
F.3 MAST

F.5 BOWSPRIT

G.3 MAINSAIL

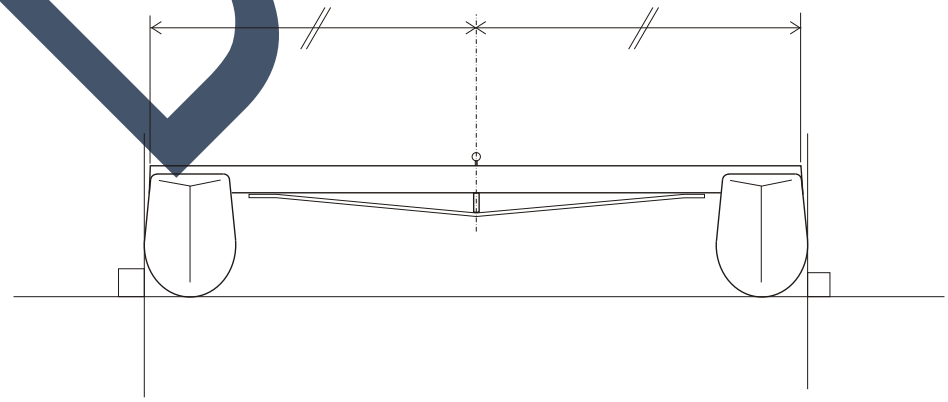

IDENTIFICATION
National Letters
NAT
Sail Numbers
123
DRAFT
F18
FORMULA 18 CATAMARAN
F18
SPI 21.00
F18
SPI 19.00
F18
MainSail 17.00
F18
Jib 4.15
F18
Jib 3.45
International F18 Association
National Letters
Sail Numbers
RUDDER 1
DAGGERBOARD 1
MAST
PCB/06/01

**D.4 BEAMS**
**D.4.2 CONSTRUCTION**
**D.4.2 (b) The curvature of the beams.**



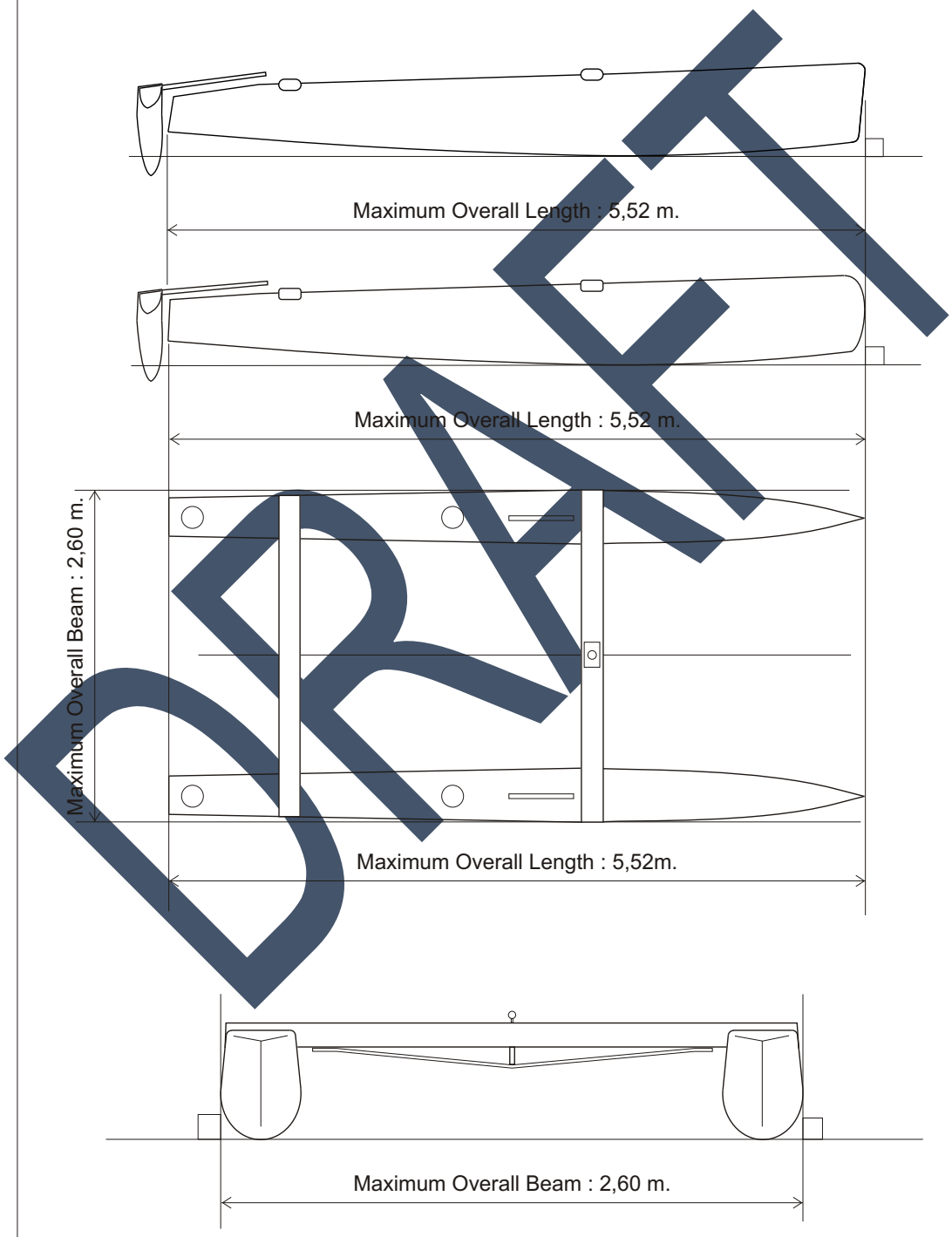

I.F18.A/PCB/10.01

**D.4 BEAMS**
**D.4.2 CONSTRUCTION**
**D.4.2 (c) The mast pivot on the front beam.**



I.F18.A/PCB/10.01

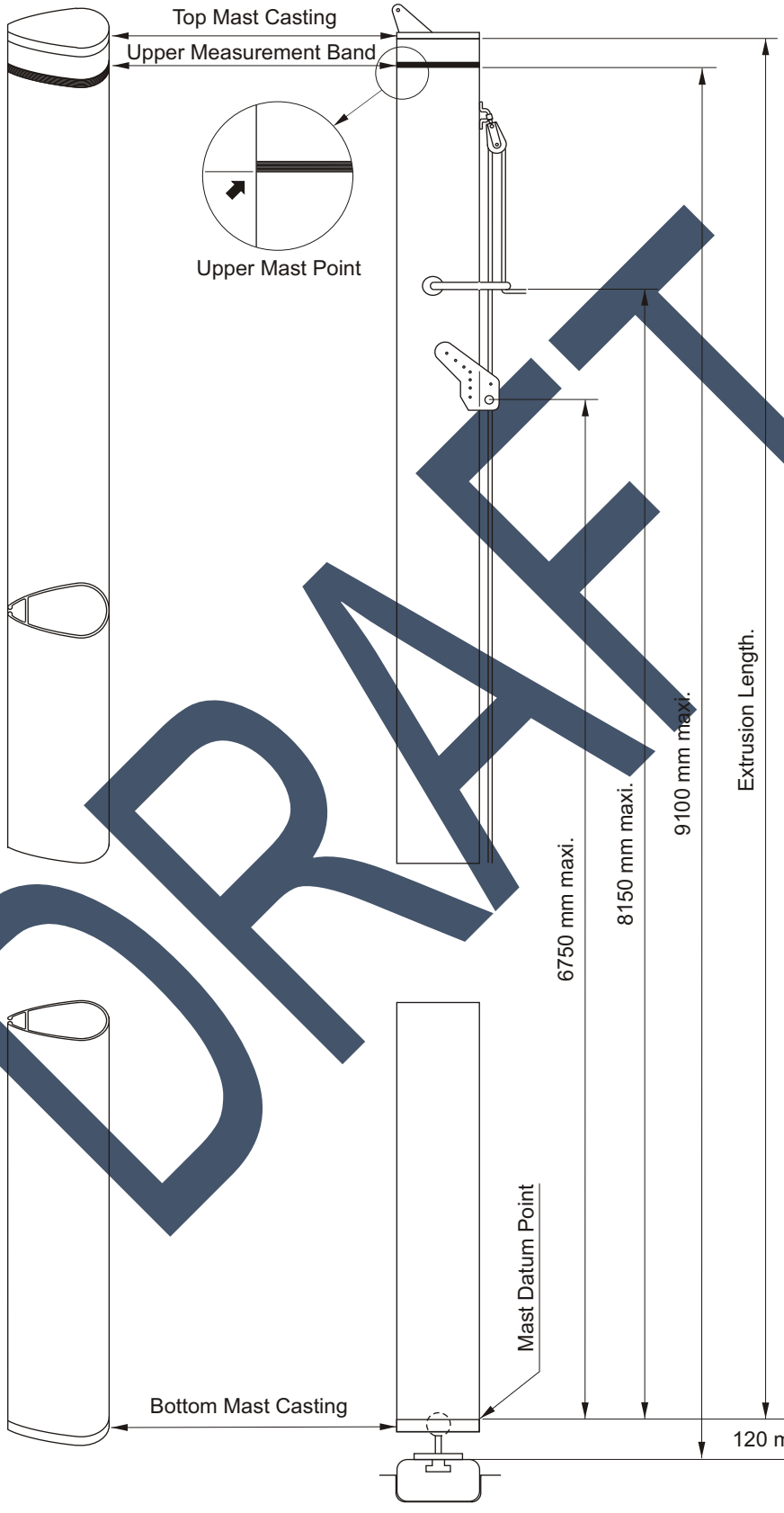
**D.6 ASSEMBLED HULLS**
**D.6.2 DIMENSIONS**
**D.6.2 (a) maximum hull length.**
**D.6.2 (b) maximum boat beam.**



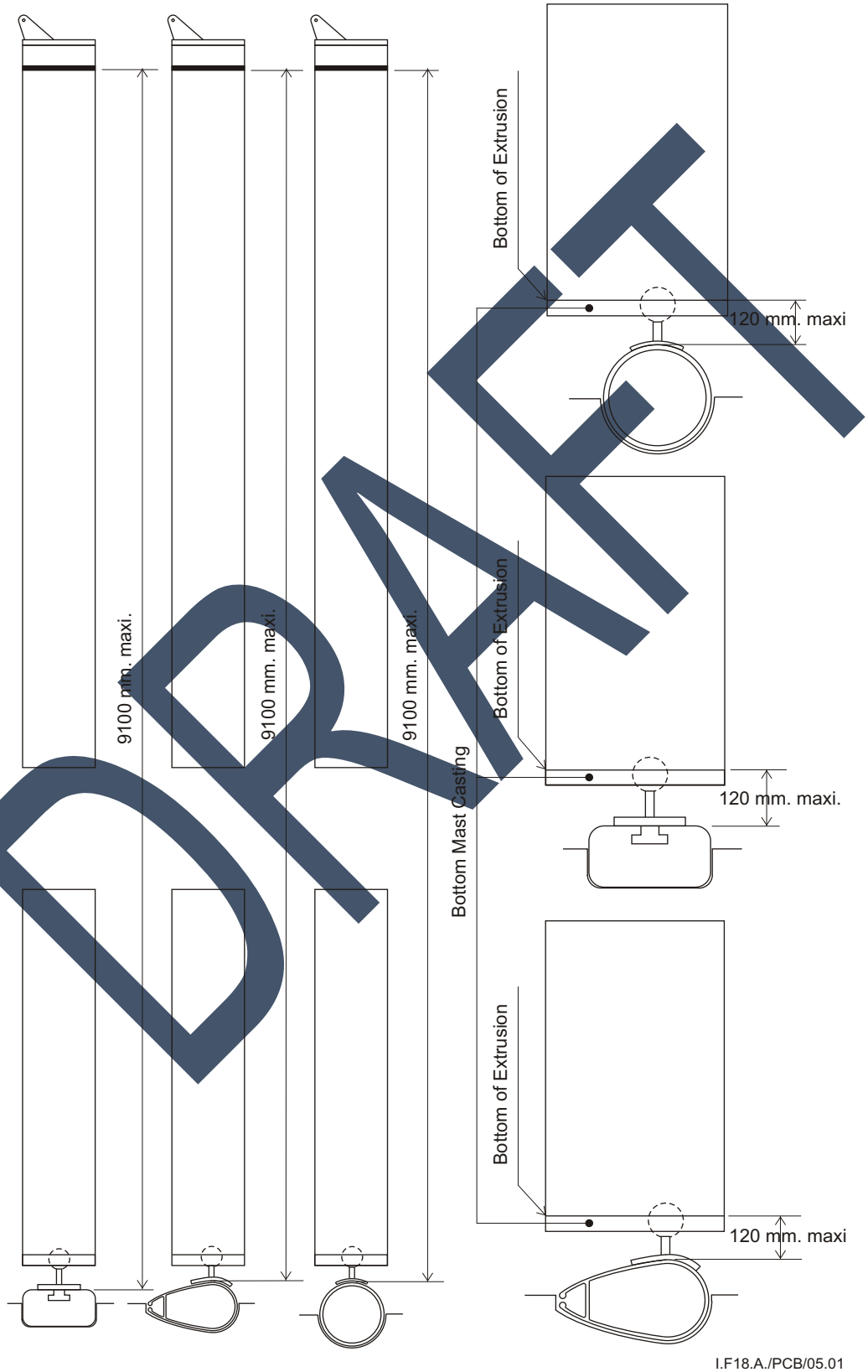



I.F18.A/PCB/06.01

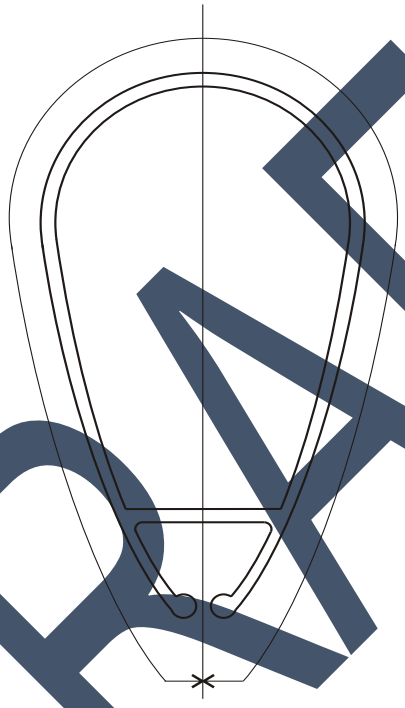
**F.2 GENERAL. F.2.5 (a) Mast Datum Point**
**F.3 MAST. F.3.2 DIMENSIONS.**



## F.3 MAST
## F.3.2 DIMENSIONS

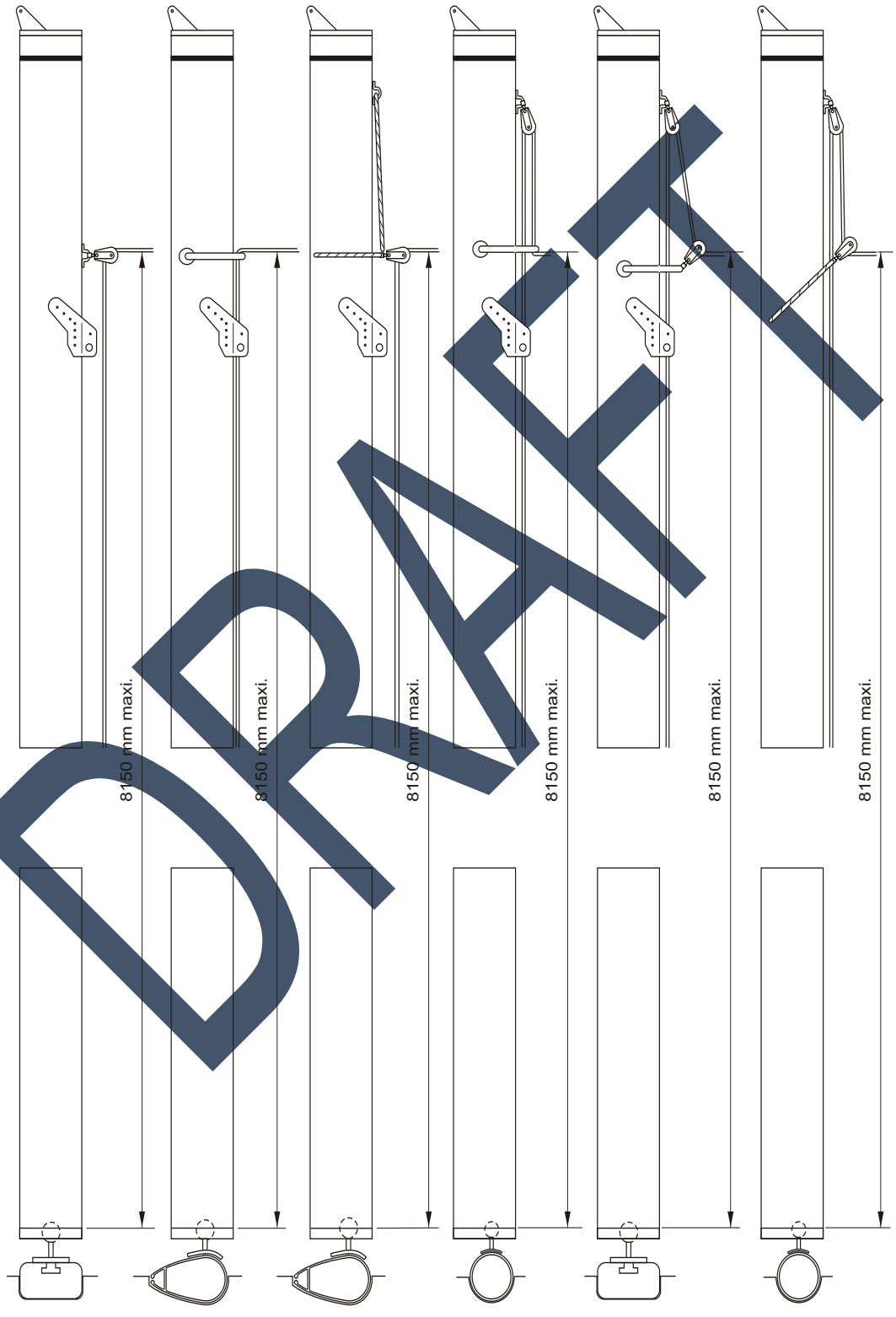


**F.3 MAST**
**F.3.2 DIMENSIONS**
**MAST SPAR CIRCUMFERENCE**




I.F18.A/PCB 01/01

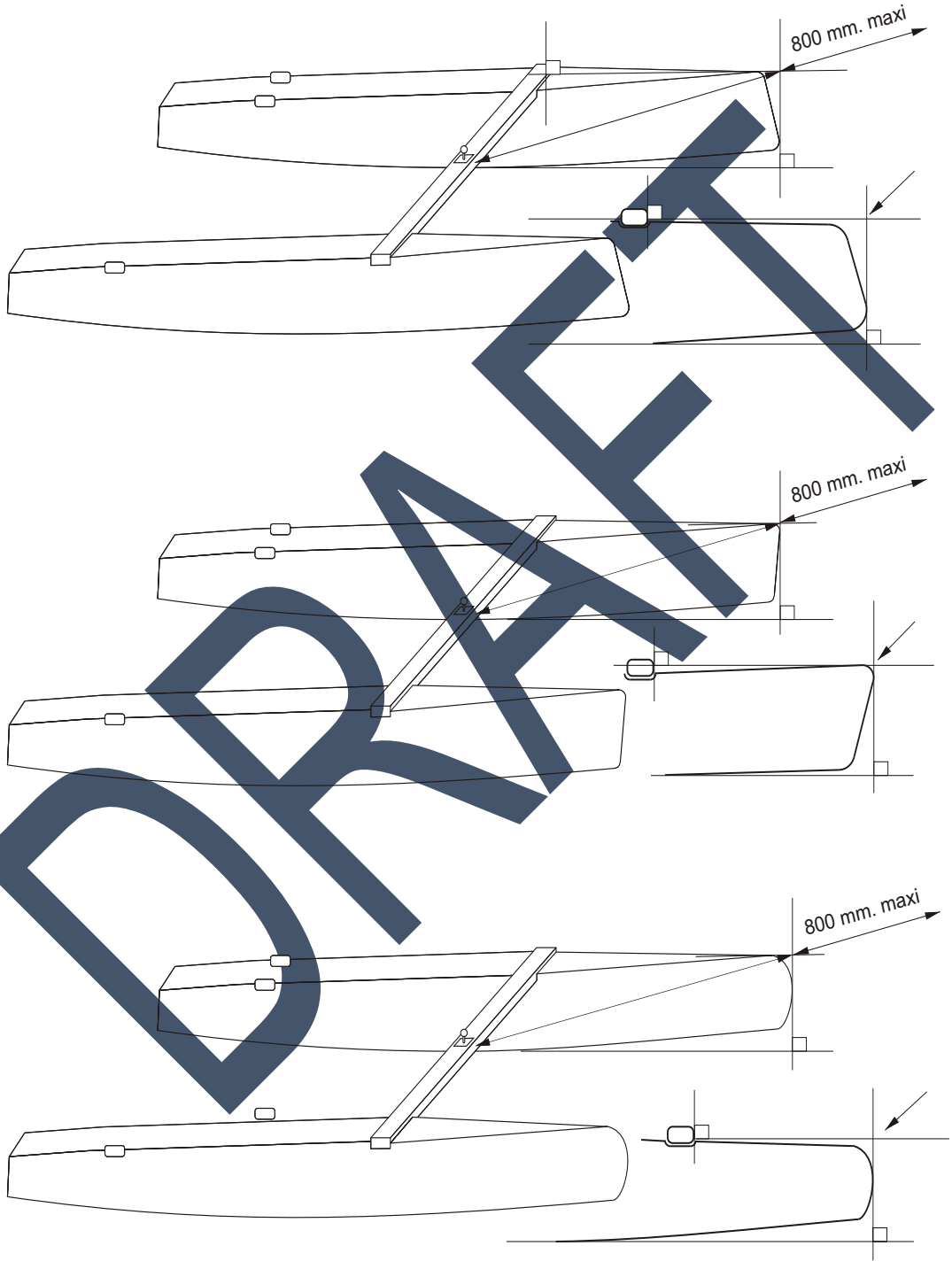
## F.3 MAST
## F.3.2 DIMENSIONS . SPINNAKER HOIST HEIGHT






I.F18.A./PCB/05.01

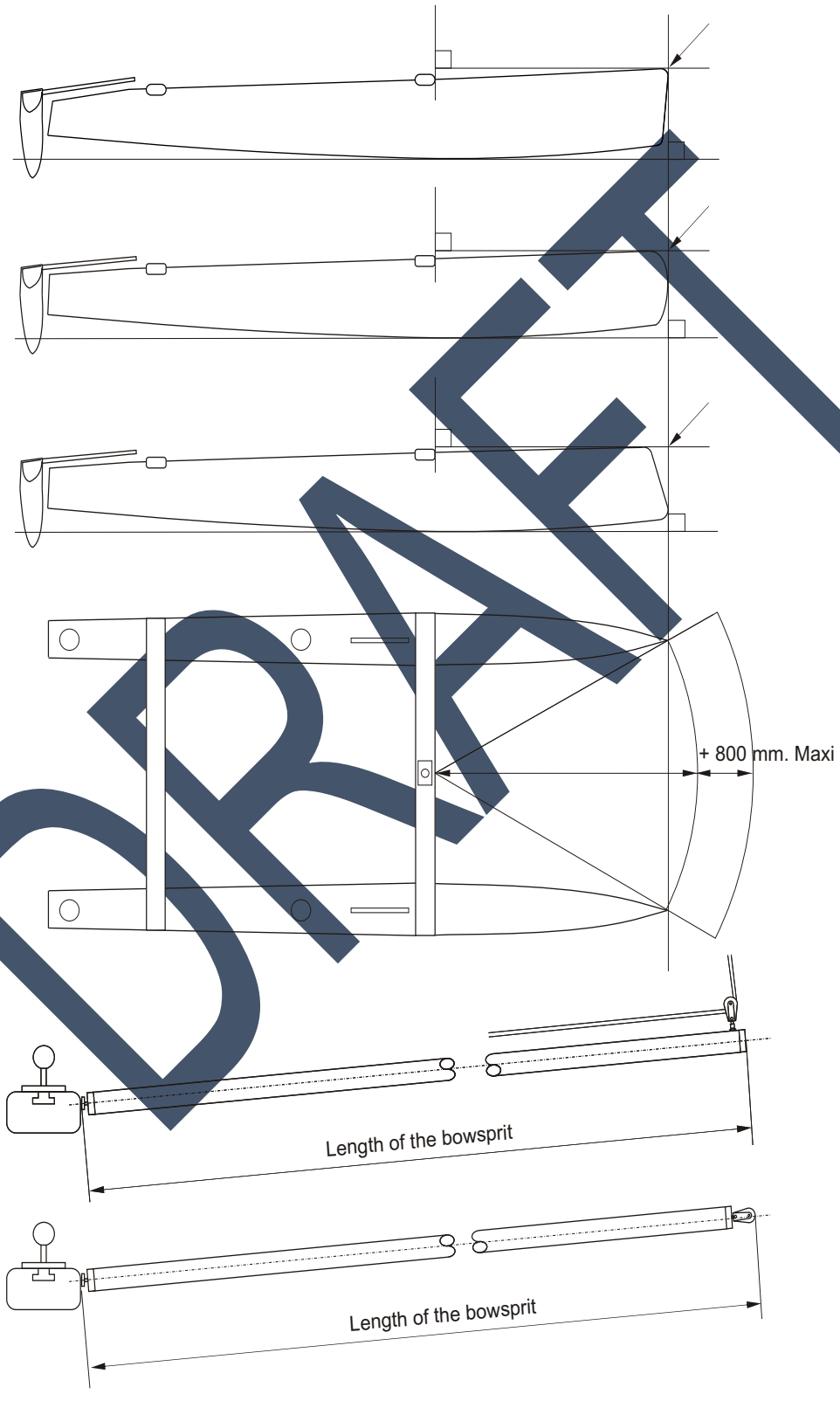
**F.5 BOWSPRIT**
**F.5.5 DIMENSIONS**
**F.5.5 (a) The maximum length.**



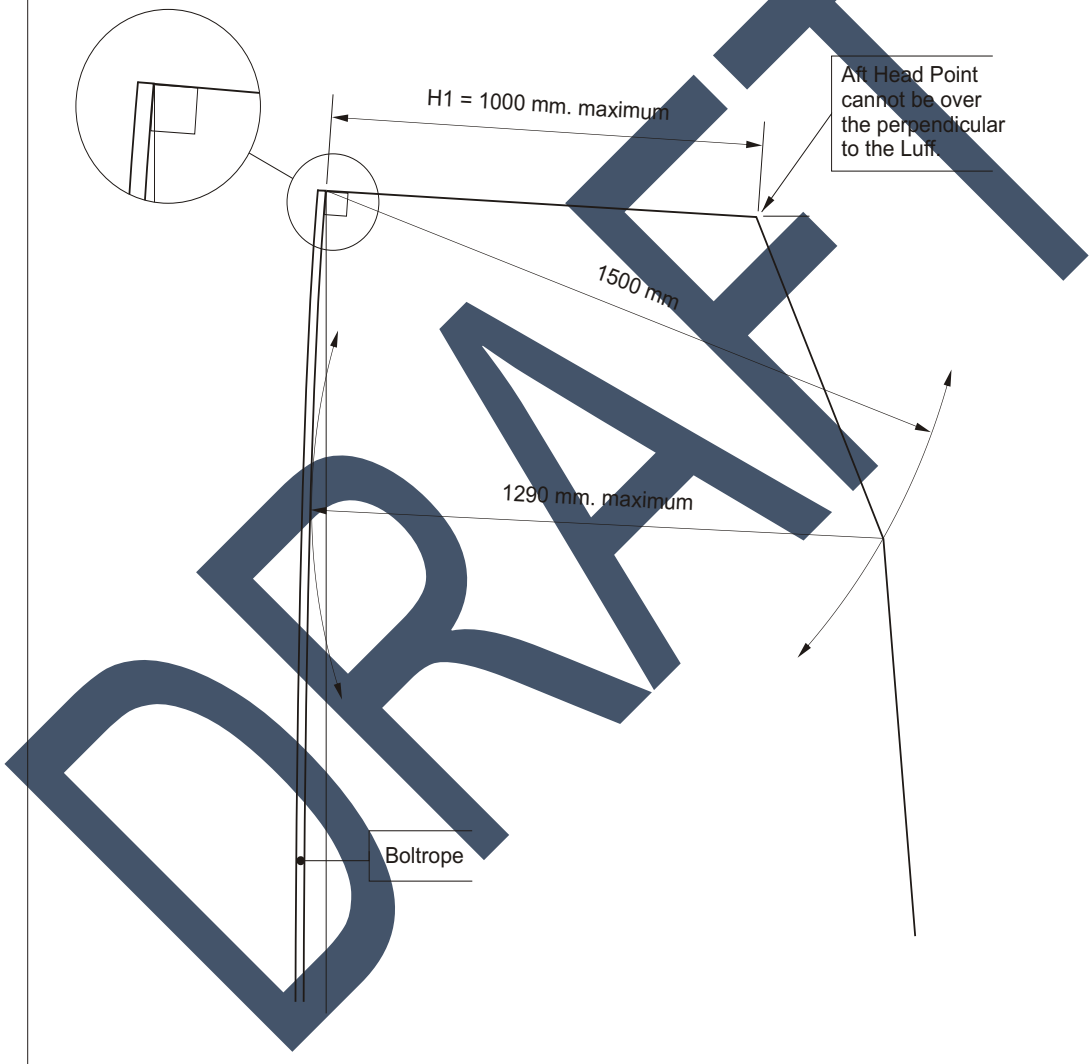



I.F18.A/PCB/11.07

## F.5 BOWSPRIT



## G.3 MAINSAIL
## G.3.5 DIMENSIONS

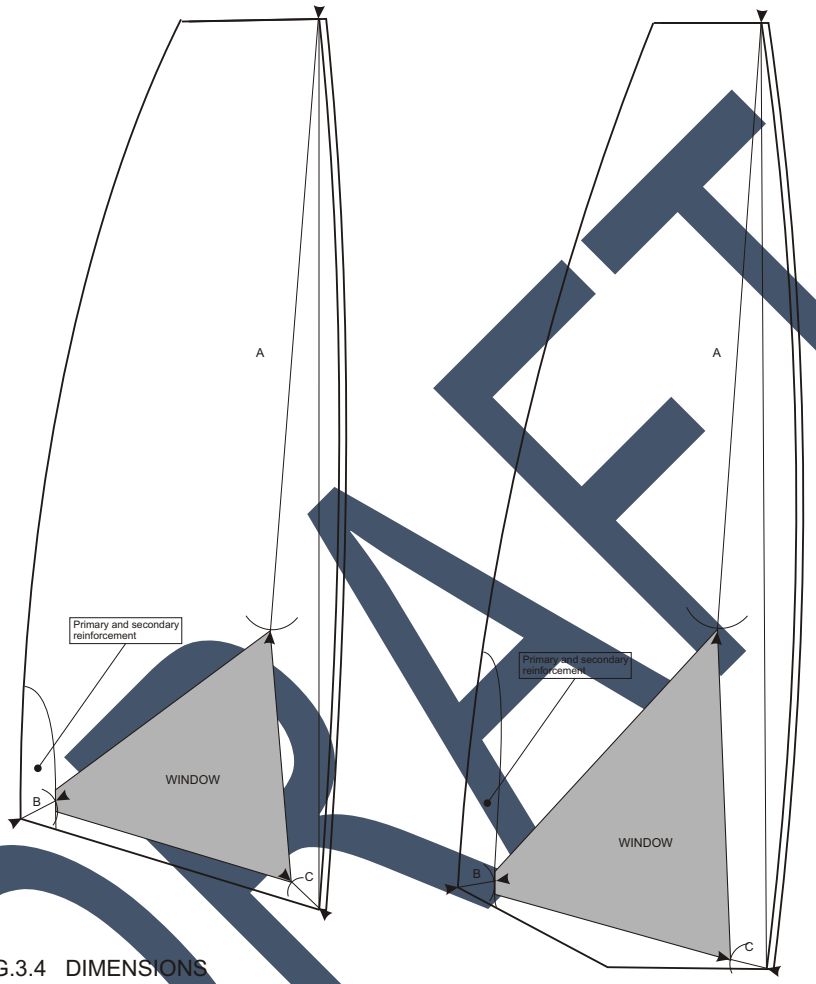





I.F18.A/PCB. Mars 2007

TEXT UNDERNEATH DRAWING TO BE REMOVED

MEASUREMENT PROCEDURE MAINSAIL WINDOW




G.3.4 DIMENSIONS

**Window area** (Appendix c)

- length A, from **head point** to **window area**, maximum 7630mm
- length B, from **clew point** to **window area**, maximum 480mm
- length C, from **tack point** to **window area**, maximum 440mm.

Pierre-Charles BARRAUD
IF18A, Chief measurer.
10/11/2018

APPENDIX D. CLOTH LIST

MAINSAIL / JIB See G.3.2 and G.4.1

| Manufacturer | Cloth / Style | Material / Fibre | Status | Thickness (mil) |
|---|---|---|---|---|
| Bainbridge | Diax 120 P | Polyester | Active | 1.5 |
| Bainbridge | Diax 60 P | Polyester | Active | 1.5 |
| Bainbridge | Diax LSP 60 | PEN | Active | 1.5 |
| Bainbridge | Diax LSP 90 | PEN | Active | 1.5 |
| Challenge | MPTC 3 | Polyester | Active | 3.0 |
| Challenge | MPX 06 P | PEN | Phasing out Dec. 2015 | 1.5 |
| Challenge | MPX 06 P | Polyester | Active | 1.5 |
| Challenge | MPX 06 P | PEN | Phasing out Dec.2015 | 2.5 |
| Challenge | MPX 06 P | Polyester | Active | 2.5 |
| Challenge | MPX 12 P | PEN | Phasing out Dec. 2015 | 1.5 |
| Challenge | MPX 12 P | Polyester | Active | 1.5 |
| Challenge | MW15OB | Polyester | Active | 4.0 |
| Contender | Apen 06 | PEN | Active | 1.5 |
| Contender | Apen 06 | PEN | Active | 2.5 |
| Contender | Apen 06 | PEN | Active | 3.0 |
| Contender | Apen 12 | PEN | Active | 1.5 |
| DIMENSION-POLYANT | Flex 08 P | PEN | Phasing out Dec. 2015 | 1.5 |
| DIMENSION-POLYANT | PE 05 | PEN | Active | 1.5 |
| DIMENSION-POLYANT | PE 10 | PEN | Active | 3.0 |
| DIMENSION-POLYANT | PE 10 | PEN | Active | 1.5 |
| DIMENSION-POLYANT | PE 15 | PEN | Active | 1.5 |
| DIMENSION-POLYANT | PX 05 | Polyester | Active | 1.5 |
| DIMENSION-POLYANT | PX 10 | Polyester | Active | 1.5 |
| DIMENSION-POLYANT | PX 15 | Polyester | Active | 1.5 |
| DIMENSION-POLYANT | PXB 10 | Polyester | Active | 1.5 |
| DIMENSION-POLYANT | PXB 15 | Polyester | Active | 1.5 |
| Pryde | F18 X | Polyester | Active | 3.0 |

WINDOW

| |
|---|
| Any monofilm/polyester, not containing aramid or carbon fibres and not lighter than 3.0 oz |

APPENDIX D. CLOTH LIST

GENNAKER See G.5.1

| Manufacturer | Cloth / Style | Material | Finish | Status | Weight (g/m2) |
|---|---|---|---|---|---|
| Bainbridge | AIRX620NS | Nylon | Silicone | Active | 37 |
| Bainbridge | AIRX650 | Nylon | | Active | 40 |
| Bainbridge | AIRX700 | Nylon | | Active | 45 |
| Bainbridge | AIRX720NS | Nylon | Silicone | Phased out | 45 |
| Bainbridge | MPEX 70 | Nylon | | Active | 40 |
| Challenge | Elite 40 coated | Nylon | | Active | 40 |
| Challenge | Elite 45 coated | Nylon | | Active | 45 |
| Challenge | FibreMax | Nylon | | Active | 77 |
| Contender | Dynakote 75 | Nylon | Silicone | Active | 40 |
| Contender | Maxikote 100 | Polyester | | Active | 50 |
| Contender | Maxikote 70 | Polyester | | Active | 38 |
| Contender | Superkote 75 | Nylon | | Active | 40 |
| Contender | Superkote 80 | Nylon | | Active | 42 |
| Contender | Superkote 90 | Nylon | | Active | 46 |
| DIMENSION-POLYANT | 6611 UCP Australia | Polyester | | Active | 34 |
| DIMENSION-POLYANT | 7722 UCP | Polyester | | Phasing out Dec. 2015 | 40 |
| DIMENSION-POLYANT | CHS 32 | Nylon | | Active | 44 |
| DIMENSION-POLYANT | CHS 90 | Nylon | | Phasing out Dec. 2015 | 96 |
| DIMENSION-POLYANT | Dilon | Nylon | | Active | 43 |
| DIMENSION-POLYANT | Formulon 75 | Nylon | | Active | 39 |
| DIMENSION-POLYANT | RPN 075 | Nylon | | Active | 40 |
| DIMENSION-POLYANT | SCN 32 | Nylon | Silicone | Active | 46 |
| Mazu Sailcoth | N075C2 | Nylon | Silicone | Active | 40 |