



## Martin 242 Class Rules

Amended by IMCA January 26, 2011 and in effect March 1, 2011

### 1. Intent

The M242 was created as a strict one design class. The intent is that all boats will be equal and that competition will be a true test of the crews, not boats and equipment. Any effort to alter the boat or its rigging, except as specifically permitted by these rules, is prohibited. Contact the Fleet Measurer before making any modifications.

#### 1.1 Measurement Certificate

All boats shall have a valid **Measurement Certificate**.

### 2. Definitions

#### 2.1 Builder

"**Builder**" means any manufacturer authorized by Martin Yachts Ltd. to produce the Martin 242 and accepted by the International Martin 242 Class Association ("IMCA").

#### 2.2 Mast Datum

The centerline of the hole that the headstay attaches to is the "**Mast Datum**". The mast point that the headstay attaches to is also known as the mast lug or a mast ear.

#### 2.3 Plinth

The raised smooth flat surface immediately surrounding the mast boot collar is the "**Plinth**".

#### 2.4 Measurement Certificate

"**Measurement Certificate**" is that certificate which states whether or not a boat, its sails, rigging, fittings, and weight conform to the Class Rules. Variances to the Class Rules, special dispensations from Fleet Measurers, or IMCA waivers, shall be noted on the Measurement Certificate. Measurement Certificates are issued, and remain valid, in accordance with the IMCA Constitution, Part 6.

### 3. Measurement and Specifications

#### 3.1 Keel and Rudder

Except as provided in 3.1.1, all keels and rudders shall conform to the measurements in Appendix B of these rules.

- 3.1.1 Boats with keels and rudders that do not meet these measurements shall apply for dispensation from IMCA through the Fleet Measurer. Dispensation shall be contingent upon the establishment that no modifications have ever been undertaken to alter the keel or rudder



in such a way as to move its measurements or characteristics away from the Appendix B specifications.

- 3.1.2 The sections and profiles of the keel and rudder may only be altered to comply with Appendix B, and this includes repairing or fairing of the keel or rudder.
- 3.1.3 Keel Position: The keel shall be located so that the leading edge is 4470mm (14.67 feet) +/- 25mm (.08 feet) from the intersection of the transom and the hull surfaces measured along the hull surface at the centerline.
- 3.1.4 Competitors should discuss pending changes with a Fleet Measurer prior to any modifications of a keel or rudder.

### 3.2 Spars and Rigging

The spars and standing rigging as supplied by the **Builder** may not be altered in any way except as specifically allowed by CR 3.2. All measurements in Section 3.2 have a tolerance of +/- 6mm (.02 feet) unless otherwise specified.

- 3.2.1 The length of the mast, not including mast step, is 11201mm (36.75 feet). When stepped, the mast must comply with 3.2.2 and 3.2.3.
- 3.2.2 The **Upper Point** shall be 2057mm (6.75 feet) from the **Mast Datum** as measured along the front face of the mast. The **Lower Point** shall be a maximum of 9144mm (30 feet) from the **Upper Point**. **Limit Marks** must be clearly visible on the mast and boom, and shall be a contrasting color to the spar color. The **Limit Mark Width** shall be a minimum of 19mm (.06 feet).
- 3.2.3 The distance from the **Lower Point** to the **Plinth**, when measured along the front centerline of the mast, shall be 749mm (2.46 feet). If the mast has been shortened (due to age or damage), or if the mast step has become compressed over time, the lost length *must* be made up by raising the mast step by an equivalent amount.
- 3.2.4 The steaming/bow light may be removed from the mast.
- 3.2.5 Internal or external sleeving material for mast repair shall be no longer than necessary to effect the repair and in no case shall exceed 762mm (2.5 feet). Broken mast repairs must be approved by the Fleet Measurer. Sleeving the mast for any purpose other than repairs is not permitted.
- 3.2.6 **Outer Point Distance** shall be 3658mm (12 feet).
- 3.2.7 Spinnaker pole shall be 2515mm (8.25 feet) long overall including fittings. Its tube shall be untapered aluminum with an outside diameter of no less than 51mm (.17 feet).
- 3.2.8 The method of attaching the pole lift and downhaul to the spinnaker pole is optional.
- 3.2.9 A single spinnaker ring shall be 305mm (1 foot) +/- 25mm (.08 feet) above the upper face of the lower band. Outside ring diameter may be a maximum of 57mm (.19 feet).
- 3.2.10 Spreader bracket horizontal mid-point height shall be 3505mm (11.5 feet) from the **Mast Datum**.



- 3.2.11 Transverse length is measured as the distance between the outside edge of both upper shrouds on the upper edge of each spreader, and is 1486 mm (4.88 feet). Fore and aft length is measured as the distance from the aft face of the spar to a line intersecting the aft edge of both shrouds, and is 260mm (.85 feet).
- 3.2.12 The **Spinnaker Hoist Height** shall be not more than 229mm (.75 feet) above the **Mast Datum**. If a spinnaker halyard fairlead is used, it shall not project further than 51mm (.17 feet) forward from the forward face of the mast.
- 3.2.13 Headstay rule: The headstay span shall not exceed **8442mm (27.7 feet or 27'-8-3/8")**, +/- **13mm (.04 feet or 1/2")**, measured from the **Mast Datum** to a point in the top face of the toerail 25mm (.08 feet) aft of its forward ending.
- 3.2.14 The distance from the top face of the toerail to the jib tack point shall not be less than 108mm (.035 feet) +/- 6mm (.02 feet) measured parallel to the forestay.
- 3.2.15 The mast may be blocked at deck level.
- 3.2.16 The backstay and its tackle must remain secured in its normal position while racing. The backstay may be led inside or outside the stern pulpit.
- 3.2.17 A buggy whip may be installed at either the masthead or stern pulpit to facilitate the passage of the mainsail leech across the backstay during tacking and gybing. It may not be used for any other purpose.
- 3.2.18 All standing rigging with the exception of the backstay shall be 1x19 strand, 4mm (.013 feet) diameter wire. Dyform (compacted strand) is prohibited. The backstay may be made of 1x19 wire or synthetic material of no less than 3mm (.01 feet) diameter.
- 3.2.19 There is no restriction on the type of shroud turnbuckle.
- 3.2.20 Altering shroud tension: during any day's racing the tension on the lower and upper shrouds may not be adjusted after the preparatory gun for the first race of the day. Any such adjustments shall be subject to protest and disqualification unless the skipper can prove to the jury that such adjustment was necessary to prevent damage to the boat or spars.

### **3.3 Fittings and Lines**

The diameter, length, and material of all running rigging is not restricted.

- 3.3.1 Builder supplied hardware may be replaced provided the mechanical advantage of the system is not increased and the locations of the system and its cleat do not materially change.
- 3.3.1.1 Mainsheet – 4:1 maximum with a single mainsheet cleat
- 3.3.1.2 Traveler – 2:1 maximum with a single cleat at each end of the traveler on the seat back. Cleat eyestrap fairleads are permissible.
- 3.3.1.3 Outhaul – 6:1 maximum. A single turning block may be added to the boom to change the direction of the outhaul line. A fairlead may be installed on the boom aft of the outhaul cleat. The type of cleat, block and fairlead and their locations on the boom are optional.
- 3.3.1.4 Main Cunningham – 4:1 maximum



- 3.3.1.5 Boom Vang – 12:1 maximum. A second fixed cam cleat on the cabin back and attendant blocks may be added to allow cleating on both sides of the cabin top.
- 3.3.1.6 Backstay – 6:1 maximum. Cleat located on the lower backstay tackle block
- 3.3.1.7 Jib Cunningham/Halyard Adjuster – 4:1 maximum
- 3.3.1.8 Jib Sheets - 2:1 maximum
- 3.3.2 Provision for storing the spinnaker halyard, bag and the pole may be added providing this hardware is used for no other purpose.
- 3.3.3 Lifelines and stanchions may be removed for class racing unless otherwise specified in the Notice of Race or Race Instructions.
- 3.3.4 An additional fixed jib fairlead may be added on each side within 508mm (1.67 feet) of the winches.
- 3.3.5 An additional cleat each side may be added within 508mm (1.67 feet) of the winches.
- 3.3.6 Mainsail reef points are optional. Reef points must be a minimum of 1219mm (4 feet) from the foot of the sail. A second set of reef points may be added above the first. The addition of any cleats and leads for the slab reefing is optional provided this equipment is used for no other purpose.
- 3.3.7 Jib luff tensioning devices are permitted, provided they are not led aft of the furling drum nor prevent furling. Zipper luff jibs with halyards and jib cunninghams are permitted.
- 3.3.8 A single line, cleat and turning block, may be installed on each side for combination barber hauler/tweaker. Location and means of attachment are optional.
- 3.3.9 Spinnaker ratchet blocks shall be located within 76mm (.25 feet) of the toerail, aft of the forward chainplate U bolt and ahead of the mainsheet traveler track.
- 3.3.10 Boats must be equipped with bow and stern pulpits.
- 3.3.11 Central mainsheet cleating - the mainsheet system may be altered to allow the mainsheet cleat to be fixed to the traveler track using a swivel cam.
- 3.3.12 A furling line fairlead may be installed on the deck surface within 610mm (2 feet) of the furling drum provided it is used for no other purpose.
- 3.3.13 A main halyard stopper may be located forward of the starboard winch.
- 3.3.14 The bow or stern mooring cleats may be replaced with alternative suitable mooring points.
- 3.3.15 Non-skid heel bars (not a hiking device) are allowed on the horizontal seat within 76mm (.25 feet) of the inboard edge of the seat. They may be up to 76mm (.25 feet) high. No depression in the molded seat surface is permitted. The clearance between the seat surface and underside of any elevated heel rail shall not exceed 51mm (.17 feet). No equipment may be attached to them.
- 3.3.16 Finger grips may be installed on the seat back. No part other than the fastenings may pierce the seat back surface. No equipment may be attached to them. They may be up to 18mm (.06 feet) high measured at right angles to the surface they are mounted on.



### **3.4 Hull and Interior**

Additions to personalize the interior, which do not improve performance, are allowed as long as the structural integrity of the boat is not impaired.

- 3.4.1 All bunkboards and cushions may be removed.
- 3.4.2 The main interior bulkhead attachment points under the hull liner may be reinforced with wood and fiberglass bonding.
- 3.4.3 The bunkboard immediately aft of the mast may be permanently secured in place. The bunkboard shall be made from 12.7mm (.04 feet) medium density overlay, plywood or equivalent.
- 3.4.4 Keel viewing windows are permitted in the vicinity of the keel provided the installation does not impair the structural integrity of the boat.
- 3.4.5 The cockpit drains may be altered or replaced provided the watertight integrity of the boat and the effectiveness of the drains is not diminished.

### **3.5 Equipment and Instruments**

Sailing instruments and navigation equipment such as the following are not restricted: mechanical masthead wind indicator, tell-tales, electronic or mechanical compasses, depth sounder, knot meter, log, GPS, VHF. Aside from the mast-head wind indicator, there is no restriction on the location of any of the instruments.

- 3.5.1 Boats shall comply with national boating safety standards. The Notice of Race or Sailing Instructions may specify additional radio, communication, or safety equipment.

### **3.6 Sails**

- 3.6.1 All sails must meet the measurement criteria set out in Appendix A. Only 3 sails from a yacht's Sail Register may be used during any day's racing - main, jib, and spinnaker. A sail may be replaced, including during a race, if it is significantly damaged. Proof of reasonable damage must exist.
- 3.6.2 Each yacht is entitled to add two sails per calendar year to her Sail Register. A sail credit may be banked such that a maximum of 3 sails can be purchased in a calendar year.
- 3.6.3 Sail Register - each yacht shall maintain a Sail Register indicating the serial number and purchase date for each sail. All Sails listed in this Register may be used by that yacht in any class event subject to Rule 3.6.1 (3 sails per race). All sails purchased and delivered after January 1, 2008 shall have a Martin 242 Class Certification Mark either sewn or riveted or permanently fastened within an 18" radius of the starboard tack of a jib and mainsail and the starboard clew of a spinnaker. The identifier shall be numbered and shall be obtained from the fleet measurer by the sailmaker. The sailmaker shall attach the identifier to the sail prior to delivery of the sail and in doing so is certifying that he/she has measured the sail and that it conforms to the IMCA rules.
- 3.6.4 Used boats - Rule 3.6.1 shall apply to all yachts except as follows: Upon a change of ownership a yacht will retain any accrued sail entitlements as per Rule 3.6.1. Within two months of a change of ownership the new owner may elect to eliminate any sails less than 24



months old from the yacht's Sail Register (See Rule 3.6.3). Elimination of these sails will entitle the yacht to additional sail entitlements up to a maximum of three as provided under Rule 3.6.1. Any sails eliminated may be reinstated as allowed under Rule 3.6.5.

- 3.6.5 Used Sails - Any yacht may add used sails to the Sail Register at any time without affecting their sail entitlements provided that the sails are more than 24 months old. Used sails less than 24 months old will be treated as new sails for the purpose of sail entitlements.
- 3.6.6 Dispensations - Any yacht may apply to the class Technical Committee for a dispensation from the requirements of Rule 3.6 if that yacht believes that due to some special situation, these rules are not equitable for the yacht. The decision of the technical committee shall be binding and shall form part of the yacht's Sail Register.
- 3.6.7 An owner whose boat is unavailable may apply to the Fleet Executive for permission to temporarily transfer the sail inventory of his boat to another boat in order to continue racing as he would have with his own boat, until such time as his boat becomes available. This transfer will not affect, or be limited by, the sail credits of the boats involved. Permission will be contingent upon the establishment that the owner has not gained a significant advantage in doing so.
  - 3.6.8.1 For the purpose of section 3.6.2 reference to a yacht's Sail Register shall also include a registered skipper's Sail Register.
  - 3.6.8.2 A registered skipper shall be a member with a Sail Register. There shall be no co-mingling of sail credits under 3.6.2 between registered skippers.
  - 3.6.8.3 Notwithstanding 3.6.1, a bona fide registered charterer, being a registered skipper, may co-mingle sails with the chartered yacht's Sail Register, but not with another registered skipper's Sail Register.
  - 3.6.8.4 In a "Team" there can only be one registered skipper whose sail credits are applicable to the "Team" in any one calendar year.
  - 3.6.8.5 In order for a registered yacht or a registered skipper to score for any Fleet Series the two (2) primary sail numbers must match - i.e. - Main Sail and Spinnaker numbers must match.

### **3.7. Weight and Measurement Requirements**

- 3.7.1 The empty weight shall not be less than 1123kg (2475 pounds). The empty weight includes the mast, boom, and any battery or equipment installed in compliance with CR 3.7.2, and all fittings, standing and running rigging, with the exception of jib sheets, spinnaker sheets/guys, and tweekers. The empty weight excludes any other items not screwed onto or permanently fixed to the boat, for example, sails, spinnaker pole, bunk boards, cushions, winch handles, flares, safety gear, fire extinguisher, engine and bracket, and other miscellaneous equipment. The boat shall be clean and dry. If a compass is mounted on the removable plate covering the lifting strap hole, it may be counted as part of the boat weight.
- 3.7.2 A yacht may include in the basic boat weight any gear (including a battery) provided that:
  - 3.7.2.1 It does not infringe on another class rule;
  - 3.7.2.2 It is placed in accordance with 3.7.3;



- 3.7.2.3 It is fastened in place;
- 3.7.2.4 It is listed on the Measurement Certificate, and;
- 3.7.2.5 Any battery included in the boat weight per CR 3.7.1. shall be permanently installed and be not less than Group 24 in size.
- 3.7.3 Corrector weights shall be added to bring boats to the minimum empty weight. Placement of corrector weights shall be affixed outside the cabin sole such that a minimum of 50% and a maximum of 70% of the required weight is aft of the aft bulkhead, and the remainder forward of the forward wooden bulkheads. The weights shall be visible for inspection, marked as to the individual weight amounts in pounds or kilograms, and listed on the Measurement Certificate.
- 3.7.4.1 Crew weight cannot exceed a total of 386kg (850 pounds).
- 3.7.4.2 Crews shall only be weighed during the registration period prior to racing. Re-weighing shall only take place if a valid protest shows the pre-race weights were false.
- 3.7.4.3 During an IMCA sanctioned event, substitution of crew members or changing the number of crew members onboard a boat is not permitted during the event without written approval of the protest committee. Requests for crew change by competitors under this rule must be made in writing to the protest committee as soon as reasonably possible. The rulings of the protest committee under this rule will be final and shall be based on receipt of written evidence which demonstrates a compelling reason why a particular crew member may not continue competing in the series without hardship.
- 3.7.5 The rudder and shaft shall weigh a minimum of 18.1kg (40lbs). If it weighs less, corrector weight shall be securely fastened to the rudder tube.
- 3.7.6 Dispensations - Any boat may apply to the Fleet Measurer for a dispensation from the requirement of Rule 3.7.3 if that boat believes that due to some special situation, the rule is not equitable for the boat. The decision of the Fleet Measurer shall be binding and be listed on the Measurement Certificate.
- 3.7.7 All yachts must carry an outboard engine with a suitable bracket. If the engine and bracket together weigh less than 13.6kg (30lbs), corrector weight shall be added to either the motor or the bracket. Fuel may not be counted as part of the engine weight calculation.
- 3.7.8 Keel and rudder work, other than minor painting and sanding invalidates the **Measurement Certificate**, however, only the modified foil(s) need to be measured to revalidate the **Measurement Certificate**. Revalidation does not extend the life of a **Measurement Certificate**.
- 3.7.9 **Measurement Certificate** Challenge: Should a member of the fleet believe that another boat is not in compliance with the class rules, that member may demand a re-measurement of the boat. To make a formal challenge, the challenger shall deposit a \$50 re-measurement fee with the Class Measurer. If the boat is found to be in compliance with its **Measurement Certificate** the challenger forfeits the \$50. If the boat is found not in compliance, the boat(s) owner shall pay the \$50 re-measurement fee and the current **Measurement Certificate** will be invalid. The challenger will be refunded the \$50 re-measurement deposit. The owner of the boat not in compliance will correct the violation(s) and have the boat re-measured. When the



boat is found to be in compliance, a new **Measurement Certificate** will be issued. Any boat found not in compliance can be stripped of any titles or points it may have earned while sailing the boat with an invalid **Measurement Certificate**.

3.7.10 The maximum weight of the keel shall be 413kg (910 pounds).

#### **4. Hiking**

Droop hiking is not permitted. Legs and thighs shall be kept inside the boat.

#### **5. Enforcement**

In any Class event, the Race Chairperson may require examination of any boat for adherence to the Class Rules as outlined above. Boats sailing in a designated "One-Design" event without a valid Measurement Certificate are subject to protest under ISAF rules.

#### **6. Waivers**

When a change to the Rules results in a boat being put out of the Class, that boat may apply for a waiver from IMCA.

#### **7. Eligibility**

In championship events recognized by IMCA, at least the helmsperson of each boat shall be a member in good standing of a recognized M242 fleet. In all other events at least one member of the crew of each boat shall be a member in good standing of a recognized M242 fleet.



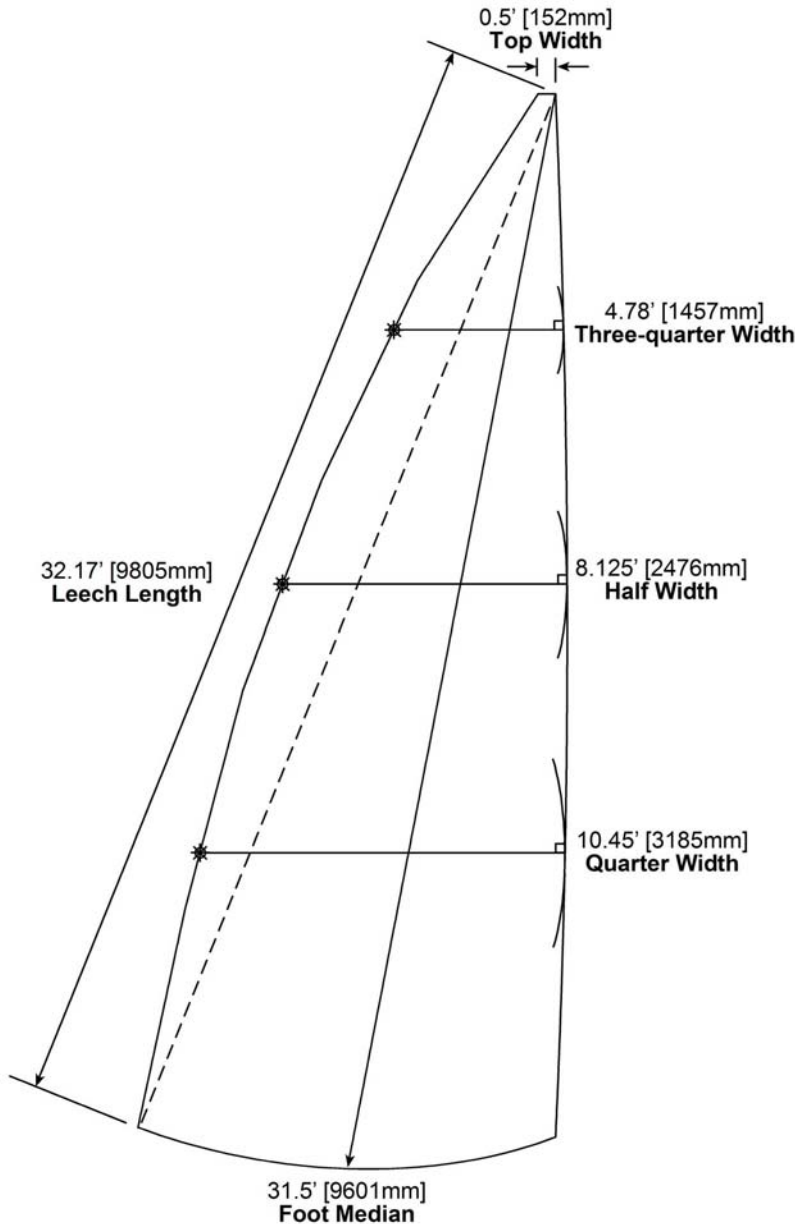
**Appendix A –Sail Measurement**

Sail measurements follow for:

- Mainsail
- Jib
- Spinnaker

See rule **3.5 Sails** governing the use and purchase of sails.

Appendix A – Sail Measurement - **M242 Mainsail Specifications**



1. The mainsail shall conform to, and be measured in accordance with, the current ISAF Equipment Rules of Sailing.

2. All measurements are maximums unless otherwise noted.

3. **Leech Length:** 32.17' (9805mm), **Top Width:** 0.5' (152mm), **Foot Median:** 31.5' (9601mm), **Quarter Width:** 10.45' (3185mm), **Half Width:** 8.125' (2476mm), **Three-Quarter Width:** 4.78' (1457mm).

4. Reef points shall be optional. Any reef points must be a minimum of 4.0' (1219mm) above the adjacent foot.

5. Battens: There shall be 4 battens. The battens shall be equally spaced along the leech. The top 2 battens may be any length. The bottom battens shall not exceed 4.0' (1219mm).

6. Windows are permitted.

7. The mainsail shall have the class insignia located on both sides between the two upper battens. The insignia shall be red with black numbers.

8. Numbers: the mainsail shall have class sail numbers or other numbers accepted by the applicable regatta organizing authority.

9. The minimum weight of the mainsail excluding battens shall be 14 lbs (6.35 kg). Note: Components or materials that are not a functional part of the mainsail shall not be included in the minimum mainsail weight. The items listed herewith which could have the effect of increasing the weight of a **sail** and are not required for the normal functioning of the **sail** are prohibited: any **sail ply**, any **sail reinforcement**, and any sail hardware

and other items not required for normal functioning of the **sail**.

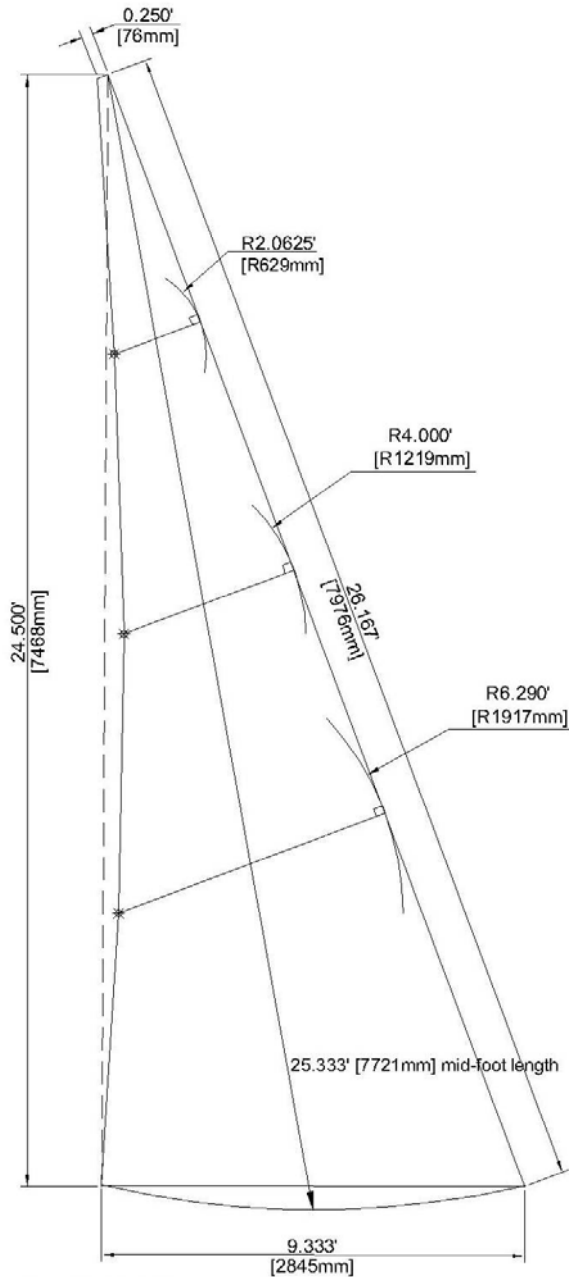
10. The **body of the sail** shall consist of **woven ply** and/or **laminated ply** made from one or more of the following materials: PET, PEN. Silicon Dioxide (SiO<sub>2</sub>) may be used in reinforcing fibres.

(Note: Polyethylene terephthalate (PET) is marketed under the trade names Mylar and Dacron. Polyethylene naphthalate (PEN) is marketed under the trade name Pentex. Fibreglass is a form of silicon dioxide (SiO<sub>2</sub>))

**Specifications revised December 10, 2007 and in effect January 15, 2008**

(Revised Dec. 19, 2007 c. strand)

Appendix A – Sail Measurement - M242 Jib Specifications



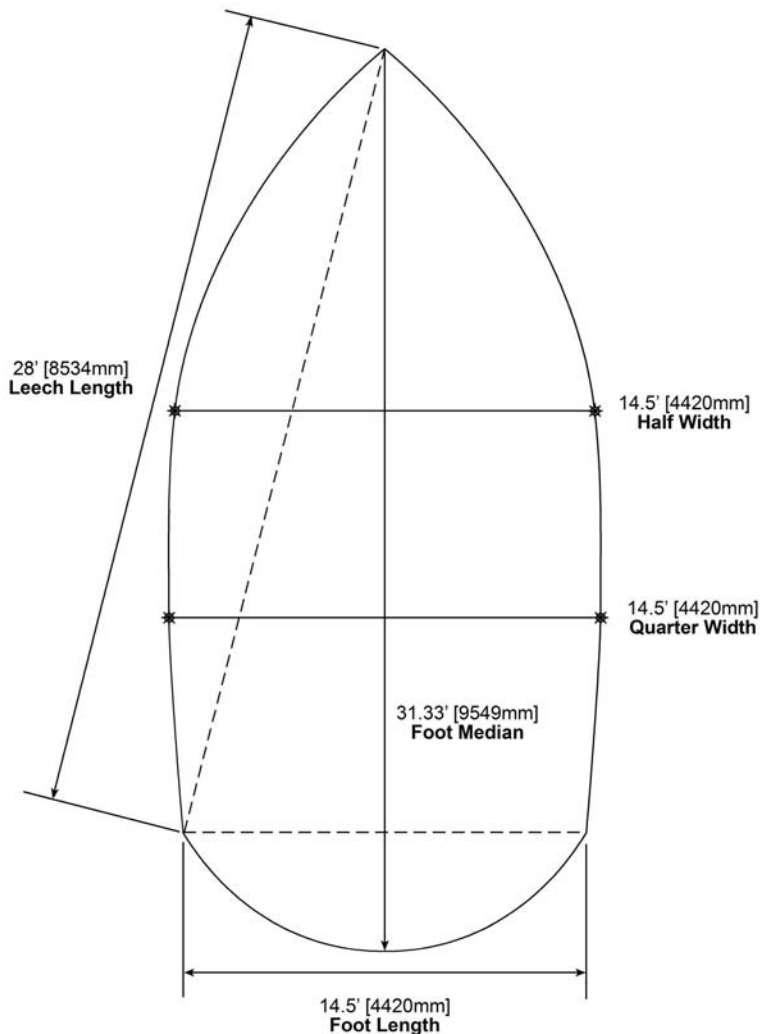
Oct. 22, 2007

1. The jib shall conform to, and be measured in accordance with, the current ISAF Equipment Rules of Sailing.
2. All jib measurements include zip luff sleeve in closed position.
3. All jib measurements are maximums unless otherwise noted.
4. Tack and clew measurements are taken to intersection of the respective edges - projected if necessary. **Leech Length:** 24.5' (7468mm), **Luff Length:** 26.167' (7976mm), **Foot Length:** 9.333' (2845mm), **Top Width:** 0.25' (76mm), **Foot Median:** 25.33' (7721mm), **Quarter Width:** 6.29' (1917mm), **Half Width:** 4.0' (1219mm), **Three-Quarter Width:** 2.0625' (629mm), **Foot Irregularity:** 0.2292' (70mm).
5. No clew-boards are permitted.
6. Up to three vertical or horizontal battens (but not both types on one sail) are permitted that divide the leech into equal sections.
7. Battens shall not exceed 2" (50mm) in width, and must come within one inch of and no more than 18" (457mm) from the leech, and shall not be removed for measurement, except as noted, nor prevent the headsail from completely furling.
8. The minimum weight of the jib excluding battens shall be 7.7 lbs (3.5 kg). Note: Components or materials that are not a functional part of the jib shall not be included in the minimum jib weight. The items listed herewith which could have the effect of increasing the weight of a **sail** and are not required for the normal functioning of the **sail** are prohibited: any **sail ply**, any **sail reinforcement**, and any **sail hardware** and other items not required for normal functioning of the **sail**.
9. Windows are permitted

**10.** The **body of the sail** shall consist of **woven ply** and/or **laminated ply** made from one or more of the following materials: PET, PEN. Silicon Dioxide (SiO<sub>2</sub>) may be used in reinforcing fibres.

(Note: Polyethylene terephthalate (PET) is marketed under the trade names Mylar and Dacron. Polyethylene naphthalate (PEN) is marketed under the trade name Pentex. Fibreglass is a form of silicon dioxide (SiO<sub>2</sub>))

**Specifications revised Dec. 10, 2007 and in effect Jan. 15, 2008**  
Dec. 19, 2007 (c. strand)

**Appendix A – Sail Measurement - M242 Spinnaker Specifications**

1. The spinnaker shall conform to, and be measured in accordance with, the current ISAF Equipment Rules of Sailing.
2. All spinnaker measurements are maximums unless otherwise noted.
3. **Foot Median:** 31.33' (9549mm), **Leech Length:** 28' (8534mm), **Foot Length:** 14.5' (4420mm) +/- 0.5' (152mm), **Quarter Width:** 14.5' (4420mm) +/- 0.5' (152mm), **Half Width:** 14.5' (4420mm) +/- 0.5' (152mm).
4. Numbers: the spinnaker shall have class sail numbers or other numbers accepted by the applicable regatta organizing authority.
5. The **body of the sail** shall consist of a **woven single-ply** made of Nylon. (Note: Polyester, Cuben Fibre, and other laminates are not permissible)
6. The minimum weight of the **body of the sail** shall not be

less than 36 grams per square meter. The weight shall be based on the cloth manufacturers published specifications. (Revised August 2007, and in effect Oct 1, 2007. Further revised November 13, 2008 re "body of the sail" and in effect November 30, 2008).

**Revised Specifications provided by Don Martin February 2, 2007**

**Sail weight revised August, 2007**

**Additional text revisions made November 13, 2008**



## Appendix B – Foil Sections

These tables are included to give repair crews something to work from in the event of need. The primary intent of the Class is to preserve the sections produced by the Builder.

### Keel Section

The table below provides for the minimum and maximum keel measurements:

Name	Description	Length	Tolerance
KF	Front leading edge	1226mm (4.02 feet)	+/- 10mm (.03 feet)
KB	Bottom edge	450mm (1.48 feet)	+/- 10mm (.03 feet)
KA	Aft edge	1186mm (3.89 feet)	+/- 10mm (.03 feet)
KT	Top edge	751mm (2.46 feet)	+/- 10mm (.03 feet)

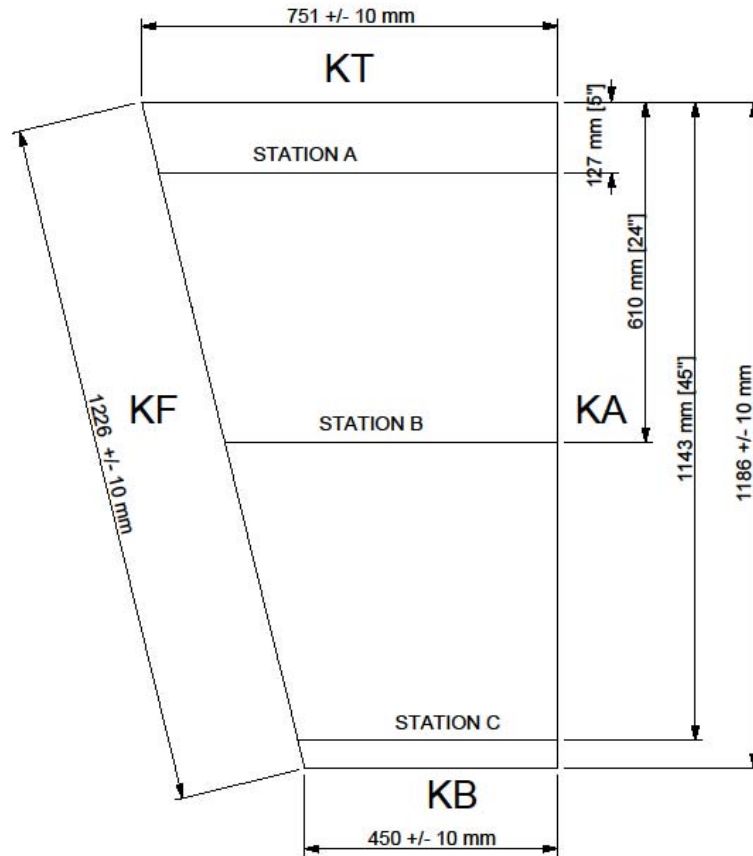
The keel's maximum thickness shall be as defined in the table below. There shall be no fillets. Between these measurement points, the keel shall change thickness roughly in proportion to the change in chord. This means no significant bulges or hollows.

Station	Location from top of keel	Thickness	Tolerance
A	127mm down Aft edge	86mm (.28 feet)	+/- 6mm (.02 feet)
B	610mm down Aft edge	77mm (.25 feet)	+/- 6mm (.02 feet)
C	1143mm down Aft edge	57mm (.19 feet)	+/- 6mm (.02 feet)

The keel's leading edge radius shall uniformly measure between a minimum of 5mm and a maximum of 9mm.

All measurements shall be to the projected corners of the keel.

All Station measurements shall be done perpendicular to the Aft edge of the keel.



KEEL DIMENSIONS AND STATIONS



**Rudder Section**

The table below provides for the minimum and maximum rudder measurements:

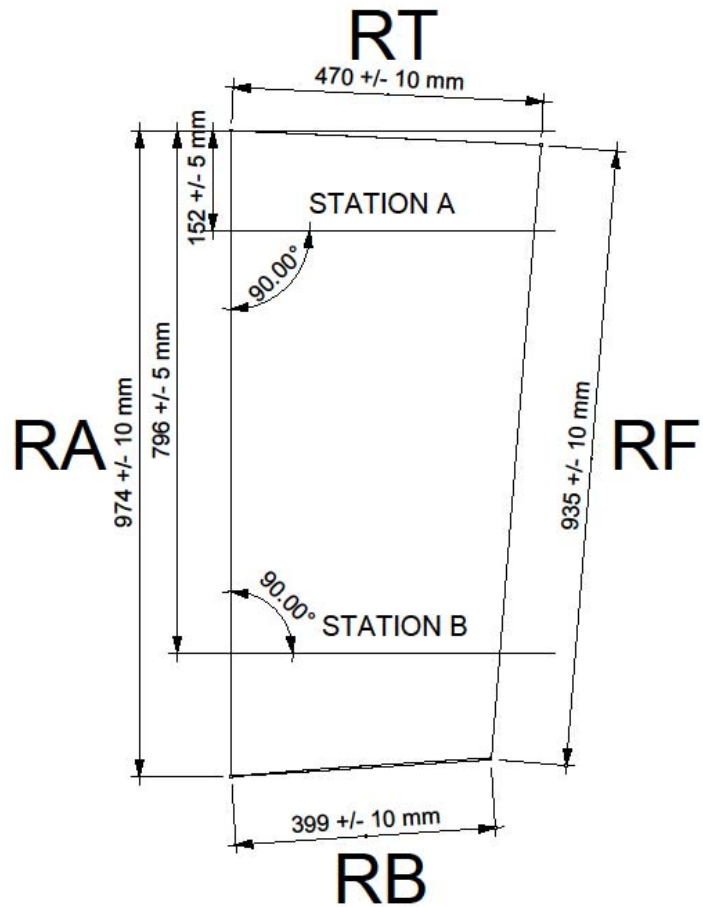
<b>Name</b>	<b>Description</b>	<b>Length</b>	<b>Tolerance</b>
RF	Front leading edge	935mm (3.07 feet)	+/- 10mm (.03 feet)
RB	Bottom edge	399mm (1.29 feet)	+/- 10mm (.03 feet)
RA	Aft edge	974mm (3.2 feet)	+/- 10mm (.03 feet)
RT	Top edge	470mm (1.56 feet)	+/- 10mm (.03 feet)

The rudder's maximum thickness shall be as defined in the table below. There shall be no fillets. Between these measurement points, the rudder shall change thickness roughly in proportion to the change in chord. This means no significant bulges or hollows.

All measurements shall be to the projected corners of the rudder.

All Station measurements shall be done perpendicular to the Aft edge of the rudder.

<b>Station</b>	<b>Location from top of rudder</b>	<b>Thickness</b>	<b>Tolerance</b>
A	152mm down Aft edge	69mm (.23 feet)	+/- 5mm (.02 feet)
B	796mm down Aft edge	63mm (.21 feet)	+/- 5mm (.02 feet)



RUDDER DIMENSIONS AND STATIONS

OCT. 27, 2009 cls

## Appendix C – Martin 242 PHRF General Dimensions

These dimensions are provided for informational purposes only.

Year designed:	1980
LOA:	7366mm (24.17 feet)
LWL:	6096mm (20 feet)
Beam:	2438mm (8 feet)
Draft: (Fin)	1448mm (4'9")
Displacement:	1123kg (2475 lbs.)
Ballast:	413kg (910 lbs.)
Ballast material:	Lead (non-moveable)
Keel:	Fixed in position
Engine:	Outboard
Type of rig:	Fractional, aluminum

Unmodified Class Boat

PHRF General Rating: 150 to 168

### **Suggested Class standard maximum sail specifications:**

Foretriangle: I = 8458mm (27'8"), J = 2210mm (7'3")

Largest headsail: 110%

Main: P = 30', E = 12', MGU = 4.78', MGM = 8.125'

Spinnaker: Symmetric, SL = 28', SSMG = 15', SSF = 15', SPL = 8'3"

IC = 27' 7 1/2"

