

# INTERNATIONAL CONTENDER CLASS SPECIFICATION

Authority:- I.Y.R.U. HOLDINGS LTD., 5 BUCKINGHAM GATE, LONDON, S.W.1.

## 1. GENERAL

- (a) The official language of the Class is English, and in the event of dispute over interpretation the English text shall prevail.
- (b) In the event of discrepancy between these rules, and the measurement form and the plans, the rules shall take precedence.
- (c) Neither the I.Y.R.U. nor the International Contender Association (I.C.A.) accept legal responsibility in respect of these rules or any claim arising therefrom.
- (d) Where there is no National Authority or the National Authority does not wish to administer the Class, its function as stated in these rules shall be carried out by the International Contender Association or its delegated representatives.

## 2. ROYALTY

- (a) The royalty shall be based on 3% of the average retail price in Australia of a completely fitted boat ready to sail. This fee includes the designer's fee of 2%, the International Contender Association administration fee of 0.5% and the I.Y.R.U. administration fee of 0.5%.
- (b) The amount of royalty shall always be assessed on the above basis, and will be reviewed and revised by the I.Y.R.U. every other year at their Conference. From November 1968 until review the royalty shall be 31 United States dollars.
- (c) A royalty is payable by the builder on every boat built whether or not the boat is subsequently measured and registered.
- (d) The builder shall complete an International Contender Royalty Form in full (available from National Authorities or the I.C.A.) for each boat built and shall forward it to the International Contender Association headquarters in Sydney, together with the appropriate royalty as defined.
- (e) An official Royalty Receipt shall be issued to the builder by the Association: Royalty Receipts shall be numbered consecutively.
- (f) The official Royalty Receipt shall be delivered by the builder to the owner on delivery.

## 3. BUILDERS

- (a) Professional builders of the CONTENDER shall be only those recognised and registered by the I.Y.R.U.
- (b) Recognition is subject to review and withdrawal by the I.Y.R.U.
- (c) Additional professional builders may be recognised by the I.Y.R.U. at the recommendation of the I.C.A. or the relevant National Authority provided that a requirement can be shown for an additional source. It is not the intention to licence wooden builders before March 1970, except for suppliers of wooden kits. A timber kit shall consist of the unassembled component parts of the hull, rudder assembly and centreboard.
- (d) Bona fide amateur builders are permitted for timber construction only, and are limited to the construction and registration of one CONTENDER per year, and this shall be for their own use and not immediate resale. If circumstances necessitate immediate resale, then permission for this action shall be obtained from the I.C.A. or relevant National Authority.
- (e) The builder shall be responsible for delivering boats within the measurement rules and specifications. The builder shall at his own expense correct any boat which fails to pass measurement and failure to do so can be cause for cancellation of his licence. The responsibility for ensuring the continuing validity of the boat's certificate shall rest with the owner.

## 4. REGISTRATION

- (a) No boat shall be allowed to race in the Class unless it has a valid Class Measurement Certificate. Application for measurement and registration is the responsibility of the owner who shall apply to his National Authority for a sail number and measurement form, submitting at the same time the proposed name of the boat, and the Royalty Receipt.
- (b) Each country shall issue sail numbers which shall be consecutive commencing from "one" and the number shall be preceded by the official national letters. The National Authority shall enter the sail numbers of the boat on the official Royalty Receipt.
- (c) No two boats in the Class registered in the same country shall have the same name.
- (d) The owner shall arrange the attendance of an approved Measurer who shall complete the measurement form and, if satisfied, shall certify thereon that the boat complies with the Class Rules.
- (e) The measurement form, when COMPLETE, shall be returned by the owner to his National Authority, together with any registration fee required by the National Authority. On receipt of these a measurement certificate shall be issued to the owner and a duplicate sent to the International Contender Association headquarters in Sydney, giving the sail number, Royalty Receipt number, and the name and address of the owner. The boat shall then be entered on the official class register.
- (f) A National Authority may charge a registration fee.
- (g) Change of ownership invalidates the certificate but re-registration may be affected by returning the old certificate to the National Authority, together with an application in writing containing the name and address of the new owner and the appropriate re-registration fee if any. Re-measurement is not necessary. The National Authority shall issue a new certificate to the owner and shall send a duplicate to the International Contender Association headquarters in Sydney. The Association Secretary shall amend the Class register accordingly.
- (h) Notwithstanding anything contained in these rules, the I.Y.R.U. or National Authority shall have the power to refuse or withdraw the certificate of any boat.

## 5. MEASUREMENT

- (a) This is a one-design Class. Measurement tolerances are intended to allow for genuine building errors only and shall not be deliberately used to alter the design. Measurement shall be carried out using these rules in conjunction with the official plans and measurement diagram. The measurer shall report on the Measurement Form anything which he considers to be a departure from the intended nature and design of the boat, or to be against the general interest of the Class, and a Certificate may be refused, even if the specific requirements of the Rules are satisfied.

- (b) Templates used for official measurement or re-measurement shall be issued by the I.Y.R.U.
- (c) Only an Official Measurer appointed by the National Authority may measure a boat and sign the declaration, on the Measurement Form that it complies with the Class Rules. Payment for the Measurer's services is the responsibility of the owner.
- (d) A Measurer shall not measure a boat owned or built by himself.
- (e) It is the responsibility of the owner to ensure that the boat is correctly measured and to ensure that it thereafter complies with the current Class Rules.
- (f) All certified boats shall be liable to re-measurement at the discretion of the National Authority or Race Committee, but only by an Official Measurer.  
Any boat re-measured at a Class Meeting and found not to comply with the Class Rules may be disqualified.
- (g) A certificate shall be invalidated by structural alteration, replacement of components, or repair of the boat until the boat has been re-measured in respect of the affected parts by an Official Measurer and found correct.
- (h) New sails shall be measured, and registered on the boats Certificate by an Official Measurer.

## 6. RECOGNITION MARKS

- (a) The builders serial numbers shall be permanently marked on the surface of the deck forward of the forestay.
- (b) The sail numbers, national letters and class emblems shall be placed on both sides of the mainsail, in accordance with the I.Y.R.U. racing rules. Sail numbers, letters and emblems shall sharply contrast in colour with the sail letters and numbers on the sail shall be of the following minimum size: Height 300; Width 200 mm. (except figure 1 and letter 1).
- (c) Sail makers marks, if any, shall be placed near the tack of sails and shall not exceed 15 centimetres x 15 centimetres.

## 7. HULL MEASUREMENT

- (a) Both hull and deck in any boat shall be constructed of the same material, i.e. reinforced plastics or entirely of wood.
- (b) The length of the hull overall, excluding overlap of aft and forward deck shall be 4,875 millimetres measured between perpendiculars,  $\pm$  10 millimetres.
- (c) The hull shall be measured according to the measurement plan which is part of these rules. There shall be no concavities in the hull form aft of station 4 in the fore and aft direction parallel to the keel greater than 3 mm. between each station. There are metal templates for the stations 1, 2, 3, 5, 7, 8, the stem, and stern profile. These templates shall be obtained from the I.Y.R.U. The measurement stations shall be permanently marked at the keel and sheer as shown on the measurement diagrams  $\pm$  2 millimetres. The hull section, stem profile and sheer line shall conform to the lines  $\pm$  8 millimetres.
- (d) The transom shall be on the extreme aft end of the hull excluding overlap of the aft deck, and may rake forward or aft not more than 5 millimetres measured between top of deck and bottom of hull skin.
- (e) A datum shall be established for measuring the keel rocker as shown on the measurement diagram. The profile shall conform to the dimensions shown  $\pm$  5 millimetres.

## 8. COCKPIT AND DECKING

- (a) The cockpit and decking shall be measured according to the measurement diagram measurements and a tolerance of + or  $-20$  millimetres shall apply.
- (b) The camber of the deck measured at the foot of the mast position shall not exceed 60 millimetres.
- (c) The cockpit may only be drained through:
  - (i) The centreboard case.
  - (ii) Two transom tubes with a total cross sectional area not exceeding .015 square metres.
- (d) In the case of timber construction the entire deck and cockpit surface shall be a minimum thickness of 6 millimetres, and the timber shall have an officially recognised specific gravity of not less than .5.
- (e) In the case of timber construction the measurer shall drill 6 random check holes 3 millimetres in diameter in the deck and cockpit to verify timber thickness.
- (f) The centreboard case trunk may extend into the cockpit:
  - Maximum height 60 millimetres.
  - Maximum width 160 millimetres.
- (g) A vertical watertight bulkhead shall be fitted transversely at the forward and after end of the cockpit and vertical longitudinally watertight bulkheads at the inboard end of the side decks. Vertical cockpit corners may be radiused to 200 millimetres maximum and horizontal cockpit corners may be radiused to 68 millimetres maximum.

## 9. RUBBING STRAKE

A continuous rubbing strake width maximum 40 millimetres—minimum 15 millimetres and depth maximum 40 millimetres—minimum 10 millimetres measured vertically shall be fitted to the topside at the gunwale and may also be fitted to the top of transom.

## 10. CENTREBOARD

- (a) The centreboard shall conform with the measurements as shown on the measuring diagram,  $\pm$  4 millimetres.
- (b) The pivot is optional so long as the centreboard can be completely retracted into the centreboard case without moving the pin.
- (d) The centreboard when fully down shall not extend more than 1,214 millimetres below the keel.

## 11. RUDDER

- (a) The rudder blade shall conform with the underwater profile as shown on the plan  $\pm$  4 millimetres.
- (b) The rudder blade when fully down, shall extend not more than 905 millimetres below a line at right angles to the transom at the keel.
- (c) The design of the tiller and tiller extension is optional.

## 12. MAST

25.4

- (a) The mast shall be an inherently straight aluminium alloy extrusion of constant section with an integral sail track. Overall fore and aft measurement of the extrusion shall not be less than 63 millimetres nor more than 75 millimetres and athwartship shall not be less than 51 millimetres nor more than 61 millimetres.
- (b) The extrusion may be tapered from above black band (iii) and the sail track opened or cutaway below a normally positioned sail entry point but the shape shall be not otherwise altered.
- (c) The mast must not rotate.
- (d) The mast must be stepped on deck.
- (e) Distinctively coloured bands approximately 10 millimetres in width shall be painted on the mast:
  - (i) whose upper edge shall be a maximum of 585 millimetres above the deck measured along the after side of the mast when it is stepped,
  - (ii) whose upper edge shall be 3,350 millimetres minimum above (i) and located below (iii),
  - (iii) whose lower edge shall be 3,760 millimetres maximum above (i),
  - (iv) whose lower edge shall be 5,842 millimetres maximum above (i).
- (f) The rigging on the mast is optional except that the main shrouds, trapeze wires, and forestay or their extensions shall not intersect the mast outside the limits of black bands (ii) upper edge, and (iii) lower edge.
- (g) The minimum weight of the mast shall be 7 kilograms, complete with fixed fittings, all rigging and trapeze wires.
- (h) The minimum height of the centre of gravity with all rigging in position but lashed to the mast and the main halyard in sailing position shall be 2,150 millimetres above black band (i), upper edge.
- (j) The distance between after edge of the mast at deck and the after side of the transom at centreline (excluding the aft deck overlap) shall be minimum 3,050 millimetres, maximum 3,250 millimetres.
- (k) The mast step, shrouds, and forestay shall not be adjusted while racing.
- (l) All standing rigging, shall be circular in section and shall have no fairings. The minimum diameter of the main shrouds and forestay shall be 2.5 millimetres.
- (m) The mast as weighed shall be capable of floating horizontally.

19'2"

76.48"

## 13. BOOM

- (a) The boom may be of any material but shall be inherently straight and of constant section throughout its length.
- (b) The boom (excluding fittings), shall pass through a 80 millimetre diameter circle.
- (c) A distinctively coloured band 10 millimetres wide shall be painted on the boom with its forward edge not more 2,700 millimetres from the line of the afterside of the mast including the integral sail track or its extension with the boom attached to its gooseneck in the normal sailing position. The measurement shall be taken along the line of the top of the boom.

8.86  
8/104"

## 14. SHROUDS AND FORESTAY PLATES

- (a) The main shrouds shall be connected to the shroud plates, which shall be fitted not less than 250 millimetres abaft the afterside of the mast. The shroud plates shall be attached to the outside of the hull.
- (b) The forestay shall meet the centreline of the foredeck at a point 4,300 millimetres from the aft side of the transom at centreline excluding the aft deck overlap (tolerance + or -100 millimetres.)

## 15. WEIGHT

- (a) The minimum weight of the hull shall be 83 kilograms. When weighed the boat shall be weighed with only the following essential fixed fittings:
  - Toe straps and fastenings
  - Mainsheet traveller
  - Chainplates
  - Transom pintels
  - Towing eye
  - Mast step
  - Fixed fastening points for centreboard uphaul and downhaul tacklebut excluding all gear.
- (b) If the weight of the hull is less than 83 kilograms, lead weight correctors, total weight not exceeding 6 kilograms shall be equally divided and fastened at the fore and aft ends of the cockpit no lower than 50 millimetres below the deck.
- (c) Neither any essential fixed fittings, nor any correctors shall be removed or altered without the boat being reweighed by an official measurer.
- (d) The sailing weight in dry condition shall not at any time be less than 104 kilograms. The sailing weight shall be the weight of the boat, complete and ready to sail, excluding paddle, life jacket and trapeze harness.

## 16. SAIL

- (a) Not more than two sails shall be permitted for use in an International Race or principal event.
- (b) The sails shall be constructed and measured in accordance with the I.Y.R.U. sail measurement instructions.
- (c) The maximum dimension of the headboard, in any direction, shall not exceed 120 millimetres.
- (d) The curve of the leech is not controlled, but the total width of the mainsail is measured in three places, representing quarter, half and three-quarter heights on the sail. Any hollows in the leech shall be bridged by straight lines. The maximum distance from three-quarter luff point to three-quarter leech point is 1,210 millimetres. The maximum distance from half-luff to half leech point is 2,020 millimetres. The maximum distance from quarter luff to quarter leech point is 2,520 millimetres.
- (e) The length of the leech shall not exceed 6,100 millimetres.
- (f) Not more than 5 sail battens are permitted and they shall not be longer than 1,000 millimetres and shall divide the leech into approximately equal parts. The length of the batten pockets shall not exceed 1,050 millimetres. The upper side of the top batten pocket shall reach from the leech to the afterside of the mast, at a point not less than 1,230 millimetres from the top of the headboard.

4.724"

20'

(g) The leech of the mainsail shall in no place be concave when not under tension.

(h) The sail shall not project more than 5 millimetres past the edge of a straight line joining the headboard, or ends of batten pockets, or clew eyelet.

(j) Double luffed or loose footed sails are prohibited.

(k) When set, the luff of the mainsail shall not extend beyond the lower edge of band (iv) or the upper edge of band (i) specified in rule 12 (d). The foot of the mainsail shall not extend beyond the forward edge of the boom black band, specified in Rule 13 (a).

(l) The Class insignia, representing International code flag "C" shall be displayed on each side of the sail, and shall be 300 millimetres minimum, 350 millimetres maximum in height, and 450 millimetres minimum 500 millimetres maximum in width.

(m) When measured and found to be in accordance with these rules, the sails shall be legibly and permanently endorsed with the date of measurement and the measurer's signature.

New or substantially altered sails shall be measured by a recognised measurer and the details recorded on the official certificate in the space provided. The sail maker shall mark his serial number permanently on the sail.

## 17. EQUIPMENT

The following equipment shall always be carried on board while racing.

(i) An efficient paddle, not less than 750 millimetres in length, nor less than 20 millimetres in width for 90% of its length. Minimum weight .4 kilograms.

(ii) A life jacket, or buoyancy vest, which shall be worn at all times, unless the sailing instructions provide otherwise.

(iii) A towing ring shall be fitted and positioned forward of the forestay fitting.

## 18. MISCELLANEOUS

No hiking aids shall be allowed, except for gunwale foot loops, toe straps and trapeze gear. Trapeze gear worn by the crew shall not exceed 5 kilograms in weight and shall be buoyant under its own weight.

The following are prohibited:

Hydrofoils  
Outriggers  
Ballast  
Suction bailers  
Keel bands—except in way of centreplate slot  
Bottom rubbing strakes  
Spray deflectors and any projection from the skin other than normal fittings.

## 19. CREW

There shall be one person on board when racing.

## 20. BUOYANCY

The builder shall ensure that 150 kilograms minimum positive buoyancy is secured in the hull. One third to be located ahead of Section 5 and the remainder aft of Section 5 distributed equally around the centre line. This buoyancy may be used as a structural member. Air space shall not be considered positive buoyancy.

Effective: 1st May 1969

## DRAWINGS:—

1. Hull sections
2. Hull sections
3. Lines plan and offsets
4. Measurement diagram
6. Grp construction
7. Equipment
8. Wooden construction

Full size timber constructions 4 sheets