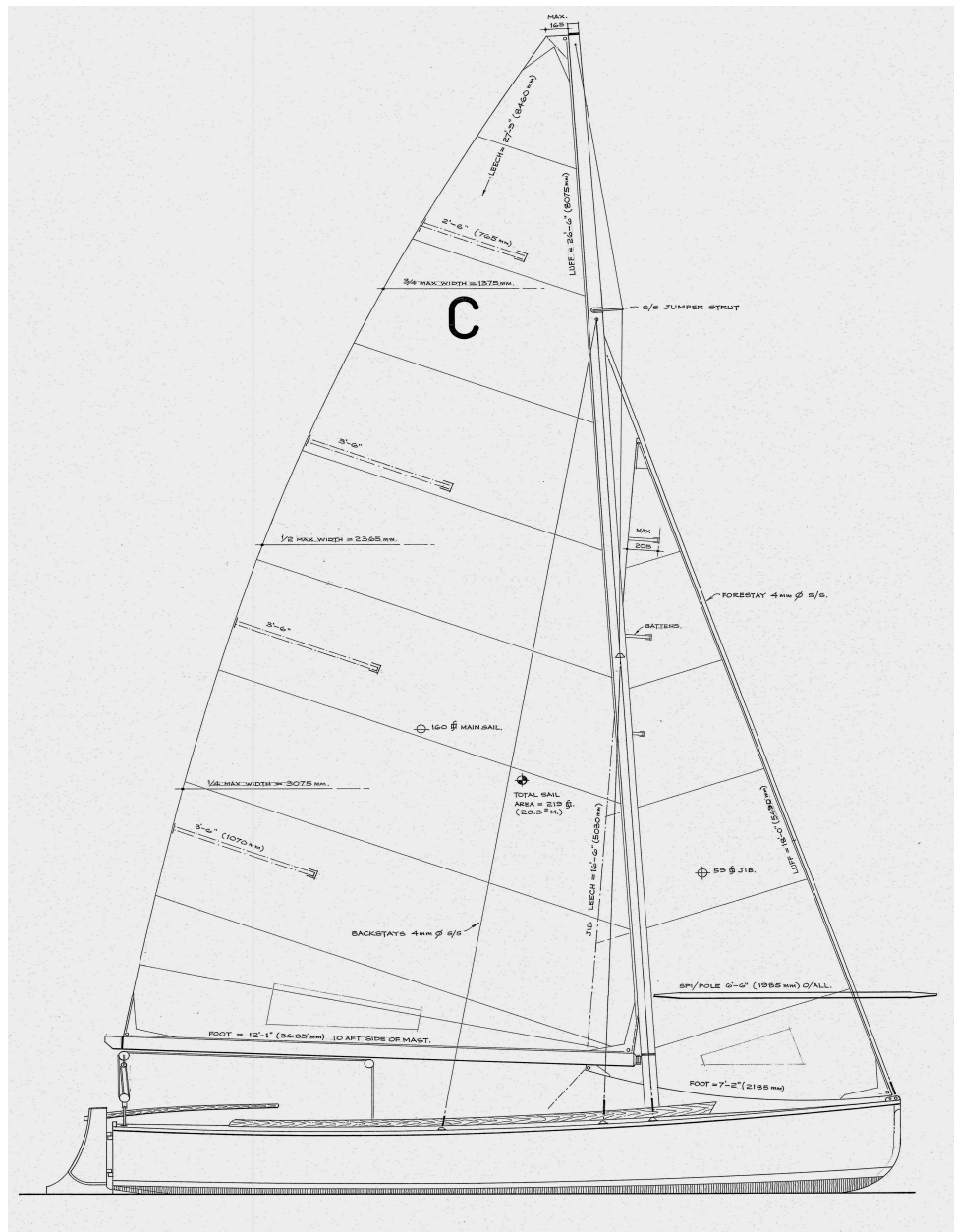


# BRIGHTLINGSEA ONE DESIGN

## CLASS & ASSOCIATION RULES

### 2016



The Brightlingsea One Design was designed in 1927 by Robbie Stone.



# 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	ISAF Rules .....	4
A.6	Class Measurement .....	5
A.7	Class Rules Amendments .....	5
A.8	Building Royalty .....	5
A.9	Sail Numbers .....	5
A.10	Hull Certification .....	5

### Section B – Boat Eligibility

B.1	Class Rules and Certification ....	5
B.2	Flotation Check .....	6
B.3	Class Association Membership .	6

## PART II – REQUIREMENTS AND LIMITATIONS

### Section C – Conditions for Racing

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

D.1	Parts .....	11
-----	-------------	----

D.2	General .....	11
D.3	Hull Shell .....	12
D.4	Deck .....	12
D.5	Buoyancy Tanks .....	13
D.6	Gunwale Rubbing Strakes .....	13
D.7	Internal Fitments .....	13
D.8	Thwarts .....	13
D.9	Assembled Hull .....	13

### Section E – Hull Appendages

E.1	Parts .....	14
E.2	General .....	14
E.3	Centreboard .....	15
E.4	Rudder Blade, Rudder Stock and Tiller .....	15

### Section F – Rig

F.1	Parts .....	16
F.2	General .....	16
F.3	Mast .....	16
F.4	Boom .....	18
F.5	Spinnaker Pole .....	19
F.6	Standing Rigging .....	19
F.7	Running Rigging .....	20

### Section G – Sails

G.1	Parts .....	20
G.2	General .....	20
G.3	Mainsail .....	20
G.4	Headsail .....	21
G.5	Spinnaker .....	22

## PART III – APPENDICES

.....	24
-------	----



# INTRODUCTION

---

*The Brightlingsea One Design rules are **closed class rules**. i.e. unless specifically permitted it is not allowed.*

*The intention of these rules is to ensure that in sailing weight, foil shape, sail plan and spar design, the boats are nearly alike as possible. It is also the intention that the hull form should also be similar, although age, condition, repairs and different builders has been taken into consideration.*

*Brightlingsea One Design hulls, hull appendages, rigs and sails are measurement controlled.*

*Brightlingsea One Design GRP hulls and hull appendages shall only be manufactured by builders specifically approved by the BOD Class Association – in the class rules referred to as licensed builder/s. Other builders may apply to the class for approval.*

*As of 2015 the builder is appointed as White Formula Ltd who will undertake all GRP moulding and Simon Hipkin Boats who will undertake all woodwork and completion as necessary or required*

*Brightlingsea One Design 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 any certification process that might take place.*

*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 Brightlingsea One Design Class Rules proper begin on the next page.*

*The Brightlingsea One Design class permits IHC (In House Certification) as approved by the RYA for Section G – Sails and by the Class Association for GRP hulls as per A.6.5.*

**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 ISAF International Sailing Federation
- RYA Royal Yachting Association
- BODOA Brightlingsea One Design Owners Association
- ERS Equipment Rules of Sailing
- RRS Racing Rules of Sailing

### A.3 AUTHORITY

- A.3.1 The copyright and control of the class lies with the BODOA.
- A.3.2 Notwithstanding anything contained herein, the BODOA has the authority to suspend the eligibility of a **boat**.
- A.3.3 The BODOA accepts no legal responsibility arising from these rules

### A.4 ADMINISTRATION OF THE CLASS

- A.4.1. The Class shall be governed by a Class Committee, which shall consist of the Owner (or one representative of the owner) of each boat. Each boat shall carry one vote only, and votes may be given by proxy.
- A.4.2. The quorum for alteration of the rules shall be seven boats. The quorum for all other business shall be five boats.
- A.4.3. Proposed rule changes shall be put to the Annual General Meeting, or an Extraordinary General Meeting in the event of an emergency, and shall be passed by a majority or two thirds of the votes cast at the meeting.
- A.4.4. Not less than 14 days clear notice shall be given before any meeting of the Class Committee.
- A.4.5. Notwithstanding A.4.1, the day to day business of the class shall be conducted by the Executive Committee, i.e.: the Chairman, Vice-Chairman and Secretary. N.B. A member of the Executive Committee may undertake the role of treasurer. The Executive Committee may co-opt/appoint persons who may not be owners to undertake specific tasks for the Class
- A.4.6. The Executive Committee shall report fully to the Class Committee at every Annual General Meeting.



## **A.5 ISAF 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 MEASUREMENT**

- A.6.1 A Technical Committee consisting of a minimum of four members shall be elected by the BODOA to control the measurement of boats, spars and sails and all other measurement considerations including appointment of Class Measurers. This Committee may co-opt/invite other persons (who may not be owners) for advice as necessary; these persons shall not have a vote. The builders shall not be elected members of the committee but may be invited to attend. A chairman shall be appointed from the committee who shall report to the Executive Committee and AGM as necessary.
- A.6.2. The Class Measurers shall report to the Class anything considered to be a departure from the intended nature and design of the boat, or to be against the general interest of the Class.
- A.6.3. A Measurer shall not measure a boat, sails or spars owned or made by him, or in which he has a personal interest or involvement.
- A.6.4. New or substantially altered sails shall be signed by any class-approved measurer or by a measurer approved by the RYA as an “RYA Sail Measurer”.
- A.6.5. For GRP production boats, the class may approve an In House measurement system such that the builder may sign any measurement forms issued by the class. The builder shall make a boat or any parts of a boat available for checking at the request of the Class. The Technical Committee may appoint a person to carry out this work.

## **A.7 CLASS RULES INTERPRETATION**

- A.7.1 Interpretations of **class rules** shall be made by the Technical Committee of the BODOA who shall refer to any rules, drawings and specifications as necessary. Owners, builders and sailmakers may request interpretations.

## **A.8 BUILDING ROYALTY**

- A.8.1 Each new boat built shall pay to the BODOA a royalty. This shall be paid by the builder at a rate set by the BODOA – currently £250 per boat.

## **A.9 SAIL NUMBERS**

- A.9.1 All boats shall sail under the number issued at the time of building. The Executive Committee shall be responsible for the issuing of sail numbers. GRP Boats shall start the numbering sequence at 50 – excluding number 75. Wooden boats shall continue to fill the gaps up to number 49 inclusive. Numbers for each group (GRP and Wood) shall be issued consecutively.



## **A.10 HULL CERTIFICATION**

A.10.1 **Certificates** are not issued.

## **Section B – Boat Eligibility**

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

### **B.1 CLASS RULES AND CERTIFICATION**

B.1.1 The boat shall:

- (a) be in compliance with the **class rules**.
- (b) have valid **certification marks** if required.
- (c) shall have measured sails.

### **B.2 FLOTATION CHECKS**

B.2.1 The hull shall carry adequate buoyancy as per the **class rules**.

### **B.3 CLASS ASSOCIATION MEMBERSHIP**

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



## 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 – Clothing, shall not apply.
- (b) The ERS Part I – Use of Equipment shall apply.

#### C.2 CREW

##### C.2.1 LIMITATIONS

- (a) The **crew** shall consist of a maximum of 3 persons.
- (b) Persons under the age of 12 may sail and not count as crew.

#### 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 (CE 50 Newtons) or EN 393, which shall be worn.

#### C.4 ADVERTISING

##### C.4.1 LIMITATIONS

Advertising shall only be displayed in accordance with the ISAF Advertising Code. (See ISAF Regulation 20). Advertising on the **boat** chosen by the owner or person in charge is prohibited.

#### C.5 PORTABLE EQUIPMENT

##### C.5.1 FOR USE

###### (a) MANDATORY

- (1) One hand bailer or bucket
- (2) One anchor of not less than 5kg in weight which may include not more than 2kg of chain, and with not less than 20m of line.
- (3) Floorboards – These may be a moulded part of a GRP **boat**.
- (4) Thwarts – minimum 3 – Helm and one either side of the centreboard case. The helm or aft thwart on a GRP boat may be incorporated as



part of the rear tank/deck assembly if not using the official tank moulding.

(b) **OPTIONAL**

- (1) Electronic or mechanical timing devices
- (2) Compasses of optional design
- (3) Manual or electric bilge pumps
- (4) Internal storage arrangements

C.5.2 **NOT FOR USE**

(a) **MANDATORY**

- (1) Oars or paddles capable of propelling the boat.
- (2) Rowlocks if oars are carried.
- (3) VHF Radio/s

(b) **OPTIONAL**

- (1) Electronic navigation devices
- (2) One petrol or electric outboard engine and fuel tank or battery pack
- (3) Towing/Mooring lines
- (4) Boom support of optional design

**C.6 BOAT**

C.6.1 **WEIGHT**

	minimum	maximum
The weight of the <b>boat</b> in dry condition .....	610 kg	.....

The weight shall be taken including one suit of **sails** and all portable equipment as listed in C.5, excluding the outboard engine and associated fittings and any power sources for electronic equipment.

C.6.2 **CORRECTOR WEIGHTS**

- (a) **Corrector weights** of lead shall be carried in the bilge below the floorboards when the **boat** weight is less than the minimum requirement. They shall be secured in near equal amounts port and starboard, forward of the aft end of the centreboard case.

C.6.3 **FLOTATION**

- (a) Buoyancy equipment in GRP **hulls** shall comprise of tanks fitted as per specifications approved by the Technical Committee.
- (b) Buoyancy equipment in timber **hulls** shall comprise air bags or foam blocks to a minimum of 410kg or tanks.

**C.7 HULL**

C.7.1 **MODIFICATIONS, MAINTENANCE AND REPAIR**

- (a) Additional strengthening may be added to wooden boat **hulls** to overcome weakness caused by age and condition.
- (b) The **hull** may be coated in protective paints and varnish.



## C.7.2 FITTINGS

### (a) USE

- (1) Hand hole covers and drainage plugs shall be kept in place at all times in buoyancy tanks.
- (2) The length, design and position of the jib sheet tracks are optional, except that the track and its fittings shall be fitted entirely on the side deck excluding gunwale rubbing strakes and cockpit coamings.
- (3) All other fittings, their type and position are optional.
- (4) The minimum distance between stops on the mainsheet horse is 300mm. The stops shall not be adjusted while racing – see D.9.1.
- (5) A prodder extending not more than 200mm from the stem head may be fitted to catch the spinnaker sheet. The prodder shall be of a material that shall not cause damage in the event of a collision and shall therefore bend or break off.

## C.8 HULL APPENDAGES

### C.8.1 MODIFICATIONS, MAINTENANCE AND REPAIR

- (a) The centreboard may be repaired and re-faired and covered in a protective coating excepting the main shape and section shall be as pattern.

### C.8.2 FITTINGS

- (a) The centreboard shall be raised and lowered using a wire or HMPE/LCP strop connected to the winch barrel. The lead of the rope from the winch drum and the purchase is optional.
- (b) The centreboard may be fitted with a retaining device of optional design to prevent it becoming dislodged in the event of a capsize.

### C.8.3 RUDDER

#### (b) USE

- (1) Except when avoiding shallows, the rudder blade shall be in its fully lowered position.
- (2) The rudder blade may be notched at the forward edge as per class diagram. See section H.

## C.9 RIG

### C.9.1 MODIFICATIONS, MAINTENANCE AND REPAIR

- (a) Routine maintenance such as cleaning, minor repairs and replacement of fittings is permitted without re-measurement and **re-certification**.

### C.9.2 FITTINGS

#### (a) USE

- (1) Fittings are optional subject to any restrictions in these **class rules**.



### C.9.3 MAST

#### (a) USE

- (1) The **spar** shall be stepped in or on the mast step in such a way that the heel is not capable of moving more than 10 mm.
- (2) The **Heel Point** of the mast shall take the full weight of the mast.
- (3) The mast shall be retained at deck level by chocks. The number and shape are optional.

### C.9.4 BOOM

#### (a) DIMENSIONS

	minimum	maximum
<b>Limit mark width</b> .....	12 mm	
<b>Outer point distance</b> .....		3685 m

#### (b) USE

- (1) 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, nor more than 130mm above, the upper edge of the mast **lower limit mark** when the boom **spar** is at 90° to the mast **spar**.

### C.9.5 SPINNAKER POLES

#### (a) USE

- (1) There may be a single or twin pole system. The launching and stowage systems for the spinnaker poles are optional.

### C.9.6 STANDING RIGGING

#### (a) USE

- (1) Rigging links and rigging screws for the forestay and shrouds shall not be adjusted while racing.
- (2) The running backstays shall be connected to the track cars. The backstays shall be tensioned only by moving the track cars.

### C.9.7 RUNNING RIGGING

#### (a) USE

- (1) The mainsail sheet shall connect the boom by blocks to the transom horse and then forward to a centre mainsheet jammer on the centreboard case. The purchase is optional.
- (2) Jib barber haulers are optional except that they shall not be capable of hauling the jib clew or its extension to project within the cockpit.
- (3) All other running rigging and associated fittings 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 cleaning and minor repairs which do not alter the shape of the **sail** is permitted without re-measurement and re-certification.

#### C.10.2 LIMITATIONS

- (a) Not more than 1 mainsail, 1 headsail and 1 spinnaker shall be carried aboard.

#### C.10.3 MAINSAIL

##### (a) USE

- (1) The **sail** shall be hoisted on a halyard. The arrangement shall permit hoisting and lowering of the **sail** at sea.
- (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 aft of the fore side of the **boom outer limit mark**.
- (3) The **mainsail luff** bolt rope or sliders shall be in the **spar** grooves or tracks. The **mainsail foot** bolt rope or sliders shall be in the **spar** grooves or tracks for a lens foot sail, or the sail may be loose footed and attached only at the **clew** end.

#### C.10.4 HEADSAIL

##### (a) USE

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

## Section D – Hull

### D.1 PARTS

#### D.1.1 MANDATORY

- (a) Hull shell
- (b) Deck
- (c) Buoyancy or buoyancy Tanks
- (d) Gunwale Rubbing Strakes
- (e) 3 Thwarts

#### D.1.2 OPTIONAL

- (a) Bulkheads
- (b) Extra thwarts

### 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) New Boats built in original materials (includes plywood planking) to the



Class plans and rules shall be exempt from the Recreational Craft Directive (RCD), being built substantially of original materials and to a design pre-dating 1950. It shall be the builder's responsibility to ensure that this exemption is logged. Boats built in GRP shall conform to the RCD or any exemptions allowed.

#### D.2.2 CERTIFICATION

See Rule A.10.

#### D.2.3 MODIFICATIONS, MAINTENANCE AND REPAIR

- (a) The hull shell, deck, bulkheads and centreboard case shall not be altered in any way except as permitted by these **class rules**.
- (b) Holes not bigger than necessary for the installation fittings and passage of lines may be made in the deck but shall not pass through buoyancy compartments.
- (c) Routine maintenance such as painting and polishing and repair of minor chips and abrasions is permitted without re-measurement and re-certification.
- (d) If any **hull** is repaired in any other way than described in D.2.3(c), the Technical Committee or an **official measurer** appointed by them shall verify that the **hull** still complies with the **class rules** and that no substantial advantage has been gained as a result of the repair.

#### D.2.4 IDENTIFICATION

- (a) New **hulls** shall carry the official Craft Identification Number (CIN) as issued by the RYA if the builder is not registered in his own right.
- (b) This number shall include the sail number as part of the serial number.

#### D.2.5 BUILDERS

- (a) The **hull** shall be built by a builder/s licensed by the BODOA.
- (b) All moulds shall be approved by the BODOA.

### D.3 HULL SHELL

#### D.3.1 MATERIALS

- (a) The hull shell shall be built from GRP.  
OR
- (b) Elm or Mahogany or Plywood

#### D.3.2 CONSTRUCTION

- (a) The hull shell shall be of Clinker lap construction in accordance with the class building specifications and class plans.
- (b) GRP hull shells shall be constructed from the approved mould to the class building specification.

### D.4 DECK

#### D.4.1 MATERIALS

- (a) The deck may be a composite construction of Plywood, Glass cloth and resin and/or a solid timber finish



#### D.4.2 CONSTRUCTION

- (a) The deck shall be as specified in the Class plans, except that the cockpit coamings may be cut down or removed provided that full width splashboards are fitted in lieu.

	Minimum
Height to deck centreline	90mm
Taper at 25mm in from gunwale	25mm

The taper is optional but if made shall be either straight or convex.

- (b) GRP Boats may have either a wooden deck constructed to class plans or a GRP moulded deck to Class specifications. The joining of the wooden deck to the GRP Hull shall be as per the Class Specification.
- (c) The main area of the deck surface shall have a non slip finish

### D.5 BUOYANCY TANKS

#### D.5.1 CONSTRUCTION

- (a) Buoyancy equipment in GRP **hulls** shall comprise of tanks fitted as per specifications approved by the Technical Committee.
- (b) Buoyancy equipment in timber **hulls** shall comprise air bags or foam blocks to a minimum of 410kg or tanks.

### D.6 GUNWALE RUBBING STRAKES

#### D.6.1 MATERIALS

- (a) The rubbing strakes shall be of timber.

#### D.6.2 CONSTRUCTION

- (a) The rubbing strake shall run unbroken on each gunwale.

### D.7 INTERNAL FITMENTS

#### D.7.1 CONSTRUCTION

- (a) GRP Boats shall have internal bulkheads and tanks  
GRP Boats may have internal construction of either timber or GRP Moulding to Class Specification.
- (b) The shape material and position of floorboards is optional except that they shall cover the floor area of the cockpit.
- (c) The centreboard case may be cut down to allow top loading but shall have a cap the shape shown on the plans which shall be fitted in place whilst racing. The GRP Boat shall have a centreboard case as an integral part of the hull moulding. It shall be open topped to the approved specification. A cap may be fitted.

### D.8 THWARTS

#### D.8.1 MATERIALS

- (a) Thwarts shall be of timber or GRP.



## D.8.2 CONSTRUCTION

- (a) A minimum of three thwarts (Helm plus two others, i.e. one to port and one to starboard of the centreboard case) shall be fitted at all times. The helm thwart shall be positioned at the aft end of the cockpit; across the tank moulding if present or may be the seat section of built in tanks (as per C51). The size and position of all other thwarts is optional. The methods of fixing all thwarts is optional.

## D.9 ASSEMBLED HULL

### D.9.1 FITTINGS

#### (a) MANDATORY

The following fittings shall be positioned in accordance with class rules:

- (1) Stemhead fitting – on stem head moulding – design as per drawing
- (2) Shroud plates – design and material optional
- (3) Mooring cleat – design and material optional. It shall be fitted on the foredeck of the **boat** on the fore & aft centreline. It shall be practical to use and be able to secure the boat to a mooring.
- (4) Mainsheet horse – may be original cast material or stainless steel. The minimum distance between stops shall be 300mm. The material of the stops is optional. The stops shall not be adjustable while racing.
- (5) Running backstay tracks – design and material optional. They shall be positioned wholly aft of the lower shroud position.
- (6) Centreboard winch cast/constructed from class approved patterns/design. It shall be fitted between forward end of centreboard case and aft end of mast step. The winch drum barrel may be fitted with a sleeve if necessary.

#### (b) OPTIONAL

- (1) All other fittings.
- (2) Keelband and stem band on GRP **hulls**.
- (3) Electric bilge pumps may be fitted.

### D.9.2 DIMENSIONS

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

Section 1: at 1245 mm from the transom

Section 2: at 2770 mm from the transom

Section 3: at 4295 mm from the transom

	minimum	maximum
Beam of <b>hull</b> , excluding rubbing strakes and fittings, at <b>sheerline</b> ;		
at section transom .....	1215 mm	1225 mm
at section 1 .....	1698 mm	1718 mm
at section 2 .....	1850 mm	1870 mm



at section 3 .....	1445 mm ... 1465 mm
Longitudinal dimension of mast <b>spar</b> hole:	
Aft end from transom .....	3620 mm.....
Forward end from transom .....	3880 mm
Athwartships width of hole.....	110 mm
Length overall of running backstay track .....	1250 mm
Aft end of track from transom .....	2050 mm .....
Centreline of lower shroud plate from transom.....	3410 mm.... 3450 mm
Centreline of upper shroud plate from transom .....	3720 mm ... 3760 mm
Width of helm thwart.....	280 mm.....
Thickness of helm thwart.....	25 mm.....

### D.9.3 WEIGHTS

	minimum	maximum
Weight of bare shell moulding inc: tank moulding, centreboard case and forward bulkhead without hatch .....	205 kg .....	...
<i>(This weight will be modified if necessary when further boats are built and the information becomes available)</i>		

## 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 MODIFICATIONS, MAINTENANCE AND REPAIR

- (a) Hull appendages shall not be altered in any way except as permitted by these class rules.
- (b) Routine maintenance such as painting and maintenance of the surface is permitted without re-measurement and **re-certification**.

#### E.2.3 CERTIFICATION

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



### **E.3 CENTREBOARD**

#### **E.3.1 RULES**

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

#### **E.3.2 MANUFACTURERS**

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

#### **E.3.3 MATERIALS**

- (a) The **centreboard** shall be of fine tough cast iron or semi steel.
- (b) The **centreboard** may be covered with an optional protective coating that does not alter the shape of the casting.

#### **E.3.6 CONSTRUCTION**

- (a) The **centreboard** shall be manufactured from a pattern approved by the BODOA. Currently this is the pattern constructed by John Mullins in 2005.
- (b) The casting may be faired but the main shape and section shall be as the pattern.

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

#### **E.4.1 RULES**

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

#### **E.4.2 MANUFACTURERS**

- (a) Manufacturers are optional.

#### **E.4.3 MATERIALS**

- (a) The **rudder** blade shall be of stainless steel or steel plate.
- (b) The **rudder** stock shall be of wood.
- (c) The material of the tiller is optional.
- (d) The material of the tiller extension is optional.

#### **E.4.4 CONSTRUCTION**

- (a) The **rudder** blade and rudder stock shall be constructed in accordance with class plans.
- (b) The dimensions and design of the tiller and tiller extension are optional, except that the tiller shall tenon into the rudder stock mortise.

## **Section F – Rig**

### **F.1 PARTS**

#### **F.1.1 MANDATORY**

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



- (d) Running **rigging**
- F.1.2 OPTIONAL
  - (a) **Spinnaker pole/s**
- 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
  - (a) **Spars** shall not be altered in any way except as permitted by these **class rules**.
  - (b) Routine maintenance such as cleaning, minor repairs and replacement of fittings is permitted without re-measurement and re-**certification**.
- 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
  - (a) MAST DATUM POINT
 

The **mast datum point** is the **heel point** being the lowest point possible.
- F.2.5 MANUFACTURER
  - (a) No licence is required.
- F.3 MAST**
- F.3.1 MATERIALS
  - (a) The **spar** shall be of Spruce or aluminium alloy.
  - (b) The material of the jumper struts is optional.
  - (c) The material of the spreaders is optional.
  - (d) The material of mast fittings is optional.
  - (e) Permitted surface finish shall be optional
- F.3.2 CONSTRUCTION
  - (a) The **spar** extrusion shall include a fixed sail groove or track which may or may not be integral with the **spar** and need not be of the same material.
  - (b) The wooden mast shall be constructed as per Class plans, except that the internal flag halyard is optional.
  - (c) The section of the aluminium mast is optional.
  - (d) The optional mast taper shall be fair and either straight or convex.
  - (e) The jumper struts connector bar shall be of a similar size to the main struts. The struts shall form an angle of 55 +/-5 degrees from the centreline.
  - (f) The spreaders shall be free swinging connected by one bolt only.
  - (g) The method of termination and attachment to the mast of the standing



rigging is optional.

- (h) The general arrangement of standing rigging shall be a forestay, upper and lower shrouds and running backstays.
- (i) The **Heel Point** of the mast shall take the full weight of the mast. For a wooden mast it shall be in the form of a tenon and shall sit in the mast step on the centreboard case spur extension. Metal masts may use either a tenon or other mast heel arrangement to maintain the same average rig height.

### F.3.3 FITTINGS

#### (a) MANDATORY

- (1) Jumper struts.
- (2) Spreaders.
- (3) Mainsail halyard sheave box
- (4) Headsail halyard sheave box
- (5) Spinnaker halyard sheave box or sheave block.
- (6) Gooseneck.

#### (b) OPTIONAL

- (1) One mechanical wind indicator
- (2) Compass bracket
- (3) Spinnaker halyard crane.
- (4) Spinnaker pole fittings and track
- (5) Spinnaker pole lift block with attachment
- (6) Spinnaker pole downhaul block with attachment
- (7) Kicking strap attachment
- (8) Other fittings for standing and running rigging.

### F.3.5 DIMENSIONS

	minimum	maximum
<b>Mast length</b> .....	9320 mm	9330 mm
<b>Mast spar curvature</b> .....		30 mm
<b>Mast spar cross section below taper;</b>		
<b>fore-and-aft</b> .....	91 mm	
<b>transverse</b> .....	68 mm	
Sum of fore and aft plus transverse .....	164 mm	
<b>Mast spar cross section at upper point;</b>		
<b>fore-and-aft</b> .....	55 mm	
<b>transverse</b> .....	40 mm	
Start of taper .....	7300 mm	
<b>Mast limit mark width</b> .....	12 mm	
<b>Lower point height</b> .....	1080 mm	1090 mm
<b>Upper point height</b> .....		9160 mm
Diamond wire above spreaders .....		150 mm
Diamond wire below mast head .....		190 mm



<b>Upper shroud</b> and running backstay below jumper strut .....	150 mm
<b>Lower shroud height</b> below spreaders.....	140 mm
Headsail sheave pin height .....	6645 mm ... 6680 mm
<b>Spinnaker pole fitting:</b>	
<b>projection</b> .....	60 mm
Spinnaker sheave pin height .....	6690 mm ... 6850 mm
<b>Spinnaker crane fitting:</b>	
projection .....	105 mm
<b>Spreader;</b>	
<b>length</b> .....	530 mm .... 610 mm
height to centreline .....	4265 mm ... 4295 mm
Jumper strut centreline .....	7010 mm ... 7035 mm
Jumper strut length .....	275 mm .... 310 mm
Front of mast to connector bar centreline .....	100 mm .... 130 mm
Distance from <b>mast datum point</b> as defined in F.2.4	
to centre of gravity in condition as described in	
ERS H.4.6 .....	
	3960 mm

#### F.3.16 WEIGHTS

	minimum	maximum
<b>Mast</b> weight of section .....	1.59 kg/m	
<b>Mast weight</b> .....	25 kg	
<b>Mast tip weight</b> .....	9 kg	

### F.4 BOOM

#### F.4.1 MATERIALS

- (a) The **spar** shall be of Spruce or aluminium alloy.
- (b) Permitted surface finish shall be optional.

#### F.4.2 CONSTRUCTION

- (a) The **spar** extrusion shall include a fixed sail groove or track which may or may not be integral with the **spar** and need not be of the same material.
- (b) The section and design of the **spar** is optional.

#### F.4.3 FITTINGS

- (a) The fittings are optional.

#### F.4.5 DIMENSIONS

	minimum	maximum
<b>Boom spar curvature</b> .....		25 mm
<b>Boom spar</b> overall length.....		3810 mm

#### F.4.16 WEIGHTS

	minimum
<b>Boom weight</b> of section .....	1.6 kg/m



## **F.5 SPINNAKER POLES**

### **F.5.1 MANUFACTURER**

- (a) Manufacturer is optional.

### **F.5.2 MATERIALS**

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

### **F.5.3 CONSTRUCTION**

- (a) The construction is optional.

### **F.5.4 FITTINGS**

- (a) Fittings are optional.

### **F.5.5 DIMENSIONS**

	minimum	maximum
<b>Spinnaker pole length</b> .....	... mm	1985 mm

## **F.6 STANDING RIGGING**

### **F.6.1 MATERIALS**

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

### **F.6.2 CONSTRUCTION**

#### **(a) MANDATORY**

- (1) A forestay of 6 x7 or 1 x 19 wire.
- (2) Upper and lower shrouds of 6 x7 or 1 x 19 wire.
- (3) Running backstays of 6 x7 or 1 x 19 wire.
- (4) Diamonds of 6 x7 or 1 x 19 wire.

### **F.6.3 FITTINGS**

#### **(a) MANDATORY**

- (1) Forestay rigging link or rigging screws or lashing.
- (2) Upper and lower shroud rigging screws or lashings
- (3) Backstay rigging screws or lashings directly to track cars.
- (4) Diamond rigging screws or lashings.

#### **(b) OPTIONAL**

- (1) Shackles in all of the above.

### **F.6.4 DIMENSIONS**

	minimum
Forestay diameter .....	4 mm
Upper and lower shrouds diameter .....	4 mm
Running backstay diameter .....	4 mm
Diamonds diameter .....	2 mm

## **F.7 RUNNING RIGGING**

### **F.7.1 MATERIALS**

- (a) Materials are optional.



F.7.2 CONSTRUCTION

- (a) The construction of running rigging is optional.

F.7.3 FITTINGS

- (a) All fittings are optional subject to C.9.6 & C.9.7.

## 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) The RYA may appoint one or more persons at a sailmaker to measure and **certify sails** produced by that manufacturer in accordance with the ISAF In-house Certification Guidelines.

G.2.3 SAILMAKER

- (a) No licence is required.

### G.3 MAINSAIL

G.3.1 IDENTIFICATION

- (a) The class insignia shall be the letter “C”.
- (b) The national letters and sail numbers shall comply with the RRS except where prescribed otherwise in these **class rules**.
- (c) National letters are optional.
- (d) The colour of the insignia, national letters and sail numbers is optional.

G.3.2 MATERIALS

- (a) The **ply** fibres shall consist of polyester.
- (b) **Stiffening** shall consist of:
  - (1) Cornerboards – plastic or aluminium
  - (2) Battens – wood, foam, GRP or a combination of these.
- (c) **Sail reinforcement** shall consist of materials permitted in the **body of the sail**.



### G.3.3 CONSTRUCTION

- (a) The construction shall be: **soft sail, single ply sail**.
- (b) The **body of the sail** shall consist of **woven ply** throughout.
- (c) The **sail** shall have 4 batten **pockets** in the **leech**.
- (d) The sail may be constructed so that it can be reefed by means of slab reefing at a maximum of two points adjacent to the **luff**, two points adjacent to the **leech** and four or five corresponding points in the **body of the sail**.
- (e) The **mainsail** may have a loose **foot**. The foot roach shall be measured with the sail laid flat and flaked horizontally above the foot to allow the lower portion of the sail to lie as flat as possible. The foot roach shall be measured at 90° to the straight line joining the **clew point** to the **tack point**.
- (c) The following are permitted: Stitching, glues, webbing, woven and PTFE tapes, bolt ropes, corner eyes, corner rings, Velcro or other fastenings, headboard with fixings, Cunningham eye or pulley, reefing eyes, **batten pocket patches**, batten pocket elastic, batten pocket end caps, batten retaining devices, 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
<b>Leech length</b> .....	8220 mm	8460 mm
<b>Quarter width</b> .....		3075 mm
<b>Half width</b> .....		2365 mm
<b>Three-quarter width</b> .....		1375 mm
<b>Top width</b> .....		165 mm
Foot roach .....		240 mm
Weight of <b>ply</b> of the <b>body of the sail</b> .....	170 g/m <sup>2</sup>	
<b>Window area</b> .....		0.3 m <sup>2</sup>
Batten lengths:		
uppermost .....		765 mm
lower three .....		1070 mm
Reefing points above <b>tack</b> and <b>clew</b> points:		
Lowest line for reef points .....	765 mm	
Highest line for reef points .....		1680 mm

## G.4 HEADSAIL

### G.4.1 MATERIALS

- (a) The **ply** fibres shall consist of polyester.
- (b) **Stiffening** shall consist of:
  - (1) Battens or wood or GRP.



- (c) **Sail reinforcement** shall consist of materials permitted in the **body of the sail**.

#### G.4.2 CONSTRUCTION

- (a) The construction shall be: **soft sail, single ply sail**.
- (b) The **body of the sail** shall consist of **woven ply** throughout.
- (c) The headsail may have 3 **batten pockets** in the **leech**.
- (d) The **leech** shall not extend beyond a straight line from the aft **head point** to the **clew point**.
- (e) There shall be a **window/s** in the lower 1/3 of the sail.
- (f) The following are permitted: Stitching, glues, webbing and woven tapes, luff wire, corner eyes, corner rings, hanks, Velcro, press studs or other fastenings to the forestay, batten pocket elastic, **batten pocket patches**, batten pocket end caps, batten retaining devices, Cunningham eye with cleat, leech line with cleat, foot line with cleat, 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
<b>Luff length</b> .....	...	5490 mm
<b>Leech length</b> .....	...	5030 mm
<b>Foot length</b> .....	...	2185 mm
<b>Foot median</b> .....	...	5260 mm
<b>Top width</b> .....	.....	50 mm
<b>Window area</b> .....	0.2m <sup>2</sup> .....	0.3 m <sup>2</sup>
<b>Window to sail edge</b> .....	150 mm	
<b>Batten length</b> .....	.....	205 mm

### G.5 SPINNAKER

#### G.5.1 IDENTIFICATION

- (a) The sail numbers shall comply with the RRS except where prescribed otherwise in these **class rules**.
- (b) National letters are optional.

#### G.5.2 MATERIALS

- (a) The **ply** fibres shall consist of Nylon.
- (b) **Sail reinforcement** shall consist of:
- (1) **Primary reinforcement** – optional material.
  - (2) **Secondary reinforcement** - material permitted in the **body of the sail**.

#### G.5.3 CONSTRUCTION

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



- (b) The **body of the sail** shall consist of **woven ply** throughout.
- (c) The following are permitted: Stitching, glues, webbing and woven tapes, corner eyes, corner rings, headboard 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
<b>Leech/Luff lengths</b> .....	5640 mm	... 5850 mm
<b>Foot length</b> .....		... 3625 mm
<b>Foot Median</b> .....		... 6300 mm
<b>Half width</b> .....		... 3900 mm
Weight of <b>ply</b> of the <b>body of the sail</b> .....	30 g/m <sup>2</sup>	
Headboard in any direction .....		..... 105 mm



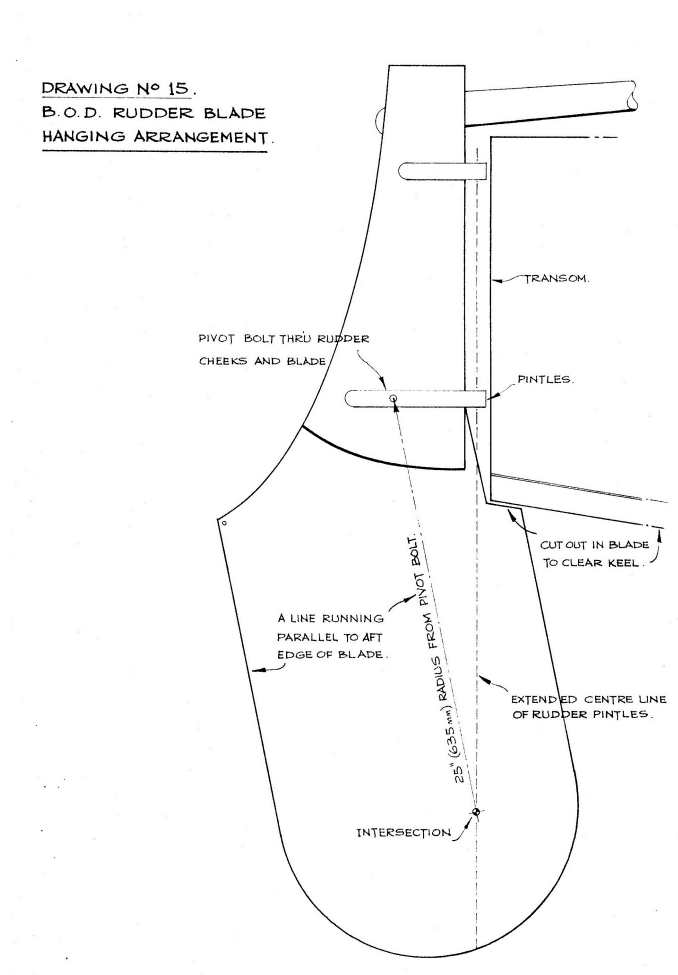
## PART III – APPENDICES

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 PLANS AND DRAWINGS

Plans referred to in the rules shall be available to licensed builders as necessary for reference purposes from the BODOA.



Effective: 1<sup>st</sup> January 2016

Previous issues: 1<sup>st</sup> July 2015

1<sup>st</sup> January 2014

1<sup>st</sup> December 2010

1<sup>st</sup> December 2009



1<sup>st</sup> December 2008

1<sup>st</sup> July 2008

© BODOA 2008