

Appendix 14: Boats and Equipment

By-Laws to Rule 39: Free Construction

Requirements for racing boats & equipment

Failure to comply with any requirements of these By-Laws shall result in a sanction up to disqualification.

All safety requirements described here are minimum requirements. It is the responsibility of the member club/school/association concerned and the rowers to ensure their safety with regards to their rowing equipment.

For all para-rowing events, athletes must meet the para-rowing equipment specifications as outlined in Appendix 6.

For all coastal rowing events, athletes must meet the coastal-and beach sprint rowing equipment specifications as outlined in Appendix 11 and 12

1. Boats

- a) Maximum Length – All boats used in eights events shall be a minimum of two sections, with no section longer than 11.9 metres.
- b) Minimum length of racing boats — The minimum overall length of a racing boat shall be 7.20 metres. This will be measured from the front of the bow ball to the furthest aft extent of the boat, which may include an extension beyond the hull. If an extension is used it will terminate in a 40 mm ball as described below. If a boat cannot be correctly aligned because it is less than the minimum overall length, the Starter may exclude the crew from the race. This Rule does not apply to boats used at para-rowing and coastal and beach sprint rowing events.
- c) Boat Design – All boats shall be displacement monohulls, unless otherwise agreed by Rowing Australia.
- d) Fins – A fin is a plate, with single surface with or without cross-sectional shape, affixed to the hull below the water. Any number of fins are allowed but they must be fixed and vertical on the hull.
- e) Rudders – A rudder is a rotatable surface with its axis of rotation in the centreline plane of the hull. Only one rudder is allowed.
- f) Coxswains Seat - The opening of the coxswain's seat must be at least 70 cm long and it must be as wide as the boat for at least 50 cm. The inner surface of the enclosed part must be smooth and no structure of any sort may restrict the inner width of the coxswain's section.
- g) Floatation: All boats manufactured from 1 January 2020 must have a production plaque as outlined in the rules and confirm that the boat does meet the floatation requirements specified in FISA's Minimum Guidelines for Safe Rowing, specifically that when full of water a boat with the crew seated in the rowing position should float in such a way that the top of the seat is a maximum of 5cm below the static waterline. It shall be the sole responsibility of the club including school club or State Association using a boat to ensure that it complies with this requirement.
- h) Bow Balls - The bows of all boats shall be fitted with a solid white ball shape, minimum diameter 4 cm. which covers the point of the bow and is bright white. If this is an external part, it shall be firmly affixed to the bow of the boat such that it does not significantly deflect if a side force is applied. If it is an integral part of the hull construction, it shall afford equivalent protection and visibility
- i) Quick release foot stretchers - In all boats with the foot stretchers, shoes or other devices holding the feet of the rowers shall be a type which allow the rowers to get clear of the boat without delay in an emergency.

- i. Where shoes and other devices holding the feet will remain in the boat, each shoe or device shall be independently restrained such that when the heel reaches the horizontal position the foot will be released from the shoe. In addition, where laces, Velcro or similar materials all such materials must be able to be released immediately with a single quick hand action of pulling on one easily accessible strap.
- ii. Where shoes or other devices holding the feet will not remain in the boat, each shoe or device must be able to be released by the rower without using their hands or with a single quick hand action of pulling on one easily accessible strap or release device.

2. Oars

- a) All parts of the oar shall be fixed in place and incapable of movement independent of the movement of the oar as a whole during rowing
- b) Oar Blade Thickness – Oar blades may not be less than 5 mm thick for sweep oars, and 3 mm thick for sculls. This thickness shall be measured 3 mm from the outer edge of the blade for sweep oars and 2 mm for sculls.

3. Identifications

- a) Production Plaque – All boats must have a production plaque or equivalent visible and permanently affixed inside the boat, up to 50 sq. cm in area, on which is written the name and address of the boat builder, its mark or logo, the year the boat was constructed, the average weight of the crew for which the boat is designed, the weight of the boat on construction or upon delivery and stating whether the boat meets the flotation requirements specified in World Rowing's Minimum Guidelines for the Safe Practice of Rowing.
- b) All boats and oars shall comply with the requirements set out in the By-Laws to Rule 50 (Identifications etc.)

4. Natural Properties

No substances or structures (including riblets) capable of modifying the natural properties of water or of the boundary layer of the hull/water interface shall be used.

5. Communications and Electronics

- a) Data Transmission – During racing (which shall mean at all times when racing "traffic rules" are in force), no communication with the crew is permitted from outside the boat using electric or electronic equipment. This includes but is not limited to audio transmission or sending text messages or software communication of any kind. In addition, no data may be sent to, the boat except as provided for in paragraph 5c with the exception of those outlined in Appendix 6 (Para Regulations).
- b) Allowable Data - No data may be sent to or received from the boat except as provided for below. During racing, the only information allowed to the crew in the boat shall be:
 - i. Time, Distance
 - ii. Stroke Rate, Distance per stroke, Drive Time, Recovery Time, Drive/Recovery Ratio
 - iii. Boat velocity/acceleration
 - iv. Performance: Force, Power, Work, Force/Power Position, Impulse
 - v. Physiological: Heart rate, Respiratory rate
 - vi. Boat Floatation: Roll Motion, Yaw Motion, Pitch Motion, Surge Motion, Sway Motion
 - vii. Oar Angles, Slip, Wash, Stroke Length
 - viii. Stroke Count
 - ix. Geographic Position

This information shall be designated 'allowable data'. This data and any information derived directly from it may be recorded and/or transmitted from the boat during racing for later use. No other data or information may be measured, recorded or stored except as provided for in paragraph 5c. It shall not be allowed to further process the allowable data during the race which would provide additional information or advice to the crew.

- c) Data transmitted from the boat shall not be published or broadcast by any recipient in any form during the regatta except by Rowing Australia or with the explicit permission from Rowing Australia
- d) Regatta Information - RA may install on each boat a device(s) or interface with an existing device in the boat for the purpose of recording or transmitting real-time race and other information which

shall be owned by RA and may be used for any purpose including presentation and promotion of the event and the sport.

6. Promotional Equipment

At RA Events, RA may require crews to carry on their boats such equipment as it considers desirable for the better promotion of the sport of rowing (e.g. mini cameras, microphones, etc.) provided that such equipment is identical for all boats in a race.