# Taipan 5.7 Class Rules April 2015

1. **GENERAL** 

- a. The official language of the class is English and in the event of any dispute over interpretation English shall prevail.
- b. These rules shall take precedence over the measurement forms and plans.
- c. Neither the designers, their companies, Goodall Design or TCAA does not accept legal responsibility in respect to these rules or any claim arising there from.
- d. The purpose of these rules and restrictions is to provide uniform specifications for the Taipan 5.7 class of catamaran.
- e. These rules shall be administered by the TCAA.
- f. "The Designers" refers to John James (Jim) Boyer and Gregory Ernest (Greg) Goodall.
- g. 'TCAA" is a reference to the Taipan Catamaran Association of Australia.
- h. "Goodall Design" refers to Goodall Design International Pty Ltd.

# 2. REVIEW OF RULES AND RESTRICTIONS

- a. These rules and restrictions shall come up for review on the 1st of July each year.
- b. Proposals shall be put to the TCAA Committee which shall coordinate all aspects of the changes.
- d. All proposed changes shall be approved by the directors of Goodall Design. Before being put to the members.
- e. All Taipan 5.7 owners who are full financial members of the Taipan class associations are eligible to vote.
- f. The committee shall make a reasonable attempt to send voting forms and explanations (where required) to all financial members from the previous year.
- g. A majority of 55% of returned votes is required to adopt a proposal.
- h. Revised rules shall come into force on the 1st of April each year except where specifically agreed by the voting members. The new edition of the rules shall be prefaced with the changes from the previous edition. Where a preface isn't practical due to a large number of changes as second document outlining changes shall be published and distributed in parallel.

## 3. **BUILDING FEE**

a. For each Taipan 5.7 Catamaran hull built, and each Taipan 5.7 catamaran sail built, the builder shall pay to Goodall Design a building fee which shall be set by Goodall Design.

Refer Appendix B at rear of this document for schedule of applicable building fees.

- b. The building fee is payable regardless of whether the Taipan 5.7 Catamaran is subsequently measured or raced.
- c. On payment of the building fee, an official Sail Number, Building Receipt, and Building Registration Card shall be issued to the owner by Goodall Design. These shall be numbered consecutively. The builder may reserve a sail number up to ten ahead by payment of a fee set by Goodall Design
- d. If boats are built which are essentially the same as the Taipan 5.7 catamaran, but sold under another name, the above rules do not preclude the designers or Goodall Design from taking action against the builder to recover damages, building fees, and costs.

#### 4. BUILDERS

a. Taipan 5.7 hulls may be built by professional builders who have a current licence with the Taipan Catamaran Association of Australia.

Licence to build may be withdrawn if;

- 1. A builder is shown to be acting against the interests of the Taipan Catamaran Association of Australia.
- 2. Is not competent to build the Taipan 5.7 Catamaran.
- 3. Has not produced a Taipan 5.7 Catamaran for one year.
- b. All hull moulds shall only be built from master plugs approved by Goodall Design. These Plugs shall not be modified without written permission from the Taipan Catamaran Association of Australia.

## **5. REGISTRATION**

- a. No Taipan 5.7 Catamaran shall be allowed to race in the class unless it has a valid class measurement certificate.
- b. No Taipan 5.7 Catamaran shall be allowed to race in the class unless it has a valid Building Registration Card.
- c. The registered boat number applies to a pair of hulls. A hull may be replaced because of serious damage but it is subject to measurement. A new pair of hulls, for any reason, requires a new boat number.
- d. No two Taipan Catamaran 5.7's in the class, registered in the same country shall have the same name.
- e. Application for measurement and registration shall be the responsibility of the owner. Each time a Taipan 5.7 Catamaran is submitted for measurement a fee shall be charged.
- f. The owner shall arrange for an approved Measurer to measure the boat. The Measurer, if satisfied, shall complete the Measurement Summary Form.

- g. The Measurement Summary Form, when complete, shall be retained by the owner. The State Authority shall then enter the Taipan 5.7 Catamaran on its official Class Register.
- h. Change of ownership invalidates the certificate. Re-registration may be effected by returning the old Measurement Summary Form to the State Authority, together with an application in writing, containing the name and address of the new owner and the appropriate re-registration fee.

Re-measurement is not necessary. The State Authority shall issue a new Measurement Summary Form to the owner, and amend its Class Register accordingly.

#### 6. MEASUREMENT

Hulls, centreboards, rudders, mast sections, and beam sections supplied from a mould or die registered with Goodall Design are deemed to measure.

- a. This is a one design class. If a measurer considers any aspect of a boat submitted for measurement, departs from the intended nature and design of the Taipan 5.7 Catamaran, he may refuse to issue a measurement certificate, even if the specific requirements of the rules are satisfied. The measurer shall refer any such instances to the designers for a ruling.
- b. Only an official measurer appointed by the Taipan Catamaran Association of Australia shall measure a Taipan 5.7 Catamaran and sign the declaration on the Measurement Summary Form that it complies with the Class Rules
- c. A measurer shall not measure a Taipan 5.7 Catamaran owned and built by themself.
- d. It shall be the responsibility of the owner to see that the Taipan 5.7 Catamaran is correctly measured and to ensure that it thereafter complies with the current Class Rules.
- e. All certified Taipan 5.7 Catamarans shall be liable to re-measurement at the discretion of the Taipan Catamaran Association of Australia, or Race Committee, but only by an official measurer. Any Taipan 5.7 Catamaran re-measured at a class meeting and found not to comply with the Class Rules, may be disqualified by protest.
- f. A certificate may be invalidated by structural alteration, replacement of components or repair of the Taipan 5.7 Catamaran. The Taipan 5.7 Catamaran shall be re-measured in respect of the affected parts by an official measurer
- g. New sails shall be measured by the Sail maker. An official sail measurement tag shall be affixed to the sail within 400mm of the tack. The sail measurement tags shall be obtained from Goodall Design. Sails may be measured by an official measurer.

# 7. WEIGHT (mass)

- a. The weight of the complete boat rigged to race, when in a dry condition to the measurer's satisfaction, shall not be less than 142kg.
- b. Where spinnaker use is not permitted in a regatta, the weight of the complete boat rigged to race, when in a dry condition to the measurer's satisfaction, shall not be less than 137kg.
- c. Corrector weights shall be added to the boat to achieve the required weight.

## 8. RECOGNITION MARK

- a. The yachts class, name and sail number shall be permanently written across the rear beam or on the rear section of the hull in letters a minimum of 50mm high.
- b. The building registration cards shall be soaked in resin and permanently glued inside the hull where they are clearly visible through the rear hatch covers.
- c. The Registered Boat Number; and class emblem shall be displayed on both sides of the mainsail in accordance to ISAF rule G1.2.

# 9. HULL MEASUREMENT

a. Hulls shall be of moulded plastic construction built by a licensed builder from an approved mould b. Materials shall be vinylester, polyester, and/or epoxy resin. Glass and/or Kevlar fabrics. Polyester gel coat finish, Polystyrene, Urethane and/or PVC foams. Appropriate filling materials.

## 10. PLATFORM

- a. The maximum width of the platform including all fittings shall not exceed 2550mm.
- b. The centreline separation at the keel at the transom and a point 50 mm up from the bow tip shall be in a 20mm range. For the purposes of this rule, the bow tip is defined as the point of intersection of projections of the keel and the bow lines.
- c. The hulls May be canted outwards from the deck with an angle of 6.5 + 1 from the vertical.

## **11. BEAMS**

- a. The hulls shall be joined by a main beam and rear beam. There shall be no beam or strut attached to the hulls other than the main beam and rear beam and there shall be no beam or strut connecting the main beam and rear beam.
- b. The main beam and rear beam shall each be straight aluminium alloy or Carbon Fibre tube the front beam shall consist of constant of circular section along its length the rear beam may be of square extruded beam incorporating traveller track. Holes may only be drilled in the beams for fastenings and fittings.

The MINIMUM beam sections shall be:

Diameter: 100 2 mm. Wall section: 2.5 mm c. FRONT BEAM

- I. The strut shall have a minimum length of 280 mm when measured from the top of the main beam to the bottom of the striker strap. The strut shall be made of Aluminium alloy with a minimum diameter of 24mm in and a minimum wall thickness of 3mm.
- II. The striker strap shall be made of solid Stainless Steel and shall be a minimum of 3mm thick and a minimum of 38mm wide. Lightening holes are prohibited
- d. REAR BEAM
- I. Total height of beam and the traveller track not to exceed 120mm. The track for the traveller car may be extruded on to this section.
- e. Titanium bolts are prohibited in the beams.

## **12. CENTREBOARDS**

- a. Two centreboards shall be fitted; one per hull.
- b. The centreboards shall have no moving parts except that up haul / down haul cords are allowed.
- c. Centreboards may be made of any material, but shall be capable of floating in fresh water.
- d. Profile and section of centreboards is not restricted.
- e. Dimensions: Min. Max.

Width at keel in down position 290mm. 330mm.

Thickness at keel in down position 22mm. 27mm.

Overall length 850mm. 1200mm.

Ratio of Length to Width (chord).

#### 13. RUDDERS

- a. The rudder boxes are to be held captive to the transoms to prevent loss due to capsize.
- b. With the rudders in the fore and aft position the centre planes of each hull and its rudder shall coincide.
- c. Two rudders shall be fitted, one to each transom.
- d. Rudders may be made of any material but shall be capable of floating in fresh water.
- e. Rudders shall be capable of being lifted or swung up when the Taipan 5.7 Catamaran is beached. Fixed rudders

are prohibited.

f. Dimensions and shape of rudders are de-restricted.

#### 14. TRAMPOLINE

- a. A trampoline shall cover the area between the main beam, rear beam and the inner sheer lines, except that a maximum gap of 100mm is allowed for lacing.
- b. There shall be no trampoline or other covering whatsoever in front of the main beam or behind the rear beam.
- c. Trampolines shall be made of woven material. A net trampoline is not permitted. (For the purpose of this rule, net shall be defined as a material where the intersection of warp and weft are knotted, welded or in any way treated to space the warp and the weft apart.)

#### **15. MAST**

- a. The mast shall be made of aluminium alloy. Mast sections shall be permitted only when the design has been approved by the designers, and has been produced from moulds or dies registered with Australian High Performance Catamarans.
- b. The length of the mast section shall be 9.450 M 25mm.
- c. The forestay and shrouds shall be attached to the mast at a single point, within 35mm of the extrusion surface and 6750mm 25 from the lower end of the mast extrusion. The hound fitting shall be fitted externally on the mast
- d. The trapeze wires shall be attached to the mast and not to the standing rigging. The attachment point shall be not more than 50mm from the attachment point for the shrouds and forestay, and may be the same point. The trapeze lines shall be a minimum of 2.0 mm dia.
- e. The mast shall be stepped on the centreline of the boat.

- f. Measurement bands shall be painted round the mast such that the inner distance between bands is not greater than 9040mm. Measurement bands shall be in a colour contrasting with that of the spar and have a minimum width of 25mm.
- g. When stepped, the lower end of the mast extrusion shall be not more than 70mm above the top of the main beam
- h. The maximum distance from the bottom of the mast section that the spinnaker can be hoisted shall be 8380mm.

#### **16.BOOM**

- a. The boom shall be of Aluminium or Aluminium Alloy and shall be of constant section throughout its length.
- b. Excluding fittings, the boom shall pass through a 100mm diameter circle.

# 17. STANDING RIGGING

- a. There shall be one shroud only attached to each hull. The attachment point being the side chain plate.
- b. The mast shall carry one pair of diamond stays only, which shall be rigged below the hounds. Diamond stays may be passed through a fairlead, permanently attached to the mast above the lower attachment point. The distance between the diamond upper attachment point, and the lower attachment point, or the fairlead's, shall not be less than 6000mm.
- c. The distance between the points of intersection of the diamond wires and the spreaders shall be not less than 670mm or more than 770mm apart measured in a straight line.
- d. There shall be one forestay only, which shall be attached to a strop between the hulls.
- e. The point of intersection of the lines of the forestay and each half of the forestay strop shall lie on the centreline of the boat and, shall be not less than 630mm from a straight line joining the deck crown where they intersect the plane of the forestay bridle.

This measurement shall be taken with the forestay strop in a vertical plane and with a upward force of not less than 2kg and not more than 6kg applied vertically at the centreline of the boat.

- f. Struts, stays, or devices which limit the natural fore and aft movement of the forestay and forestay strops are prohibited
- g. There shall be no other standing rigging.
- h. All standing rigging shall be circular in section and shall have no fairing's. Rod rigging is prohibited. The minimum diameter of the shrouds, diamond wires, forestay and forestay strop shall be a minimum of 3.5mm diameter and have a minimum breaking strain of 1400kg. Diamond arms may have fairing's.
- i. Adjusting the standing rigging whilst racing is prohibited

Standing rigging shall be adjusted only by means of rigging screws or turnbuckles, shackles, shroud adjuster plates and lashing. All of these shall be locked, wired or otherwise firmly secured while racing.

## 18. BOWSPRIT (SPINNAKER POLE)

- a. The bowsprit shall be made of aluminium or aluminium alloy of constant section with a minimum diameter of 38mm with a minimum wall thickness of 1.6mm
- b. The maximum length shall not be greater than 3660 mm measured from the surface of the front beam.
- c. The bowsprit shall be fixed and approximately on the longitudinal centreline of the boat.
- d. The bowsprit shall pass below the forestay bridle and shall be restrained to the bridle. It shall be supported at the outer ends by two stays; minimum diameter of 2mm
- e. The bowsprit may be bent to allow a lower tack position, the maximum bend allowed when in position is 200mm.

This shall be measured as the distance between a straight line connecting the bowsprit ends and the underside of the bowsprit at the point of maximum bend.

#### 19. SAILS.

All sails manufactured by Goodall Yacht Sails prior to the acceptance of these rules shall deem to measure. Subsequently altered sails are subject to rule 19 a.

The ISAF Guide to Sail Measurement 1997 - 2000 shall apply where no conflict with these rules arises. Battens shall be removed from the mainsail for measurement.

Refer Appendix C at rear of this document for Designer statement of intent in relation to sail construction a. New sails shall be measured by the sail maker. When measured and found to be in accordance with these rules, a

completed measurement tag shall be legibly and permanently endorsed with the date of measurement and the sail makers signature and shall be affixed to the sail within 400mm of the tack. Substantially altered sails shall be measured by the sail maker and the measurement tag endorsed with the new measurements.

b. The rig shall consist of a mainsail, headsail and optional spinnaker

## c. HEADSAIL (Standard)

The sail maker shall certify on the measurement tag that items ii to xii correctly measure

i. The headsail shall be carried on the forestay.

The tack shall not extend below the intersection of the forestay with the forestay strop.

A device shall be used to prevent adjustment of the tack below this point.

- ii. Only zip, 'Velcro', and sleeve luff's are allowed
- iii. The `Triangulation' method of measurement shall be used if the width of the sail at the head exceeds 50mm.

For the purpose of this rule the width at the head shall be measured at right angles to the luff through the highest point of the sail on the luff, to the line of the leech, extended if necessary.

- iv. The length of the leech shall be not more than 5600mm.
- v. The length of the luff shall be not more than 5760mm.
- vi. The length of the foot shall be not more than 2000mm.
- vii. The maximum foot round will be 50mm.
- viii. At a point on the leech 200mm down from the head, the nearest point on the luff shall be not more than 110mm distant.
- ix. At the half leech point the nearest point on the luff shall be not more than 930mm distant.

The half leech point shall be found by folding head to clew and smoothing the sail out flat.

x. Up to three battens are allowed in the leech only. Each batten shall be perpendicular to the leech, not be more than

300mm in length and not more than 20mm in width.

- xi. The leech shall be in no place convex
- xii. Headsail clew boards larger than 60mm in any dimension are prohibited.

Only one sheet attachment point is permitted.

#### **Optional Self Tacking Headsail**

- iv. The length of the leech shall be not more than 5800mm.
- v. The length of the luff shall be not more than 6150mm.
- vi. The length of the foot shall be not more than 1600mm.
- vii. The maximum head width will be 60mm.
- viii. The maximum foot round will be 25mm
- ix. At the half leech point the nearest point on the luff shall be not more than 760mm distant.

The half leech point shall be found by folding head to clew and smoothing the sail out flat.

- x. Up to three full length battens are allowed. Each batten shall be not more than 20mm in width.
- xi. The leech shall be in no place convex

## d. MAINSAIL:

The sail maker shall certify on the measurement tag that items viii to xiii correctly measure

i. 'Head' shall be the highest point of the sail projected perpendicular to the luff or its extension.

'Tack' shall be the point of intersection of the line of the foot with the line of the aft edge of the mast.

'Clew' shall be the point of intersection of the line of the foot with the line of the leech from the bottom batten pocket.

- ii. The mainsail shall be hoisted in the integral luff groove of the mast extrusion, and shall not be fitted with a sleeve or double luff or other faring device.
- iii. The mainsail shall be set within the inner edges of the measurement bands on the mast.
- iv. The sail shall be loose-footed and shall be attached to the boom or boom fittings at the clew.
- v. There shall be a maximum of 11 battens and no batten may exceed a width of 30mm or protrude more than 100mm beyond the leech of the sail.
- vi. The battens shall have no moving parts.
- vii. The battens shall not incorporate carbon fibre.
- viii. The leech shall be straight or concave between batten pockets and from the top batten pocket to the head.

Any hollows in the leech in way of width measurement points shall be bridged with straight lines for measurement.

#### (old Style measurements)

ix. The top of the sail shall not exceed 550mm measured perpendicular to the head.

x. Measured to include the bolt rope:

At the 1/4 leech point, the nearest point on the luff shall be not more than 2200mm distant.

At the 1/2 leech point, the nearest point on the luff shall be not more than 1900mm distant.

At the 3/4 leech point, the nearest point on the luff shall be not more than 1360mm distant.

At the 7/8 leech point, the nearest point on the luff shall be not more than 950mm distant.

The 1/2 leech point shall be found by folding the head to clew and smoothing the sail flat.

The 1/4 and 3/4 leech points shall be found by folding the clew and the head to the 1/2 leech point and smoothing the sail flat.

The 7/8 leech point shall be found by folding the head to the 3/4 leech point and smoothing the sail flat.

- xi. The distance from the head to the clew shall be not more than 8740mm.
- xii. The distance from the clew to the tack shall be not more than 2350mm measured to include the bolt rope.
- xiii. The foot round shall be a maximum of 50mm.

- ix. The top of the sail shall not exceed 1000mm measured perpendicular to the head.
- x. Measured to include the bolt rope:

At the 1/4 leech point, the nearest point on the luff shall be not more than 2100mm distant.

At the 1/2 leech point, the nearest point on the luff shall be not more than 1840mm distant.

At the 3/4 leech point, the nearest point on the luff shall be not more than 1460mm distant.

At the 7/8 leech point, the nearest point on the luff shall be not more than 1180mm distant.

The 1/2 leech point shall be found by folding the head to clew and smoothing the sail flat.

The 1/4 and 3/4 leech points shall be found by folding the clew and the head to the 1/2 leech point and smoothing the sail flat.

The 7/8 leech point shall be found by folding the head to the 3/4 leech point and smoothing the sail flat.

- xi. The distance from the head to the clew shall be not more than 8720mm.
- xii. The distance from the clew to the tack shall be not more than 2250mm measured to include the bolt rope.
- xiii. The foot round shall be a maximum of 25mm.

#### e. SPINNAKER:

The sail maker shall certify on the measurement tag that items i to iv correctly measure

- i. The spinnaker shall be asymmetric in design of less than 23 sq metres.
- ii. Maximum allowable measurements of the spinnaker:

Luff length (SL1) - from the highest point of the sail to the lowest point on the luff 9000mm

Leech length (SL2) - from the highest point of the sail to the lowest point on the leech 8100mm

Foot length (SF) - from the lowest point of the luff to the lowest point on the leech 4000mm

- iii. The mid-height width of the sail (SMG), taken from the midpoint of the luff to the midpoint of the leech, shall be equal to or greater than 75% of the foot length.
- iv. The Area of the spinnaker (CSPI) is to be calculated using the following:

 $CSPI = SF \times (SL1 + SL2)/4 + (SMG - SF/2) \times (SL1 + SL2)/3$ 

#### **20. MAINSHEET TRAVELLER.**

a. A mainsheet traveller system shall be fitted and run across the rear beam only. The track shall run within the width of the rear beam.

## 21. MISCELLANEOUS.

a. No hiking aid shall be allowed except for foot loops, toe straps, trapeze gear, and any line for retaining crew positions on gunwale. The trapeze gear may be used by the crew at any time, who shall have at least one foot in

contact with the boat.

b. The following are prohibited:

Foresail booming out spars, foresail booms, radial vangs, mast jacks, hydrofoils, outriggers, ballast, suction bailers

keel bands, rubbing strakes, spray deflectors, chine's, and any projection from the skin other than normal fittings.

## 22. PERSONS ON BOARD

The crew (including helmsman) shall consist of a minimum of two persons.

Measurer : Date measured :
Passed : YES :
i f NO state rule number/s at fault.
Signature ( Only if passed.)
Sail number : Yacht name :
Build date: / / Hull mould Registration number
Builder: Owner:
Owner Address :
post code
Phone number : home work Mobile
Fax. E-mail
I, being the owner of the Taipan 5.7 catamaran listed above agree to comply with all the rules of the Taipan Association. Any alterations performed on the Taipan 5.7 Catamaran listed above after this certificate is issued, will comply with all the rules dated from 1st December 1999.  SIGNED
This section should be completed and forwarded to the Class Association so that the boat and the owner can be registered in accordance with Rule 5.  Sail number: AUS Yacht name:  Build date: / / Hull mould registration number
Builder:
Owner:
Address:
post code
Phone number : home work Mobile
Fax. E-mail

# APPENDIX B

TAIPAN 5.7 CATAMARAN SCHEDULE OF BUILDING FEES

Building Fees payable to Australian High Performance Catamarans Pty Ltd for each Taipan 5.7 Catamaran hull built

and each Taipan 5.7 Catamaran sail built as set by AHPC Pty Ltd:

Per Hull: By negotiation

Per Mainsail: \$25.00 Per Jib: \$10.00 Per Spinnaker: \$20.00

A set of drawings to assemble a Taipan 5.7 cost \$50-.

## APPENDIX C

TAIPAN 5.7 CATAMARAN SAIL CONSTRUCTION INTENT.

1 December 1999

Taipan Catamaran Association

5.7 Taipan 1999 Rules - Sail Construction Intent

When designing and defining the Sails for the 5.7 Catamaran it was my intent that the following aspects of sail construction would be de-restricted and without limit within the overall perimeter boundaries of the sails defined by the Class Rules.

Primary Reinforcement Secondary Reinforcement

Flutter Patches Chafing Patches Batten Pocket Patches

Seams

Ply Number and Weight

**Tabling** Windows Greg Goodall Taipan 5.7 Catamaran Designer

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