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THE STARLING CLASS CONSTITUTION & RULES

INDEX:

This publication, construction plans and building instructions are available from:

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HISTORY

During the 1968 Tauranga Cup 'P' Class Contest held at Kohimarama a group of fathers were lamenting the fact that there was no intermediate monotype suitable for boys and girls graduating from the 'P' Class.

After listening to the many ideas put forward, John Peet drew up a list of criteria considered desirable for a new class.

They were:

1. The boat should cater for boys and girls too big or too old for the 'P' Class yet not ready for adult classes.
2. Crew weight to be approximately 50 to 70 kg (8 to 11 stone).
3. The boat should be easily handled in fresh conditions, plane readily and have a good windward performance.
4. Appearance to have a high priority.
5. Buoyancy of 'P' Class Standard.
6. Cockpit space for two boys or room for Dad to try his hand.
7. Construction to be simple.
8. Very close restrictions so that all boats would have equal potential, eg. masts from standard aluminium extrusion, sails from the same material and loft.

John took the list to designer Des Townson and the two spent some time studying the existing monotypes then they listed approximate dimensions. Des retired to his drawing board and produced the plan for 'Starling' No. 1.

It was thought essential to have building methods and instructions that could be handled with confidence by a beginner. A building booklet was made up and David Peet, who had not built a boat before, took on the task of producing the first 'Starling'.

No.1 was launched at the Western Clubs' 1969 Anzac Regatta. In the following weeks it was trialed far and wide and countless yachtsmen were encouraged to sail, provided that they were prepared to answer a questionnaire.

At the time, there was a very real fear that yet another new class would not be welcomed. It was important to find out if there really was a need.

So many kind things were said about the pretty little boat that it was decided to go ahead. A number of what appeared to be minor alterations were made, but in fact the changes necessitated complete re-drawing of the plan. Having done this Des very graciously presented it to the Glendowie Boating Club Inc and went back to his beautiful keelers.
A building demonstration was organised at the 1969 Boat Show and many hands set to and assembled a kitset. Slowly, in garages and under houses, the nucleus of a fleet began to take shape.

The turning point came one fine Sunday morning when the seven completed boats were trailed to Kohimarama and lined up on the beach. The reaction of the 'P' Class skippers and parents was amazing and soon, with a good breeze, the little boats were busy showing their paces. Everyone wanted a sail, everyone wanted a 'Starling'.

Highlights in the history of the 'Starling' Class

December 1970: Recognised by N.Z.Y.F as an established Class.
April 1971: First Auckland Championship.
February 1972: First Pupuke Regatta. 60 starters.
April 1972: First New Zealand Championship.
August 1972: Recognised by the N.Z.Y.F. as a National Class.
March 1979: Original plan, showing Imperial dimensions, altered by the designer to show metric dimensions.
March 1995: Starling No.1 was restored by David Peet and presented to the Auckland Maritime Museum to celebrate the class's 25th year.
April 1999: Open age division created.
July 2000: Launch of prototype GRP Starling.

STATEMENT OF POLICY

The Glendowie Boating Club Inc., (hereafter referred to as GBC) is the controlling body of the 'Starling' Class and it is our policy that all boats of the 'Starling' Class should have the same potential speed**. Boats should be built to comply with the spirit and intention of the rules and specifications and should not be built to exploit loopholes in the plan or rules.**

The object of the Class Rules is to provide a one design hull form, spars and sail plan, whilst permitting certain freedom of finish and equipment. We feel it is up to the owners of the boats to see that the spirit of this policy as well as the letter is obeyed.

It is the sole responsibility of the GBC to amend the plan, class rules and specifications to the approval of Yachting New Zealand.

CLASS RULES AND SPECIFICATIONS

1 General

1.1 The class shall be known as the Starling Class.
1.2 The Starling Class is a one-design class. The object of these rules is to provide a one-design hull form, spars and sail plan, whilst permitting a certain freedom of finish and equipment, so as to ensure that all Starlings have the same potential speed.
1.3 All Starlings shall be built in accordance with the class rules. Except where these rules specifically permit variations, Starlings shall be alike in hull form, construction, weight, rigging, spars and sail plan.
1.4 These rules are complementary to the Starling plans, measurement diagrams and certified measuring jig drawings approved by the Glendowie Boating Club Inc. (GBC).
1.5 These rules supersede all previous rules and are effective as from the first day of November 2001.
1.6 Exemptions allowed by previous rules are allowed to continue under these rules.
1.7 It is the responsibility of the owner to ensure that the Starling complies and is maintained in accordance with the class rules. Alterations or replacements to the boat, spars, sails or equipment shall comply with these rules.
1.8 The term “boat” means the hull, deck and cockpit.
1.9 The term “Starling” means the boat and its measured equipment including but not limited to its spars and rigging, sail, attached fittings, centreboard and rudder.
1.10 The term “registered Starling owner” means the owner of a Starling that has been registered or a person that has purchased a Starling plan with the intention to complete a Starling.

2 Authority

2.1 The Starling Class shall be administered by GBC.
2.2 It is the sole responsibility of GBC to amend the plan, class rules and specifications and to obtain the approval of Yachting New Zealand (YNZ) for such amendments.
2.3 Interpretations of these rules shall be made by GBC, and communicated to YNZ.
2.4 Neither GBC nor YNZ accept any legal responsibility in respect of these rules or any claim arising therefrom.

3 Change of Rules

3.1 No changes of class rules will be considered unless:
3.1.1 Notice proposing a change has been given to the GBC signed by at least six registered Starling owners, and
3.1.2 Details of the proposed change has been circulated to all registered Starling owners, and
3.1.3 A period of at least 21 days after the circulation of details of the proposed change has been allowed for registered Starling owners to return ballot papers, and
3.1.4 The proposed change has been approved by two thirds of the registered Starling owners who return ballot papers.

4 Builders

4.1 Boats may be built in wood by any professional or amateur builder.
4.2 Boats may be built in GRP or materials other than wood only by a Certified Builder as defined in these rules.
4.3 For the purpose of 4.2 a Certified Builder is approved by GBC, bound by licence from GBC and shall produce boats to specifications approved by GBC.

5 Registration

5.1 A building fee shall be paid by the builder of every boat, being the amount set by GBC. Such amount is to include payment for the certified measurer to measure a boat at the measurer's premises, and shall be paid to the GBC, whether or not the boat is subsequently measured.
5.2 On receipt of the building fee referred to in rule 5.1, GBC will allocate a registration number particular to that boat. GBC shall record the owner and builder of that boat on its register.
5.3 The boat's registered number shall be its sail number.

6 Measuring

6.1 Certified measurers shall be appointed by GBC.
6.2 Measurers shall not measure a Starling owned or built by them, or in which they have a vested interest, unless approved by GBC.
6.3 Where the measurer finds that the Starling complies with the rules the measurer shall give the owner a completed and signed measurement report. The owner shall send the report to GBC for approval, registration and issuance of certificate of registration.
6.4 The measurer shall record anything that the measurer considers departs from the rules or the object of the rules.
6.5 Templates and jigs used for measuring shall be issued and owned by GBC.
6.6 It is the responsibility of the owner to see that the Starling is measured, and to ensure that it thereafter complies with the current class rules.
6.7 Alterations, replacement of components, or repairs to the Starling may result in invalidation of the certificate. Any Starling so affected shall be re-measured in respect of the affected parts by a measurer to ensure compliance.

7 Certificate of Registration

7.1 A certificate of registration (an "A" Certificate) will be issued to the owner of every Starling which after official measuring is found to comply with these rules, except a certificate may be refused for a Starling even if the specific requirements of the rules are met where GBC considers that it does not comply with the object of these class rules.
7.2 GBC has the right to cancel or withdraw any certificate. Such action will be taken if GBC finds that a Starling does not comply with these rules, or that a boat built by a certified builder does not conform to the specification. GBC shall not be liable for any losses incurred by the owner or other person.
7.3 On change of ownership, the certificate becomes invalid and is to be forwarded to the GBC together with the relevant fee and particulars of the new owner's name and address, whereupon a new certificate will be issued. Issuance of the new certificate does not evidence compliance of the Starling with the rules at the date of issuance.

7.4 If the Starling is altered or allowed to fall into disrepair, the certificate becomes invalid and a new certificate will be issued only at the discretion of GBC.

7.5 Only Starlings with current and valid A Certificates shall be eligible to compete in Starling Class races.

8 Restrictions applying to all boats

8.1 The outside shape of boats first measured after the first day of November 2001 shall fit within the certified measuring jig with not more than 13mm clearance between the measurement points on this jig and the outer surface of the boat.

8.2 The outside shape including attachments of boats first measured after the first day of November 2001 shall fit within the certified bow profile jig.

8.3 Subsequent to the first day of October 2006 the outside shape of boats first measured before the first day of November 2001 shall fit within the certified measuring jig with not more than 13mm clearance between the measurement points on this jig and the outer surface of the boat.

8.4 Deck overhangs including gunwales, beadings and connecting joints are not to extend more than 25mm from sides or bulkheads measured at right angles to sides or bulkheads.

8.5 Building tolerances:

a) Overall length excluding overhangs to be not less than 2871mm and not more than 2921mm.

b) Overall Beam including overhangs to be not less than 1206mm and not more than 1230mm.

c) The shape at the certified measuring jig stations except stations A and B between the chine and the fore and aft centreline may deviate from a straight line by not more than 6mm.

8.6 Sides and bottom of hull shall not extend beyond tuck.

8.7 Coamings to be positioned aft of mast step and to be not less than 10mm thick and height at fore and aft centreline to be 64 +/-6mm from the deck. Coaming height at points 75mm towards the fore and aft centreline from the gunwale to be more than 25mm. Top of coaming shall have no concavities.

8.8 Mast step to have mast bearing surface no more than 20mm above deck.

8.9 Centrecase slot width to be 19 +/-1mm. Centrecase openings to be rectangular shape with a maximum of 12mm radius in each corner. Centrecase top opening length (excluding buffer pads) to be 298 +/-6mm. Centrecase bottom opening length (excluding buffer pads) to be 375 +/-6mm. Slot fairing device under a trim on the centrecase top is permitted. Slot fairing device attached to the underwater surface of the hull or any water excluding device within the centrecase is not permitted. Buffer pads of maximum thickness fore and aft 15mm within the centrecase to protect the leading and trailing edges of the centreboard (i.e. not purposely shaped to act as a water excluding device) are permitted.

8.10 Centrecase depth measured at a right angle to the top surface of the centrecase shall be:

- at the forward end of the centrecase top opening 248 +/-6mm.
- at the aft end of the centrecase top opening 242 +/-6mm.

8.11 The distance measured at a right angle between the top surface of the centrecase and the deck at the forward cockpit bulkhead on the centreline shall be 180 +/-6mm.

8.12 The weight of the boat in dry condition, stripped of everything except permanently attached fittings, as listed below, is to be not less than 41

kilograms. Corrector weights, where required, are to be of wood and fitted to the aft face of the aft cockpit bulkhead. Fittings that may be included in weight are:
Towing Handle, Chain Plates, Traveller or Hawse, One Sheet Block, Cleats of any type, Stacking Straps, Inspection Ports, Carrying Handles, Fairleads, Compass, Adjusting Cord Blocks.

8.13 The boat must contain buoyancy adequate to ensure that when swamped it will support its own weight including all fixed equipment plus 10kg. Buoyancy shall be so disposed as to float the boat on an even keel when swamped. Swamped means:

- for boats not fitted with at least two separate compartments when the entire boat is flooded.
- for boats fitted with two or more separate compartments when 50% of the total volume of all the compartments is flooded.

9 Restrictions applying to wooden boats

9.1 Boats shall be built to comply with the layout and construction details shown on the current Starling drawing (Design 26 amended 10/01, and hereafter called the Starling Plan).

9.2 All scantling sizes, dimensions and specifications on the Starling Plan are to be maintained within the tolerances stated. All figured dimensions +/-6mm except overall length and overall beam. Scantling sizes +/-1mm.

9.3 The bottom, sides, frames, deck, bulkheads and side bulkheads are to be of plywood 6mm thick, conforming to BS1088:1966 "Specifications for Plywood for Marine Craft". Filling and/ or trimming of the plywood thickness is permitted only to the extent necessary to correct genuine building errors or to effect genuine repairs. Such filling and/ or trimming shall comply with these rules and shall be subject to the approval of a certified measurer and GBC.

9.4 It is permissible to cut 'weight reduction' holes in the stem profile and in frames A,B,D, and E, providing that such cut-outs comply with the figured dimensions of Fig 1 "Frame Cutouts".
There shall be no cut-outs in frame C, which must seal to the sides, bottom and deck to create these separate watertight compartments.

9.5 Inspection Ports of not less than 95mm diameter shall be fitted to fore and aft cockpit bulkheads. Side bulkhead inspection ports are optional.

9.6 Deck overhang at the tuck shall be not more than 8mm. There shall be no deck overhang at the stem.

9.7 Holes that are only of a size sufficient to accommodate adjusting cords may be cut in coamings.

9.8 Centrecase bracing may be attached no more than 32mm forward of the aft end or face of the centrecase and must be of timber and may extend completely across the cockpit. This centrecase bracing must be contained within a line from the top edge of the centrecase to a point on the cockpit side, not exceeding 50mm above the bottom planking.

9.9 The keel centrecase doublers may be carried aft of the centrecase to no more than 100mm and filled between with a wood packer. These doublers and packer must be no less than 31mm and no more than 36mm high for their entire length.

9.10 The cockpit side stringers and four additional longitudinal stiffening stringers are required in accordance with the Starling Plan. These are to be minimum of 16mm x 12mm and a maximum of 20mm x 14mm, laid on edge. The distance between the inner face of the cockpit side walls and the adjacent stringers and

the distance between the fore and aft centreline and the adjacent stringers is not to exceed 130mm at any point between frames C and E. All stiffening stringers are to be carried forward at least to frame B and aft to the transom.

9.11 Floor Battens of wood two per side are to be glued to the hull. On each side of the fore and aft centreline one batten is to be positioned centrally between the cockpit side wall and the adjacent stringer and one batten is to be positioned centrally between that stringer and the stringer adjacent to the fore and aft centreline. The minimum cross-section of the battens is to be not less than 50mm x 6mm and not more than 75mm x 12mm and they must extend to no less than 50mm of the fore and aft cockpit bulkheads.

9.12 A boat issued with a registered number higher than 1220 shall have its registered number permanently and visibly marked on the kelson in the cockpit in numerals not less than 10mm high.

10 Restrictions applying to boats of GRP or materials other than wood

10.1 Boats must be built to comply with a specification approved by GBC.

10.2 An inspection port of not less than 95mm diameter shall be fitted in the aft deck. An inspection port of not less than 95mm diameter may be fitted to the foredeck between mast step and coaming.

10.3 Holes in the coaming are not permitted.

10.4 Once the boat is registered, a label is to be permanently affixed to the hull centrally in the bottom of the rear buoyancy compartment. Such label shall state month and year of building and registration number in letters no less than 10mm high.

10.5 Alterations to the boat as supplied by the builder are prohibited. Such alterations include filling and/or fairing other than required in genuine repairs. In deciding whether any such modification is permitted, unless the rules specifically state that something is permitted it shall be assumed to be prohibited.

11 Rudder

11.1 Materials and design of stock, blade, tiller and extension are optional.

11.2 Rudder to be tilting type. Rudder blade must be able to tilt aft to a position where the leading edge of the blade is not less than 60 degrees from an extension of the vertical pivot axis of the gudgeons.

11.3 Distance measured in line with the vertical pivot axis of the gudgeons from the top of the deck at the fore and aft centreline of the tuck to the bottom of the rudder blade when in fully lowered position shall be no more than 840mm. The width of the rudder blade shall be no more than 254mm.

11.4 The most forward point of the rudder blade when in fully lowered position shall be no more than 30mm aft from an extension of the vertical axis of pivot of the gudgeons.

11.5 The distance from the aft face of the tuck to the centre of each gudgeon pivot shall be no more than 38mm.

12 Centreboard

12.1 Materials and design are optional.

12.2 The centreboard must float.

12.3 The blade under the cheeks must fit inside a rectangle 1067mm x 280mm.

13 Mast and Boom

13.1 Both aluminium extrusions to A. Foster and Co. Ltd specifications: Foster F4 pear shaped extrusion nominally 44mm x 54mm untapered.

$Ixx = 54.42 \times 10^3 \text{ mm}^4$

$Iyy = 83.33 \times 10^3 \text{ mm}^4$

13.2 Unrigged spars must be within 10mm of straight. The spars and sail tracks must be continuous, the mast track for a minimum of 3775mm from the top of the extrusion, and the boom track for 2000mm minimum. No lightening holes allowed.

13.3 Overall length of mast measured from top of mast including fittings to the bearing surface at the base excluding base pin(s) but including any tangs and rotating bearings to be 4480mm maximum.

13.4 Mast Strengthening: A stiffener inside the mast is permitted, length optional.

13.5 Mast to be supported by 3 stays so that their extended line meets the outside of the mast 2875 +/- 75mm from the base of the mast.

13.6 The point of attachment of the stays to the mast or to fittings attached to the mast shall be 2875 +/-75mm from the base of the mast.

13.7 An optional inner forestay may be fitted so that its extended line meets the outside of the mast 880 +/- 50mm from the base of the mast and is attached to the same fitting at the bow as the main forestay.

13.8 Bridles and separate positions for the fore and side stay attachments are allowed provided the stays or their extensions meet the outside of the mast 2875 +/-75mm from the base of the mast.

13.9 Stays shall not be adjusted whilst sailing.

13.10 Masts may be fixed or rotating.

- A fixed mast shall be stepped in such a way that it is unable to rotate about its vertical axis.
- A rotating rig shall be set up so that the boom rotates at the same rate as the mast about the mast's vertical axis. Any system to control the mast rotation at a different rate to the boom is not permitted.

13.11 Distance from the aft face of mast circle at deck to forward cockpit bulkhead to be 610 +/- 6mm.

13.12 Distance from the end of the boom, including fittings, to be not more than 2300mm from the aft face of the mast circle.

13.13 Halyard to be external to the mast section for a distance of not less than 4280mm from the base of the mast.

13.14 The halyard may be adjustable.

13.15 Sail must be able to be raised and lowered from deck level with the boat upright.

13.16 Additional fixed rigging not elsewhere specified is not permitted.

13.17 Mast and boom fittings not elsewhere specified are optional.

14 Hawse or Traveller

14.1 The design and materials are optional but shall be fitted within 50mm of tuck face and shall not protrude beyond the gunwales.

15 Sail

15.1 The sail shall be made strictly to the pattern certified by GBC and lodged with the appointed class sail makers as decided by GBC. Variations to sail

specifications to suit changing technology and material availability are subject to GBC's discretion.

15.2 Any alterations to the sail are not permitted.

15.3 Repairs to sail shall not alter sail shape.

15.4 A Cunningham eye is to be placed not less than 150mm from the centre of the tack cringle.

15.5 A foot-tensioning device is permitted.

15.6 Reefing points are optional. If included they must be located no more than 450mm from the foot.

16 Equipment

16.1 Jibing centreboards, deck padding, additional decking and ballast are prohibited.

16.2 Any protective coating may be used on hull, centreboard, rudder and tiller.

17 Crew

17.1 For National and Provincial Championships, to be one person of any age.

MEASUREMENT AND REGISTRATION

This section is intended as a guide to procedures for registration and measurement. It does not form a part of the class rules, but should be read in conjunction with the rules.

- Measurers are appointed by GBC throughout New Zealand. In order to locate the measurer for each region contact GBC or visit the GBC Starling Class website at *www.gbcyachting.org*
- Only a certified measurer appointed and/ or recognised by GBC shall measure Starlings
- Newly appointed measurers should be trained and their ability and knowledge approved by a certified measurer or GBC prior to their appointment.
- Measurers with any interest in a Starling should not measure that Starling, unless approved by GBC.
- The building fee includes payment for the certified measurer to measure the Starling at the measurer's premises, and shall be paid to GBC, even if the Starling subsequently is not measured.
- It is the owner's responsibility to ensure that the measurement record completed by the measurer is forwarded to The Starling Class Secretary c/- GBC for approval, registration and issuance of a certificate.
- The measurer's role is to record measurements and submit this record to the owner for forwarding to GBC for approval, registration and certification. It is not the measurer's responsibility to deal with disputes or justify any rule. Measurers are free to offer their opinions, but GBC is the sole and final authority to determine questions of application and interpretation of the rules.
- It is the owner's responsibility to see that the boat, its spars, sails and equipment are measured, and to ensure that these thereafter comply with the current class rules. Structural alterations, or replacement of measured equipment, or if the boat has significant repairs or is allowed to fall into disrepair may render an existing

certificate invalid, and the owner should arrange for re-measurement to ensure compliance with the rules.

- The Starling Class is a National Class and a National Register is kept. Starlings with current certificates are recorded on the register, together with details of the owner.
- Once GBC approves the measurement record completed by the measurer, a certificate (an "A Certificate") will be issued and forwarded to the owner.
- Change of ownership will render the certificate invalid. The new owner should forward the certificate together with the relevant fee to the Starling Class Secretary c/- GBC with particulars of the new owner's name and address. These details will be recorded in the Class Register and a new certificate will be issued and sent to the new owner. Issuance of a new certificate does not necessarily evidence compliance with the rules at the date of issuance.
- A certificate may be refused or withdrawn, even if the specific requirements of the rules have been met. Attention is drawn to the statement of policy detailed elsewhere in this document, and to the object of the class rules as stated in the rules.

NATIONAL CONTESTS

Authority

Yachting New Zealand shall be the Organising Authority for the Starling Class National Contest. Yachting New Zealand may appoint a Club or other body affiliated to Yachting New Zealand to act as the Organising Authority on its behalf.

Crew

National contests shall be sailed as one fleet with two divisions. The Youth Division shall be for sailors whose age is under 19 on 31st of January of the year in which the contest is being held, and the open division shall be open to sailors of any age.

Measuring

Each entrant must be able to produce a current 'A' Certificate or signed measurement form where circumstances have not permitted the issuing of the 'A' Certificate.

Trophies

- Youth Division
    - The John Peet Trophy shall be awarded to the winner of each contest.
    - The Kohi Cup shall be awarded to the runner-up in each contest.
    - The Murrays Bay Cup shall be awarded to the third placegetter.
    - The Howick Cup may be awarded to the winner of any handicap event run in conjunction with the contest.
    - The Graeme L. Hays Shield may be awarded to any skipper who, in the opinion of the host club, showed exceptional courage and effort during the event.
    - The Harken Trophy may be awarded to the youngest skipper in the first 10 places.

- Open Division
    - The Des Townson Trophy shall be awarded to the winner of each contest.

- The aforementioned trophies shall all remain the property of Yachting New Zealand.
  They shall be held by the winner for one year. In the event of a tie, the trophy will be held by each joint winner for equal parts of the year. Its shall be the responsibility of the holder of each trophy to ensure that it is forwarded to the host club for the next contest prior to that contest date.
- The engraving is the responsibility of the trophy winner and this should follow existing
  style and layout.