

NATIONAL
SQUIB™
CLASS RULES
2022



The Squib was designed in 1967 by Oliver Lee and was adopted as a national class in 1972.

INDEX

PART I – ADMINISTRATION

Section A – General

A.1	Language	4
A.2	Abbreviations	4
A.3	Authorities.....	4
A.4	Administration of the Class	4
A.5	World Sailing Rules	4
A.6	Class Rules Variations	4
A.7	Class Rules Amendments	4
A.8	Class Rules Interpretation	4
A.9	Class Building Fee	4
A.10	Sail Numbers	5
A.11	Hull Certification	5
A.12	Initial Hull Certification	5
A.13	Validity of Certificate	5
A.14	Hull Re-Certification	5
A.15	Retention of Certification Documentation	6

Section B – Boat Eligibility

B.1	Class Rules and Certification	6
B.2	Flotation	6

PART II – REQUIREMENTS AND LIMITATIONS

Section C – Conditions for Racing – boats prior to 1/7/16

C.1	General	7
C.2	Crew	7
C.3	Personal Equipment	7
C.4	Advertising	7
C.5	Portable Equipment	7
C.6	Boat	8
C.7	Hull	8
C.8	Hull Appendages.....	9
C.9	Rig	9
C.10	Sails	10

Section D– Hull – built prior to 1/7/16

D.1	Parts	11
D.2	General	11
D.3	Hull Shell	12

D.4	Deck	12
D.5	Buoyancy	12
D.6	Gunwale Rubbing Strakes	13
D.7	Thwarts	13
D.8	Assembled Hull	14

Section E – Hull Appendages

E.1	Parts	16
E.2	General	16
E.3	Keel	16
E.4	Rudder and Tiller	17

Section F – Rig

F.1	Parts	18
F.2	General	18
F.3	Mast	19
F.4	Boom	20
F.5	Spinnaker Pole	20
F.6	Standing Rigging	21
F.7	Running Rigging	21

Section G – Sails

G.1	Parts	22
G.2	General	22
G.3	Mainsail	22
G.4	Headsail	24
G.5	Spinnaker	25

PART III – APPENDICES

H.1	Measurement diagrams	26
H.2	Building plans list	2?

Section J – Conditions for Racing – boats built after 1/7/16

J.1	General	7
J.2	Crew	7
J.3	Personal Equipment	7
J.4	Advertising	7
J.5	Portable Equipment	7
J.6	Boat	8
J.7	Hull	8
J.8	Hull Appendages.....	9

J.9	Rig	9	K.3	Hull Shell	12
J.10	Sails	10	K.4	Deck	12
Section D– Hull – built after 1/7/16			K.5	Inner Moulding	12
K.1	Parts	11	K.6	Gunwale Rubbing Strakes	13
K.2	General	11	K.7	Assembled Hull.....	13

INTRODUCTION

*The National Squib Class Rules are **closed class rules** (previously known as one-design class rules) where anything not specifically permitted by the class rules is prohibited. The rules are intended to ensure that boats in the National Squib Class are as nearly as possible the same as regards shape and weight of hull, the deck, keel, rudder, spars and sails, and in all respects affecting performance.*

National Squib hulls, hull appendages, rigs and sails are measurement controlled.

National Squib shall only be manufactured by RYA licenced builders, using the moulds for the hull and deck approved by the RYA and owned by the NSOA. The keel shall be cast using the pattern approved by the RYA and owned by the NSOA.

National Squib rudders may be manufactured by optional builders.

National Squib rigs may be manufactured by optional builders.

National Squib sails shall only be manufactured by RYA licenced manufacturers.

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

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

Rules regulating the use of equipment during a race are contained in Section C and J 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 Squib Class Rules proper begin on the next page.

Note: The class permits In-house Certification – as detailed in Section F and G sails – in accordance with the World Sailing Guidelines.

**PLEASE REMEMBER: IF THESE RULES DO NOT SAY
THAT 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
- NSOA National Squib Owners 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 the RYA which shall co-operate with the NSOA in all matters concerning these **class rules**.
- A.3.2 Notwithstanding anything contained herein, the **Certification Authority** (RYA) has the authority to withdraw a **certificate**.

A.4 ADMINISTRATION OF THE CLASS

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

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** may only be varied at events as per RRS 87.

A.7 CLASS RULES AMENDMENTS

- A.7.1 Amendments to these **class rules** are subject to the approval of the **Class Rules Authority**.
- A.7.1 **Class rule** amendments from the previous version are highlighted with an underline.

A.8 CLASS RULES INTERPRETATION

- A.8.1 Interpretation of **class rules** shall be made by the **Class Rules Authority**.

A.9 CLASS BUILDING FEE

- A.9.1 The licensed **hull** builder shall pay the Class Building Fee to the RYA on commencement of building whether or not it is subsequently **certified**.
- A.9.2 The RYA shall, after having received the Class Building Fee for the **hull**, send a Building Fee receipt, a sail number and for **hulls** built after 01/01/2013 a building fee plaque, to the licensed **hull** builder.

A.10 SAIL NUMBERS

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

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 RYA
- (d) Name of Owner(s) and address
- (e) Hull Identification Number (HIN) when applicable
- (f) Builder/Manufacturers details
- (g) Date of issue of initial **certificate**
- (h) Date of issue of **certificate**
- (i) Details of **corrector weights**
- (j) Details of penalty corrector weights
- (k) Name of relevant **official measurers**
- (l) Sailing weight of the **boat**

A.12 INITIAL HULL CERTIFICATION

A.12.1 For a **certificate** to be issued to **hull** not previously **certified**:

- (a) **Certification measurement** shall be carried out by the **official measurer** who shall complete the appropriate documentation.
- (b) The documentation and **certification** fee shall be sent to the **certification authority**.
- (c) Upon receipt of a satisfactorily completed documentation and **certification** fee 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**,
- (d) Modifications made as permitted by C.7.1(h) and C.7.1(i)

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.
- (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 initial and any subsequent **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 the **class rules**.
- (b) Have a valid hull **certificate**.
- (c) Have valid **certification marks** on equipment as required whilst *racing*.

B.2 FLOTATION CHECKS

B.2.1 For boats built prior to 1st July 2016, where a full height aft flotation tank is fitted it shall be pressure tested by the application of an over pressure test of 1.25kPa (125mm water) which shall not drop by more than 0.75kPa (75mm water) within 30 seconds. Such test shall be undertaken by an **official measurer** who shall endorse and date the boat's **Certificate** upon satisfactory testing.

B.2.2 Owners are responsible for ensuring that all flotation elements where fitted shall not be compromised.

B.3 CLASS ASSOCIATION MEMBERSHIP

B.3.1 Where indicated in the Notice of Race for an event the Owner (see A.11.1(d)) shall be a full member of the National Squib Owners Association.

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 or J 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 – for boats built prior to 1/7/16

C.1 GENERAL

C.1.1 RULES

- (a) The ERS Part 1 – Use of Equipment, shall apply.
- (b) Where the following terms are used within these class rules, the meanings as defined below shall apply;
 - (i) Maintenance
Maintenance shall constitute work required to retain the original condition of an item of equipment whilst compensating for normal wear and tear in order to achieve its maximum useful life. This includes preventative maintenance which shall be taken as the systematic inspection, detection and prevention of incipient failures before they become actual or major failures.
 - (ii) Repairs
Corrective action following unintended damage to a component. Repairs shall be carried out using permitted/approved materials. Repairs shall constitute work required to restore the original condition of an item of equipment whilst compensating for any additional material required to return the component to its original characteristics.
 - (iii) Modification
An alteration to an existing component that is within the original or intended specification or tolerance of that component.
 - (iv) Installation/installed
The attachment of a permitted item through bonding or fastening directly to the boat. This may include the drilling of holes, when and where permitted, through which fasteners are attached. A backing plate appropriate for the size of the fitting is considered as part of the fitting and installation.

C.2 CREW

C.2.1 LIMITATIONS

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

C.3 PERSONAL EQUIPMENT

C.3.1 MANDATORY

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

C.4 ADVERTISING

C.4.1 LIMITATIONS

Advertising on the **boat** chosen by the person in charge is prohibited, unless expressly permitted by the NSOA – as prescribed by World Sailing Regulation 20.

C.5 PORTABLE EQUIPMENT

C.5.1 FOR USE

(a) MANDATORY

- (1) One hand bailer or bucket
- (2) One anchor between 4.0kg and 5.0kg in weight and with between 18m and 20m of continuous line of between 8mm and 12mm in diameter
- (3) A minimum of 158 litres of additional floatation equipment shall be securely fitted forward of the mast.

(b) OPTIONAL

- (1) Electronic or mechanical timing devices
- (2) Magnetic or digital compasses that are entirely self-contained units with the following modes only: Heading, tactical scale, timer
- (3) Echo Sounder including a dedicated power device. If not contained within the echo sounder, the power device shall be removable for weighing.
- (4) Marine band handheld VHF Radio
- (5) **Personal equipment** and consumables.
- (6) Unless prohibited by the Notice of Race, cameras and/or tracking devices may be carried on board.
- (7) A removable step may be fitted between the sideseats adjacent to Section 6
- (8) A battery which shall be removable for weighing

C.5.2 NOT FOR USE

(a) MANDATORY

- (1) One paddle minimum 1000mm long – maximum weight 2.0kg

(b) OPTIONAL

- (1) One outboard engine
- (2) Mooring lines, fenders, spare lines, spare equipment, tool kit and other **personal equipment** that provide no sailing performance advantage.
- (3) Boom crutch

C.6 BOAT

C.6.1 WEIGHT

minimum maximum

- (a) The weight of the **boat**680 kg
- (b) The weight of the **boat** in C.6.1(a) shall be taken to include **sails** and items listed as mandatory in C.5.1 and C.5.2 and permanently fitted items as listed in C.5.1(b).

C.6.2 CORRECTOR WEIGHTS

- (a) **Corrector weights** of metal shall be permanently fastened to the underside of the cockpit seats when the **boat** weight in C.6.1(a) is less than the minimum requirement.
- (b) The total weight of such **corrector weights** shall not exceed 30 kg.

C.6.3 PENALTY CORRECTOR WEIGHTS

(a) Penalty **correctors** weights may be installed or removed with prior approval of the NSOA & RYA.

(b) Weights in addition to those of C.6.2(b) not exceeding 30Kgs, that may be necessary to achieve the **boat weight** in C.6.1 (a) shall be of metal with 50% of the penalty weight fixed to the forward face of the aft buoyancy tank immediately below the deck moulding and 50% of the penalty weight fixed to the aft face of the mid beam under the foredeck.

(c) Penalty weights shall be identified as such on the certificate. Under A.11.1 (j)

C.7 HULL

The **hull** shall not be **modified, maintained** or **repaired** in any way except as permitted by the **class rules**.

C.7.1 MODIFICATIONS

(a) The cockpit floorboard, which may be removable if fitted, may be made in one or more pieces.
(b) Additional seats of wood, GRP, foam or a combination of these materials may be fitted. They may be fitted either within the cockpit or on the side decks adjacent to the cockpit but shall not extend outside of the **sheerline**.

(c) Holes for the purpose of installing permitted **fittings** may be made provided that they are not larger than necessary for the intended function/**fitting**.

(d) Additional floatation equipment consisting of polystyrene foam, buoyancy bags etc may be fitted underneath the deck, seats and shall be securely fitted.

(e) Attached to the deck only, either a;

(i) A moulded grp extension to the raised curved lip of the cuddy

Or

(ii) A bar/moulded piece positioned athwartship between the raised limitations of the cuddy,

For the purpose of attaching **running rigging fittings**.

(f) Ventilation holes may be drilled within the floor provided that the diameter of the hole does not exceed 75mm. No more than 6 holes in total are permitted in the cockpit floor.

(g) Inspection hatches may be fitted to the floor provided that the diameter of the hatch does not exceed 200mm.

(h) A **boat** modified in accordance with D.2.1(c) shall comply with the rules as detailed in D.2.1(b)

(i) Components detailed in D.5 and D.8 may be replaced with a GRP foam sandwich equivalent produced by a licenced manufacturer.

C.7.2 MAINTENANCE

(a) Routine maintenance such as **sanding, coating** and **lubricating** is permitted without re-measurement and re-**certification**. **Fairing** of the **hull** is prohibited.

C.7.3 REPAIR

(a) Minor, localised repairs to the **hull**, not involving more than two components as detailed in D.1.1, are permitted to be carried out without re-measurement and re-**certification**.

- (b) If the **hull** is repaired in any other way than described in C.7.3(a), an **official measurer** shall verify that the external shape is the same as before the repair and that no substantial stiffness, or other, advantage has been gained as a result of the repair.
- (c) Any repairs and replacement of plywood parts such as, floors, buoyancy tanks, frames, shall be made on a like for like basis, however where it is necessary and appropriate panels may be jointed. Watertight chambers made by sealing frames to the floor and hull is permitted.

C.7.4 FITTINGS

(a) USE

- (1) Hatch covers and drainage plugs shall be kept in place at all times.
- (2) Toe straps, if fitted, shall be arranged inside the cockpit and not capable of extending out board of the **sheerline**.
- (3) Hand holds on the deck shall not exceed 75mm in overall height.
- (4) A bilge pump handle shall not be capable of extending outside of the **sheerline**.

(b) LIMITATIONS (Optional)

Fittings shall be appropriate for their intended use;

Additional cleats, packing pieces, fairleads, shackles, jamming cleats and blocks for the purpose of **running rigging**

Outboard bracket(s) on transom or gunwale.

Stowage device for outboard motor.

Deck clips for cockpit cover and/or tent.

Spinnaker turtle and associated fittings.

Tiller lock.

Stowage clips for paddle(s), spinnaker boom, sail bags and other equipment.

Storage bags, netting or similar

Not more than two manually operated bilge pump systems which may discharge through the hull or the deck

and

not more than two electric bilge pump systems which may discharge through the hull or deck
Halyard winches or tensioners.

Headsail fairlead tracks maximum length 385mm, which shall be mounted within the outer un-sanded areas of the deck edge.

Jib furling / roller reefing device and fitting plate which shall retain the forestay and be fixed to the forestay plate above the deck.

C.8 HULL APPENDAGES

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

C.8.1 MODIFICATIONS

- (a) The **keel** may be modified such that above 300mm from the underside of the **keel**, the keel aft edge shall be of 22mm minimum thickness 90mm from the aft edge, 13mm minimum thickness 15mm from the aft edge and an aft edge radius of a minimum 3mm.

C.8.2 MAINTENANCE

- (a) Routine maintenance such as **sanding, coating and lubricating** is permitted without re-measurement and re-**certification**.

C.8.3 REPAIR

- (a) The **hull appendages** may be repaired for minor surface damage.
- (b) If the **keel** is repaired in any other way than described in C.8.3(a), an **official measurer** shall verify that the external shape is the same as before the repair and that no advantage has been gained as a result of the repair.
- (c) If the **keel** is repaired over its chord length, it shall be re-measured and re-certified.

C.8.4 LIMITATIONS

- (a) Only one **rudder** blade shall be used during an event of less than 7 consecutive days, except when a rudder has been lost or damaged beyond repair.

C8.5 RUDDER

- (b) USE
 - (1) The **rudder** blade shall be attached to the **hull** in such a way that it cannot float away.

C.9 RIG

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

C.9.1 MODIFICATIONS

- (a) Fittings may be added as per below provided that compliance with F.2.3(b) is maintained;
 - (1) Fittings as listed in F.3.3(a) and F.3.3(b) may be replaced
 - (2) Fittings installed below the **lower point** height are optional.

C.9.2 MAINTENANCE

- (a) Routine maintenance such as cleaning and polishing is permitted without re-measurement and **re-certification**.

C.9.3 REPAIR

- (a) If a **spar** is repaired, an **official measurer** shall **certify** and verify that the external shape is the same as before the repair and that no stiffness or other advantage has been gained as a result of the repair.

C.9.4 LIMITATIONS

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

C.9.5 MAST

- (a) USE
 - (1) The **spar** shall be stepped in the mast step in such a way that the heel is not capable of moving more than 10 mm.
 - (2) Other than by **standing rigging** and the **backstay**, the **spar** shall not be restrained in movement within the mast spar hole.

C.9.6 BOOM

- (a) DIMENSIONS

	minimum	maximum
Limit mark width	10 mm	
Outer point distance		2743 mm

(b) USE

- (1) The **limit marks** shall be indelibly marked.
- (2) The positions of the mainsheet and kicking strap attachments shall not be altered whilst *racing*.

C.9.7 STANDING RIGGING

(b) USE

- (1) The **standing rigging** shall not be adjusted whilst *racing*.
- (2) The **shrouds** may be covered with rollers or plastic tubes.

C.9.8 RUNNING RIGGING

(a) MATERIALS

- (1) The type and material is optional.

(b) USE

Except where prescribed below, **running rigging** is optional in its design and functionality.

- (1) The mainsheet shall be lead either directly to the mainsheet traveller, or to the mainsheet traveller and swivel block mounted adjacent to the centre of the mainsheet traveller.
- (2) Barber haulers, i.e. a freely floating block or eye on each sheet between the clew of the **headsail** and the fairleads as defined in rule D.8.1.(6) each with a single control line which when being adjusted shall effect a modification to the sheeting angle in one direction only are permitted.

C.10 SAILS

10.1 MODIFICATIONS, MAINTENANCE AND REPAIR

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

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

10.2 LIMITATIONS

10.2 Not more than 1 mainsail, 1 jib and 2 spinnakers shall be carried aboard when *racing*.

10.2 Event Notice of Race or Sailing Instructions may permit an additional spinnaker to be carried. The second spinnaker shall be used only if the first is lost or damaged beyond repair.

10.3 MAINSAIL

10.3 USE

- A **halyard** shall be used to hoist the **sail**. The arrangement shall permit hoisting and lowering of the **sail** at sea.
- Luff** and **foot** bolt ropes shall be in the **spar** grooves or tracks.
- Reefing points or lacing may be fitted.

10.4 HEADSAIL

10.4 USE

- A **halyard** shall be used to hoist the **sail**. The arrangement shall permit hoisting and lowering of the **sail** at sea.

Section D – Hull

D.1 PARTS

D.1.1 MANDATORY

- (a) Hull shell
- (b) Deck
- (c) Buoyancy Tanks
- (d) Gunwale Rubbing Strakes
- (e) Thwarts
- (f) Floorboards

D.2 GENERAL

D.2.1 RULES

- (a) The **hull** shall comply with the **class rules** in force at the time of initial **certification**.
- (b) For **hulls** built after 1/7/16, they shall comply with the following sections;
 - (i) Section A
 - (ii) Section B
 - (iv) Section E
 - (v) Section F
 - (vi) Section G
 - (vii) Section H – Diagrams 2 and 4 only
 - (viii) Section J
 - (ix) Section K
- (c) For **hulls** built prior to 1/7/16, components listed in D.1.1(b)-(f) may be replaced with components listed in K.1.1(b)-(d).

D.2.2 CERTIFICATION

See Rule A.12.

D.2.4 DEFINITIONS

(a) HULL DATUM POINT

The **hull datum point** is the aft intersection of the underside of the **hull** and the transom, as shown on the diagram in section H and a perpendicular line through this point for all length measurements.

D.2.5 IDENTIFICATION

- (a) The **hull** shall carry the sail number cut into or permanently marked on the transom in figures minimum height 30mm.
- (b) In addition to D.2.5(a) **hulls** built after 01/01/2013 shall carry an RYA building fee plaque permanently attached to aft face of the cockpit below the **sheerline**.

D.2.6 BUILDERS

- (a) The **hull** shall be built by a builder licensed by the RYA.
- (b) All moulds & patterns shall be approved by the RYA.

D.3 HULL SHELL

D.3.1 MATERIALS

- (a) The material of the **hull** shall be in accordance with a material specification submitted by the manufacturer to and approved by the RYA prior to the commencement of construction.

D.3.2 CONSTRUCTION

- (a) The **hull** shall be constructed to the RYA approved plans and specifications.

D.4 DECK

D.4.1 MATERIALS

- (a) The deck shall be built from glass reinforced plastic.

D.4.2 CONSTRUCTION

- (a) The deck shall be constructed to the RYA approved plans and specifications.
- (b) Holes not exceeding 120mm in any direction are permitted for the instillation of fittings or equipment.

D.5 BUOYANCY

D.5.1 CONSTRUCTION

- (a) Buoyancy, which shall be securely fixed, shall comprise of:
 - (1) A forward buoyancy tank and frames as detailed on the official plans, of plywood of not less than 12mm nominal thickness. A maximum of 2 frames are permitted.
 - (2) Not less than 158 litres of additional flotation equipment fitted forward of the mast.
 - (3) An aft buoyancy tank as detailed on the official plans or a full height aft flotation tank, of plywood of not less than 12mm nominal thickness.
- (b) Where a full height aft flotation tank is fitted this shall comprise of a compartment formed between the hull, deck and an athwartships bulkhead. Such tank shall contain not less than 0.180 m³ of either securely fixed closed cell foam with a density of less than 150kg/m³ and water absorption by volume of less than 8% or securely fixed rigid wall air containers.
- (c) Flotation equipment of any type additional to the foregoing may be fitted under the decks, under the seats and/or under the floor.
- (d) Each buoyancy tank may be fitted with two inspection holes. Each hole shall be closed in a watertight manner with a detachable cover capable of resisting accidental dislodgement.
- (e) Drain holes in buoyancy tanks are permitted, provided that the watertight integrity of the buoyancy tank is maintained.

D.6 GUNWALE RUBBING STRAKES

D.6.1 MATERIALS

- (a) The rubbing strakes shall be of any resilient material.

D.6.2 CONSTRUCTION

- (a) The rubbing strake shall run unbroken on each gunwale.
- (b) The rubbing strake shall be uniform in section to a point within 50mm of the extreme ends. (joint gaps up to 5mm are allowed).

D.7 THWARTS

D.7.1 MATERIALS

- (a) The forward cockpit seats shall be of a solid hardwood.

D.7.2 CONSTRUCTION

(a) The seats shall be fitted in accordance with the official plans.

D.8 FLOORBOARDS

D.8.1 MATERIALS

(a) The floorboards and 5 frames shall be of a plywood of not less than 12mm nominal thickness.

D.8.2 CONSTRUCTION

(a) The floorboards shall be fitted in accordance with the official plans.

D.9 ASSEMBLED HULL

D.9.1 FITTINGS

(a) MANDATORY

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

- (1) Stemhead fitting
- (2) Forestay fitting
- (3) Bow mooring cleat
- (4) Stern mooring cleat
- (5) Shroud plates
- (6) Headsail fairleads mounted within the outer un-sanded area of the deck
- (7) Mainsheet track with one traveller. Maximum useable length 610mm
- (8) Mast step on top of the forward buoyancy tank

(b) OPTIONAL

The following additional items may be fitted but shall not be readily removable and shall, if included in the weight of the boat, be recorded on the measurement certificate and shall not be removed without a reweighing of the boat.

- (1) extra seats of wood, GRP, foam or a combination of these materials fitted within the cockpit area or on top of the side decks.

D.9.2 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 3: at 4172 mm from **hull datum point**

Section 6: at 2610 mm from **hull datum point**

Section 9: at 1047 mm from **hull datum point**

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

at the **hull datum point**: 355 mm from the **hull** shell

at section 3: 133 mm from the **hull** shell

	minimum	maximum
Hull length	5755 mm	.. 5785 mm
Vertical distance from baseline to underside of hull shell;		
at section 6	70 mm	..... 90 mm
at section 9	196 mm	.... 216 mm

Vertical distance from baseline to underside of keel		
at section 6	588 mm	618 mm
Beam of hull , excluding rubbing strakes and fittings, at sheerline;		
at section 3	1420 mm	1450 mm
at section 6	1885 mm	1915 mm
at section 9	1600 mm	1630 mm
At Section 3: Keel line to (port & starboard)		
Sheerline	740 mm	770 mm
Hull 229mm athwartships of centreline	110 mm	128 mm
Hull 457mm athwartships of centreline	255 mm	275 mm
At Section 6: Keel line to (port & starboard)		
Sheerline	735 mm	765 mm
Hull 229mm athwartships of centreline	60 mm	76 mm
Hull 457mm athwartships of centreline	139 mm	157 mm
Hull 686mm athwartships of centreline	254 mm	275 mm
At Section 9: Keel line to (port & starboard)		
Sheerline	580 mm	610 mm
Hull 229mm athwartships of centreline	48 mm	64 mm
Hull 457mm athwartships of centreline	113 mm	129 mm
Hull 686mm athwartships of centreline	234 mm	256 mm
Longitudinal distance from hull datum point perpendicular		
to intersection of keel trailing edge and hull	2204 mm	2230 mm
to aft point of mast spar hole at deck	3440 mm	3476 mm
Longitudinal dimension of mast spar hole		130 mm
Horizontal distance from centre of forestay attachment		
hole to forward end of hull	<u>75 mm</u>	<u>145 mm</u>
Horizontal distance from centre of Jib tack attachment		
hole to forward end of hull	143 mm	167mm
Centre line of shroud plate forward of Section 6	410 mm	460 mm
Centre line of shroud plate		
to outer edge of deck	70 mm	90 mm
Gunwale rubbing strakes;		
depth	24 mm	56 mm
width	6 mm	38 mm
distances from transom and forward end of hull ,		
excluding stemhead fitting,		50 mm
Overall height of mast step		25 mm
Mainsheet track;		
length		610 mm
vertical height to top above cockpit sole	260 mm	325 mm
Headsail track length		385 mm
Forward buoyancy tank top:		
length along centreline from inside of stem	2135 mm	2185 mm
height of aft end above cockpit sole	50 mm	80 mm

vertical dist from top of deck at fore side of spar hole	653 mm ..	703 mm
Half height aft buoyancy tank		
length along centreline from inside of transom	800 mm	850 mm
height of fore end above cockpit sole	205 mm	265 mm
Full height aft buoyancy tank		
fore side of tank from aft side of forward tank	2400 mm ..	2500 mm
Inside diameter of buoyancy tank inspection holes .....	.....	350 mm
Inside diameter of buoyancy tank draining holes .....	.....	26 mm
Top edge of cockpit coaming to top of cockpit sole at		
section 6	600 mm	660 mm
section 9	520 mm	580 mm
Fore cockpit seats		
length	895 mm	945 mm
width	245 mm	265 mm
<u>thickness</u>	<u>21 mm</u>	<u>24 mm</u>

Section E – Hull Appendages

E.1 PARTS

E.1.1 MANDATORY

- (a) **Keel**
- (b) **Rudder**

E.2 GENERAL

E.2.2 CERTIFICATION

- (a) The **official measurer shall certify hull appendages.**

E.3 KEEL

E.3.1 RULES

- (a) The **keel** shall comply with these **class rules.**

E.3.2 DEFINITIONS

- (a) The **Keel Aft Measurement Point (KAMP)** is the point at which the extension of the aft edge of the keel intersects the extension of the line of the underside of the keel.

E.3.3 MANUFACTURERS

- (a) Manufacturers shall be approved by the RYA.

E.3.4 MATERIALS

- (a) The **keel** shall be of fine grain cast iron.
- (b) The **keel** may be covered with any paint, resin, or plastic coating which shall not be reinforced.

E.3.5 CONSTRUCTION

- (a) The **keel** shall be manufactured from a pattern approved by the RYA.

E.3.6 DIMENSIONS

minimum maximum

Transverse width of **keel** at 100mm above underside at:

165mm forward of KAMP	88 mm	....	100 mm
365mm forward of KAMP	124 mm	....	136 mm
565mm forward of KAMP	140 mm	....	152 mm
765mm forward of KAMP	126 mm	....	138 mm

Transverse width of keel at 200mm above underside at:

565mm forward of KAMP	92 mm	109 mm
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Transverse width of keel from 400mm above underside at:

60mm from fore edge to 90mm from aft edge.....22mm

The aft edge of the **Keel** from 25mm above the underside of the keel shall be straight within +/- 3mm.

Above 300mm from the underside of the keel the keel aft edge shall be of 22mm minimum thickness 90mm from the aft edge, 13mm minimum thickness 15mm from the aft edge and an aft edge radius of a minimum 3mm.

E.4 RUDDER AND TILLER

E.4.1 RULES

(a) The **rudder** blade shall comply with these **class rules**.

E.4.2 DEFINITIONS

(a) The waterline for rule E.4.5(b) shall be taken as the extension of the underside of the hull along the centreline.

E.4.3 MANUFACTURERS

(a) Manufacturers are optional.

E.4.4 MATERIALS

(a) The **rudder** shall be of one or more of:

- (1) Wood
- (2) GRP
- (3) Core material

(b) Core material may only be used in a GRP **rudder** and, when used, shall be of wood and/or foam.

(c) The tiller and tiller extension material is optional.

E.4.5 CONSTRUCTION

(a) The **rudder** section is optional.

(b) The profile of the **rudder** blade below the waterline shall conform to the official plan. The edge of the blade shall be a maximum of 6mm from the outline of the **rudder** on the plan.

(c) The design of the tiller and tiller extension is optional

E.4.6 FITTINGS

(a) MANDATORY

- (1) The design of the rudder bearings is optional.

E.4.7 DIMENSIONS

	minimum	maximum
Centreline of bearing forward or aft of leading edge	16 mm
Centreline of bearing aft of transom centreline.....	25 mm

Section F – Rig

F.1 PARTS

F.1.1 MANDATORY

- (a) **Mast**
- (b) **Boom**
- (c) **Standing rigging**

F.1.2 OPTIONAL

- (a) **Spinnaker pole**
- (b) **Running rigging**

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.2.3 DEFINITIONS

(a) MAST DATUM POINT

The **mast datum point** is the **heel point**.

(b) CENTRE OF GRAVITY

The mast with normal fixed fittings, shall have all the halyards fully hoisted and the halyard tails led back up the mast and secured along its length. Any excess halyard tail shall be secured to the masthead crane. The standing rigging shall be secured along the mast.

F.2.4 MANUFACTURER

- (a) No licence is required.

F.3 MAST

F.3.1 RULES

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

F.3.2 CERTIFICATION (SPARS BUILT AFTER 1/1/18)

- (a) The **official measurer** shall **certify** the **mast spar** immediately below the **lower point** on the fore side of the **mast spar**.
- (b) An MNA may appoint one or more persons at a manufacturer to measure and **certify spars** produced by that manufacturer in accordance with the World Sailing In-house Certification Guidelines.

F.3.3 MATERIALS

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

F.3.4 CONSTRUCTION

- (a) The **spar** extrusion shall include a fixed sail groove or track which may or may not be integral with the **spar** but shall be of the same material. It may be anodised.
- (b) The **spreaders** shall be fitted above the lower shrouds.

- (c) The **spreaders** shall be free to swing through an arc of at least 45 degrees aft from the athwartships position.

F.3.5 FITTINGS

(a) MANDATORY

- (1) Mast head crane
- (2) Shroud fittings
- (3) One set of swinging spreaders
- (4) Mainsail halyard sheave box
- (5) Headsail halyard sheave box
- (6) Spinnaker halyard sheave box
- (7) Spinnaker pole lift block with attachment
- (8) Gooseneck
- (9) Kicking strap attachment
- (10) Heel fitting

(b) OPTIONAL

- (1) One mechanical wind indicator
- (2) Compass bracket
- (3) Spinnaker crane
- (4) Spinnaker pole fitting
- (5) Spinnaker pole downhaul block with attachment
- (6) Additional fittings for running rigging below the **mast spar lower point**
- (7) Protection pads for the **mast spar** hole at deck level

F.3.6 DIMENSIONS

	minimum	maximum
Mast length	7695 mm	
Mast spar curvature		50 mm
Mast spar cross section below the upper point;		
fore-and-aft	85 mm	92 mm
transverse	64 mm	70 mm
Mast limit mark width	10 mm	
Lower point height	1160 mm	
Upper point height	7485 mm	
Forestay height	6400 mm	6440 mm
Main Shroud height	6400 mm	6500 mm
Lower Shroud height	3400 mm	3500 mm
Spinnaker pole fitting:		
projection .....	... mm	70 mm
Spinnaker hoist height .....	... mm	6490 mm
Extension of spinnaker hoist eye or block bearing surface		
from front of mast.....	... 100 mm	
Spreader;		
length	538 mm	558 mm
height	3500 mm	3550 mm

Distance from **mast datum point** as defined in F.2.3(a) To centre of gravity in condition as described in F.2.3(b)3400 mm

F.3.7 WEIGHTS

minimum maximum

Mast weight 16 kg

F.4 BOOM

F.4.1 MATERIALS

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

F.4.2 CONSTRUCTION

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

(b) The **spar** shall be of constant section and shall not be tapered.

F.4.3 FITTINGS

(a) MANDATORY

- (1) Mainsheet block/s with attachment/s
- (2) Kicking strap fitting
- (3) Gooseneck attachment

(b) OPTIONAL

- (1) Not more than two strops for mainsheet blocks fixed to the boom.
- (2) Spinnaker pole stowage fittings including Pulleys, blocks and elastic for pole launch system
- (3) Other sail control fittings
- (4) Shroud protectors

F.4.4 DIMENSIONS

minimum maximum

Boom spar curvature 25 mm

Boom spar cross section;

vertical 100 mm

transverse 75 mm

F.5 SPINNAKER POLE

F.5.1 MANUFACTURER

(a) Manufacturer is optional.

F.5.2 MATERIALS

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

F.5.3 CONSTRUCTION

(a) The construction is optional.

F.5.4 FITTINGS

(a) Fittings are optional.

F.5.5	DIMENSIONS	minimum	maximum
	Spinnaker pole spar including end fittings		
	shall pass through a circle, diameter		76 mm
	Spinnaker pole length		2140 mm

F.6 STANDING RIGGING

F.6.1 MATERIALS

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

F.6.2 PARTS

(a) MANDATORY

- (1) A **forestay**.
- (2) Main **shrouds**.
- (3) Lower **shrouds**.

F.6.3 FITTINGS

(a) Optional

F.6.4 DIMENSIONS

	minimum	maximum
Forestay diameter	2.5 mm	
Shroud diameter	2.5 mm	

F.7 RUNNING RIGGING

F.7.1 MATERIALS

(a) Materials are optional.

F.7.2 PARTS

- (a) A **backstay**.
- (b) A backstay span of wire and/or rope.

F.7.3 DIMENSIONS

	minimum	maximum
Backstay diameter	2.5 mm	

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

- (a) **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 MNA may appoint one or more persons at a sailmaker to measure and **certify sails** produced by that manufacturer in accordance with the World Sailing In-house Certification Guidelines.

G.2.3 SAILMAKER

- (a) There shall be a maximum of 5 sailmakers who shall each be approved by the RYA.

G.2.4 SAIL NUMBERS

- (a) The mainsail and spinnaker shall display the boats sail number.

G.3 MAINSAIL

G.3.1 IDENTIFICATION

- (a) The class insignia shall conform to the dimensions and requirements as detailed in the diagram contained in H1.

G.3.2 MATERIALS

- (a) The **ply** fibres shall consist of 5.2oz impregnated polyester (e.g. Polypreg). The colour shall be 'Mace' or similar and the cloth manufacturer shall be approved by the RYA.
- (b) **Stiffening** shall consist of:
 - (1) Cornerboards of optional material
 - (2) Battens of optional material
- (c) **Sail reinforcement** shall consist of:
 - (1) **Primary reinforcement:** optional **woven ply** polyester
 - (2) **Secondary reinforcement** shall be of **woven ply** cloth the same specification as the **ply** fibres.
 - (3) **Tabling** may consist of optional **woven ply** polyester coloured white or 'Mace' (or similar).

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 **woven ply** throughout.
- (c) The **sail** shall have a maximum of 3 **batten pockets** in the **leech**.
- (d) The sail shall be constructed so that all **seams** in the **body of the sail** run across the sail from **luff** to **leech**.
- (e) The battens shall remain in place during measurement.
- (f) The following are permitted: Stitching, glues, tapes, bolt ropes, corner eyes, headboard with fixings, Cunningham eye or pulley, **batten pocket patches**, batten pocket elastic, boom slide, leech line with cleat, up to 2 **windows**, tell tales, spreader chaffing patches, up to 4 draft stripes of contrasting colour, and items as permitted or prescribed by other applicable *rules*.

G.3.4 DIMENSIONS

	minimum	maximum
Leech length		6815 mm
Quarter width		2320 mm
Half width		1690 mm
Three-quarter width		985 mm
Top width		145 mm
Primary reinforcement		340 mm
Secondary reinforcement:		
from sail corner measurement points		1020 mm
for flutter patches		120 mm
for chafing patches		150 mm
for batten pocket patches		120 mm
Tabling width		50 mm
Distance from clew point to foot bolt rope		200 mm
Distance from tack point to foot bolt rope		200 mm
Total Window area		0.4 m ²
Window to sail edge	65 mm	
Batten pocket length:		
uppermost pocket:		
inside		785 mm
intermediate pocket:		
inside		935 mm
lowermost pocket:		
inside		855 mm
Batten pocket width:		
inside		60 mm
Head point to intersection of leech and centreline of uppermost batten pocket		1630 mm
Clew point to intersection of leech and centreline of lowermost batten pocket		1630 mm
Draft Stripes width		25 mm

G.4 HEADSAIL

G.4.1 MATERIALS

- (a) The **ply** fibres shall consist of 5.2oz impregnated polyester (e.g. Polypreg). The colour shall be ‘Mace’ or similar and the cloth manufacturer shall be approved by the RYA.
- (b) **Sail reinforcement** shall consist of:
- (1) **Primary reinforcement:** optional **woven ply** polyester
 - (2) **Secondary reinforcement** shall be of **woven ply** cloth the same specification as the **ply** fibres.
 - (3) **Tabling** may consist of optional **woven ply** polyester coloured white or ‘Mace’ (or similar).

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** throughout.
- (c) The sail shall be constructed so that all **seams** in the **body of the sail** run across the sail from **luff to leech**, except that below the bottom **seam**; **seams** or **tucks** are permitted and they may run in any direction.
- (e) The sail shall have a steel wire of minimum diameter 3mm in the **luff**.
- (f) The **leech** shall have **tabling**.
- (g) The **leech** shall not extend beyond a straight line from the **aft head point** to the **clew point**.
- (h) The following are permitted: Stitching, glues, tapes, corner eyes, hanks, one Cunningham hole, leech line with cleat, foot line with cleat, up to 2 **windows**, and up to 3 tell tale **windows**, tell tales, up to 4 draft stripes of contrasting colour, and items as permitted or prescribed by other applicable *rules*.

G.4.3	DIMENSIONS	minimum maximum
	Luff length .....	... mm .. 5380 mm
	Leech length .....	... mm .. 4670 mm
	Foot length .....	... mm .. 2410 mm
	Foot median .....	... mm .. 5030 mm
	Top width .....	..... 40 mm
	Primary reinforcement .....	..... 315 mm
	Secondary reinforcement:	
	from sail corner measurement points .....	..... 935 mm
	for flutter patches .....	..... 120 mm
	Tabling width .....	..... 50 mm
	Tell tale windows maximum dimension of.....	..... 250 mm
	Total Window area in addition to tell tale windows .....	..... 0.4 m ²
	Window to sail edge	65 mm
	Draft Stripes width .....	..... 25 mm

G.5 SPINNAKER

G.5.1 MATERIALS

- (a) The **ply** fibres shall consist of nylon.
- (b) **Sail reinforcement** shall consist of:
 - (1) **Primary reinforcement:** optional **woven ply** nylon or polyester.
 - (2) **Secondary reinforcement** optional **woven ply** nylon or polyester.
 - (3) **Tabling** optional **woven ply** nylon or polyester.

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) All **seams** in the **body of the sail** shall either:
 - (1) be not more than 8 in number and run across the sail from **leech** to **luff** OR,
 - (2) be not more than 6 in number and run from the **head** to the **foot**.
- (d) The following are permitted: Stitching, glues, tapes, webbing, corner eyes, and items as permitted or prescribed by other applicable *rules*.

G.5.3 DIMENSIONS

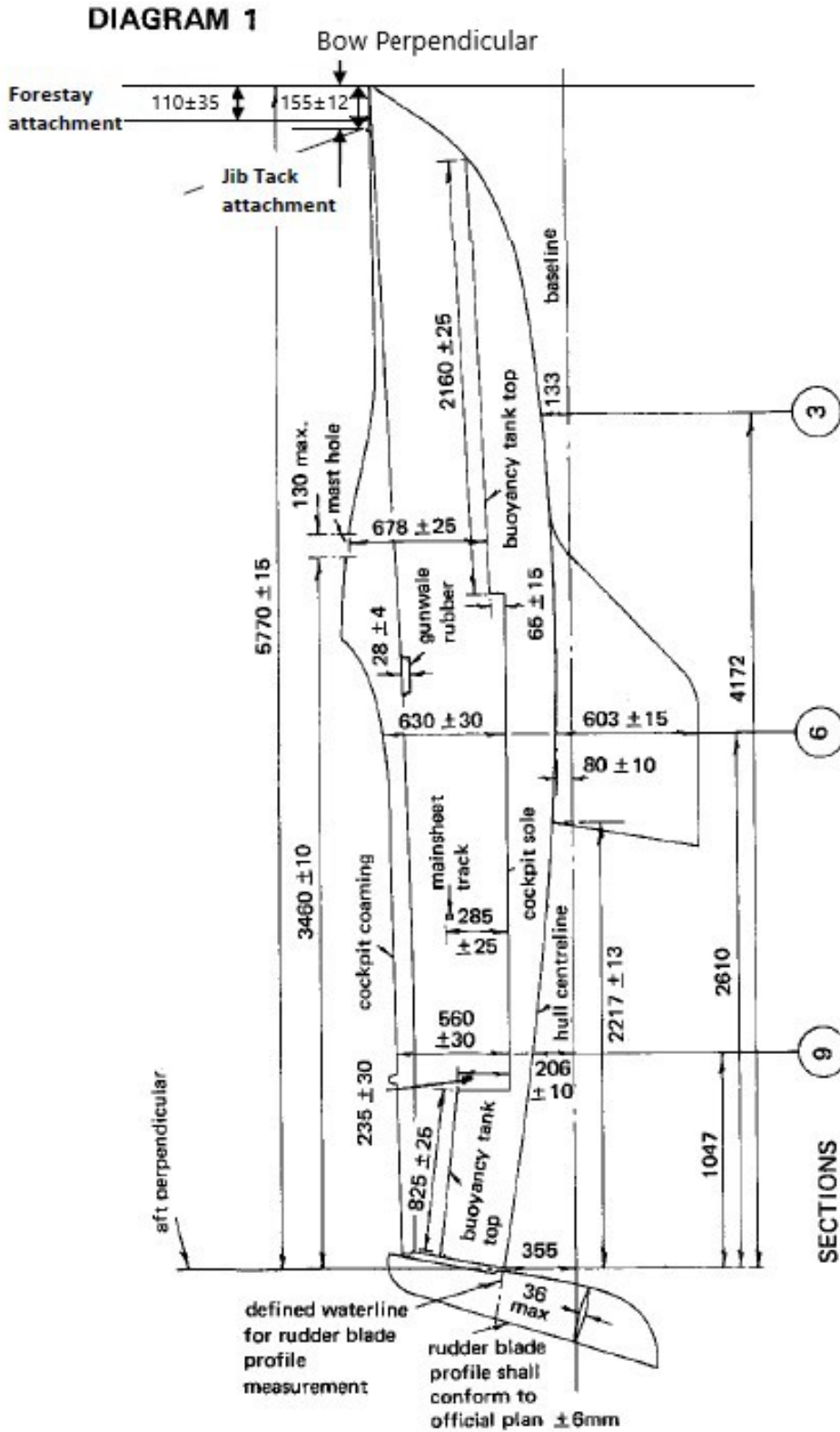
	minimum	maximum
Leech length	4900 mm
Luff length	4900mm
Foot length	3420 mm
Foot Median	5250 mm
Half width	3200 mm
Three-quarter width	1880 mm
Weight of ply of the body of the sail	40 g/m ²	
Primary reinforcement	300 mm
Secondary reinforcement:		
from sail corner measurement points	890 mm
Tabling width	20 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.

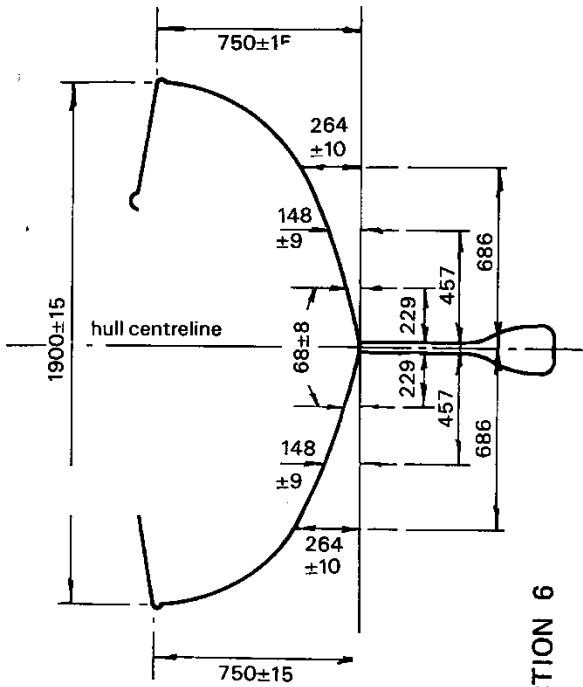
Section H

H.1

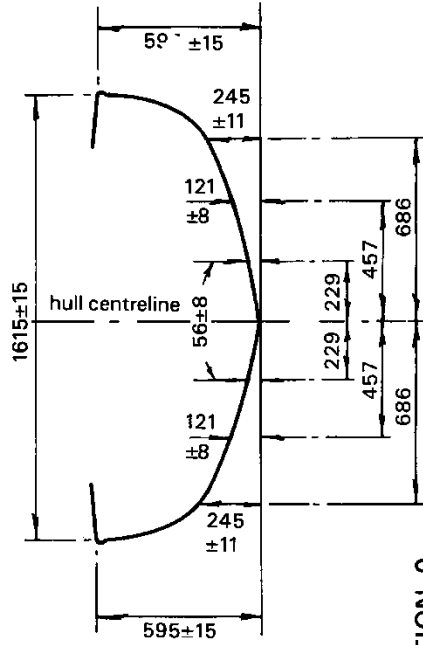


Measurement diagrams

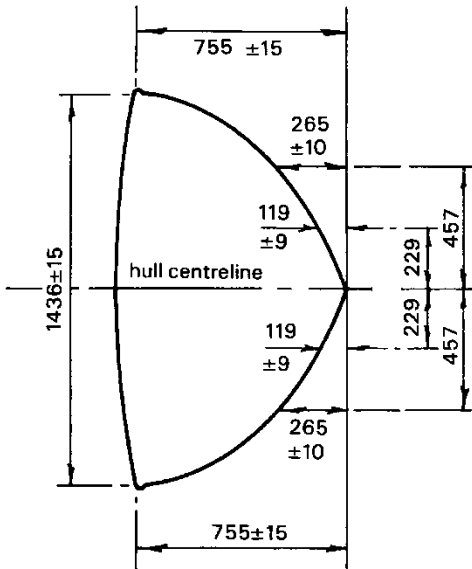
DIAGRAM 2



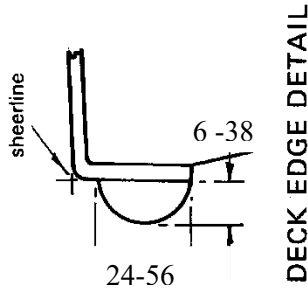
SECTION 6



SECTION 9



SECTION 3



DECK EDGE DETAIL

DIAGRAM 3 Deck Plan

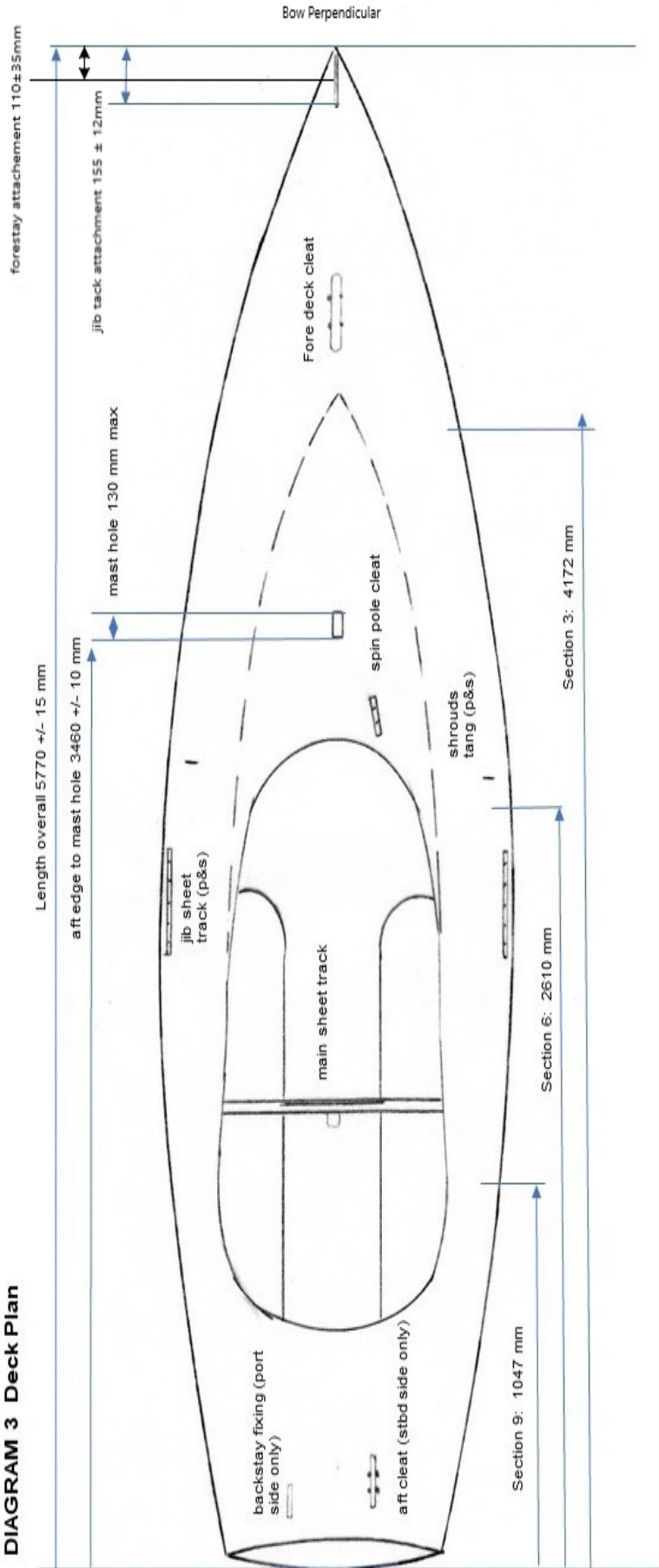
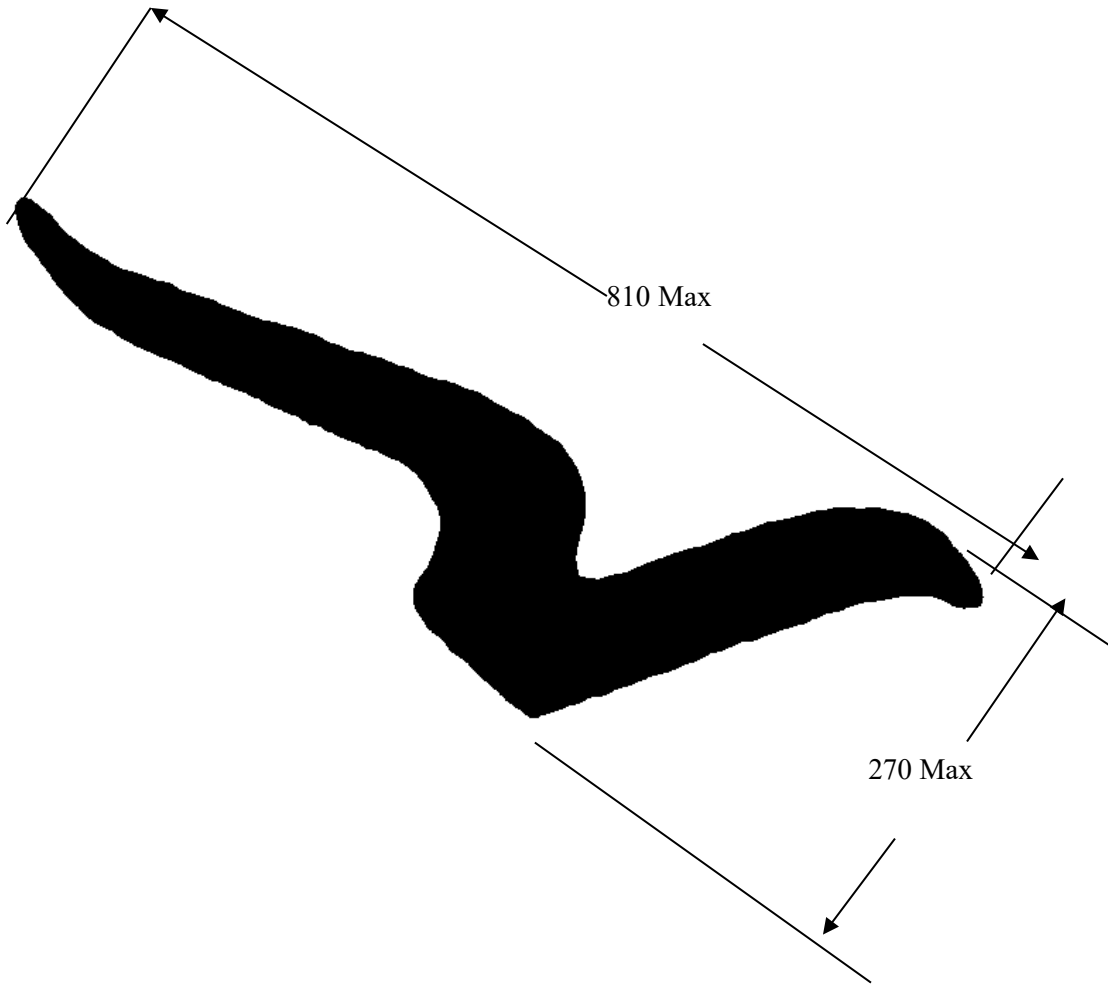


Diagram 4

National Squib Insignia



H.2 OFFICIAL PLANS FOR BUILDING

1. General Layout
2. Rig Layout
3. Keel
4. Rudder Blade Profile.

Section J – Conditions for Racing – for boats built after 1/7/16

The **crew** and the **boat** shall comply with the rules in this Section J when *racing*.

The rules in this section are **closed class rules**. **Certification control** and **equipment inspection** shall be carried out in accordance with the ERS except where varied in this Part.

J.1 GENERAL

J.1.1 RULES

- (a) The ERS Part 1 – Use of Equipment, shall apply.
- (b) Where the following terms are used within these class rules, the meanings as defined below shall apply;
 - (i) Maintenance
Maintenance shall constitute work required to retain the original condition of an item of equipment whilst compensating for normal wear and tear in order to achieve its maximum useful life. This includes preventative maintenance which shall be taken as the systematic inspection, detection and prevention of incipient failures before they become actual or major failures.
 - (ii) Repairs
Corrective action following unintended damage to a component. Repairs shall be carried out using permitted/approved materials. Repairs shall constitute work required to restore the original condition of an item of equipment whilst compensating for any additional material required to return the component to its original characteristics.
 - (iii) Modification
An alteration to an existing component that is not within the original or intended specification or tolerance of that component.
 - (iv) Installation/installed
The attachment of a permitted item through bonding or fastening directly to the boat. This may include the drilling of holes, when and where permitted, through which fasteners are attached. A backing plate appropriate for the size of the fitting is considered as part of the fitting and installation.

J.2 CREW

J.2.1 LIMITATIONS

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

J.3 PERSONAL EQUIPMENT

J.3.1 MANDATORY

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

J.4 ADVERTISING

J.4.1 LIMITATIONS

Advertising on the boat chosen by the person in charge is prohibited, unless expressly permitted by the NSOA – as prescribed by World Sailing Regulation 20.

J.5 PORTABLE EQUIPMENT

J.5.1 FOR USE

(a) MANDATORY

- (1) One hand bailer or bucket
- (2) One anchor between 4.0kg and 5.0kg in weight and with not less than 18m of continuous line of between 8mm and 12mm in diameter

(b) OPTIONAL

- (1) Electronic or mechanical timing devices
- (2) Magnetic or digital compasses that are entirely self-contained units with the following modes only: Heading, tactical scale, timer
- (3) Echo Sounder including a dedicated power device. If not contained within the echo sounder, the power device shall be removable for weighing.
- (4) Marine band hand held VHF Radio
- (5) **Personal equipment** and consumables.
- (6) Unless prohibited by the Notice of Race, cameras and/or tracking devices may be carried on board.
- (7) A removable step may be fitted between the sideseats adjacent to Section 6

J.5.2 NOT FOR USE

(a) MANDATORY

- (1) One paddle minimum 1000mm long – maximum weight 2.0kg

(b) OPTIONAL

- (1) One outboard engine
- (2) Mooring lines, fenders, spare lines, spare equipment, tool kit and other **personal equipment** that provide no sailing performance advantage.
- (3) Boom crutch

J.6 BOAT

J.6.1 WEIGHT

minimum maximum

- (a) The weight of the **boat**680 kg
- (b) The weight of the boat in C.6.1(a) shall be taken to include items listed as mandatory in J.5.1 and J.5.2 and permanently fitted items as listed in J.5.1.

J.6.2 CORRECTOR WEIGHTS

- (a) **Corrector weights** of metal shall be permanently fastened to the cockpit sides underneath the side deck as close to Section 6 as possible when the **boat** weight in J.6.1(a) is less than the minimum requirement.
- (b) The total weight of such **corrector weights** shall not exceed 30 kg.

J.7 HULL

The **hull** shall not be modified, maintained or repaired in any way except as permitted by the **class rules**.

J.7.1 MODIFICATIONS

- (a) Holes for the purpose of installing permitted fittings may be made provided that they are not larger than for the intended function/fitting.

J.7.2 MAINTENANCE

- (a) Routine maintenance such as sanding, painting and polishing is permitted without re-measurement and re-**certification**. Fairing of the **hull** is prohibited.

J.7.3 REPAIR

- (a) Minor, localised repairs to the **hull**, not involving more than two components as detailed in K.1.1, are permitted to be carried out without re-**certification** provided that the external shape is the same as before the repair and that no substantial stiffness, or other advantage has been gained as a result of the repair.
- (b) If the **hull** is required to be repaired in any other way than described in J.7.3(a), the repair shall only be carried out by persons approved by the RYA.

J.7.4 FITTINGS

(a) USE

- (1) Hatch covers shall be kept in place at all times.
- (2) Toe straps, if fitted, shall be arranged inside the cockpit and not capable of extending out board of the **sheerline**.
- (3) Hand holds on the deck shall not exceed 75mm in overall height.

(b) LIMITATIONS (Optional)

Fittings shall be appropriate for their intended use;

Additional cleats, fairleads, jamming cleats, turning blocks for **running rigging**

Outboard bracket(s) on transom or gunwale.

Stowage device for outboard motor.

Deck clips for cockpit cover and/or tent.

Spinnaker turtle and associated fittings.

Tiller lock.

Stowage clips for paddle(s), spinnaker boom, sail bags and other equipment.

Storage bags, netting or similar

Halyard winches or tensioners.

Headsail fairlead tracks maximum length 385mm, which shall be mounted within the outer un-sanded areas of the deck edge.

Jib furling / roller reefing device and fitting plate which shall retain the forestay and be fixed to the forestay plate above the deck.

J.8 HULL APPENDAGES

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

J.8.1 MODIFICATIONS

- (a) The **keel** may be modified such that above 300mm from the underside of the **keel**, the keel aft edge shall be of 22mm minimum thickness 90mm from the aft edge, 13mm minimum thickness 15mm from the aft edge and an aft edge radius of a minimum 3mm.

J.8.2 MAINTENANCE

- (a) Routine maintenance such as **sanding, coating and lubricating** is permitted without re-measurement and re-**certification**.

J.8.3 REPAIR

- (a) The **hull appendages** may be repaired for minor surface damage.
- (b) If the **keel** is repaired in any other way than described in J.8.3(a), an **official measurer** shall verify that the external shape is the same as before the repair and that no advantage has been gained as a result of the repair.
- (c) If the **keel** is repaired over its chord length, it shall be re-measured and re-certified.

J.8.4 LIMITATIONS

- (c) Only one **rudder** blade shall be used during an event of less than 7 consecutive days, except when a rudder has been lost or damaged beyond repair.

J.8.5 RUDDER

(d) USE

- (1) The **rudder** blade shall be attached to the **hull** in such a way that it cannot float away.

J.9 RIG

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

J.9.1 MODIFICATIONS

- (a) Fittings may be added as per below provided that compliance with F.2.3(b) is maintained;
 - (1) Fittings as listed in F.3.3(a) and F.3.3(b) may be replaced
 - (2) Fittings installed below the lower point height are optional.

J.9.2 MAINTENANCE

- (a) Routine maintenance such as cleaning and polishing is permitted without re-measurement and re-**certification**.

J.9.3 REPAIR

- (a) If a spar is repaired, an **official measurer** shall **certify** and verify that the external shape is the same as before the repair and that no stiffness or other advantage has been gained as a result of the repair.

J.9.4 LIMITATIONS

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

J.9.5 MAST

(a) USE

- (1) The **spar** shall be stepped in the mast step in such a way that the heel is not capable of moving more than 10 mm.
- (2) Other than by **standing rigging** and the **backstay** the **spar** shall not be restrained in movement within the mast spar hole.

J.9.6 BOOM

(a) DIMENSIONS

	minimum	maximum
Limit mark width	10 mm	
Outer point distance		2743 m

(b) USE

- (1) The **limit marks** shall be indelibly marked.
- (2) The positions of the mainsheet and kicking strap attachments shall not be altered whilst *racing*.

J.9.7 STANDING RIGGING

(b) USE

- (1) The **standing rigging** shall not be adjusted whilst *racing*.
- (2) The **shrouds** may be covered with rollers or plastic tubes.

J.9.8 RUNNING RIGGING

(a) MATERIALS

- (1) The type and material is optional.

(b) USE

Except where prescribed below, **running rigging** is optional in its design and functionality.

- (1) Barber haulers, i.e. a freely floating block or eye on each sheet between the clew of the **headsail** and the fairleads as defined in rule K.7.1.(6) each with a single control line which when being adjusted shall effect a modification to the sheeting angle in one direction only are permitted.

J.10 SAILS

J.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 cleaning and minor repairs is permitted without re-measurement and re-**certification**.

K.10.2 LIMITATIONS

- (a) Not more than 1 mainsail, 1 jib and 2 spinnakers shall be carried aboard whilst *racing*.
- (b) Event Notice of Race or Sailing Instructions may permit an additional spinnaker to be carried. The second spinnaker shall be used only if the first is lost or damaged beyond repair.

J.10.3 MAINSAIL

(a) USE

- (1) A **halyard** shall be used to hoist the **sail**. The arrangement shall permit hoisting and lowering of the **sail** at sea.
- (2) **Luff** and **foot** bolt ropes shall be in the **spar** grooves or tracks.
- (3) Reefing points or lacing may be fitted.

J.10.4 HEADSAIL

(a) USE

- (1) A **halyard** shall be used to hoist the **sail**. The arrangement shall permit hoisting and lowering of the **sail** at sea.

Section K – Hull for boats built after 1/7/16

K.1 PARTS

K.1.1 MANDATORY

- (a) Hull shell
- (b) Deck
- (c) Inner moulding
- (d) Gunwale Rubbing Strakes

K.2 GENERAL

K.2.1 RULES

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

K.2.2 CERTIFICATION

- (a) The RYA may appoint one or more persons at a licenced builder to measure **hulls** produced by that manufacturer in accordance with the World Sailing In-house Certification Guidelines.

K.2.3 DEFINITIONS

(a) HULL DATUM POINT

The **hull datum point** is the aft intersection of the underside of the **hull** and the transom, as shown on the diagram in section H and a perpendicular line through this point for all length measurements.

K.2.4 IDENTIFICATION

- (a) The **hull** shall carry the sail number cut into or permanently marked on the transom in figures minimum height 30mm.
- (b) In addition to K.2.4(a) **hulls** shall carry an RYA building fee plaque permanently attached to aft face of the cockpit below the **sheerline**

K.2.5 BUILDERS

- (a) The **hull** shall be built by a builder licensed by the RYA.
- (b) All moulds & patterns shall be approved by the RYA.

K.3 HULL SHELL

K.3.1 MATERIALS

- (a) The material of the hull shall be in accordance with a material specification submitted by the manufacturer to and approved by the RYA.

K.3.2 CONSTRUCTION

- (a) The **hull** shall be constructed to the RYA approved specifications.

K.4 DECK

K.4.1 MATERIALS

- (a) The material of the **deck** shall be in accordance with a material specification submitted by the manufacturer to and approved by the RYA.

K.4.2 CONSTRUCTION

- (a) The deck shall be constructed to the RYA approved specifications.

- (b) Hatches not exceeding 120mm in any direction are permitted for the installation of fittings or equipment.

K.5 INNER MOULDING

K.5.1 MATERIALS

- (a) The material of the inner moulding shall be in accordance with a material specification submitted by the manufacturer to and approved by the RYA.

K.5.2 CONSTRUCTION

- (a) The inner moulding shall be constructed to the RYA approved specifications.
- (b) Hatches not exceeding 150mm in any direction are permitted for the installation of fittings or equipment.
- (c) Two drainage tubes from the aft edge of the inner moulding of internal diameter not exceeding 42mm passing through the aft buoyancy tank and exiting at the transom.

K.6 GUNWALE RUBBING STRAKES

K.6.1 MATERIALS

- (a) The rubbing strakes shall be of any resilient material.

K.6.2 CONSTRUCTION

- (a) The rubbing strake shall run unbroken on each gunwale.
- (b) The rubbing strake shall be uniform in section to a point within 50mm of the extreme ends. (joint gaps up to 5mm are allowed).

K.7 ASSEMBLED HULL

K.7.1 FITTINGS

(a) MANDATORY

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

- (1) Stemhead fitting
- (2) Forestay fitting
- (3) Bow mooring cleat
- (4) Stern mooring cleat
- (5) Shroud plates
- (6) Headsail fairleads mounted within the outer un-sanded area of the deck
- (7) Mainsheet track with one traveller.
- (8) Mast step

K.7.2 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 3: at 4172 mm from **hull datum point**

Section 6: at 2610 mm from **hull datum point**

Section 9: at 1047 mm from **hull datum point**

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

at the **hull datum point**: 355 mm from the **hull** shell

at section 3: 133 mm from the hull shell		
	minimum	maximum
Hull length	5755 mm	.. 5785 mm
Vertical distance from baseline to underside of hull shell;		
at section 6	70 mm	..... 90 mm
at section 9	196 mm	.... 216 mm
Vertical distance from baseline to underside of keel		
at section 6	588 mm	.... 618 mm
Beam of hull , excluding rubbing strakes and fittings, at sheerline;		
at section 3	1420 mm	.. 1450 mm
at section 6	1885 mm	.. 1915 mm
at section 9	1600 mm	.. 1630 mm
At Section 3: Keel line to (port & starboard)		
Sheerline	740 mm	.... 770 mm
Hull 229mm athwartships of centreline	110 mm	.... 128 mm
Hull 457mm athwartships of centreline	255 mm	.... 275 mm
At Section 6: Keel line to (port & starboard)		
Sheerline	735 mm	.... 765 mm
Hull 229mm athwartships of centreline	60 mm	..... 76 mm
Hull 457mm athwartships of centreline	139 mm	.... 157 mm
Hull 686mm athwartships of centreline	254 mm	.... 275 mm
At Section 9: Keel line to (port & starboard)		
Sheerline	580 mm	.... 610 mm
Hull 229mm athwartships of centreline	48 mm	..... 64 mm
Hull 457mm athwartships of centreline	113 mm	.... 129 mm
Hull 686mm athwartships of centreline	234 mm	.... 256 mm
Longitudinal distance from hull datum point perpendicular		
to intersection of keel trailing edge and hull	2204 mm	.. 2230 mm
to aft point of mast spar hole at deck	3440 mm	.. 3476 mm
Longitudinal dimension of mast spar hole		130 mm
Horizontal distance from centre of forestay attachment hole to forward end of hull	125 mm	.... 145 mm
Horizontal distance from centre of Jib tack attachment hole to forward end of hull	143 mm	..... 167mm
Centre line of shroud plate forward of Section 6	410 mm	.... 460 mm
Centre line of shroud plate to outer edge of deck	70 mm	..... 90 mm
Gunwale rubbing strakes;		
depth	24 mm	..... 56 mm
width	6 mm	..... 38 mm
distances from transom and forward end of hull , excluding stemhead fitting,		50 mm
Overall height of mast step		25 mm

	minimum	maximum
Mainsheet track:		
length		610 mm
longitudinal distance of mainsheet traveller aft of		
Section 6 at sheer.....		880 mm
Floor height at mast step position:		
vertical distance from top of deck at fore side of spar hole	653 mm ...	703 mm

Measurement parameters for sails are detailed in Section G above.

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- 4 August 2021
- 01 January 2021
- 30 September 2019
- 10 June 2019
- 08 January 2018
- 24 July 2017
- 1 June 2017
- 2016 (date TBC)
- 19 February 2014
- 19 June 2013
- November 2012
- June 2009
- December 2008
- April 2008
- December 2007
- 1 January 2007
- 1 April 2006
- 1 April 2005
- 1 March 2004
- 1 March 2003
- 1 April 2001
- 1 May 1996
- 1 March 1990
- 1 August 1989
- 1 March 1989
- 1 March 1985
- 1 January 1983
- 1 March 1982
- 1 March 1981
- 1 March 1977
- 1 April 1976
- 1 March 1975
- 1 March 1974
- 1 May 1973
- 1 March 1972