

NATIONAL
HORNET™
CLASS RULES

2019



The Hornet was designed in 1952 by Jack Holt and was adopted as a national class in 1964.

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INTRODUCTION

*The National Hornet is an RYA class, where the intention of these **closed class rules** is to ensure that in hull form, sailing weight, sail plan and mast weight, the boats are similar.*

Hornet hulls, hull appendages, rigs and sails are measurement controlled.

Hornet hulls, hull appendages, rigs and sails may be manufactured by optional builders.

Hornet 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.

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

The class permits IHC for items produced under section G.

PLEASE REMEMBER
IF THESE RULES DO NOT SAY YOU
CAN,
THEN YOU CAN 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.2 ABBREVIATIONS

- A.2.1 WS World Sailing
- RYA Royal Yachting Association
- NCA National Hornet Class Association
- ERS Equipment Rules of Sailing
- RRS Racing Rules of Sailing
- IHC WS In-House Certification system

A.3 AUTHORITIES

- A.3.1 The authority of the class is the RYA which shall co-operate with the NCA in all matters concerning these **class rules**.
- A.3.2 Notwithstanding anything contained herein, the **certification authority** has the authority to withdraw a **certificate**.
- A.3.3 The RYA, the NSA and **official measurers** are under no legal responsibility in respect of these rules, plans or accuracy of measurement and no claim arising from these **class rules** can be entertained.

A.4 ADMINISTRATION OF THE CLASS

- A.4.1 The class shall be administered by the RYA in conjunction with the NCA

A.5 WORLD SAILING RULES

- A.5.1 These **class 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 **Class rules** shall not be varied at events without the approval of the RYA and the NCA.

A.7 CLASS RULES AMENDMENTS

- A.7.1 Amendments to these **class rules** shall be approved by the RYA.

A.8 CLASS RULES INTERPRETATION

A.8.1 Interpretation of **class rules** shall be made by the RYA who may consult the NCA.

A.9 CLASS FEE

A.9.1 The hull builder shall pay the Class Fee of £172 plus VAT for UK registered boats on each boat built, whether or not is it subsequently measured and registered.

A.9.2 The RYA shall, after having received the Class Fee for the hull, issue a building fee receipt, a sail number and for boats built after 01/01/2016, a building fee plaque. The building fee receipt shall be delivered to the owner by the builder on the sale of the boat.

A.10 SAIL NUMBERS

A.10.1 Sail numbers shall be issued by the RYA.

A.10.2 For boats built after 01/01/2016 the sail number shall be the number on the Building Fee Plaque.

A.11 HULL 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(s)
- (e) Hull identification
- (f) Builder/Manufacturers details
- (g) Date of issue of initial **certificate**
- (h) Date of issue of **certificate**
- (i) Weight and position of correctors
- (j) Sailing weight
- (k) Date built

A.12 INITIAL HULL CERTIFICATION

A.12.1 For a **certificate** to be issued to **hull** 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) The documentation shall include receipts for the class building fee.
- (c) Upon receipt of a satisfactorily completed documentation and **certification** fee, if required, the **certification authority** may issue a **certificate**.

A.13 VALIDITY OF CERTIFICATE

A.13.1 A **hull certificate** becomes invalid upon:

- (a) the change to any items recorded on the **hull certificate** as required under A.11.
- (b) withdrawal by the **certification authority**,
- (c) the issue of a new **certificate**,

A.14 HULL RE-CERTIFICATION

A.14.1 The **certification authority** may issue a **certificate** to a previously certified **hull**:

- (a) when it is invalidated under A.13.1(a), after receipt of the old **certificate** when available, and **certification** fee if required.
- (b) when it is invalidated under A.13.1 (b), at its discretion.
- (c) in other cases, by application of the procedure in A.12.

A.15 RETENTION OF CERTIFICATION DOCUMENTATION

A.15.1 The **certification authority** shall:

- (a) retain the original documentation upon which the current **certificate** is based.
- (b) upon request, transfer this documentation to the new **certification authority** if the hull is exported.

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 the **class rules**.
- (b) have a valid **hull certificate**.
- (c) have valid **certification marks** as required

B.2 FLOTATION CHECKS

B.2.1 The hull shall be capable of passing the tests for buoyancy as per rule H.1.

B.2.2 A race committee or **official measurer** may require that a **boat** shall pass the tests in rule H.1.

B.3 CLASS ASSOCIATION MEMBERSHIP

B.3.1 The owner shall be a current full member of the NCA.

B.3.2 If the owner is not sailing the boat then one member of the crew shall be a current full member of the NCA.

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 43.1 (b) is changed as follows: The total weight of clothing and equipment worn or carried by a competitor, including any buoyancy apparatus but excluding trapeze harness or belt, shall not exceed 10kg when wet, measured as per RRS Appendix H.

RRS 49.1 is added as follows: One sliding seat or pair of trapeze wires, which shall be used to support one person only, is permitted

- (b) The ERS Part I – Use of Equipment shall apply.

C.2 CREW

C.2.1 LIMITATIONS

The **crew** shall consist of 2 persons if the **boat** is fitted with a sliding seat or trapeze, or 3 persons if no sliding seat or trapeze is fitted.

C.3 PERSONAL EQUIPMENT

C.3.1 MANDATORY

The boat shall be equipped with **personal buoyancy** for each crew member to the minimum standard ISO 12402-5.

C.3.2 OPTIONAL

Trapeze harness. The weight shall not exceed 3.5 kg and shall have positive buoyancy.

C.4 ADVERTISING

C.4.1 LIMITATIONS

Advertising shall only be displayed in accordance with Category C of the WS Advertising Code.

C.5 PORTABLE EQUIPMENT

C.5.1 FOR USE

(a) OPTIONAL

- (1) Electronic or mechanical timing devices
- (2) Magnetic compasses
- (3) Electronic compasses which have functions not exceeding timing, heading and directional memory which may include a user programmed reference heading. All such devices shall be entirely self contained and with either an internal battery and/or solar power.
- (4) Bailers and/or sponges.

C.5.2 NOT FOR USE

(a) OPTIONAL

- (1) Towing lines.
- (2) Paddles.
- (3) Spare parts such as blocks, shackles, ropes etc.

C.6 BOAT

C.6.1 DIMENSIONS

minimum maximum

Longitudinal distance from **hull datum point**
to extension of headsail luff and **sheerline** 4714 mm

C.6.2 WEIGHT

minimum

The weight of the **boat** in dry condition..... 126 kg
The weight shall be taken excluding **sails** and all portable equipment as listed in C.5.

C.6.3 CORRECTOR WEIGHTS

- (a) **Corrector weights** shall be permanently fastened to the **boat** if the weight is less than the minimum requirement.
- (b) The total maximum weight of such **corrector weights** shall be 15kg. 6kg may be fitted at any point. Any further **corrector weights** shall be divided equally and one part of each half (which may be split into two separate weights to be fitted either side of the hog)) fitted within 300mm of the datum point the other half fitted at a distance of not less than 3400mm beyond the datum point, either on or to either side of the hog. All **corrector weights** shall have easy access for removal for regatta inspection if required
- (c) It is not permitted to build in any form of compensation weight within the construction of the hull skin with the purpose of reduction of the amount of correctors to be carried.

C.6.4 FLOTATION

- (a) The hull shall have flotation elements.

C.7 HULL

C.7.1 MODIFICATIONS, MAINTENANCE AND REPAIR

Maintenance, modification and repair is optional subject to current **class rules**

C.7.2 FITTINGS

(a) USE

- (1) Buoyancy tank hand hole covers and drainage plugs shall be kept in place at all times.
- (2) No part of the headsail and spinnaker fairleads shall project beyond the outside edge of the rubbing strake when viewed in plan.

C.8 HULL APPENDAGES

C.8.1 LIMITATIONS

Only one **centreboard** and two **rudder** blades may be used during an event of less than 7 consecutive days, except when a **hull appendage** has been lost or damaged beyond repair.

C.8.2 CENTREBOARD

USE

The **centreboard** when housed shall not extend above the **sheerline**, nor shall project below the **hull**.

C.8.3 RUDDER

USE

The **rudder** shall be fitted to the boat in such a manner that it shall not part company with the **hull** during a capsize.

C.9 RIG

C.9.1 MODIFICATIONS, MAINTENANCE AND REPAIR

Maintenance, modification and repair is optional subject to current **class rules**

C.9.2 FITTINGS

All fittings are optional and unrestricted.

C.9.3 LIMITATIONS

Only one set of **spars** and standing **rigging** may be used during an event of less than 7 consecutive days, except when an item has been lost or damaged beyond repair.

C.9.4 MAST

(a) DIMENSIONS

	minimum	maximum
The heel point of the spar below the sheerline or deck, whichever is higher	229 mm	
Longitudinal distance from hull datum point ; to foreside of mast spar	3263 mm	3289 mm

(b) USE

- (1) The **spar** shall be stepped in the mast step in such a way that the **heel point** shall not be capable of moving more than 4 mm.
- (2) The bottom of the **spar** shall take the full weight of the mast.

C.9.5 BOOM

(a) DIMENSIONS

	minimum	maximum
Limit mark width	10 mm	
Boom point distance		2667 mm

(b) USE

The intersection of the aft edge of the mast **spar** and the top of the boom **spar**, each extended as necessary, shall not be below the upper edge of the mast **lower limit mark** when the boom **spar** is at 90° to the mast **spar**.

C.9.6 SPINNAKER POLE

USE

- (1) One or two **spinnaker poles** may be used.
- (2) The systems for **spinnaker poles** are optional.

C.9.7 STANDING RIGGING

USE

- (1) Special levers or devices to alter the effective length whilst *racing*, of rigging attached to the mast **spar** above the **mast datum point** are prohibited.
- (2) The effective length of not more than one strut or similar device and/or one pair of lower **shrouds**, attached to or bearing on the mast below the **lower point** may be adjusted whilst *racing*.

C.9.8 RUNNING RIGGING

USE

- (1) All running rigging and associated systems are optional.

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 such as sewing, mending and patching is permitted without re-measurement and re-**certification**.

C.10.2 LIMITATIONS

- (a) Not more than 2 mainsail, 2 headsails and 2 spinnakers may be used during an event of less than 7 consecutive days, except when a **sail** has been lost or damaged beyond repair.

C.10.3 MAINSAIL

USE

- (1) The method of hoisting the **sail** is optional.
- (2) The highest visible point of the **sail**, projected at 90° to the mast **spar**, shall not be set above the lower edge of the mast **upper limit mark**. The intersection of the **leech** and the top of the boom **spar**, each extended as necessary, shall not be behind the fore side of the boom **outer limit mark**.
- (3) **Luff** and **foot** bolt ropes if fitted, shall be in the **spar** grooves or tracks.

C.10.4 HEADSAIL

USE

- (1) The method of hoisting the **sail** is optional.

C.10.5 SPINNAKER

USE

- (1) The method of hoisting the **sail** is optional.
- (2) The method of retrieval and stowage of the **sail** is optional.

Section D – Hull

D.1 PARTS

D.1.1 MANDATORY

- (a) External Hull shell excluding transom

D.1.2 OPTIONAL

- (a) Deck
- (b) Cockpit
- (c) Transom
- (d) Buoyancy Tanks
- (e) Gunwale Rubbing Strakes
- (f) Bulkheads
- (g) Thwarts
- (h) Sliding Seat
- (i) Any other item such as, but not limited to, spinnaker chute or storage bins.

D.2 GENERAL

D.2.1 RULES

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

D.2.2 CERTIFICATION

See Rule A.12.

D.2.3 MODIFICATIONS, MAINTENANCE AND REPAIR

- (a) The hull shell shall not be altered in any way except as permitted by these **class rules**, without re-measurement and re-**certification**.
- (b) Routine maintenance such as painting, polishing and the repair of minor abrasions is permitted without re-measurement and re-**certification**.

D.2.4 DEFINITIONS

HULL DATUM POINT

The **hull datum point** is taken at right angles to the base line, on the centreline and as being through the aft most part of the hull, extended as necessary but excluding rudder fittings and any deck projection as defined in D.9.2.

D.2.5 IDENTIFICATION

The hull shall carry the sail number, either cut into or indelibly marked on the outside of the transom, or if no transom is fitted, on the centreline of the helmsman's cockpit not more than 300mm forward of the **Hull Datum Point**. The figures shall be not less than 25 mm high.

D.2.6 BUILDERS

A license is required to build Hornet hulls. The builder shall apply to the Hornet Class Association who shall grant a one boat license to amateur builders. Professional production builder's licenses shall also be approved by the RYA.

As part of the license application every builder shall submit detailed specifications of how the hull shell of the boat is to be built and if not of all plywood construction a minimum 500mmx500mm sample of the hull shell to be used for build purposes shall be supplied to the NCA before building commences.

D.3 HULL SHELL

D.3.1 MATERIALS

- (a) The hull shell may be built from a combination of:
 - (i) Resins: Polyesters, vinylesters, Epoxy.
 - (ii) Fibres: All forms of glass cloth, tissue and mat.
 - (iii) Core materials: 3mm to 12mm foam.
 - (iv) Backing pads and tapping places of optional material.
- (b) If plywood is included in the external hull shell only (D.1.1.a), it shall be not less than 6mm nominal thickness.
- (c) In the case of foam reinforced plastic the hull skin shall be made of not less than two layers of fibre reinforcement each of 290gm/m² (nominal 300gm/m²) plus resin with a foam core of unspecified thickness between that as specified D.3.1(a)(iii)

D.3.2 CONSTRUCTION

The construction methods for the **hull** are optional

- (a) Chines shall continue on to an athwartships plane through the **hull datum point**.
- (b) The round on the chines between the **hull datum point** and section 5 shall be measured from the point at which the outer faces of the bottom and topside panels would meet if extended.
- (c) The foreside of the mast slot shall be rigid and it or its extension at the sheerline shall conform to the dimensions in D.10.2
- (d) For the purpose of incorporating a spinnaker chute, the topside and/or gunwales forward of section 5 may extend outboard.
- (e) The **hull** topside panels may be cut forward to meet the deck, should the deck be less than the length to the **hull datum point**.
- (f) The hull may be fitted with a permanently fixed skeg/fairing for a bailer system.

D.4 DECK

D.4.1 MATERIALS

The deck may be built from optional materials.

D.4.2 CONSTRUCTION

The construction and design is optional except that the **sheerline** shall be continuous and able to be located from the stem head to a point not more than 160mm from the **hull datum point**.

D.5 BUOYANCY TANKS

D.5.1 CONSTRUCTION

- (a) Buoyancy systems shall comprise of sufficient to float the boat, plus 200kg: approximately level when full of water for at least 30 minutes, with the weight evenly placed about the centre line within 200mm of section 3.

D.6 GUNWALE AND RUBBING STRAKES

D.6.1 MATERIALS

- (a) The rubbing strakes may be built from optional materials.

D.6.2 CONSTRUCTION

- (a) Measured in the (athwartships) transverse plane, the rubbing strake shall not project more than 65mm from the **sheerline**.

D.7 BULKHEADS

D.7.1 MATERIALS

Optional

D.7.2 CONSTRUCTION

Optional

D.8 THWARTS

D.8.1 MATERIALS

Optional

D.8.2 CONSTRUCTION

Optional

D.9 SLIDING SEAT

D.9.1 MATERIALS

Optional

D.9.2 CONSTRUCTION

(a) Optional

(b) The weight of the sliding seat shall include fittings but exclude any bridge.

D.10 ASSEMBLED HULL

D.10.1 FITTINGS

(a) MANDATORY

The following fittings shall be positioned in accordance with the measurement dimensions:

(1) Shroud plates fixed to topsides, gunwales or pads thereon.

(2) No fitting shall be attached to any deck projection beyond the transom.

(b) OPTIONAL

All fittings unless specifically stated to the contrary are optional.

D.10.2 DIMENSIONS

The keel line shall be taken as the intersection line from transom to stem of the hull shell and the **hull** centreplane.

The sections shall be taken as vertical, transverse planes at the following positions:

Section 1: at 762 mm from **hull datum point** as defined in D.2.4

Section 2: at 1524 mm from **hull datum point**.

Section 3: at 2438 mm from **hull datum point**.

Section 4: at 3353 mm from **hull datum point**.

Section 5: at 4267 mm from **hull datum point**.

The baseline shall be on the centreplane of the **hull** at the following vertical distances:

at Section 1: 162 mm from the **hull** shell

at Section 5: 178 mm from the **hull** shell

	minimum	maximum
Hull length (including stem band).....	4865 mm	.. 4890 mm
Vertical distance from baseline to underside of hull shell;		
at section hull datum point	225 mm	.... 251 mm

at section 2	85 mm	....	111 mm
at section 3	44 mm	.....	70 mm
at section 4	70 mm	.....	96 mm
at sheerline at stem	737 mm	....	763 mm
Distance from hull datum point to point of intersection of extension of straight line of stem, including stem band, and base line			
	4737mm	..	4777 mm
Distance from a point 270mm from base line, measured along extension of straight line of stem, including stem band, to nearest point of keel including keel band			
	30mm	.....	50 mm
Distance from point of intersection of: extension of straight line of stem, including stem band, and extension of line of keel from keel including keel band to base line, measured along line of stem			
	260mm	....	280 mm
Base line to chine;			
at transom	304 mm	....	330 mm
at section 1	251 mm	....	277 mm
at section 2	197 mm	....	223 mm
at section 3	184 mm	....	210 mm
at section 4	254 mm	...	280 mm
at section 5	375 mm	....	401 mm
Base line to sheerline ;			
at transom Where applicable	509 mm	....	535 mm
at section 1	528 mm	....	554 mm
at section 2	556 mm	....	582 mm
at section 3	590 mm	....	616 mm
at section 4	634 mm	...	660 mm
at section 5	699 mm	....	725 mm
Beam at chine;			
at transom	826 mm	....	852 mm
at section 1	1054 mm	..	1080 mm
at section 2	1194 mm	..	1220 mm
at section 3	1182 mm	..	1208 mm
at section 4	927 mm	...	953 mm
at section 5	419 mm	....	445 mm
Longitudinal distance from hull datum point ;			
to fore end of centreboard slot	2884 mm	..	2910 mm
to aft end of centreboard slot.....	1740 mm	..	1766 mm
Width of centreboard slot.....			
			40 mm
Deviation of external hull surface at sections 1, 2, 3 and transom from a straight edge placed on the hull surface at right angles to the centreline			
			5 mm
Round on chine - as per D.3.2 - between;			

transom and section 4	8 mm
sections 4 and 5	12 mm

Beam of **hull**, excluding rubbing strakes and fittings, at **sheerline**;

at transom where applicable	927 mm	....	953 mm
at section 1	1194 mm	..	1220 mm
at section 2	1366 mm	..	1392 mm
at section 3	1385 mm	..	1411 mm
at section 4	1207 mm	.....	1233 mm
at section 5	733 mm	....	759 mm

Longitudinal distance from **hull datum point**;

to foreside of mast slot D.3.2(c)	3263 mm	..	3289 mm
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Longitudinal distance from **hull datum point**

to intersection of shrouds at sheerline	2732 mm	..	2758 mm
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Horizontal distance forward of any part of the boat from the point 80mm aft of the forward most part of the

hull on the centreline	125 mm
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Projection of deck;

beyond aft face of transom	12 mm
below deck surface at transom	30 mm

Gunwale rubbing strakes;

Width in plan from sheerline	65 mm
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Sliding seat if fitted;

extension beyond sheerline	1440 mm
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Weight including all fittings	8.2 kg
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Section E – Hull Appendages

E.1 PARTS

E.1.1 MANDATORY

- (a) **Centreboard**
- (b) **Rudder**

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 MANUFACTURERS

- (a) The manufacturer of **hull appendages** is optional.

E.3 CENTREBOARD

E.3.1 MATERIALS

The **centreboard** may be of any material.

E.3.2 CONSTRUCTION

- (a) The shape and construction of the **centreboard** is optional.
- (b) The **centreboard** shall have no moving parts

E.4 RUDDER BLADE, RUDDER STOCK AND TILLER

E.4.1 MATERIALS

The **rudder** blade, **rudder** stock, tiller and tiller extension may be of any material.

E.4.2 CONSTRUCTION

The construction and design of the **rudder** blade, **rudder** stock, tiller and tiller extension is optional.

E.4.3 FITTINGS

MANDATORY

A system to prevent the rudder parting company from the boat during a capsize.

Section F – Rig

F.1 PARTS

F.1.1 MANDATORY

- (a) **Mast**
- (b) **Boom**
- (c) Standing **rigging** comprising of two **shrouds**.
- (d) **Spinnaker pole**

F.1.2 OPTIONAL

- (a) One **forestay**
- (b) Two lower **shrouds**
- (c) Strut or similar
- (d) Running **rigging**
- (e) Two **trapeze** wires

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 **class rules**.

F.2.2 MODIFICATIONS, MAINTENANCE AND REPAIR

Spars shall not be altered in any way except as permitted by these **class rules**.

F.2.3 CERTIFICATION

(a) The **official measurer** shall **certify spars**.

(b) No **certification** of standing and running **rigging** is required.

F.2.4 DEFINITIONS

MAST DATUM POINT

The **mast datum point** is the upper edge of a band, not less than 10mm wide, with that edge level with the **sheerline**.

F.2.5 MANUFACTURER

The manufacturer is optional and no licence is required.

F.3 MAST

F.3.1 MATERIALS

The **spar** may be of any material excluding carbon fibre.

F.3.2 CONSTRUCTION

(a) The construction of the **spar** is optional.

(b) The extension of the line of the forestay if fitted and headsail luff shall meet the mast below the edge of the shroud band.

F.3.3 FITTINGS

All fittings including **spreaders** cross trees and struts are optional.

F.3.5 DIMENSIONS

Where no limit(s) for a particular dimension is given then the item is not controlled and need not be measured.

	minimum	maximum
Mast spar curvature		50 mm
Mast limit mark width	10 mm	
Lower point height	655 mm	760 mm
Upper point height		6705 mm
Forestay height		
The extension of the line of the forestay if fitted		
and headsail luff above mast datum point		4650 mm
Lower point to upper point		5945 mm
Spinnaker pole fitting:		
projection		50 mm
Spinnaker hoist height above mast datum point		4755 mm
Spinnaker hoist fitting:		
projection		100 mm

	Distance from mast datum point as defined in F.2.4 to centre of gravity in condition as described in ERS H.4.6	2440 mm	
	Mast tenon depth		25mm
F.3.6	WEIGHTS		
		minimum	maximum
	Mast weight	9.0 kg	
F.4	BOOM		
F.4.1	MATERIALS The material of the spar is optional.		
F.4.2	CONSTRUCTION The construction of the spar is optional.		
F.4.3	FITTINGS All fittings are optional.		
F.4.5	DIMENSIONS <i>Where no limit(s) for a particular dimension is given then the item is not controlled and need not be measured.</i>		
		minimum	maximum
	Boom spar curvature		25 mm
	Boom spar cross section Complete with any track but excluding fittings, must pass through a circle of diameter		100 mm
F.5	SPINNAKER POLE		
F.5.1	MANUFACTURER Manufacturer is optional.		
F.5.2	MATERIALS Spar materials are optional		
F.5.3	CONSTRUCTION Construction is optional.		
F.5.4	FITTINGS Fittings are optional.		
F.5.5	DIMENSIONS		
		minimum	maximum
	Spinnaker pole length		2500 mm
F.6	STANDING RIGGING		
F.6.1	MATERIALS The material of the standing rigging is optional.		

F.6.2 CONSTRUCTION

Optional

F.6.3 FITTINGS

Optional

F.6.4 DIMENSIONS

Optional

F.7 RUNNING RIGGING

F.7.1 MATERIALS

Optional

F.7.2 CONSTRUCTION

Optional.

F.7.3 FITTINGS

Optional.

Section G – Sails

G.1 PARTS

G.1.1 MANDATORY

(a) **Mainsail**

(b) **Headsail**

G.1.2 OPTIONAL

(a) **Spinnaker**

G.2 GENERAL

G.2.1 RULES

Sails shall comply with the **class rules** in force at the time of **certification**.

G.2.2 CERTIFICATION

(a) The **official measurer** shall **certify** mainsails and headsails in the **tack** and spinnakers in the **head** and shall sign and date the **certification mark**.

(b) An RYA may appoint one or more persons as a sailmaker to measure and **certify sails** produced by that manufacturer in accordance with the WS In-house Certification Guidelines.

G.2.3 SAILMAKER

The Sailmaker is optional.

G.3 MAINSAIL

G.3.1 IDENTIFICATION

- (a) (a) The class insignia shall be not less than 300mm high or 125mm wide and shall conform with the visual form shown in the diagram below, and shall be placed in accordance with RRS 77, appendix G.



- (b) The sail number and National letter(s) (if displayed) shall be placed as laid down in RRS 77, Appendix G.

G.3.2 MATERIALS

- (a) The **ply** fibres shall be optional.
- (b) **Stiffening** shall consist of:
- (1) Cornerboards: material optional.
 - (2) Battens: material optional.
- (c) **Sail reinforcement** shall consist of materials listed in (a) above.

G.3.3 CONSTRUCTION

- (a) The construction shall be: **soft sail, single ply sail**.
- (b) The **body of the sail** shall consist of either **woven** and/or **laminated ply** throughout.
- (c) The **sail** shall have no more than 7 batten **pockets** in the **leech** which may extend to the **luff**.
- (d) The sail may be loose footed.
- (e) The following are permitted: Stitching, glues, webbing, tapes and PTFE tapes, bolt ropes/shock cord, corner eyes, corner rings, Velcro or other fastenings, headboard with fixings, Cunningham eye or pulley, batten pocket elastic, batten pocket end caps, mast and boom slides, leech line with cleat, **windows**, tell tales, sail shape indicator stripes and items as permitted or prescribed by other applicable *rules*.

G.3.4 DIMENSIONS

Where no limit(s) for a particular dimension is given then the item is not controlled and need not be measured.

	minimum	maximum
Leech length		6465 mm
Quarter width		2370 mm
Half width		1860 mm
Three-quarter width		1120 mm
Upper width at upper leech point 300 mm from head point		280 mm
Top width		130 mm
Batten pocket width:		
inside		60 mm

G.4 HEADSAIL

G.4.1 MATERIALS

- (a) The **ply** fibres shall consist of polyester or HMPE.
- (b) **Stiffening** shall consist of:
 - (1) Cornerboards: material optional
 - (2) Battens: material optional
- (c) **Sail reinforcement** shall consist of materials listed in (a) above.

G.4.2 CONSTRUCTION

- (a) The construction shall be: **soft sail, single ply sail**.
- (b) The **body of the sail** shall consist of either **woven** and/or **laminated ply** throughout.
- (c) The headsail shall have not more than 3 **batten pockets** in the **leech**.
- (d) The following are permitted: Stitching, glues, webbing, tapes, luff wire, corner eyes, corner rings, clew board with fixings, hanks, Velcro or press studs, Cunningham eye with cleat, batten pocket elastic, batten pocket end caps, leech line with cleat, **windows**, tell tales, sail shape indicator stripes and items as permitted or prescribed by other applicable *rules*.

G.4.3 DIMENSIONS

Where no limit(s) for a particular dimension is given then the item is not controlled and need not be measured.

	minimum	maximum
Luff length		4115 mm
Leech length		3963 mm
Foot length		2134 mm
Foot median		4115 mm
Top width		30 mm
Batten pocket length:		
inside		315 mm
Batten pocket width:		
inside		60 mm

G.5 SPINNAKER

G.5.1 IDENTIFICATION

(a) The national letters need not be displayed on the spinnaker.

G.5.2 MATERIALS

(a) The **ply** fibres shall consist of **polyester** or **polyamide**.

(b) **Sail reinforcement** shall consist of materials listed in (a) above.

G.5.3 CONSTRUCTION

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

(b) The **body of the sail** may consist of different **woven ply** throughout.

(c) The following are permitted: Stitching, glues, webbing, tapes, corner eyes, corner rings, recovery line eyes, headboard with fixings, tell tales and items as permitted or prescribed by other applicable *rules*.

G.5.4 DIMENSIONS

Where no limit(s) for a particular dimension is given then the item is not controlled and need not be measured.

	minimum	maximum
Leech and Luff lengths	<u>4600 mm</u>
Foot length	<u>3350 mm</u>
Foot Median	<u>5300 mm</u>
Difference between diagonals	50 mm
Half width	2830 mm ..	3350 mm
Headboard in any direction	105 mm

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 BUOYANCY TESTS

- (a) Buoyancy apparatus shall comprise of sufficient to float the boat, plus 200kg: approximately level when full of water for at least 30 minutes, with the weight evenly placed about the centre line within 200mm of section 3.
- (b) If the buoyancy apparatus consists, wholly or in part, of built-in bulkheads the boat shall be measured with one buoyancy compartment flooded.
- (c) If the measurer is in any doubt about the adequacy of the buoyancy arrangements, he shall order an immersion test.