

# 29er Class Rules

The **29er** is a strict one design designed in 1997 by Julian Bethwaite

## Section A - Fundamental Rules

### A.1 Type of Class Rules

A.1.1. These are **closed class rules**.

A.1.2. Builders licensed by LIC with the approval of ICA shall manufacture the **29er** in accordance with the construction manual.

A.1.3 Any alteration of the form or construction of the **hull**, equipment, fittings, **spars, sails** or running **rigging**, as supplied by the builder, unless specifically approved by the **class rules**, is prohibited.

### A.2 Abbreviations

ISAF - International Sailing Federation

MNA - ISAF Member National Authority

ICA - International **29er** Class Association

NCA - National Class Association

ERS - Equipment Rules of Sailing

RRS - Racing Rules of Sailing

LIC - The licensor/designer (see Appendix 3)

### A.3 Authority

A.3.1. The international authority of the class is the ICA, which shall cooperate with the LIC in all matters concerning these **class rules**.

A 3.2. The ICA, an MNA, an NCA or an **official measurer** is under no legal responsibility in respect of these **class rules**.

### A.4 Language

A.4.1. The official language of the class is English and, in case of dispute over translation the English text shall prevail.

A.4.2. The word "shall" is mandatory and the word "may" is permissive.

## A.5 ICA Rules

A.5.1. These **class rules** shall be read with ERS, and measurements shall be taken in accordance with these unless specified. Where a term is used in its defined sense, it is printed in "**bold**" type if defined in ERS and in "*italic*" type if defined in RRS.

## A.6 Interpretation of Class Rules

A.6.1. Any interpretations of the **class rules**, except as provided in A.7, shall be made by ICA Chairman of Technical Committee, subject to ratification by ISAF in cooperation with the ICA.

## A.7 Interpretation of the Class Rules at an Event

A.7.1. Interpretations of the **class rules** at an event shall be made in accordance with the RRS and the race organising authority shall, as soon as practical after the event, inform the ICA and the LIC of such a ruling.

## A.8 Event Measurement

A.8.1. In the case of a measurement dispute on any part or item of the **boat**, the following procedure shall be adopted. A sample of 5 other boats, shall be taken and measured using identical techniques. The dimensions of the disputed boat shall be equal to, or between, the maximum and minimum dimensions obtained from these 5 boats. If the boat in question is outside these dimensions the matter, together with any relevant information, shall be referred to the ICA, which shall give a final ruling. If any of the dimensions of the sample are considered to be unusual, all relevant information shall be referred to the ICA.

## Section B - Organisation

### B.1 Administration of the Class

B.1.1. The class is administered by the International **29er** Class Association.

### B.2 Class Fee and ICA Plaque

B.2.1. The Class/Sail Fee shall be paid by the licensed **hull/sail** builder to the ICA.

B.2.2. All **hulls** shall bear the ICA class plaque.

B.2.3. All **sails** shall bear the ICA sail plaque

### B.3 Certificate

B.3.1. **Certificates** are not issued.

### B.4 Amendments to Class Rules

B.4.1. The ICA in accordance with its constitution shall propose amendments to the **class rules**.

## Section C - Conditions for Racing

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

### C.1 Identification on Sails

C.1.1. The national letters and the sail numbers shall comply with the RRS as modified by G.6.

C.1.2. The national letters and the sail numbers shall be wholly between the 2nd and 3rd **batten pockets** from the **head point**.

C.1.3. The base of the national letters and the sail numbers shall be approximately parallel to the **batten pockets**.

C.1.4. The sail number shall be either:

- (i) If either of the crew have finished in the top 50 in the preceding **29er** world championship then their sail number shall be that place, 1st to 9th single digit, otherwise two digits.
- (ii) Otherwise, the number shall be that shown on the ICA class plaque and shall be three digits. Boat # 15 = 015 or Boat # 2345 = 345 The digits that precede the last three digits shall be red.
- (iii) Should there be multiplicity in numbers due to C.1.4. (i) or (ii), a RC may make an arrangement suitable for the duration of the event involved.

### C.2 Equipment

#### C.2.1. LIMITATIONS

- (a) Apart from what is permitted by C.2.2. - C.2.4., only equipment listed in the part list Appendix 1 shall be used.
- (b) Apart from what is permitted by C.2.2. - C.2.5., no function may be extended or added.
- (c) No part of a **boat** shall be replaced during an event, other than to replace equipment damaged beyond repair or lost before the next race. Such replacements may be made only with the approval of the race committee, and no re-substitutions of the original equipment may then be made, except with the approval of the race committee.
- (d) Standing **rigging** shall not be adjusted when *racing*.
- (e) The forestay shall be fitted to the center hole of the stem head fitting.
- (f) Mast spar rake is controlled by lying the forestay along the forward face of the mast spar and measuring the extension of the forestay beyond the mast heel point. This distance shall be taken between the forward

extension of the bottom of the heel tenon and the lower bearing surface of the forestay pin, OR an attached shackle, and shall be a minimum 447 mm and maximum 460 mm.

(g) No holes may be made in the **hull** shell or deck mouldings, except for the purpose of making repairs - see C2.5

(h) The weight of the **hull** excluding the **hull appendages**, all removable fittings and ropes that are not permanently attached, shall not be less than 70kg with all items in dry condition.

(i) A corrector weight with a minimum thickness of 10mm shall be permanently fastened via the bolts holding on the jib track under the **mast** partner when the **hull** weight as in C.2.1(h) is less than the minimum requirements.

(j) The total weight of such **hull** corrector weights shall not exceed 2kg.

(k) The stemhead fitting shall sit flat (+/- 1 mm) within its recess and the centre of the centre hole in the stemhead fitting shall be between 35mm and 45mm forward of the aft notch in that recess perpendicular to that recess.

(l) The dimension between the centre of the centre hole in the stemhead fitting and the front face of the **mast spar** at the top of the heel plug, measured in a straight line between these two points, shall be minimum 1820 mm, maximum 1830 mm

(m) An additional wedge may be fitted under the partner, adjacent to and in front of the gennaker halyard turning block to facilitate the retraction of the **bow sprit**.

### C.2.2. OPTIONAL

(a) Timing devices, removable for weighing.

(b) Mechanical wind indicators.

(c) Tufts or ribbons in the **sails** and **rigging**.

(d) Maximum of 2 compasses with brackets, removable for weighing. (Electronic, non-programmable compasses are permissible).

(e) A non-ratchet block for the gennaker sheet with a sheave diameter of 30-40mm attached to the **mast** step.

(f) Shockcord tails in ropes.

(g) A non-ratchet block, in the gennaker halyard behind the two floor blocks, with a sheave of not more than 20 mm diameter and attached with

a shockcord, which may pass through an additional block of not more than 20mm in diameter.

(h) Maximum 2 foot loops per side for which holes may be drilled.

(i) Storage devices within the cockpit.

(j) Non-skid tape or patches provided they are not more than 3 mm thick, made from a flexible material and attached to the deck moulding.

(k) One tie down loop, bolted through the gunwale flange on each side to be totally within 700 mm to 1000 mm in front of the rear corner of the gunwale chainplates, to facilitate securing the **hull** to a trailer or dolly.

(l) A tube of not more than 25mm in diameter and less than 800mm in length may be fitted over the lower part of the forestay.

(m) Wedges may be fitted under vang, cunningham and gennaker halyard cleats.

(n) Safety equipment, tools and spare parts may be carried.

(o) A clip or shackle may be fitted at the end of the jib sheet where it attaches to the clewboard of the jib.

### C.2.3. MODIFICATIONS

(a) The tiller may be modified.

(b) The hull may be sanded, painted and polished, except that the shape or weight distribution of the hull as originally supplied shall not be altered.

(c) The daggerboard and rudder blade non-alloy ends may be sanded, filled or painted in order to maintain their original supplied shape. Centreboards and Rudder Trunks may only be packed with a soft carpet or felt material. Such packing shall not extend less than 20mm or more than 100mm from the top and the bottom of the trunk and maybe fixed with glue or tape.

(d) The trapeze arrangement may be modified to include a continuous system and/or adjustable hook height provided that the attachment method to the **mast spar** is not changed and provided that only one trapeze wire per side is rigged.

(e) The mainsheet shall be rigged either:

(i) with a ratchet block as the last block shackled to the **boom spar**, in which case a fairlead may be attached to the main sheet floor plinth (if fitted); or

(ii) with a block with a 30-40 mm sheave as the last block on the **boom spar** and block attached to the main sheet floor plinth via a shackle or a swivel base, which may include a cleat.

(f) The gennaker halyard may be led either internally in the mast **spar** or led externally. If led externally, no additional fittings shall be used.

#### **C.2.4. REPLACEMENTS FROM OPTIONAL SUPPLIERS**

(a) Replacements shall be fitted in the same position as the standard fitting, or as close as is structurally possible.

(b) Any cleat may be replaced with a cleat of any material and of substantially the same size and design.

(c) Any block may be replaced with a block of the same number of sheaves of similar or greater diameter. Ratchet blocks have no sheave diameter restrictions provided they do not alter the weight distribution of the boat.

(d) The tiller extension(s) may be replaced without any restrictions as to design and material.

(e) Standing **rigging** may be replaced and shall then comply with the following:

(i) The forestay and shrouds shall be 3.0 - 3.5 mm diameter 1x7 or 1x19 stainless steel wire.

(ii) The supplied shroud plates may be replaced, but must be of normal commercial availability, and have a minimum increment of adjustment of 4 mm.

(f) Trapeze stainless steel 1x19 wire minimum length 3500mm, minimum diameter 2.3mm, remaining length optional (i.e. wire, cord or rope)

(g) Sheets and lines may be replaced without any restrictions as to length, diameter and taper providing the part is not made of wire.

(h) Main/jib halyards may be replaced by lines or wires of any material.

(i) Rig pins may be replaced by quick pins or any other type of pins.

#### **C.2.5. Repairs**

In the event of damage to any part of a **boat**, necessary repairs may be made provided repairs are made in such a way that the essential shape, construction detail or other characteristics are not materially affected. Fittings shall be attached in the same position as before the repair, or as close as is structurally possible.

### C.3 BOUYANCY

C.3.1. The watertight integrity of the **hull** must be maintained.

C.3.2. The breather hole in the mast plinth shall remain open and un-restricted.

### C.4 Location of hull Appendages

C.4.1. The **daggerboard** and **rudder** blade shall each be secured by shockcord, which may have a snap hook. The shockcord may be attached to any existing fitting.

C.4.2 The holes in the **daggerboard** and **rudder** blade for the lifting handles shall not be below the case/casting s top edge.

### C.5 Crew

C.5.1. The crew shall consist of 2 persons.

C.5.2. There shall be no restriction on who trapezes and when they trapeze provided only one person is on the trapeze at any one time.

### C.7 Membership

C.7.1. Each crew member shall be a current member of the ICA or members of a national class association duly established in accordance with the class constitution.

## Section D - Hull

### D.1 Measurement

D.1.1. The **hull** shall comply with the **class rules** in force at the time of manufacture. **Hull** fittings shall comply with the current **class rules**.

### D.2 Builders

D.2.1. **Hull** builders shall be licensed in accordance with A.1.2.

## Section E - Hull Appendages

### E.1 Measurement

E.1.1. The **hull appendages** shall comply with the **class rules** in force at the time of manufacture.

## E.2 Manufacturers

E.2.1. Manufacturers shall be licensed in accordance with A.1.2.

## Section F - Rig

### F.1 Measurement

F.1.1. **Spars** shall comply with the **class rules** in force at the time of manufacture. **Rigging** shall comply with the current **class rules**.

### F.2 Manufacturers

F.2.1. **Spar** manufacturers shall be licensed in accordance with A.1.2.

## Section G - Sails

### G.1 Measurement

G.1.1. **Sails** shall comply with the **class rules** in force at the time of manufacture.

### G.2 Sailmakers

G.2.1. Manufacturers shall be licensed in accordance with A.1.2

G.2.2. **Sails** shall not be re-cut, except as permitted in G.5.1., or otherwise changed for any reason other than effecting necessary repairs or as permitted by these **class rules**.

### G.3 Mainsail

#### G.3.1. CLASS INSIGNIA

The class insignia shall be silk-screened, glued or sewn onto the **sail** all within 1st and 2nd **batten pockets** from the **head point**.

#### G.3.2. TACK POINT AND FOOT LENGTH

For the purpose of advertising, the **tack point** shall be taken as the lowest point of the forward edge of the **luff** and the **foot length** shall be taken to be 2100 mm.

### G.4 Jib

G.4.1. RRS 50.4. - Headsails, shall not apply

### G.5 Gennaker

G.5.1. The gennaker may be modified by having graphics cut in, which shall not extend within 800 mm of the **head point** or **tack point** and shall not extend within 600mm of the **luff**, **leach** or **foot**. Such actions shall not alter the original shape of the **sail**.



## **G.6 Sail Numbers**

The Racing sail number shall be as set out in C.1.4. All numbers and their positions shall be in accordance with the ISAF RRS, Appendix H1, with the exception that the specifications for boats under 3.5 metres shall apply. For ease of reference, the minimum heights are as follows.

Numeral height: 230mm

Letter height: 230mm

Minimum space between letters and numerals or the edge of the sail: 45mm.

Published Date: 8<sup>th</sup> February 2006  
Effective Date: 1<sup>st</sup> March, 2006

© ISAF (UK) Ltd., Southampton, UK

## APPENDIX 1 - PART LIST

Standard fittings list		Part #	Options or restrictions (Where no comment as per class rules)
<b>Mast</b>	Top Mast	<b>29er</b> TopMast	LIC Licensed supplier only
	Mid Mast	<b>29er</b> MidMast	LIC Licensed supplier only
	Lower Mast	<b>29er</b> LowMast	LIC Licensed supplier only
	Spreader	<b>29er</b> Spr	LIC Licensed supplier only
	Spin Halyard block (top)	RF 1981	2mm +/- dia sheave
	Main Halyard sheave	RF 9707012F	2mm +/- dia sheave
	Mast Tip casting	<b>29er</b> TipCast	LIC Licensed supplier only
	Jib Halyard exit box	RF 9707012	2mm +/- dia sheave
	Vang Pivot/Goosneck	RM680(m)	LIC Licensed supplier only
	Vang Foot	<b>29er</b> Foot	LIC Licensed supplier only
	Vang Top end	<b>29er</b> VanTop	LIC Licensed supplier only
	Vang bottom end	<b>29er</b> vanBot	LIC Licensed supplier only
	HA halyard hook	HA345	
	Mast Plug	<b>29er</b> Plug	LIC Licensed supplier only
	Shrouds Chainplate	RF 2331	Minimum of 4mm adjustment and commercially available
	Boom section	<b>29er</b> Boom	LIC Licensed supplier only
	Boom Goosneck	RM678(m)	LIC Licensed supplier only
	Exit box (outhaul)	RF1985	2mm +/- sheave dia
	Outhaul hook block	RM 421	
	Single block (outhaul)	RF666	2mm +/- sheave dia
	Cleat (outhaul)	RF5106	
	Bullet blocks	RF892	5mm +/- sheave dia
<b>Bowsprit</b>	Bowsprit	<b>29er</b> Bowsprit	LIC Licensed supplier only
	Small Exit Box	RF 1985	2mm +/- sheave dia
	Gennaker Throat	<b>29er</b> SPTH	LIC Licensed supplier only
	Forestay fitting	<b>29er</b> FS,Chain	LIC Licensed supplier only
<b>Jib Sheet</b>	Micro cheek block	RF1978	2mm +/- sheave dia
	Micro block	RF 1951	2mm +/- sheave dia
	Cleat and Swivel	RF 9508033	
	Mast Step Channel	<b>29er</b> MastStep	LIC Licensed supplier only
	Gennaker Sock	<b>29er</b> SpinSock	LIC Licensed supplier only
	Micro Cheek Blocks	RF1978	2mm +/- sheave dia
	Single block with Hook	RM 421	
	Rudder Pin	<b>29er</b> RudderPin	LIC Licensed supplier only
	Rudder Gudgeon Top	<b>29er</b> GudTop	LIC Licensed supplier only
	Rudder Gudgeon Bottom	<b>29er</b> GudBot	LIC Licensed supplier only
<b>Rudder</b>	Rudder Stock	<b>29er</b> Stock	LIC Licensed supplier only

## **APPENDIX 2 - EVENT RULES**

1.1. The minimum wind speed for starting shall be that in which the race committee considers the boats have sufficient capability for pre-start maneuvers.

1.2. Races should not start, or races in progress should be abandoned when:

- (a) wind gusts exceed 25 knots for more than 30 seconds
- (b) wind gusts exceed 30 knots for any duration
- (c) the race committee considers conditions are unsafe for sailing
- (d) the wind is less than 4 knots for more than 5 minutes.

## **APPENDIX 3**

The LIC in the context of these rules shall be deemed to be the designer/copyright holder sitting in council with 2 of the principal builders or their representatives plus the President (or in his absence the Secretary) of the **29er** ICA.