INTERNATIONAL 470 CLASS RULES

Authority: 1.Y.R.U. HOLDINGS LTD., 5 BUCKINGHAM GATE, LONDON, SW1E 6JT

Date of International Status: 1st March, 1970

1. GENERAL

- (1) The 470 is a One-Design racing dinghy with an overall length of 4.70 m for a crew of two, designed by Andre Cornu. The intention of these rules is that the boats shall be as alike as possible in all respects affecting speed and ease of handling in order that racing success shall depend on the skill of the crew.
- (2) The official language of the class is English and the English text shall prevail in event of a dispute over translation.
- (3) These rules are complementary to the plans, measurement diagram and measurement form. Any interpretation shall be made by the I.Y.R.U. in consultation with the 470 International Class Association (470 International) and the Designer.
- (4) In the event of discrepancy between these rules, the measurement form, measurement diagram and/or the plans, the matter shall be referred to the LY.R.U.
- (5) In countries where there is no National Authority for Yachting (N.A.) or the N.A. does not wish to administer the class its functions as stated in these rules shall be carried out by 470 International or its delegated representatives (National Associations).
- (6) Neither the LY.R.U. nor 431 International accept any legal responsibility in respect of these rules and/or the plans or any claim arising therefron

2. BUILDING FEE

- (1) The building fee shall be \$U.S. 36 of which \$U.S. 4 shall be due to the L R J . \$U.S. 12 to 470 International and \$U.S. 20 to the designer. This sum may be reviewed + x the I.Y.R.U.
- (2) The builder of a 470 hull is responsible for paying the whole fee to the I.Y.R.U. which shall forward the appropriate arithm to 470 International and the Designer.
 - With each fee payment the builder shall notify the I.Y.R.U of the serial number(s) of the hull(s) and the mould number.
- (3) The I.Y.R.U. shall issue for each fee payment a building fee plaque bearing the hull serial number(s). The appropriate N.A. shall supply to the boat's first private owner confirmation (on the measurement certificate) that the building fee has been paid.

3. BUILDERS

- (1) Moulded hulls and decks shall be produced only by builders licenced by the I.Y.R U.
- (2) Application for a licence shall be made through a N.A. to the I.Y.R.U. The licences shall include clauses requiring good standards of manufacture, compliance with class rules and plans and a guarantee that all fees shall be paid. The I.Y.R.U. shall consult with 470 International before granting any licence and only sufficient licences will normally be issued in a country to ensure that demand is satisfied.

4. REGISTRATION AND MEASUREMENT CERTIFICATE

- (1) No boat shall take part in class races unless it has a valid measurement certificate in the owner's name. The certificate is obtained as follows.
 - (a) The builder shall apply to the appropriate N.A. for a sail number quoting the boat building fee plaque number.
 - (b) Each country shall issue sail numbers which shall be consecutive beginning from 1, preceded by the National Letter,
 - (c) The boat shall be measured before leaving the builder's premises by a measurer officially recognised by a N.A.

 The measurement form shall be supplied to the owner of the boat. In the case of a part-built boat the owner shall be responsible for arranging completion of measurement by an Official Measurer
 - (d) The owner is responsible for sending the completed measurement form to his N.A., together with any registrat on fee that may be required. On receipt of this a certificate may be issued to the owner
- (2) No two boats in the same country shall have the same name.
- (3) Change of ownership invalidates the certificate and the old certificate shall be returned to the N.A. together with a written application containing the name and address of the new owner and any re-regist ation fee that may be required by the N.A. A certificate shall then be issued to the new owner.
- (4) 470 International shall obtain at regular intervals from each N.A. details of sail numbers and certificates issued, together with the names and addresses of owners

5. MEASUREMENT

- (1) Only a measurer officially recognised by a N.A. shall measure a boat, its spars, sails, and equipment and sign measurement forms or certificates.
- (2) A measurer shall not measure a boat, spars, sails or equipment owned or built by himself, or in which he is an interested party or has a vested interest.
- (3) If a measurer is in any doubt as to the legality of any part of boat, spars, sails or equipment, he shall replace on the measurement form.
- (4) Repairs and replacements other than sails shall be checked by an Official Measurer.
- (5) New or substantially altered sails shall be checked by an Official Measurer and stamped or signed and dated by the measurer near the tack.
- (6) Templates used for official measurement shall be supplied by the I.Y.R.U.
- (7) Inspection of boats and sails at a championship or open meeting may be carried out by an Official Measurer, or by an official of the 470 National or International Association, if either of those bodies is assisting in organising the meeting.

- (8) At first measurement an official measurer shall check the watertightness of buoyancy tanks, hatches and drainplugs. Thereafter it is the responsibility of the owner to ensure the watertightness of these. If the measurer is in doubt he may order an immersion test, afterwards checking the tanks for significant leakage. If the buoyancy is unsatisfactory the certificate shall be withdrawn and not returned until successful remedial measures have been taken. For international events the certificate shall indicate that a satisfactory buoyancy test has been carried out within the previous twelve months.
- (9) It shall be the owner's responsibility to ensure that the boat complies at all times with the class rules, but the builder shall be liable to rectify at his own expense any fault proved to have occurred in building.

6. IDENTIFICATION MARKS

- (1) The hull shall carry, either moulded in or on a plate, permanently fixed, the builder's mark serial number and mould number, which also appear on the certificate.
- (2) The hull shall carry the building fee plaque fixed in a conspicuous position inside the cockpit.
- (3) The mainsail shall carry the 470 emblem in blue, the national letters and sail number in red, and shall have one sail maker's mark near the tack. (Rule 17 also refers.)
- (4) The headsail shall carry one sailmaker's mark near the tack
- (5) The spinnaker shall corry at about half-height the sail number, and may have one sailmaker's mark.
- (6) All emblems, marks and numbers site to of durable material securely attached
- (7) The serial numbers of sails shall be inserted on the certificate by the N.A.

7. CONSTRUCTION

- (1) The hull shell, foredeck, forward bulkhead, side decks and bulkheads shall be in accordance with the official plans and specifications, and shall be made of glass fibre reinforced thermosetting or thermoplastic resin.
 Any wood used for strengthening shall be of durable nature.
- (2) Not less than 0.05 cu. metre of rigid non-communicating air cell foam plastics shall be attached to the inside of each side decking. If the buoyancy space is not divided into three or more separate tanks of substantial volume, a further 0.10 cu. metre of the same foam shall be added. The minimum length for each block shall be 1.50 m and they shall be placed centrally about the transverse axis of the boat.
- (3) The hull skin shall be of approximately even thickness and density longitudinally and no attempt shall be made to concentrate weight near mid-length, or in any way except that the thickness of the floor may be doubted between the side decks if it is suspected that this rule is being broken a National Authority may order test holes to be drilled in the skin
- (4) The hull shell shall be self-coloured white, the colour of all other parts is optional.
- (5) The following shall be constructed and positioned to conform to the plans.
 - (i) The mast partners at deck level, the forward end of which shall be 3150 mm ± 40 mm from the aft face of the transom. These were omitted in the earlier boats.
 - (ii) A hatchway and watertight cover in the forward bulkhead with a minimum dimension of 300 mm.
 - (iii) One drainhole placed low in the forward bulkhead with a maximum dimension of 25 mm.
 - (iv) One drainhole in each side bulkhead, placed low and near the transom, with a maximum dimension of 25 mm.
 - (v) The titler port and a crosspiece of 35 mm deep x 20 mm min, cross section stiffening the top of the transom.
 - (vi) A hog or false keel 30 mm min, wide by 50 mm ± 10 mm high at the forward and tapering to 25 mm min, high by 30 mm wide at the after end shall extend forward and aft of the centreboard case to within 100 mm of the forward bulkhead and transom.
 - The mast shall be stepped directly onto the false keel (see 15 (1)(d)).
 - (vii) The centreboard box securely attached to the hull along its length and reinforced along its length with a hog or false keel and supported laterally with athwartships knees or thwart.
 - (viii) Two gunwale rubbing strips of approximately constant width not less than 20 mm extending from stem to transom. The strakes may be tapered away at the stem and transom over the end 500 mm. If made of wood these shall not be hollow. Non-slip material may be added at the crew's position.
 - (ix) The total area of tiller port and transom drainage holes shall not exceed 0.07 m².
- (6) The parts listed in rule 7 shall not be modified in any way except to drill fastening holes for fittings.
- (7) Any holes in buoyancy tanks shall be made watertight and each buoyancy tank shall have at least one, but not more than two, inspection holes. Each hole shall have a detachable cover capable of resisting accidental dislodgement and such covers shall be kept in place at all times when racing. The opening provided shall be not less than 85 mm or more than 200 mm in diameter.

8. HULL MEASUREMENT

- (1) The length overall of the hull, excluding deck overlap, shall be 4700 mm ± 10 mm, from the aft face of the transom to the line of the stem projected to deck level.
- (2) Measurement sections 1, 3, 5, 7 and 8 shall be at 500 mm, 1500 mm, 2500 mm, 3500 mm and 8000 mm respectively from the aft face of the transom measured along the base line.
- (3) To check the profile of the keel a base line shall be fixed at 230 mm below the lowest point of the transom and 114 mm below the keel at section 8. The distance between the base line and keel shall not differ from the figures on the measurement diagram by more than 10 mm, and the total difference between greatest and least clearances shall not exceed 15 mm.
- (4) The stem template shall be applied as shown on the measurement diagram. Between sheer and a point 200 mm above the waterline the template shall touch the hull lightly or clear by not more than 20 mm. Below the 200 mm point the template shall touch lightly or clear by not more than 15 mm.

- (5) Section templates 1, 3, 5 and 7 shall be applied as shown on the measurement diagram.
 - The top of deck at gunwale shall be not more than 10 mm above or below the sheer marks on the templates. The templates shall touch the gunwale rubbing strips lightly or clear.
 - Below the points 200 mm above the waterline the templates shall touch the hull lightly or clear by not more than 20 mm. The total difference between greatest and least clearances at any section shall not exceed 15 mm.
- (6) The measurer shall test the surface of the hull with a flexible batten to ensure that the shape is uniform between template stations.
- (7) (i) The distance of the centreboard pivot from the aft face of the transom shall be 2650 mm ±10 mm and its height above the underside of the keel shall be 102 mm ±10 mm.
 - (ii) The width of the inside of the centreboard box shall not exceed 35 mm.
 - (iii) The top of the box shall at no point be less than 300 mm above the underside of keel.
- (8) At section 7 the centre of the foredeck shall be not more than 75 mm above the top of deck at gunwale. The top of the foredeck when viewed from the side shall be substantially straight.
 - At centreline the afterface of the breakwater shall be 3250 mm \pm 30 mm forward of transom and at sheer 2830 mm \pm 30 mm. The breakwater shall be not less than 40 mm high at the centreline.
- (9) The measurer shall inspect the sidedecks for conformity to the plans and report any substantial variation,

9. CENTREBOARD

- (1) The centreboard shall be made of wood, plywood or glass reinforced plastic (g.r.p.). The edges may be protected by a reinforcing strip
- (2) (i) The contour shall conform to the dimensions and tolerances on the measurement diagram.
 - (ii) The shap 2 of the lower corners shall be not more than 10 mm from the designed shape.
 - (iii) The bolt hole shall be 90 mm : 5 mm aft of the leading edge and not more than 1035 mm above the lowest part.
- (3) The centreboard shall be of even thickness throughout 22 mm \pm 2 mm, except that the edges may be bevelled as act and in rule 9(4).
- (4) The edges of the centreboard may be bevelled to a maximum distance of 110 mm from the trailing and lower edge and 55 mm from the leading edge.
- (5) The centreboard shall weigh in dry condition not more than 6.5 kg.

10. RUDDER

- (1) The rudder stock shall be made of wood, plywood, metal or plastic and the tiller shall be of wood. The blade shall be of wood, plywood or g.r.p.
- (2) The contour shall conform to the dimensions and tolerances on the measurement diagram. The shape of the lower corners shall be not more than 10 mm from the designed shape.
- (3) The rudder shall be of even thickness throughout 22 mm \pm 2 mm, except that the edges may be bevelled as defined in rule 10(4).
- (4) The edges of the rudder may be bevelled to a maximum distance of 70 mm from the trailing and lower edge and 55 mm from the leading edge.
- (5) With the rudder in fore-and-aft position on the transom the distance of the pivot abaft the transom and its height above the lower corner of the transom shall conform to the dimensions on the measurement diagram.
- (6) A blade control line and two cleats may be fitted and the tiller shall have an extension with ball and socket or similar joint.

11, MAST

- (1) The mast shall be constructed of wood, metal or g.r.p.
- (2) If of metal or g.r.p., the athwartships dimension of the mast at any point within 5010 mm of the heal shall be not more than 75 mm nor less than 55 mm. The fore and aft dimension at any point more than 1550 mm and less than 5010 mm, from the heal shall be not more than 75 mm nor less than 65 mm.
- (3) If of wood the dimensions of the mast shall be; at 1250 mm and 2800 mm from the heel 73 mm ± 1.5 mm, and at 5 010 mm from the heel 67 mm ± 1.5 mm.
- (4) The mast when supported horizontally with the groove uppermost between the upper coloured band and a point not more than 100 mm from the heel shall deflect not more than 200 mm when loaded with 25 kg at a point midway from either support and with the mast supported on its side it shall deflect not more than 130 mm when similarly loaded with 15 kg.
- (5) The aft edge of the mast above the sail entry shall be straight when first measured. A permanent set due to deformation of up to 40 mm is permitted from the line joining the upper coloured band to the heel when the mast is rigged in the boat.
- (6) The weight of the mast with rigging and usual fittings shall be not less than 10 kg.
- (7) Measurements from the heel of the mast shall be taken from the bottom of the heel fitting, but excluding any tenon.
- (8) The centre of gravity of the most in weighing condition shall be not less than 2800 mm above the heel, with the rigging dressed along the mast.
- (9) Distinctively coloured bands of not less than 10 mm width shall be placed to conform to the measurement diagram.
- (10) Only the following fittings are permitted:
 - (i) Sheaves and a rack or cleat for main halliard.
 - (ii) Mast head support device for mainsail. The sail shall be capable of being lowered when the boat is affoat upright
 - (iii) Sheaves and a tensioning system for headsail halliard, on the mast or inside the boat.
 - (iv) Sheaves and/or eyes and cleats for spinnaker halliard, which shall not project more than 60 mm forward of the mast.
 - (v) A pair of rigid or swinging metal spreaders with their attachment system.
 - (vi) A sliding mainboom gooseneck.

- (vii) A fixed spinnaker boom attachment at 1250 mm ± 10 mm above heel of the mast no part of which shall extend more than 40 mm from the mast, and a lift and a downhaul system.
- (viii) A fitting for kicking strap attachment.
- (ix) A fitting for centreboard hoist blocks.
- (x) A self tensioning reel for the spinnaker halliard tail, on the mast or inside the boat.
- (xi) A fitting by the top of the mast for flag halliard and a cleat.
- (11) Positions of centre of spinnaker boom fitting, centre of spreader fitting, top of spinnaker halliard sheave or eye, and junction of line of shrouds with outside of mast, shall conform to the measurement diagram, as shall the projections of spinnaker halliard sheave or eye and spinnaker boom fitting from the surface of the mast.

12. RIGGING

Only the following rigging is permitted.

- (1) The mast shall be supported by a forestay and one shroud on each side. These shall be of steel wire, diameter not less than 2.5 mm. The forestay shall be attached to the stemhead fitting, provided with one hole each for forestay and headseil Each shroud shall be attached to the shroud plates, by means of plates having a row of adjustment holes. No other arrangement of shroud adjustment is permitted.
- (2) One trapeze wire on each side for the use of one person only shall be fitted, of steet wire diameter not less than 2,5 mm. These shall be provided with handholds rings, adjustment if required and an elastic cord return system with fairleads.
- (3) No additional rigging or fittings are permitted the purpose of which is to affect the bend of the mast.

13. **BOOM**

- (1) The boom shall be constructed of wood, metal or g.r.p.
- (2) If of metal or g.r.p. the width of the boom at any point shall be not less than 38 mm. The depth at any point shall be not less than 54 mm nor more than 72 mm.
- (3) If of wood the width of the boom shall be 42mm \pm 2 mm and the depth shall be 70mm \pm 2 mm
- (4) The top of the boom shall be straight when first measured. A permanent set of up to 20 mm due to deformation is permitted from the line between the inner end of the boom and the coloured band.
- (5) The boom when supported horizontally with the groove uppermost between the outer band and a point 100 mm from the forward end shall deflect not more than 50 mm when loaded with 80 kg at a point midway from either support.
- (6) Measurements along the boom shall be taken with the boom attached to the mast as if the mainsait were hoisted head to wind. Measurements shall be taken from the downward projection of the after edge of the mast, disregarding local projections or cutouts.
- (7) A distinctively coloured band not less than 10 mm wide shall be placed with its inner edge not more than 2650 mm from the after edge of mast as defined above.
- (8) The length of the boom beyond the distinctively coloured band is optional.
- (9) Only the following fittings are permitted:
 - (r) A kicking strap attachment.
 - (ii) A track or attachment points for mainsheet,
 - (iii) An attachment for aft mainsheet.
 - (iv) A device for adjusting the mainsail clew.
- . (10) The distance from the mast to attachment point of the kicking strap shall be 600 mm ± 20 mm.

14. SPINNAKER BOOM

- (1) The boom shall be constructed of wood, metal or g.r.p.
- (2) its overall length including fittings shall not exceed 1900 mm.
- (3) Only the following fittings are permitted:
 - (i) A hook at each end.
 - (ii) Fittings approximately at the mid-point for attachment for lift/downhaul.

15. FITTINGS

- (1) Position of fittings:
 - (a) The mainsheet slide track(s) shall be attached to the top of the transom and/or its centreline shall be 1625 mm ± 25 mm from the aft face of the transom. If the latter, its lower surface shall be not more than 50 mm above the top of the centreboard case and the track shall be straight.
 - (b) The centre of the attachment hole in the shroud plates shall be 2780 mm ± 10 mm measured on the centreline from the aft face of the transom.
 - (c) The centre of the headsail attachment hole in the stemhead fitting shall be 4630 mm ±15 mm measured on the centreline from the aft face of the transom.
 - (d) The mast step, which may incorporate means of fore-and-aft adjustment, shall be fitted with its top surface no more than 10 mm above the hog or keel or at that same station. Its fore-and-aft position and design shall be such that the after edge of the mast, projected downward from above the sail entry, shall at step level be at all times 3085 mm ± 30 mm from the aft face of the transom. The position of the mast heel shall not be adjusted during racing.
- (2) Fittings:
 - (a) Only the following fittings are permitted in addition to those listed elsewhere in the rules:
 - (i) An adjustable kicking strap.
 - (ii) Fixed or sliding jib sheet fairleads or pulleys.
 - (iii) The tension of the headsail sheets may be controlled by a system of winches, jamming cleats and pulleys.

- (v) Fairleads and cleats for spinnaker halliard.
- (vi) A spinnaker catcher not more than 150 mm in length.
- (vii) A centreboard hoist system of pulleys, elastic cord, and/or rope, and cleats.
- (viii) Toe straps fitted within the cockpit only. No other stability aids other than trapeze referred to in 12(2) shall be fitted
 - (ix) Two rudder fittings bolted to the transom.
 - (x) Two transom draining ports in the lower part of the transom, with transparent hinged covers and a closing system. The covers shall not obstruct the rudder nor act as an extension of the bottom of the hull.
- (xi) Sealing strips for the centreboard slot.
- (xiii) The centreboard pivot, which shall prevent the sides of the centreboard box from being forced together
- (xiii) Two self bailers.
- (b) No fittings, with the exception of a spinnaker catcher, shall project beyond the outboard edges of the gunwale rubbing strips or beyond the profile of the hull.
- (c) Ballast shall not be carried.
- (d) No additional buoyancy apparatus, floorboards or bulkheads shall be carried in the cockpit.

16. WEIGHT

The weight of the boat fully rigged in dry condition but without sails, personal buoyancy garments, bucket, paddle anchor and line shall be not less than 118 kg. Should the boat be found to be under-weight the difference shall be made up with corrector weights fastened to the underside of the foredeck. Details of correctors shall be entered on the boat's certificate and the boat shall be reweighed and a new certificate obtained following alteration to or removal of the correctors.

17. SAILS

Sails shall be constructed and measured according to the I.Y.R.U. Sail Measurement Instructions. One unwoven window is permitted in the mainsail and headsail, and such windows shall be not more than 0.28 m² in area, and shall be not less than 150 mm from any edge of the sail

The sail number, letter(s) and class emblem shall be placed as laid down in the I.Y.R.U. Racing Rules. The numbers and letter(s) shall be of the following minimum dimensions

Height:

300 mm

Thickness:

45 mm

Width:

200 mm (except number 1 and letter I)

Minimum space between adjoining figures: 60 mm.

(1) Mainsail

(a) The mainsail shall be made of white cloth of even weight throughout.

The mainsail shall have no apertures other than normal cringles excetp that an additional cringle is permitted in the luff, together with the equipment necessary for making adjustments to the luff tension.

Three battens shall be fitted which shall divide the leech (aft edge of sail) into four approximately equal parts. The upper batten shall extend from luff to leech. A headboard as shown on the measurement plan shall be fitted and one cringle at each of head, tack and clew.

- (b) The sail shall not extend beyond the inner edge of the boom band nor above the lower edge of the upper mast band. The forward extension of the line of the upper edge of the boom shall not be lower than the upper edge of the lower mast band.
- (c) The following measurements shall be taken and shall not exceed the dimensions on the measurement diagram.
 - (i) Leech-distance in a straight line from upper forward corner of headboard to lower edge of boltrope below centre of clew cringle shall be not more than 6230 mm.
 - (ii) Width of headboard or sail from mast at top of headboard shall not exceed 120 mm.
 - (iii) Length of top batten pocket shall be not more than 1140 mm and of two lower pockets shall be not more than 800 mm.
 - (iv) Widths of sail at one-quarter and one-half heights of fulf and leech (after edge of sail) including bottrope shall be 2360 mm and 1800 mm respectively.

The mid-point of the luff shall be determined by folding the sail upon itself with the highest point of the headboard nearest the luff even with the lower edge of the boltrope nearest the tack.

The mid-point of the leech shall be determined with the highest point of the headboard nearest the luff ever with the lowest point of the sail directly under the centre of the clew cringle. The quarter points of luff and

leach shall be determined in a similar way by folding a second time.

The distance of the lowest point of the top batten pocket below the top of the sail shall be not less than 1700 mm with the luff under just sufficient tension to flatten the cloth adjacent to the luffrope. The centres of the cringles shall be not more than 30 mm from the boltrope.

(d) The leech shall not be hollowed to evade the width measurements.

(2) Headsail

- (a) The headsail shall be made of white cloth of even weight throughout. Not more than three battens in total shall be fitted in foot and leech of the jib, the pockets shall be not more than 250 mm long.
- (b) The leech shall not extend beyond a straight line, i.e. shall not be convex.
- (c) The following measurements shall not exceed the figures on the measurement diagram.

Luff 4100 mm, leech 3650 mm and foot 1950 mm.

Width at head 30 mm.

The distance between the head of the sail and the lowest edge of the sail at the mid-point of the foot shall not exceed 75 mm plus the mean of the measurements of the luff and the leech. The mid-point of the foot shall be determined by placing the tack cringle over the clew cringle and tensioning both halves of the foot equally. The measurement shall be taken as a straight line measurement with just sufficeint tension to remove the wrinkles along the line of measurement.

- (3) The following are prohibited:
 - (i) Double luffs, zippers and similar contrivances.
 - (ii) A roller lib.
 - (iii) Cunningham holes or other tack cringle adjustment in the foresail.

(4) Spinnaker

- (a) The spinnaker shall be a three cornered sail of optional coloured cloth of even weight throughout. There shall be no battens or headboard.
 - The spinnaker shall be measured folded at its vertical centreline, about which it shall be symmetrical.
- (b) There shall be no holes, slots or pockets other than three normal cringles, nor shall any form of adjustment be incorporated in the sail.
- (c) The following measurements shall not exceed the dimensions on the measurement diagram Lengths of foot, luffs and centrefold, all measured round the curves.
 - At its widest point the width of the spinnaker measured at right angles to the straight line between head and centre of foot shall be not more than 3600 mm nor less than 3400 mm.

18. EQUIPMENT

 The following equipment shall be on board when racing A paddie.

An anchor of not less than 1 kg weight, having a line of minimum length 15 m attached to both anchor and boat. Two personal buoyancy garments,

(2) The trapeze belt shall not be ballasted, shall float, and shall not weigh more than 5 kg.

RULES FOR CLASS RACING

19. RACING RULES

Class races shall be sailed under the I.Y R.U. Racing Rules and the prescriptions of the National Authority in whose country the races are held. These rules may be varied only with the agreement of the National Authority and 470 International.

20. CLASS RULES

- (1) The class rules shall not be varied by a race committee.
- (2) It is the owner's responsibility to ensure that the boat conforms to the rules.
- (3) Before the start of a race or series of races the crew shall produce the boat's certificate which shall be valid in the owner's name.

21. MEASUREMENT

- (1) At championships or principal events the race committee may arrange for boats and/or sails to be partly or completely remeasured before racing if possible. Should any boat be found to have raced while contravening class rules, the committee shall take action under I.Y.R.U. rules 73.2 and 68.4.
 - The body to which protests on measurement are referred shall be the authority which issues certificates in the country in which the race was held.
- (2) Only one set of sails per boat shall be used in a series of races except in case of authenticated damage,

The mast and boom shall not be changed during a series except in case of authenticated damage.

Replacement spars and sails shall be measured and stamped before use.

22. CREW

Two persons shall be on board, each in contact with the boat.

OFFICIAL PLANS

Plan No.	Description	Date
1	Lines	1964
3	Cockpit Layout	1964
· 4	Full Size Sections	1964
5	Full Size Sections	1964
5	Full Size detail of Stem	1964
12	Class Emblem	1964

(Plans 2, 9 and 10 have been cancelled.)

The following plans are available for information only:

7 Centreboard 8 Rudder blade

Effective: 1st March 1973

Previous issues: 1st March 1972

1st March 1971 1st March 1970