# NACRA Class Rules for Australia 2017



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## INTRODUCTION

This introduction only provides an informal background and the Australian NACRA Class Rules proper begin on the next page.

NACRA Class Catamarans are each a one design Manufacturers class. The rules, official plans and specifications are intended to ensure the catamarans of these classes are nearly as possible the same as regards to shape and weight of the hulls, daggerboards, rudders, spars, 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.

Any alterations to the hull form, hull appendages construction, equipment, spars, rig, sails and standing rigging, as supplied by the manufacture except as is specifically authorized by these rules, are a breach of these rules, both in spirt and substance and are prohibited.

Nacra hulls, hull appendages, cross beams, rigging, rig and sails are manufacturing controlled.

Nacra hulls, hull appendages, cross beams, rig and sails shall only be manufactured by Nacra Australia or Nautical Sports BV – In the class rules referred to as "Manufacturer". Equipment is required to comply with the NACRA building Specifications and is subject to manufacturing control system.

Nacra hulls, hull appendages, cross beams, trampoline, rigging and sails may, after having left the manufacturer, only be altered to the extent permitted in Section C of the class rules.

Owners and crews should be aware that compliance with the rules in Section C is the responsibility of the competitor, as this is NOT checked as part of the in house certification process.

Rules regulating the use of equipment during a race are contained in Section C of these class rules, in ERS Part 1 and in the Racing Rules of Sailing.

#### PLEASE REMEMBER:

THESE RULES ARE **CLOSED CLASS RULES** WHERE IF IT DOES NOT **SPECIFICALLY SAY THAT YOU MAY – THEN YOU SHALL NOT**.

COMPONENTS, AND THEIR USE, ARE DEFINED BY THEIR DESCRIPTION.

## Part 1 – ADMINISTRATION

### Section A – general

#### A.1. LANGUAGE

- A.1.1 The official language of the class is English and in case of dispute over translations the English text shall prevail.
- A.1.2 The word "Shall" is mandatory and the word "may" is permissive.
- A.1.3 Except where used in headings, when a term is printed in "**bold**" the definition in the ERS applies and when a term is printed in "*italics*" the definition in the RRS applies.

#### A.2. ABBREVIATIONS

INCA International NACRA Class Association

DNCA District of the Nacra Association of Australia Inc

RRS Racing Rules of Sailing

NA Marine Importing and Manufacturing

ERS Equipment Rules of Sailing

MG Measurement Guide
NS Nautical Sports BV

N17 International Nacra 17

N15 International Nacra 15

F18 Nacra F18 F16 Nacra F16

NC All classes manufactured or distributed by Nacra Australia.

CM Class measurer

#### A.3. AUTHORITIES

A.3.1 The Australian Authority of the **Class Rules** is NA.

#### A.4. ADMINISTRATION OF THE CLASS

A.4.1 The class is administrated by the NAA

#### A.5. CLASS RULES CHANGES

- A.5.1 At all events RRS 87 applies.
- A.5.2 At all NACRA events RRS 44.1 is changed to a "one turn penalty".

#### A.6. CLASS RULES AMENDMENTS

#### PROTECTION OF INTERNATIONAL NACRA CLASS DESIGN

Note-to Double 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 of by plans, specifications or Design rules is assumed illegal until approved and thus recorded in writing by those administering the **class rules** 

- A.6.1 Amendments of these **class rules** shall be made by-NAA in accordance with its constitution and submitted to NA for approval.
- A.6.2 Communications for amendments shall be conducted as follows:

NA -- NAA - DNCA - Members

#### A.7. CLASS RULES INTERPRETATION

- A.7.1 Interpretation of these **Class Rules** shall be made by NAA in consultation with NA
- A.7.2 Interpretation of **class rules** at an event shall be carried out in accordance with the RRS. The event organising authority shall inform NAA of any such interpretations.
- A.7.3 **Class rules** may vary from one country to the next. Do not assume what applies in your country automatically applies in another.

#### A.8. SAIL NUMBERS

A.8.1 Sail numbers shall be issued by NA or NS depending on the class.

#### A.9 MANUFACTURER

- A.9.1 Nacra equipment shall only be manufactured by NA or NS and its appointed suppliers, except where otherwise authorized by these **class rules**.
- A.9.2 All Nacra equipment for use on boats being sailed in Australia shall be purchased from NA and its appointed dealers, except where otherwise authorized by these class rules.

## Section B - Boat Eligibility

For a boat to be eligible for racing, it shall comply with the rules in this section.

#### **B.1. CLASS RULES**

#### B.1.1 The boat shall

- (a) Be in compliance with the class rules.
- (b) Have valid class insignia on the sail or sails.
- (c) The F18 shall comply with the F18 international **class rules**, except the conditions of part 11 of these rules shall apply for equipment used.
- (d) The F16 shall comply with the F16 **class rules**, except the conditions of part 11 of these rules shall apply for equipment used.
- (e) The International Nacra 17 shall comply with the International Nacra 17 class rules. Where these Class Rules conflict the International Nacra 17 class rules shall have precedence.
- (f) The International Nacra 15 shall comply with the International Nacra 15 class rules. Where these Class Rules conflict the International Nacra 15 class rules shall have precedence.

## **B.2. CLASS MEASURER (CM)**

- B.2.1 A role of CM(s) at an event is to verify that equipment has been produced by a Licensed Manufacturer and has not been subsequently altered (other than as is permitted within these rules) using whatever inspection methods they deem appropriate, including comparison with a reference sample of the type of equipment presented for inspection and or the specifications in the class measurement guide. Should this comparison reveal deviation greater than the CM considers being within manufacturing tolerances, the matter shall be reported to the Race Committee.
- B.2.2 In the case of dispute at an event alleging non-compliance with class rules where specific measurements are not stated, the CM shall adopt the following procedure:
  - (a) If the dimensions of the boat/equipment under dispute are outside the dimensions, then the matter shall be referred to NA, who shall give a binding ruling.
  - (b) The CM will advise Race Committee as soon as possible as per the RRS.
- B.2.3 The CM is a position appointed by NAA or DNCA for that event.

#### **B.3. EVENT LIMITATION MARKS**

B.3.2 If an event uses **event limitation marks** these marks shall not be removed during the event. If the **event limitation mark** becomes damaged or lost this shall be reported to the Race Committee as soon as possible.

## PART 11 - REQUIREMENTS AND LIMITATIONS

The **crew** and the **boat** shall comply with the rules in Part 11 when racing. In case of conflict Section C shall prevail.

The Class Rules in Part 11 are closed class rules, where anything that is not specifically allowed in Class Rules is prohibited.

**Equipment control** and **equipment inspection** shall be carried out in accordance with the ERS except where varied in this Part.

## **SECTION C – Conditions for Racing**

#### C1 GENERAL

#### C.1.1 RULES

- (a) RRS 49.1 is amended such that **crew**(s) may use a trapeze. The number of varies according to Class and is specified in the MG.
- (b) RRS 42.3 is changed as follows: A boats crew may pump the mainsail repeatedly to release one or more inverted battens.
- (c) RRS Appendix G1.3 (d) shall not apply.

#### C.1.2 LIMITATIONS

- (a) The Nacra Boat shall only be raced with original or replacement equipment supplied by NA, except where otherwise authorized by these **Class Rules**.
- (b) Nacra boats manufactured by NS shall be raced only with original equipment as supplied. Replacement equipment shall be supplied by NA, except where otherwise authorized by these **Class Rules**.
- (c) Where replacement equipment other than from NA is authorized, it may be obtained from any supplier provided that the replacement is of a similar weight, size and type and performs the same function except where otherwise authorized by these **Class Rules**.

#### C.2 CREW

#### C.2.1 LIMITATIONS

- (a) The following models shall to be sailed by one **crew**: Nacra 14sq, 16sq, 18sq, 17 cat rigged.
- (b) The following models shall to be sailed as by two **crew**: Nacra 5.0, 5.2, 5.5, 5.7, 5.8, 17 sloop, F18.
- (c) The following models may be sailed either by one **crew** or two **crew**. Nacra 4.5, 430, 350, F16

The **crew** numbers shall not be changed during an event.

- (d) The N17 shall comply with the N17 class rules.
- (e) The N15 shall comply with N15 class rules.

#### C.2.2 MINIMUM CREW WEIGHT

The following Minimum **Crew** weights shall apply. For weigh in purposes **crew** must be bare footed and wear, as a maximum clothing consisting of one pair of shorts or trousers and one T shirt or similar. Normal undergarments may also be worn with the aforementioned clothing.

(a) Nacra 5.5	125kg
(b) Nacra 5.7	140kg
(c) Nacra 5.8	140kg

(d) Nacra F18 150 kg as per F18 Class Rules

## C.2.3 CORRECTOR WEIGHT

Minimum weight may be met by adding corrector weights. The maximum weight to be added shall not exceed 15kgs. However **crew**s carrying the maximum 15kgs, yet still not attaining the minimum weight requirement, shall nonetheless be considered legal for racing.

Corrector weights shall be securely fastened on the outside of the front beam on the port side and may not be removed while racing.

#### C.2.5 CREW CHANGES OR HELMING

- (a) **Crews** shall not be substituted unless such substitution is expressly permitted in writing by Race Committee responsible for the event.
- (b) Substituted **crews** shall still be subject to C.2.2
- (c) On 2 **crew** boats, it is permissible for either to helm or crew at any time during the race.

#### C.2.6 MEMBERSHIP

During any authorised Nacra event the boat and **crew** shall be a current member of a Nacra District.

## **C.3 PERSONAL EQUIPMENT**

#### C.3.1 PERSONAL FLOATATION DEVICE

- (a) When racing all **crew** shall wear a **personal floatation device**. Race organisers may stipulate compliance with a relevant minimum standard.
- (b) The use of inflatable personal floatation devices is not permitted when racing.

#### C.4 ADVERTISING

- C.4.1 (a) Advertising as chosen by the Organising Authority shall be displayed in accordance with ISAF Regulation 20. For the purpose of ISAF Advertising code, the **gennaker** shall be deemed a spinnaker.
  - (b) The word NACRA along with a class designation may be displayed on each **hull**, rear beam and main beam to any size.
  - (c) Competitors advertising on hulls and sail shall be allowed in accordance with ISAF Regulation 20.
  - (d) Any state or local park sticker required by law to sail.
  - (e) Any yacht club or multihull organisation sticker to a maximum of 4 different stickers may appear on each hull. Sticker size may not exceed 25 \* 25 cm.

#### C.5 PORTABLE EQUIPMENT

N17 refer B.1.1 (e) and N15 refer B.1.1 (f)

#### C.5.1 MANDATORY

- (a) All classes must carry a righting line of minimum 10mm thickness and 4.5 meters in length and shall be fixed on the boat at all times while racing.
- (b) Any other items required in the Sailing Instructions.

#### C.5.2 OPTIONAL

(a) Timing devices.

- (b) One compass with a bracket, which may include a timing device. If electronic, only a compass with heading, heading memory and timing functions is permitted.
- (c) Spare parts and tools, removable for weighing.

#### C.6 BOAT

The following is permitted without the approval of NA. Unless stated otherwise items mentioned in the section may be obtained from any manufacturer or supplier.

N17 refer B.1.1 (e) and N15 refer B.1.1 (f)

#### C.6.1 MODIFICATIONS

- (a) Holes no larger than the necessary size for the passing of lines may be made in any part of the **boat**.
- (b) Lightening of **hulls**. The **hulls** may not be lightened in any manner. A maximum of four inspection ports per **hull** may be added to the deck in the following manner.
  - (i) One aft of the rear beam
  - (ii) Two between the 2 beams
  - (iii) One in front of the main beam and a point not to exceed 30cm in front of the main beam.
  - (iv) Inspection ports requiring a deck aperture greater than 15.25cm for fitment will not be approved.
  - (v) Ports in front of the forward measurement shall only be fitted with prior written approval of NA.
- (c) Block's, cleats, attachment points and ropes on the boat may be replaced or relocated. F18 and N17 **class rules** shall take precedence if a conflict occurs.
- (d) Mainsheet Systems. All classes carry a maximum of 8:1 mainsheet purchase except; the F18, 16sq and 5.8 can carry 10:1. N15 and N17 as per their respective class rules.
- (e) To facilitate advertising, the application of vinyl, Mylar or other plastic film over the surfaces of the **hull**, **sails** and **spars**, provided that the film shall not be specially textured or otherwise manufactured in a way that could improve the character of the flow of water or air inside the boundary layer.

#### C.6.2 MAINTENANCE

- (a) Maintenance may be carried out provided that the essential shape, characteristics and function of the original component are not affected.
- (b) Alterations to **Hulls**, **daggerboards** and **rudders**. Grinding, planning, sanding and/or application of putty, fillers and coatings of the outside surface is permitted provided that it is undertaken to fair local imperfections in these surfaces or to improve the surface finish.

#### C.6.3 REPAIR

- (a) Maintenance may be carried out provided that the essential shape, characteristics and function of the original component are not affected.
- (b) Replacements for any boat equipment, including but not limited to **Hull**, Deck, **Appendages**, **rig**, **sails**, **battens**, spinnaker pole and fittings whether original or replacements shall only be those produced by NA except where otherwise authorized by this section.

#### C.6.4 WEIGHT

The weight of the **boat** in dry condition shall be:

- (a) F18 according to F18 Class Rules
- (b) N17 according to N17 Class rules.
- (c) F16 according to F16 Class Rules
- (d) N15 according to N15 Class rules.

#### C.6.5 CORRECTOR WEIGHTS

Corrector weights shall be securely fastened to the outside on the Starboard side from the middle of the front beam at the dolphin striker rod, when the boat weight is less than the minimum requirement.

#### C.7 HULL

The following is permitted without the approval of NA. Unless stated otherwise items mentioned in the section may be obtained from any manufacturer or supplier. **Hull** includes deck.

N17 refer B.1.1 (e) and N15 refer B.1.1 (f)

#### C.7.1 MODIFICATIONS

- (a) Non-skid tape may be applied.
- (b) Two footstraps may be fitted to each hull.

#### C.7.2 MAINTENANCE

- (a) The watertight integrity of the **hull** shall be maintained.
- (b) The outermost surfaces of the **hull** may be polished and cleaned with normal concentrations and quantities of detergents or similar materials.

#### C.7.3 REPAIR

- (a) In the event of damage to any part of the **hull**, necessary repairs may be made provided repairs are made in such a way that the essential shape and function is not materially affected. Areas of damage may be filled, sanded and polished over.
- (b) Only composite repairs with glass laminate that those models are made off are permitted for the hull structure.
- (c) If any hull is damaged and requires major repairs in any other way than described in (a) or a deck removal, the repair will require written approval by NA after. -
  - Damage report
  - Including Photos

Is sent to NA. All repairs to be carried out by an authorized Nacra repairer. #NA may on request authorise single one off repairs where an Authorised repairer is not available.

#### C.7.4 LIMITATIONS

- (a) Only one starboard **hull** and one port **hull** shall be used in an event, except when lost or damaged beyond repair. Any replacement shall be made with the approval of the Race Committee.
- (b) Replacement of decks shall require prior approval of NA. Decks shall be supplied by NA, who will keep a register of replacement decks fitted.

#### C.8 HULL APPENDAGES

The following is permitted without the approval of NA. Unless stated otherwise items mentioned in the section may be obtained from any manufacturer or supplier.

N17 refer B.1.1 (e) and N15 refer B.1.1 (f)

#### C.8.1 MAINTENANCE

- (a) The outermost surfaces of the **daggerboards** and **rudders** may be sanded, polished and cleaned with normal concentrations and quantities of detergents or similar materials. Provided that the essential shape, characteristics and function of the original characteristics and function of the original component are not affected.
- (b) Shims maybe added to reduce or compensate for wear.
- (c) **Rudder** casting packing may be used to reduce or compensate for wear.
- (d) Tiller extensions may be replaced without any restriction as to design or material.

#### C.8.2 REPAIR

- (a) Repairs to chips in the leading edge and trailing edge of blades may be filled and blended in.
- (b) Other repairs to **Daggerboards** or **Rudder** blades are permitted, provided that the essential shape, characteristics and function of the original characteristics and function of the original component are not affected.

#### C8.3 LIMITATIONS

- (a) Only one starboard **daggerboard** and **rudder** blade and one port **daggerboard** and **rudder** blade shall be used in an event, except when lost or damaged beyond repair. Any replacement shall be made with the approval of the Race Committee.
- (b) The **rudder** and stock assembly, including method of attachment to the transom is not to be modified.
- (c) **Rudders** may be raked to attain helm balance.
- (d) All **rudders** manufactured or supplied by NA are legal for racing on the class of boat they are fitted on from the manufacturer.
- (e) **Daggerboards** The top of the **daggerboard** may not be inserted below the deck level. **Daggerboards** with hand holds, the bottom of the handholds will be considered to be the top of the **daggerboard**.

- (f) Handholds in the **daggerboards** may be added or removed only when the original shape and length is maintained.
- (g) 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.
- (d) All **daggerboards** manufactured or supplied by NA are legal for racing on the class of boat they are fitted on from the manufacturer, except ones which required modification of **daggerboard** or well to accommodate them.

#### C.9 BEAMS

The following is permitted without the approval of NA. Unless stated otherwise items mentioned in the section may be obtained from any manufacturer or supplier.

N17 refer B.1.1 (e) and N15 refer B.1.1 (f)

#### C.9.1 MODIFICATIONS

- (a) Additional internal and/or external hardware is optional but the total area of beam removed to accommodate such installations may not exceed 50cmsq per beam.
- (b) Front Beam The extrusion length, mast step and dolphin striker assembly are not to be altered.
- (c) Rear Beam 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.
- (d) Rear Beam The length must remain the same as original.
- (e) Control systems and associated hardware on the beams may be modified.
- (f) Beams may be bedded in on the **hull** and shall be able to be removed without damage to either **hull** or beam at any time.

#### C.9.2 MAINTENANCE AND REPAIR

(a) Routine maintenance such as cleaning, polishing and the replacement of broken fittings is permitted.

#### C.9.3 LIMITATIONS

- (a) Adjustment of the beam bolts bedding inside the beam castings is prohibited.
- (b) No changes to the method of attachment shall be made for any class of Nacra.

#### C.9.4 FITTINGS

(a) Front beam curvature may not be greater than 15mm.

#### **C.10 RIG**

The following is permitted without the approval of NA. Unless stated otherwise items mentioned in the section may be obtained from any manufacturer or supplier.

N17 refer B.1.1 (e) and N15 refer B.1.1 (f)

#### C.10.1 MODIFICATIONS

- (a) N15 and N17 as per their respective class rules.
- (b) F18 as per F18 Class rules
- (c) F16 as per F16 Class rules
- (d) Other NC Replacement of running rigging

#### C.10.2 MAINTENANCE AND REPAIR

- (a) N15 and N17 as per their respective class rules.
- (b) Routine maintenance such as cleaning, polishing and the replacement of broken fittings is permitted.
- (c) Maintenance or replacement of **running rigging** and fittings with similar materials is permitted.

#### C.10.3FITTINGS

- (a) Use
  - (i) Lower hole of the hounds shall be used to fit the forestay and shrouds.
  - (ii) The middle (where applicable) and top hole of the hounds may be used to fit the **trapeze** wires.
  - (iii) The **trapeze** wires may also be fitted through the upper terminal of the shrouds.
- (b) Optional mechanical wind indicators may be added.

#### C.10.4LIMITATIONS

- (a) Only set of **Spars** and **standing rigging** shall be used during an event, except when an item has been lost or damaged beyond repair. Any replacement shall only be made with the approval of the race committee.
- (c) Lightening of **spars**. No holes may be drilled, filed or cut into manufacture supplied component, spar or casting for the purpose of reducing weight.
- (d) The spreader arm lengths may not be altered.
- (e) NA adjustable rake spreaders are allowed, refer to MG
- (f) The diamond wires are to be securely attached at the spreader ends.
- (g) The **Boom** extrusion length and method of attachment to the gooseneck are not to be altered. The mainsheet blocks are to be hung from permanent fixed bales or webbing straps where fitted. All other hardware is optional.
- (h) No **booms** shall be used on boomless designed rigs. **Mainsail** foot inhaulers may be used but must be attached to the **mainsail** clew and/or **mast** or **boom**.
- (i) No continuous trapeze systems are allowed

#### C.10.5 DIMENSIONS

- (a) N15 and N17 as per their respective class rules.
- (b) F18 as per F18 class rules
- (c) F16 as per F16 class rules
- (d) Other NC The extrusion lengths and positons of the mast head, mast hound, jib **halyard** tang, diamond tangs, spreaders, spinnaker bale and mast base shall not be altered in any manner. For any Nacra fitted with a **boom**, the gooseneck and mast rotation spanner position may not be altered.

#### C.10.6 STANDING RIGGING

- (a) MODIFICATION, MAINTENANCE AND REPAIR
  - (1) **Standing rigging** may be replaced and shall comply with the following.

N15 and N17 as per their respective class rules.

F18, F16, Other NC - Standing rigging as per MG

- (b) USE
  - (i) **Standing rigging** shall not be adjusted while racing.
- (c) LIMITATIONS
  - (i) Bridle wires Lengths of bridal wires and/or bridal foils are not to be altered. The **forestay** or its extension is to be attached at the bridal intersection.

- (ii) Bridal Foils The extension length, and all its components and their positions, along with the method of attachment to the hull are not to be altered.
- (III) All **standing rigging** (including diamond wires) shall conform to the wire types and diameters as per supplied from NA. refer MG

#### C.10.7 RUNNING RIGGING

- (a) MODIFICATION, MAINTENANCE AND REPAIR
  - (1) Standing rigging may be replaced and shall comply with the MG.
    N15 and N17 as per their respective class rules.

F18, F16, Other NC – **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 supplied from NA.

Rope tails on **halyards** are permitted.

Jib halyards may not be led internally.

- (b) **Running rigging** shall be led through and attached to the fittings supplied for the function.
- (c) Blocks, shackles and other **running rigging** may be substituted for other types that perform the same function, unless a minimum size is specified in the MG. N15 and N17 as per their respective **class rules**.

#### C.11 SAILS

N17 refer B.1.1 (e) and N15 refer B.1.1 (f)

#### C.11.1MODIFICATION, MAINTENANCE AND REPAIR

The following is permitted without approval and may be done by anyone.

- (a) Routine maintenance and repairs
- (b) Addition of tell tales
- (c) Addition of camber stripes
- (d) Battens as supplied by NS or NA shall be placed in the batten pockets.

#### C.11.2 LIMITATIONS

- (a) Not more than 1 **mainsail**, 1 **jib** and 1 **gennaker** (N17, F18, NC models) shall be used during an event except when a sail has been lost or damaged beyond repair. Any replacement shall only be made with the approval of the race committee.
- (b) The **mainsail** and **jib** are not to be altered in any manner, except that a window may be installed in both main and/or jib but such

installation must not alter sail shape. In the case of 18 sq and boomless sails only, one additional cringle (making 2 in total) may be added to facilitate increased purchase for the main luff control.

(c) 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 and must be secured at each end of the sail.

#### C.11.3 MAINSAIL

## (a) MODIFICATION, MAINTENANCE AND REPAIR

- (i) N15 and N17 as per their respective class rules.
- (ii) AS per C.6.1 (e) the application of vinyl, Mylar or other plastic film over the surfaces of the **mainsail** is permitted to facilitate advertising, provided the film shall not cover the window panels in the sail.

## (b) IDENTIFICATION

- (i) N15 and N17 as per their respective class rules.
- (ii) F18 as per F18 class rules
- (iii) Other NC As per B.1.1 (b).

## (c) BATTENS

- (i) N15 and N17 as per their respective class rules.
- (ii) Battens are sized to match a batten pocket in the sail each batten pocket shall carry one batten.
- (iii) A batten set shall be of the standard set supplied by Nacra licensed suppliers only. A batten set may consist of any approved type for that model. Refer MG.

#### (d) NATIONAL FLAGS

(i) N15 and N17 as per their respective class rules.

#### (e) USE

(i) The **sail** shall be hoisted on the **halyard**. The Nacra supplied arrangement shall permit hoisting and lowering of the sail whilst afloat.

#### C.11.4JIB

#### (a) MODIFICATION, MAINTENANCE AND REPAIR

- (i) N15 and N17 as per their respective class rules.
- (ii) AS per C.6.1 (e) the application of vinyl, Mylar or other plastic film over the surfaces of the **jib** is permitted to facilitate advertising, provided the film shall not cover the window panels in the sail.

## (b) BATTENS

- (i) N15 and N17 as per their respective class rules.
- (ii) Battens are sized to match a batten pocket in the sail and is not allowed to put battens in not-matching batten pockets and each batten pocket shall carry one batten.
- (iii) A batten set shall be of the standard set supplied by Nacra licensed suppliers only. A batten set may consist of any approved type for that model. Refer MG.

## (c) USE

(i) The **sail** shall be hoisted on the halyard. The Nacra supplied arrangement shall permit hoisting and lowering of the sail whilst afloat. Refer MG

#### C.11.5 Gennaker

## (a) MODIFICATION

The **gennaker** may be painted for graphics.

## Section D - Platform

#### D.1 PARTS

N17 refer B.1.1 (e) and N15 refer B.1.1 (f)

#### D.1.1 MANDATORY

- (A) Starboard **hull** (including deck)
- (b) Port hull
- (c) Front cross beam
- (d) Rear cross beam
- (e) Trampoline N17 and N15

#### D.2 MODIFICATIONS, MAINTENANCE AND REPAIR

The alterations contained in D.2.1to D.2.3 may be made by NA, or by anybody after a formal request has been made to the NA and written approval is received by the owner. This shall require the manufacturer's declaration to be reissued.

#### **D.2.1 MODIFICATIONS**

(a)

#### D.2.2 MAINTENANCE

(a)

#### D.2.3 REPAIR

(a) If any **hull** is damaged and requires repaired in any other way than described in section C the details shall be recorded on the Manufacturers declaration.

## D.3 MANUFACTURERS

The parts in section D.1.1 shall only be manufactured by NS-or supplied by NA.

#### D.4 IDENTIFICATION

The **hull** shall carry the licensed manufacturers serial number displayed on the Starboard or port **hull**.

## D.5 MATERIALS, CONSTRUCTION AND DIMENSIONS

D.5.1 Shall comply with the Manufacturers Construction Manual.

#### D.5.2 PAINT

N17 refer to class rules

N15 refer to class rules

F18 refer to class rules

F16 refer to class rules

Other NC: The gelcoat finish is not to be removed and replaced with a paint finish. Severely damaged boats can be painted only with the written permission of NA after sending a damage report and photos to NA.

# Some allowance can be made to older boats with the consultation of NA.

## **SECTION E – Hull Appendages**

E.1 PARTS

N17 refer B.1.1 (e) and N15 refer B.1.1 (f)

- **E.1.1 MANDATORY** 
  - (a) Starboard **Daggerboard**
  - (b) Port **Daggerboard**
  - (c) Starboard Rudder blade
  - (d) Port Rudder blade
  - (e) **Rudder** upper-casting including tiller arm (F18, F16, N17, N15)
  - (f) **Rudder** lower-casting (F18, F16, N17, N15)
  - (g) **Rudder** casting (one piece other NC)
  - (h) Tiller bar
- E.2 MANUFACTURERS

The parts in section E.1 shall only be manufactured by NS-or supplied by NA.

- E.3 INDENTIFICATION
  - (a)
- E.4 MATERIALS, CONSTRUCTION AND DIMENSIONS
- E.4.1 Shall comply with the Manufacturers Construction Manual.

## Section F - Rig

## F.1 Parts

N17 refer B.1.1 (e) and N15 refer B.1.1 (f)

## F.1.1 MANDATORY

- (a) **Mast** (includes head and foot)
- (b) Spreaders
- (c) **Boom** (5.2, 18sq, F18, N17, N15, F16)
- (d) **Bowsprit** including snuffer ring. (F18, N17, N15, F16, NC)
- (e) Compression post (N17, N15)
- (f) Spi snuffer bag (N17, N15)

## F.2 MANUFACTURERS

The parts in section F.1 shall only be manufactured by NS or supplied by NA.

- F.3 INDENTIFICATION
- (a)

## F.4 MATERIALS, CONSTRUCTION AND DIMENSIONS

F.4.1 Shall comply with the Manufacturers Construction Manual.

## Section G - Sails

G.1 Parts

N17 refer B.1.1 (e) and N15 refer B.1.1 (f)

- **G.1.1 MANDATORY** 
  - (a) Mainsail
    - (i) Batten set
  - (b) Jib
    - (i) Standard batten set
  - (c) **Gennaker** (F18, N17, N15, F16, NC spinnaker models)

## G.2 MANUFACTURERS

The parts in section G.1 shall only be manufactured by NS-or supplied by NA.

- G.3 INDENTIFICATION
- (a) The **mainsail**, **jib** and **gennaker** shall carry the licensed manufacturers label and serial number (F18, F16, N17, N15).
- G.4 MATERIALS, CONSTRUCTION AND DIMENSIONS
- G.4.1 Shall comply with the Manufacturers Construction Manual.

# Part 111 – Appendix

# H. MEASUREMENT GUIDE

Insert measurement guide here.