AMYA MARBLEHEAD CLASS RULES 1998

Effective 1 March 1998

1 GENERAL

1.1 Purpose of the Measurement Rules

1.1.1 The Marblehead is a Development Class.

1.1.2 Anything not specifically restricted or prohibited is PERMITTED.

1.6 Materials

1.6.1 Except for remote control equipment, material of higher density than lead (0.41 lbs./in^3) is prohibited.

1.7 Sail Area

1.7.1 The measured sail area shall not exceed 800 in^2.

3 HULL

3.1 Definition

3.1.1 The hull is defined as the boat including all equipment but excluding the rig and the appendages.

3.2 Identification Marks

3.2.1 The boat's registration number shall be:

(a) Painted on, engraved in or moulded in an easily visible location.

(b) Displayed on the external surface clearly and legibly with a minimum height of 0.79".

3.3 Construction

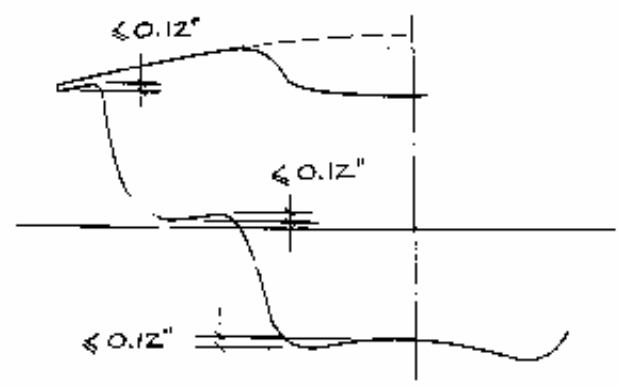
3.3.1 The hull shall be a monohull of minimum length 50.20" and maximum length 50.75".

3.3.2 The forward 0.5" (minimum) of the hull shall be made of elastomeric material.

3.3.3 Except for hollows or voids formed by trunkings or tubes for appendages:

(a) Hollows which exceed 0.12", or voids, in the underwater profile or the plan view of the hull are prohibited.

(b) Hollows in the undersurface of the hull, tested transversely and parallel to the waterline, shall not exceed 0.12".



3.3.3(b)

4 APPENDAGES

4.1 Construction

4.1.1 The following are prohibited:

(a) Appendages containing or forming concentrated ballast that can be moved or rotated relative to the hull or which have elements which can be so moved.

(b) Retracting appendages.

(c) Appendages attached to the hull more than 0.6" from the centerline plane.

(d) Appendages which project forward or aft of the hull.

5 RIG

5.1 Definitions

5.1.1 A rig is defined as, and is restricted to, no more than; one mainsail, one jib, one mast, one luff spar, four booms, fittings, wind indicator/s, standing rigging and running rigging.

5.1.2 A mast is defined as a spar and all its fittings attached along the luff of a mainsail.

5.1.3 A luff spar is defined as a spar and all its fittings attached along the luff of a jib.

5.1.4 A boom is defined as a spar and all its fittings, other than a mast or luff spar, attached to any part of a sail or another boom.

5.1.5 A boom that extends fore and aft of the mast is defined as two booms.

5.2 Sail Plan

5.2.1 The A, B, G, H, I, Q, R and width dimensions (maximum) for no more than three rigs, designated Rig A, Rig B and Rig C, shall be recorded on the certificate.

5.2.2 The height above deck of the lower edge of the upper mast band, H, shall not exceed 85".

5.2.3 The height above deck of the lower edge of the middle mast band, I, shall not exceed 80% of H for the relevant recorded rig.

5.2.4 A line taken through the jib *tack point* and *head point* shall not cut the forward face of the mast higher than the lower edge of the middle mast band when the jib clew is on the centerline plane of the hull.

5.2.5 Height measurements for all rigs of the same designated rig letter shall be taken to the same point on the deck next to the relevant mast position(s).

5.2.6 Except as permitted by 5.2.7, the A, B, G, H, I, Q, R and width measurements shall not exceed the equivalent dimensions of the relevant recorded rig.

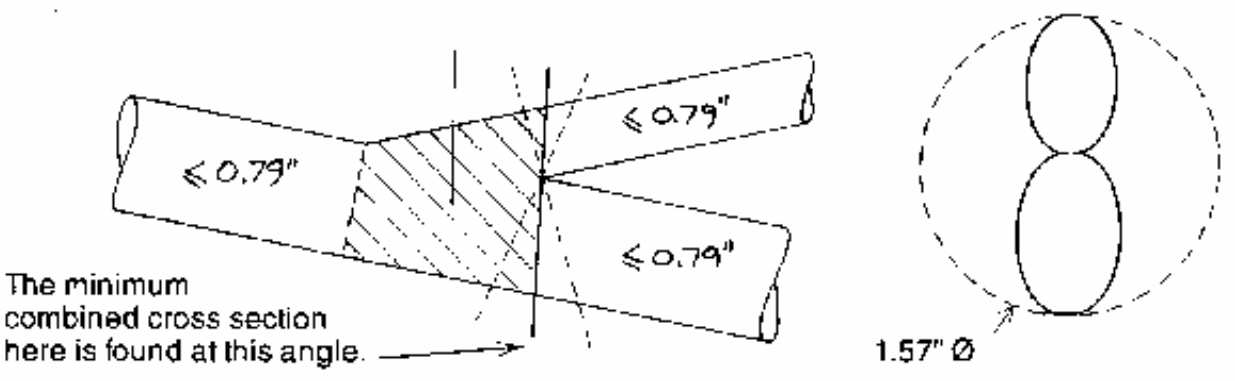
5.2.7 When in racing trim the height above deck of the upper edge of the lower mast band shall not vary by more than 0.4" from the relevant recorded rig dimension, G.

5.2.8 Sails may be used with more than one rig if they are marked with all appropriate designated rig letters and do not exceed the relevant recorded rig dimensions.

5.2.9 No part of a rig shall be forward or aft of the hull when the main and jib clews are held on the centerline plane of the hull.

5.3 Spars

5.3.1 The cross section of spars shall not exceed 0.79" except that:
(a) for the last 3.9" at one end of each boom spar the cross section shall not exceed 1.57",
(b) where boom spars meet, the minimum combined cross section at all points shall not exceed 1.57", and
(c) below the upper edge of the lower mast band the mast spar cross section shall not exceed 1.57".



5.3.1(b)

5.3.2 Mast bands shall be of a color that contrasts with the mast and shall be not less than 0.12" wide.
5.3.3 Except as in 5.3.4, three mast bands shall be placed on each mast.
5.3.4 The middle and/or upper mast band(s) may be omitted from a mast whose length makes it impossible to infringe 5.2.6.
5.3.5 A main boom may be placed at any height with respect to the lower mast band.

5.4 Other Rigging Rules

5.4.1 A fitting that is faired into a spar shall be considered to be part of the spar.
5.4.2 A fitting attached to a rotating spar shall be no bigger than is reasonably required for its purpose.
5.4.3 No more than three rigs of each designated rig letter may be used during an event. Only one rig shall be used at any one time.
5.4.4 Forestays and jib tacks need not be fixed on or approximately on the centerline plane of the boat.
5.4.5 Except as in 5.2.9 any part of a rig may be outboard of the hull.

6 SAILS

6.1 General
6.1.1 Sails shall be *soft sails* made and measured in accordance with the current 'ISAF (formerly IYRU) Sail Measurement Rules', except where varied herein. Where a term defined or a measurement given in the ISAF (formerly IYRU) Sail Measurement Rules is used in these rules it is printed in *'italic'* type.
6.1.2 *Sails* shall comply with the measurement diagrams.
6.1.3 During measurement battens need not be removed and *sails* may remain attached to spars.
6.1.4 Discontinuous attachments on a sail *luff* shall be disregarded for the purpose of measurement provided that their total length, measured along the *luff*, does not exceed 10% of the length of the *luff*.

6.1.5 Battens shall not exceed 4.13" in length and 0.79" in width. Their centerlines shall divide the *leech* into parts where the inequality does not exceed 1".
6.1.6 The *foot* round shall not exceed 1" measured to a straight line between the *tack point* and *clew point*. The foot irregularity shall not exceed 0.12".
6.1.7 All *sails* shall be marked at the clew with the designated rig letter.
6.1.8 Headboards shall not extend more than 0.79" from the *head point*.
6.1.9 Parts of wire supporting the head of a sail that are less than 0.079" in diameter and not covered with sail material shall not be taken as parts of the *sail*.

6.2 Mainsails

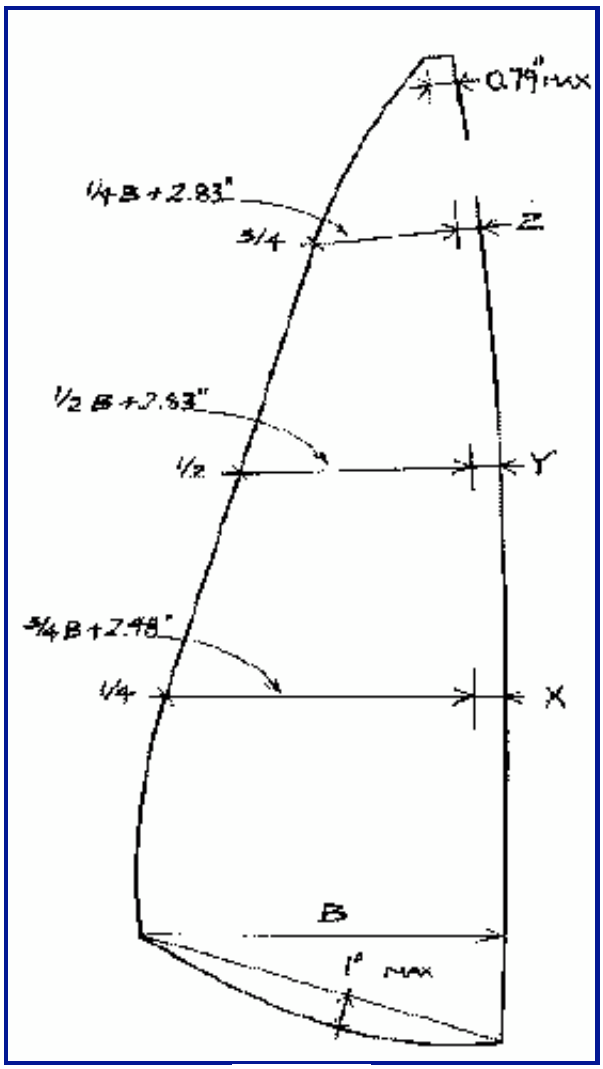
6.2.1 There shall be no more than four battens.
6.2.2 The *head point* shall not extend above the lower edge of the upper mast band and the *tack point* shall not extend below the upper edge of the lower mast band.
6.2.3 If the *luff* is set in a luff groove and except as permitted by 6.1.4, the B measurement and widths shall be taken to the aft edge of the mast spar.
6.2.4 The B measurement and widths shall be taken to the fore edge of articulated flaps and/or fairings if they are used
6.2.5 If the *sail* has a *double luff*, the B measurement and widths shall be taken to the *luff* with the mast in place, or to the fore edge of the spar, whichever gives the greater dimensions, and the *head point* shall be taken at the aft edge of the spar.

6.3 Jibs

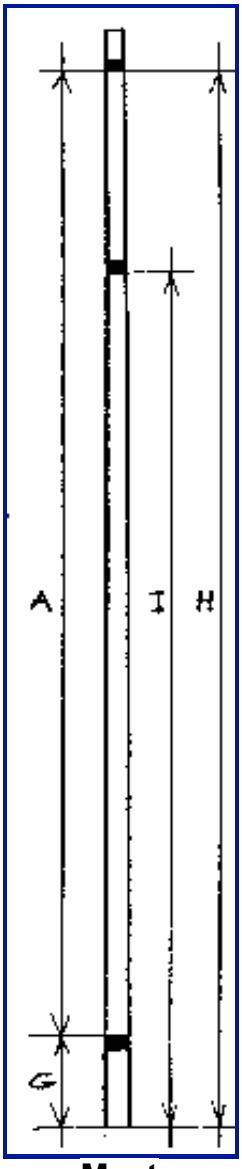
6.3.1 There shall be no more than three battens.
6.3.2 If the *sail* is set on a luff spar, the R measurement and widths shall be taken to the *luff* with the spar in place, or to the fore edge of the spar, whichever gives the greater dimensions, and the *head point* shall be taken at the aft edge of the spar.

6.4 Identification Marks

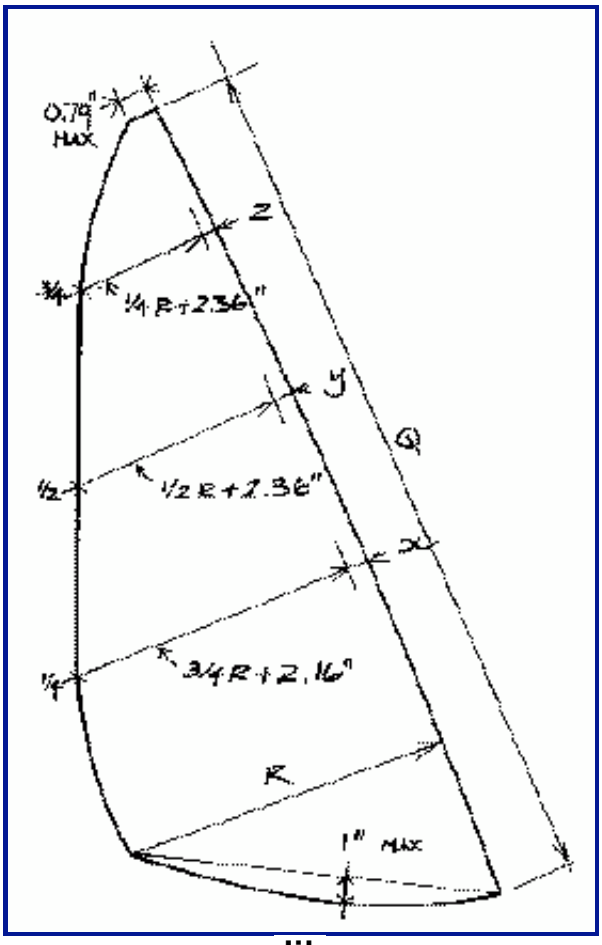
6.4.1 *Sails* shall carry identification marks in accordance with the RRS (formerly IYRR).
6.4.2 The class insignia shall be the letter ‘M’ of the following dimensions: height and width 1 - 1.2", thickness 0.25 - 0.3".



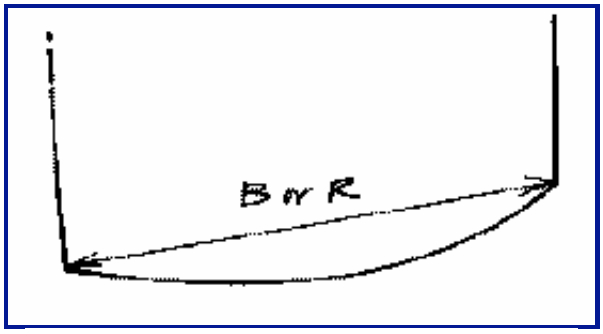
Mainsail



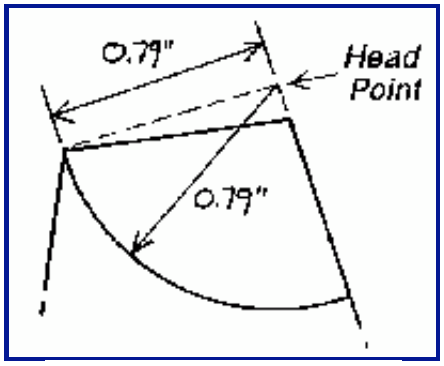
Mast



Jib



Dropped Foot on a Mainsail or Jib

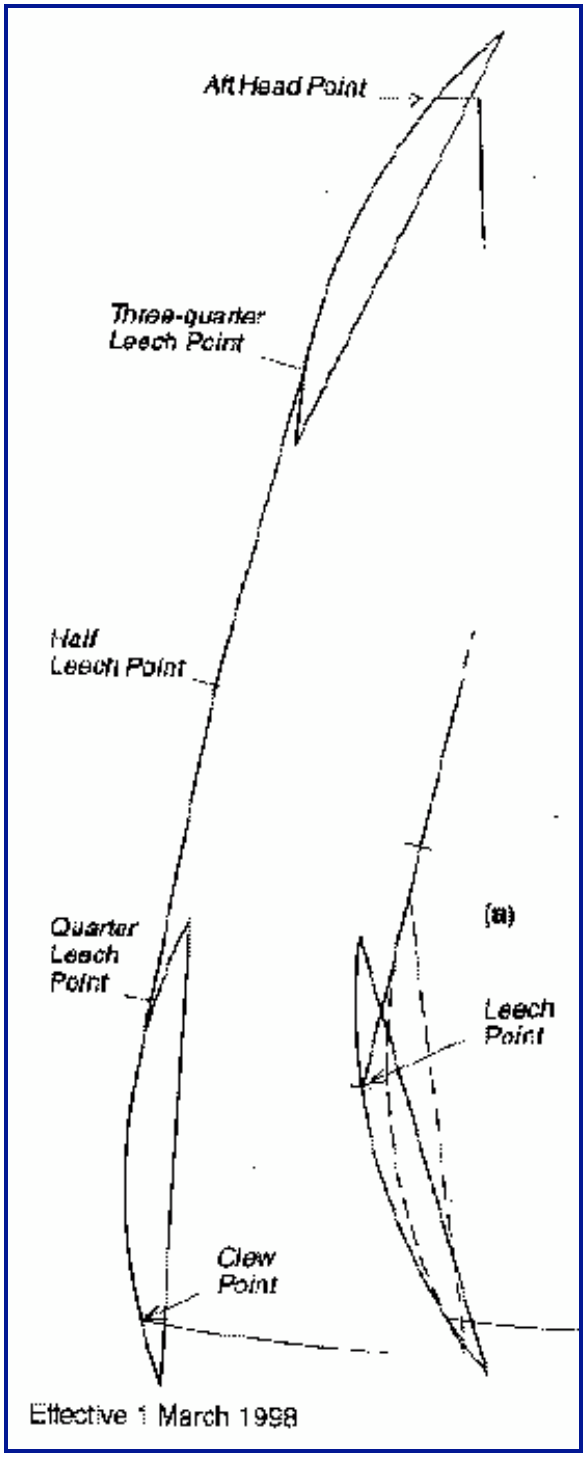


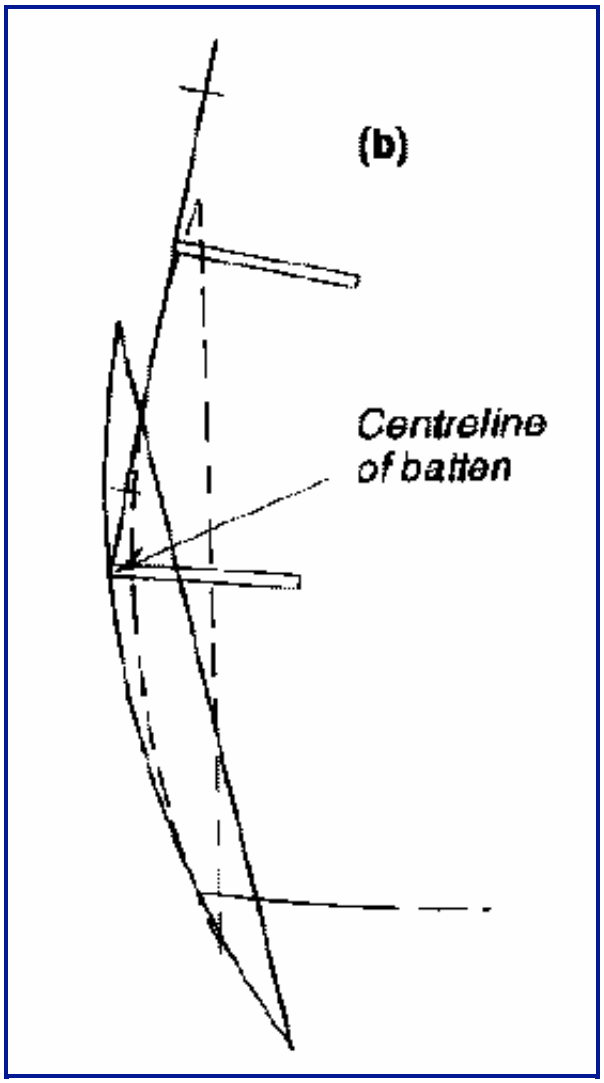
Headboard Limitation

SAIL AREA CALCULATION

	Triangular Sail Area	Excess Area
Mainsails	0.5 x A x B	A x (2X + Y + 2Z) / 6
Jibs	0.5 x Q x R	Q x (2x + y + 2z) / 6

Where: X and x are the excesses in the ***quarter widths***
Y and y are the excesses in the ***half widths***
Z and z are the excesses in the ***three quarter widths***





CONTROL OF THE UPPER AND LOWER LEECH PROFILE

The Template

A template of 35.5" radius shall be used for this purpose. At the head The template shall be placed to touch the *aft head point* and a straight line through the two nearest *leech points.* At the clew The template shall be placed to touch the *clewpoint* and a straight line through the two nearest *leech points*. General If a *leech point* (diagram a) and/or a point where the centreline of a batten intersects the *leech* (diagram b) falls outside the template when positioned as above, the template shall be repositioned to either point so that neither point appears outside the template. When the template is positioned according to the instructions above, the *leech* shall not project outside the template.

Exceptions for AMYA Regattas Only

(1) Hulls registered before 1 March 1998 may be measured using the previous AMYA M Class Rule.
(2) Sails built before 1 March 1998 may carry identification marks in accordance with the previous AMYA **M Class Rule.**
(3) Measurement forms for AMYA regattas shall be either the Marblehead Class Regatta Measurement Form (English Units), or the International Marblehead Class Measurement Forms or Certificate (Metric Units).

Sail Identification Marks Rules

Boats shall carry marks in accordance with RRS Appendix H with the exception of H1.1(c), the last paragraph of H1.1, H1.2(b), H2 and H3. Identification marks shall also conform with the following rules.

(a) The sail number shall be the last two digits of the boat registration number, or the last two digits of the personal number allotted. Single digit boat registration and personal numbers shall be prefixed by a zero.

(b) There shall be a space in front of the sail numbers for a prefix '1' in accordance with (d). The use of a prefix '1' shall be prescribed by the race committee in the event of a clash of sail numbers.

(c) Where there remains a clash of sail numbers the race committee shall prescribe that sail numbers shall be amended to other numbers until the clash is resolved.

(d) The size and spacing of identification marks are expressed in mm and shall be as follows:

Dimension (expressed in mm)	**Letters**	**Digits**
Height	60-66	100-110
Width excluding digit '1' and letter 'I'	40-45	60-73
Thickness	8-12	12-18
Radius at junctions and ends of strokes	3 max	3 max
Space between adjacent letters or digits	13-18	20-25
Space between marks on opposite sides of the sail	60-100	
Space between sail numbers and other marks	100 min	

(e) Both sides of sails shall carry identification marks. They shall be placed at different heights, those on the starboard side being uppermost. However, if symmetrical about a vertical axis, the class insignia may be placed back to back.

(f) Headsails shall carry only sail numbers. They shall be below an imaginary line projecting at right angles to the leech from the half leech point.

(g) Mainsails shall carry sail numbers which shall be above an imaginary line projecting at right angles to the luff from a point on the luff one-third of the luff length from the tack or, if this is not possible, as high as possible. National letters, if carried, shall be below this line.

(h) Mainsails shall carry the class insignia above the sail numbers.

(i) Where the sail is too small to achieve the spacing requirements, the spacing may be decreased as necessary to an absolute minimum of 13 mm in the following order:

(1) between sail insignia in opposite sides
(2) between the starboard side number and the port side insignia
(3) between numbers on opposite sides
(4) between letters on opposite sides
(5) between the starboard side letters and port side number

(a) Where the sail is too small to use the specified size digits and letters, even with the absolute minimum spacing of 13 mm, smaller national letters and digits may be used as necessary.

(k) Except at ISAF-RSD regattas, when mainsails and jibs shall conform with these rules, identification marks on mainsails shall conform with these rules or with the class rules in effect when first measured.

Effective 1 March 1998