INTERNATIONAL ENTERPRISE CLASS RULES 2011

THE INTERNATIONAL ENTERPRISE WAS DESIGNED BY JACK HOLT

Authority: INTERNATIONAL SAILING FEDERATION

Marginal markings indicate changes made in the text since the previous edition.

1. OBJECT OF THE CLASS RULES

This is a One Design Class. The rules, plans and specifications are intended to ensure that in the hull form, weight, scantlings, sail plan, sail colour, deck plan, the boats are as nearly alike as possible with variations in cockpit layout and fittings as alternatives on lists and plans. All boats shall be built according to the rules and relevant plans in all respects. Tolerances are given to allow minor building errors and distortion through age, but any intentional variations within these tolerances shall be prohibited.

If the measurer considers that there has been any attempt to depart from the design or the rules in any particular, he shall report the matter to the National Authority, which shall withhold the certificate of measurement pending an examination of the case and after consultation with the ISAF, may grant a certificate.

2.CONTROL OF ONE- DESIGN

In addition to the class rules and measurement forms, all boats shall also conform where relevant to the following plans,

Sheet No Content or Title Applicable to, Latest Issue Date
1 Moulds and fitting out wood hull Wood 1981
2 Stem, hog, keel, transom knee Wood 1978
3 Transom, quarter knee Wood 1982
4 Sections 1, 2; platecase, forward knee
(when thwart is in aft position) rubbing bead Wood 1978
5 Sections 3, 4; platecase; knee, bilge keel Wood 1982
6 Rudder All 1978
7 Centreboard All 1978
8 Mast, boom, fittings, handle, rigging All 1978
9 Sail plan, bilge keel position All 1978
10 Built-in buoyancy and conversion, rubbing bead Wood 1981
11 GRP I Hull construction GRP I 1978
12 GRP I Completion GRP I 1978
13 Composite construction Composite 1978
14 GRP II GRP II 1981

Moulds for the construction of the boats in glass reinforced plastic shall be obtained only from the central source approved by the ISAF. Moulds shall be numbered and issued only to moulders licensed by the ISAF. No alterations shall be made to any of the official moulds which affect the configuration or shape of the hull, deck or component mouldings.

All applications for licences shall be sent direct to the Enterprise International, which will refer these to the National Authority of the country concerned, asking such authority to advise on the suitability of these builders. An inspection of the production facilities may be carried out at the expense of the builder to ensure that the boats produced are of an acceptable quality.

If this inspection is satisfactory, application should be made to the ISAF to issue a licence to the builders under the terms agreed between ISAF and the Copyright Holder, to produce International Enterprise dinghies conforming with the official plans, specifications and measurement rules. This licence shall be subject to review and withdrawal by the ISAF at any time. The ISAF shall ensure that a legal contract shall be signed by the moulder when approved, which shall include clauses requiring a high standard of moulding being both maintained and a guarantee that the building fees are paid.

(b) The National Authority may delegate its responsibilities to the relevant national Enterprise Association.

3. INTERNATIONAL CLASS AND ADMINISTRATION FEE

(1) The International Class and Administration Fee is £43.68 (plus VAT in the UK).
(2) The amount of the above fee may be reviewed by the ISAF in consultation with Enterprise International.
(3) The ISAF is responsible for the collection and distribution of the above fee to the designer, Enterprise International and the ISAF.
(4) The International Class and Administration Fee shall be payable by the builder on each boat built whether or not it is subsequently measured and registered. Payment shall be made direct to the ISAF which will issue an official receipt.

4. SAIL NUMBER

The sail number shall be obtained from the ISAF which shall only issue the number on receipt of the International Class and Administration Fee.
The sail number shall be carved in figures not less than 19 mm high in the transom or may be in the upper face of the aft thwart on moulded and composite boats.
A production serial number shall be engraved on a plate permanently fastened to the inner face of the transom of all boats with moulded hulls.

5. MEASUREMENT CERTIFICATE

No boat is permitted to race in the class unless it has a valid measurement certificate and the owner is a current member of a recognised Enterprise Association. This certificate shall be obtained in the following way:
(A) Measurement forms and lists of approved measurers can be obtained from the National Authority.
(B) In the case of a new boat, or one so substantially reconstructed or repaired as to require re measurement, by sending a measurement form properly completed and signed by a measurer recognised by the National Authority.
(C) On change of ownership by sending the old certificate to the National Authority, together with any re-registration fee required.
(D) Replacement or substantially altered sails shall be measured and the details entered on the certificate and signed by a measurer recognised by the National Authority.
(E) Replacements or rebuilt masts, booms, centreboards and rudders shall be submitted for measurement by a recognised measurer before being used. A measurement form need not be completed for such items.
(F) A National Authority may, examine any boat, refuse to issue a certificate or withdraw a certificate already issued, if in the opinion of the chairman and secretary of the responsible technical committee, specifications or rules had not been clearly complied with.
(G) From 1st July 1978, all boats sailing in international events shall comply with the current rules and measurement form.

6. CONSTRUCTION

The following types of construction are permitted;

Wood; May be built by any amateur or professional builder.

Composite; (*Fibreglass hulls with wooden decks*) Any amateur or professional builder may complete a fibreglass hull from an approved mould into a composite boat

Fibreglass; Only licensed, professional builders are permitted to build fibreglass boats, from approved moulds as per (rule 2) above.

Permitted Materials

Wood – Where wood construction is used any type of glue is permitted. Where the drawings or material lists state a particular material, this is for guidance only, except that plywood must be plywood and solid wood solid. While the drawings show each piece of wood as solid, laminating or building up to size with another piece, even of a different species, is permitted. The sections shown of individual pieces give the size of any radii or bevels. Where these are shown no noticeable increase is permitted. In other cases, a radius or bevel of up to 6.3 mm is permitted. A hard protective finish may be affixed to the inside of the centreboard case. If this is done it shall extend over the whole of the inside of the centreboard case.

Composite – the materials allowed are as per wood rules and fibreglass specifications.

Fibreglass – Mark 1 and 2 fibreglass boats may be made using polyester or vinylester resin and any chopped strand mat and woven glass fibre cloth, the use of specialised or non glass fibres is not permitted. The Mark 3 fibreglass boat may be made from epoxy resins.

All types of fibreglass boats are permitted to incorporate additional panel reinforcement such as Coremat, foam ribs or closed cell PVC foam. The maximum permitted thickness of foam shall not exceed 10mm in the hull floor panels, and 6mm elsewhere. The total thickness of the hull floor panels shall not exceed 15mm, and the overall thickness of any other panels shall not exceed 10mm. The fibreglass mat on either side of the foam shall not be less than 1oz/ft2 (305g/m2) or more than 1.5oz/ft2. (457g/m2).

Fittings - The drawings show the types of fittings required. They may be made in various materials but their general design must not be changed to enable fittings to be put to additional uses. In positioning any of the fittings the structure of the boat may not be altered other than by making the necessary holes for bolts or screws. Substantial alterations invalidate the certificate making it necessary for the boat to be re-measured and a new certificate issued.

7. HULL

(A) *Length*

Length overall of hull including keel band (but not normal rudder fittings, covers for transom ports and optional outboard pads) measured from aft face of transom to a point where the line of the deck meets the line of the forward face of the keel band shall be 4039 mm +/- 13 mm.

(B) *Shape*

(1) The hull form shall conform to the plan of sections at full scale and shall be measured according to the measurement form which is part of the rules.

(2) The sections of the keel (excluding keel band) from the transom to 3505 mm forward shall be as plans +/- 3 mm on height and width.

(3) Measurement sections 1, 2, 3 and 4 shall be at 3302 mm, 2388 mm, 1575 mm and 762 mm respectively, measured along the base line from the aft face of the transom. No tolerance.

(4) Base line shall be fixed at 86 mm at section 1 and 168 mm at transom below the bottom of the keel. No tolerance.

(5) The sheerline is the intersection of the lines of the top of the deck and the outside of the skin, projected if necessary. Beam at the sheerline shall be measured to this point.

(6) The shape of the stem and forefoot shall be controlled by the following measurements:

(a) The extension of the straight edge of the foreside of the stem, including the keel band, shall meet the base line 3835 mm +/- 20 mm from the aft face of the transom and:
(b) The distance from a point 200 mm from the base line, measured along the extension of the foreside of the stem as described in (a) above, to the nearest point of the keel band shall be 55 mm +/- 10 mm.
(7) All measurements shall exclude the keel band except where otherwise stated.
(8) The bilge keels shall conform to the cross-section profile as shown on Plan sheet 5 or as shown on Plan sheet 14, irrespective of the material of hull construction.
(C) Weight
(1) The weight of the hull in dry condition shall not be less than 94 kg. Hull shall include fixed metal work covering anything essential in this category fixed to the hull by bolts, screws or rivets; other permanently attached equipment; buoyancy and its attachments; protective finish and correctors. It shall not include the centreboard.
(2) Correctors may be used totalling not more than 4.5 kg and shall be attached at the under-side of the deck, or the under-side of the thwarts and the total weight shall be recorded on the certificate. Correctors shall not subsequently be reduced in weight, or removed from the boat unless the boat is officially reweighed and a Measurement Form is submitted to the National Authority with the relevant parts filled in by an official measurer, together with the Measurement Certificate which shall be appropriately amended or replaced.
(D) *Centreboard Capping*
For wood boats, the centreboard capping may be of either design shown on Plan sheet 1 or on Plan sheet 13.

8. DECKING

(A) *Foredeck*
(1) Length of foredeck from a point where line of forward face of keel band meets line of deck shall be 1372 mm +/- 13 mm.
(2) Wash Boards shall be fitted or moulded. Height from deck at centre line shall be 28 mm +/- 9 mm extending to within 50 mm of each sheerline.
(3) Wooden boat, top of hog to top of deck at mast shall be 603 mm +/- 13 mm. moulded and composite boat, underside of keel to top of deck at mast shall be 635 mm +/- 13 mm.
(B) *Sidedecks*
(1) Boats with wood decks. Width of the decks from the transom to section 2 shall be 152 mm +/- 13 mm. Width shall be measured from the sheerline to the inboard edge of the deck.
(2) Boats with moulded decks. Width of the decks from the transom to section 2 shall be not less than 125 mm or more than 165 mm measured as in (1) above. moulded boats with side tanks extending up to the side deck shall have a hand grip beading.
C) *Handles*
Two carrying handles of wood or metal may be fitted on the top of the deck or rubbing bead.

9. GUNWALE RUBBING BEAD

The rubbing bead or deck overhang shall be not more than 32 mm wide and shall be of uniform width +/- 3 mm throughout (local damage excepted), but may be faired in to a maximum distance of 76 mm from bow and stern.

10. BUOYANCY

(A) Where built-in buoyancy is not fitted apparatus which shall consist of side unit or units providing a total positive buoyancy of not less than 90 kg on each side and a

bow unit or units providing a total buoyancy of not less than 136 kg shall be fitted. Boats built after 1st March 1974 shall be fitted with at least two separate buoyancy units on each side, each providing not less than 45 kg positive buoyancy (this rule shall apply when any side buoyancy unit is replaced). All buoyancy units shall be firmly secured by webbing straps of not less than 25 mm in width which shall be secured either by screws passing through the strap or by brackets or plates which are screwed to the boat. Free ends of the webbing straps shall be securely joined and a knot or a buckle type fastener may be used for this purpose. There shall be at least three straps on each unit of side buoyancy and at least four straps on any side buoyancy unit providing more than 70 kg of positive buoyancy. Without spars, the boat when filled with water shall float roughly level fore and aft with an effective weight which may consist of metal or a suitable number of persons weighing not less than 200 kg of which 100 kg shall be placed within 1500 mm of the bow, the rest aft of amidships.

(B) Where built-in buoyancy as the plans is fitted, side tanks shall not be fitted unless a bow tank is also fitted.

Measurers shall check all water-tight joints and satisfy themselves that they are efficient and that the hatches are also adequately water-tight. In addition, the joints of the bulkheads shall be tested with the boat floating level, by filling the cockpit with water until it overflows the top of the centreboard case. After 30 minutes in this condition, the cockpit shall be drained and the measurer shall inspect the tanks for significant leakage.

Leakage shall be checked by measurement of the quantity of water drained from the tanks after the immersion test. The maximum quantities permitted are as follows:

Bow tank: Leakage(litres)
Wood, composite, new moulded with bulkhead in recommended position (approx. 2990 mm from transom)..... 10.0
Bow tank:
New moulded with bulkhead in original position (approx. 3170 mm from transom)..... 7.0
Side tank:
Wood.....3.5
New moulded 5.5
All round:
Old GRP.....24.0

As an alternative to an immersion test the adequacy of buoyancy tanks and units may be determined by subjecting them to either a pressure or a vacuum test. The tanks and units shall be deemed satisfactory if an initial pressure differential of 125mm of water does not reduce below 50mm in 30 seconds.

This alternative method will still require inflatable buoyancy units, including their fastenings, to conform with Rule 10(A).

(C) Where built-in bow buoyancy as the plans is fitted without side tanks, apparatus which shall consist of side unit or units providing a total positive buoyancy of not less than 90 kg on each side shall be fitted to conform with (A) above.

Both buoyancy tests shall be carried out as detailed above.

(D) Hatches are compulsory in buoyancy tanks enclosed entirely or partially by wood (hull, bulkhead or deck) and are optional in buoyancy tanks of moulded construction. Not more than two hatches, maximum diameter of aperture 127 mm shall be fitted in any side buoyancy tank. Not more than two hatches, maximum diameter 152 mm, or alternatively, one hatch not exceeding 305 mm diameter shall be fitted in the bow buoyancy tank.

A drain hole with suitable stopper shall be provided in each separate compartment of built-in buoyancy.

(E) The appropriate test(s) shall be carried out when the boat is first measured and thereafter annually and the certificate endorsed by a measurer recognised by the

National Authority.
(F) Boats with moulded hulls shall have buoyant foam material incorporated in their construction in accordance with the appropriate plans, as follows:-
Moulded boats with full built-in buoyancy Cubic metres minimum
(a) with side tanks extending up to the side decks 0.14
(b) with separate side tanks..... 0.084
Moulded boats with built-in bow buoyancy and inflatable side buoyancy: 0.07
Composite construction..... 0.042

11. CENTREBOARD

(A) The centreboard shall be of the general size and shape shown on the plans and shall have maximum width 407 mm and maximum length 940 mm from the centre of the bolt hole which shall be not less than 101 mm from the fore edge of the centreboard. The radius of the corners of the immersed portion shall be optional to a maximum of 80 mm.
The centreboard shall be constructed of plywood, solid wood, glass reinforced plastic with or without a plastic foam core or any combinations of these materials. The type of resin and or coating is optional. It shall not be less than 14 mm and not more than 23 mm thick. It shall be of even thickness throughout except that the edges may be bevelled to a maximum of 51 mm from each edge. It shall be permissable for the whole of the part of the centreboard which does not protrude below the keel to be built up in equal, uniform thicknesses on each side to reduce sideplay.
(B) Position
Aft face of transom to fore side of centreboard bolt shall be 2229 mm +/- 13 mm.

12. RUDDER

(A) The rudder stock shall be of optional design and material.
The rudder blade shall be constructed of plywood or solid wood, glass reinforced plastic with or without a plastic foam core or any combinations of these materials. The type of resin and or coating is optional.
The rudder blade shall pivot within the stock.
Below the line of the keel the blade shall be in accordance with one of the two designs shown on the plans.
Above the line of the keel the shape of the blade may be modified to fit the rudder stock.
Blade 1: Extension below keel: 538 mm maximum. Width: 318 mm maximum.
Blade 2: Extension below keel: 614 mm maximum: Width: 254 mm maximum.
Width shall be measured at right angles to the line of maximum length. Thickness of the blade shall be 19 mm +/- 3 mm. The blade shall be of even thickness throughout except that the edges may be bevelled to a maximum of 51 mm from the edge.
Extension of the blade below the keel shall be measured with the blade fully down. The measurement shall be from the aft lower edge of the keel, excluding keel band and parallel with the aft face of the transom.
(B) The rudder blade may be secured in the sailing position by a device of optional design, or shock cords and/or lanyards may be used to raise or lower the blade. The design of the rudder head and the tiller is optional. The rake of the blade is optional.

13. TILLER

The type and length of the tiller is optional.

14. MAST

(A) *Position*
(1) The measurement from the aft face of the transom to the aft side of the mast at the top of the mast step shall be 2683 mm +/- 6 mm.
(2) For the purpose of this rule the aft side of the mast shall be defined as the aft side of the luff groove projected to the top surface of the mast step by

means of a straight edge.
(B) *Construction, Weight and Specification*
Masts shall be of wood or aluminium alloy.
(1) *Wooden Masts*
(a) The mast shall be constructed generally as the plans. It shall not be less than 6200 mm overall and shall be parallel-sided between points 1041 mm to 4470 mm above the top surface of the mast step, minimum dimension 79 mm fore and aft by 60 mm athwart-ships with an optional taper from 4470 mm above the top surface of the mast step, to a minimum dimension 54 mm fore and aft by 41 mm athwartships at upper band.
(b) *Spreaders (optional)*
Either: One pair of fixed stays from 4432 mm to 482 mm above the top surface of the mast step +/- 76 mm in each case, may be spread out by one strut not less than 559 mm or more than 660 mm long and fitted through the mast 2412 mm +/- 76 mm above the top surface of the mast step. Adjusters of not more than 51 mm exposed length each side, as plans, may be included.
Or: Optional design spreaders may be used between mast and main shrouds.
(2) *Aluminium Alloy Masts*
(a) Minimum and Maximum Diameter of Mast (between points 1041 mm to 4470 mm above the top surface of the mast step)
Fore and aft Minimum 64 mm Maximum 73 mm
Athwart-ships Minimum 54 mm Maximum 67 mm
Masts shall be parallel-sided between points 1041 mm to 4470 mm above the top surface of the mast step. Above 4470 mm the mast may be tapered to a minimum of 44 mm fore and aft and 44 mm athwart-ships at upper band.
(b) *Spreaders (optional)*
Either: One pair of fixed stays fitted as in 14(B)(1)(b) above except that the struts shall not pass through the mast but may be affixed to it by plates using pop rivets or self-tapping screws, or optional design spreaders may be used between the mast and main shrouds.
(C) *Weight of Mast*
(b) Halyards, cleats and/or leads shall be permitted on the mast.
(d) The tip weight of the mast with all fittings, rigging and halyards (including shroud and fore-stay length adjusters but excluding the burgee and/or wind indicator) shall be not less than 3.5 kg when weighed at the lower edge of the upper measurement band and in the following condition: Mast horizontal and supported at the tenon of the heel plug; halyards shall be in the sailing position with tails trailing over the tenon support; the shrouds and fore-stay shall be tied to the mast at the upper edge of the lower measurement band and have their lower ends trailing.
(D) *Bands*
Measurement bands contrasting in colour with the mast shall be painted on the mast as follows:
(a) No.1 the upper edge of which shall be not less than 431 mm above the top surface of the mast step;
(b) No.2 the lower edge of which shall be not more than 6070 mm above the top surface of the mast step.
If reduced rig in use:
(c) No.1A the upper edge of which shall not be more than 583 mm or less than 431 mm above the top surface of the mast step.
(d) No.2A the lower edge of which shall not be more than 5182 mm above the upper edge of band 1A.
(E) *The Point of Intersection*

The point of intersection of the lines of shrouds and fore-stay with the mast shall be not more than 4470 mm above the top surface of the mast step. The jib halyard shall intersect the mast below this point. The point of intersection of the spinnaker halyard and the mast shall be not more than 4654 mm above the top surface of the mast step.

(F) The Rake

The effective length and position of the shrouds shall not be adjusted during racing.

(G) Mast Step

(1) The total depth of the mast step shall be not more than 26 mm.

The type of material shall be optional.

(2) Packing pieces are permitted between the mast tenon and the mast step to prevent the fore and aft movement of the mast, provided the packing is fixed. Packing pieces are permitted between the mast tenon and the mast step to prevent the athwartships movement of the mast.

15. STANDING RIGGING

One forestay and two shrouds shall be fitted. The shrouds shall be connected to the sheerline 346 mm +/- 13 mm abaft the aft side of the mast at the mast step. See Rule 14 (A) (2) for definition of aft side of mast.

Material of standing rigging is optional.

The method of fixing the standing rigging to the mast is optional.

16. RUNNING RIGGING

Type of material of all running rigging is optional.

17. BOOMS

The main boom shall be of wood or of aluminium alloy.

(A) *Wooden Boom.*

As the plans. Maximum depth 76 mm.

(B) *Aluminium Alloy Boom*

(1) The boom, including sail track but excluding other fittings, shall be able to pass through a circle of 80 mm diameter and shall be of uniform section throughout its length.

(2) Booms may be open ended and need not float.

(C) The boom shall include a spar groove or track which may or may not be integral with the spar with a minimum length of 2400mm from the outer distance mark.

(D) *Bands*

A measurement band, contrasting in colour with the boom, shall be painted on the boom with its forward edge not more than 2657 mm from the aft side of the mast as defined by Rule 14(A) (2). If reduced rig in use a further band shall be painted on the boom with its forward edge not more than 2124 mm from the aft side of the mast as defined by Rule 14 (A)(2).

(E) *Spinnaker Boom (if authorised by the National Authority)*

Length including fittings shall not extend more than 1575 mm from the mast surface when in use. Diameter shall be 32 mm +/- 8 mm.

18. FITTINGS

Only the fittings referred to in the following lists and the corresponding structural modifications (with the restrictions given in rule 6) are permitted. Where cleats and blocks are permitted by this rule they shall include mountings. The size and shape is optional unless specified on the plans.

(A) *Hull (construction)*

(1) Holes in knees. One hole of not more than 13 mm diameter is permitted in any knee through which a control line shall pass. Holes may not be drilled in the fixing pieces for this purpose. Three holes of not more than 13 mm diameter are permitted in the optional forward knee on the centreboard case to allow control lines to be led aft; additionally a hole of maximum dimensions 90 mm x 32 mm may be cut in this knee to allow a kicking strap winch to be fitted to the front of the centreboard case.

(2) Transom drain holes: In wooden boats and in boats with moulded hulls with a single skin at the transom not more than two holes of maximum diameter 26 mm are permitted. In moulded boats with double skin transoms drain holes in the transom are prohibited but not more than two holes of maximum diameter 26 mm are permitted in the cockpit floor, or keel, with centres within 51 mm from the transom.
(3) Transom drain ports. Not more than two optional design drain ports are permitted. The clear opening of each shall be capable of fitting within a 254 mm x 127 mm rectangle or a 203 mm diameter circle.
In wooden boats the ports shall not extend below the fashion piece and the transom knee shall not be removed.
In single skin boats with moulded hulls or boats without a lower transom fashion piece, the ports shall not be less than 55mm from the cockpit floor measured on the forward face of the transom.
Ports must be fitted with devices capable of effectively closing the ports at any time.
Draining port covers shall not interfere with the full movement of the rudder.
The draining port system may have shockcord, lines and cleats fitted inside the boat.
(4) Blocks under side decks for rowlocks and rowlock sockets are permitted.
(5) Outboard motor chock. In wooden boats and in boats with moulded hulls with a single skin at the transom up to one half of the transom may be fitted with a chock for this purpose.
(B) *Hull (fittings)*
(1) Keelband. A keelband shall run the whole length of the boat from the transom to the stem fitting, including both sides of the centreboard case. It shall be metal or plastic and shall be 13 mm wide +/- 2 mm and not more than 6 mm deep. On boats with moulded hulls parts of the keelband may be moulded integrally with the hull. Fairing plates may be used at each end of the centreboard slot. Twin keelbands are permitted.
(2) Bilge keel strips. Metal or plastic strips may be fitted to the bilge keels and shall be not more than 13 mm wide or more than 6 mm deep.
(3) Centreboard slot strips. Strips of rubber or other suitable material may be fitted over the centreboard slot.
(4) Self bailer(s) may be fitted in the bottom skin.
(5) A pintle and gudgeon or two pintles shall be fitted to the transom for the rudder.
(6) Shroud plates and a bow plate shall be fitted.
(7) A painter eye may be fitted on the foredeck.
(8) Mooring cleats, ring bolts and fairleads may be fitted.
(9) Mainsheet attachment to transom (See also Rule 13
(a) If a mainsheet horse is fitted the type shall be optional provided that Rule 13 is not contravened, but if in excess of 305 mm in length it shall be of the internal track type, secured directly to the top of the transom and may have adjustable stops, control lines, fairleads and cleats.
(b) If mainsheet eyes are fitted on the transom they shall be 230mm each side of the centre-line of the boat.
(10) (a) Jib sheet fairleads and jib cleats of optional design are permitted.
(b) The jib sheet fairleads shall be fitted at deck level and may overlap the cockpit, but the bearing surface of the fairleads shall not be less than 600 mm from the centreline of the boat nor less than 2240 mm from the aft face of the transom. Sliding fittings are permitted.
(c) The fairlead supports may be of optional material which may extend into the cockpit by a maximum of 350 mm fore and aft and a maximum of 50 mm abeam.

(d) The fairlead supports may be covered by an extension of the deck material.
(e) Cleats and their mounting may overlap the cockpit by not more than 114 mm abeam and 127 mm fore and aft.
(11) Halyard Cleats. The position and number of halyard cleats and/or leads is optional.
(12) A kicking strap mechanism of optional design is permitted.
(13) Toe straps shall be of webbing or similar material. In single skin boats with moulded hulls, toe straps and any supporting lanyards and shockcords may be fitted to any part of the boat except the skin of the hull or buoyancy tanks, the deck, the sides of the centreboard case or the floor battens. Toe straps may be held out from the centreboard case by not more than two brackets or chocks which shall be not more than 51 mm wide and shall not extend more than 153 mm from the centreline.
(14) A centreboard pivot bolt or stirrup shall be fitted.
(15) Centreboard friction hose and clamp bars where this option is shown on the plans.
(16) Fastenings for securing loose equipment such as jib stick, paddle etc. may be fitted.
(17) Moulded boats may have a protective plastic moulding fitted around the lower edge of the rubbing bead, or alternatively a protective wooden moulding may be fitted along the outer side of the rubbing bead. The protective moulding shall be included in the measurement of the width of the rubbing bead.
(18) Grab lines are permitted beneath the middle third of the rubbing bead for the purpose of righting the boat after a capsize.
(C) *Centreboard (fittings)*
(1) The centreboard shall conform to Rule 11 and may be fitted with a bush in the pivot bolt hole and friction hose as shown on the plans.
(2) Stops of rubber or similar material shall be fitted to the stop bolt as shown on the plans.
(3) Flexible cord or webbing not more than 305 mm in length may be fixed to or near the centreboard stop bolt to facilitate raising and lowering the centreboard.
(4) A protective strip may be fitted to the fore edge and bottom of the centreboard.
(D) *Rudder and Tiller (fittings)*
(1) The rudder and tiller shall conform to Rules 12 and 13.

(2) A pintle and gudgeon or two gudgeons shall be fitted to the rudder stock.
(3) A protective strip may be fitted to the fore edge and bottom of the rudder blade.
(4) Cleats may be fitted on the tiller for the rudder lanyard and shockcord.
(E) *Mast (fittings)*
(1) The mast shall conform to Rule 14 and shall be fitted with a gooseneck which may be adjustable vertically.
(2) Brackets may be fitted for attachment of the jib stick.
(3) A highfield lever for tensioning the jib halyard may be fitted. This lever shall be attached to the mast.
(4) Halyard cleats and leads. See Rule 18(B) (11).
(5) A mast tabernacle may be fitted.
(6) If spinnaker use is approved by the National Authority, brackets and leads may be fitted for attachment of the spinnaker halyard, spinnaker boom, topping lift and downhaul.
(F) *Boom (fittings)*
(1) The boom shall conform to Rule 17.
(2) The type of boom fitting for attachment of the kicking strap and its position

along the boom are optional. A claw ring with equipment for positioning may be used.
(3) The type of mainsail clew outhaul is optional.
(G) *Sail Fittings and Controls (design and use optional)*
(1) Mainsheet blocks.
(2) Lanyards, fairleads, blocks and jam cleats for adjustment of the Cunningham hole.
(3) A foresail tack distance piece without mechanical adjustment.
(4) Spinnaker sheets, leads, blocks and cleats as approved by the National Authority.
(H) *Accessories (optional)*
(1) Whisker Pole
(2) Fittings, cleats, pulleys and or leads for the adjustment of the whisker pole.
(3) A compass and or timing devices may be attached to any part of the hull, deck or spar.
(4) Hand bailer(s)
(5) Anchor and warp.
(6) Paddle.
(7) A burgee or wind indicator, shroud telltale ribbons, tufts on sails.
(8) Removable centre seat. The function of this is to provide a broader portion of the plate case top to support either of the crew whilst having to place their weight amidships to trim the boat. The plan size shall be not more than 228 mm x 305 mm and it shall be held in place by a vertical wooden member not more than 102 mm deep fitted into the plate case slot. A lanyard may be fixed to the seat and hull to prevent loss during capsize.
(9) Flag halyard.
(10) Fitting for holding flag or burgee on mast and/or headboard of mainsail.
(J) *Racing Flags.*
As required by racing rules and sailing instructions.

19. SAILS

19.1 General

19.1.1 Anything not specifically permitted by these class rules is PROHIBITED.
19.1.2 Sails shall be made and measured in accordance with the current "ISAF Equipment Rules of Sailing" except where varied herein. Where a term defined or a measurement given in the ISAF Equipment Rules of Sailing is used in these rules, it is printed in "*italic*" type.
19.1.3 The manufacturer of *sails* is optional.
19.1.4 The weight of *ply* is optional.

19.2 Mainsail

19.2.1 CONSTRUCTION

19.2.1.1 The construction shall be: *Soft sail, single ply sail.*
19.2.1.2 The body of the *sail* shall consist of dyed light blue *woven ply* throughout. Except within
300mm of the *foot* of the *sail*, the *ply* shall be the same throughout. *Ply* fibres shall be of polyester. *Reinforcement* shall consist of the same materials permitted in the *body of the sail*.
19.2.1.3 The sail shall have three *batten pockets* in the *leech*.
19.2.1.4 The following are permitted: Stitching, glue tapes, bolt ropes, elasticated bolt rope in the *foot*, corner eyes, headboard with fixings, cunningham eye/pulley, batten pocket elastic, a mast and a boom slide, leech line with cleat on leech, one *window* located below the *half width* measurement, sailmaker label, royalty label, tell-tales.
19.2.1.5 There shall be no *hollows* in the *leech*.

19.2.2 DIMENSIONS

minimum maximum
Full Rig

Leech Length .... 5985 mm
Quarter Width..... ..... 2330 mm
Half Width..... ..... 1770 mm
Three-quarter Width .... 1010 mm
Reduced Rig
Leech Length .... *5375 mm*
Quarter Width..... ..... *1860 mm*
Half Width..... ..... *1400 mm*
Three-quarter Width .... *830 mm*
Either rig
Top width..... ..... *130 mm*
Primary reinforcement .... *320 mm*
Secondary reinforcement:
from Corner measurement points..... ..... *960 mm*
for Flutter patches .... *100 mm*
for Chafing patches .... *960 mm*
for Batten Pocket patches .... *100 mm*
Tabling Width .... *35 mm*
Seam Width around window..... ..... *26 mm*
Seam Width elsewhere .... *20 mm*
Window internal dimension .... *458 mm*
Distance from window to edge of sail..... *150 mm*
Width of headboard at right angles to luff .... *110 mm*
Batten Pocket outside length, uppermost pocket..... ..... *650 mm*
Batten Pocket outside length, other pockets..... ..... *802 mm*
Batten Pocket outside width..... ..... *65 mm*
Intersection of leech with centrelines of upper, middle
and lower Batten Pockets from Three quarter, Half, and
Quarter Leech Points respectively .... *50 mm*
Bearing surface of Cunningham eye/pulley from *luff*..... ..... *40 mm*
Bearing surface of Cunningham eye/pulley from *tack point* .... *185 mm*
Distance from *clew point* to *foot* bolt rope .... *100 mm*
Distance from *tack point* to *foot* bolt rope..... ..... *250 mm*

19.3 Headsail
19.3.1 CONSTRUCTION
19.3.1.1 The construction shall be: *Soft sail, single ply sail.*
19.3.1.2 The body of the *sail* shall consist of dyed light blue *woven ply* throughout. *Ply* fibres shall be of polyester.
Reinforcement shall consist of the same materials permitted in the *body of the sail*.
19.3.1.3 The following are permitted: Stitching, glue tapes, corner eyes, hanks, one window located below *half width*, sailmaker label, royalty label, tell-tales.
19.3.2 DIMENSIONS
minimum maximum
Full Rig
Luff length .... 3836 mm
Leech Length .... 3684 mm
Foot Median .... 3861 mm
Foot Length .... 1702 mm
Reduced Rig
Luff length .... 3379 mm
Leech Length .... 3023 mm
Foot Median .... 3404 mm
Foot Length .... 1321 mm
Either rig
Top width .... 35 mm

Primary reinforcement .... 300 mm
Secondary reinforcement:
from *Corner measurement points*..... ..... 900 mm
for *Chafing patches* .... 900 mm
Tabling Width .... 35 mm
Seam Width around *window*..... ..... 26 mm
Seam Width elsewhere .... 20 mm
Window internal dimension .... 458 mm
Distance from *window* to edge of *sail* ..... 150 mm

19.4 Spinnaker

19.4.1 CONSTRUCTION

19.4.1.1 The construction shall be: *Soft sail, single ply sail.*

19.4.1.2 The body of the *sail* shall consist of the same *woven ply* throughout. *Ply* fibres shall be
of polyester. *Reinforcement* shall consist of the same materials permitted in the *body of the sail*.

19.4.1.3 The following are permitted: Stitching, glue tapes, corner eyes, sailmaker label, royalty
label.

19.4.2 DIMENSIONS

minimum maximum
Leech Length .... 4270 mm
Foot Median .... 4870 mm
Foot Length..... ..... 2900 mm
Width..... ..... 2980 mm
Width at half height .....2520 mm
Primary reinforcement..... ..... 300 mm
Secondary reinforcement from *Corner measurement points ....* 900 mm
Tabling Width .... 35 mm
Seam Width .... 20 mm

19.5 Class Insignia, National Letters and Sail Numbers

19.5.1 The Class Insignia, National Letters, and sail numbers as issued by the ISAF shall be in accordance with RRS 77 - Appendix H.

19.5.2 The Class Insignia shall be the letter "E", which shall conform to the same dimensions as the National Letters and sail numbers.

19.6 Additional Rules

19.6.1 The *foot* bolt rope shall be in the *boom spar* sail track

19.6.2 The mainsail shall be set so that no part of the *sail* shall extend above the lower edge of the upper mast band or beyond the inner edge of the boom band. The top of the fore edge of the boom shall be not lower than the upper edge of the lower mast band when racing. If reduced rig is in use, then the upper and lower mast bands are respectively bands 1A and 2A as defined in Rule 14(D) and the boom band is that specified for reduced rig in Rule 17(C).

19.6.3 Spinnakers shall not be used in International events and may only be used in other events at the option of the National Authority.

19.6.4 All *sails* measured shall be signed and dated in waterproof ink at the tack by the measurer.

20. IDENTIFICATION

Each sail shall have permanently fixed near to its tack, a serial numbered official Enterprise International Sail Label. The number of this sail label shall be entered on the certificate. The official sail labels shall be obtainable from the respective National Associations, price £10.00 each.

Each hull shall carry on the aft face of its transom a current Enterprise International Label. The official labels shall be obtained from the respective National Association.

21. CREW Two persons.

OFFICIAL PLANS

Sheet No Content or Title Applicable to, Latest Issue Date

1 Moulds and fitting out wood hull Wood 1981
2 Stem, hog, keel, transom knee Wood 1978
3 Transom, quarter knee Wood 1982
4 Sections 1, 2; platecase, forward knee
(when thwart is in aft position) rubbing bead Wood 1978
5 Sections 3, 4; platecase; knee, bilge keel Wood 1982
6 Rudder All 1978
7 Centreboard All 1978
8 Mast, boom, fittings, handle, rigging All 1978
9 Sail plan, bilge keel position All 1978
10 Built-in buoyancy and conversion, rubbing bead Wood 1981
11 GRP I Hull construction GRP I 1978
12 GRP I Completion GRP I 1978
13 Composite construction Composite 1978
14 GRP II GRP II 1981