# CHERUB CLASS INTERNATIONAL ASSOCIATION

# **RULES AND RESTRICTIONS**

# Adopted 1st October 1968 with amendments to 15th September, 1972

**Please Note** - These are not current Cherub Rules anywhere in the world. They are posted as an aid to owners of older boats to understand the whys and wherefores of how their boat was built, and so that they have a set of measurements if they wish to get original size sails cut.

CHERUS CLASS INTERNATIONAL ASSOCIATION

# Rules and Restrictions



**INTRODUCTION.** The object of these restrictions is to provide a uniform set of rules to which inexpensive high-performance dinghies may be designed and built in all parts of the world. It is not possible for rules to cover every eventuality. In cases where doubt exists as to the intention of these restrictions, a ruling should be obtained from the Technical Committee C.C.I.A. Requests for such rulings shall be made through the relevant National Council. Where rulings made from time to time by the I.Y.R.U. are applicable and do not conflict with the class restrictions, these shall be adhered to.

**TITLE.** The class shall be known as the CHERUB 12ft. Restricted Class.

# 1. INSIGNIA

Shall consist of a heart shaped silhouette of a size which would approximately be contained in a 12" (30.48 cm) diameter circle. Shall be of a colour contrasting with the mainsail and placed approximately one third from the top on both sides of the sail.

#### 2. REGISTRATION:

On completion of measurement by an authorised measurer and subject to conforming to the class restrictions and payment of the prescribed fee, each boat shall be issued with a registration number by the Class Registrar (National); such number to be displayed on both sides of the mainsail close to and directly under the insignia and on the spinnaker at approximately half height on both sides in distinctly contrasting colours. The numbers to be approximately 12" (30.48 cm) high and have a trunk width of approximately 2" (5.08 cm). The National Authority may further require these numbers to be permanently marked on or into the hull. On completion of measurement of sails and subject to conformity with the class restrictions, those sails shall be marked indelibly, clear of all reinforcement with an official stamp showing the initials of the National Authority, the measurer's signature and the date. Where prescribed by the National Authority, sails may be required to be passed by an official measurer before leaving the manufacturers' loft.

#### 3. CREW:

The crew shall consist of two persons.

# 4. AMENDMENTS TO CLASS RESTRICTIONS:

May only be made as a result of a 2/3 majority vote in favour in a postal ballot of owners entitled to vote following a "remit" stating the proposed amendment(s) and signed by five owners entitled to vote.

"Remits" shall be submitted directly to the President C.C.I.A. not later than the 28th February in order to be eligible for the Annual Ballot.

The President shall promptly advise all National Technical Officers of the content of the "remit(s)", directing them to send to him not later than the 30th April a written report setting out their opinion of the desirability of the proposed amendment(s).

Such reports, from National Technical Officers, as are received by the President by the 30th April, shall promptly be submitted by him to the International Technical Officer with a request for a written report setting out the International Technical Officer's opinion on the desirability of the proposed amendment(s). The President C.C.I.A. shall, before the 31st May, write to each National Authority directing them to conduct a postal ballot where "remit(s)" have been received. He shall make available to the National Authorities all reports received on the "remit(s)" from National Technical Officers and from the International Technical Officer. These reports shall be made available, through National

Authorities, to all voting owners at the time the ballot is conducted. Votes not returned by the National Authority to the President C.C.I.A. by the 31st July shall be invalid. All votes shall be assessed collectively and the amendment(s) if passed shall become effective at 15th September unless otherwise stated in the "remit". No amendment however can be postponed for more than twelve months by "remit", and voting on the postponement shall be separated from the amendment.

Amendments shall be applicable to all boats registered after the date at which the amendment becomes effective notwithstanding which any replacement of sails, spars or other equipment or alterations to the hull other than minor repairs, which shall be certified as such by an authorised technical officer or measurer, shall conform to current restrictions. The National Authority shall have the right to determine whether boats partly complete on the date at which an amendment becomes effective shall be required to conform to this.

# 5. HULL:

- 1. Length overall shall not exceed 12 feet (3.658 metres).
- 2. Boats shall be of hard chine type with not more than one chine each side of the fore and aft centre line. The angle formed by the junction between bottom and topsides at the chine may 'disappear' forward but aft of mid-length may not be rounded off to a radius greater than (6.35 mm).
- 3. Sheer shall be fair and continuous in elevation, either concave, straight, or convex.
- 4. Stem. The profile of the stem outside capping etc. shall be approximately perpendicular to the waterline and straight for a minimum depth below sheer of 18" (45.72 cm) but may be rounded below this point.
- 5. The following shall be measured at mid-length: -
- (a) Beam outside gunwale cappings etc. may not exceed 5' 0" (1.524 metres).
- (b) Beam at chines outside of skin may not be less than 3' 10½" (1.1811 metres).
- (c) Depth measured vertically from sheer to underside of hull at centre, may not be less than 18" (45.72 cm).
- (d) Depth measured vertically from chine to underside of hull at centre, may not exceed 6" (15.24 cm).
- 6. The following shall be measured at Transom: -
- (a) Width between chines shall not be less than 3'0" (91.44 cm).
- (b) Depth measured vertically from sheer to underside of hull at centre may not be less than  $10\frac{1}{2}$ " (26.67 cm).
- (c) Depth measured vertically from sheer to chine may not be less than  $7\frac{1}{2}$ " (19.05 cm). NOTE: Where chine has been rounded off as in (5) 2 measurements for 5 (b) and (d) and for 6 (a) and (c) shall be taken mid-way on round. Where a keel batten or band is fitted this may not exceed 2" (5.08 cm) in width or  $\frac{1}{2}$ " (1.27 cm) in depth.
- 7. Curvature in sections: No vertical cross section of the hull may contain more than ¾ " (19.05 mm) of curvature, which may be concave or convex, between chines and sheer. Between chines and fore and aft centreline curvature may only be convex and may not exceed 1¾" (4.445 cm) measured 3 feet (91.44 cm) from stem or 1" (2.54 cm) at or aft of mid-length. Such curvature in sections shall have its maximum rise or depth at a point not

less than one-third (1/3rd) of the span from either extremity, i.e. at sheer, chine or centreline.

- 8. Materials: Hull may be constructed from any materials provided that the decks shall be of material of at least equivalent strength and rigidity to the topsides and shall be permanently fitted.
- 9. Centrecase shall be fitted on the fore and aft centre- line of the hull and may not be constructed in such a way as to enable the centreboard to be set off centre.
- 10. Decks: Decking shall be fitted for the full width of the boat at or above sheer height from the stem to the aft side of the mast, with the exception that openings for halyards, etc., not exceeding 2 square inches (12.90 sq. cm) in total area plus further openings for spinnaker stowage, jib furling gear, etc., not exceeding one and one half square feet (0.1393 sq. m) in total area are permitted provided that they do not permit access for water into a buoyancy compartment. Aft of this, side decking not less than 6" (15.24 cm) in width inclusive of gunwale assembly must be fitted each side of the boat. This may roll down or slope inwards but may not fall more than 1" (2.54 cm) below sheer within 6" (15.24 cm) of the gunwale.
- 11. Gunwale Assembly: The outer edge of the gunwale assembly shall form a fair continuous curve in plan and elevation for the full length of the boat except that foot stops for crew, if fitted, may extend outside this. Gunwale assembly may be fitted completely or partly outside the hull. No projection outside the gunwale other than footstops is permitted.
- 12. Buoyancy Compartments: Not less than 9 cubic feet (0.2549 cu. m) of buoyancy contained in three separate compartments with not less than 2/3 cubic ft. (0.0189 cu. m) in each one. These shall be built into the boat in such manner as to enable the hull, with sails, spars, rudder, and centreboard and all loose gear removed, to support with cockpit flooded and all draining devices opened, 300 lbs. (136.080 kg) of cast iron or other dense material placed not less than 4' 6" (1.371 m) from stem. After remaining in this condition for not less than 30 minutes the gunwales shall remain clear all round and no significant leakage into the buoyancy compartments shall have occurred.

Measurement of buoyancy compartments shall include the volume contained within the external surface surrounding these but may not include buoyancy achieved in other parts of the hull by foam sandwich or other construction. In hulls built entirely or substantially from non-buoyant materials there shall remain when buoyancy compartments are flooded not less than 100 lbs. (45.359 kg) positive buoyancy of approved type.

- 13. Cockpit: Self draining cockpits of the false floor type are not permitted. Water taken inboard shall have direct access to the inside bottom of the boat over an area of not less than 10 square feet (0.9290 sq. m). The bottom of the boat may be laminated from any materials including a combination of dissimilar materials e.g. reinforced plastic and plastic foam, but may not exceed 1½" (3.175 cm) in total thickness inclusive of structural members e.g. stringers, over the whole of this area, other than within 2" (5.08 cm) each side of the fore and aft centreline.
- 14. Weight and weighing: Weight of the hull in dry condition inclusive of all normal permanently fixed fittings but excluding sails, spars, rigging, centreboard, rudder, detachable floorboards and other loose gear, shall not be less than 110 lbs. (49.895 kg). When the hull is underweight weight correctors not exceeding 10 lbs. (4.536 kg) may be fitted to the underside of the foredeck and may not be fitted in any other location. Any

additional discrepancy shall be made good by structural additions to the satisfaction of the measurer. The amount of weight correctors and the nature of any structural additions made in this respect shall be recorded on the measurement form. Weight correctors may subsequently be reduced or removed subject to the boat being reweighed after having been dried out and stored in a dry place for not less than three weeks.

# 6. CENTREBOARD AND RUDDER:

May be of any material(s) and type but may not be ballasted. Centreboard may not be shaped or fitted with any device by which it will adjust itself or may be adjusted offcentre or pivoted about its longitudinal axis.

Centreboard may not exceed 5' 9" (1.753 m) in length and if designed to house in the centrecase when retracted it shall not project below the underside of the skin when housed.

# **7. SPARS:**

Spars may be of any material, may be laminated and/or hollow, and must be capable of being passed through a 4" (10.16 cm) diameter ring when stripped of all fittings. Spars may not be constructed permanently bent.

Mast: Length overall shall not exceed 20 ft. (6.096 m) and shall be stepped at or above deck level. Where stepped over or into an extension of the compression strut or brace this shall be a fixture in the hull and may not extend more than 5" (12.70 cm) above the bottom of the mast.

Two coloured bands not less than ½" (1.27 cm) in width and spaced not more than 18 feet (5.486 m) apart between inner edges, shall be painted on the mast. When the mainsail is set no part of the head of the sail may extend past a line 90 degrees to the mast at the lower edge of the upper coloured band. In addition the upper top of the boom, inclusive of track, or projection thereof, may not be set below the upper edge of the lower coloured band.

Boom: Shall have painted on it a coloured band not less than  $\frac{1}{2}$ " (1.27 cm) in width with its inner edge not more than 6' 9" (2.057 m) from the point where the projection of the aft side of the mast intersects the top of the boom.

No part of the sail at or above the foot may extend outside a line 90 degrees to the boom at the inner edge of the coloured band.

Spinnaker Boom: May not exceed 9 feet (2.743 m) in length inclusive of fittings.

Rigging: Standing and running arrangements are optional except that devices for adjusting of standing rigging to permit alteration of bend or rake in the mast whilst racing are not permitted. This specifically includes mast preventer stays or struts which can be

adjusted whilst sailing but does not preclude the use of adjustable boom vangs or 'kickers'.

#### 8. SAILS:

Material: Shall be confined to woven fibre cloth, including synthetics, except that one unwoven transparent panel may be used below half-height in each of the mainsail and jib. All sails shall be stowable in sail bags of normal dimensions.

Reinforcement: Only normal reinforcement to take headboard tack and clew cringles is permitted. The use of additional reinforcement in place of normal tabling or edging on leach is not permitted.

#### **MAINSAIL**

Mainsail: No part of the headboard or sail shall extend above a line 90 degrees to the mast at the upper coloured band and no part of the leach shall extend beyond a line at 90 degrees to the boom at the coloured band when luff and foot are fully extended to their relevant bands.

Luff: Shall not exceed 18 feet (5.486 m) when stretched with 10 lbs. (4.536 kg) tension applied. Leach: Shall not exceed 19 feet (5.791 m) when laid flat and stretched free of wrinkles.

Foot: Shall not exceed 6' 9" (2.057 m) when stretched with 10 lbs. (4.536 kg) tension applied.

Headboard: Shall not exceed 4" (10.16 cm) in width perpendicular to luff and must be fitted as close as possible to bolt rope.

Cross widths: With the luff stretched at 10 lbs. (4.536 kg) tension and marked from the headboard upper forward corner at points: -

- 1 12" (30.48 cm)
- 2. 4' 6" (1.372 m)
- 3. 9' 0" (2.743 m)
- 4. 13' 6" (4.115 m)

The sail shall then be laid out on the floor and width measured along the fold obtained at each of the above positions when the portion of the luff above the mark is placed over the portion below, with edges coinciding for the full length for which they overlap and the sail smoothed out.

Widths shall not exceed the following at: -

- 1. 15" (38.10 cm)
- 2. 3' 3" (0.991 m) <sup>3</sup>/<sub>4</sub> ht.
- 3. 4' 11" (1.499 m) ½ ht.
- 4. 6' 3" (1.905 m) 1/4 ht.

Measurements shall be taken over the full width of the sail inclusive of bolt rope or other edging and any hollows in the leach shall be bridged by straight lines to which measurements shall be taken.

Battens: In the mainsail shall not exceed six in number and the width inside the pockets may not exceed  $2\frac{1}{2}$ " (6.35 cm). Length and position of battens is optional except that no

part of the uppermost batten pocket may extend above the fold obtained for measurement of width at (1).

#### JIB

Jib: Maximum measurements shall be as follows: -

Luff: 12' 3" (3.734 m) measured with 10 lb. (4.536 kg) tension applied. Leach 11' 9" (3.581 m) measured with 5 lbs. (2.268 kg) tension applied.

Foot 5' 9" (1.753 m) measured with 10 lbs. (4.536 kg) tension applied. The wire luff of the jib may be used in place of a normal forestay wire but, where the luff of the jib is adjustable on the wire at either or both ends, the tension shall be applied to the jib luff and not to the wire when measuring. Measurements shall be taken from the point of intersection of the projections of adjacent edges, outside of all cloth and external edging at tack and clew, and from the point at which the cloth terminates at the head. The width at the head shall not exceed 1½" (3.175 cm). A headboard is not permitted. Battens may be fitted to the leach only. These may not exceed three in number. The width inside the pockets may not exceed 1½" (3.175 cm). Length inside the pockets may not exceed 8" (20.32 cm). Upper and lower batten pockets may not be placed less than 2' 6" (76.20 cm) from the head or clew.

#### **SPINNAKER**

Spinnaker: Maximum measurements shall be as follows: -

Luff: 14' 8" (4.470 m) measured with 5 lb. (2.268 kg) tension applied.

Leach: 14' 8" (4.470 m) measured with 5 lbs. (2.268 kg) tension applied.

Foot 9' 4" (2.845 m) measured with 5 lbs. (2.268 kg) tension applied. Measurements shall be taken in a straight line. A headboard not exceeding 4" (10.16 cm) in width at any point may be fitted. Battens are not permitted. In addition the width at half height shall be measured as follows: -

Double luffed spinnakers shall be folded down the centre and smoothed out on the floor with luffs coinciding as far as is permitted by the head board or head cringle. The half-width measured along the fold when the centre of the head board or head cringle is placed over the point of intersection of the projection of luffs and foot and the sail smoothed out with upper and lower portions of the luff coinciding may not be less than one quarter of the foot plus 8" (20.32 cm) or more than 4' 6" (1.372 m).

Single luffed spinnakers shall be folded crosswise between midpoints on the luff and the leach, and smoothed out on the floor. Width then measured along the line of the fold may not be less than half of the foot plus 9" (22.86 cm). One spinnaker only may be carried on board in any race.

# 9. THE FOLLOWING ARE NOT PERMITTED: -

- (a) Ballast of any form other than weight correctors.
- (b) Bowsprits or bumpkins.
- (c) Double or pocket luffed mainsails.
- (d) Outriggers for sheeting sails or any other purpose.

- (e) Any contrivance other than a trapeze extending outboard to support the crew.
- (f) Spinnaker sheet catchers on stem which may be dangerous to other crew or craft.
- (g) Markings on sails other than insignia, registration number, measurer's stamp and manufacturer's trade mark.

Note: Jib fairleads and spinnaker guy and sheet fairleads may be mounted on the gunwale assembly provided that they do not extend outside of this. The spinnaker guy and sheets may be led through tubes below deck from outside of the hull.

One trapeze only is permitted, but may be used by either member of the crew.

# **10. DEFINITIONS:**

Chine: Junction between bottom and topsides outside skin.

Sheer: Point where the outside surface of topsides or projection thereof meets or

intersects the upper surface of the decks.

Concave Curved inwards or downwards (hollow).

Convex: Curved outwards or upwards.

Camber: As convex.

Gunwale Assembly: The whole of the gunwale construction inclusive of inside and/or outside gunwales, beltings, cappings, etc.

Skin The shell of the hull excluding structural members to or by which it is jointed.

Self Draining Cockpit: A cockpit which drains or partly drains it self without assistance of the forward motion of the boat.

Spars Constructed with a Permanent Bend: Mast, boom, or spinnaker pole designed and built intentionally with a permanent bend. No spar remains perfectly straight or in fact is likely to be built perfectly straight, but it is the intention of the rule to prohibit spars being designed and built intention ally bent in order to gain sail area or other advantage.

Normal Reinforcement: Such reinforcement as is normally considered necessary to hold the tack and clew cringles and head cringle against pulling out. The use of stiffening e.g. heavier cloth, numbers of layers of cloth or materials other than normal woven cloth and/or overstitching cannot be regarded as normal. Neither can any excessive width of tabling, turning, additions of heavier cloth or overstitching of the leach be regarded as normal.

Coloured Bands: Coloured bands shall be of such a colour as will contrast with the colour of the spars.

Editor's Note. These are the rules which with slight changes applied in the UK up until 1984. They are supplied so that owners of older boats may understand the restrictions that the designer and builder of their boat was working to.

The most significant differences for earlier boats was that a smaller jib was used and that spinnakers did not have a minimum cross width at half height and so could be triangular. From 1984 up until 1991 the hull rules were substantially similar except that the rise of floor measurement at mid length was relaxed and the sail plan was much less rigidly defined with a slightly larger area.