

# West Wind

The Newsletter of the NZ Zephyr Owners' Association

Volume 63 Issue 2

www.zephyr.org.nz

July 2019

## Editorial

**Rule Changes;** This edition of West Wind is a bit “stodgy”, dealing as it does with a number of rule changes, most of which have been signalled in past issues of West Wind. Their appearance here is the formal notification required by the rules and they have all been submitted with the required six signatures. Brian Peet has done the “heavy lifting” on the rule changes allowing and defining the use of carbon fibre in the Zephyr class. Currently our class rules do not theoretically allow carbon fibre or fibreglass use for sheathing and fittings, clearly an unsatisfactory situation. Wellington owners have requested the ability to adapt the masts to their conditions, either by stiffening or permitting their repair. The other set of rule change are primarily procedural, tidying up anomalies and permitting items seen on boats, but not mentioned in the rules—and thus, theoretically not allowed.

**Voting on Rule Changes;** This will be via Survey Monkey, as in the past. ZOA members will receive a link to the survey. The class rules require at least four weeks between notification and the ballot. Two thirds majority are required for the proposals to pass.

**All Fibreglass Zephyr Progress Report;** Tony Miller reports; We are very pleased to advise the progress on a fully fibreglass Zephyr. The ZOA Executive have approved the manufacture of a deck mould and modifications to the existing hull mould to suit a fully fibreglass Zephyr to be manufactured by Mackay Boats. Our target date for the first complete Zephyr is early 2020. Our target price for a complete Zephyr with beach trailer is \$19,500. This includes sail, mast, boom, fittings, foils etc ready to sail. Component prices will be refined over the next few months and the final complete price confirmed. But the really good news is no sanding or varnishing EVER!

Three hulls will be built in the first batch and at least the first off will be offered as complete sail-away with beach trailer packages. The ZOA will be responsible for selling these packages as before.

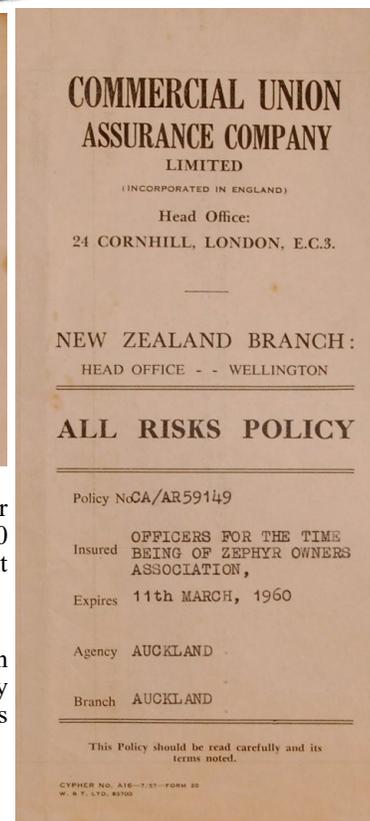
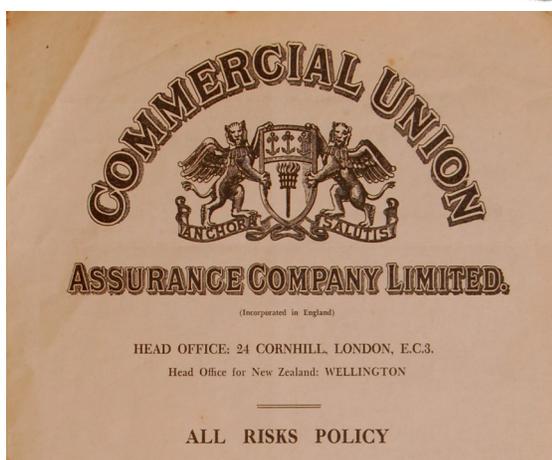
At the recent Tauranga Nationals, 11 sailors expressed interest in a complete fibreglass package. Rule changes to permit the new hull and deck are underway.

Please register your interest by emailing me at: [tjmilller39@outlook.com](mailto:tjmilller39@outlook.com).

Please also advise which foils system interests you. Steve Bull or XPL.

**Annual General Meeting;** This will be in Christchurch this year, see elsewhere for the notification details. Full reports will follow closer to the meeting.

**Memorabilia;** The ZOA has been around for a few decades now and we periodically come across items of interest in the paper files. The original Championship Trophy,



depicted here, was insured for the princely some of 40 pounds, in 1960. It cost about that much to buy a Zephyr!

Our Certificate of Registration has also evolved. For many years it was a simple record as depicted below.

## ZOA Certificate of Registration

*This is to certify the following Zephyr has been measured and accepted by the Owners' Assoc.*

NAME ..... No. .... OWNER .....

ADDRESS .....

DATE ..... 19 ..... Hon. Secretary .....

CERTIFICATE BECOMES VOID AT CHANGE OF OWNERSHIP

**Zephyr Owners' Association (Inc)**  
**Minutes of Annual General Meeting**  
**Pt Chevalier Yacht Club,**  
**1930hrs, Thursday, August 23rd,**

**1.1 Attendance;** Peter Busfield (Chair) and 24 members of the Association

**1.1 Apologies;** Richard MacKay, Peter Stokell, Don Currie, Brian Baker, Clive Wright, Helen Spencer

**1.2 Confirm Minutes**

Minutes of the Special General Meeting of 17th Jan 2018 were confirmed as a true and correct record. *Snedden/Pyatt*.

Minutes of the 2017 Annual General Meeting were confirmed as a true and correct record. *Kliffen/Sargisson*

**1.3 Matters Arising from Previous Meetings; Nil**

**2.0 President's Report**

Peter Busfield noted welcomed Grant Beck and Murray Sargisson's return to sailing following recent surgery. He then proceeded to highlight the themes outlined in his previously circulated report.

**3.0 Treasurer's and Trading Report**

Tony Miller spoke to his previously circulated report.

**3.1 Trading**

**Rigs;** New Zealand Rigging's business location was inconvenient to access, but there was no solution to this.

**Zephyr Hulls:** A relationship was being developed with Mackay Boats, a specialist dinghy builder for a full fitted out fibreglass Zephyr. Mackay are not in a position to undertake this immediately but would contract the build to Andrew Howden, an acknowledged boat builder, and supervise the process. Timber inserts and a timber deck likely to remain options. Tony Miller was maintaining a store of BS1088 plywood and cedar for future builds. The plywood was consistent weight wise, but the cedar varied by up to 1.0kg per length. The meeting heard that nominal 4mm plywood can vary from 3.7-4.3mm.

**Zephyr Sails;** The modified sails with a clew slug and improved corner reinforcement had been well received. The "transport crease" remains an issue, but the cost increase of \$120+GST for an uncreased sail was not felt to be warranted.

**3.2 Financial Report**

Tony Millers spoke to the circulated Financial Reports. Discrepancies between 2017 and 2018 accounts affected the stock figures primarily and were the effect of moving to GST registration. The ZOA faced a range of cost increases; bigger Executive, Chief Measurer flight costs, MYOB and BoardPro expenses, plus face to face Executive meetings. GST also had reduced subscriptions income. The need for a National Championship Travel Subsidy was questioned. Alex Aitken noted that CZOA matched the subsidy for South Island contestants, and was sustainable when trading profits were healthy.

After discussion, the meeting accepted the motion "that the National Championship Travel Subsidy be removed from the 2018-19 Budget" *Snedden/Sargisson*

**3.3 Subscriptions**

Tony Miller acknowledged the satisfactory nature of our current account balances, but noted the development of a deck mould would be expensive. It was desirable that the ZOA maintain or improve its reserves. He recommended an increase in the ZOA subscriptions to \$40. This prompted considerable discussion especially that the increase would discourage membership.

The meeting expressed concern at the seemingly growing ex-

penses and the Executive acknowledged the need to contain these. After discussion, a motion "that the ZOA subscriptions for the 2018-19 season be \$30+GST" was passed. *Aitken/Knowles*. Voting was tied and 9 for and 9 against with Chair Peter Busfield deciding the motion on a casting vote.

**3.4 Appointment of Financial Scrutineer**

Peter Busfield noted the support of Gerald Turnbull from Turnbull and Associates in scrutinizing ZOA Accounts. The meeting formalised his appointment; "That Gerald Turnbull, of Turnbull & Associates, be appointed ZOA Financial Scrutineer" *Snedden/Pyatt*

**4. Election of Officers**

**4.1** The following Officers were elected.

Patron	Alex Aitken
President	Peter Busfield
Secretary	Rob Ebert
Treasurer	Tony Miller
<b>Executive</b>	<b>Regional Representatives</b>
Steve Pyatt	Richard MacKay - Canterbury
Peter Stokell	Andy Knowles - Hamilton/Tauranga
Johh Kliffen	Glenn Tassicker - Wellington
Clive Wright	Brian Peet - Auckland
Llewellyn Viljoen	

**4.2 Appointment of Chief Measurer**

The meeting accepted the motion "that Graeme Robinson be appointed Chief Measurer" *Peet/Miller*

**5.0 Other Business**

**4.1 Life Member Nominations**

M Sargisson and R Ebert. The meeting accepted the motion "That Murray Sargisson and Rob Ebert be appointed Life Members of the Zephyr Owners' Association". *Busfield/Aitken*.

Chair Peter Busfield acknowledged the contribution of both nominees to the ZOA. Murray Sargisson's association with the class goes back to 1963. Rob Ebert has been Secretary now for over 20yrs. Murray Sargisson read Des Townson's forward to the 21st National Championship programme from 1977. Des had originally anticipated a few boats in a Zephyr fleet that might last a few years! Expectations that were greatly exceeded.

**4.2 Tauranga Nationals 2019**

Andy Knowles outlined the arrangements for the 2019 Zephyr Nationals, which are well in hand. NoR and Entry form about to be published. The fleet will be split if more than 60 boats. Some accommodation available for sailors at the club, but need to indicate early.

**4.3 Nationals 2020**

Planned for the top of the Sth Island. Picton, either Queen Charlotte or Waikawa - probably the former, likely venues. Nelson a possibility, but no response from them so far. The meeting noted the limitations of the Picton venues - long tows out, shifty conditions. Possibility of other Sth Island lakes mentioned - Wanaka, Queenstown being the most likely. The venue was important and timing of Feb/March the best. Helpful if Canterbury liaises with ZOA over timing.

**4.4 Rule Change Proposals**

(Continued on page 3)

(Continued from page 2)

Rob Ebert outlined the intended rule changes, many being "procedural". The significant changes were to corrector weights and allowing "carbon" and other sheathing materials. The "carbon" rule prompted vigorous debate reminiscent of the first time this rule change was mooted. Matt Mitchell was of the opinion that allowing unrestricted carbon use would permit it to be used to internally strengthen Zephyr hulls - a ring frame was one example, resulting in a superior boat. This sentiment was echoed by the meeting, but it was also pointed out that minor variations in Zephyr design over the years had not produced a stand out boat. Currently, carbon was in use in Zephyrs for areas of local reinforcement and wear, in chain-plates and in foils. At present, though, the rules do not contain provisions for its use.

#### 4.5 Other Business

**Settlement on #607;** Helgard Dannhauser queried the price paid to return #607 to the ZOA. Peter Busfield indicated that the decision was a complicated one that took considerable deliberation by the ZOA and affected parties. The boat could be used for a deck mould, training boat, or remediated and returned to the fleet.

**Decision on #602;** The ZOA's intention to replace #602 was also queried. It had been established previously that the boat did not conform to the build specification, and was heavier than its subsequent sisters. The ZOA's position is that hulls will be built to specification and will be repossessed and fixed if not up to specification.

**Rotorua Sprints Series:** Paul Pearson recommended the Rotorua Sprint Series in October, to the meeting.

**Rob Ebert**  
Secretary

### 2020 Zephyr National Championships Queen Charlotte Yacht Club, Picton.

**Saturday, Feb 1st - Wednesday Feb 5th, 2020**

Phil Folter will again be the R/O. The Nationals will be the first national event in the new QCYC building which sounds pretty exciting.

- BBQ Saturday night - welcome
- Event formal dinner Tuesday night
- Skippers forum Wednesday morning
- 2 races Sunday, 3 Monday, 3 Tuesday at least 1 Wed (+ any cancellations), travel home Thurs 6 Feb (Wellingtonians may elect to head home Wed night on the late ferry).

Arbitration will be available. At this stage RRS rule 26 will be operative (as you know any change is less than popular down here).

South Island Contest will be held at QCYC 14/15th December, R/O is Phil Folter, we would welcome any North Island skippers to this event, it's totally open.

### Contacting the Chief Measurer zoasecretary@outlook.com

Graeme Robinson, is making an important difference as our Chief Measurer. If you want to contact him, please do it via the ZOA Secretary at zoasecretary@outlook.com. This should ensure that we keep a handle on his "work load" and ensure a timely response.

### ZEPHYR OWNERS' ASSN

### ANNUAL GENERAL MEETING

**1900hrs, Thursday, August 14th 2019**

**Armadillo's Tavern, 155 Colombo St, Christchurch**

**Drinks from 1800hrs, post meeting nibbles 2030ish**

**Meals available**

#### Agenda

1. Apologies
2. Minutes of the previous meeting
3. Matters arising from the previous meeting
4. President's Report
5. Treasurer's Report
7. Subscriptions Recommendation
8. Election of Officers
  - *Patron:* Alex Aitken has agreed to another term.
  - *President:* P Busfield has agreed to stand for a further term.
  - *Secretary:* R Ebert has agreed to stand for another term.
  - *Treasurer:* T Miller has agreed to stand for another term.
  - *Financial Scrutineer*
  - *Regional Representatives.* AZO, HAZO, CZOA, WAZO
  - *Chief Measurer:* Graeme Robinson has agreed to continue
9. General Business
  - National Contests
  - Rule Changes
  - Other



## Proposed Zephyr Rule Amendments

5 May 2019

Six members of the Zephyr Owners Association have proposed the following rule amendments as per class rule 1.9.1. These amendments are now submitted to the membership for eventual voting as required by the Class Rules.

### Background

Carbon fibre usage has been a vigorously discussed subject within the Zephyr class over the last few years, with less than ideal clarity surrounding where it may or may not be used. Graeme Robinson, our Chief Measurer has advised that World Sailing (WS) rules define heritage classes like the Zephyr as 'closed'. The effect is that if an activity is not specifically permitted in a class's rules, then it's prohibited. (ISAF, its predecessor, used the descriptor 'restricted', with a similar effect.)

Our rules are silent on both carbon fibre and E-glass usage, so under the WS guidelines, neither material is permitted. These rule changes are designed to relax our rules to permit both E-glass use and carbon fibre in certain areas. The amendments maintain a carbon prohibition in areas the 2019 Nationals sailors' forum confirmed as detrimental to the class's ongoing viability.

The timeline of relevant decisions are:-

- In July 2012 the ZOA Executive advised members in West Wind (56.3) that, "*There has been ongoing discussion about the role of carbon fibre sheathing of both old and new Zephyrs over the past year or so. The Executive has been debating the issue in a series of email discussions over the past few months, culminating in a decision by a slim majority, not to support carbon fibre sheathing of Zephyrs.*" [Bold font used in West Wind]
- A 2014 (or there about) class vote to permit carbon sheathing failed. (West Wind August 2014)
- The carbon sheathing prohibition was re-affirmed by majority vote at the October 2018 ZOA Exec meeting.
- The 2019 Nationals sailors' forum minutes recorded a 49/3 vote in favour of continuing a ban on open carbon use. The meeting also supported continuing the carbon fibre sheathing ban.
- The forum supported the continued use of carbon fibre as a decorative and/or nonperformance enhancing material on hulls and supported its use in construction of fittings, foils and sail battens.
- The forum voted 49/3 in favour of owners applying for and being granted permanent dispensation for existing carbon usage where boat performance was not affected. It was proposed that each owner could apply under rule 1.10.14 to have their case considered by the Chief Measurer who would then make a recommendation to the ZOA Exec. The Exec would have final say on any exemption, exemption period or prohibition. The consensus view from the meeting was that a liberal approach should be applied to non-performance carbon usage.

These rule amendments have been prepared with input from Chief Measurer, Graeme Robinson.

### Proposed Rule Amendments

These rules shall take effect once adopted and approved by YNZ.

#### 1.7 Sails

Add new rule: -

1.7.5 Sail battens may be made of any material, including carbon fibre.

Explanation: *Sail battens are currently made from a range of materials. This amendment would permit unrestricted use of*

*any material in battens, normalising the existing practice.*

#### 2.1 Hulls

Add new rule: -

2.1.4: Any wood or plywood surface of the hull or deck may be covered with a single layer of up to 200 g/m<sup>2</sup> glass fibre 'E-Glass' attached with resin. Fairing filler of up to 5 mm thickness may be added, but shall be used only to fair hollows in the surface.

Explanation:- *Permitting E-glass protective covering over wood internal and external surfaces normalises decades of fibreglass sheathing practice across the fleet.*

Add new rules: -

2.1.5; Carbon fibre is permitted for decorative, non-structural use on the hull. Carbon fibre may be used to construct fittings.

Explanation: *Decorative carbon fibre on the hull and fittings made from carbon fibre are widespread and this rule normalises that practice.*

2.1.6: Carbon fibre may only be used to strengthen the hull shell at the chain plates and is limited to an area 170 x 100mm.

Explanation: *The 170 mm x 100 mm dimension recognises the carbon reinforcing built into the existing GRP boats.*

#### Centreboard

3.4.1; Replace last sentence with: Design and construction materials are optional, including the use of carbon fibre.

#### Rudder

3.5.1; Replace with: The design and construction of the rudder, rudder blade and tiller are optional, including the use of carbon fibre.

Explanation: *Rudder assemblies and centreboards are currently made from a range of materials including carbon fibre. This amendment would permit the use of carbon fibre, normalising the widespread existing practice.*

#### 3.8 Items not permitted

Replace the existing rules with:

3.8.1; Sliding seats, spreaders, trapezes, ballast, weight jackets, additional decking, false floors and carbon fibre hull sheathing are prohibited.

3.8.2; Except where specifically permitted in these rules, carbon fibre use is prohibited.

Explanation: *Carbon fibre hull sheathing has never been permitted, a fact that was endorsed twice by different ZOA Executives over a six year time span. This rule reaffirms those previous rulings.*

#### Summary

The proposers of the above amendments believe the ongoing viability of both the Zephyr class and any future GRP hull production hinges on prohibiting carbon sandwich modification to existing three-skin wood boats. Investigation with the carbon wand at the nationals showed the presence of two, single-sided, carbon-sheathed boats. The Executive has received information describing one other externally carbon-sheathed boat with a sheathed cockpit floor, creating what is thought to be the first carbon-sandwich Zephyr.

The proposers believe a three skin wood-hull of carbon sandwich construction has advantage over the existing Zephyr GRP layup, E-glass sheathed wood hulls and unsheathed wood hulls. The differences in the materials were graphically demonstrated to the sailors' forum with a presentation of a Young's modulus of tensile elasticity comparison table.

(Continued on page 5)

(Continued from page 4)

Carbon Fibre Fabric/Epoxy Resin	70
E Glass Fabric/Epoxy Resin	25
Epoxy Resin	3
Chopped Glass Strand Mat/ Resin	8
NZ Pine Wood along grain	8
NZ Pine Wood at right angles to grain	0.5 (estimated)
Gaboon Plywood along grain	9

Carbon fibre cloth (200 gm at \$40/m) is considerably more expensive than E-cloth (200 gm \$9/m) and the technical knowledge or skills to extract the full benefits of carbon are not available to the vast majority of Zephyr participants. This creates an inequality many in the class believe should be avoided.

Mackay Boats have indicated a desire to build GRP Zephyrs, but for this to be viable, the proposers of these amendments believe new fibreglass hulls must be at least equal to existing boats. The proposers believe this can only be achieved by restricting sheathing of existing wood boats to E-glass.

### Carbon Fibre Usage

#### Chief Measurer Recommendation

It has been suggested to the ZOA Exec that additional explanation around what carbon fibre cloth will be permitted or exempted in the proposed rule tweaks is needed. Below are examples of existing carbon usage observed on Zephyrs and Chief Measurer Graeme Robinson has detailed how these might be affected by a successful ballot.

#### Sail Battens and Foils

Carbon will become a permitted material for partial or full usage on battens and foils.

#### Fittings

Any carbon fitting, either fastened to or moulded into hulls will be permitted. Some examples:-

Rudder stocks, tillers, tiller extensions, fixed rudder fittings, transom venturi flaps, transom handles, chain plates, mounting brackets, mainsheet take off systems, block mountings, hiking strap fixtures, control line tubing and all commercially available fittings with carbon content.

#### Decorative carbon

Clear-coated carbon cloth added for aesthetic enhancement will be permitted. It is frequently seen in patterns on decking and on other surfaces as both decorative and protective coverings and

trimmings. Only non-structural applications are permitted. Some existing examples are – but not limited to: -

Deck rub pads, chain plate surrounds, centre thwart wrapping, gunwale wrapping, coaming sheathing, centre case cappings and mast-hole trim-wraps.

#### Other carbon usage

Existing carbon fitted to hulls not otherwise prescribed within the rules, but deemed by the Chief Measurer and Exec to be non-performance enhancing may be eligible for dispensation.

Rule 1.10.14 provides a boat-by-boat assessment process.

Some existing examples - but not limited to: -

- Patch repairs, side tank to hull joint taping, side tanks aft of the thwart, bulkhead to hull joint taping, mast step web taping and any carbon application similar to the decorative carbon as described above, but painted.

Application for dispensation must include detailed description of the carbon usage.

Applications will be referred to the Chief Measurer and he will assess each boat on its individual merits. He's indicated a desire to treat materially over weight boats favourably.

His recommendations then get forwarded to the Committee for a final decision.

### Proposed Additional Mast Rules 2019

Wellington members have proposed the following rule change to potentially extend the useful life of damaged masts and reduce the cost of maintenance, especially in regions where mast breakages may be common.

#### Damaged Masts Repair

**New Rule 3.1.8;** Damaged aluminium masts may be repaired using an aluminium internal tube section with a wall thickness not exceeding the mast section wall thickness, and a maximum total length of not more than 400mm, which extends no more than 200mm above and 200mm below the repair joint. The repaired mast must be approved by an approved Class Measurer and the mast base must be removable to allow easy re-measurement of the tube length, thickness and location above and below the mast repair joint.

#### Mast Stiffener

**New Rule 3.1.9;** Aluminium masts may be fitted (or repaired) with a single internal aluminium tube section with a wall thick-

ness not exceeding the mast section wall thickness, and a maximum total length of not more than 2000mm, which must be fitted not more than 100mm from the base of the mast. Any modifications or repairs to the mast must be approved by an approved Class Measurer.

*The stiffness or bending characteristics of aluminium mast varies due to manufacturing variations in the thickness of the extruded aluminium tube section and also the age of the mast. The following rule is proposed to allow an aluminium internal mast stiffener section to customise mast bending performance characteristics to potentially compensated for these variations and to also suit sailor preference, which may also allow boat performance to be optimised to suit an increased range of sailor weight etc.*

*Should both 3.1.8 and 3.1.9 be passed with the required number of votes necessary for a class rule change, then the limitations in rule 3.1.8 are not required and only rule 3.1.9 will be included as a change to the class rules (as rule 3.1.8).*

### Rule Interpretation

#### Transom and Centrecase Construction Query

The Executive received an inquiry from a member wanting to replace the centre case sides and transom in a Zephyr being refurbished. They requested permission to use a combination of clear timber and plywood and sought clarification on the acceptable thickness - 18mm or 20mm. The existing original transom was apparently a timber/ply combination. The Executive had some sympathy for the request, but the Class Rules only permit clear timber, or plywood, not a combination. The Class Rules do not permit the Executive to change them so the request was denied.

## Zephyr Class Rules 2019 Proposed Changes

### Introduction

The rule changes outlined below have now attracted six signatures from the Executive and this is to notify the membership of the proposed changes for voting on shortly. The changes are intended to make the rules clearer and more consistent.

### Name

The class shall be known as the Zephyr Class. The Zephyr is a one-design class. **As defined in the World Sailing Equipment Rules of Sailing, these are Closed Class Rules where anything not specifically permitted by the class rules is prohibited.**

*This is a self-explanatory clarification.*

### Hulls

1.6.3 Purchasers shall purchase **new** hulls from ZOA and no other person.

*This clarifies the intention that the ZOA is the new hulls supplier.*

### Sails

1.7.1 All new sails shall be made by a sail maker approved by the Committee, to the computer generated design and specifications current at **the time of production 30th January 2007**. No further new sails will be made from **any** earlier pattern. Existing sails from **any** previous approved pattern may remain in use.

*A rule tidy up*

### Registration and Measurement

1.10.11 **All spars, sails, foils equipment and corrector weights shall comply with the current version of the class rules. Hulls shall comply with the version of class rules which was current at the time the hull was first measured.** Any alterations or replacements shall comply with the current rules.

*This is a rule re-write, clarifying how rule changes can be applied*

1.10.13 Where these rules are silent on any point of measurement procedure, the **World Sailing Measurers' Manual - Sailing Federation measurement** handbook shall be used.

### 2. Restrictions and finishing instructions for hulls

2.1.3 Hulls weighing less than the minimum weight are to be brought up to weight with corrector weights. Corrector weights, **each weighing not less than half of the total weight required** shall be fixed to the **aft bulkhead or keelson adjacent to the aft bulkhead** and the aft section of the mast step cross member, or in an equivalent position approved by the Chief Measurer for those boats that do not have a conventional mast step and/or an aft bulkhead.

*The intention is to allow some flexibility in how and where the corrector weights can be attached.*

2.2.1 The deck shall be made of marine plywood i.e. BS1088 or **equivalent**, ~~the European Equivalent EN314 23 Class 3, Exterior,~~ of nominal thickness not less than 4mm and shall be glued down. Deck beams may be rounded to 5mm convex radius.

*Clarifies the standard to be adhered to.*

2.3.4 Internal beadings shall not be less than 3mm **wide** and 15 mm **high**.

*Minor clarification*

2.6 In wooden boats, the maximum height shall be 90mm from top of keelson to top side of **the** step. In fibreglass boats,

maximum height shall be 103mm from the inner surface of the hull at the centreline, to the top side of the step. **When the point at which the mast step fitting contacts the mast is more than 5mm above the allowed height of the mast step, the additional distance shall be added to the overall length of the mast.**

2.9.1 **Bouyancy shall be** a minimum of 0.2 cubic metres and it shall comply with YNZ Safety Regulations Part 1.

2.9.2 Bulkheads **and bouyancy tanks** are permitted and recommended and may enclose the whole or part of the area covered by the deck.

### 3 Equipment

3.1 **Masts; The maximum overall length of the mast shall be 5640mm, measured from the upper bearing surface of the halyard sheave to the point of contact with the mast step fitting.**

*This is a new section clarifying the mast length measurements for wooden and fibreglass boats, and wooden and alloy masts.*

3.1.3 The sail track, for all masts built after 1<sup>st</sup> October 2012, shall be continuous for a minimum of **4470mm** from the top of the halyard sheave.

*This is a simplification.*

3.1.6 A halyard complying with YNZ Safety **Regulations Part 1** shall be fitted.

3.1.7 The vertical pivot axis for the gooseneck shall be no more than 35 mm from the aft face of the mast **excluding the sail track**.

3.3.1 The mainsheet **blocks** shall be attached only to the **boom and centrethwart/centrebase** assembly.

3.4.3 **Reinforcement of the centrebase/centrethwart junction with a knee extending no more than 50mm in either direction, and no deeper than the centrethwart, is permitted.**

*This permits the commonly occurring reinforcement of this area.*

### 4 Builder's Specifications

4.1.4 Where doubt exists as to the validity of any matter, it **shall** ~~should~~ be referred to the Committee for a decision.

4.3.3 Fibreglass shells shall be constructed using a lay up of E glass with such resins and core materials as determined from time to time by the ZOA Committee. The side buoyancy tanks shall be made of **marine ply as specified for decks in rule 2.2.1**, nominal thickness not less than 4mm. The fibreglass transom shall be reinforced with a not less than 9mm plywood doubler.

*These are all clarifications*

4.3.4 **A fully fibreglass Zephyr - hull shell, deck, bulkheads, centrebase, bouyancy tanks and coamings may be constructed to specifications as determined from time to time by the Committee.**

*This permits the development of a fully fibreglass Zephyr*

### Finish and Supply

4.5.3 Owners may replace the decks, coamings, mast collar, transom, bulkheads, sidetanks or centrebase components with materials specified for the relevant use in these rules after one year of being issued with a first measurement certificate, except that manufacturing flaws may be made good in consultation with the Chief Measurer and **Committee**. Prior approval, where practicable, must be obtained from the Chief Measurer. Following any such replacement, the boat must be inspected and approved by a Class Measurer.

*Change for consistency*

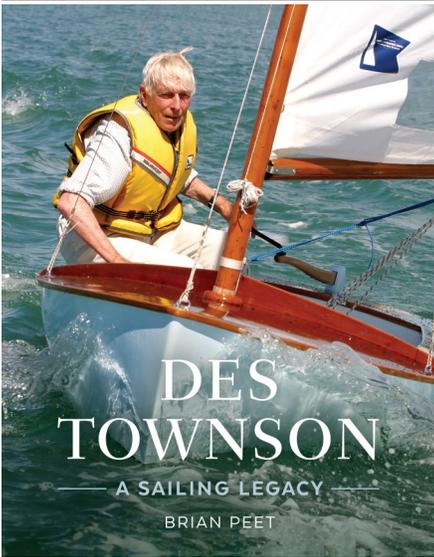
**Framing Timbers**

Amendments to the table in 4.4.1 are below, clarifying the transom and centrecase timber used for wooden boats and eliminating the wooden dowel provision.

**Rob Ebert**  
Secretary

**4.4.1 Framing Timbers**

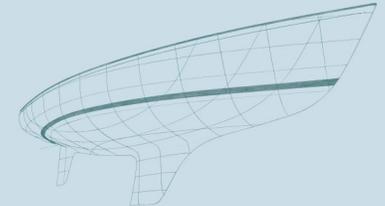
Part	Material	Min unless stated (mm)	Notes
Transom (wooden boats)	Clear Timber Marine Plywood	20 thick 18 thick	Shape as shown in template
Centrecase Centrespacer	Clear Timber Marine Plywood	24 max	Cut out centre for board
Aft Deck Post		25 Diam	Dowel
Foredeck Post		25 Diam	Dowel



**Des Townson**  
*A Sailing Legacy*

It's not common knowledge that Brian Peet has been working steadily to chronicle Des Townson's contribution to New Zealand sailing.

The formal book launch is set down for September.



DES TOWNSON was a yacht designer and boatbuilder responsible for a unique body of work which filled a special niche in New Zealand's rich boating history. He possessed an analytical mind, an innate feel for sailing boats and a wonderful eye for their visual balance. As an accomplished racing helmsman, he applied his once-in-a-generation set of skills to his creative art. During a five-decade long design career he produced some of the most eye-catching, easily handled and well-performing maritime craft to ever grace New Zealand waters. The fact he was self-taught and worked almost his entire career alone only intensifies the achievements of this remarkable man.

This book chronicles his life and design work through his own recollections and those of his family, close friends and associates. Combined with photos, boat plans and press reports, a detailed record of his impact on the New Zealand sailing scene is preserved. Des Townson's legacy continues to this day through the thousands of yachts still bearing his name.

