# **Class Rules**

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# 1. General

1.1 The Formula 42 shall be a single-handed sailboard development class.

1.2 The international authority for the Formula 42 shall be the International Board Sailing Association (IBSA).

1.3 Interpretations of these rules shall be made by the International Board Sailing Association (IBSA).

1.4 No liability or legal responsibility in respect of these rules can be accepted by the IBSA or its delegated representatives.

# 2. Administration

#### 2.1 Language

2.1.1 The official language of the Class is English and in the event of a dispute over interpretation the English text shall prevail.

2.1.2 The word "shall" is mandatory and the word "may" is permissive

2.2 **National Authority** in countries where there is no National Authority (NA) or in which the NA does not wish to undertake the administration of the Formula 42, its functions as stated in these rules shall be carried out by the "National Board Sailing Association" which is recognised by the IBSA.

#### 2.3 Eligibility to Race

2.3.1 No sailboard shall race in the Formula 42 unless it complies with the current Class Rules

2.3.2 It is the owner's responsibility to ensure that the equipment complies with the rules at all times and that alterations or replacements to the sailboard do not contravene these rules.

2.3.3 No sailboard shall sail in the Formula 42 Class unless it carries a coded ISAF International Class sticker on the board and an IBSA sticker on the sail. Stickers shall be available from IBSA and indicate that the International Class Fee has been paid. Boards carrying ISAF/IYRU Production Board Sticker are deemed to have complied with this requirement.

#### 2.4 Measurement

The primary method of determining compliance with measurement rules shall be by measuring boards and equipment of high finishing competitors after race completion. This procedure shall be followed in World or Continental events or when the notice of race so prescribes.

2.4.1 Only a measurer officially recognised by the IBSA, the National Authority or the National Board Sailing Association of the country in which the measurement is undertaken shall measure a sailboard, its mast, sail and equipment.

2.4.2 The measurer shall report to the IBSA and the NA anything which he may be consider to depart from the intended nature of the Formula 42, or to be against the interests of the sport and in that event notwithstanding anything in these rules, the IBSA or NA may refuse to let a sailboard race.

2.4.3 All sailboards shall be liable to measurement checks by a recognised measurer at the discretion of the IBSA, the NA or the race committee at any time.

#### 2.5 IYRU Measurement Instructions

2.5.1 Except where other methods of measurement are specifically indicated, all measurements shall be carried out in accordance with the current IYRU Measurement Instructions.

#### 2.6 Identification Marks

2.6.1 The sail shall carry the National Letter(s), National number and the sailboard insignia, if it has one, in accordance with the IYRU Racing Rules. The minimum size of sail letters and numbers shall be:

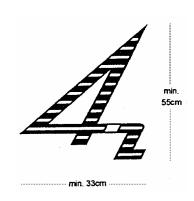
Height	300mm
Width	200mm
(excluding number one and letter I)	
Thickness	40mm
Spacing	60mm

National letters and sail numbers shall be of a single colour and when applied to a transparent sail be either black or red.

2.6.2 The sail may carry the **Formula 42 insignia** in the head of the sail in accordance with IYRR 25. The insignia shall be as indicated in the diagram.

2.6.3 The Formula 42 insignia may be carried on the starboard side of the sail only.

2.6.4 All insignia, letters and numbers shall be of a durable material, of a colour contrasting with the sail, and shall be securely attached.



2.6.5 If the racing is divided into groups the heavy weight group shall carry a circular disc on both sides of the sail in the proximity of the head. The minimum diameter of the disc shall be 150mm. A women's group shall carry an equilateral diamond on both sides of the sail in the proximity of the head. The minimum length of each side shall be 150mm

# 3. Construction and Measurement Rules

#### 3.1 Boards

The 'Longboard' shall comply with the current dimension and construction limitations of these Class Rules 3.2.

The 'Shortboard' shall be within the limitations of these Class Rules 3.3

3.1.1 In these rules 'the fair deck line' refers to the fore and aft line of the deck at its highest point in transverse section, disregarding any local variation. This line need not be the centreline of the board.

3.1.2 In these rules 'the fair underside' refers to the fore and aft line of the hull at its lowest point in transverse section, disregarding any local variations. The fair underside need not be on the centreline.

3.1.3 All measurements shall ignore local variation in shape.

3.1.4 All measurements shall be taken with bungs and hatches removed, except for weighing.

#### 3.2 'Longboard'

3.2.1 The overall length shall be not more than 3850mm nor less than 3150mm. If the drain, bung or towing eye is a separate fitting attached to the board then the overall length including such a fitting shall not exceed 3870mm

3.2.2 The maximum beam shall be not more than 675mm.

3.2.3 The minimum width at one transverse section shall be not more than 600mm measured not more than 30mm above the fair underside.

3.2.4 The width at sections 350mm from the bow and 350mm from the stern shall be not less than 320mm measured not more than 15mm above the fair underside.

3.2.5 At any section the depth shall be not more than 190mm measured from the fair deck line to the fair underside. At any section within 350mm of the bow or the stern the depth shall be not more than 125mm

3.2.6 There shall be no visible air gap dividing the board longitudinally throughout its length when afloat in an upright sailing position fully equipped but without the crew or rig.

3.2.7 The weight of the board with skeg(s), centreboard and other equipment (footstraps, mast carriage, compass) shall be not less than 14kg when in a clean and wet state.

3.2.8 A towing eye and mast leach attachment shall be fitted to the board. The mast leach is governed by Rule 3.6.3. The towing eye shall be capable of receiving a 10mm towline and be positioned within 200mm of the bow.

3.2.9 Any board may be rejected on grounds of safety if the bow has a radius of less than 15mm in plan view unless it has adequate rubber protection.

3.2.10 The depth of the centreboard shall not exceed 700mm measured normal to the fair underside of the board.

3.2.11 The centreboard shall be capable of insertion into the board from its upper side and shall have stops to prevent it exceeding the depth in rule 3.2.10

3.2.12 The skeg(s) shall be not more than 700mm from the stern. If two skegs are fitted they shall be an equal distance from the stern.

3.2.13 Remote methods of skeg adjustment by control lines or any other means are prohibited and the skeg(s) shall not project above the deck.

#### 3.3 'Shortboard'

3.3.1 The overall length shall be not more than 3150mm nor less than 2600mm

3.3.2 The minimum weight of the board shall be not less than 7.5kg weighed including skeg, straps and power joint, without mast base or any other fittings above the fair deck line, weighed in a clean wet state.

3.3.3 A centreboard or daggerboard is prohibited.

#### 3.4 Mast

3.4.1 The length of the mast shall be not more than 5700mm measured from the uppermost tip to the fair deck line at the mast foot. The measurement shall include any local raising of the deck which has the effect of increasing mast height.

3.4.2 At any cross section normal to the mast's axis, the mast shall be circular and of uniform wall thickness. The bending curve shall be equal in every direction. A tapered mast is allowed. Pre-bent masts are prohibited.

The bent curve shall be checked as follows: support the mast 50mm from each end, suspend a weight of approximately 20kg at 1700mm from the base and measure the deflection from the horizontal. Rotate the mast through 90°, 180° and 270° on the longitudinal axis and repeat the test. There shall be not more than 10% difference in any of the deflections and the deflection shall not exceed 50mm when not under load.

3.4.3 The construction of the joint and downhaul fitting between the mast and the board is optional but it shall be possible to incline the mast to an angle of at least 90 ° to the vertical in every direction unless the sheer of the deck prevents this.

3.4.4 The mast shall be capable of quick release from the board, without the use of tools.

#### 3.5 Boom

The size of the boom is optional.

#### 3.6 Fittings and Control Lines

3.6.1 There shall be no lines and fittings acting to control the mast bend other than the outhaul, downhaul, kicker (boom vang) or topping lift.

3.6.2 Harness attachments may be fitted to the boom and may be adjustable.

3.6.3 The mast shall have a safety line attached to the board to prevent the mast parting from the board if the mast step releases. The safety attachment shall have a breaking strain of not less than 100kg in any direction.

### 4. Sail

4.1 The maximum sail area is 8.5 sqm. Measured in accordance with these rules.

Class approved labelled sails shall be deemed eligible for use in the class provided they are unaltered and fall within the parameters of the data sheet for that model registered with the class.

At World and Continental Championships, or when so prescribed in the Notice of Race, all other sails shall have been measured prior to the competition.

4.2 The sail shall be made of flexible material that is capable of being folded flat in any direction without damaging the fibres, if any, or the body of the material.

4.3 The number and length of battens is optional.

4.4 The mast pocket shall extend downwards to within 300mm of the Tack Measurement Point or beyond. The width of the mast pocket is optional.

4.5 The Tack Measurement Point (point **Y**) shall be determined in one of two ways depending on the sail configuration.

(a) If the mast pocket extends downwards beyond the intersection or fair extension of the foot of the sail, point **Y** shall be the point on the forward edge of the mast pocket which is opposite to the point at which the foot or its extension intersects the rear edge of the mast pocket, measured perpendicular to the forward edge of the mast pocket.

(b) If the mast pocket is not as specified in (a), point **Y** shall be defined by the corner of the  $90^{\circ}$  template shown in the diagram. The template shall be placed si that when the 450mm arm is aligned with the leading edge of the mast pocket the foot of the sail shall touch the 250mm arm of the template and no point of the sail shall lie below the extension of the 250mm arm.

4.6 The Clew Measurement Point (point Z) shall be the point at which the foot or its extension intersects the leach or its extension.

4.7 The Head Measurement Point (point **X**) shall be the highest point on the forward edge of the mast pocket where the sail is 150mm wide, measured perpendicular to the forward edge of the mast pocket. The sail shall be made so that the head can be found in this way.

4.8 Headboards are prohibited

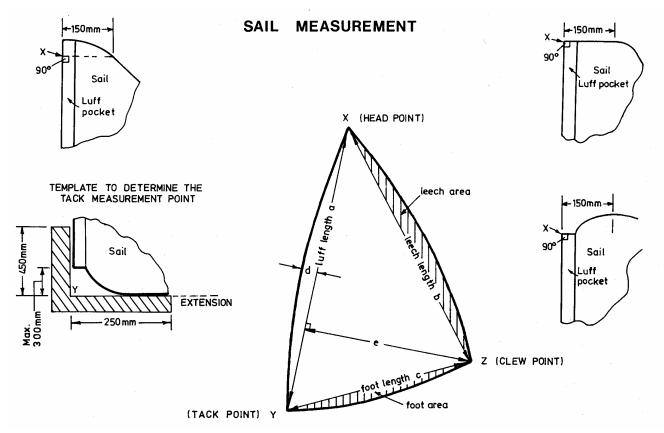
4.9 A clewboard is permitted

4.10 Battens and camber inducers shall not be removed for measurement

4.11 The sail area shall be measured in accordance with the following method

4.11.1 With sufficient tension applied between points **X** and **Y**, or as close as possible to those points, to remove all wrinkles perpendicular to the line between the points, the distance from **X** to **Y** shall be measured, to be the luff length, **a** 

4.11.2 With the tension maintained a straight chalk line shall be marked on the sail from point  ${\bf X}$  to  ${\bf Y}.$  With the tension removed, measurement d shall be the maximum



perpendicular offset from the chalk line to the forward edge of the luff pocket, projected if necessary through local variations in shape.

4.11.3 With sufficient tension applied between points **Z** and **Y**, or as close as possible to those points, to remove all wrinkles perpendicular to the line between the points, the distance from **Z** and **Y** shall be measured, to be the foot length, **c** 

4.11.4 With the tension maintained a straight chalk line shall be marked on the sail from point Z to Y. With the tension removed, the area between the chalk line and the edge of the sail shall be measured by dividing it into trapeziums, triangles and segments and measuring the area of each. For the purpose of this instruction the area of a segment shall be taken as two thirds of the product of the chord of the round and the maximum perpendicular offset to the chord. This area shall be called the **foot area**.

4.11.5 With sufficient tension applied between points **Z** and **X**, or as close as possible to those points, to remove all wrinkles perpendicular to the line between the points, the distance from **Z** and **X** shall be measured, to be the leach length, **b** 

4.11.6 With tension maintained a straight chalk line shall be marked on the sail from point **Z** to **X**. The procedure described in rule 4.11.4 shall be used to measure the area between this chalk line and the edge of the sail, to be called the **leach area**.

4.11.7 The distance from point  ${\bm Z}$  to the chalk lines between points  ${\bm X}$  and  ${\bm Y},$  measured perpendicular to the chalk line, shall be  ${\bm e}$ 

4.11.8 The area of the sail shall be calculated by

 $((a \times e) / 2) + (a \times d \times (2 / 3)) +$ foot area + leach area

4.12 Multiple attachment positions may be fitted to the tack and clew. Any reefing system shall be fully extended for measurement purposes

4.13 The sail shall carry the identification marks required by rule 2.6. Sail makers marks shall not exceed 300mm in diameter.

# 5. Crew

The crew shall be one person

# 6. Limitation of Equipment

6.1 During a series of races not more than two boards and four sails may be used. Not more than three sails shall be greater than 6.5 sqm. Measured in accordance with these rules. Only one board and one sail shall be used during a race.

The limited equipment shall not be altered in any way during the regatta without the permission of the Jury. The Jury may only permit substitution of irreparably damaged limited equipment on a 'like for like' basis. Other equipment is interchangeable provided it complies with these rules.

- 6.2 A harness is permitted.
- 6.3 Wind indicators and tell tales are permitted
- 6.4 A compass is permitted

6.5 A weight jacket is prohibited. The total weight of clothing and equipment worn or carried by a competitor shall not be capable of exceeding 9kg when soaked with water and weighed as provided in Appendix A4 of the International Yacht Racing Rules.

# 7. Racing Rules

There shall be no weight groups unless specifically stated in the Notice of Race. Competition shall be in Male and Female groups.

### 8. Buoyancy

If personal buoyancy is prescribed, every competitor shall wear, above the waist, a jacket, harness or vest with a minimum buoyancy of 4kg uninflated, in fresh water. The buoyancy shall be tested with a metal weight of 4kg, which shall remain supported for a minimum of 5 minutes.

### 9. Advertising

Advertising is allowed in accordance with IYR Rules. In World and Continental events, s competitor may be required or induced to display advertising on the board, the sail, the clothing or the equipment.

