

LASER SB3

CLASS RULES

2008



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The Laser SB3 was designed in 1999 by Tony Castro and was adopted as a
Recognised class in 2007

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INTRODUCTION

The Laser SB3 Class has been created as a strict one-design sportsboat where the true test when raced is between crews and not boats and equipment. The fundamental objective of these class rules is to ensure that this concept is maintained.

Laser SB3 hulls, hull appendages, tillers, rigs and sails shall only be manufactured by the licensed manufacturers. Equipment is required to comply with the Laser SB3 Building Specification.

Laser SB3 hulls, hull appendages, rigs and sails may, after having left the manufacturer, only be altered to the extent permitted in Section C of the class rules.

Owners and crews should be aware that compliance with rules in Section C is NOT checked as part of the manufacturing 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 is intended to provide a non-binding overview. The Laser SB3 Class Rules proper begin on the next page.

PART I – ADMINISTRATION

Section A – General

A.1 LANGUAGE

- A.1.1 The official language of the class is English and in case of dispute over translation the English text shall prevail.
- A.1.2 The word “shall” is mandatory and the word “may” is permissive.

A.2 ABBREVIATIONS

- A.2.1 ISAF International Sailing Federation
- MNA ISAF Member National Authority
- SB3CA Laser SB3 Class Association
- NCA National Laser SB3 Class Association
- ERS Equipment Rules of Sailing
- RRS Racing Rules of Sailing
- LIC Licensors - Laser and Copyright Holder
- LM Licensed Manufacturers as agreed by the LIC and SB3CA

A.3 AUTHORITIES

- A.3.1 The international authority of the class is the ISAF which shall co-operate with the LIC and the SB3CA in all matters concerning these **class rules**.
- A.3.2 The SB3CA, a NCA, or an MNA are under no legal responsibility in respect of these **class rules**.

A.4 ADMINISTRATION OF THE CLASS

- A.4.1 The class is administered by the SB3CA which shall co-operate with the LIC. The SB3CA may delegate part or all of its administrative functions to an NCA.
- A.4.2 In countries where there is no NCA, or the NCA does not wish to administrate the class, its administrative functions shall be carried out by the SB3CA in co-operation with the MNA, or by the MNA in co-operation with the SB3CA.

A.5 ISAF RULES

- A.5.1 These **class rules** shall be read in conjunction with the ERS.
- A.5.2 Except where used in headings, when a term is printed in “**bold**” the definition in the ERS applies and when a term is printed in “*italics*” the definition in the RRS applies.

A.6 CLASS RULES VARIATIONS

- A.6.1 At Class Events – see RRS 88.1.(d) – ISAF Regulation 26.5(f) applies. At all other events RRS 86 applies.
- A.6.2 The Notice of Race and/or Sailing Instructions may only vary **class rule** C.3.1(b).

A.7 CLASS RULES AMENDMENTS

- A.7.1 Submissions for rule changes may be made in writing by the SB3 World Council after consultation with the LIC.
- A.7.2 Amendments to these **class rules** shall only be made subject to approval of ISAF in accordance with the ISAF Regulations.

A.8 CLASS RULES INTERPRETATIONS

- A.8.1 Interpretations of **class rules** shall be made by ISAF in consultation with the LIC and SB3CA in accordance with the ISAF Regulations.

A.9 INTERNATIONAL CLASS FEE AND ISAF BUILDING PLAQUE

- A.9.1 The licensed hull builder shall pay the International Class Fee.
- A.9.2 ISAF shall, after having received the International Class Fee for the hull, send the ISAF Building Plaque to the licensed hull builder.

A.10 SAIL NUMBERS

- A.10.1 Sail numbers shall be issued by the LIC.
- A.10.2 Sail numbers shall be issued in consecutive order.

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 COMPLIANCE

- B.1.1 The boat shall be in compliance with the **class rules**.
- B.1.2 In the event of a dispute alleging non-compliance with **class rules** where specific dimensions are not stated, the following procedure shall be adopted:
 - a) A sample of the dimensions for the disputed item shall be obtained by taking the identical measurement from five boats or items of equipment, which are not the subject of the dispute.
 - b) The dimension of the disputed boat or items of its equipment taken using the same technique as above shall be compared to the sample.
 - c) If any of the dimensions obtained from the disputed boat or item of equipment lie outside the corresponding range of dimensions found in the sample, the matter together with the details of the measurement methods and any other relevant information shall be referred to the Race Committee.

B.2 CLASS ASSOCIATION MARKINGS

- B.2.1 Each Laser SB3 shall have a builder's hull identification mark incorporating the boat sail number fixed in the rear of the cockpit.

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**, where anything not specifically permitted by the **class rules** is prohibited. Any **equipment inspection** shall be carried out in accordance with the ERS except where varied by Part II of these **class rules**.

Section C – Conditions for Racing

C.1 GENERAL

C.1.1 RULES

- (a) RRS 50.4 shall not apply.
- (b) RRS Appendix G1.3 (d) shall not apply.
- (c) RRS 42.3 is changed as follows:
 - Add to RRS 42.3:
 - h) A boat's crew may pump the mainsail repeatedly to release the top batten.
- (d) The ERS Part I – Use of Equipment shall apply.

C.1.2 LIMITATIONS

- (a) The Laser SB3 shall only be raced with **hull, hull appendages, rig, sails**, battens and tiller, as supplied by the LM conforming to these rules.
- (b) Where specified in these **class rules**, parts or equipment may be replaced providing that the replacement is of a similar weight, size and type and performs the same function. The replacement parts or equipment may be obtained from any supplier.
- (c) No person is permitted to race a Laser SB3 in any event unless the owner, or a joint owner, or a nominated representative of an organisation owning the Laser SB3 is a current Full Member and one person on board is either a Full Member or Associate Member of the Class Association.

C.2 ADVERTISING

C.2.1 LIMITATIONS

Advertising shall only be displayed in accordance with Category C of the ISAF Advertising Code. (See ISAF Regulation 20)

C.3 CREW

C.3.1 WEIGHTS

- (a) The total weight of the **crew** dressed in at least underwear shall not exceed 270 kg
- (b) Crews shall be weighed during the registration period prior to racing if required by Notice of Race.
- (c) In the event of crew substitution, should the total **crew** weight change by in excess of 15kg, the boat shall carry ballast in the form of water in clear containers below decks at the base of the mast such that the adjusted weight is not more than 15kg from the original total.

C.3.2 LIMITATIONS

- (a) The **crew** shall consist of a maximum of 4 persons.
- (b) There shall be no **crew** substitution unless:
 - (1) The Race Committee is advised, in writing before the event registration period, of the exact dates of required crew changes. The new crew members must be available for weighing before starting to race.
OR:
 - (2) Authorised by the Race Committee before any race starts as being necessary due to wholly unavoidable circumstances.

C.3.3 POSITIONING

- (a) No **crew** member shall sit with the base of their spine or legs on or over the side rails, or outside the forward extension of the line of the side rails.
- (b) No device, method or sheet may be used to implement or assist hiking or sitting outboard other than the foot straps as positioned and supplied by the licensed manufacturer.

C.4 PERSONAL EQUIPMENT

C.4.1 The boat shall be equipped with **personal buoyancy** for each crew member *to the minimum standard EN 393: 1995 (CE 50 Newtons), or USCG Type III, or AUS PFD 1.*

C.4.2 No clothing or equipment shall be carried with the specific feature of adding weight by water absorption or holding water in pockets, compartments, containers or any other method.

C.5 EQUIPMENT

Replacement of the following items is permitted. Parts may be obtained from any supplier unless otherwise stated.

C.5.1 MANDATORY

- (1) One horseshoe lifebuoy attached at the stern.

- (2) A bucket of minimum volume 9 litres on a lanyard not less than 2m in length and 4mm in diameter.
- (3) One anchor of not less than 3.5 kg in weight (including shackles) and 2m of 8mm steel chain shall be securely stowed when not in use.
- (4) A non-floating line, minimum of 30m long of not less than 8mm in diameter.
- (5) A floating throwing line, minimum of 10m long and 6mm in diameter shall be attached at the stern.
- (6) One outboard engine, minimum of 2.5hp when supplied by the manufacturer, which shall be stored in location designated by the LIC when not in use. One outboard bracket, as supplied by the LM, which may only be modified to accept different engine types and a minimum of 4lts of fuel in a plastic container when measured upon leaving the shore.

OR:

22kg ballast, securely stowed in location designated by the LIC.

- (7) A fire extinguisher.
- (8) A functioning VHF radio
- (9) First Aid Kit in waterproof container or bag
- (10) Four flares, two red and two orange smoke, within date, shall be stored in a watertight container or bag.

C.5.2 OPTIONAL

- (1) One compass, timing device or a combination of both may be fitted using the bracket supplied by the LM provided that it/they can only provide information relating to a) the boat's heading, b) current or elapsed time, c) depth and d) boat speed.
- (2) PVC film may be attached to any part of the **hull, sails or spars**, provided their fixing gives no performance advantage.
- (3) The carrying of loose ropes, fenders, spares, internal buoyancy and any safety equipment is unrestricted provided their fixing does not change the structural properties of the boat and gives no performance advantage.
- (4) Any system of tape, rope or clips intended only to prevent bottlescrews becoming undone.
- (5) Buoyancy bags as supplied by the LM.
- (6) Charts and means for recording compass headings.
- (7) Tape, rope, bags or fittings to secure safety or other equipment
- (8) Fittings or bags may be added to the deck provided their sole function is to stow equipment and/or food and/or drinks.
- (9) Tell tales may be added to any part of the jib, mainsail or **rig**.
- (10) The method of attaching sheets to the spinnaker is unrestricted provided that the sail when flown will not fly further than 10cm from the principal sheet rope.

- (11) The method of attachment of any fitting to the **boat** is unrestricted but shall not modify the fitting's position, the effective operation of the fitting nor the intended purpose or action of any equipment and provided their fixing gives no performance advantage.
- (12) The use of flexible adhesive tape, plastic or stainless rings, Velcro, rope or shock cord, shackles and bobbles is unrestricted as long as this does not modify the effective sheeting of any sail nor the intended purpose or action of any equipment.

C.6 BOAT

C.6.1 WEIGHT

From 1 June 2008, the minimum weight of the **boat** in dry condition shall be 685 kg. The weight shall be taken excluding the following:

- (1) All equipment as listed in C.5, except for the compass bracket, buoyancy bags, if fitted, the main traveller rope, bowsprit outhaul rope, spinnaker tackline, jib tackline, lower backstay rope and any fittings or bags as detailed in C.5.2(8).
- (2) **Sails**
- (3) Sheets
- (4) Compass
- (5) **Personal equipment**
- (6) Spinnaker bag (including frame as supplied by the licensed manufacturer)

C.6.2 CORRECTOR WEIGHTS

- (a) **Corrector weights** of lead shall be permanently fastened to the centreline stringer between the mast bulkhead and the keel box when the **boat** weight in C.6.1 is less than the minimum requirement.
- (b) If the total weight of **corrector weights** required exceeds 20kg, the owner may divide the weight between the centreline stringer and the stringer at the port side of the mast bulkhead.

C.6.3 ALTERATIONS

No performance advantage shall be obtained from any replacement, addition or repair permitted by these **class rules**.

- (a) Replacements for any **boat** equipment, including but not limited to **hull appendages, rig, sails**, battens, tiller, spinnaker bag frame or fittings, whether original or replacements shall be only those produced by a LM except where otherwise authorised by this section.
- (b) Repairs and maintenance including but not limited to painting and sanding may be carried out provided repairs are made in such a way that the essential shape, characteristics or function of the original are not affected.
- (c) Maintenance may include the replacement of fastenings with alternatives from any supplier, provided that the equipment is replaced in the original position.

C.7 HULL

C.7.1 MODIFICATIONS, MAINTENANCE AND REPAIR

- (a) Waxing and polishing of the **hull** is permitted provided the intention and effect is to polish the **hull** only.
- (b) Repairs are permitted; however, an **official measurer** may verify that the external shape is the same as before the repair and that no substantial stiffness, or other, advantage has been gained as a result of the repair.
- (c) Any work intended or with the effect of lightening the **hull** or improving, shape or performance beyond the original is not permitted.

C.7.2 FITTINGS

(a) USE

- (1) The main hatch and all inspection hatch covers shall be kept closed at all times except when accessing stored equipment.
- (2) Fittings shall be arranged as supplied by the LM and documented in the SB3 Rigging Manual except that:
 - (i) The backstay cleat may be reversed to facilitate release aft.
 - (ii) The spinnaker sheet blocks may be arranged with either the ratchet block forward or ratchet block aft.

(b) REPLACEMENTS

Replacement of the following items is permitted. Parts may be obtained from any supplier

- (1) Blocks
- (2) Cleats
- (3) Mainsheet swivel base
- (4) Shackles, pins, bobbles
- (5) Inspection hatches
- (6) Spinnaker bag (using the mounting frame as supplied by the licensed manufacturer)

C.7.3 ADDITIONS AND ALTERATIONS TO HULL

The following additions and alterations are permitted. Parts may be obtained from any supplier:

- (a) Non slip material of any kind (maximum thickness 5mm) may be added to the deck and cockpit.
- (b) Packers may be fitted under cleats
- (c) Calibration marks
- (d) Fittings for speed/depth may be fitted flush to the hull surface.
- (e) Anti-foul coatings may be applied to the hull surface.
- (f) A single hole of up to 111mm diameter may be cut in the forward most bulkhead to give access to the back of the towing eye bolt.
- (g) Not more than three, 154mm inspection hatches may be added.

- (h) If the total weight of **corrector weights** required exceeds 20kg, additional reinforcement as detailed by the LIC may be added to the area around the centreline stringer between the mast bulkhead and the keel box.

C.8 HULL APPENDAGES

C.8.1 MODIFICATION, MAINTENANCE AND REPAIR

- (a) Waxing and polishing of the **hull appendages** is permitted provided the intention and effect is to polish the **hull appendages** only.
- (b) Repairs are permitted; however, an **official measurer** may verify that the external shape is the same as before the repair and that no substantial stiffness, or other, advantage has been gained as a result of the repair.
- (c) Any work intended or with the effect of lightening the **hull appendages** or improving, shape or performance beyond the original is not permitted.

C.8.2 LIMITATIONS

- (a) Only one **keel** and one **rudder** blade shall be used during an event, except when an item has been lost or damaged.

C.8.3 KEEL

(a) DIMENSIONS

The maximum projection from the bottom of the hull beside centre of the keel fin to the top of the bulb shall be 1175 mm.

(b) WEIGHT

From 1 September 2008, the maximum weight of the **keel** shall be 327kg.

(c) ALIGNMENT

- (1) The **keel** may be aligned to the centreline of the **hull**.
- (2) The **keel** may be packed to maintain a snug fit provided this has no effect on moving the keel forward or aft in the boat.

(d) USE

- (1) The **keel** shall be fixed down and may only be released for the purposes of re-floating when aground after which it shall be secured fully down at the earliest opportunity.

C.8.4 RUDDER

(a) ALIGNMENT

- (1) The **rudder** may be aligned to the centreline of the **hull**.
- (2) The **rudder** may be positioned such that the top of the rudder blade is flush with the underside of the **hull**.

(b) FITTINGS

- (1) **Rudder** fittings of any of the designs supplied by the LM are permitted. The diameter of the pin may be increased and additional reinforcement may be added inside the rudder post.
- (2) Tiller extensions may be replaced with alternatives from any supplier, providing that the replacement performs the same function.

C.9 RIG

C.9.1 MODIFICATIONS, MAINTENANCE AND REPAIR

Replacement of the following items is permitted. Parts may be obtained from any supplier:

- (a) Cleats
- (b) Sheave blocks

C.9.2 FITTINGS

The following may be added to the **rig**. Parts may be obtained from any supplier:

- (a) A mechanical wind indication device may be fitted to the top of the **mast**.
- (b) A cover may be fitted around the **mast** between the deck and the gooseneck provided its fixing gives no performance advantage.
- (c) Protective padding may be fitted to the end of the **boom**.

C.9.3 LIMITATIONS

- (a) Only one set of **spars** and standing **rigging** shall be used except when an item has been lost or damaged beyond repair.

C.9.4 STANDING RIGGING

Replacement of the standing **rigging** is permitted. Parts may be obtained from the LM.

- (a) USE
 - (1) Standing **rigging** shall be arranged as supplied by the LM and documented in the SB3 Rigging Manual

C.9.5 RUNNING RIGGING

Replacement of the running **rigging** is permitted. Parts shall be of uniform diameter and may be obtained from any supplier.

- (a) USE
 - (1) Running **rigging** shall be arranged as supplied by the LM and documented in the SB3 Rigging Manual
 - (2) Ropes of any fibre may be used.

(b) DIMENSIONS

| | minimum | maximum |
|--------------------------------|---------|---------|
| Main halyard diameter | 5 mm | - mm |
| Jib halyard diameter | 8 mm | - mm |
| Spinnaker halyard diameter | 8 mm | - mm |
| Backstay diameter | 4 mm | - mm |
| Backstay control line diameter | 5 mm | - mm |
| Main sheet diameter | 8 mm | - mm |
| Jib sheet diameter | 8 mm | - mm |
| Spinnaker sheet diameter | 8 mm | - mm |
| Jib tack line diameter | 4 mm | - mm |
| Spinnaker tack line diameter | 6 mm | - mm |

| | minimum | maximum |
|---------------------------|---------|---------|
| Bowsprit outhaul diameter | 6 mm | - mm |
| Main traveller diameter | 6 mm | - mm |
| Main cunningham diameter | 6 mm | - mm |
| | | |

C.9.6 BOWSPRIT

The bowsprit shall be fully retracted at all times other than when the spinnaker is set or in the act of being set or recovered. When retracted the forward end of the **bowsprit** shall not extend more than 200mm forward of the **hull**.

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 and repairs are permitted provided the size and shape are not altered.
- (c) Logos may be inserted into spinnakers provided this process does not alter the size or shape

C.10.2 LIMITATIONS

- (a) Not more than 1 mainsail, 1 jib, and 2 spinnakers shall be carried aboard.

C.10.3 MAINSAIL IDENTIFICATION

- (a) The sail number shall be displayed on each side of the mainsail in accordance with the RRS Appendix G.
- (b) The Class Insignia shall be the Laser logo as prescribed by the LIC, and shall be displayed near the head.

Section D – Hull

D.1 HULL SPECIFICATION

- D.1.1 The hull shall comply with the Building Specification in force at the time of manufacture.

D.2 HULL MANUFACTURER

- D.2.1 The hull shall be built by a manufacturer licensed by the LIC to produce hulls.
- D.2.2 All production moulds used for hull manufacture shall be approved by the LIC.

D.3 HULL IDENTIFICATION

- D.3.1 Each hull shall carry a builder's Hull identification plaque incorporating the boat sail number fixed in the rear of the cockpit.
- D.3.2 Each hull manufactured after 1st February 2008 shall have an individually numbered ISAF Plaque fixed on the starboard side aft face of the transom.

D.4 HULL ALTERATIONS

- D.4.1 The hull shall not be altered in any way except as permitted by Section C of these **class rules**.

D.5 HULL FITTINGS

- D.5.1 Hull fittings shall comply with the Building Specification in force at the time of manufacture except when altered, added or replaced as permitted by Section C of these **class rules**.

Section E – Keel and Rudder Assembly

E.1 KEEL AND RUDDER SPECIFICATIONS

- E.1.1 The keel, rudder blade and rudder stock/tiller assembly shall comply with the Building Specification in force at the time of manufacture.

E.2 MANUFACTURER

- E.2.1 The keel, rudder blade and rudder stock/tiller shall be made only by a manufacturer licensed by the LIC to produce these.

E.3 KEEL AND RUDDER ALTERATIONS

- E.3.1 The keel, rudder blade and rudder stock/tiller shall not be altered in any way except as permitted by Section C of these **class rules**.

Section F – Rig

F.2 SPARS

- F.1.1 **Spars** and their fittings shall comply with the Building Specification in force at the time of manufacture of the **spar**.

F.2 RIG MANUFACTURER

- F.2.1 **Spars** and their fittings shall be made only by a manufacturer licensed by the LIC to produce spars.

F.3 RIG ALTERATIONS

- F.3.1 **Spars**, their fittings and rigging shall not be altered in any way except as permitted by Section C of these **class rules**.

Section G – Sails

G.2 SAIL SPECIFICATIONS

- G.1.1 The **sails** shall comply with the Building Specification in force at the time of manufacture of the **sail**.

G.2 SAIL MANUFACTURER

- G.2.1 The **sails** shall be made only by a manufacturer licensed by the LIC to produce sails.

G.3 SAIL ALTERATIONS

- G.3.1 The **sails** shall not be altered in any way except as permitted by Section C of these **class rules**.

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