

A CLASS CATAMARAN

MEASUREMENT GUIDELINES

The A Class Catamaran is controlled by the rules set down by the ISAF under the "Rules for the Divisions of Catamarans and The International C Class" (Last issued May 1985), which are as follows:

1. A catamaran is defined as a two-hulled sailing boat with essentially duplicate or mirror image hulls, fixed in parallel positions.

2. Sail area shall not be more than:
13.94 square metres (150 square feet)

Sail area to be measured in accordance with the "IYRU Measurement & Calculation of Sail Area Instructions" (Last issued May 1985)

3 The overall length of the catamaran shall not be more than:
5.49 metres (18 feet)

The length shall be measured between perpendiculars to the extremities of the hulls with the catamaran in her normal trim. The measurement shall be taken parallel to the centre line of the craft and shall exclude rudder hangings, but if the athwartships width of a rudder within 153mm (6 inches) of the bottom of the hull is more than 76mm (3 inches), the length shall be taken to the aftermost point of the rudder.

4. The extreme beam shall not be more than:
2.3 metres (7 ft 6½ inches)
The beam shall be measured at right angles to the centre line of the craft at the widest point and including all fixed or adjustable apparatus with the exception of a normally accepted trapeze or retractable seat.

5. The crew in Division "A" shall be one person (helmsperson)

6. Unballasted retractable seat or trapeze shall be allowed for the helmsperson. When in use the helmsperson at all times shall have at least one foot in contact with the boat.

7. The A Division emblem shall be carried on the mainsail and shall consist of the letter A over two parallel horizontal lines over national letters and sail numbers,

Sail numbers shall be allotted by the National Authority or Class Association appointed by the National Authority. The class emblem, national letters and distinguishing numbers shall be placed as prescribed in the Yacht Racing Rules. (RRS 77 & RRS Appendix H)

8. Hydrofoils are not permitted.

9. Minimum weight in full sailing trim shall be not less than 75 kilograms.

MEASURER'S GUIDE TO COMPLETION OF MEASUREMENT FORM.

All A Division Catamarans shall have a valid measurement form and for all yachts measured after 1st January 1998 it shall be on the latest style form dated 4/97. This form is composed of four separate areas that are largely self-explanatory. The following notes should assist in their understanding.

Mast & Boom Measurement Form

The purpose of this measurement is to find half the total area of the mast and any mast base fitting attached. On a straight section (i.e. not tapered) it is simply the length L x half the mast girth. The Measurement and Calculation of Sail Area instructions defines girth as follows:

“The girth measurement shall be taken as the distance from the centreline round the surface of the spar to the same point on the centreline. The resultant dimension shall be divided by two to give the half girth measurement.”

Should mast be tapered extra measurement U1 & T need to be taken and the formulae on measurement certificate utilised. Black band measurements L1 & L2 play no part in the mast measurement at this stage.

Boom measurement is only utilised if the profile height of the boom is more than 1.5 of the width.

Hull Measurement

This area is self explanatory with only two measurements needed i.e. width & length.

Things to look for with overall length are:

If the width of a rudder within 153mm (6 inches) of the bottom of the hull is more than 76mm (3 inches) the length measurement needs to go to the aftermost point of the rudder.

With the width, measurement is at the widest point of the hulls, this may be at some point down the sides of the hulls, especially if hulls are angled. It may also be possible that the maximum width is at bottom of centreboards when fully down.

Sail Measurement Form

When undertaking the sail measurement the following points should be noted.

Sail to be measured on a flat surface and laid out in terms of IYRU Measurement & Calculation of Sail Area Instructions. i.e.

“With battens set in their pockets the sail shall be pegged out on a flat surface with just sufficient tension to remove waves or wrinkles from the edge rounds and to spread the sail, as far as possible, substantially flat. Once the sail has been pegged out in this way all the required measurements shall be taken and no alterations to the tensions shall be made.”

Luff length A is the maximum distance from the head to the tack of the sail. It is taken on the inside of the boltrope, which is not included in any measurement.

Base length P is a measurement from the clew to a point at 90 degrees to A.

Measurements M, F, K, D & H are all made at 90 degrees to their respective lines. All are to be the maximum distance that can be taken.

General Calculation Form

This form brings all the measurements together and all that is required is to transpose measurements from the other forms. On this page it allows you to calculate the theoretical Black Band distance that will allow a maximum sail area of 13.94 square metres for each sail that the boat may have. It should be noted that black bands should be on the mast and form part of the measurement requirements.

The weight of the boat and any correcting weights are also listed on this page.

The weight of the boat consists of all items associated with the boat in full sailing trim. It does not include such things as shackle keys, water bottles, spare rope etc.

The boat must be weighed in a dry condition and any weights attached to bring the boat to a minimum weight of 75 kilograms must be permanently affixed and their weight duly noted on this page.