

B14 CLASS RULES 2010



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The B14 was designed in 1986 by Julian Bethwaite and was adopted as an ISAF Recognised Class in 1998

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INTRODUCTION

This introduction only provides an informal background and the International B14 Class Rules proper begin on the next page.

B14 hulls, hull appendages and spars are manufacturing controlled.

B14 rigs and sails are measurement controlled.

B14 hulls, hull appendages and spars shall only be manufactured by licensed manufacturers. Equipment is required to comply with the International B14 Building Specification.

B14 hulls, hull appendages, rigs and sails may, after having left the manufacturer, only be altered to the extent permitted in Section C of the class rules.

Owners and crews should be aware that compliance with rules in Section C is NOT checked as part of the certification process.

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.

PART I – ADMINISTRATION

Section A – General

A.1 LANGUAGE

- A.1.1 The official language of the class 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 ISAF International Sailing Federation

MNA ISAF Member National Authority

ICA International B14 Class Association

NCA National B14 Class Association

ERS Equipment Rules of Sailing

RRS Racing Rules of Sailing

A.3 AUTHORITIES

- A.3.1 The international authority of the class is ISAF which shall co-operate with the ICA in all matters concerning these **class rules.**
- A.3.2 ISAF nor the ICA are under any legal responsibility in respect of these **class rules**.

A.4 ADMINISTRATION OF THE CLASS

- A.4.1 ISAF has delegated its administrative functions of the class to MNAs. The MNA may delegate part or all of its functions, as stated in these **class rules**, to an NCA.
- A.4.2 In countries where there is no MNA, or the MNA does not wish to administrate the class, its administrative functions as stated in these **class rules** shall be carried out by the ICA which may delegate the administration to an NCA.

A.5 CLASS RULES CHANGES

A.5.1 At Class Events – see RRS 89.1(d) – ISAF Regulation 26.5(f) applies. At all other events RRS 87 applies.

A.6 CLASS RULES AMENDMENTS

A.6.1 Amendments to these **class rules** are subject to the approval of the ISAF in accordance with the ISAF Regulations after the adoption by a majority vote of the members in a general meeting of the ICA and in accordance with its constitution.

A.7 CLASS RULES INTERPRETATION

- A.7.1 Interpretation of **class rules** shall be made in accordance with the ISAF Regulations.
- A.7.2 Interpretation of **class rules** at an event shall be carried out in accordance with the RRS and the race organising authority shall, as soon as practical after the event, inform the ISAF and ICA of such a ruling.

A.8 INTERNATIONAL CLASS FEE AND ISAF BUILDING PLAQUE

- A.8.1 The licensed hull builder shall pay the International Class Fee.
- A.8.2 ISAF shall, after having received the International Class Fee for the hull, send the ISAF Building Plaque and a measurement form to the licensed hull builder.

A.9 SAIL NUMBERS

A.9.1 Sail numbers shall be the number shown on the ISAF Building Plaque.

A.10 HULL CERTIFICATION

A.10.1 **Certificates** will not be issued.

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

B.1.1 The boat shall be in compliance with the **class rules**.

B.2 EVENT LIMITATION MARKS

B.2.1 If an event uses event limitation marks, these marks shall not be removed during the event. If the event limitation mark becomes damaged or lost, this shall be reported to the race committee as soon as possible.

B.3 EVENT MEASUREMENT

B.3.1 In the case of a measurement dispute on any part or item of the boat, the following procedure shall be adopted;

A sample of 5 other boats, shall be taken and measured using identical techniques. The dimensions of the disputed boat shall be equal to, or between, the maximum and minimum dimensions obtained from these 5 boats. If the boat in question is outside these dimensions the matter, together with any relevant information, shall be referred to the ICA, which shall give a final ruling. If any of the dimensions of the sample are considered to be unusual, all relevant information shall be referred by the ICA to the ISAF.

PART II – REQUIREMENTS AND LIMITATIONS

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. 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) RRS Appendix G1.3(d) & (e) shall not apply
- (b) RRS 50.4 shall not apply.

C.2 CREW

C.2.1 LIMITATIONS

- (a) The **crew** shall consist of 2 persons
- (b) At least one crew member shall be a current member of the ICA or a member of a regional, national or district class association duly established in accordance with the class constitution, to participate in any event organised by a regional, national or district class association.

C.3 PERSONAL EQUIPMENT

C.3.1 MANDATORY

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

C.3.2 TOTAL WEIGHT

As an amendment to RRS 43.1(b), the sailing instructions may amend the maximum weight to 10kg.

C.4 ADVERTISING

C.4.1 LIMITATIONS

- (a) Advertising on the boat, as chosen by the owner or person in charge, is unrestricted within the limitations of ISAF Regulation 20
- (b) For the purposes of the ISAF Advertising Code the gennaker shall be deemed a **spinnaker**.

C.5 PORTABLE EQUIPMENT

C.5.1 OPTIONAL

- (a) FOR USE all must be removable for weighing.
 - (1) Electronic or mechanical timing devices
 - (2) Maximum two compasses. Electronic compasses with functions beyond heading and timing are prohibited
 - (3) Storage devices within the cockpit
 - (4) Any additional equipment required for safety purposes.

(b) NOT FOR USE

- (1) Electronic navigation devices
- (2) Communication devices.

C.6 BOAT

C.6.1 WEIGHT

	minimum	maximum
The hull weight excluding all items as listed in	63.6 kg	-
C.5 but including the bowsprit and tackline	_	
If the hull also has wing pins attached	64.0 kg	-

C.6.2 DIMENSIONS

(a) Measured from the **hull datum point**

	minimum	maximum
Bearing point of bowsprit at full extension	-	3760 mm
The outer tubing of the wings be aft of	450 mm	-

(b) Beam measurement

	minimum	maximum
Boat beam	-	3040 mm

C.6.3 CORRECTOR WEIGHTS

- (a) **Corrector weights** of lead shall be permanently fastened to the underside of the mast gate when the **hull weight** is less than the minimum requirement
- (b) The total weight of such **corrector weights** shall not exceed 2.0 kg. Any additional **corrector weights** required to achieve minimum **hull weight** shall be permanently attached to the transom bar.

C.6.4 LIMITATIONS

(a) No part of a **boat**, except ropes, lines and cord shall be replaced during an event, other than to replace equipment damaged beyond repair before the next race.

Such replacements may be made only with the approval of the race committee, and no re-substitutions of the original equipment may then be made, except with the approval of the race committee.

C.7 HULL

C.7.1 MODIFICATIONS, MAINTENANCE AND REPAIR

- (a) In the event of damage to any part of a boat, necessary repairs may be made provided repairs are made in such a way that the essential shape, construction detail or other characteristics are not materially affected. Fittings shall be attached in the same position as before the repair, or as close as structurally possible
- (b) A breather hole of maximum diameter 3mm may be drilled in the main bulkhead
- (c) Non skid tape or patches provided they are not more than 3mm thick, made from a flexible material and attached to the deck or the wings
- (d) A sacrificial rubber strip of up to 5mm thick and 50mm wide and 60mm long may be added to the rear of the centreboard case at inner cockpit deck level
- (e) Cockpit kick blocks are allowed up to a maximum height of 45mm not including non-skid tape
- (f) Wedges may be fitted under blocks or cleats for the sole purpose of providing a fairer lead to the cleat jaws. There shall be no change to any sheeting position from the installation of such wedges
- (g) Padding may be used in the centreboard case. The thickness of such padding may be varied to provide an optimum friction fit for the centreboard. It shall be of substantially uniform thickness for the length of the centreboard case
- (h) The trampolines may be substituted by any material provided the area enclosed by the wing tubing cannot be penetrated by a sailor's foot
- (i) The end of the wing tubes shall have an end cap in place that is constructed of a solid plastic material with no sharp edges.

C.7.2 FITTINGS

- (a) USE
 - (1) Inspection hatch covers and drainage plugs shall be kept in place at all times.

(b) MANDATORY

(1) Toe straps, maximum one on each side of the boat either attached to the gunwale with saddles or the outrigging tubes of the wings. Additional shockcord or rigid material may be added for the sole purpose of supporting the toe straps.

(c) OPTIONAL

(1) Up to 3 tab like pads may be added to each side of the foredeck. Such pads shall measure no more than 30mm above the deck profile and no more than 50mm wide, they shall be positioned at least 1000mm from the front face of the bow ring

- (2) One tie down loop may be added on each side to facilitate securing the hull to a trailer or dolly. Such loops shall be bolted through the gunwale flange between 600mm and 1000mm behind the chainplates
- (3) Gennaker bags shall be unrestricted as to both form and materials, so long as the design does not project beyond the outline of the inner cockpit and does not provide any additional functionality above that of the standard, supplied bag
- (4) A system for the sole purpose of opening or closing the gennaker bag is allowed, using not more than three non-ratchet blocks and a single cleat. One length of shockcord and one line may also be used for this purpose
- (5) Lengths of shock cord or line may be added to the stern at the boat to avoid sheets and tiller extensions from wedging or fouling.

C.8 HULL APPENDAGES

C.8.1 MODIFICATIONS, MAINTENANCE AND REPAIR

- (a) The **daggerboard** and **rudder** may be sanded, painted and polished. The original shape shall be maintained
- (b) The tiller/rudder stock assembly may be modified
- (c) The tiller extensions may be replaced without any restriction as to design and material.

C.8.2 FITTINGS

- (a) USE
 - (1) The **daggerboard** and **rudder** blade may be secured to the boat by shockcord which may have a snap hook. The shock cords may be attached to any existing fitting
 - (2) The holes in the **daggerboard** for the lifting handles shall not be below the top horizontal edge of the case
 - (3) In the case of a dagger style rudder blade, the holes in the rudder blade for the lifting handles shall not be below the top edge of the stock.

C.9 RIG

C.9.1 MODIFICATIONS, MAINTENANCE AND REPAIR

- (a) Routine maintenance such as cleaning, polishing and the replacement of broken or worn fittings is permitted without re-measurement
- (b) Replacements shall be fitted in the same position as the standard fitting, or as close as structurally possible. They shall be of substantially the same size and design of the original
- (c) Calibration marks are permitted
- (d) Painting or varnishing of the mast is permitted
- (e) Sheets, lines and gennaker halyard may be replaced without any restrictions as to length, diameter and taper providing no part is made of wire
- (f) Main and jib halyards and mainsheet strop may be replaced without any restrictions as to length, diameter and taper
- (g) Rig pins are optional in design.

C.9.2 FITTINGS

- (a) USE
 - (1) Mechanical Wind Indicators
 - (2) A compass complying with rule C5.1 is permitted
 - (3) Chocking is permitted around the mast gate.

C.9.3 LIMITATIONS

- (a) The jib halyard shall be limited to 1:1 purchase
- (b) The vang shall have a maximum purchase of 16:1 and not more than 4 turning blocks shall be used for leading it to the cleating positions
- (c) The mainsail cunningham shall have a maximum purchase of 8:1 and shall not use more than 5 pulleys.

C.9.4 STANDING RIGGING

(a) DIMENSIONS

	minimum	maximum
Forestay length (with any adjuster) when laid along the front surface of the mast the extension beyond the mast foot to the bearing point of the		
forestay pin		
Where forestay bears on a bow ring	265 mm	335 mm
Where forestay bears on a track	225 mm	295 mm

(b) USE

(1) Standing rigging shall not be adjusted while *racing*.

C.9.5 RUNNING RIGGING

(a) MODIFICATIONS, MAINTENANCE AND REPAIR

- (1) Lengths of shockcord may be added to lines and halyards provided they do not introduce a new function that can be achieved otherwise
- (2) Shockcord tails and associated blocks are permitted so long as they are used only to tidy ropes and do not provide additional functionality
- (3) A single non ratchet block or fairlead may be fitted on the gennaker halyard between the sail and the mast spar, attached with a shockcord tail leading down the mast via either a fairlead or hole in the mast
- (4) The mainsail halyard may have a 2:1 purchase
- (5) A chainplate may be used to secure the jib tack
- (6) The jib sheets may be led through non-ratchet blocks attached to the clew, or the clew eyelet, to effect 2:1 headsail sheeting
- (7) The forestay shall be fitted to either a track or a bow ring. If a bow ring is fitted then a Highfield lever may be used to apply rig tension
- (8) Bobbles may be added to lines and halyards provided they do not introduce a new function that can be achieved otherwise
- (9) A 1:2 purchase may be used internally on the gennaker halyard

- (10) A strop may be used to attach the vang to the boom, it may be made of any material and shall be attached in a manner that requires no additional fixing holes to be made in the boom. It shall be fitted such that a line continuing the vang through the boom would fall within the prescribed measurements
- (11) The mainsheet shall be rigged with a ratchet block as the last block shackled to either a strop, made of any material, located by a saddle or straight to a saddle on the boom. A fairlead may be attached to the cockpit for the purpose of terminating the mainsheet.

C.9.6 BOOM

(a) DIMENSIONS

Following dimensions are measured from the rear face of the mast		
	measurement	Tolerance
		+/-
Boom Length	2610 mm	20 mm
Sleeve leading edge	440 mm	minimum
Vang attachment (top of boom) if the vang is attached to the lower side of the boom then the above measurement shall compensate for this	750 mm	20 mm
Main ratchet block	1080 mm	30 mm

C.10 SAILS

C.10.1 MODIFICATIONS, MAINTENANCE AND REPAIR

- (a) Sails shall not be altered in any way except as permitted by these class rules
- (b) Routine maintenance, which does not materially affect the shape or size of the sail, is permitted without re-measurement.

C.10.2 LIMITATIONS

(a) Not more than 1 mainsail, 1 headsail and 1 gennaker shall be carried aboard

C.10.3 MAINSAIL

(a) IDENTIFICATION

The national letters and sail numbers shall comply with the RRS except where prescribed otherwise in these **class rules**.

(b) USE

- (1) The **sail** shall be hoisted on a **halyard**. The arrangement shall permit hoisting and lowering of the **sail** whilst afloat
- (2) The highest visible point of the **sail**, projected at 90° to the mast **spar**, shall not be set above the top of the **mast**. The intersection of the **leech** and the top of the boom **spar**, each extended as necessary, shall not be behind the aft end of the **boom**.

- (3) The **leech** shall not extend aft of straight lines between:
 - (i) the **aft head point** and the intersection of the **leech** and the upper edge of the nearest **batten pocket**
 - (ii) the intersection of the **leech** and the lower edge of a **batten pocket** and the intersection of the **leech** and the upper edge of an adjacent **batten pocket** below
 - (iii) the **clew point** and the intersection of the **leech** and the lower edge of the nearest **batten pocket**.

(c) LIMITATIONS

(1) Battens shall be manufactured from glass fibre

C.10.4 HEADSAIL

- (a) USE
 - (1) The **sail** shall be hoisted on a **halyard**. The arrangement shall permit hoisting and lowering of the **sail** whilst afloat.

Section D – Hull

D.1 PARTS

D.1.1 MANDATORY

- (a) Hull
- (b) Wings.

D.2 GENERAL

D.2.1 RULES

(a) The **hull** and wings shall comply with the **class rules** in force at the time of initial **manufacture**, unless explicitly stated in these **class rules**.

D.2.3 MODIFICATIONS, MAINTENANCE AND REPAIR

- (a) The **hull** and wings shall not be altered in any way except as permitted by these **class rules**
- (b) Holes not bigger than necessary for the installed fittings may be made in the hull, except a breather hole in accordance with C.7.1(b) is permitted
- (c) Routine maintenance such as sanding, painting and polishing is permitted without re-measurement
- (d) No modifications, maintenance or repairs shall alter the original lines of the hull
- (e) Inspection hatches may be installed in accordance with D.4.1(b)(2)
- (f) Drain holes may be installed in accordance with D.4.1(b)(3).

D.2.4 DEFINITIONS

(a) HULL DATUM POINT

The **hull datum point** is the point at which the forward bulkheads intersect, or would intersect if extended, at deck level.

D.2.5 IDENTIFICATION

(a) The hull shall carry the ISAF Plaque permanently placed on the transom.

D.2.6 MANUFACTURERS

- (a) The hull shall be built by a manufacturer licensed by the ICA.
- (b) All moulds shall be approved by the ICA

D.3 HULL SHELL

D.3.1 MATERIALS

The materials used in construction are limited to the following:

- (a) Polyester, Vinylester and Epoxy resins
- (b) E-Glass
- (c) Unidirectional carbon limited to a single layer of 300g/m², 150mm wide placed directly under the bulkhead extending from gunwale to gunwale
- (d) Foam not exceeding 80kg/m³ for sandwich material.

D.3.2 CONSTRUCTION

(a) The **hull** lay up shall conform to the builder's manual.

D.4 ASSEMBLED HULL

D.4.1 FITTINGS

(a) MANDATORY

The following fittings shall be positioned in accordance with the builders manual, measurement diagram and diagram H1, in the case of conflict Diagram H1 shall prevail:

- (1) Bowring fitting
- (2) Shroud Chain plates
- (3) Wing horns
- (4) Mast gate
- (5) Mast step
- (6) Jib fairleads or blocks
- (7) Jib turning blocks
- (8) Jib cleats
- (9) Transom bar
- (10) Mainsail Cunningham blocks, fairleads and cleats
- (11) Mainsail Vang blocks, fairleads and cleats
- (12) Pole outhaul blocks, fairleads and cleats
- (13) Rudder gudgeons or pintles

(14) Bowsprit return stopper.

(b) OPTIONAL

- (1) Wedges may be fitted under blocks or cleats for the sole purpose of providing a fairer lead to the cleat jaws. There shall be no change to any sheeting position from the installation of such wedges
- (2) A maximum of three inspection holes may be fitted, one in each bulkhead and one in the deck within 300mm of the transom. The watertight integrity of the hull shall be maintained and covers, capable of resisting accidental dislodgment, shall be fitted
- (3) A maximum of two drain holes, each of maximum diameter 25mm. The watertight integrity of the hull shall be maintained and plugs, capable of resisting accidental dislodgment, shall be fitted.

D.4.2 DIMENSIONS

(a) Measured from the hull datum point

	minimum	maximum
Rudder rotation point	-	2470 mm
Forestay bearing point	-	2010 mm

D.4.3 WEIGHTS

The minimum **hull weight**, including permanently attached fittings is 62.0kg.

D.4.4 HULL CORRECTOR WEIGHTS

- (a) **Corrector weights** of lead shall be permanently fastened to the underside of the mast gate when the **hull weight** is less than the minimum requirement
- (b) The total weight of such **corrector weights** shall not exceed 2.0 kg. Any additional **corrector weights** required to achieve minimum **hull weight** shall be permanently attached to the transom bar.

D.5 WINGS

D.5.1 MANUFACTURERS

- (a) The wings shall be supplied by a licensed builder
- (b) Carbon racks built prior to 01.10.2009, shall be grandfathered and be considered within class subject to conforming to D.5.3.

D.5.2 MATERIALS

- (a) The wings shall be constructed of either:
 - (1) aluminium alloy tube, or
 - (2) carbon fibre tube.

D.5.3 WEIGHTS

- (a) Carbon wings, excluding trampolines, lines and fittings, shall have a minimum weight of 9.85kg per wing
- (b) Where carbon wings are below the minimum weight, **corrector weights** of lead shall be added to achieve the minimum weight. Such weights shall be added in two equal amounts, bonded inside the outer longitudinal wing tube at the point where the transverse struts intersect.

Section E – Hull Appendages

E.1 PARTS

E.1.1 MANDATORY

- (a) Daggerboard
- (b) Rudder Blade, Rudder Stock and Tiller.

E.2 GENERAL

E.2.1 RULES

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

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 and repairs are permitted without re-measurement
- (c) **Hull appendages** may be sanded, painted and polished.

E.2.4 MANUFACTURERS

(a) The **hull appendages** shall be made by manufacturers licensed by ICA.

E.3 DAGGERBOARD

E.3.1 MATERIALS AND CONSTRUCTION

- (a) The **daggerboard** shall be manufactured in a mould approved by the copyright holder and ICA. All wooden foils built before 1st Jan 1997 carry a grandfather rule and are permitted
- (b) The **daggerboard** lay up shall conform to the builder's manual.

E.3.2 FITTINGS

- (a) MANDATORY
 - (1) The **daggerboard** shall have a rope handle attached to two holes drilled through the top.
- (b) OPTIONAL
 - (1) The **daggerboard** may be secured to the boat by shockcord, which may have a snap hook. The shockcord may be attached to any existing fitting.

E.4 RUDDER BLADE, STOCK AND TILLER

E.4.1 MATERIALS & CONSTRUCTION

- (a) The **rudder** blade shall be manufactured in a mould approved by the ICA. All wooden foils built before 1st Jan 1997 carry a grandfather rule and are permitted
- (b) The **rudder** blade lay up shall conform to the builder's manual
- (c) The **rudder** stock shall be a 29er aluminium casting. Original formed aluminium rudder stocks, as supplied by the licensed builder, are allowed
- (d) The tiller shall be of Aluminium or GRP.

E.4.2 FITTINGS

- (a) MANDATORY
 - (1) The dagger style **rudder** blade shall have a rope handle attached to two holes drilled through the top. The holes in the centreboard for the lifting handles shall not be below the case top edge

(2) In the case of swing rudders a locking device shall be fitted to lock the rudder blade in the vertical position.

(b) OPTIONAL

(1) The rudder blade may be fitted with a downhaul and a cleat.

Section F - Rig

F.1 PARTS

F.1.1 MANDATORY

- (a) Mast
- (b) Boom
- (c) Standing rigging
- (d) Running rigging
- (e) Bowsprit.

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 manufacture of the **spar**
- (b) The standing and running **rigging** shall comply with the **class rules**
- (c) Permanently bent spars are prohibited.

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 replacing standing, running rigging and fittings is permitted without re-measurement.

F.2.4 DEFINITIONS

(a) MAST DATUM PLANE

The **mast datum plane** is defined as the plane perpendicular to the lower end of the spar tube.

F.2.5 MANUFACTURER

(a) Spars shall be supplied by manufacturers licensed by the ICA.

F.3 MAST

F.3.1 MATERIALS

(a) The **spar** shall be of either carbon fibre or aluminium with a glass fibre tip.

F.3.2 CONSTRUCTION

(a) The **spar** shall include a fixed sail track.

F.3.3 FITTINGS

(a) MANDATORY

- (1) Mast head fitting (carbon spars only)
- (2) Shroud T Ball plates
- (3) Two sets of adjustable spreaders
- (4) Mainsail halyard sheave box
- (5) Headsail halyard sheave box
- (5) Spinnaker halyard sheave box
- (6) Mainsail halyard rack or cleat
- (7) Jib halyard rack or cleat
- (8) Spinnaker halyard cleat
- (9) Spinnaker halyard turning block
- (10) Gooseneck
- (11) Heel fitting.

(b) OPTIONAL

- (1) Mast head fitting (aluminium spars only)
- (2) Mechanical wind indicators
- (3) Compass bracket
- (4) Fairlead for a shock cord spinnaker halyard retainer
- (5) Main and Headsail halyard turning blocks, positioned below the relevant cleat or rack
- (6) One block, or hook, associated with the gennaker bag open/close system.

F.3.5 DIMENSIONS

(a) Carbon spars shall conform to the following measurements

	Minimum	Maximum
Mast length	7199 mm	7209 mm
Mast section	CST-287-1	
Following measurements are from the Mast Da	tum Plane	
Main halyard pulley	7140 mm	7160 mm
Cap shroud height	6457 mm	6477 mm
Gennaker block height (centre)	6390 mm	6410 mm
Upper spreader :		
Height	5102 mm	5112 mm
Length	360 mm	380 mm
distance between shrouds	700 mm	760 mm
Forestay height	5066 mm	5076 mm
Shroud height	4970 mm	4990 mm
Lower spreader:		
Height	2840 mm	2860 mm
Length	460 mm	480 mm
distance between shrouds	870 mm	930 mm
Track start	1090 mm	1110 mm
Gooseneck (to top of boom)	800 mm	910 mm
Mainsail halyard exit point (port side)	730 mm	770 mm
Gennaker halyard exit point	660 mm	700 mm
Gennaker halyard cleat	550 mm	650 mm
Gennaker halyard turning block	410 mm	510 mm
Mainsail halyard rack (port side)	480 mm	580 mm
Headsail halyard exit point (starboard side)	450 mm	490 mm
Headsail halyard cleat (starboard side)	300 mm	400 mm
Mast foot protrusion from bottom of tube	10 mm	20 mm

(b) Aluminium/glassfibre spars shall conform to the following specifications and measurements

Main Mast Alloy Tube		
Grade of Alloy	6082 T6 / 6351 T5	
Wall Thickness	1.6mm ± 0.1mm / 1.7mm ± 0.1mm	
Overall Length	5185mm ± 5mm	

Angle of cut off Outer Diameter	Max 25° ± 3° 64mm ± 1mm
Inner Sleeve	
Grade of Alloy Wall Thickness Overall Length Angle of cut off Outer Diameter Position of Sleeve	6082 T6 / 6351 T5 2.0mm ± 0.2mm / 1.9mm ± 0.2mm 1500mm ± 10mm Max 45° ± 3° 60mm ± 1mm Against foot

	Minimum	Maximum
Mast length	7199 mm	7209 mm
Following measurements are from the Mast Da	tum Plane	
Main halyard pulley	7140 mm	7160 mm
Cap shroud height	6457 mm	6477 mm
Gennaker block height (centre)	6390 mm	6410 mm
Upper spreader:		
Height	5102 mm	5112 mm
Length	355 mm	375 mm
distance between shrouds	700 mm	760 mm
Forestay height	5066 mm	5076 mm
Shroud height	4970 mm	4990 mm
Lower spreader:		
Height	2840 mm	2860 mm
Length	455 mm	475 mm
distance between shrouds	870 mm	930 mm
Track start	1090 mm	1110 mm
Gooseneck (to top of boom)	800 mm	910 mm
Mainsail halyard exit point (port side)	730 mm	770 mm
Gennaker halyard exit point	660 mm	700 mm
Gennaker halyard cleat	550 mm	650 mm
Gennaker halyard turning block	410 mm	510 mm
Mainsail halyard cleating point	600 mm	700 mm
Headsail halyard exit point (starboard side)	450 mm	490 mm
Headsail halyard cleating point	300 mm	400 mm
Mast foot protrusion from bottom of tube	10 mm	20 mm

F.4 BOOM

F.4.1 MATERIALS

(a) The **spar** shall be of aluminium.

F.4.2 CONSTRUCTION

(a) The **spar** extrusion shall be round.

F.4.3 FITTINGS

(a) MANDATORY

- (1) Ratchet block with attachment
- (2) Single sheave mainsheet block with attachment
- (3) Provision for making fast end of mainsheet
- (4) Provision for attaching the **clew** which may include a system of adjustment including blocks, lines and a cleat
- (5) Kicking strap fitting
- (6) Gooseneck attachment.

(b) OPTIONAL

(1) Mainsheet fairlead of open design, positioned between the two mainsheet blocks on the boom **spar**.

F.4.4 DIMENSIONS

Boom Alloy Tube		
Grade of Alloy	6082 T6 or 6351 T5	
Wall Thickness	1.65mm ± 0.15mm	
Outer Diameter	64mm ± 1mm	
Inner Sleeve Alloy Tube		
Grade of Alloy	6082 T6	
Wall Thickness	2.0mm max.	
Sleeve Length	800mm	

F.5 BOWSPRIT

F.5.1 MANUFACTURER

(a) The bowsprit is to be supplied by a licensed builder.

F.6 STANDING RIGGING

F.6.1 MATERIALS

(a) The **standing rigging** shall be of stainless steel.

F.6.2 CONSTRUCTION

(a) MANDATORY

- (1) A **forestay** of 1 x 7 wire
- (2) **Shrouds** of 1 x 7 wire
- (3) Cap **shrouds** of 1 x 7 wire.

F.6.3 FITTINGS

(a) MANDATORY

(1) **Shroud** adjustment plates. Plates shall be of normal commercial availability, with a minimum adjustment increment of 4mm.

(b) OPTIONAL

- (1) Forestay adjustment plate
- (2) A tube not more than 25mm diameter and less than 1000mm in length may be fitted over the lower part of the forestay

F.6.4 DIMENSIONS

	minimum	maximum
Forestay diameter	3.0 mm	3.5 mm
Shroud diameter	3.0 mm	3.5 mm
Cap shroud diameter	2.3 mm	2.6 mm
	Measurement	Tolerance +/-
Shroud length from load bearing edge of T-ball to centre of lower hole	4710 mm	30 mm
Cap Shroud length from load bearing edge of T-ball to centre of lower hole	6250 mm	30 mm

F.7 RUNNING RIGGING

F.7.1 **MATERIALS**

(a) Materials are optional.

F.7.2 **FITTINGS**

- (a) MANDATORY
 - (1) Mainsail halyard
 - (2) Mainsheet bridle
 - (3) Vang (kicking strap)
 - (4) Headsail halyard
 - Headsail sheets (5)
 - (6) Gennaker halyard
 - (7) Gennaker sheet
 - (8) Gennaker tackline
 - (9) Mainsail Cunningham line
 - (10) Mainsail sheet.

(b) OPTIONAL

- Bowsprit retraction shockcord (1)
- (2) Mainsail outhaul.

F.7.3 **FITTINGS**

- (a) MANDATORY
 - Fittings shall be positioned within the areas described in Diagram H1.

Section G - Sails

G.1 PARTS

G.1.1 **MANDATORY**

- (a) Mainsail
- (b) Headsail
- (c) Gennaker.

G.2 GENERAL

G.2.1**RULES**

(a) Sails shall comply with the class rules in force at the time of manufacture.

G.2.3**SAILMAKER**

(a) No licence is required.

G.3 MAINSAIL

G.3.1 IDENTIFICATION

(a) The class insignia shall be silk-screened, glued or sewn onto the sail. The class insignia shall be:



(b) The insignia shall be to the following specification

	Measurement	Tolerance +/-
Height of "B"	500 mm	100 mm
Height of "14"	375 mm	75 mm

G.3.2 MATERIALS

- (a) The **ply** shall consist of woven or laminated material
- (b) Where the **body of the sail** is made from laminated ply, the film shall be of polyester and the ply fibres shall be of polyester, polyethylene or aramid
- (c) **Primary** and **secondary reinforcement** shall consist of the same material as the **body of the sail**.

G.3.3 CONSTRUCTION

- (a) The construction shall be: soft sail, single ply sail
- (b) The **body of the sail** shall consist of the same **ply** throughout
- (c) The **sail** shall have a maximum of five **batten pockets**, which shall be full length
- (d) The following are permitted: Stitching, glues, tapes, bolt ropes, corner eyes, headboard with fixings, Cunningham eye or pulley, up to five **battens**, **batten pocket patches**, batten pocket end caps, batten retaining devices, mast and boom slides, leech line with cleat, single ply windows, tell tales, sail shape indicator stripes and items as permitted or prescribed by other applicable rules
- (e) The sail shall be loose footed.

G.3.4 DEFINITIONS

(a) The top width shall be measured between points on the **luff** and **leech** 500mm from the **head point**.

G.3.5 DIMENSIONS

	minimum	maximum
Leech length	6250 mm	6450 mm

	minimum	maximum
Half width	1900 mm	2050 mm
Three-quarter width	1270 mm	1500 mm
top width	600 mm	685 mm
Foot length	2400 mm	2520 mm
Foot median	-	6250 mm
Weight of ply of the body of the sail	140 g/m^2	-
Primary reinforcement	-	Unlimited
Secondary reinforcement	-	Unlimited
Window area	-	Unlimited
Extension of headboard from head point	-	135 mm
Dimension of headboard in any direction	-	120 mm

G.4 HEADSAIL

G.4.1 MATERIALS

- (a) The ply shall consist of woven ply or laminated ply
- (b) Where the **body of the sail** is made from laminated ply the film shall be of polyester and the ply fibres shall be of polyester, polyethylene or aramid
- (c) **Primary** and **secondary reinforcement** shall consist of the same material as the **body of the sail**
- (d) **Battens** shall be made of glass fibre.

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 **ply** throughout
- (c) The headsail shall have two or three full length **batten pockets**
- (d) The sail shall be fitted with zip luff or jib hanks
- (e) The following are permitted: Stitching, glues, tapes, tabling, corner eyes, clew board, **flutter patches**, 2 or 3 **battens**, **batten pocket patches**, **single ply windows**, tell tales, sail shape indicator stripes and items as permitted or prescribed by other applicable *rules*.

G.4.3 DIMENSIONS

	minimum	maximum
Luff length	4950 mm	5000 mm
Leech length	4300 mm	4450 mm
Foot length	1970 mm	2150 mm
Foot median	4558 mm	4895 mm
Top width	-	65 mm
Weight of ply of the body of the sail	140 g/m^2	-
Primary reinforcement	-	Unlimited
Secondary reinforcement	-	Unlimited
Window area	-	Unlimited

	minimum	maximum
Dimension in any direction of clew board	-	120 mm

G.5 GENNAKER

G.5.1 MATERIALS

- (a) The **ply** fibres shall consist of polyester or nylon
- (b) **Primary** and **secondary reinforcement** shall consist of the same material as the **body of the sail**.

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) The following are permitted: Stitching, glues, tapes, corner eyes, tell tales sail shape indicator stripes, sail identification, one window below the line of the **half** width measurement, luff line with cleat and items as permitted or prescribed by other applicable rules.

G.5.3 DIMENSIONS

	minimum	maximum
Luff length	7300 mm	7800 mm
Leech length	6150 mm	6800 mm
Foot length	4000 mm	4400 mm
Foot Median	-	7300 mm
Half width	3775 mm	4300 mm
Weight of ply of the body of the sail	32 g/m^2	-

Effective Date: 20 April 2010 Published Date: 20 April 2010 Previous issues: 1 March 2004

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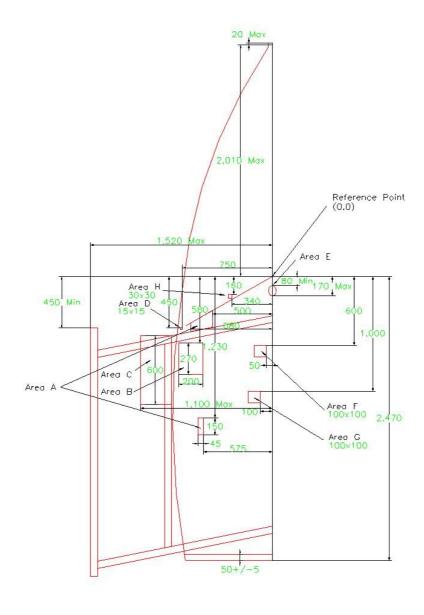
PART III - APPENDICES

The rules in Part III are **closed class rules**. Measurement shall be carried out in accordance with the ERS except where varied in this Part.

Section H

H.1 HULL FITTINGS LOCATION

(a) DIAGRAM



(b) DIMENSIONS

- (1) All measurements are taken from the **hull datum point**
- (2) All dimensions are in mm
- (3) All defined fittings shall lie within the prescribed areas.

(c) AREAS

- Area A Vang and Cunningham cleats and fairleads shall be positioned within this area, or on the forward transverse wing tube.
- Area B A single turning block, which may include a ratchet, and a single cleat for the purpose of sheeting the jib shall lie within this area. The cleat may include a fairlead.
- Area C All gennaker sheet turning blocks shall attach to a point on the wing in this area. Up to two turning blocks may be used of which only one may have a ratchet mechanism.
- Area D The **shroud** chainplates shall attach in this area.
- Area E The position of the aperture in the mast gate for the mast to pass through.
- Area F The pole outhaul cleat and fairlead shall lie in this area.
- Area G A single non ratchet turning block for the pole outhaul shall lie in this area.
- Area H The primary jib sheeting point shall lie in this area. The load bearing point shall be no more than 30mm above the deck.

Section I – Event Rules

I.1 WIND CONDITIONS

- (a) The minimum wind speed for starting will be that in which the race committee considers the boats have sufficient capability for pre-start manoeuvres.
- (b) Races should not start, or races in progress should be abandoned when:
 - (1) Wind gusts exceed 25 knots for more than 30 seconds
 - (2) Wind gusts exceed 30 knots for any duration
 - (3) The race committee considers conditions are unsafe for sailing.