



## BRITISH MOTH BOAT ASSOCIATION CLASS RULES

### 1) Application

- (a) These Rules are effective from 3rd August 2017.
- (b) All boats shall conform to this set of rules or the corresponding set of rules applying to them at the time the original certificate was issued, with the exception that:-
  - (i) All boats shall comply with the current buoyancy requirements.
  - (ii) Any alterations which require re-measurement shall conform to these rules in respect of those alterations.
- (b) Any boat may be re-measured under these rules at the owner's option.
- (c) All measurements shall be in metric units with any of the dimensions rounded to the next highest whole millimetre (mm).
- (d) These rules shall be interpreted and administered in conformity with the measurement instructions of the I.S.A.F.

### 2) Registration and Measurement Certificate.

- (a) Application for registration shall include three names in order of preference, details of hull and deck material and builder, and the registration fee. The Secretary of the Association will furnish a sail number, include the appropriate measurement form and confirm the accepted name (No two boats to bear the same name).
- (b) The specified measurements shall be entered and signed by a B.M.B.A. approved measurer and forwarded to the B.M.B.A. accompanied by the specified fee and an appropriate membership subscription (unless the owner is already a paid-up member of the Association). If satisfactory, a Certificate of Measurement will be issued, which will indicate whether or not a buoyancy test was carried out during measurement. Glassfibre reinforced plastic and foam sandwich (GRP) hulls and boats made from moulds approved by the British Moth Boat Association may complete one of the shortened measurement forms for that particular boat. Approval will be given after the builder has presented full construction details, material specification, report and completed measurement certificate carried out by RYA, ISAF or BMBA measurer of the mould and prototype hull or boat. These documents will be considered by the British Moth Boat Association committee for approval. Such approval may be withdrawn in writing. It is the owner's responsibility that their boat conforms in all respects to the current rules.
- (c) The Certificate will be valid for twelve months only from the date of the original or subsequent buoyancy test, which may be witnessed by a responsible club official or self certified by the owner.
- (d) Change of ownership invalidates the Certificate, but does not necessitate re-measurement. The Certificate shall be returned to the B.M.B.A. for re-registration, accompanied by the specified fee. Rules 2(c) and 2(g) also apply.



## BRITISH MOTH BOAT ASSOCIATION CLASS RULES

- (e) It is the owner's responsibility to ensure that his/her boat as a whole complies with the Class Rules, and that in the event of alterations, replacements or repairs, appropriate re-measurement, re-weighing, or buoyancy testing is undertaken.
- (f) Any British Moth sailing in a National Championship must have a valid certificate and be sailed by a paid-up member of the Association.
- (g) No certificate is valid for racing unless accompanied by the owner's receipt for the current year's subscription.

### 3) Class Insignia and Identification Marks

- (a) Every boat shall bear its registration number cut or indelibly marked on the hog piece, transom, or mainbeam in a visible position.
- (b) The British Moth sail emblem is a circular blue band of external diameter between 280mm and 330mm surrounding a letter "M" in red on a white background. The widths of the circular band and the parts of the letter "M" shall be 35mm to 45mm. Emblems shall be placed on both sides of the sail, back to back, above the numbers.
- (c) The emblem for the Mini-Moth sail shall have a second "M", half the size of the main "M", with the centres of both "M"s on the same horizontal line. The small "M" shall be placed to the right on the starboard side of the sail, and to the left on the port side, so that the emblems may be placed back to back, and shall break the circle at its crossing point. (See Sail Measurement form for sketch).
- (d) The position and size of the sail numbers shall conform to current I.S.A.F. rules.

### 4) Hull and Deck Construction and Weight

#### Definitions:

*Hull and deck - includes the centreboard case and any bonded structure or component; it conforms to the measurement criteria and when fitted with proprietary hatch covers meets the buoyancy requirements.*

*Fittings – readily removable components, attached for example by screws. There is no restriction on the materials for fittings.*

*Corrector - a piece of material attached to the hull for the purpose of adjusting the total weight of hull and deck to comply with the Class Rules.*

- (a) Hull and deck may be constructed of:
  - (i) Wood and wood/foam/wood sandwich
  - (ii) Glass-reinforced-plastic (GRP) including foam sandwich
  - (iii) Aluminium or aluminium alloyHull and deck may be of composite construction using any of these materials (e.g. GRP hull with wooden deck).
- (b) When a single layer of wood is used, hull thickness shall not be less than 5mm. If sandwich construction the facing plies shall not be less than 3mm and the foam core not greater than 5mm. Deck thickness shall not be less than 3mm.



## BRITISH MOTH BOAT ASSOCIATION CLASS RULES

- (c) When GRP is used, the lay-up of hull and decks shall include as reinforcement either:
  - (i) a single layer of glass fabric of not less than 3oz/ft<sup>2</sup> (0.915kg/m<sup>2</sup>), or
  - (ii) two layers spaced, each not less than 1oz/ft<sup>2</sup> (0.305kg/m<sup>2</sup>)
- (d) When aluminium / aluminium alloy is used, hull thickness shall not be less than 20 swg (0.914mm).
- (e) The hull and deck with permanent fittings shall weigh at least 45kg.

An underweight hull and deck shall be compensated by adding corrector(s) up to 6.3kg. Each corrector shall be indelibly marked with its weight; the number and total weight of correctors shall be recorded on the measurement certificate.

The hull and deck may be re-weighed by an approved measurer at any time and the correctors, if any, altered, provided that the details are entered on the certificate, and signed by the measurer.

### 5) Hull Dimensions

- (a) The hull shall be constructed within the tolerances set out on the Measurement Form. The lines of the keel, chine, and sheer shall be a fair curve within these tolerances, with no sudden changes in direction. The British Moth Boat Association moulded hull has a bow profile that satisfies Rule 5A requiring a "fair curve" and any boat built or modified to a similar bow profile similarly satisfies Rule 5a.
- (b) Measurement shall be relative to a measurement line set up horizontally, along the longitudinal centre line of the hull. The measurement at the bow shall be 490mm vertically from the point where the line of the deck meets the line of the hull. At the transom, the line shall be 380mm vertically from the mid-point of a line which passes through the points where the line of the deck meets the line of the hull at the sheer.
- (c) The measurement stations specified on the measurement form shall be set out on the measurement line by projecting forward from Station 0 as follows: Station 2 - 610mm, Station 4 - 1220mm, Station 6 - 1830mm, Station 8 - 2440mm, Station 9 - 2745mm, and Station 10 - 3050mm. Station 0 is the transverse plane which touches the aftermost point of the transom.
- (d) The overall length shall be measured along the measurement line from Station 0 to the aft side of the stem band, and shall not include any rubbing strip or G.R.P. overlap at the bow.
- (e) No part of the standing rigging or fittings may project more than 51mm outside the sheer line. No part of the hull may project more than 50mm from the surface of the outer skin.
- (f) The line of the sheer at the bow shall not have a radius of less than 300mm (i.e. in plan view). The centre of this radius shall be 303mm aft of the bow, and shall be on the centre line of the deck.
- (g) Aft of Station 8, the outer surface of the hull bottom panel shall fall within  $\pm 3$ mm of any straight line joining the keel to the chine, parallel to the frames. Forward of Station 8, the outer surface of the hull bottom panel shall be outside of any straight line joining the keel to the chine, parallel to the frames.



## BRITISH MOTH BOAT ASSOCIATION CLASS RULES

- (h) The point where the line of the chine meets the line of the sheer shall be not more than 3225mm and not less than 3125mm forward of Station 0, (measured along the centre line of the hull).

### 6) Deck Dimensions

- (a) The hull must be completely decked to at least 914mm astern of the aft side of the stem band or rubbing strip.
- (b) The mast shall be stepped on the centre line of the boat, in any position between 475mm and 762mm from the aft side of the stem band to the fore side of the mast.
- (a) Beam-crop (i.e. sheerline to crown of deck) at any position of the mast step shall not exceed 70mm positive. (i.e. the crown of the deck at this point must not be lower than the sheerline.)
- (b) Side decks must run aft from the aft side of the foredeck to the forward side of the transom or stern deck. Where such decking does not form a sealed compartment the minimum width of the side decks, projected onto a horizontal plane at the level of the sheerline, shall be 254mm, measured from the sheerline.
- (e) Side decking is to be everywhere outside an imaginary arc struck from the inside of the chine with a radius extending to the sheerline.
- (f) Side decking need not conform to the width and radius measurement rule when the hull is watertight and self-draining. For the purpose of the Rule a hull shall be considered watertight and self-draining where the whole of the hull decking is sealed and the cockpit area, except for a footwell not exceeding 0.13m<sup>2</sup> in plan area, is drained through transom scuttles or the centreboard slot.
- (g) Where a panel is fitted under the side deck for the purpose of forming a buoyancy tank, the panel is not subject to the radius restriction above, and the side deck may have a minimum projected width of 190mm, measured from the sheerline to the junction between deck and panel ignoring any overhang, provided that the maximum width of the cockpit, measured at the junction between cockpit floor and side panel does not exceed either 710mm or the maximum width measured at the top of the panel, whichever is the lesser.

### 7) Centreboard and Case

- (a) The position and width of the centreboard slot shall be within the tolerances specified in the measurement form.
- (b) The position of the centreboard bolt fore and aft shall be measured from the centre of the pivot bolt to a vertical through the front edge of the slot at the skin.
- (c) No longer applicable.



## BRITISH MOTH BOAT ASSOCIATION CLASS RULES

(d) The centreboard shall be made of wood, GRP or wood sheathed with GRP, of any profile provided that the leading edge will retract within the centreboard case when pivoted on the bolt at the position specified. A protective strip may be applied to the edges.

(c) The weight of the centreboard shall be cut or indelibly marked in a position visible when the centreboard is retracted into the case.

### 8) Rudder and Tiller

(a) The rudder blade shall be made of wood, GRP or wood sheathed with GRP, of any profile. A protective strip may be applied to the edges.

(b) The rudder assembly shall be mechanically restrained to prevent it becoming inadvertently detached from the boat.

### 9) Spars

(a) Spars shall be made of any material.

(b) The mast shall not rotate nor be permanently bent.

(c) The mast may be deck stepped or keel stepped. Measurements on a deck stepped mast shall be taken from the base of the mast, including any tenon, and when stepped the base of the mast shall not be raised more than 20mm above the crown of the deck.

(d) Keel stepped masts require to be marked permanently at the level of the crown of the deck as a datum for measurements.

(e) Masts must have shrouds fixed at or above 3.5m from the base of the mast, or the datum mark for keel stepped masts, and be a minimum of 2mm diameter wire or equivalent.

(d) The boom section shall pass through a ring of 102mm internal diameter.

### 10) Limits of Sail Plan

(a) Measurement bands of not less than 10mm width shall be painted or varnished over on the mast and boom in black or white to contrast with the mast or boom colour.

(b) The mast shall bear two such measurement bands, plus one additional upper band if it is to be used with a Mini-Moth sail. Figures in brackets refer to Mini-Moth sail. In the case of:-

(i) a deck stepped mast: distance from base to upper edge of lower band shall be 551mm and from base to lower edge of upper band 5898 (5096) mm.

(ii) a keel stepped mast: the bands shall be placed at 571mm from the crown of deck datum to the upper edge of the lower band and at 5918 (5116) mm from datum to lower edge of upper band.



## BRITISH MOTH BOAT ASSOCIATION CLASS RULES

- (c.) The boom shall have one such measurement band. The distance from the rear edge of the luff track (extended if necessary, but ignoring any local curvature) to near edge of the band shall be 2210mm.

### 11) Sail

*(See sail measurement form for sketch).*

- (a) The sail shall be made of flexible materials and may contain a window. The sail shall be capable of being stowed in a normal sailbag of 305mm diameter.
- (b) The sail shall be roped for a luff groove or track.
- c) The sail measurements shall include luff and foot ropes. (Figures in brackets are for Mini-Moth sail)
- (i) Straight line leech (i.e. straight distance between head and clew) shall not exceed 5537 (4782) mm.
- (ii) Half-height width measurement point to be found by folding the head to clew and marking the leech at the fold. The distance from the leech mark to the nearest point on the luff not to exceed 1640mm.
- (iii) Three quarter height width measurement point to be found by folding the head to the half-height leech mark and marking the leech at the fold. The distance from the leech mark to the nearest point on the luff not to exceed 1095mm.
- (iv) In the case of a loose-footed sail, the maximum distance between the head and the lower edge of the sail shall be 5478 (4665) mm.
- (v) The distance between the leading edge of the luff rope to the aft edge of the headboard and sail shall not exceed 120mm, measured at right angles to the aft side of the mast.
- (vi) Battens : the sail shall have three battens of maximum length 762mm, except that the top batten may be of any length, provided that it does not extend more than 100mm beyond the leech of the sail at any time.
- (vii) The centre lines of the batten pockets shall fall within plus or minus 25mm of the points dividing the leech from head to clew into four equal parts.
- (viii) After measurement in conformity with this rule, the measurer shall sign and date the sail indelibly in the vicinity of the tack.
- (ix) No part of the permissible roach extension above the three quarter height shall project more than 100mm beyond a straight line connecting the top aft edge of the head board and the three quarter leech mark. Note, roach extension must reduce to zero at the aft edge of the head board and the three quarter leech mark. Roach extension below the three quarter height is not allowed.

The intention is to limit further development of roach in this area, increasing complexity of sail construction and cost.

- (c) See also Rule 14(b).

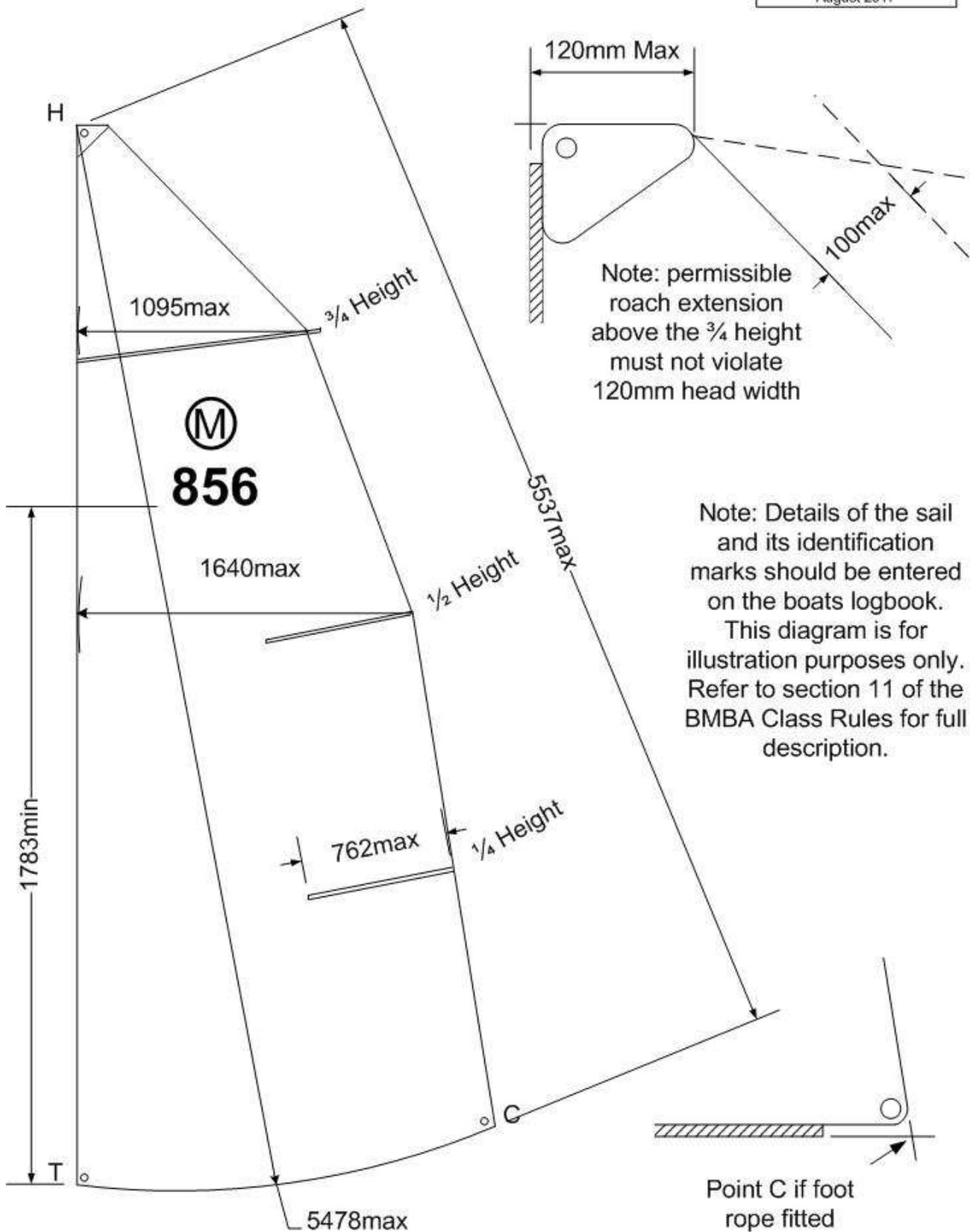
### Sail Measurement Plan



BRITISH MOTH BOAT ASSOCIATION  
CLASS RULES

# SAIL DIAGRAM

REVISED  
August 2017



Note: permissible roach extension above the  $\frac{3}{4}$  height must not violate 120mm head width

Note: Details of the sail and its identification marks should be entered on the boats logbook.  
This diagram is for illustration purposes only. Refer to section 11 of the BMBA Class Rules for full description.



## BRITISH MOTH BOAT ASSOCIATION CLASS RULES

### 12) Buoyancy requirements

- (a) The boat in sailing trim but less sail shall have the cockpit and open places filled with water and all self-draining devices closed. The boat shall then float roughly level fore and aft with a weight of not less than 65kg for 10 minutes.
- (b) The boat shall be tested with a minimum weight of 65kg for 10 minutes on each side, with the mast supported horizontally from its top end.
- (a) All bags shall remain firmly secured and show no signs of deflation. Built in buoyancy (including self-draining hulls) shall not take in more than 9 litres (approx 2 gallons) in all tanks during the test.
- (b) Compartments bounded by partial bulkheads shall not constitute built in buoyancy and the boat must be supported by other means, e.g. bags, foam, or built in buoyancy chambers.
- (e) All openings into buoyancy chambers shall be sealed with a proprietary watertight hatch cover. (Boats built before 1995 shall have unsuitable hatch covers sealed at the request of the Race Officer).

### 13) Other Provisions

### 14) Prohibitions

- (a) Trapezes and/or sliding seats, double luffed sails, double rudders, gybing centreplates and unstayed masts are not permitted. Additional streamlining, aerofoils, or lift enhancing devices on any portion of the mast or its fittings are prohibited.
- (b) Sails and hulls shall not carry advertising unless for a sponsored race or event and then only with the approval of the committee. Sail maker names and logos are to be no greater in size than a single area equivalent to 150mm x 150mm on each side of the sail and positioned at the tack. Class promotional material approved by the BMBA Committee is exempt from this rule.
- (c) Global positioning systems (GPS) and other positioning or velocity indicating devices which make the information available to the sailor whilst sailing, are not allowed. Electronic compasses and recording devices that are downloaded after the race are allowed.

### 15) Amendments

- 1990 Rule 11(a) Reference to sail being of woven material - deleted.
- 1991 Loose footed sail adopted as option, dimensions for small Mini-Moth sail laid down.
- 1992 Section 7a on measurement form, centre board slot width increased to 27mm.
- Addition to Rule 14, Additional aerofoils etc. on mast prohibited.
- 1993 Rule 9(c) Datum point for deck stepped masts changed to base of mast, and height above crown of deck measurement altered to compensate.
- Rule 10(b)(i) Height of black band measurements altered to compensate for new datum.
- 1994 Rule 12(e) Water-tight hatch covers introduced.
- 1995 Rule 12(a) Buoyancy test shall be conducted with self bailers *closed*.
- 1996 Rule 7(c) which in effect specified the material of centre board gaskets deleted as redundant.
- 1998 Rules 7 and 8 altered to allow for GRP foils.
- Rule 11 – removal of limit to size of window in sail



## BRITISH MOTH BOAT ASSOCIATION CLASS RULES

2000 Rule 12b will therefore be applied to all boats to demonstrate the ability of the boat to remain watertight in a capsized position.

Crew weight now to be 65kg.

Test duration now 10 minutes (each side)

2004 The lower age limit for veterans shall be 65 (changed from 55)

2005 Every boat shall carry a hand bailer and a paddle, and their provision shall be checked at each buoyancy test - deleted.

2008 Rule 9(a) – Spars shall be made of any material.

2011 Rule 9(e) - Masts must have shrouds fixed at or above 3.5m from the base of the mast, or the datum mark for keel stepped masts, and be a minimum of 2mm diameter wire or equivalent.

2012 Rule 11 (c) (ix) No part of the sail roach shall project more than 100mm beyond a straight line connecting the top aft edge of the head board and point Z. Note the 120mm headboard limit and 1095mm Z dimension still apply.

The intention is to limit further development of roach in this area, increasing complexity of sail construction and cost.

2013 Rule 8(b) Flotation requirement removed and reworded. The intent is to bring the rules in line with modern development of materials.

2013 Rule 14(b) adopted.

2013 Rule 14(c) adopted.

2013 The BMBA have adopted the RYA Charter and BMBA members must uphold its values.

The foregoing British Moth Class Rules are as agreed at the A.G.M. of August 2000 and modified at subsequent A.G.M.s. For all boats before Sail Number 780, except those that have been re-measured under Rule 1(b) and (c), reference should be made to the Class Rules dated August 1978.

2016 Rule 4 has been reworded The intent is to bring the rules in line with modern development of materials

2017 Rule 11 section (c.) (ii) and (iii) rewording of method of measuring half height and three quarters height

2017 Rule 11 section (c.) (ix) redefinition of permissible roach extension.



# BRITISH MOTH BOAT ASSOCIATION

## CLASS RULES

### CONSTITUTION OF THE BMBA

#### 1 Title, Membership and Management.

(a) The title shall be the "British Moth Boat Association" and membership shall be open to anyone acceptable to the Committee of Management on payment of the appropriate fee.

(b) The Committee of Management shall consist of the Chairman, Vice-Chairman, Secretary, Assistant Secretaries, Press Secretary, Treasurer, and one member elected by the above officers to represent each Sailing Club that has adopted the British Moth sailing boat. All such persons shall retire annually and shall also be eligible for re-election.

(c) No person shall remain on the committee for more than four consecutive years

#### 2 Objectives.

The objects of the Association shall be to:-

(a) Determine the Specification of the British Moth and to supply copies of the Specification together with blueprints by arrangement of the Designer, authorise Official Measurers and issue or withdraw Class Certificates.

(b) Register, re-register and transfer registration (on change of ownership) and keep the Register (Boat log book and history).

(c) Encourage building of new craft and development of the Class while protecting existing craft from becoming obsolete, and affect recognition of the Class by the R.Y.A.

(d) Organise and keep members informed of Class activities and organise, co-ordinate and keep records of competitions for the "Brent Cup" and other Trophies for Registered Craft.

(e) Adopt and uphold the values of the RYA Charter.

#### 3 Finance and Fees

(a) The funds of the Association shall be expended solely in the execution of the above objects. A balance sheet shall be prepared and presented by the Hon. Treasurer at the Annual General Meeting, or when demanded by a majority vote of the members. Two Hon. Auditors, who shall be elected annually and shall be eligible for re-election on annual retirement, shall certify that the balance sheet is a true representation of financial transactions during the year in accordance with the objects of the Association.

(b) The Trustees shall be the Committee of Management and on their behalf the Hon. Secretary and Treasurer shall receive and expend moneys. Amounts over £2.00 must be paid with a cheque signed by the Hon. Secretary and Treasurer.



## BRITISH MOTH BOAT ASSOCIATION CLASS RULES

- (c) The Funds of the Association shall be derived (exclusive of gift, donation or bounty) from annual Membership fees, payable before 31st of March in each year. Junior Membership shall cease when member attains his/her eighteenth birthday during the whole of the present year.

Registration Fees shall be charged for all boats when registered or re-registered, and on issue of Class Certificates.

Fees may be reviewed from time to time by the Committee and amended by agreement of an A.G.M.

- (d) Any member infringing RYA Charter Rule 69.1 "gross misconduct or bringing the class into disrepute" shall, if so decided by the BMBA Committee, have their membership temporarily or permanently withdrawn. A member under investigation may submit a written explanation to the Committee for consideration. A member is allowed a single opportunity to appeal against the decision; this may only take place at a General Meeting.

### **4 Meetings, Powers Etc.**

- (a) The Committee of Management shall have power to make such rulings and take such action as may be necessary, not inconsistent with this Constitution. They shall also have power to take legal advice or request to attend a meeting of the Committee of Management any expert opinion required in connection with the execution of the Objects as outlined in this Constitution, but such invited persons shall not be present whilst voting is in progress or when decisions are made.
- (b) At Meetings of the Committee of Management, five shall form a quorum. At all other meetings eleven shall form a quorum. A member necessarily absent, may hand his sealed observations to the Hon. Secretary or the elected Chairman who shall open them when the relevant item on the agenda is reached. Such practice shall not constitute attendance.
- (c) An Annual General Meeting shall take place each year, and all Members having paid current membership fees shall be informed by notice in writing by email or post, dated not less than fourteen days before the intended meeting. Other Meetings shall be called by the Committee of Management as and when necessary in the execution of 2. above. An Extraordinary Meeting (General) may be called at the signed request of not less than five members to the Hon. Secretary, who shall call the meeting in such a manner that each member shall receive fourteen days' notice, as for an Annual General Meeting.

Other Meetings shall be called by the Committee of Management as and when necessary in the execution of 2. above. An Extraordinary Meeting (General) may be called at the signed request of not less than five members to the Hon. Secretary, who shall call the meeting in such a manner that each member shall receive fourteen days notice, as for an Annual General Meeting



## BRITISH MOTH BOAT ASSOCIATION CLASS RULES

### 5 Amendments

1991 Reference to amount of annual subscription removed. Mechanism for altering fees added.

2005 Rule 13(a) deleted.

2013 Rule 2(e) RYA Charter adopted.

2013 Rule 3(d) introduced.

2016 Rule 4(c) Meetings, Powers Etc. amended

### 6 Addenda to Constitution (1970)

There shall be created a new class of Membership - Honorary Life member, upon the following conditions:-

- (i) Proposals for Honorary Life Membership shall be considered at the A.G.M. and nominees elected by simple majority.
- (ii) Any nominee shall have been a member of the Association for at least five years.
- (iii) Any nominee shall have given outstanding service to the Association.

Hon. Life Members 2001 are;

Morris Metcalf

Tom Cooper

John Schilling

Stuart & Kate Hutchinson

Cyril Hill

Brian Skinner

Roger Wollin\*

John Burford