

INTERNATIONAL NACRA CLASS RULES PERTAINING TO ONE DESIGN CONTROL AS AMENDED FOR AUSTRALIA

1. OBJECT OF CLASS RULES

International NACRA Class Catamarans are each a one design Manufacturer's class. The rules, official plans and specifications are intended to ensure that the catamarans of these classes are as nearly as possible the same as regards to shape and weight of hulls, daggerboards, rudders, spars and sails, and that the equipment is simple, functional and dependable. The ultimate intent is to encourage the use of only racing tactics and sailing skill to increase the boat speed.

2. PROTECTION OF INTERNATIONAL NACRA CLASS DESIGNS

2.1 The hulls, daggerboards, rudders and stocks, standing rigging spars, sails and battens are strictly controlled (manufacturer supplied) while running rigging and associated fittings are not controlled, except as specified in the rules. Interpretations of the rules shall be given by NACRA Australia in consultation with the proper committees of the International NACRA Class Association (herein after referred to as I.N.C.A.). In the event of a conflict between rules, official plans, measurement form and/or measurement diagram, the matter shall be referred to I.N.C.A.

Note: To doubly guard against "loop hole destruction" of these fine international Class Catamarans and their potential for lasting racing pleasure, every deviation from past practice or precedent which is not specifically spelled out by plans, specifications of Design Rule is assumed illegal until approved and thus recorded in writing by those administering the Class Designing Rules.

2.2 Molds. All molds, patterns and templates for the hulls, daggerboards and rudders shall be constructed solely by NACRA or builders licensed for that purpose by NACRA for NACRA.

2.3 Alterations to Molds. No alterations shall be made to any molds, official patterns or templates unless specifically authorised in writing by NACRA.

2.4 Measurements of Molds. Tolerances are given to allow for minor variations not inconsistent with good building practice and distortions through age. International variations within these tolerances are prohibited. Each mold shall be measured prior to commencement of production and thereafter annually by a measurer approved by I.N.C.A.

3. HULLS, DAGGERBOARDS AND RUDDERS

3.1 The manufacture of hulls, daggerboards and rudders is strictly controlled by NACRA. Licences to build these components are issued by NACRA.

3.2 Alterations to hulls, daggerboards and rudders. Grinding, planing, sanding and/or application of putty, fillers and coatings of the outside is permitted provided that it is undertaken to fair local imperfections in these surfaces or to improve the surface finish provided that no part of the catamaran is thereby caused to be outside the measurement tolerances.

3.3 Lightening of hulls. The hulls may not be lightened in any manner. A maximum of four (approved) inspection ports per hull may be added to the deck in the following manner:

- One aft of the rear beam
- Two between main beam and rear beam
- One between the main beam and a point not to exceed 1m in front of the main beam.

Inspection ports requiring a deck aperture greater than 15.25cm for fitment will not be approved. Ports in front of the forward measurement may only be installed by written permission of the manufacturer.

3.4 Rudders. The rudder and rudder stock assembly, including the method of attachment to the transom is not to be modified. Rudders may be raked to attain helm balance. All rudders manufactured by NACRA are legal for racing.

3.5 Daggerboards. The top of the daggerboard may not be inserted below the deck level. Hand holds in the daggerboards may be added. The bottom of the handholds will then be considered the top of the daggerboard and may not be inserted below the deck level. The daggerboard rake may be adjusted but no part of the daggerboard or daggerboard well may be removed or added for the purpose of varying rake. All daggerboards manufactured by NACRA are legal for racing except ones which require modification of daggerboard or daggerboard well to accommodate them.

4. SPARS

4.1 Construction. The material, method of construction and design of the spars shall be in accordance with these rules and Official Spar Plan. The masts, spreaders, boom and beam section shall be extruded from extrusion dies approved by NACRA or builders licensed for that purpose by NACRA for NACRA.

4.2 Masts. The extrusion length and positions of the mast head, mast hound, jib halyard strap eye, diamond tangs, spreaders and mast base are not to be altered in any manner. The gooseneck (centreline), when fitted to the mast, may not be lower than 32cm from the bottom of the extrusion. The 5.2 mast spanner position above the boom, may not be altered.

4.3 Spreaders. The spreader arm lengths may not be altered. NACRA adjustable rake spreaders are allowable on all models. The diamond wires are to be securely attached at the spreader ends.

N.B. Does not apply to NACRA 14sq.

4.4 Booms. The extrusion length and the method of attachment of the gooseneck are not to be altered. The mainsheet blocks are to be hung from permanently fixed bales and may not exceed an 8:1 purchase. The original bale may not be moved more than 15mm aft of its original position. On the 5.2 additional bales may only be fitted forward of the original bale. All other hardware is optional. No booms may be used on the boomless designed rigs. Mainsail foot inhaulers may be used but must be attached to the mainsail clew and/or the mast or boom.

4.5 Main Beams. The extrusion length, mast step and dolphin striker assembly are not to be altered. Additional internal and/or external hardware is optional but the total area of beam removed to accommodate such installations may not exceed 50cm.

4.6 Rear Beams. The rear beam may not be altered with the following exceptions. The traveller may be replaced by one of another design but it must be in a straight line and be mounted to the rear beam. Its length must not exceed 1.85m except in the case of the 18sq where it must not exceed 2.5m. Additional internal and/or external hardware is optional but the total area of beam removed to accommodate such installation may not exceed 50cm.

4.7 Tillers, Tiller Tie Bar and Extension. Tillers may be toed-in and tiller tie bar shortened. Tiller extensions and designs are optional.

4.8 Lightening of Spars. No holes may be drilled, filed or cut into any manufacturer supplied component, spar or casting for the purpose of reducing weight.

4.9 Bridle Foils. The 5.5sl bridle foil length hardware and fittings may not be altered.

5. RIGGING

5.1 Construction. All standard rigging (including diamond wires) shall conform with the wire types and diameters shown in the rigging

schedule. Running rigging and associated fittings, sizes, types and lengths are optional but the main halyard, jib halyard and trapeze wire diameters shall not be less than those shown in the rigging schedule. Rope tails on halyards are permitted. Jib halyards may not be led internally.

Rigging Schedule

	Wire Type	14sq Dia.	5.0/16sq Dia.	5.2/18sq Dia.	5.5/5.8 Dia.
Shrouds	1x19	1/8"	1/8"	5/32"	5/32"
Forestay	1x19	1/8"	1/8"	5/32"	5/32"
Bridal	1x19	1/8"	1/8"	5/32"	5/32"
Diamond wires	1x19	n/a	1/8"	1/8"	1/8"
Main halyard	7x19	n/a	3/32"	3/32"	n/a
Jib halyard	7x19	n/a	*3/32"	*3/32"	*3/32"
Trapeze wires	1x19	3/32"	3/32"	3/32"	3/32"

*Not applicable to 18 and cat-rigged 5.0

5.2 Alterations. Lengths of bridal wires are not to be altered. The forestay or its extension is to be attached at the brida! intersection. The forestay and shrouds shall not be adjusted while racing. The method of attachment and adjustment of diamond wires must not be altered.

6. SAIL AND BATTENS

6.1 Construction. The material, method of construction and design of the sails shall be in accordance with the sail plan. The sails shall be built for NACRA from patterns and specifications approved by NACRA. The battens shall be built for NACRA in accordance with the plans and specifications approved by NACRA. A batten set may consist of any approved type for that model.

6.2 Alterations. The sails and jib battens are not to be altered in any manner save that a window may be installed in both main and/or jib but such installation must not alter sail shape. In the case of 18sq and boomless sails only, one additional cringle (making two in total) may be added to facilitate increased purchase for main luff control. Class insignias may not be repositioned or altered in any manner.

6.3 Luff Rope. The entire mainsail luff rope must be in the mast luff groove except where the sail extends below the bottom of the extrusion on boomless and 18sq rigs.

6.4 Clew traveller assembly may be added to any boomless sail plan. Clew track assembly: Track can not exceed 780mm and can only be added below bottom batten, main block attachment point may not travel beyond leech, no battens or stiffeners may be added below the bottom batten. A suspended track may be used, no additional sailcloth area may be used to lower trade assembly.

7. CREW

7.1a The 5.0. The 5.0 when sloop-rigged is a two person racing craft and may be double-trapezed. The 5.0 may be single handed while racing by removing the jib. The sailor may trapeze. No minimum racing crew weight shall apply.

7.1b The 5.2. The 5.2 is a sloop-rigged, two person racing craft and may be double-trapezed. No minimum racing crew weight shall apply.

7.1c The 5.5SL. The 5.5sl is a sloop-rigged, two person racing craft and may be double trapezed. The 5.5sl has a minimum racing crew weight of 125kg.

7.1d The 5.8. The 5.8 is a sloop-rigged, two person racing craft and may be double-trapezed. The 5.8 has a minimum racing crew weight of 140kg.

7.1e The 18sq, 16sq, 14sq. The NACRA 18sq, 16sq, 14sq, are all one person racing crafts. The sailor may trapeze. No minimum racing crew weight shall apply.