

INTERNATIONAL MOTH CLASS RULES



Authority: International Sailing Federation
Ariadne House, Town Quay, Southampton, Hampshire, SO14 2AQ.
United Kingdom

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SECTION A: ADMINISTRATION

1 GENERAL

- 1.1 The International Moth is a single-handed development class boat, and these rules are **open class rules**. The intention of these rules is to give the designer and builder the fullest liberty in design and construction, within these rules to develop and produce faster boats.
- 1.2 The official language of the class is English and in the event of a dispute over translation, the English text shall prevail.
- 1.3 These rules are complementary to the measurement form. The International Moth Class Association (IMCA) may issue interpretations, which must be ratified by the ISAF before becoming effective.
- 1.4 In the event of discrepancy between the rules and the measurement form, the matter shall be referred to the IMCA and ISAF.
- 1.5 In countries where there is no National Authority, or where the National Authority does not wish to administer the class, its function as stated in the rules shall be carried out by IMCA or its delegated representatives (National Associations).
- 1.6 Neither the ISAF or the IMCA accept legal responsibility in respect of the rules, or any claim rising therefrom.

2 INTERNATIONAL CLASS FEE

- 2.1 The International Class Fee (ICF) shall be made up of three parts:
Part A due to ISAF which is set by agreement between ISAF and the IMCA World Secretary based on 0.5% of the average cost of a new boat ready to **sail**, taken over the World fleets whether made privately or professionally.
Part B due to IMCA set at each IMCA Annual General Meeting (AGM).
Part C due to the National Associations to be set at each IMCA AGM.
- 2.2 The IMCA is responsible for the collection of the ICF and the distribution of ICF plaques on the above basis.
- 2.3 The IMCA may delegate its responsibility to collect the ICF and issue plaques to National Associations.
- 2.4 The ICF is payable by the builder on each boat built whether or not it is subsequently measured and registered. Payment shall be made directly to the IMCA or its delegated representative (National Association), which shall issue an official ICF plaque. The ICF plaque shall be delivered by the builder to the owner upon delivery of the boat.

- 2.5 ISAF shall sell the IMCA official ICF plaques at the rate set out in rule 2.1 (Part A) above, to the IMCA which shall sell them at the rate set out in rule 2.1 (Part B) above, to the National Authority or its delegated representative (National Association). The purchase price in each case represents the proportion of the ICF due to the ISAF and the IMCA. The National Authority or its delegated representative (National Association) may charge an additional sum (including the amount in rule 2.1 (Part C), but not exceeding the administration cost of carrying out this function.

3 REGISTRATION AND MEASUREMENT CERTIFICATE

- 3.1 No boat is permitted to race unless it has a valid measurement certificate issued by the national authority or its delegated representative (National Association).
- 3.2 Each competitor shall be a fully paid-up member of the relevant IMCA National Association or a direct member of IMCA as per the IMCA Constitution.
- 3.3 The sail number shall be the same number as the boat's ICF plaque preceded by national letters, except that the first ten competitors in the most recent World Championship are permitted to carry their overall finishing position as their sail number.
- 3.4 A National Authority or its delegated representative shall only issue a measurement certificate on receipt of the completed measurement form and evidence that the ICF has been paid.

3.5 Certification Control

3.5.1 Fundamental measurement

- a). **Fundamental measurement** shall be performed in accordance with class rule 4
- b). The class measurement form shall be used to record the results of **fundamental measurement**.
- c). The owner shall be responsible to ensure that **fundamental measurement** has been performed.

3.5.2 Certification

- a). The owner shall apply to the Certification Authority for a Certificate by enclosing the ICF plaque number, and the completed measurement form.
- b). The Certification Authority shall record the ICF plaque number and other details on the measurement form.
- 3.6 It is the competitor's responsibility to ensure that their boat, **spars, sails** and equipment comply with the rules when racing. Alterations and replacement shall be measured, when relevant, by a measurer recognised by the National Authority or its delegated representative (National Association), who will, if necessary, endorse the measurement certificate accordingly, and shall notify the National Authority or its delegated representative where this would apply.
- 3.7 Notwithstanding anything contained in these rules, ISAF or the National Authority or its delegated representative (National Association) shall have the power to refuse to grant a certificate to, or withdraw a certificate from any boat.

3.8 The IMCA shall obtain at regular intervals from each National Authority or its delegated representative (National Association) details of measurement certificates issued.

4 MEASUREMENT

4.1 Only a measurer officially recognised by the National Authority or its delegated representative shall measure a boat, its **spars**, **sails** and equipment. The measurer shall sign the declaration form that the boat complies with the class rules.

4.2 The measurer shall report on the measurement form anything that the measurer may consider to be unusual or to depart from the intended nature of the boat or to be against the general interest of the class and a certificate may be refused, even if the specific requirements of the class are satisfied.

4.3 A measurer shall not measure a boat, **spars** or equipment owned, designed or built by the measurer, or in which the measurer is otherwise an interested party or has a vested interest.

4.4 New or substantially altered **sails** shall be measured by a measurer who shall stamp or sign and date the **sail** near the tack. The details shall be recorded on the certificate and the entry signed by the measurer or secretary of the National Authority or its delegated representative (National Association).

4.5 All boats, **spars**, **sails** and equipment shall be subject to re-measurement at the discretion of a race committee or the National Authority or its delegated representative (National Association).

SECTION B: SPECIFICATION OF AN INTERNATIONAL MOTH

5 IDENTIFICATION MARKS

5.1 The class insignia shall be a representation of a Moth and shall conform in shape and size to the pattern held by the ISAF and IMCA. The colour of the insignia is not restricted, except that Gold insignia are reserved for the optional use by current and former World Champions.

5.2 The ICF plaque shall be fixed to the **hull** near the transom or on the forward vertical bulkhead. Should this plaque come off or need to be removed at a later date, this shall not invalidate the measurement certificate but the ICF plaque number shall then be permanently engraved on the **hull** near the transom.

5.3 The sail number, national letters and class insignia on the **sail** shall conform with World Sailing RRS Appendix G, except that the minimum height shall be 300mm and the minimum space between characters and from the edge of the **sail** shall be 60mm. This changes rule G1.2(b). **Sails** certified prior to the effective date of these rules shall meet the sail number dimensional requirements in force when the **sail** underwent certification control.

6 HULL

- 6.1 The overall length of the **hull**, excluding removable **rudder fittings** and **stem fittings** shall not exceed 3355mm measured between perpendiculars with **hull** level transversely and waterline horizontal.
- 6.1.1 Mechanical fasteners or similar fittings that are permanently attached to the **hull** and used for the sole purpose of attaching the **rudder fittings** or **stem fittings** to the **hull** shall be disregarded for the purpose of this rule.
- 6.1.2 **Rudder fittings** and **stem fittings** outside the overall **hull** length, including the gantry shall be secured to the **hull** with mechanical fasteners only, and shall be readily removable from the **hull**. For boats that completed **fundamental measurement** prior to 22 March 2013, **rudder fittings** and **stem fittings** may be bonded onto the **hull**, as long as they satisfy all other rules.
- 6.1.3 No attempt at increasing waterline length shall be made by fairings comprising part of, or attached to **rudder fittings** or **stem fittings**. **Rudder fittings** and fairings that are a fair extension of the **hull** surface or extend beyond the fair extension of the **hull** surface are not permitted. Unless otherwise permitted, the distance between the **hull** and **any rudder fittings** and fairings shall be not less than 30mm when viewed in profile perpendicular to the **hull** centreplane. The minimum distance between the **hull** and any **rudder fittings** or fairings shall not apply;
- a) in way of the structural connection points to the **hull**, and
 - b) greater than 200mm from a plane parallel with the fair extension of the **hull** on the centreplane perpendicular to the **hull** centreplane.
- 6.1.4 Any fittings or fairings attached to the **hull**, except for the **rudder fittings** and **stem fittings** shall be considered part of the **hull**.
- 6.1.5 If the following extend more than 500 mm beyond the limits of the overall length of the **hull**, the excess shall be added to the measured length of the **hull**.
- a) **rudder fittings** and/or **rudder** fitting attachments throughout their full range of movement (excluding the **rudder**); or
 - b) **stem fittings** and/or stem fitting attachments throughout their full range of movement.
- 6.2 The overall beam shall not exceed 2250 mm.
- 6.3 Hollows
- 6.3.1 There shall be no visible air gap dividing the boat longitudinally throughout its length when viewed from fore or aft.
- 6.3.2 Below the **static waterplane** and within the overall length of the **hull**, there shall be no hollow in the **hull** more than 75 mm in any section closer than 2700 mm from the aft perpendicular as described in rule 6.1. The reference line for this hollow shall be a string line stretched tightly around the underside of the **hull** from points on the static waterline either side of the **hull**.

- 6.3.3 Any **foil**, excluding the **rudder** and any **rudder** mounted **foil**, shall protrude out of the **hull** from below the **static waterplane**.

7 BUOYANCY

- 7.1 Boats shall not have less than two separate buoyancy tanks or bags attached firmly to the **hull** which together must be sufficient to float the boat's own weight plus 75 kg, approximately level when capsized or full of water, and which, with any one tank or bag flooded, must be sufficient to float the boat's own weight plus 10 kg. If a measurer cannot ascertain compliance with this Rule by visual inspection, the measurer may undertake a buoyancy test.

8 SPARS

- 8.1 The overall length of **mast spars** shall not exceed 6250 mm.
- 8.2 Any **boom spar** section, or mast part below 5185 mm from the top of the mast shall be capable of passing through a ring of 90 mm internal diameter, excluding fittings.
- 8.3 The area of the mast from the **top point** to a point measuring 5185 mm below the **top point** shall be added to the calculated total **sail** area in accordance with rule 9.1. The **mast spar** area is to be measured under rule 9.3.

9 SAILS

- 9.1 The boat shall carry only one **sail** when racing, with the total measured area of the **rig** excluding fittings being not greater than 8.25m². For the purpose of this rule, only the mast area excluding fittings within 5185mm from the **top point** shall be measured. Mast area enclosed by the **sail** shall not be added to the calculated total **sail** area.
- 9.2 The **sail** shall not extend more than 5185 mm from the **throat point**.
- 9.3 **Sail** area shall be measured by triangulation in the case of **soft sails** or via the half girth method for masts and **wing sails** or wing masts in accordance with the IMCA Measurement Manual.
- 9.4 All **sail** area calculations are to three decimal places, rounded to two at the total area.
- 9.5 In line with 9.1 (one **sail**), **wing sails** if used shall be of a single element configuration only. No slots shall be visible in the section whilst sailing.
- 9.6 No part of the **sail** may project above a reference line passing through the **throat point** drawn at 110° from the **luff**.

10 CREW

- 10.1 There shall only be one person on board when racing.
- 10.2 The righting moment of the crew weight shall only be transferred to the **sail** through the **hull**, rigging or mainsheet system, in which case it shall include blocks attached to the **hull**. Hiking straps are permitted but shall only be attached to the **hull**.

11 PROHIBITIONS

- 11.1 Moving or detachable seats and trapezes are prohibited.

- 11.2 Catamaran or multihull configurations are prohibited. Sailing any type of permitted **hull** design consistently as a catamaran or multihull is also prohibited.

12 ALTERATIONS TO THE RACING RULES OF SAILING

- 12.1 RRS 42.3(c) is amended to read:
When surfing (rapidly accelerating down a wave), foiling (sailing with the **hull** clear of the water due to the effect of hydrofoils) or planing is possible, the boat's crew may pump the **sail** in order to initiate surfing, foiling or planing, but only twice for each wave or gust of wind or twice just after having completed a tack or a gybe. Rapid and/or repetitive body movements that exert force upon the **hull** for the specific purpose of promoting foiling or pumping of the **sail** are prohibited.
- 12.2 In alteration to RRS 52, only remote controls using stored power are prohibited. The use of commercially available small springs, shockcord, and similar devices are permitted in remote controls.

APPENDIX A - DEFINITIONS

Words in bold in the main text but not listed below refer to the definition in the ISAF Equipment Rules of Sailing.

1. **Static waterplane** The plane containing the static waterline of the **hull** is determined with the boat fully equipped, afloat and upright without crew.
2. **Hull** Includes a single buoyant **hull**, and **hiking racks**, which must be rigidly connected while racing. Excludes **rudder**, **rudder fittings**, **stem fittings**, centreboard, and other **foils**.
3. **Hiking racks** Structures which are used only to support the crew or **rig** outboard of the buoyant **hull**. May include buoyant components which are not normally immersed.
4. **Rudder** A steering device mounted to the **hull**, or **rudder fittings**.
5. **Foil** Any centreboard, fin, hydrofoil used for lift, stability or lateral resistance.
6. **Rudder fittings** Non buoyant structure used solely to support the **rudder**.
7. **Stem fittings** A device to connect an object pertaining to **rig** or **foils** to the **hull**.
8. **Rig** The **sail** and any structure to support or control the **sail**.
9. **Sail** An item of equipment attached to the **rig**, used to propel the boat. May consist of a soft **sail** set on **spars** or a **wing sail**.
10. **Spars** Any rigid elements included in the **rig** to support the **sail**.
11. **Soft Sail** A **sail** where the body of the **sail** is capable of being folded in any direction without damaging any ply other than by creasing.
12. **Wing sail** A rigid or semi rigid structure (encompassing a traditional **mast** and mainsail structure), similar to an aircraft wing orientated to provide propulsion from the wind.

