



2005

INTERNATIONAL FIVE POINT FIVE METRE RATING RULE

Authority*: International Sailing Federation, Ariadne House, Town Quay, Southampton

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Updated rules from the previous issue :

- Index, list of contents for an easiest reading, quickest searching.
- Preliminary Advise from the Technical Committee (not part of the rules).
- 15.5.4 Floors.
- 17.3, 17.8 and 17.9 Foresails.
- 18.3, Mainsail.
- 20, Spinnaker pole.

* The International Sailing Federation (ISAF) is not a National Authority (NA).

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Preamble advise from the Technical Committee (not part of the rules) :

It is strongly recommended to owners of boats that have their first certificate issued before 01.01.2000 to transform their boat to fulfil either rules 15.5.5 and 15.5.6, or the following criterias : a total buoyancy volume of 1'600 litres must be fitted in the boat. This total amount can be reach from the addition of different elements like closed compartments, low density material blocks, permanent inflated bags, etc. Internal bags intended to be inflated automatically when immersed are not regarded as flotation elements.

Note : hull shell itself represents ca. 330 litres of buoyancy, the lightest ballast ca. 100 litres (yes, lead is floating !), reason why 1'600 litres of extra buoyancy is enough to carry the heaviest boat (2'050 kg). Pessimistically, deck shell volume is not taken into account.

1. CHANGES TO RATING RULE

At least one year's notice of any change to these rules shall be given.

2. MEASUREMENT FORMULA AND LIMITS

2.1. $0.9 * ((L * S^{(1/2)} / 12 / D^{(1/3)}) + ((L + S^{(1/2)}) / 4))$ shall not exceed 5.500 metres

Where: L = Length for rating (rule 3)
 S = Measured sail area (rule 16)
 D = Displacement in cubic metres. This shall be taken as the weight (kg) when the yacht is first measured or when it is re-weighed for subsequent revalidation's, divided by 1025.

2.2. The following limits shall apply:

| | | |
|-------------------|----------------------|-----------|
| Minimum beam | 1.900m | (rule 5) |
| Maximum draft | 1.350m | (rule 14) |
| Maximum D | 2.000m ³ | |
| Minimum D | 1.700m ³ | |
| Minimum average F | 0.628m | (rule 4) |
| Maximum S | 29.000m ² | (rule 16) |
| Minimum S | 26.500m ² | |

2.3. All measurements shall be taken in metres to three places of decimals.

3. LENGTH

3.1 L in the formula is: the length measured at a height of 82.5mm above the waterline (LWL) plus the bow girth difference plus one-third of the stern girth difference.

3.2 The bow girth difference is taken at the forward end of the measured length, and is the bow girth to points 275mm above L, minus 550mm.

- 3.3 The stern girth difference is taken at the aft end of the measured length, and is the stern girth from the top of the covering board (sheerline) on each side, minus twice the vertical height at the side of the yacht at this point.
- 3.4 For the purpose of calculating the rating, the bow girth difference shall not be less than 165mm; and the stern girth difference divided by 3 shall not be less than 234mm.

4. FREEBOARD

Freeboard shall be measured at the fore and aft girth stations, and midway between those stations. The average of these freeboards shall not be less than 628mm. The actual freeboard measured midway between the fore and aft girth stations shall not be less than 560mm.

5. BEAM

The beam shall be measured at half height of freeboard. The maximum beam shall be not less than 1.900m.

6. HOLLOW IN THE SURFACE OF THE HULL

Hollows are not permitted in the surface of hull above the waterline. Bilge pump discharge openings and traveller sump drains shall not be considered hollows in the surface of the hull.

7. SHEER

The sheer shall be a fair continuous curve.

8. STERN ANGLE

The angle of the aft profile of the hull with the waterline shall not be less than 1 in 5½. This shall be checked with the yacht in measurement trim.

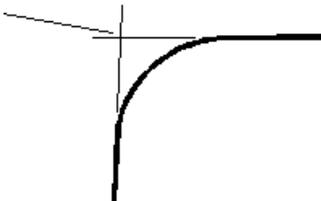
9. ROUND OF BEAMS

The deck camber shall not exceed 7mm in 305mm length.

10. TUMBLEHOME

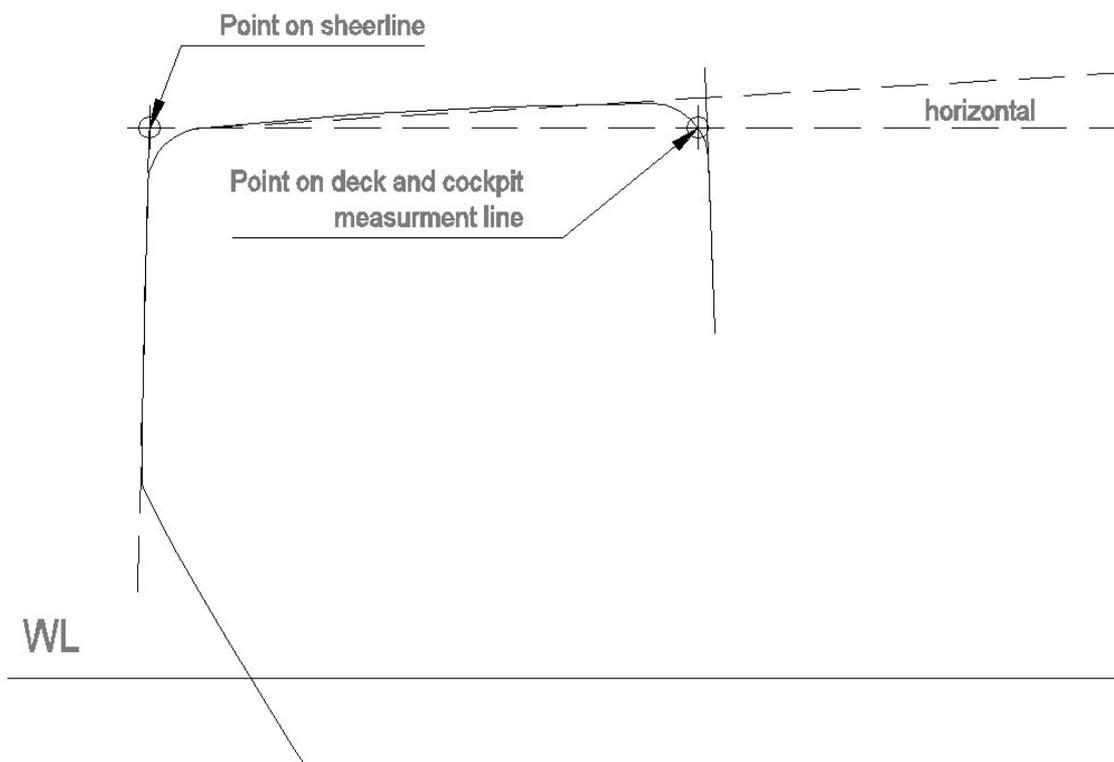
- 10.1 The tumblehome on each side shall not exceed two per cent of the maximum beam of the yacht as defined in rule 5. When the tumblehome of the side of the yacht exceeds the amount allowed, three times the excess shall be added to the rating. The deck edge radius shall not exceed 40mm.

10.2 Measurement point for tumblehome



11. DECK OPENINGS

The total area of deck openings shall not exceed 2.25 square metres. The breadth of side decks shall not be less than 350mm measured from the sheerline to the deck and cockpit measurement line.



12. COCKPIT

The aft end of the cockpit or any deck opening shall not be carried aft of 1750mm forward of the after L_1 mark. If a spinnaker chute is used it shall exit into the cockpit and the cockpit shall be self draining.

13. WEIGHT

13.1 The yacht shall be weighed before her first Certificate of Rating is granted. The weight shall be stated on the certificate. The weight and position of all inside ballast shall be noted.

- 13.2 The yacht shall be re-weighed before a new Certificate of Rating is issued.
- 13.3 When re-measurement is required owing to an alteration to the keel, or to the weight or fore and aft position of inside ballast, the yacht shall be re-weighed and re-sighted.
- 13.4 The volume of displacement shall be correct for salt water of specific gravity of 1.025.

14. FIN KEEL AND RUDDER

- 14.1 The keel, including ballast, shall be of the single fixed fin type.
- 14.2 The keel may be hollow, except that the ballast keel shall be solid. Apertures in the keel are prohibited.
- 14.3 Ballast shall be of lead.
- 14.4 The fin-keel shall have a vertical or raked section not less than 150mm wide, from its upper level (junction with the hull) to the level 1000 mm below the waterline, and the width shall not exceed 350 mm.
- 14.5 Not more than two rudders shall be allowed. They shall be solid and each shall pivot on one axis only.
- 14.5 When two rudders are fitted one shall be fitted to the aft edge of the keel. The other shall be separate (with or without skeg) and the lower edges of the rudders shall not extend below the maximum permitted draft at any angle of helm.
- 14.6 Not more than two fins and their attendant fairings are allowed. For the purpose of this rule, the keel and a rudder if hung thereon, and a separate rudder with a skeg (if fitted) shall be defined as a fin.
- 14.7 When a rudder is fitted to the aft edge of the keel, the aft edge of the keel shall be straight and formed to receive the forward edge of the rudder throughout its length and the rudder shall extend for the whole depth of the keel, except for a rounding up of the heel. This rounding up shall not raise the heel of the rudder to a point above 80 per cent of the maximum draft.
- 14.8 No centreboard or other keel, fin or similar contrivance, except as permitted above, shall be allowed on the underwater part of the hull.
- 14.9 The centre of the rudder stock shall not be aft of the aft L mark.
- 14.10 If the rudder extends aft of the aft L₁ mark (measured at right angles to the underside of the counter) its thickness shall nowhere exceed 90mm.
- 14.11 The thickness of the rudder shall not exceed 175mm.
- 14.12 The rudders shall be in the deepest position when the draught is measured.

15. CONSTRUCTION, SCANTLINGS

15.1 General

15.1.1 International 5.5 Metre yachts shall from 1st January 1997 be constructed according to these rules, approved construction drawings and an approved 'International 5.5 Metre Building Form'. The approval shall be given by an appropriate international measurer appointed by ISAF in consultation with the International Class Association.

15.1.2 During the construction of the yacht a surveyor shall check that the scantlings and the weight distribution approved in the Building Form have been observed. The survey shall be done by the same international measurer appointed by the ISAF.

15.2 Plan approval

Prior to commencement of the construction of a new yacht a completed Building Form together with appropriate construction drawings and material specifications shall be submitted to the international measurer for approval to enable confirmation of the design weight. Commencement of construction prior to approval shall be at the owners risk. On approval signed copies of the Building Form shall be distributed as follows :

- Three copies to the owners representative.
- One copy to be retained in the class files.

15.3 Fees for plan approval and survey

The fee for plan approval shall be decided by the Class Association and paid before the approved Building Form is issued by the international measurer. The fee for survey shall be decided by the Class Association and paid before the Rating Certificate is issued.

15.4 Responsibility of designer and builder

Compliance with the following requirements does not ensure that a yacht is of adequate strength. The construction and structure of the yacht is the responsibility of the owner, the designer and the builder. The only purpose of the design approval and the Building Form is to ensure compliance with the weight and weight distribution requirements in this rule.

15.5 Scantlings

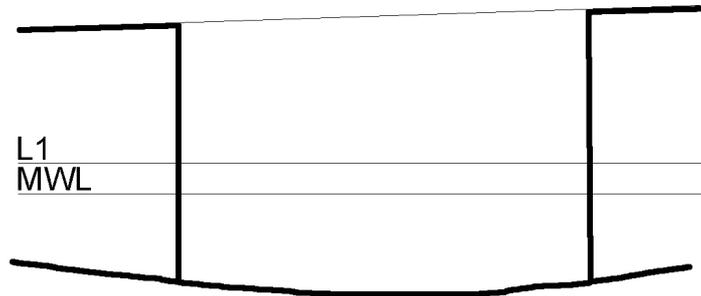
The following minimum weights of various parts of the yacht are required for a yacht to pass both plan approval and final weight check :

15.5.1 The weight of the hull panel shall be at least 9.5kg/m². In the case of a framed or longitudinally stiffened single skin construction the total weight of skin and stiffeners shall be at least 9.5kg/m².

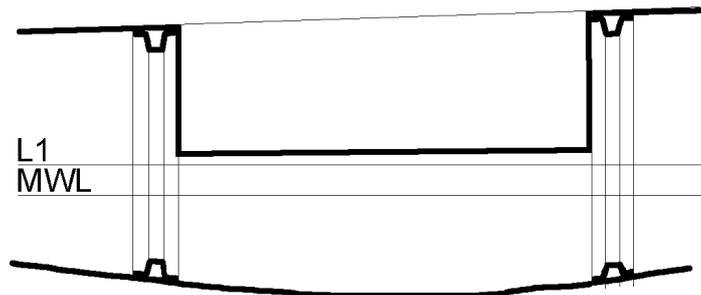
15.5.2 The weight of the deck panel shall be at least 7.5kg/m².

15.5.3 The bottom panel in way of the keel has to be a single construction with a minimum thickness of 20mm. This area is situated for 1/3 LOA amidships and shall have a minimum width of 200mm.

- 15.5.4 The floors within 1/3 LOA amidships shall have a minimum length of 800mm and a spacing of not more than 300mm. These floors shall have a minimum weight of 2.7kg/m. A different construction with the same minimum weight and weight distribution can also be allowed. The weight of the cockpit sole or its stiffeners shall not be included in the weight of these floors.
- 15.5.5 A bulkhead shall be fitted at both the forward and aft end of the cockpit. Each bulkhead shall create a watertight compartment forward or aft respectively, except for openings for control lines which shall be as small as practicable and not more than 150mm below the deck. The total area of these holes after installation of any fittings but without control lines installed shall not exceed 3cm² in each bulkhead. Any hatches fitted shall maintain the watertight integrity of the bulkhead. Each bulkhead without closing hatch shall weigh not less than 6.5kg."



- 15.5.6 The two watertight bulkheads specified above may be replaced by a watertight cockpit. In this case the cockpit sole shall be above L1 level and the cockpit shall have at least two self bailers. Openings for control lines shall meet the above requirements and any hatches shall maintain the watertight integrity of the cockpit. The weight of each bulkhead, including the weight of the adjacent ring frame if fitted, shall be not less than 6.5kg.



15.6 Materials

The materials permitted for the construction of hull and deck panels, floors and other stiffeners in hull and deck are as follows:

15.6.1 Fibre reinforcements

Only glassfibres of type E, R and S are permitted. Reinforcements of higher specific modulus are prohibited.

- 15.6.2 Resin
Polyester, vinylester and epoxy resin are permitted as are all bonding compounds.
- 15.6.3 Wood
Wood of any species is permitted.
- 15.6.4 Fastenings
Any commercially available fastenings are permitted. The weights of the fastenings shall be additional to the above defined minimum weights of structures.
- 15.6.5 Keel bolts
Shall be of stainless steel. The total section area of the keel bolts shall be not less than 1400 sq mm.
- 15.6.6 Core Material
The nominal density of any core material shall be at least 80 kg/m³. All types of honeycomb cores are prohibited.
- 15.6.7 Aluminium
Aluminium of any grade is permitted.

15.7 Weight of keel, ballast and rudder

- 15.7.1 The maximum weight of the keel and internal ballast is 70% of the yachts total weight as defined in rule 13.
- 15.7.2 The amount and position of internal ballast in the yacht is free but shall be recorded on the Certificate of Rating.

15.8 Survey of Construction

- 15.8.1 It is the purpose of the survey to check that the scantlings and the weight distribution approved in the '5.5m Building Form' have been observed.
- 15.8.2 The builder shall supply the surveyor with a sample of the hull laminate not smaller than 40mm in diameter and taken from the hull of the yacht. He shall as well supply him with a sample of the deck laminate not smaller than 40mm in diameter taken from the deck of the yacht, and a sample from the keel area 20mm in diameter. These samples shall be retained with the yachts records.
- 15.8.3 The minimum number of visits during the construction of the yacht shall be three. They shall be signed off and dated into the Building Form. One visit shall take place when the deck is to be fitted to the hull and one when the keel is ready to be fastened to the hull. At this visit the keel shall be weighed and its weight recorded.
- 15.8.4 On completion of the construction the Building Form shall be signed by the surveyor, the owners representative and the builder confirming the compliance with these rules.

- 15.8.5 One signed Building Form shall then be returned to the Class Office.
- 15.8.6 Another signed Building Form shall be handed over to the measurer. This form becomes an integral part of the Measuring Certificate and shall be considered to be the Classification Certificate for the purpose of fulfilling these rules.

16. SAILS AND SAIL PLAN

- 16.1 The measured sail area S is the sum of the areas of the mainsail and of the largest headsail. No headsail shall be less than 80 per cent of the foretriangle for measurement purposes.
- 16.2 Notwithstanding the requirements of the 1986 IYRU Sail Measurement Instructions sails may be made of non-woven material and the reinforcement may be of any size. There is no restriction on the number, size or position of windows. Multi-ply sails are permitted.
- 16.3 If any device of any material is used which increases the area of the sail beyond its area measured in accordance with these rules, this additional area shall be added to the area of the sail for rule purposes.
- 16.4 Double luffed sails are prohibited, except headsails in accordance with rule 17.
- 16.5 Mainsails may be loose footed. On a loose footed mainsail the distance between the forward top corner of the headboard and the midpoint of the foot is not allowed to be more than 106 per cent of the luff of the mainsail.
- 16.6 The class insignia, national letters and sail numbers shall be placed on the mainsail and spinnaker as laid down in the International Yacht Racing Rules. They shall be of the following minimum dimensions:
- | | |
|--|--------------------------------------|
| Height | 400mm |
| Width | 260mm (except number 1 and letter I) |
| Thickness | 50mm |
| Minimum space between letter and numbers | 80mm |
- 16.7 The height of sail plan shall not exceed 11.100m. It shall be measured from deck at covering board (sheerline) level to the underside of upper measurement band.
- 16.8 The base of the fore triangle shall not exceed 50 per cent of the square root of the area of the sail plan. A measurement band shall be painted on the deck with its aft edge at the inboard end of the fore triangle. A mast stop shall be fitted to prevent the mast being moved abaft of this point.

17. FORETRIANGLE AND HEADSAIL

- 17.1 The height of the foretriangle shall not exceed 8.880m above the level of the covering board (sheerline).

17.2 The maximum height of the foretriangle on the mast and the forward ending of the foretriangle on the deck shall be defined as the points where the extension of the inboard side of the forestay cuts the mast and cuts the deck. A forestay shall be fitted.

17.3 The "head" of the jib is defined as the higher of: the bearing point of the cringle or, the point at which the sail is 40*mm wide, measured perpendicular to the luff.

**From 1st March 2006 on, this value will be 90 mm.*

17.4 The "tack" shall be taken as the bearing point of the cringle in the luff wire. If the bearing point of the cringle is in the sail the tack shall be taken as the lower of the lowest point on the edge of the sail directly below the bearing point or the fair prolongation of the foot roach.

17.5 The area of the largest headsail shall be taken as the length of the luff multiplied by half the perpendicular distance from the clew to the forward side of the luff, measured with tension on the line of measurement just to remove wrinkles across the line of measurement.

17.6 The foresail luff may envelope the forestay providing that the sail can be set and removed without detaching the forestay. The luff rope, which shall be of wire not less than 3mm diameter or any other non-stretchable material (such as Kevlar rope or tape or similar) shall be firmly attached to the sail and shall be pulled out to its full length at measurement. (Note: the use of shackles does not constitute "firmly attached"). (see also rule 16).

17.7 A clew board is permitted but a club foot, battens in the foot, headboard or yard are prohibited.

17.8 Not more than two* battens are permitted in the leech and where fitted, shall divide the leech into approximately equal parts and be approximately at right angles to it. The length of these battens shall not exceed 350* mm.

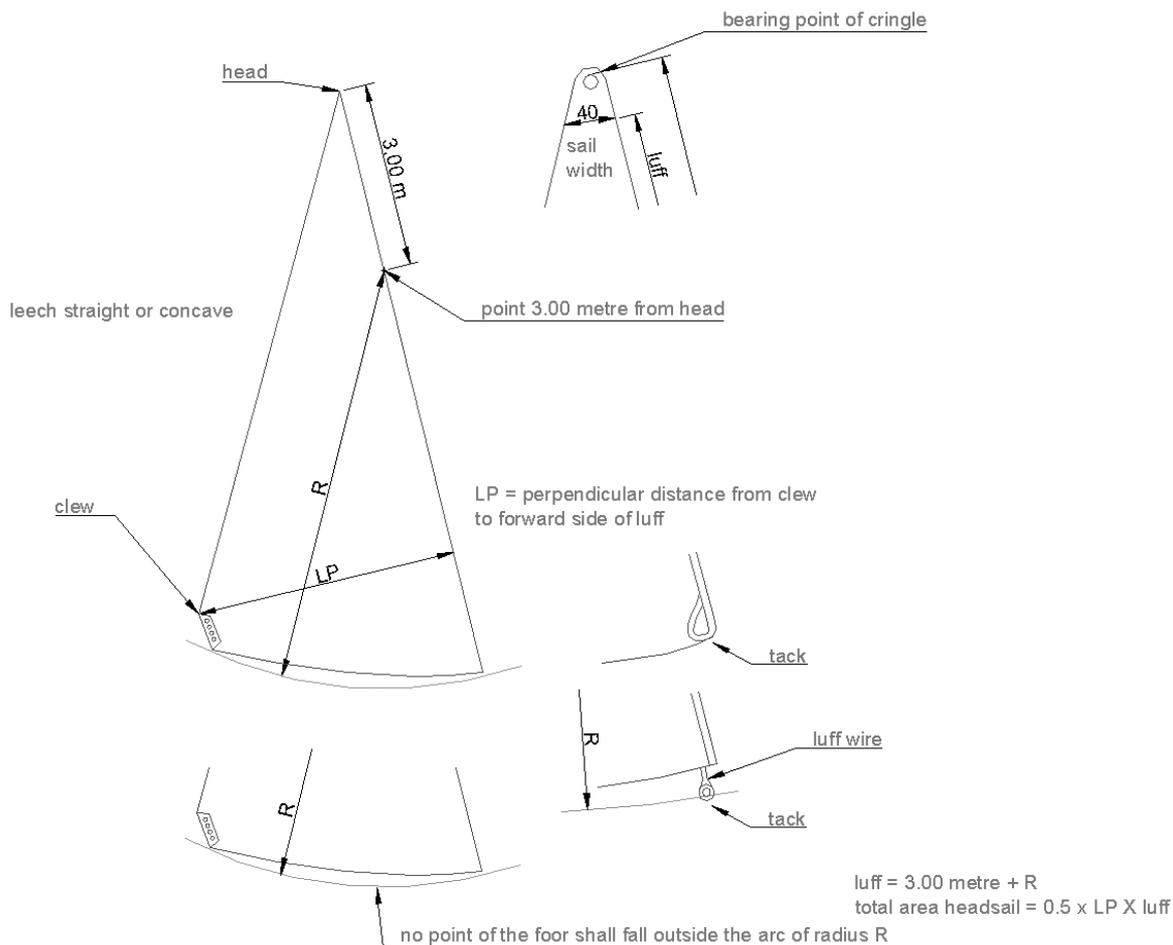
**From 1st March 2006 on, these two values will be respectively three and 700 mm..*

17.9 The foresail shall be triangular, except as provided for in this class rule. The leech of the sail shall be a straight line or a concave curve*.

**From 1st March 2006 on, the wording of this article will be :
"The foresail shall be triangular, except as provided for in this class rule. The leech of the sail shall be contained in a straight line from the clew point to the tip point at which the sail is 90 mm wide measured perpendicular to the luff."*

17.10 The foot shall not fall outside an arc scribed from a point on the luff three metres below the head, the radius of which is the length from that point to the tack.

17.11 The greatest dimension of the clewboard or other non-sail material shall not exceed 250mm.



This amends IYRU Sail Measurement Instructions 1986.

18. MAINSAIL

- 18.1 The area of the mainsail shall be taken as the length of the luff multiplied by the length of the foot divided by two.
- 18.2 The length of the luff shall be the distance from the top of the measurement band, below which the top of boom cannot be lowered, to the bottom of the measurement band above which the top of the headboard cannot be hoisted. Stops are to be fitted at these positions. However, when a halyard lock is used the upper stop may be omitted, provided the top of the headboard cannot be above the bottom of the measurement band while racing. The maximum height of the upper edge of the lower band shall be 850mm above the covering board (sheerline) and the minimum height shall be 500mm.
- 18.3 The length of the foot shall be the distance from the inner edge of the measurement band at the boom end along the top of boom to the aft side of the mast excluding the track or jackstay; but if there is a groove in the mast for the sail, to the foreside of the groove or 16mm, whichever is the lesser. The cross-width of mainsail from the midpoint of the leech to the nearest point of the luff shall not exceed 60* per cent of the length of the foot and at three quarters of the leech shall not exceed 35* per cent.

Hollows in the leech in way of the measurement points shall be bridged and the leech between the upper batten and aft corner of the headboard or lower batten and clew shall not lie more than 25mm outside a straight line between these points.

**From 1st March 2006 on, these two values will be respectively 62 and 36 per cent.*

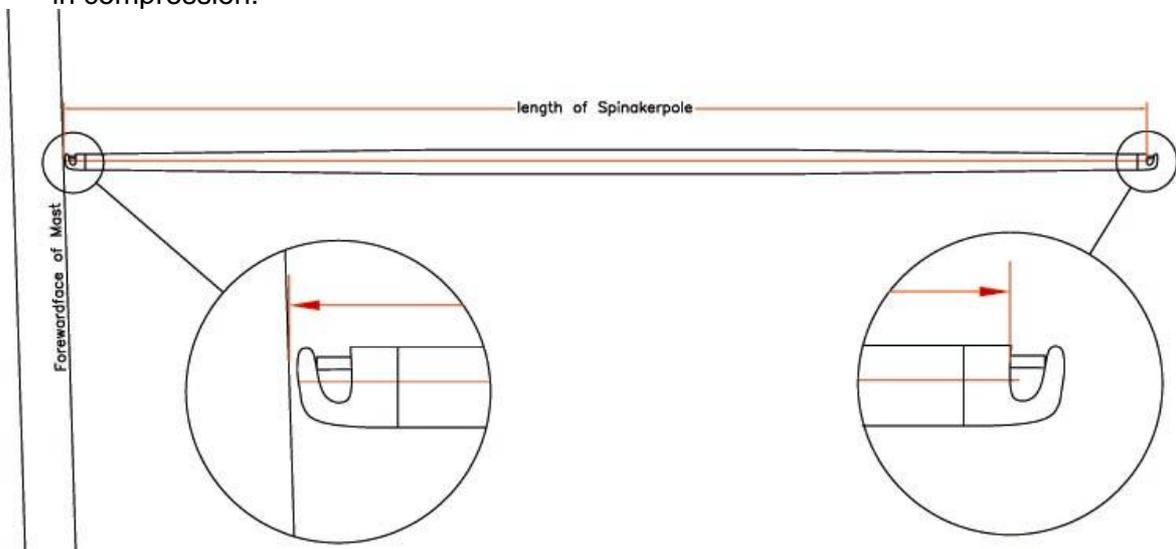
- 18.4 The greatest extension of the mainsail in way of the widest part of the headboard from the forward side of the bolt rope or its extension measured perpendicular to the mast shall not exceed 150mm.
- 18.5 Not more than four battens are permitted in the leech, and they shall divide the leech into approximately equal parts. The length of the top batten is not restricted but the curve of the leech, determined by the head, foot and the two girth measurements, shall at no point become concave. The length of the lower battens shall not exceed 1000mm.
- 18.6 The measurement from the bearing point of the shackle in the head board to the centre of the batten at the intersection with the luff shall not be greater than 150mm more than the measurement of the bearing point of the shackle in the head board to the centre of the top batten at the point of intersection with the leech.

19. SPINNAKER

- 19.1 A spinnaker shall be symmetrical about its vertical centre line and shall not embody any device capable of altering its shape. The luff and leech shall be of equal length. The maximum lengths of luff or leech shall not exceed the height of the fore triangle.
- 19.2 The breadth of half the foot, when folded tack to clew, shall not exceed the base of the foretriangle multiplied by 1.25.
- 19.3 When a spinnaker is folded tack to clew and luff to leech the width at the point halfway down the periphery of the fold to a point halfway down the leech shall not be less than 75 per cent of the length from the clew to the end of the centre line at the foot.
- 19.4 All spinnakers shall be taped along the luff, leech and the foot with a non-stretch tape and the measurements shall be taken along the tapes. Alternatively a check wire shall be fitted.
- 19.5 A minimum spinnaker shall have the same dimensions as stated above except that the breadth of half the foot, when folded tack to clew, shall not exceed the base of the foretriangle.
- 19.6 Headboards are prohibited in spinnakers.
- 19.7 The spinnaker shall be suspended from a point not more than 100mm above the forestay and not more than 30mm from the surface of the mast.

20. SPINNAKER POLE

The length of the pole from the centreline on the forward side of the mast to the bearing point in the eye at the outer end of the pole shall not exceed the length of the base of the fore triangle. For the measurement purpose, the pole is held horizontal and in compression.



21. MAST

- 21.1 The mast shall be of constant section from the heel to a point not less than 6.000m above the covering board. This section shall have a minimum forward and aft measurement of 125mm excluding external tracks and minimum athwartships measurement of 75mm. There shall be no hollows in the surface of the mast excluding those created by fittings or local weld distortion.
- 21.2 Permanently bent masts, rotating masts, moveable tracks, and similar contrivances are prohibited. For the purpose of the rule a permanent set not exceeding 50 mm between the upper and lower measurement bands is permitted.
- 21.3 A fully rigged mast shall have a tip weight of not less than 16kg when measured as follows:
- Halyards and the spinnaker pole lift shall be in a fully hoisted position and the mast shall be horizontal;
 - The mast with standing rigging secured along the mast, shall be supported at deck level on a suitable pivot;
 - The scale reading of the tip weight shall be taken at the lower edge to the upper measurement band;
 - The mast head fly, if any, shall be removed.

22. BOOM

The boom shall nowhere be deeper than 152mm including track or less than 38mm wide. The top of the boom to which the sail is fastened shall be constructed straight and shall not be mechanically bent.

23. MEASUREMENT AND SIGHTING

23.1 Yachts shall be measured by an official measurer of the International Class Association or a National Authority.

23.2 Visible marks on the hull are to be placed at all points of measurement in accordance with the following definitions and diagrams:

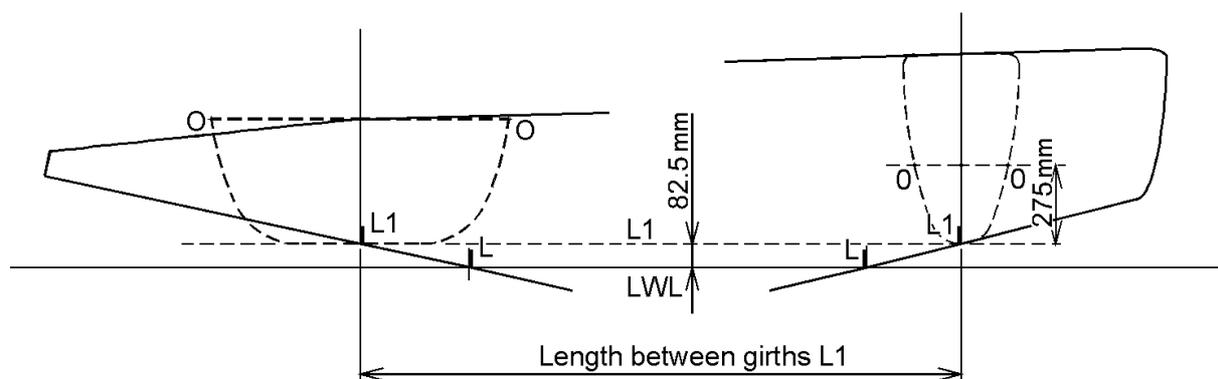
23.2.1 **Waterline marks L** at the ends of the waterline. The marks shall be rectangular not less than 10mm wide and 100mm long in a transverse plane at right angles to the waterline ending and as close to the centre line of the vessel as possible. In the case that the uppermost part of the rudder will be above the waterline, it is recommended to add a supplementary measurement mark, ie, a horizontal bar on the rudder blade, showing by the exact level of the waterline.

23.2.2 **Upper length marks L₁** on the fore part of the stem and aft part of the counter. The marks shall be rectangular not less than 10mm wide and 100mm long in a transverse plane at right angles to the waterline and as close to the centre line of the vessel as possible. The marks shall be fixed so that their outer edges are at heights of 82.5mm above L.W.L.

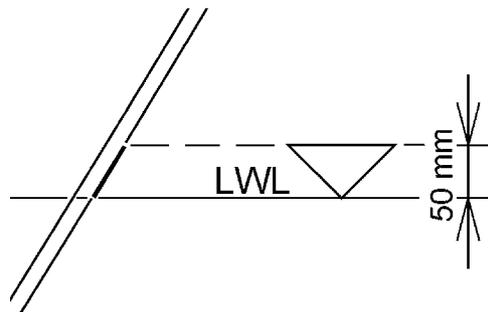
23.2.3 **Overhang girth marks O** at bow shall be fixed so that their centres are vertically above the outer edges of the L₁ marks and at a height of 275mm above the L₁ marks. The marks shall be round marks 10mm in diameter or square with counter sunk raised-head screws in the centre.

23.2.4 **Overhang girth marks O** at stern on the edge of, or close below, the covering board (sheerline), one on each side of the yacht, centred vertically above the outer edges of the L₁ marks. The marks shall be round marks 10mm in diameter or square with counter sunk raised-head screws in the centre.

The girths are the shortest distances between the marks as defined above.



23.2.5 **Immersion marks I**, in accordance with the diagram, on both sides of the yacht shall be midway between the girth stations with the bottom corners just touching the waterline. When measured in fresh water additional I marks are to be placed according to its different specific gravity.



The height of the triangle in the **vertical plane** shall be not more than 50mm

- 23.3 Before the official measurer measures a yacht the marks must have been provisionally placed as close as possible to the defined positions by the owner's representative (i.e. the designer or builder). The owner's representative shall furnish the measurer with a certificate showing the difference in the immersed length and freeboard in salt water of a specific gravity of 1.025 and fresh water of a specific gravity of 1.000. The measurement marks shall be fixed for immersion in salt water with additional L marks for immersion in fresh water and additional triangles shall be cut in the I mark as indicated. The measurer shall measure the distance between the fresh water and salt water length marks so placed, and check that it agrees with the difference recorded on the certificate furnished to him by the designer or builder.
- 23.4 The measurer having certified the correct position of all marks and taken all measurements ashore, is only required to test the position of the marks by sighting when the vessel is put afloat. For the purpose of establishing flotation and displacement the yacht shall be complete in its structure. It shall have on board, mast with rigging, boom, spinnaker pole, all winches and fixed fittings. The anchor and chain shall not be on board for weighing and flotation. The measurer shall satisfy himself that the mast is at the aft permissible extremity of J and is not raking forward of vertical and that the boom and spinnaker pole are in their normal positions. Slings and/or lifting attachments shall be provided but shall not be included in the weight.
- 23.5 With the yacht in measurement trim the measurer shall test that the outer edge of the waterline marks 'L' do not fall below the length immersed and shall observe that the lower corners of the 'I' marks just touch the water or may be just free, in which case the outer edge of the 'L' marks and the lower corner of the 'I' marks shall not be more than 5mm above the water.
- 23.6 The top of the 'I' marks shall not be immersed when the yacht is floating level in racing trim, with all persons and additional equipment not specified for purposes of measurement on board. Re-checking may be requested at any time.

24. [Spare]

25. CERTIFICATE OF RATING

- 25.1 As soon as a yacht has been measured and a Classification Certificate has been issued, the measurer shall send the Measurement Form to the National Authority

which shall issue a Certificate of Rating to be effective from the date of completion of measurement.

- 25.2 Only one valid Certificate of Rating with only one set of maximum sail dimensions, shall be issued by any National Authority to any one yacht at any time. All National Authorities shall use a common format of Measurement Form and Certificate of Rating similar to that issued with these rules.
- 25.3 If from any peculiarity in the construction of the yacht, or other cause, the measurer is of the opinion that the rule will not rate the yacht fairly, or that in any respect she does not comply with the requirements of these rules, he shall report the circumstances to the National Authority who after due enquiry shall award such Certificate of Rating as they may consider equitable and the measurement shall be deemed incomplete until this has been done.

26. OBLIGATIONS OF OWNER RESPECTING CERTIFICATE

- 26.1 The Certificate of Rating shall cease to be valid under any of the following circumstances:
- 26.1.1 Upon expiration of two years from the date of issue. A new Certificate of Rating shall be issued only if the owner or his representative is able to certify that no alterations to the yacht have been made which affect her rating or the scantlings and the yacht has been re-weighed in accordance with Rule 13.
- 26.1.2 If any alteration is made which, in any way, reduces the scantlings. A new Certificate of Rating shall be issued only if the international measurer certifies that the alteration, if incorporated when the yacht was built, would not have caused her original Classification Certificate to have been withheld.
- 26.1.3 If the amount or position of the inside ballast is altered from that shown on the Certificate of Rating.
- 26.1.4 If any dimension measured for rating, except freeboard, is found to exceed the measurement stated on the Certificate of Rating.
- 26.1.5 If any alteration is made so as to alter the beam or girth or girth difference, or the length of any spar or spars, as respectively measured for rating, or if the sail plan is altered.
- 26.1.6 If one or both outer edges of the waterline length marks where they intersect the profile fall below the water level when the yacht is lying in smooth water in measurement trim.
- 26.1.7 If any length or girth or immersion mark is moved from its position.
- 26.1.8 If the fittings do not comply with the rules.
- 26.2 In such cases the owner or his representative shall forthwith notify in writing the invalidity of the Certificate of Rating to the National Authority. A new or re-dated Certificate of Rating shall afterwards be issued, to be in force from the completion of

remeasurement by an official measurer, or from the date the Certificate of Rating expires under clause (a).

- 26.3 The owner or his representative should ascertain from time to time by inspection of the marks, whether the immersion of the yacht has from any cause whatever become such as to render the Certificate of Rating invalid.

27. INTERNATIONAL CLASS FEE

- 27.1 The International Class Fee (ICF) shall be paid to the International 5.5 Metre Association which shall issue an ISAF plaque and a receipt for all boats first certificated after 1st March 1991.
- 27.2 The ISAF plaque shall be affixed to the forward side of the aft edge of the cockpit in the vicinity of the tiller in a clearly visible position.
- 27.3 The amount of the ICF shall be revised annually by the ISAF in consultation with the International 5.5 Metre Association.
- 27.4 All sails first measured after 1st January 1997 shall have an official Class Sail Label affixed to the sail. Sail labels shall be purchased from the sailmaker at a cost of \$20 US per sail for 1997.

28. INSPECTION TO BE PERMITTED BY OWNER

Every owner sailing under these rules shall permit all reasonable inspection by or on behalf of the national authority, and shall afford all reasonable facility to carry out such inspection in regard to measurements, marks, fittings, and such other matters as fall within the scope of a measurer's duty.

29. WEIGHT AND STOWAGE OF EQUIPMENT TO BE CARRIED

- 29.1 One anchor and chain, if attached, minimum weight 11kg, maximum weight 13kg.
- 29.2 Warp, minimum diameter 9mm, length 30m
- 29.3 Only these items together with not less than one bilge pump (which is compulsory) and up to 15kg of loose equipment may be carried in the cockpit area.

30. PROHIBITIONS

The use of any apparatus or contrivance outboard or extending outboard and attached to the spars or rigging the purpose of which is or may be to support or assist in supporting a member of the crew outboard or partially outboard is prohibited. If any arrangement for supporting the crew when hiking necessitates any fastening to be

undone in order to disengage the crew from the boat then there shall be not more than one such fastening and it shall be capable of instant release under tension.

31. NUMBER OF PERSONS ON BOARD

The number of persons on board shall not exceed three.

32. ELECTRONICS AND ELECTRICALS

Electronics and electricals are permitted but they shall not be used to provide information from third parties nor to correlate true wind speed and direction or true boat speed (VMG).

33. DEFINITION OF BOAT : CLASSIC, EVOLUTION AND MODERN

33.1 The fleet shall be divided by age of boat into three classes named Classic, Evolution and Modern, as follows :

33.2 Classic boats :

33.2.1 First certificate issued before 01.01.1970.

33.2.2 Hull changes (conversions) are not allowed. Those made before the approval of these rules may remain. Hull changes are allowed only if the purpose is to restore the yacht to its design before 1970.

33.2.3 Cockpit : it is allowed to transform the cockpit to render it watertight, following rule 15.5.5 and 15.5.6.

33.2.4 Mast tube : aluminium or wood. Carbon fiber tubes are prohibited, but, mast sections dimensions of the current rules could be applicable.

33.2.5 Sails material : kevlar or high tech sails are allowed.

33.2.6 Keel: no alterations to the keel shape are allowed.

33.2.7 Winglets : no allowed

33.2.8 Rudder : it is not allowed to fit a separate rudder to a Classic Yacht.

33.2.9 Any "violation" to the previously mentioned limits will automatically switch the boat from the Classic to the Evolution class. The already existing transformations (made before 01.03.02) are not concerned by the above mentioned rules and the boat may stay in the Classic class.

33.2.10 Regardless of the alteration, the Classic boats shall fulfill the most up-to-dated 5.5mIC general Rating Rules.

- 33.2.11 Tolerance on the Displacement: the Classic boats are permitted to have a tolerance of +2.0% on the actual weight relative to the weight stated in the original certificate, but for measurement purpose, the displacement D in the rating formula must remain as on the original certificate. In the case of a boat whose displacement on the original certificate is already at the maximum permitted 2'050kg (2.00m³), it is permitted to apply the same tolerance, that is to 2'091kg.
- 33.2.12 Tolerance on the Rating calculation: the Classic boats may have an increased sail area in order to measure 5.52 metre instead of 5.5 metre. For this purpose, the rating calculation shall incorporate the lengths, girths and displacements values from the original certificate.
- 33.2.13 Tolerances on the measurement which do not affect the formula, like the draft and the freeboards, the following applies: if the extra-draft and insufficient freeboard of an aged boat is due to an extra-weight; and if that boat has been correctly measured once (original certificate); and if there has been no modifications or alterations of the hull and appendages, it shall be accepted like this.
This tolerance means that the boat gets new flotation marks and must float according to those new marks.

33.3 Evolution boats :

- 33.3.1 A yacht belongs to the Evolution class when her first certificate was issued after 01.01.1970 and before 01.01.1990.
- 33.3.2 Modifications to the hull that may alter any of the dimensions on the last measurement certificate shall be approved by the class technical committee and ISAF.
- 33.3.3 Cockpit : it is allowed to transform the cockpit to render it tight, following rule 15.5.5 and 15.5.6.
- 33.3.4 Mast tube : current rating rules are applicable.
- 33.3.5 Keel : current rating rules are applicable.
- 33.3.6 Winglets : current rating rules are applicable.
- 33.3.7 Rudder : current rating rules are applicable.
- 33.3.8 Limit to transformations of the Evolution boats : if more than two of the above allowed transformations are established, the boat will automatically be switched from the Evolution to the Modern class. The already existing transformations (made before 01.03.02) are not concerned by this and the boat may stay in the Evolution class.
- 33.3.9 Regardless of the alteration, the Evolution boats shall fulfill the most up-to-dated 5.5mIC general Rating Rules.

33.4 Modern boats :

33.4.1 First certificate issued after 01.01.1990.

33.4.2 Current Rating Rules are applicable.

33.5 Recording :

The classification of each boat – Classic, Evolution or Modern – shall be recorded on the measurement certificate.

33.6 Sister-ships :

A boat built after the date limit of a class, but issued from a mould and/or drawings of a boat already existing is considered as belonging to the same class of the original if she complies with the rules and the changes allowed for this class.

33.7 Races and ranking :

33.7.1 There is no separate starts, all the boats are racing together in the same time.

33.7.2 All boats are ranked in same list (race results). A separate list can be made, but the winner is from the main ranking list

34 ADVERTISING :

The Class adopts Category C restricted as follows: no advertising on the mainsail and jib.