

HERON

DINGHY CLASS RULES

2019



The Heron was designed in 1950 by Jack Holt.

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INTRODUCTION

The Heron is a versatile one-design class dinghy. It is ideal for cruising and for family racing. The objective of the class rules is to ensure that boats are as nearly alike as possible with regard to any matter which may have influence on the basic speed or handling. However, a wide range of options are available which make it possible to adapt the boat to suit the needs of individual owners.

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

Heron hulls in GRP/FRP shall only be manufactured by Butler Boats – in the class rules referred to as licensed builders. Construction is required to comply with the Heron Class Building Specification.

Plywood kits for Heron hulls shall only be manufactured in the UK by a licensed supplier. Currently there is no supplier – in the class rules referred to as licensed manufacturers. Construction of the kit and materials used are required to comply with the Heron Class Building Specification.

Kits and scratch-built boats may be built by professional or amateur builders.

Heron hulls in framed construction may be built from plans available from the National Class Association.

Heron hulls in Ply/Epoxy construction may be built from plans available from Selway Fisher <http://www.selway-fisher.com/index.htm> Drawings for completion are available from the Heron Dinghy Class Association.

Heron hull appendages, rigs and sails do not require a licence to manufacturer.

Heron hulls, hull appendages, rigs and sails may, after having left the builders, 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 may NOT be checked as part of any certification process.

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

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

The class permits IHC for sails (section G) in those lofts licensed under the IHC system.

These class rules work in conjunction with the definitions in the Equipment Rules of Sailing (ERS) and the rules section letters (A-H) correspond to the same sections in the ERS. To look up a specific item, you should only need to look in a maximum of two places. The relevant section (D-G) and if two different items are needed (e.g. the depth of the centreboard below the hull) then section C where can also be found the requirements for racing in terms of permitted equipment etc.

N.B. THESE ARE CLOSED CLASS RULES: IF IT DOES NOT SAY YOU CAN, THEN YOU CAN NOT.

PART I – ADMINISTRATION

Section A – General

A.1 LANGUAGE

- A.1.1 The official language of the class is English and in case of dispute over translation the English text shall prevail.
- A.1.2 The word “shall” is mandatory and the word “may” is permissive.
- A.1.3 These **class rules** shall be read in conjunction with the ERS.
- A.1.4 Except where used in headings, when a term is printed in “bold” the definition in the ERS applies and when a term is printed in “italics” the definition in the RRS applies.

A.2 ABBREVIATIONS

- A.2.1 WS World Sailing
- MNA ISAF Member National Authority
- NCA National Heron Dinghy Class Association (UK)
- ERS Equipment Rules of Sailing (WS)
- RRS Racing Rules of Sailing (WS)
- IHC In House Certification (WS)

A.3 AUTHORITIES

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

A.4 ADMINISTRATION OF THE CLASS

- A.4.1 The administrative functions of the class shall be carried out by the NCA. The NCA may delegate part or all its functions, as stated in these **class rules**, to another NCA.

A.5 CLASS RULES VARIATIONS

- A.5.1 **Class Rules** may only be varied in accordance with RRS 87.

A.6 CLASS RULES CHANGES

- A.6.1 Changes to these **class rules** shall be approved by the NCA.

A.7 CLASS RULES INTERPRETATION

- A.7.1 Interpretation of **class rules** shall be made by the NCA Executive Committee.

A.8 CLASS FEE

- A.8.1 The licensed hull builder shall pay the Class Fee.

A.9 SAIL NUMBERS

A.9.1 Sail numbers shall be issued by the NCA. They shall be issued to boats on the completion of their build. They may be allocated to unregistered boats.

A.10 HULL CERTIFICATION

A.10.1 A **certificate** shall record the following information:

- (a) Sail Number
- (b) Boat Name
- (c) Date built
- (d) Owner and address
- (e) Owners sailing club
- (f) Builder's details
- (g) Hull construction
- (h) Rig details
- (i) Date first registered if known
- (j) Date of first measurement if known
- (k) Date of last measurement
- (l) Date of current **certificate**
- (m) Weight
- (n) Corrector weights
- (o) Previous owners if possible

A.11 INITIAL HULL CERTIFICATION

A.11.1 For a **certificate** to be issued to hull not previously **certified**:

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

A.12 VALIDITY OF CERTIFICATE

A.12.1 A hull **certificate** becomes invalid upon:

- (a) the change to any items recorded on the hull **certificate** as required under A.10.
- (b) withdrawal by the **certification authority**,
- (c) the issue of a new **certificate**,

A.13 HULL RE-CERTIFICATION

A.13.1 The **certification authority** may issue a **certificate** to a previously certified **hull**:

- (a) when it is invalidated under A.12.1(a), after receipt of the old **certificate**, and **certification** fee if required.
- (b) when it is invalidated under A.12.1 (b), at its discretion.
- (c) in other cases, by application of the procedure in A.12.

A.14 RETENTION OF CERTIFICATION DOCUMENTATION

A.14.1 The **certification authority** shall:

- (a) retain the original documentation upon which the current **certificate** is based.

Section B – Boat Eligibility

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

B.1 CLASS RULES AND CERTIFICATION

B.1.1 The boat shall:

- (a) be in compliance with the **class rules**.
- (b) have a valid hull **certificate**.

B.2 FLOTATION CHECKS

B.2.1 The **boat** shall have had its buoyancy checked by the owner.

B.2.2 The owner shall be satisfied that inflatable buoyancy bags are in sound condition and that all buoyancy apparatus is securely attached to the hull or retained in an efficient manner.

B.2.3 Owners are responsible for the buoyancy and suitable tests can be found in section H.

B.3 CLASS ASSOCIATION

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

PART II – REQUIREMENTS AND LIMITATIONS

The **crew** and the **boat** shall comply with the rules in Part II when *racing*. In case of conflict Section C shall prevail.

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

Section C – Conditions for Racing

C.1 GENERAL

C.1.1 RULES

(a) The ERS Part I – Use of Equipment shall apply.
<http://www.sailing.org/documents/equipmentrules/index.php>

C.2 CREW

C.2.1 LIMITATIONS

(a) The **crew** shall consist of 2 persons for crewed events and 1 person for single handed events.

(b) No **crew** member shall be substituted during an event of less than 3 consecutive days, unless by prior written permission from the race committee.

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

C.4 ADVERTISING

C.4.1 LIMITATIONS

Advertising shall only be displayed in accordance the ISAF Advertising Code. (See WS Regulation 20). Advertising chosen by the owner or person in charge is not permitted.

C.5 PORTABLE EQUIPMENT

C.5.1 FOR USE

(a) OPTIONAL

- (1) Electronic or mechanical timing devices
- (2) One electronic or magnetic compass
- (3) Mooring line
- (4) Hand bailers or buckets

- (5) Anchor and warp
- (6) Consumables and the storage of them.
- (7) Cameras worn on the body or on the boat.

C.5.2 NOT FOR USE

(a) OPTIONAL

- (1) Towing rope.
- (2) Paddles and/or oars
- (3) Mobile phone

C.6 BOAT

C.6.1 WEIGHT

	minimum	maximum
The weight of the hull in dry condition	63.7 kg	.....
The weight shall be taken including the centreboard and floorboards (or retro-fit floor strengthening) but excluding rudder and tiller, spars, sails and all portable equipment as listed in C.5.		

C.6.2 CORRECTOR WEIGHTS

- (a) **Corrector weights** of lead shall be permanently fastened to the forward thwart either side of the **centreboard** case when the **boat** weight is less than the minimum requirement.
- (b) The total weight and number of such **corrector weights** shall be recorded on the **certificate**.

C.6.3 FLOTATION

- (a) The **hull** shall have flotation elements of either bags or tanks as per D5 & H1.

C.7 HULL

C.7.1 MODIFICATIONS, MAINTENANCE AND REPAIR

- (a) Routine maintenance such as re-painting and the repair of minor damage, scratches and abrasions is permitted without re-measurement and re-certification.

C.7.2 FITTINGS

(a) USE

- (1) Hand hole covers and drainage plugs shall be kept in place at all times if fitted.
- (2) The fitting and adjustment of toe straps is optional
- (3) Headsail sheet fairleads and tracks – excluding cleats – shall not overhang side decks inboard or outboard. Headsail sheets may be lead through side decks to below deck sheeting.
- (4) Other fittings are optional excluding hydraulics.

C.8 HULL APPENDAGES

C.8.1 MODIFICATIONS, MAINTENANCE AND REPAIR

(a) Routine maintenance such as re-painting and the repair of minor damage, scratches and abrasions is permitted without re-measurement and re-certification.

C.8.2 FITTINGS

Fittings are optional excluding hydraulics.

C.8.3 LIMITATIONS

(a) Only one **centreboard** and one **rudder** blade shall be used during an event of less than 3 consecutive days, except when a **hull appendage** has been lost or damaged beyond repair.

C.8.4 CENTREBOARD

(a) DIMENSIONS

	minimum	maximum
Width at keel when fully lowered	365 mm	
Leading edge from transom when fully lowered	1975 mm	2000 mm
Length from keel when fully lowered	718 mm	

(b) USE

(1) **Centreboard** positioning devices, pivot bolt and sealing are optional.

(2) The **centreboard** shall be housed in the case when raised and not project below the hull.

C.8.5 RUDDER

(a) DIMENSIONS

	minimum	maximum
Immersion length, measured parallel to the leading edge of a fully lowered blade from tip to intersection of transom and underside of hull adjacent to skeg:		
Spoon blade.....	530 mm	
Rectangular blade	700 mm	

C.9 RIG

C.9.1 MODIFICATIONS, MAINTENANCE AND REPAIR

(a) Routine maintenance such as cleaning, re-painting/varnishing and the replacement of fittings is permitted without re-measurement and re-certification.

C.9.2 FITTINGS

(a) Fittings are optional excluding hydraulics.

C.9.3 LIMITATIONS

(a) Only one set of **spars** and standing **rigging** shall be used during an event of less than 3 consecutive days, except when an item has been lost or damaged beyond repair.

C.9.4 MAST

(a) DIMENSIONS

	minimum	maximum
HDP (see D2.4) to aft face of mast spar	2268 mm....	2293 mm

(b) USE

(1) The **spar** shall be stepped in the mast step in such a way that the heel is not be capable of moving more than 4 mm.

C.9.5 BOOM

(a) DIMENSIONS

	minimum	maximum
Limit mark width	10 mm	
Outer point distance from mast spar excluding any track whether integral or external.....	2286 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 the upper edge of the mast **lower limit mark** when the boom **spar** is at 90° to the mast **spar**.

C.9.6 SPINNAKER POLES/WHISKER POLES

(a) USE

(1) Rigging and stowage methods are optional

C.9.7 STANDING RIGGING

(a) USE

(1) Shroud rigging links and rigging screws shall not be adjusted.
(2) The forestay and shrouds shall be fitted so that either or both the sails may always be lowered without endangering the stability of the mast or its security in the boat.

C.9.8 RUNNING RIGGING

(a) Running rigging is 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 is permitted without re-measurement and re-**certification**.

C.10.2 LIMITATIONS

(a) Not more than 1 mainsail, 2 headsails and 1 spinnaker shall be carried aboard.
(b) Not more than 1 mainsail, 3 headsails 2 spinnakers shall be used during an event of less than 3 consecutive days, except when a **sail** has been lost or damaged beyond repair.

C.10.3 MAINSAIL

(a) USE

- (1) The **sail** and/or **gaff** 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 behind the fore side of the boom **outer limit mark**.
- (3) **Luff** bolt ropes shall be in the **spar** grooves or tracks or laced to the mast as necessary.
- (4) **Foot** bolt ropes shall be in the **spar** groove for fixed foot sails.

C.10.4 HEADSAIL

(a) USE

- (1) The headsail may have a furling system which may be used.

C.10.5 SPINNAKER

(a) USE

- (1) The spinnaker launching, and recovery system is optional.

Section D – Hull

D.1 PARTS

D.1.1 MANDATORY

- (a) Hull shell
- (b) Deck
- (c) Buoyancy Tanks or bags
- (d) Gunwale Rubbing Strakes
- (e) Forward thwart across centreboard case

D.1.2 OPTIONAL

- (a) Bulkheads
- (b) Floorboards or floor stiffeners
- (c) Aft Thwart
- (d) Side Seats

D.2 GENERAL

D.2.1 RULES

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

D.2.2 CERTIFICATION

See Rule A.10.

D.2.3 MODIFICATIONS, MAINTENANCE AND REPAIR

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

D.2.4 DEFINITIONS

(a) HULL DATUM POINT

The **hull datum point - HDP** is the aft face of the transom.

- (b) FRAMED Construction means a boat built to the original plans.
- (c) EPOXY/PLY Construction means boats built to the plans drawn by Selway Fisher and possibly supplied in kit form
- (d) GRP/FRP/Foam Sandwich Construction means boats moulded from approved tooling to a specification approved by the NCA. These boats may have a wooden deck and internal fitment

D.2.5 IDENTIFICATION

- (a) The sail number issued by the Association shall be carved on the transom beam or on the coaming beam at the forward end of the cockpit or on a plate permanently attached on the centre thwart or top of centreboard case.

D.2.6 BUILDERS

- (a) GRP/FRP/Foam Sandwich hulls shall be built by a builder licensed by NCA.
- (b) All moulds shall be approved by the NCA.
- (c) Kits shall be produced by a builder licensed by the NCA
- (d) Framed and epoxy/ply hulls may be built or finished by professional and amateur builders
- (e) A GRP/FRP/Foam Sandwich hull may be completed with a wood deck and internal by professional or amateur builders.

D.3 HULL SHELL (INCLUDING BULKHEADS) AND DECK

D.3.1 MATERIALS

- (a) The hull shell and deck – including fitted buoyancy tanks – shall be built from either; solid timber and plywood; or GRP/FRP/Foam Sandwich construction with optional core.
- (b) Timber may be other than that specified on the original plans and may be laminated or solid.

D.3.2 CONSTRUCTION

- (a) The timber hull shell and deck shall be built in accordance with the plans for framed construction or epoxy /ply construction. Parts may be supplied in kit form.
- (b) GRP/FRP/Foam Sandwich hulls shall be built in accordance with specifications agreed with the NCA

- (c) GRP/FRP/Foam Sandwich hulls may have a wooden deck and internal fitments.
- (d) The dimensions of radii and filet size, types of glue, resin, tape, varnish, paint, non-slip and fastenings is optional.
- (e) A spinnaker chute may be fitted in the foredeck.
- (f) The **centreboard** case outline profile is optional.
- (g) The centreboard case may be connected to the king post.
- (h) Under deck pads for rowlocks shall be fitted approximately 840mm aft of the shrouds.
- (i) Floor slats or floorboards or a batten strengthened floor must be fitted in a wooden construction. Floor slats and floorboards must be securely fastened.
- (j) The transom may be hollowed towards the centre
- (k) The following are optional:
 - King post design and material
 - Chine rubbers
 - Washboards
 - Stern knee
 - Stern decking
 - Lifting handles
 - Additional deck beam and/or carlin extension between frames 1& 2
- (l) Bilge Rubbers may be tapered towards the ends.

D.4 BUOYANCY

D.4.1 CONSTRUCTION

- (a) Buoyancy equipment shall comprise of inflatable bags, close cell foam, tanks or any combination of these.
- (b) A minimum of 227kg of buoyancy shall be fitted, with a minimum of bow and side bags of tanks. Additional buoyancy may be fitted. (*A minimum of 270kg is recommended*)
- (c) Buoyancy shall be so disposed that the **boat** will float approximately level when the boat is filled with water to the top of the centreboard case.
- (d) All buoyancy equipment shall be securely fixed, and bags shall be fitted with webbing straps to fit the bag loops or slots. These shall be secured to the hull with screws or bolts and clamp plates
- (e) Tanks shall be fitted with either a drain bung and/or an inspection hatch of optional diameter.
- (f) Subject to (c) the layout and, height and arrangement of tanks is optional.

D.5 GUNWALE AND RUBBING STRAKES

D.5.1 MATERIALS

- (a) The rubbing strakes shall be of timber or part of the GRP/FRP moulding.

D.5.2 CONSTRUCTION

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

D.6 THWARTS AND SIDE SEATS

D.6.1 MATERIALS AND CONSTRUCTION

- (a) Thwarts and side seats shall be either strip or solid timber for boats with air bags; or part of GRP/FRP mouldings.
- (b) Hulls may have timber, GRP or plywood thwarts with vertical edge stiffeners to achieve similar strength to the solid type.
- (c) A rear thwart is optional if a stern buoyancy tank is fitted.
- (d) The stern thwart centre support is optional if the thwart is supported at its ends by buoyancy tanks.
- (e) The front thwart may be notched for the **centreboard**.
- (f) If a stern buoyancy tank is fitted side seats (if fitted) must be extended to reach the tank.
- (g) Thwarts and side seats (if fitted) may be curved or straight.
- (h) Hulls with integral side buoyancy tanks may have the side seats formed by the tank tops, stiffened by their vertical sides and stiffeners, in which case the minimum dimension in D.7.2 does not apply.

D.7 ASSEMBLED HULL

D.7.1 FITTINGS

- (a) **MANDATORY**
 - (1) Stemhead/forestay fitting
 - (2) Shroud fittings
 - (3) Mast step of optional material. Either to original plan or a proprietary fitting.
 - (4) Metal keel band from stem head to aft end of skeg. It may be fastened, bonded or non-metal as integral in a moulding
- (b) **OPTIONAL**
 - (1) Headsail sheet fairleads and tracks – excluding cleats – shall not overhang side decks.
 - (2) Toe straps not capable of extending outboard
 - (3) Hand holds on deck
 - (4) **Centreboard** case slot gaskets.
 - (5) Self bailers
 - (6) Other fittings excluding hydraulics

D.7.2 DIMENSIONS

	minimum	maximum
Hull length excluding stem band.....	3417 mm	... 3442 mm
Extension forward of the stem head ex stem band .....	.....	40 mm
HDP to aft face of foredeck	2262 mm	... 2287 mm
Top of aft edge of foredeck measured from the		

inside of the hull close to the centreline (Framed hull)	
or EXTERNAL dimension suitable for use with	
all types of hull construction	595mm..... 620 mm
Thickness of skin on wooden boats	
(and decks and bulkheads of composite) only	3.75 mm.....
Beam of hull , excluding rubbing strakes and fittings, at	
sheerline ;	
at aft face of foredeck	1170 mm ... 1195 mm
at section 1371mm from HDP	1365 mm ... 1390 mm
at section top of transom over skin	1061 mm ... 1086 mm
Girth of hull from chine to chine, at	
at section 1035mm from HDP	1182 mm ... 1207 mm
at section 2261 mm from HDP	1003 mm ... 1028 mm
Beam of hull , at bottom of transom over skin	945 mm 970 mm
Longitudinal distance from hull datum point ;	
to forward end of centreboard slot along keel	2007 mm ... 2032 mm
Hollow of transom on the centreline below sheerline ... .....	..... 60 mm
Hollow of transom on the centreline above	
the intersection of bottom panels	280 mm
Horizontal distance of headsail attachment	
hole to stemhead	20 mm 140 mm
Longitudinal distance from hull datum point	
to centre of shroud plate holes	1943 mm ... 1968 mm
Spinnaker chute from stemhead	150 mm..... 540 mm
Skeg:	
Length measured along keel	940 mm..... 990 mm
Depth of skeg at aft end to intersection of bottom	
panel line and face of transom	124 mm
Depth of skeg where bottom straight line of	
skeg stops and the rounded aft end starts	100 mm.....
Width of skeg at bottom throughout	29 mm.....
Width of skeg at top throughout	41 mm.....
Transom Openings – must be capable of being closed:	
Transom bungs – diameter	25 mm
One or two openings each an area of .....	..... 8000 mm ²
Floor slats if fitted - area	1.12m ²
Thwarts and side seats thickness	16 mm.....
Forward thwart width	
except where notched for centreboard	200 mm.....
Rear thwart width – if fitted	200 mm.....
Side seats width	152 mm.....
Bilge Rubbers:	
Width	25 mm.....
Height	9 mm.....

Length of inner rubber	2870 mm.... 2920 mm
Length of outer rubber	2260 mm.... 2310 mm
Taper length at each end to hull level.....	300 mm
Keel band - width	7.9 mm.....
Gunwale rubbing strakes;	13x9 mm . 32x25 mm
Mainsheet;	
Distance between eye centres on top of transom	394 mm..... 419 mm

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 re-painting and the repair of minor damage, scratches and abrasions is permitted without re-measurement and re-certification.

E.2.3 CERTIFICATION

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

E.2.4 MANUFACTURERS

- (a) The manufacturers of **hull appendages** are optional.

E.3 CENTREBOARD

E.3.1 MATERIALS

- (a) The **centreboard** shall be of solid or laminated timber, or plywood or GRP/Foam core.
- (b) The **centreboard** may be sheathed.

E.3.2 CONSTRUCTION

- (a) The design of the **centreboard** is optional except that the blade shall have no moving parts or trim tabs.
- (b) The edges may be chamfered.

E.3.3 FITTINGS

Fittings are optional excluding hydraulics.

E.3.4 DIMENSIONS

	minimum	maximum
Overall Thickness	12 mm	20 mm

E.4 RUDDER BLADE, RUDDER STOCK AND TILLER

E.4.1 MATERIALS

- (a) The **rudder** blade shall be of solid or laminated timber or plywood or GRP/Foam core.
- (b) The material of the **rudder** stock is optional.
- (c) The tiller and tiller extension materials are optional.
- (d) The **rudder** blade may be sheathed.

E.4.2 CONSTRUCTION

- (a) The trailing angle of the **rudder** blade is optional
- (b) The construction and design of the **rudder** stock is optional.
- (c) The edges may be chamfered.
- (d) Two basic shapes of **rudder** blade are permitted. Spoon blade as shown on the original Association plans and a rectangular blade which may be tapered. The design within the basic dimensions is optional except there shall be no moving parts, tabs or horizontal foils on or within the blade.

E.4.3 FITTINGS

- (a) Fittings are optional excluding hydraulics.

E.4.4 DIMENSIONS

	minimum	maximum
Overall thickness.....	12 mm	20 mm
SPOON BLADE:		
Width.....	... mm	318 mm
RECTANGULAR BLADE:		
Width .....	... mm	254 mm

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**

- (b) **Gaff**
- (c) **Whisker pole**

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 **spare**.
- (b) The standing and running **rigging** shall comply with the **class rules**.
- (c) The rig may be either Bermudan or Gunter,

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, re-painting/varnishing and the replacement of fittings is permitted without re-measurement.

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**.

F.2.5 MANUFACTURER

- (a) No licence is required.

F.3 MAST

F.3.1 MATERIALS

- (a) The **spare** shall be of solid or laminated timber or aluminium alloy which for the Gunter mast may include timber end plugs

F.3.2 CONSTRUCTION

- (a) The Bermudan **spare** extrusion may include a fixed sail groove or track which may or may not be integral with the **spare** but shall be of the same material.
- (b) The Gunter mast may be square up to 305mm from the **mast datum point**.
- (c) The Bermudan **spare** may be in one or two pieces.
- (d) The Gunter **spare** shall follow the original Association plans in basic layout and construction.
- (e) The Bermudan **spare** may be tapered above 3550mm from the **mast datum point**.
- (f) The Bermudan **spare** headsail halyard sheave centreline shall intersect the mast below the **Shroud height**.

F.3.3 FITTINGS

- (a) MANDATORY
 - (1) Mast head fitting
 - (2) Shroud fixings of optional design
 - (3) Gooseneck – fixed or adjustable
- (b) OPTIONAL
 - (1) One mechanical wind indicator
 - (2) Compass bracket
 - (3) Fittings for running rigging
 - (4) Mainsail halyard sheave box
 - (5) Headsail halyard sheave box
 - (6) Spinnaker halyard sheave box
 - (7) Spinnaker/whisker poles fittings
 - (8) Spinnaker/whisker pole lift blocks with attachment
 - (9) Spinnaker/whisker poles downhaul blocks with attachment
 - (10) Heel fitting with sheaves for halyards
 - (11) Kicking strap attachment
 - (12) Above boom type kicker lever of optional design
 - (13) Spreaders – length and position optional

F.3.4 DIMENSIONS

	minimum	maximum
Mast length		
Gunter.....	3239 mm	3264 mm
Bermudan.....	.....	5000 mm
Mast spar cross section		
Diameter between base and top for Gunter mast	50 mm	58 mm
Section between base and 3550 from		
mast datum point for Bermudan mast	47 mm	.....
Mast limit mark width	10 mm	
Lower point above mast datum point	610 mm	.....
Lower point to upper point (may be on Gaff).....	4340 mm	
Forestay height .....	.....	3500 mm
Shroud height .....	.....	3500 mm
Spinnaker hoist height .....	.....	3670 mm
Spinnaker pole fitting:		
height .....	.....	optional
projection .....	.....	75 mm

F.4 GAFF

F.4.1 MATERIALS

- (a) The **spar** shall be of solid or laminated timber.

F.4.2 CONSTRUCTION

- (a) The **gaff spar** extrusion shall include a fixed sail groove.
- (b) The **gaff spar** may be tapered above and below the halyard attachment band
- (c) The shape of the **gaff spar** jaws and the type of tie is optional.
- (d) The cross-section shape of the **gaff spar** is optional.

F.4.3 FITTINGS

- (a) Fittings are optional.

F.4.4 DIMENSIONS

	minimum	maximum
Gaff length excluding jaws	3150 mm	3238 mm
Halyard band above bottom of gaff ex jaws.....	1194 mm	.....
Diameter of Gaff spar at;		
Halyard band	48 mm	.....
Top	35 mm	.....
Heel above jaws	41 mm	.....

F.5 BOOM

F.5.1 MATERIALS

- (a) The **spar** shall be of solid or laminated timber or aluminium.

F.5.2 CONSTRUCTION

- (a) The **spar** extrusion may include a fixed sail groove or track which may or may not be integral with the **spar** but shall be of the same material.
- (b) The section shape in aluminium is optional.
- (c) The section shape in wood shall be rectangular.

F.5.3 FITTINGS

- (a) Fittings are optional

F.5.4 DIMENSIONS

	minimum	maximum
Boom spar length	2337 mm	2362 mm
Boom spar cross section wood:		
vertical	45 mm	.....
transverse	34 mm	.....
Boom spar cross section only if circular aluminium:		
Diameter	50 mm	.....

F.6 SPINNAKER POLES/WHISKER POLES

F.6.1 MANUFACTURER

Manufacturer is optional.

F.6.2 MATERIALS

- (a) The **spar** material is optional.

F.6.3 CONSTRUCTION
Construction is optional

F.6.4 FITTINGS
Fittings are optional.

F.6.5 DIMENSIONS
minimum maximum
Spinnaker pole/Whisker pole length 1800 mm

F.7 STANDING RIGGING

F.7.1 MATERIALS
(a) The standing **rigging** shall be of stainless steel.

F.7.2 CONSTRUCTION
(a) MANDATORY
(1) Forestay
(2) Shrouds

F.7.3 FITTINGS
(a) Fittings are optional

F.8 RUNNING RIGGING

F.8.1 MATERIALS
(a) Materials are optional.

F.8.2 CONSTRUCTION
(a) The type of running rigging is optional

F.8.3 FITTINGS
(a) Fittings are optional excluding hydraulics.

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 WS In-house Certification Guidelines. The NCA accepts this appointment.

G.2.3 DEFINITIONS

- (a) National letters and sail numbers shall comply with the RRS. National letters are optional

G.2.4 SAILMAKER

- (a) No licence is required.

G.3 MAINSAIL

G.3.1 IDENTIFICATION

- (a) The class insignia shall be the Heron logo detailed on the front cover. It shall be between 290mm and 320mm high.

G.3.2 MATERIALS

- (a) The **ply** fibres shall consist of Polyester.
- (b) **Stiffening** shall consist of:
 - (1) Cornerboards of plastic or aluminium.
 - (2) Battens of wood, plastic, GRP or FRP.
- (c) **Sail reinforcement** shall consist of Polyester.

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** or **laminated ply** throughout.
- (c) The **sail** shall have 3 batten **pockets** in the **leech**.
- (d) The sail may be constructed so that it can be reefed.
- (e) The following are permitted: Stitching, glues, tapes, bolt ropes, corner eyes, reefing eyes, headboard with fixings, Cunningham eyes or pulleys, **batten pocket patches**, batten pocket elastic, batten pocket end caps, mast and boom slides, **luff** lacing eyes, one or two **windows**, tell tales, sail shape indicator stripes and items as permitted or prescribed by other applicable **rules**.

G.3.4 DIMENSIONS

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

	minimum	maximum
Leech length	... 4725 mm	
Foot Median	... 4600 mm	
Luff length	... 4320 mm	

Foot length	2235 mm
Quarter width	1935 mm
Half width	1440 mm
Three-quarter width	875 mm
Top width	125 mm
Windows total area	0.4 m ²
Window to sail edge	150 mm
Batten length:	
uppermost:	unrestricted
others:	610 mm
Batten width:	50 mm
Head point to intersection of leech and centreline of	
uppermost batten pocket	1150 mm.... 1180 mm
Head point to intersection of luff and centreline of	
uppermost batten pocket	1230 mm.... 1280 mm
Clew point to intersection of leech and centreline of	
lowermost batten pocket	1210 mm.... 1260 mm

G.4 HEADSAIL

G.4.1 MATERIALS

- (a) The **ply** fibres shall consist of Polyester.
- (b) **Sail reinforcement** shall consist of Polyester.

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 following are permitted: Stitching, glues, tapes, corner eyes, hanks, one or two **windows**, tell tales, sail shape indicator stripes and items as permitted or prescribed by other applicable *rules*.

G.4.3 DIMENSIONS

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

	minimum	maximum
Luff length	2895 mm	
Leech length	3050 mm	
Foot length	1985 mm	
Foot median	2960 mm	
Top width	40 mm	
Windows total area	0.2 m ²	
Window to sail edge	150 mm	

G.5 SPINNAKER

G.5.1 MATERIALS

- (a) The **ply** fibres shall consist of Nylon or Polyester.

(b) **Sail reinforcement** shall consist of 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 **woven ply** throughout.
(c) The following are permitted: Stitching, glues, tapes, corner eyes, recovery line eyes, tell tales and items as permitted or prescribed by other applicable *rules*.

G.6.3 DIMENSIONS

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

	minimum	maximum
Leech lengths .....	.. 3500 mm	
Foot length .....	.. 2440 mm	
Foot Median .....	.. 3700 mm	
Difference between diagonals .....	.. 50 mm	
Quarter width .....	.. 2440 mm	
Half width .....	.. 2100 mm	
Three-quarter width .....	.. 1200 mm	

PART III – APPENDICES

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

Section H

H.1 BUOYANCY

It is the owner's responsibility to ensure that the buoyancy is adequate and is tested and regularly checked. The integrity of tanks and any hatches or drain bungs and the condition and security of any airbags should be checked regularly

A recommended method of checking the buoyancy is as follows:

With the boat full of water up to the top of the centreboard case and with two persons
or

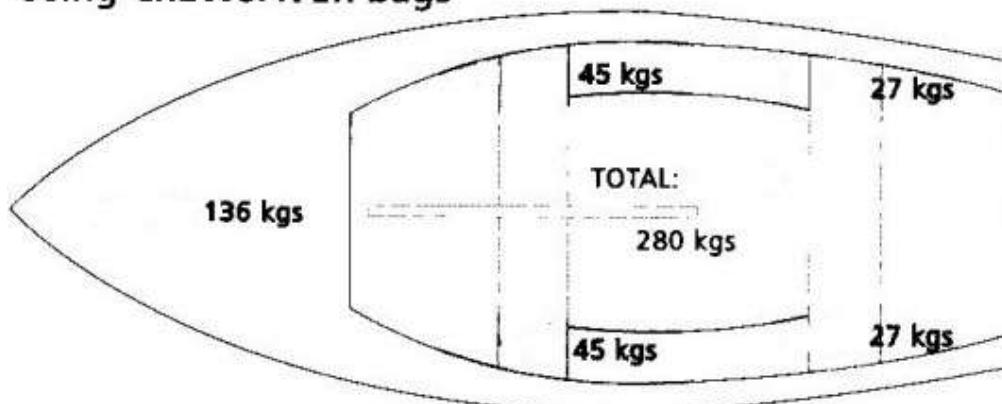
ballast of minimum 127kgs aboard the boat should float approximately level for a
minimum of 15 minutes.

The boat should then be laid on each side with the mast tip supported for a further 15
minutes on each side.

At the conclusion of the test there should not be more than 1.2 litres in any tank and
airbags should have remained securely fastened and not have deflated.

Two examples are given here to bag layout as a guide only. Other sizes and
combinations will achieve the same result.

Using CREWSAVER bags



1 x Standard Bow Bag = 136kg 91 x 76 x 30cm

2 x 45kg Pillow bags amidships = 90kg 122 x 20cm

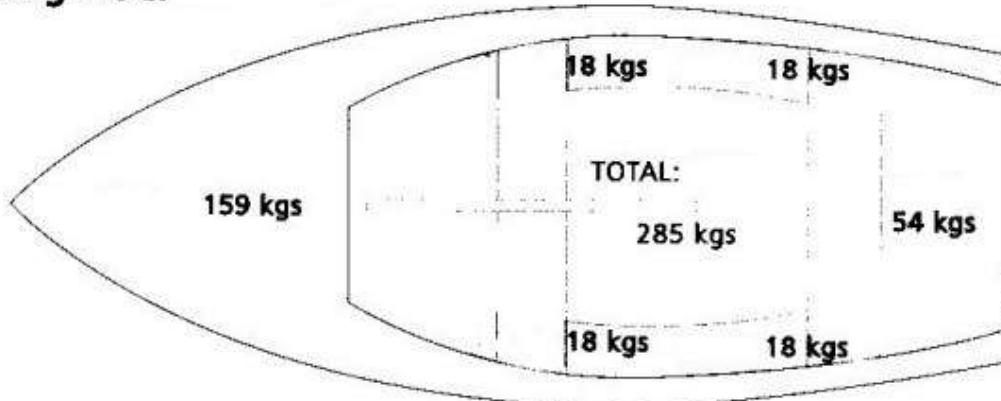
2 x 27kg Pillow bags aft = 54kg 76 x 23cm

Total 280kg

Or: 4 x 35kg Pillow bags = 140kg 99 x 23cm

Total **276kg**

Using HOLT



1 x Bow bag =	159kg	93 x 91x 35cm
4 x 18kg Pillow bags =	72kg	61 x 18cm
1 x 54 kg Pillow bag across stern =	54kg	91 x 30cm
Total	285kg	

H.2

Oars and paddles are optional. The recommended lengths are:

Oars approx. 1750mm

Paddles approx. 1400mm.

H.3

Although smaller sails will automatically measure within the standard headsail rule, the original jib dimensions and a mini Genoa (79%) dimensions are recorded here for information. Some people have found the smaller Genoa a useful sail.

JIB DIMENSIONS

	minimum	maximum
Luff length .....	... mm ...	2820 mm
Leech length .....	... mm ...	2515 mm
Foot length .....	... mm ...	1372 mm
Foot median .....	... mm ...	2700 mm
Windows total area	0.2 m ²	

MINI GENOA DIMENSIONS

	minimum	maximum
Luff length .....	... mm ...	2895 mm
Leech length mm ...	2850 mm
Foot length mm ...	1700 mm
Foot median mm ...	2850 mm

Windows total area 0.2 m²

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