

KESTREL CLASS ASSOCIATION

2022

# Measurement Rules & Constitution

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## Part I

The Kestrel, designed by Ian Proctor, is a restricted class, where the intention of the rules is to ensure that in hull form, sailing weight, sail plan and mast weight, the boats are similar.

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

### Kestrel Class Boat Register

Type	Number	Maker
Wood	1 - 6	Jack Chippendale
Mark1	7 - 1428	John Gmach
Mark 1 1/2	1429	John Gmach
Mark II	1430 - 1479	John Gmach
Mark II	1480 - 1502	Martin Boats
Mark II	1510 - 1512	Moores of Wroxham
Mark II	1513 - 1516	Williams
Mark II	1517 - 1529	Sail Nos. not issued
2000	1530 - current	Hartley Boats

Kestrel hulls are currently produced in FRP by the Copyright Holder Hartley Boats Ltd., using the class approved moulds. The Kestrel was the first sailing dinghy designed for production on FRP.

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

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

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

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

## **Section A – General**

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

### **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. MNA World Sailing Member National Authority - for example Royal Yachting Association

A.2.2. NCA National Class Association - The Kestrel Owners Association

A.2.3. ERS World Sailing Association Rules of Sailing

A.2.4. RRS World Sailing Racing Rules of Sailing

### **A.3. Authorities**

A.3.1. The authority of the class is the Copyright holder who shall co-operate with the NCA in all matters concerning these class rules.

A.3.2. Neither the MNA nor the NCA accept any legal responsibility in respect of these rules and/or plans or any claims arising there from.

### **A.4. Administration Of the Class**

A.4.1. The Copyright Holder has the administrative functions of the class. The Copyright Holder may delegate part or all of its functions, as stated in these class rules, to the NCA.

### **A.5. World Sailing Rules**

A.5.1. These class rules shall be read in conjunction with the ERS.

A.5.2. Except where used in headings, when a term is printed in "bold" the definition in the ERS applies and when a term is printed in "italics" the definition in the RRS applies.

### **A.6. Class Rules Variations**

A.6.1. Class rules shall not be varied by Organising Authorities of events without the approval of the Copyright Holder and the UK NCA.

### **A.7. Class Rules Amendments**

A.7.1. Amendments to these class rules are subject to the approval of the Copyright Holder.

### **A.8. Class Rules Interpretation**

A.8.1. The Copyright Holder in consultation with the UK NCA shall make interpretations of class rules.

### **A.9. Class Fee**

A.9.1. The Copyright Holder may require a building fee to be paid.

### **A.10. Sail Numbers**

A.10.1. Sail numbers shall be issued by the Copyright Holder

A.10.2. Sail numbers shall be issued in consecutive order starting at "1".

### **A.11. Hull Certification**

The Kestrel Class Association (NCA) in partnership with the builder shall issue a Certificate to be signed by the owner to confirm that they will maintain it such that it complies with these Class Rules and in a condition that would enable it to pass a flotation test as defined in Appendix III Section H: Flotation Tests

A.11.1. The class number is clearly visible, permanently inscribed, stamped or fixed to the inside of the hull .

## **Section B – Boat Eligibility**

### **B.1. Class Rules and Certification**

B.1.1. Unless exempted by the KOA the boat shall:

- a. Be in compliance with the class rules.
- b. Have a valid hull certificate in accordance with A 11.
- c. Have valid certification marks as required.

B.2. Unless exempted by the KOA the owner shall be:

- a. A current member of either an MNA or MNA affiliated club
- b. A current member of the NCA (The Kestrel 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 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**

The ERS Part I – Use of Equipment shall apply.

### **C.2. Crew**

#### **C.2.1. Limitations**

The crew shall consist of 2 or 3 (but cannot be changed during an event).

### **C.3. Personal Equipment**

#### **C.3.1. Mandatory**

The boat shall be equipped with personal buoyancy for each crew member to the minimum standard EN 393: 1995 (CE 50 Newtons).

### **C.4. Advertising**

#### **C.4.1. Limitations**

Advertising in accordance with World Sailing Regulation 20 - Advertising Code Category C is permitted.

### **C.5. Portable Equipment**

#### **C.5.1. For Use**

Optional

- 1 Electronic or mechanical timing devices
- 2 One magnetic compass
- 3 Electronic compasses, which have functions not exceeding timing, heading and directional memory that may include a user, programmed reference heading. All such devices shall be entirely self-contained and with either an internal battery and/or solar power. For the avoidance of doubt or misunderstanding, they shall not be connected to any external fitting or device by mechanical, electrical or wireless links.
- 4 Bailers and or sponges.
- 5 Spare parts such as blocks, shackles, ropes etc.

#### **C.5.2. Not mandatory while racing unless specified in the sailing instructions.**

Optional

- 1 Towing lines.
- 2 Paddles.
- 3 Mooring lines

### **C.6. Boat**

#### C.6.1. Dimensions

The hull is to be chocked level and vertical athwartships and with the transom vertical. The hull shape is to be checked by means of the official templates placed 25mm, 915mm, 2438mm and 3963mm forward of the transom. The templates are to be vertical and square to the centreline of the hull. At no point shall the hull surface be more than 13mm from the inside edge of the class approved templates which are held by the Copyright Holder.

	minimum	maximum
Thickness of Non-slip material on gunwhale		3 mm
Overall Length	4763mm	+/- 13mm
Beam, measured 2134mm forward of the transom	1702mm	+/- 13mm
Centreplate Slot:		
A. Outside transom to forward end	2616mm	+/- 25mm
B. Outside transom to aft end	1308mm	+/- 25mm
C. Width	13mm	+/- 1mm
D. Outside transom to pivot	2527mm	+/- 13mm
Foredeck:		
A. Length from stemhead to aft edge 76mm off centreline	1714mm	+/- 13mm
B. From stemhead to projection of aft edge	2235mm	+/- 13mm
Thwart:		
A. Height above the skin, 152 mm off the centreline.	432mm	+/- 13mm
B. Width	146mm	+/- 10mm
C. Distance, outside transom to aft edge	1930mm	+/- 13mm

#### C.6.2. Weight

The weight of the hull shall be taken in dry condition excluding spars, sails, rudder, rudder stock, tiller and all portable equipment as listed in C.5. It should include all fittings, keel-band, bow-plate, spinnaker and foresail fair leads with cleats, centre-plate cleats and blocks, toe-straps.

Minimum weight of the boat in dry condition	120.2kg
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#### C.6.3. Corrector Weights

Corrector weights shall be permanently fastened to the underside of the main thwart of the boat if the weight is less than the minimum requirement.

	maximum
Number of corrector weights	2
The total weight of such corrector weights	3.6kg

On completion of manufacture the Kestrel 2000 will be weighed and the builder will sign a declaration stating that the hull does conform to the minimum bare hull

weight of 120kg. The value of corrector weights fitted will be entered onto the boat certificate by the Class Secretary on receipt of the declaration from the builder.

It is absolutely forbidden for the corrector weights to be removed or changed in any way.

#### C.6.4. Flotation

- a. The hull shall have flotation elements.
- b. The boat shall be able to pass the flotation test procedure documented in Section H.

#### C.7. Hull

##### C.7.1. Modifications, Maintenance and Repair

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

##### C.7.2. Fittings

- a. Buoyancy tank hatch covers and drainage plugs shall be kept in place at all times.
- b. No part of the headsail and spinnaker fairleads shall project beyond the outside edge of the rubbing strake when viewed in plan.

#### C.8. Hull Appendages

##### C.8.1. Limitations

Only one centre-plate and no more than two rudder blades shall be used during an event of less than 7 consecutive days, except when a hull appendage has been lost or damaged beyond repair.

##### C.8.2. Centre-Plate

The centre-plate when housed shall not extend above the sheer-line, nor shall project below the keel.

##### C.8.3. Rudder

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

#### C.9. Rig

##### C.9.1. Modifications, Maintenance and Repair

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

##### C.9.2. Fittings

All fittings are optional and unrestricted.

##### C.9.3. Limitations

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

##### C.9.4. Mast

The mast shall be of light alloy. The specification and measurements shall conform to the Proctor D as approved in 1990, Selden Cumulus, Proctor Beta Minus, or Superspar M7 (or equivalent in characteristics and strength subject to prior approval of the NCA)

###### a. Dimensions

	minimum	maximum
Limit mark width	10 mm	15 mm

b. Use

- 1 The mast spar shall be supported in all directions in the horizontal plane at approximately deck level.
- 2 The bottom of the mast shall take the full weight of the mast and shall be below the sheer-line.
- 3 The projected line of the aft edge of the mast spar in its stepped position shall not be aft of the forward edge of the mast step limit mark.
- 4 The shroud plates will be fixed to the skin of the hull at deck level not less than 305mm aft of the mast step.
- 5 Bend fore and aft may be controlled by fixings at gooseneck level or below provided that side-ways bend is not restricted other than by the mast gate and spreaders.

C.9.5. Boom

The boom may include a fixed sail groove or track, which may or may not be integral with the spar but shall be of permitted material. The boom shall be of light alloy, Selden 2628, Proctor C, Proctor RE 2.6 or Superspar B1 (or equivalent in characteristics and strength, subject to prior approval of the NCA)

a. Dimensions

	minimum	maximum
Limit mark width	10 mm	15 m

b. Use

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

C.9.6. Spinnaker Poles / Jib Stick

The material may be of light alloy or carbon composite.

- a. Two spinnaker poles or a whisker pole may be used.
- b. The systems for the control of the spinnaker pole are optional.

	minimum	maximum
Boom spar dimension inclusive of fittings		1981mm

C.9.7. Standing Rigging

- a. The mast shall be supported by one set of shrouds which shall not be adjusted while racing.
- b. The choice of whether to fit a forestay or rely on the wire jib luff and halliard to take rig loads is optional.
- c. Lower shrouds or additional standing rigging is not permitted.

C.9.8. Running Rigging

All running rigging and associated systems are optional.

C.10. Sails

C.10.1. Modifications, Maintenance and Repair

- a. Sails shall not be altered in any way except as permitted by these class rules.
- b. Routine maintenance such as sewing, mending and patching is permitted without re-measurement and re-certification.

#### C.10.2. Limitations

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

#### C.10.3. Mainsail

##### Use

- a. The method of hoisting the sail is optional. However, it shall be possible to lower the sail whilst the boat is in its normal sailing orientation.
- b. 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.
- c. Luff bolt ropes shall be in the mast spar groove or track.

#### C.10.4. Spinnaker

##### Use

- a. The method of hoisting the sail is optional. However, it shall be possible to lower the sail whilst the boat is in its normal sailing orientation.
- b. The method of retrieval and stowage of the sail is optional.

### Section D – Hull

#### D.1. Parts

##### D.1.1. Mandatory

- a. External hull shell including transom is determined by the approved mould for the Kestrel as controlled by the builder.
- b. The first 6 boats were constructed in wood. There have been three Marks approved. The Mark I with wider side tanks and an aft deck and the Mark II with slightly narrower side tanks and no aft tank and Mark 3 (The Kestrel 2000).
- c. Foredeck
- d. Side decks
- e. Cockpit
- f. Bulkheads
- g. Buoyancy chambers
- h. Thwart
- i. Keel
- j. Keel band for length of centre-plate slot

##### D.1.2. Optional

- a. Additional keel band
- b. Any other item such as, but not limited to, spinnaker chute or storage bins. However, any such additions shall not alter the draining properties of the cockpit.

#### 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. The hull shall conform to one of the Class Association and Copyright Holder approved Marks I to III (the Kestrel 2000) or approved variations.
- c. The hull of boats shall only be altered to:-
  1. Add, remove or change fittings, including mounting pads and brackets for the sole purpose of attaching said fittings.
  2. Genuine repair of damage
  3. Routine maintenance such as polishing and painting
- d. No fixtures and fittings shall be outside of the hull skin, except shroud plates, rudder fittings, keel-band, centreboard case slot gasket, self-bailers and

transom flaps. (With the exception of the Mark I boats which may still have a bow ring /securing eye fitted).

- e. No fixtures and fittings shall project beyond the edge of the gunwales except non-slip material.
- f. Tubes passing through the aft buoyancy chamber shall not affect the water tightness of the chamber.

D.2.2. Certification

D.2.3. See Rule A.11

D.3. Modifications, Maintenance and Repair

- D.3.1. The hull shell shall not be altered in any way except as permitted by these class rules, without re-measurement and re-certification.
- D.3.2. Routine maintenance such as painting, and polishing is permitted without re-measurement and re-certification.

## Section E – Hull Appendages

E.1. Parts

- E.1.1. Mandatory
  - a. Centre-plate
  - b. Rudder

E.2. General

E.2.1. Rules

- E.2.2. Hull appendages shall comply with the class rules in force at the time of construction. If the date of construction cannot be satisfactorily determined, then the hull appendages shall comply with the class rules current at the time any compliance checks are undertaken.

E.3. Centre-Plate

E.3.1. Rules

- a. When hung from its pivot bolt and fully raised no part shall project below the keel or project above the sheer-line.
- b. The centre-plate shall be symmetrical in cross section. The cross-section to be a plane perpendicular to both the plane of the centre -plate and the leading edge of the centre-plate.
- c. The leading and trailing edges of the centre-plate shall be straight lines between the measurement points.
- d. The centre-plate may only rotate about the axis of the pivot bolt; rotation about an axis perpendicular to the axis of the pivot bolt is prohibited, i.e., Gybing centre-plates are prohibited.

E.3.2. Materials

The centre-plate must be formed in galvanised steel (as supplied in earlier boats) or light alloy approved by the builder.

E.3.3. Construction

- a. The centre-plate shall have no moving parts.
- b. The shape of the centre-plate must conform to the class approved template held by the approved builder on behalf of the Copyright Holder.
- c. The centre-plate may be packed above the keel-band to ensure a better fit in the case.

	Minimum	Maximum
Thickness of centre-plate that can project below keel, excluding packing above keel level		10 mm
Protective material on edges of centreboard		10 mm

Weight of centre-plate	10 kg	28 kg
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#### E.4. Rudder Blade, Rudder Stock and Tiller

##### E.4.1. Materials & Construction

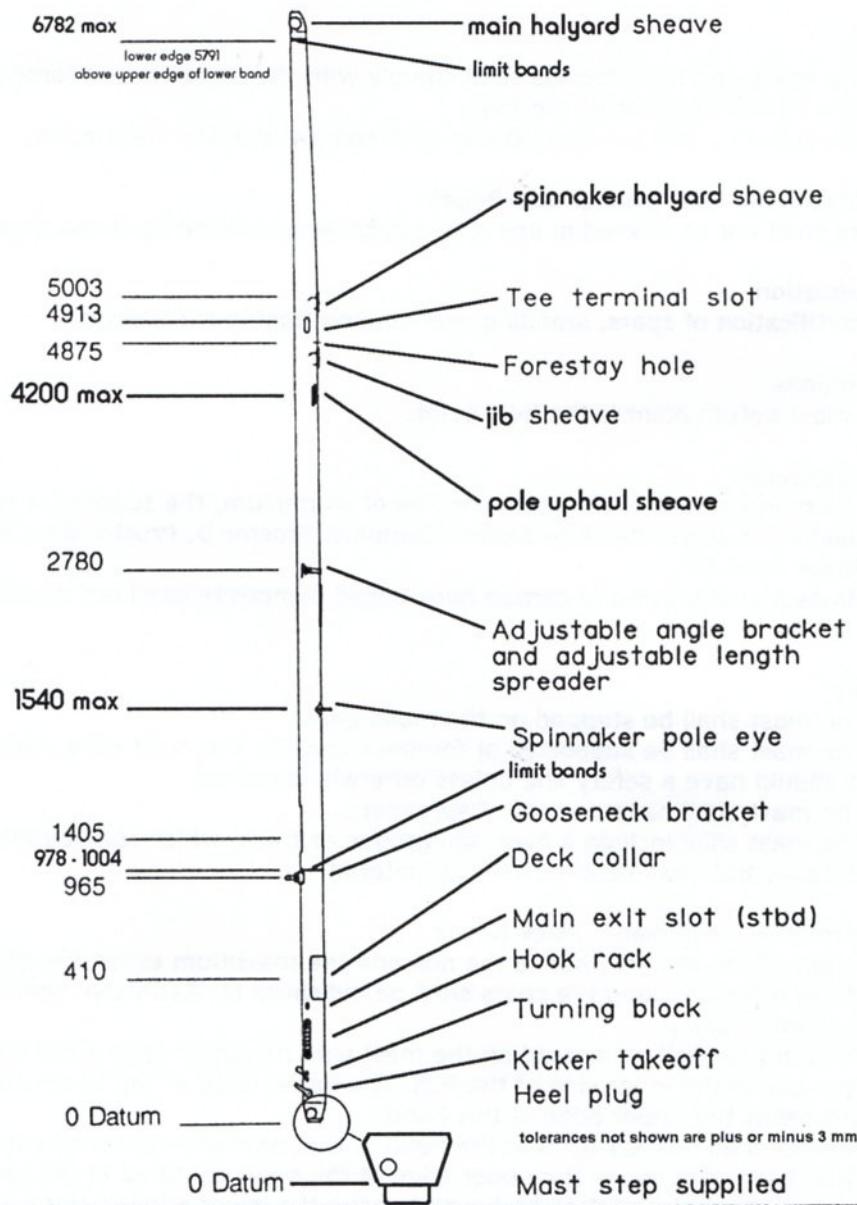
There is no limitation on rudder design or materials.

##### E.4.2. Fittings

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

#### Section F – Rig

### PROCTOR MASTS © Proctor Masts 1990



Title	KESTREL MAST Section 'D'	Dimensions are in millimetres	Org.no	V KESM D/1
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## F.1. Rules

There shall be no adjustment of the shrouds whilst racing.

## F.2. Parts

### F.2.1. Mandatory

- a. Mast
- b. Boom
- c. Standing rigging comprising of two shrouds.
- d. Spinnaker poles

### F.2.2. Optional

- a. One forestay
- b. Strut or similar
- c. Whisker pole / jib stick
- d. Running rigging and associated systems are optional.

## F.3. General

### F.3.1. Rules

- a. The spars and their fittings shall comply with the class rules in force at the time of manufacture of the spar.
- b. The standing and running rigging shall comply with the class rules.

### F.3.2. Modifications, Maintenance and Repair

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

### F.3.3. Certification

No certification of spars, standing and running rigging is required.

### F.3.4. Definitions

The mast datum point is the heel point.

### F.3.5. Manufacturer

- a. The manufacture of the mast shall be of aluminium, the supplier is optional, class rules currently allow Selden Cumulus, Proctor D, Proctor Beta Minus and Super Spar M7.
- b. Masts manufactured of carbon fibre-based composite shall not be allowed.

## F.4. Mast

### F.4.1. Rules

- a. The mast shall be stepped on the mast spur.
- b. The mast shall be supported at foredeck level by the mast gate, ram or strut. It should have a safety line unless otherwise secured.
- c. The mast shall have one set of spreaders.
- d. The mast shall include a fixed sail groove or track, which shall be integral with the spar but shall be of permitted material.

### F.4.2. Control of the sail plan - Black Bands

The height of the sail plan above the hull and the maximum extension of luff and foot of the mainsail along the spars shall be indicated by distinctive contrasting coloured limit bands.

- a. A band (A).shall be located on the mast with its upper edge 1295 mm +/- 13 mm above the inner skin of the hull. The upper edge of the boom shall not be set below the upper edge of this band.
- b. A band shall be located near the head of the mast with its lower edge not more than 5791 mm above the upper edge of the band specified in (A).above. No part of the mainsail shall be hoisted above the lower edge of this band whilst racing.
- c. A band shall be located on the boom with its forward edge 2730 mm aft of the after edge of the luff groove when the boom is assembled on the gooseneck. No

part of the floor of the sail shall be extended aft of the forward edge of this band whilst racing.

- d. The extended line of the forestay and luff of the jib shall meet the mast not more than 3885 mm above band (A).
- e. The spinnaker halyard exit from the mast shall not be more than 4013 mm above band (A).

#### F.4.3. Materials

The spar material shall be aluminium alloy.

#### F.4.4. Construction

The spar should conform to the manufacturer's specification.

#### F.4.5. Fittings

All fittings are optional and the materials used in manufacture are optional.

### F.5. Dimensions

*Where no limit(s) for a particular dimension is given then the item is not controlled and need not be measured. The tolerances are plus or minus 3mm.*

		Height above datum point
Main halyard sheave (5791 mm above upper edge of lower band)		6782mm
Mast limit width	10 mm	
Spinnaker halyard sheave		5003mm
Shroud T-terminals		4913 mm
Forestay T-terminal		4875mm
Jib Sheave		4875mm
Pole up haul sheave		4200mm max
Adjustable angle bracket and adjustable length spreaders - <i>position advisory</i>		2780mm
Spinnaker hoist fitting projection		100 mm
Spinnaker pole eye height		1540mm
Limit bands - <i>lower edge of upper band to upper edge of lower band above gooseneck</i>		5791mm
Gooseneck		965mm
Deck Collar		410mm

### F.6. Boom

#### F.6.1. Rules

The boom may include a fixed sail groove or track, which may or may not be integral with the spar but shall be of permitted material. The boom shall be of light alloy, Selden 2628, Proctor C, Proctor RE 2.6 or Superspar B1 (or equivalent in characteristics and strength, subject to prior approval of the NCA)

**F.6.2. Construction**

The construction and design of the spar should conform to the manufacturer's specification.

**F.6.3. Fittings**

All fittings are optional and the materials of manufacture are optional.

**F.7. Spinnaker Pole**

Materials, manufacturer, construction and design are not restricted.

Maximum Spinnaker pole length	1981 mm
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**F.8. Standing Rigging**

Should be of Stainless-Steel Wire

**F.9. Running Rigging**

All materials and construction are optional.

**Section G – Sails**

**G.5. Parts**

**G.5.1. Mandatory**

- a. Mainsail
- b. Headsail
- c. Spinnaker

**G.6. General**

**G.6.1. Rules**

- a. Sails shall comply with the class rules in force at the time of certification of sails.
- b. Sails shall be made and measured in accordance with the current World Sailing Sail Measurement Rules, except where varied herein.

**G.6.2. Certification**

- a. New or substantially altered sails shall be measured by an official measurer who shall certify mainsails and headsails in the tack and spinnakers in the head by signing and dating the sails.
- b. The Copyright holder has appointed one or more persons to measure and certify sails. In addition, a measurer appointed by the RYA as MNA or an official of the KOA as NCA may measure and certify Kestrel sails. A measurer appointed by the RYA may certify sails produced by a manufacturer in accordance with World Sailing In-house Certification Guidelines.

**G.6.3. Sailmaker**

- a. The Sailmaker is optional and no licence is required.

**G.7. Mainsail**

**G.7.1. Identification**

- a. The class insignia, a symbolic wing 635 mm in length on each side of the sail at an angle of 45 degrees to the mast. The thicker end downwards and forwards, together with the boat's registered number.
- b. The colour of the registered number and insignia must be in clear contrast to the colour of the sail.

c. All sails used for racing shall be measured and marked indelibly with the initials of the measurer and date measured.

Sail numbers	Minimum	Maximum
Height	300 mm	
Width (except number 1 and letter I)	200 mm	
Thickness	50 mm	60 mm
Spacing between adjoining numbers or letters or edge of sail	60 mm	

#### G.7.2. Materials

- a. The body of the sail shall consist of woven ply or laminated ply.
- b. The ply fibres shall consist of woven or laminated polyester.
- c. Stiffening shall consist of:
  - 1 Cornerboards: material optional.
  - 2 Battens: shall be made of glass fibre.
- d. Sail reinforcement shall consist of materials listed in G.3.2(a) above.

#### G.7.3. Construction

- a. The construction shall be: soft sail, single ply sail.
- b. The body of the sail may consist of different woven and laminated ply throughout.
- c. The sail shall have 4 batten pockets in the leech. The batten nearest the head of the sail shall extend from the leech to the luff.
- d. Not less than 85% of the luff of the mainsail shall be attached to the mast.
- e. The foot of the mainsail shall be attached to the boom at the tack and clew and may be attached to the boom along the foot.
- f. The following are permitted: Stitching, glues, webbing, tapes and PTFE tapes, bolt ropes, corner eyes, corner rings, Velcro or other fastenings, headboard with fixings, Cunningham eye or pulley, reefing eyes, batten pocket elastic, batten pocket end caps, mast and boom slides, leech line with cleat, not more than three windows located below the half width measurement, tell tales, sail shape indicator stripes and items as permitted or prescribed by other applicable rules.

#### G.7.4. Dimensions

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

Sail Measurement will be under 4.5kg of tension.

	Minimum	Maximum
Leech length		6401 mm
Quarter width		2470 mm
Half width (including bolt rope)		1965 mm
Three quarter width (including bolt rope)		1200 mm
Top width (excluding bolt rope)		125 mm
The roach of the mainsail shall fall in a fair and uniform curve from the peak of the sail to the boom.		
Number of windows		3

Total window area		0.6 m <sup>2</sup>
Shortest distance from window to edge of sail	150 mm	
Window(s) located below half height		
 Battens		
The roach of the sail shall be supported by four battens, each not more than 51mm in width.		51mm
The battens shall be positioned so that their outer ends divide the leach into approximately equal parts.		
Head point to intersection of leech and centreline of uppermost batten pocket		1275mm Min
Clew point to intersection of leech and centreline of lowermost batten pocket		1275mm Min
Top batten length		1219 mm
Lower battens, length		838 mm
The measurement of the width of the sail, measured from the leach on the centre line of the top batten to the nearest point on the luff must not exceed 1016mm		1016mm
Loose-footed mainsail drop :		250mm
The foot drop measurement for a loose-footed mainsail shall be taken from the edge of the sail to a straight line between the tack point and the clew point with sufficient tension, between the tack point and clew point, to remove any creases or wrinkles, additionally the head of the sail shall be held in position with sufficient tension to stop it being dragged down as the foot is pulled out to determine the maximum foot drop measurement.		
The class rules allow for the use of an undersized mainsail. Which if carried, must be used for the duration of the event.		

## G.8. Headsail

### G.8.2. Materials

- a. The headsail shall be made of Dacron or similar woven single ply material.
- b. The use of laminated polyester, aromatic polyamides (aramid), Kevlar or Mylar or any other exotic material is prohibited.

### G.8.3. Construction

- a. The construction shall be: soft sail, single ply sail.
- b. The body of the sail may consist of different woven and laminated ply throughout.
- c. The following are permitted: Stitching, glues, webbing, tapes, luff wire, corner eyes, corner rings, clew board with fixings, hanks, Velcro, press studs, zippers, Cunningham eye with cleat, leech line with cleat, not more than two window located below the half width measurement, tell tales, sail shape indicator stripes and items as permitted or prescribed by other applicable rules.

#### G.8.4. Dimensions

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

Genoa (maximum legal dimensions)	
Luff length	4115 mm
Leech length	4064 mm
Foot length	2413 mm
Maximum roach on leach	102 mm
Foot Median	4013 mm
<i>The foot should form a fair curve from the tack to the clew</i>	
Number of windows	2
Total window area	.4m <sup>2</sup>
Window(s) located below half height	
Shortest distance from window to edge of sail	150mm
Small headsail - optional. Measurements for racing will be based on the maximum sizes for the Genoa.	
Luff length	3810 mm
Leech length	3454 mm
Foot length	1600 mm
Restrictions - Battens or other means of artificial stiffening are not permitted.	
Foresail luff adjustment -	
It is permitted for the foresail to be fitted with a cunningham eye to adjust the fullness of the sail when racing.	

#### G.8. Spinnaker

##### G.8.1. Identification

- The sail number need not be displayed on the spinnaker.
- The sail number (if displayed) shall be placed as laid down in RRS Appendix G, except that they may be shown on the leeward side only and conform to the dimensions in G3.1 above.

##### G.8.2. Materials

- The ply fibres shall consist of woven ply of nylon, polyester or polyamide.
- Sail reinforcement shall consist of materials listed in G.5.2(a) above.

##### G.8.3. Construction

- a. The construction shall be: soft sail, single ply sail, three cornered and symmetrical with no artificial stiffening.
- b. The body of the sail may consist of different woven ply throughout.
- c. The following are permitted: Stitching, glues, webbing, tapes, corner eyes, corner rings, recovery line eyes, headboard with fixings, tell tales and items as permitted or prescribed by other applicable rules.

#### G.8.4. 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		4572mm max
<i>No part of the fabric of the sail shall be more than 4572 mm from the highest point of the head.</i>		
Foot median		4572mm
Width		2896 mm
Half width		2896 mm
<i>The width measurement between the midpoint of each luff shall not be less than three quarters of the straight-line width between the lower corners.</i>		
North American Rules Only		
Sides	4420 mm	4572 mm
Foot	3353 mm	3505 mm
Width 'A' taken 1372 mm down both sides	1372 mm	1448 mm
Width 'B' taken 2438 mm down both the luff and leech as above	1829 mm	1981 mm
<i>The width measurements 'A' and 'B' should be taken with the sail folded in half, with the clews held together and the measurement point taken as a straight line down the edge of the sail. Not measured round the contour.</i>		

## **Part III – Appendices**

### **Section H**

#### **H.1. Flotation Tests**

H.1.1. The manufacturer shall guarantee that the buoyancy compartments of all new boats are soundly constructed and virtually airtight.

H.1.2. Owners shall check all watertight joints and satisfy themselves that these are efficient and that the hatches are adequately watertight.

H.1.3. At any KOA event, the organiser or the committee shall have the right to require a competitor to satisfy the buoyancy test requirements.

#### **H.2. Buoyancy Test Methods**

##### **H.2.1. Immersion Test**

- a. The boat shall be floated for 10 minutes on each side supporting a minimum of 180kg (three adults) and with the stepped mast horizontal, supported above the top band.
- b. The tanks shall then be inspected for leakage. Sum of water from all buoyancy tanks shall not be in excess of 4.5 litres.

##### **H.2.2. Air Test**

- a. All hatches shall be closed normally using only the boats hatch covers and fastenings. Draining holes shall be closed with their normal stoppers. Equipment for producing a pressure differential between the buoyancy compartment and the atmosphere and a water gauge for measuring the differential shall be connected to a compartment through a hatch or drain hole.
- b. Air pressure shall be applied to the compartment to produce a differential reading of at least 152mm on the pressure gauge. After isolating the buoyancy compartment from the pressure source, the pressure differential shall not reduce from 127mm to below 51mm in less than 30 seconds.

H.2.3. In the event of any doubt over the results of an air test, an immersion test shall be carried out.

### **Section I – Approved Variants**

#### **I.1. Mark I**

A Mark I may have had many modifications made to it. Not all were produced with spinnaker chutes and many have changed from transom sheeting to centre sheeting. It is not uncommon to find strengthening bars fitted between the chainplates to stiffen the hull for racing. These dinghies were supplied with either steel or alloy centreboards. Cruising boats may not have been fitted out with transom flaps or bailers.

#### **I.2. Mark II**

The Mark II is not as numerous as the Mark I and looks very different above the hull. There is no afterdeck and the side buoyancy tanks are extended to the transom. Spinnaker chutes were optional and the Kestrel could be specified with centre or transom sheeting.

#### **I.3. Mark III (The Kestrel 2000) i.e., one without a stern deck.**

The Kestrel 2000, the current version of the dinghy, was designed by Phil Morrison. The foredeck is cleaner in design and the side buoyancy tanks have been remodelled with a distinct angled inner section, replacing the radius curve of previous marks. The jib track and fittings are now fitted clear of the side decks. Foam sandwich is used to produce a stiff hull.

### **Section J – Construction**

### **J.1. Definitions**

#### **J.1.1. Hull datum point**

The hull datum point is the intersection of the keel line and the transom on the centreline of the hull.

### **J.2. Hull Datum Plane**

The hull datum plane is a vertical plane passing through the hull datum point at right angles to the vertical plane through the centreline of the hull and parallel to a vertical plane passing through shroud positions.

### **J.3. Identification**

The hull shall carry the sail number stamped on a builder's plate attached to the cockpit face at the aft end of the buoyancy tank.

### **J.4. Builders**

#### **J.4.1. FRP hull -**

- a. The Copyright Holder shall license the builder in writing.
- b. The builder shall use moulds approved in writing by the Copyright Holder.

### **J.5. Hull Shell**

#### **J.5.1. Materials**

The hull shall each be constructed from one or more of the following materials: -

- a. Closed cell foam
- b. Fillers
- c. Glass fibres having a low alkali content and a modulus of elasticity less than 100,000 kg per cm<sup>2</sup>.
- d. Mechanical fastenings
- e. Plastic fibres having a modulus of elasticity less than 100,000 kg per cm<sup>2</sup>.
- f. Polyester or epoxy resins.

#### **J.5.2. Construction**

The construction and design will be determined by the approved class builder and class rules.

### **J.6. Deck**

#### **J.6.1. Materials**

The deck shall each be constructed from one or more of the following materials.

- a. Closed cell foam
- b. Fillers
- c. Glass fibres having a low alkali content and a modulus of elasticity less than 100,000 kg per cm<sup>2</sup>.
- d. Mechanical fastenings
- e. Plastic fibres having a modulus of elasticity less than 100,000 kg per cm<sup>2</sup>.
- f. Polyester or epoxy resins

#### **J.6.2. Construction**

The construction and design will be determined by the approved class builder and class rules.

- a. The foredeck including trim, fixtures and fittings shall not extend aft of a line drawn between the aft edge of the foredeck on the centreline of the hull and where the extended line of the foredeck meets the sheer line.
- b. Side decks shall extend the full distance between the foredeck and aft buoyancy chambers or transom.

## J.7. Buoyancy Tanks

### J.7.1. Construction

- a. Buoyancy apparatus shall comprise of sufficient to float the boat, plus 180kg: approximately level when full of water for at least 30 minutes, with the weight evenly placed about the centre line.
- b. The FRP boat shall have not less than 0.2 m<sup>3</sup> of solid closed cell buoyancy permanently attached to the hull. This may include constructional closed cell foam in foam sandwich boat.
- c. All apertures into buoyancy chambers shall be watertight when closed.
- d. The forward and aft, where present, and longitudinal buoyancy chambers shall form individual completely separate watertight chambers.

## J.8. Assembled Hull

### J.8.1. Fittings

#### a. Mandatory

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

- 1 Shroud plates fixed to topside panels, gunwales or pads thereon.
- 2 Rudder fittings shall be fixed on the vertical centre plane of the transom.
- 3 Mainsheet track if fitted shall not exceed the width between the longitudinal bulkheads unless the centreline of the track is within 102 mm of the hull datum plane.
- 4 Fittings and fixtures shall not project beyond the outside edge of the rubbing strake when viewed in plan.

#### b. Optional

- 1 All fittings and fixtures unless specifically stated to the contrary are optional.
- 2 Non-slip material on gunwales, cockpit floor and upper edges of centre-plate case.
- 3 Transom flaps

## **Part IV – CONSTITUTION OF THE ASSOCIATION (NCA)**

### **1.1. Title**

The full title of the Association shall be: "THE KESTREL OWNERS' ASSOCIATION"

### **1.2. Aims & Objectives.**

The aims and objectives of the Association shall be to govern class racing, further the interests of the Class and govern the affairs of the Class. All monies received by the Association shall be devoted to these aims and objectives.

### **1.3. Membership.**

On payment of the annual subscription, membership shall be open to all Kestrel owners. Other persons interested in the class may be eligible for Associate Membership. Applications for Associate Membership must be supported by a member (owner) who shall state the grounds on which membership should be granted. The normal grounds will be either past ownership, club membership, or regular crewing. Both types of members shall be entitled to attend general meetings; however, only full members of the Association shall vote upon matters affecting the Rules and Constitution of the Association. Associate members will receive only the newsletter. The Committee may from time to time elect Honorary members at their discretion. Joint owners may each become full members on payment of the full subscription if they so wish.

### **1.4. Subscriptions.**

The annual subscription for members (owners) in the United Kingdom, for members overseas and for Associate Members shall be such sums as the General Meeting shall decide.

### **1.5. Management.**

1.5.a. The affairs of the Association shall be managed by a Committee consisting of a Chairman, Honorary Secretary, Honorary Treasurer, and a minimum of two members, all of whom shall be elected at the AGM. And may include national representatives e.g., from countries of the UK and overseas.

1.5.b. If, by the death or resignation of any member of the Committee, a casual vacancy occurs, the Committee may co-opt, by a majority vote, any member of the Association willing to fill the vacancy and may repeat this process for each vacancy so occurring. Members co-opted to fill such vacancies shall be entitled to full voting rights and shall be eligible for re-election. Co-opted members must be either re-elected or replaced at the following AGM.

1.5.c. The Committee may, at any time, invite any members or non-members to attend its meetings for any special purpose. Such persons shall not be entitled to vote.

1.5.d. At an Annual General Meeting or an Extraordinary General Meeting, the Chairman shall have no vote except a casting vote in the event of a tie.

1.5.e. The Honorary Secretary shall be responsible for the keeping of the Minutes of Committee and General Meetings, a register of members and other relevant records. They shall also be responsible for communicating the decisions of the Committee and to members, other interested individuals and organisations. The Honorary Treasurer shall have charge of the funds of the Association, making payments as authorised by the Committee. They shall keep a record of the Association's financial affairs and shall produce a Balance Sheet (inspected by an independent person appointed by the Committee) at the AGM. The Association's financial year shall end on the 30th of September in each year. The Association encourages the formation of overseas branches of the Association.

## 1.6. Meetings

- 1.6.a. The AGM of the Association shall be held concurrently with, and at the venue of, the National Championship, on a day fixed by the Committee.
- 1.6.b. Not less than 14 days' notice, which shall include the agenda, shall be given of an AGM or an Extraordinary General Meeting and items for the agenda shall be submitted by members not less than 2 calendar months before the AGM.
- 1.6.c. The Secretary shall call an Extraordinary General Meeting on the direction of the Committee or on receipt of a written request signed by at least 12 members of the Association stating the purpose for which the meeting is to be called. Such a meeting shall be held within 28 days of it being called. Only that business may be transacted for which the meeting was called.

## 1.7. Postal Ballots.

The committee may decide to consult all members on specific points from time to time and may hold a postal ballot. Each member must be sent the necessary ballot by e-mail. At least 3 weeks must be allowed from the time of posting before the votes are counted. All votes arriving after this time will be void and the remainder will be considered as abstentions.

## 1.8. Alteration of the Constitution.

Any alteration of this Constitution requires a two-thirds majority at a General Meeting or by ballot either by post or electronically.

# 2. MEASUREMENT RULES

## 2.1. Introduction

- 2.1.a. These measurement rules are intended to fulfil a number of purposes:
- 2.1.b. To define the Kestrel One Design, by establishing certain measurements.
- 2.1.c. To maintain a high standard of construction, quality and strength at moderate cost by enforcing adherence to this definition.
- 2.1.d. To control development and to encourage refinements that tend to improve standards of quality, strength or functional efficiency and performance while preventing modification that would tend to change the character of the Kestrel or increase cost.

## 2.2. Intention

The measurement rules relate to the protection of the Kestrel One Design. They specify certain conditions of manufacture and the controlling measurements of hull and spars. The intention is met by prohibiting any Kestrel from taking part in yacht racing unless it carries a valid Measurement Certificate stating that it complies with Class Rules controlling aspects of the boat over which the owner has some choice of design. In addition, the Class Committee in consultation with the Copyright Holder may modify rules from time to time to allow or prevent certain lines of development.

## 2.3. Compliance

From the 1st of January 1968, all new boats are to be measured before delivery. A boat 'legal' at the time of manufacture will never be outlawed. However, the Committee are authorised by the membership to ensure compliance with the rules and to determine if a boat is compliant, in particular guarding against any abuse of the rules to gain competitive advantage.

# 3. Control of Construction and Protection of One Design.

## 3.1. Building Rights

The One Design character of the Kestrel and the quality of these boats shall be controlled by limited building rights to selected builders in each country from which application is made to the Copyright Holder (Hartley Boats Ltd.,) and the Class Builder (Richard C Hartley). The copyright holder shall be responsible for issuing a licence or building rights to another builder, with the approval of the Kestrel Owners' Association

### 3.2. Class Eligibility

No boat shall be entered on the Class Register as a Kestrel, or be eligible for a certificate as a Kestrel, unless the hull shell and other component mouldings are produced by a builder approved by the Class Association and entered on the Association Register of Builders. No boat built of reinforced plastic shall be entered on the Class Register as a Kestrel or be eligible for a certificate as a Kestrel, unless built to the official plans and specifications from the component mouldings produced on officially measured, approved and numbered moulds issued on the authority of the Class Association and entered on the Register of Moulds. All such moulds are to be produced from master 'plugs' held at a central source.

### 3.3. Tolerance

In the rules that follow, tolerances are allowed to accommodate minor building errors or distortion from age, but any intentional deviation from the design or exploitation of the tolerances is prohibited. If the Measurer of a boat considers that there has been any attempt to depart from the design or the spirit of the Rules, they must report the matter to the Class Secretary who is to withhold a certificate pending an examination of the case by the Class Committee, who may at their discretion grant or withhold a Certificate.

## 4. Prohibitions

4.1. Ballast, other than bilge water.

4.2. Trapezes, sliding seats, or any device other than toe straps used to support the crew outboard of the hull.

4.3. Any device increasing the water line length.

## 5. Modifications

The Committee reserve the right to prohibit any modifications which deviate from the character of the Kestrel and would strongly recommend that if an owner is in doubt about the acceptability of a modification, they should contact the Committee for discussion. Any modification approved by the Committee would be held in the strictest confidence until the owner wished otherwise. The owner, on refusal of a modification has the right to present their case at an AGM as long as the item for the agenda reaches the Secretary 14 days before the meeting.

## 6. General Rules.

### 6.1. Champion's Insignia

Current and past holders of the National Championship may attach to the outside of the transom a symbolic wing 64 mm long.

### 6.2. Racing Crew:

6.2.a. The Kestrel shall be raced by two or three persons including the helmsman, unless specified in Sailing Instructions.

6.2.b. In races organised by and for the Kestrel Owners' Association, only Full or Associate Members of the Association may take the helm, except for brief emergency reasons.

### 6.3. Substitution of Crew

Unless the Race Committee consents to a change of helmsman or crew, a competing boat must have the same helmsman and the same crew throughout the event. If any competitor wishes to make any change in their helmsman or crew, they shall apply to the Race Committee for permission to do so, specifying the reason for the change. The Race Committee will consent to the change if the specified grounds appear to be reasonable and it considers that the change is not being made primarily for the purpose of gaining an advantage.

### Change History

Date	Description
2022	Complete re-write of the class rules to conform to the ISAF Standard Class Rules
2021	Approval in North America (only) for use of Wayfarer Spinnaker and (general) relaxation on mast specification.
2011	Approval for the use of carbon rudder and spinnaker poles(s)
2005	Approval of jib luff adjustable cunningham and approval of additional mainsail window(s)
1999	Last edition of Kestrel Class measurement Rules issued by the RYA in conjunction with Harley Boats the Copyright Holder