

West Wind

The Newsletter of the NZ Zephyr Owners' Association

Volume 56 Issue 3

www.zephyr.org.nz

July 2012

Editorial

Welcome to the AGM edition of the West Wind. There have been a few issues confronting the Executive that have taken up a bit of time.

Carbon Fibre on Zephyrs

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 issues in a series of email discussions over the past few months, culminating in decision, by a slim majority, *not to support carbon fibre sheathing of Zephyrs.*

The background to the discussion, and a summary of material presented to the Executive is elsewhere in this edition of West Wind.

As the organizer of the discussion it quickly became apparent that the Association was divided - probably pretty evenly - on the use of carbon fibre on Zephyr hulls. I had hoped to frame a generally acceptable rule that would clarify the situation, but this looked to be too challenging. Instead, the focus moved to responding to the specific request that Brian Peet made in seeking to use carbon fibre in refurbishing an older Zephyr.

The debate focussed on the superior ability of carbon fibre (over fibreglass) to stiffen wooden panels and the effect this might have on potential boat speed. Within the Executive there were those that thought it would have an effect, and those that thought it would not. Without some sort of well validated velocity prediction model that could relate structural strength to boat speed, it was clear that the issue was never going to be definitively resolved. The next step was to look for some insight from a design opinion. Andre Moltschaniwskyj, Director, LOMOcean Design Ltd, kindly provided this and it appears inside. However, some of the assumptions in his opinion were thought not to apply to Zephyrs. It was also noted that any change to the "certain freedom of finish and equipment" must ensure boats had the same potential boat speed. This is a stiff test.

If you do read the supporting material, keep it mind it was in support of a motion that was to be either accepted or rejected and was subsequently rejected.

Rule Changes

The latest round of rule changes have been notified in the May West Wind and are now for voting upon. Typically, the response rates have been pretty good, so I am hopeful that class members will make the effort. SurveyMonkey makes it all pretty straight forward, so there should be few excuses.

Goosenecks

A reminder that the restriction on goosenecks now applies. The Class Rules state that the vertical pivot axis for the gooseneck shall be no more than 35mm from the aft face of the mast. You may need to add this to your winter job list.

ZOA President's Report 2011/2012

It is my pleasure to submit the President's report for the 2011/2012 year.

The Zephyr Class has continued to attract new skippers in the mostly 40+ age group who enjoy competitive small boat sailing in a yacht that is fun to sail and the camaraderie that comes with sharing experiences after the race over a beer.

Championship regattas have been well attended around the country. Tim Snedden successfully defended his National title at Worsler Bay (46 participants) and also won the North Island Championship at Taupo, a popular venue for Auckland, Tauranga, Hamilton and Wellington skippers. Steve Pyatt won the Auckland Championship at Manly. Shane Smith won the South Island and Canterbury Championships. Cathryn Bridges from Canterbury Bay won the Women's Trophy at the Nationals and Cathryn Bridges won the Women's South Island Championships.

The West Wind, published by Rob Ebert, has continued to keep owners informed and enabled them to express their views on proposed rule changes and the direction of the class. The issue of low weight new hulls has now been addressed by increasing the veneer thickness and including 4mm side tanks ex the builder. Finished hulls should now be no more than 3kg underweight which will allow for some increase in hull weight over time and less make up lead weight. The potential use of carbon fibre for protecting, strengthening and stiffening hull panels has resulted in considerable debate and has been reported on by Rob Ebert in the July West Wind. The decision making process for this issue highlighted some issues with our Rules particularly in "ensuring that all boats have the same potential speed" before approving a rule change.

It is pleasing to see the continued growth of the Wellington fleet during the season and their participation at the Nationals with 22 entries. AZO has seen an increase in interest after participating in the Auckland Hutchwilco Boat Show and there is now a small fleet developing at Manly on the Whangaparoa Peninsula, the venue for the 2013 Nationals (7-10 Feb, 2013).

The ZOA's financial position is again very strong as a result of increased trading (hulls, masts, sails) and has a higher surplus in the account. Two new hulls have been sold to Wellington owners and a third will shortly be sold to an existing Auckland owner. Tim Snedden has competently carried out his Treasurer/Trading role and has had to cope with initial difficulties with the supply of masts from NZ Rigging. Rob Ebert continues to tirelessly attend to the detail of rule changes and clarification, the web site, and the West Wind newsletter. The position of Chief Measurer has remained open during the year. Thanks are also due to our Patron Noel May for his continued interest and support, our Honorary Auditor Matt Hannah and committee members Steve Pyatt, Russell Turner, Andy Knowles, Shane Smith, Richard Mackay, Phil Williams, Chris Hargreaves and Tony Miller.

Murray Sargisson

ZEPHYR OWNERS ASSOCIATION (INC) STATEMENT OF FINANCIAL POSITION AS AT 31 MAY 2012		
ASSETS	2012	2011
Current Assets		
ASB Cheque Account	11,251	11,137
ASB Term Dep 0072 (maturing 29 July 2012)	11,296	10,983
ASB Term Dep 0073 (maturing 23 Sept 2012)	15,434	14,742
Total Cash On Hand	37,980	36,862
Debtors	-	-
Interest Receivable	262	-
Stock on Hand	9,579	6,375
Total Current Assets	47,821	43,237
Total Assets	47,821	43,237
LIABILITIES		
Current Liabilities		
Deposits for Hulls	-	3,000
Trade Creditors	524	-
Prepaid Subs	100	-
Subs due to WZO	10	-
Accrued Expenses	320	300
Total Current Liabilities	953	3,300
Total Liabilities	953	3,300
	46,868	39,937
MEMBERS FUNDS		
Accumulated Funds 1 June 2011	38,737	37,237
Royalty Reserve	1,800	1,200
Current Year Surplus	6,331	1,500
Total Members Funds	\$46,868	\$39,937

*Zephyr National Championships
Thursday Feb 7th - Sunday Feb 10th 2013
Manly Sailing Club
Manly, Whangaparoa.*

**Ron Bull Boats
ZEPHYR FOILS**

With winter coming up quickly (unfortunately) now is a good time to start thinking about maintenance of your boat and equipment. How are your foils looking – do you need to upgrade or improve, or do you just need some R & M? Whichever way we can help, give us a call, we look forward to hearing from you.

Ron Bull Boats, 19 Hobbs Rd
Whangaparoa
Ph: 09 428-3950, Fax: 09 424-2551
Email: ronbullboats@clear.net.nz

TRADING ACCOUNT		
	2012	2011
Revenue		
Sails	15,853	12,782
Spars & Rigging	14,303	1,092
Hulls	13,300	4,300
Total Trading Revenue	43,456	18,174
Cost of Sales		
Opening Stock	6,375	2,802
Purchases Sails	9,791	16,149
Purchases Spars & Rigging	13,855	-
Purchases Hulls	14,782	3,389
Purchases Veneer	3,728	-
Freight	290	-
	48,821	22,340
Less Closing Stock	9,579	6,375
Total Cost Of Sales	39,242	15,965
Gross Margin On Sales	4,214	2,209
Expenses		
Insurance for Stock	70	-
Contest Promotion	700	1,600
Net Surplus From Trading	3,444	609
ADMINISTRATION ACCOUNT		
Subscriptions Income		
Subs Auckland	840	960
Subs Central	420	490
Subs Wellington	480	300
Subs Canterbury	640	660
Subs National ZOA	40	-
Subs Prior Year	70	40
Total Subscriptions Revenue	2,490	2,450
Expenses		
Bank Charges	3	-
Newsletter	-	20
Postage & Stationery	-	70
Website Expenses	-	39
Meeting Expenses	469	811
Promotion & Development	-	101
Sundry	207	205
Tolls & General	-	-
Honorarium President	250	250
Nationals Costs	-	1,048
Total Admin Expenses	870	2,834
Net Administration Surplus/Deficit	1,621	(384)
Other Income		
Interest Income	1,266	1,275
Net Surplus	\$6,331	\$1,500

**Zephyr Owners' Association
Treasurer's Report
Year ended 31 May 2012**

Trading:

We sold 16 sails, 10 batten sets, 10 masts, 10 booms and 3 hulls to stage 1. We are currently holding 2 sails, 1 mast, one hull and veneer for approximately 8 hulls in stock.

Following a price increase by the NZ Traditional Boatbuilding School, in September we increased the sale price of new hulls from \$4,500 to \$4,900.

The new masts supplied by NZ Rigging have proven to be very competitive, with Steve Pyatt winning the Auckland Championships with one while Murray Sargisson came 3rd having made the change to a NZ Rigging rig after over 40 years sailing with wooden spars! I have also been using one with a fair bit of success in the Auckland Autumn series.

As the result of some structural issues with the new masts, NZ Rigging agreed to have the metal used in the extrusion tested. The upshot of this was that they have been supplied with an incorrect grade of alloy in the extrusions and have undertaken to recall and replace all of the existing masts at their cost. This process is expected to begin shortly. While it is not expected that the bend characteristics will materially change using the higher grade alloy, we will undertake testing in advance of full production to confirm that this is the case.

We are also holding orders for 5 new masts which have had to be delayed due to the testing and subsequent recall.

In view of the fact that the trading stock we hold can be worth as much as \$24,000 at times, the executive agreed to my recommendation that the ZOA take out a material damage insurance policy covering our trading stock. This policy became effective on 24 April 2012 and the annual premium of \$687.98 has been pro-rated for the remaining 37 days of the year under review.

Administration:

Subscriptions income of \$2490 (including prior year subs of \$70) was in line with 2011 levels.

Auckland membership declined by 6, Central by 3 and Canterbury by 1, but this was offset by an increase of 9 in Wellington Association which now has 24 members. Total paid up ZOA membership currently stands at 121.

The only major expense item was the \$469 cost of airfares for out of town executive members attending the 2011 AGM in Auckland. Small negative figures for Website expenses and Newsletter are the result of over-providing for un-invoiced costs in the prior year.

The figure for contest promotion relates to the travel subsidy of \$100 for each of the 7 members from the South Island who attended the nationals.

Investments:

Funds in our cheque account at 31 May stood at \$11,251. The ASB term deposit of \$14,742 has been rolled over at 6 monthly intervals with interest compounding on maturity. The deposit currently stands at \$15,434 and was reinvested in April for 160 days at 4.5%. The other deposit of \$10,983 has been rolled over at 3-6 month intervals and was reinvested in January for 188 days at 4.45%. Unfortunately interest rates continue to remain depressed as low economic growth keeps inflationary pressures subdued. We are continuing our strategy of spreading maturities of the two deposits in order to split our exposure to interest rates on reinvestment.

**Zephyr Owners' Association
Budget for year to 31 May 2013**

TRADING ACCOUNT	
Revenue	
Sails	15853
Spars & Rigging	14303
Hulls	14100
Total Trading Revenue	44256
Cost of Sales	
Purchases Sails	14141
Purchases Spars & Rigging	13179
Purchases Hulls	13124
Freight	296
Total Cost of Sales	40740
Gross Margin on Sales	3516
Expenses	
Insurance	688
Contest promotion	700
Net Surplus from trading	2128
ADMINISTRATION ACCOUNT	
Total Subscriptions Revenue	2420
Expenses	
Bank Charges	2
Newsletter	82
Website expenses	265
Meeting expenses	950
Sundry	211
Honorarium President	250
Total Admin Expenses	1760
Administration Income	660
Other Income	
Interest Income	1222
Net Surplus	\$4,010

Budget

In the absence of any other basis for my information I have budgeted for the same level of trading revenue as for the 2012 year.

Subscriptions: Membership numbers the same as 2012. No change in the level of subscriptions is recommended for the 2013 year.

Expenses: An inflation factor of 2% was applied to all estimated costs except president's honorarium and nationals costs.

Interest income: Locked in returns for term deposits maturing July and September plus reinvestment at 4.5%.

Tim Snedden
Treasurer

Rule Interpretation

Carbon Fibre Sheathing of Zephyr Hulls

Introduction

Over the past few months there has been considerable debate over the use of carbon fibre on Zephyr hulls. This debate emerged from the following;

- Brian Peet wrote (email) to the ZOA seeking clarification of the rules so he can refurbish a boat using carbon fibre. See Appendix. The ZOA is obliged to respond.
- Andy Knowles suggested unrestricted use of carbon fibre in his proposed revision of the Zephyr Class Rules.
- The Owners Forum at Worser Bay suggested the class clarify its position on carbon fibre use.

The Class Rules

The following class rules are pertinent;

1.3.1

It is the policy of the ZOA to restrict the hull form and sail plan, while allowing a certain freedom of finish and equipment, so as to ensure that all boats have the same potential boat speed.

1.3.3

It is essential, should an owner wish to deviate from the norm, that an interpretation of class rules be requested in writing from the ZOA.

1.4.6

Where doubt exists as to the validity of any matter, it should be referred to the Committee for a decision. Where appropriate, the Committee shall have such questions decided by ballot in accordance with Part 1.9 of the rules.

As indicated in Rule 1.3.1 the ZOA would not restrict the “certain freedom of finish and equipment” if it could be satisfied that carbon fibre use still “ensured that all boats had the same potential boat speed”

Issues

From the debate within the class so far, the issues identified were;

The issue thus becomes one of determining the effect on potential boat speed of allowing carbon fibre use within the class. The most pragmatic approach was therefore to seek expert opinion on this relationship. Accordingly, I approached Grant Beck, Zephyr sailor with a “materials” backgrounds, as to who might be able to assist. The intention was for the ZOA to make an approach, but in fact, Andre Moltschaniwskyj, Director, LOMOcean Design Ltd, provided an opinion immediately. His opinion, and a brief CV, appears below (Appendix 1)

Interpretation

The expert opinion appended strongly implies that there will be no change in the potential boat speed of Zephyrs from allowing the unrestricted use of carbon fibre on Zephyr hulls.

In the absence of an effect on potential boat speed, allowing owners the freedom to finish or refurbish Zephyr hulls with carbon fibre is thus consistent with the ZOA policy of restrict only the hull form and sail plan.

Therefore, the ZOA Executive is asked to vote on the following statement;

Carbon fibre sheathing of Zephyr hulls is permitted.

**Rob Ebert
Secretary ZOA**

NOTE

The material presented on these pages is that considered by the Executive in response to a request to clarify the use of carbon fibre in sheathing a refurbished hull.

The recommendation above that;

**Carbon fibre sheathing of Zephyr hulls is permitted.
was not accepted by the ZOA Executive**

Issue	Description	Benefit	Risk	Mitigation
Space Frame	Carbon fibre applied to hull and under side of the deck in the region of the chain plates and mast step.	Increased strength and stiffness in a load bearing part of the boat.	Improved performance (more speed) in some or all conditions	Hull may be sufficiently strong in this area already, in which case further strengthening will have little or no effect.
Cockpit Area Reinforcement	Carbon fibre on outside of hull	Reinforcement of “tramp” area of the cockpit.	Improved hull stiffness could mean a faster hull. Improved hull longevity for newer boats, renovation option in older boats.	This is the flattest section in the hull. Current hull strength may be sufficient. Impact of increased strength/stiffness unknown.
Side Deck Reinforcement	Carbon fibre applied to underside of deck in the cockpit region.	Improved deck strength in a current area of weakness – flexion cracks develop over time	Little or no impact on performance.	
“Carbon Zephyr”	Carbon fibre applied all the outside of the hull and to the cockpit floor on the inside	A stronger, stiffer hull.	Improved stiffness/strength means more speed.	Hull may be sufficiently strong/stiff already. Link between hull stiffness/strength not really known.

**Carbon Fibre on Zephyrs
A Design Opinion**

In an effort to shed some more light on the possible impact of carbon fibre on Zephyr performance, Grant Beck, at the request of the ZOA Executive, sought the following opinion from Andre Moltschaniwskyj, Director, LOMOcean Design Ltd.

According to LOMOcean Design’s web site, Andre qualified with a New Zealand Certificate of Engineering and Bachelor of Engineering (Mechanical), Andre joined LOMOcean Design as a major shareholder in early 1998 having worked as a consulting engineer with Craig Loomes over a number of years. He has over a decade of composite structural design experience on boats ranging from high volume production runabouts to top level, custom built race and super yachts. Formerly a senior engineer with leading composite materials technology company, High Modulus, he has a broad range of expertise including business development and sales experience.

Andre’s comments are as follows;

Further to our telephone conversation earlier this week, I understand you would like an opinion from me regarding the potential speed benefits associated with carbon cloth sheathing the exterior of a triple diagonal planked timber Zephyr sailing dinghy.

Weight for weight – and assuming typical resin to fibre ratios - carbon fibre cloth is some three times stiffer in tension, about 1.5 times stronger in tension and (interestingly) just 20% stronger in compression relative to E-glass cloth. The sheathing has an influence on both the local panel bending stiffness and strength – and the overall bending stiffness and strength of the hull.

Some basic calculations show that a carbon sheathed, triple diagonal planked timber panel will exhibit an increase in local bending strength of approximately 11%, an increase in local panel stiffness of around 16% and an increase in overall hull bending stiffness of perhaps 15%. This looks promising, although it is important to look at the real influence of those increases in properties.

Assuming maximum hydrodynamic pressures are no more than around 1kPa (immersion of bottom shell at around 100mm below water surface) and a panel spanning around 400mm, the difference in actual deflection of the bottom shell due to water pressure – and thus the potential difference in hull shape - will be less than one tenth of a millimeter. This is probably well inside the tolerances of the as built shape that you could meas-

ure between any two apparently identical boats in the fleet, so build geometry variations are likely to be far more significant in terms of performance differences than sheathing materials.

A similar argument applies to overall hull bending on the Zephyr. An approximate calculation of the likely stiffness of an E-glass sheathed, triple diagonal timber Zephyr predicts overall hull deflection – assuming simple support at 3m centres with an 80kg centre load – of roughly 0.5mm. An identical carbon sheathed boat is predicted to deflect just over 0.4mm.

I can’t do any calculations that would show what difference these tiny differences in geometry – both of local panels, or overall hull bending - could make. A detailed computational fluid dynamics study might show numerical differences in fluid flow and resistance due to those changes, but I believe in practical terms it is likely to be impossible to quantify a performance benefit due to local or global hull stiffness changes due to the use of light carbon cloths for sheathing.

It could be argued that you could use a lighter carbon cloth (i.e. 130g instead of 200g) to gain the same local strength or stiffness of an E-glass sheathed boat – and thus gain some kind of weight benefit, but my understanding is that there are no class requirements for the boat to be sheathed at all anyway, so if you want to save weight, don’t sheath the boat at all.

On large race yachts, optimizing hull stiffness with strategic use of materials and fibre orientation is important. A stiff hull permits more tension to be placed on the forestay to reduce sag, which allows the boat to point higher. When rules dictate minimum allowable structural weight, it thus becomes a balance between meeting local panel strength requirements versus maximizing overall boat stiffness – and there is a good argument for improving overall stiffness as much as you possibly can. This argument can’t apply to a small dinghy without head sail.

So, in summary, I think sheathing in carbon will be more expensive and heavier than not sheathing at all – with little or no measurable benefit in terms of local or overall hull bending stiffness.

I hope this is of some help...

Andre Moltschaniwskyj
Director
LOMOcean Design Ltd
June 2012

**Nomination Form
Zephyr Owner’s Association Annual General Meeting
20th July 2012**

Nominated	Position
Proposed	Seconded
Agreed	Date

Future of sailing in Canterbury

Extracts from the recent CZOA newsletter

There is a CYA working party developing document about the thrust of CYA efforts to assist yachting development in the post-earthquake environment. Obviously CYA is not about to do it for the clubs, nevertheless it is incumbent on them to support and promote important measures, but first it is necessary to be clear about where we want to head, about what members think are important.

From my point of view, there are two things which we have learnt from watching what is working locally, that are critical. The more we can flesh out these, add or subtract, the better, so happy for any and all to chip in here.

Recruitment into sailing is about **VISIBILITY** – about being seen as an exciting option able to involve individuals of any age and gender, families included. We need to get away from the image of sailing being about as interesting as watching paint dry. It is completely incorrect to assume that getting children into sailing is the only way; in fact enrolling parents often results in the children coming in as well!

- For CZOA, sailing regularly as a coherent fleet (Canterbury's, S.I.s, Nationals and whatever) meeting at a chosen Yacht Club, seems to me critically important.
- Talking to people – everyone's responsibility – conversations, social media.
- Public media visibility – newspaper, television (there is excellent and exciting footage out there that never gets seen and it is hard for a Class Association or a Yacht Club by itself to crack media indifference) so CYA assistance with YNZ help can help us there..
- Gimmicks like Boat Shows, and other propaganda.
- Available resources – we certainly get enquiries from all over, and it's obvious that the Laser girls and boys are usually able to use a Mount Pleasant YC Laser (we have 4) to get them onto the water, so we need to do the same. With this in mind, I've splashed out on another one – Bevan Stevens "White Hot" #154, which you'll recall is not particularly tidy, but well set up and quick. I'll monitor how availability of this boat is used over the next season or two and take it from there. Obviously there will be concerns about damage to it, however Brian Smith at MPYC assures me that they've had minimal problems even from beginners to sailing.

Maintaining an active fleet; Recently, at least over the last 3 seasons, we have been watching the development of a very active Laser fleet committed principally to friendly competition and a healthy dose of social involvement. The lessons of this development seem to be:

- Creating a sense of belonging. A very human need, and I think that is why we all belong to various groups, whether it be after-work socials, Crusaders Fans Support Club (rather in need of members after this weekend, I believe), or the Epitaph Riders. Every one of us must take some responsibility for creating this; maybe for some, I hope many, it is socialising after sailing, others it is the regular meetings, but for everyone I think we should all make it a personal habit to make sure we **talk to the Zephyr skipper at each fleet event whom we know the least.**
- Shared agenda. Perhaps we unconsciously do this already, but my own conception is that we share the aim to compete against each other as vigorously as possible,

within the limits of our busy lives, and without rancour. This is not to say that social togetherness is not valued too, and it would probably help to think of new ways of achieving this.

- Critical mass. It's kind of boring sailing to be in a fleet of one or two, better to be 12th in a fleet of 15, than always last in a fleet of 3. It's a big attraction of Zephyrs, and we need to defend our critical mass vigorously.
- Supporting our skippers. Again this seems to me to happen a lot, I'm impressed by the level of help we get from our peers. I've had the benefit of discussions with Bill Beere, John Kennett, Bevan Stevens, Richard Ineson, Shane Smith and many others (wonderful that it hasn't made an obvious difference!) and the female skippers, when I was discussing the fleet with them, were also clear that they valued receiving the input of other skippers. So this is an important value worth retaining and raises the issue that having some formal workshops of an evening might work quite well, especially over winter.

Richard Mackay

ZEPHYR OWNERS' ASSN ANNUAL GENERAL MEETING

**Mt Pleasant Yacht Club, Chch
1930hrs, Friday, July 20th 2012**

Agenda

1. Apologies
2. Minutes of the previous meeting
3. Matters arising from the previous meeting
4. President's Report
5. Treasurer's Report
6. Secretary's Report
 - Exchange with Brian Peet over carbon fibre sheathing
7. Budget and Subscriptions
8. Election of Officers
 - *Patron:* Noel May is prepared to stand down.
 - *President:* M Sargisson has agreed to stand for a further term.
 - *Secretary:* R Ebert has agreed to stand for another term.
 - *Treasurer:* T Snedden has agreed to stand for another term.
 - *Auditor:* Matt Hannah
 - *Regional Representatives.* AZO, HAZO, CZOA, WAZO
9. General
 - Building Report
 - Mast/Sail Report
 - National Contest 2013-14
 - Further Rule Changes?

Nominations for the ZOA Executive Committee

Our Constitution allows for three Officers, and five Committee members. Presidents of the regional associations - Auckland, Hamilton/Tauranga, Wellington and Canterbury are ex-officio members of the Executive. A nomination form appears inside, so please give some thought to who you want to represent you.

RULE CHANGE PROPOSALS

The following rule changes has been received from six registered Zephyr owners in accordance with the class rules. They were notified in the last West Wind and now need to be voted on.

That rule 3.3.2 be amended to;

3.2.2 Aluminium booms shall be Baverstock BS5 or Standard McKechnie die 57.15 or ***NZ Rigging Die F6 57.50mm*** round section with track attached, and built to the following specifications:

Comment: *When we changed the rule for the masts to include the NZ Rigging Die, I neglected to include the boom.*

That 3.5.1 be amended to;

3.5.1. That portion of the blade below an extension of the keelson marked on the leading edge of the rudder shall fit within a rectangle 900 x 292mm.

Comment; *This clarifies the current rule and is line with the original measuring recommendations.*

That 4.3.2 be amended to;

4.3.2 Shells shall be constructed using either triple skin diagonal cold moulding or single skin strip plank, glassed both sides.

- Triple skin diagonal cold moulding; the shell shall be constructed of three skins of **at least 2.2mm** thick approved timber.

Comment: *The initial veneer was one tenth, or 2.5mm. It got rounded down to 2mm in the conversion to metric. Our current veneer thickness of 2.2mm is thus not according to class rules. This change establishes the minimum as 2.2mm and retains the option of an increase should it be indicated at a later stage.”.*

That Rule 4.4.3 (Section 4.4 Framing Timbers) be amended to;

4.4.3 Hulls shall be supplied by the builder with these framing timbers, side and athwartship bulkheads glued in pace permanently.

Comment: *It has been standard practice to supply hulls with side and athwartship bulkheads in place, but the rules do not require this. This aligns the rules with our current practice.*

That Rules 4.5.3 and 4.5.4 be added to 4.5 Finish and Supply

4.5.3 Owners may replace the decks, coamings, mast hole collar, transom, bulkheads, sidetanks or centrease components with materials specified for the relevant use in these rules. Following any such replacement, the boat must be inspected and approved by a class measurer .

4.5.4 Other parts of the hull may be replaced only in the case of breakage or deterioration.. All materials used must comply with these class rules.

Comment: *At the moment, the rules do not allow owners to really do much to their boats at all. This rule allows owners to refurbish their boats.*

Rule Change Voting Paper or Online at <http://www.surveymonkey.com/s/YROXZFN>

Lastname

Firstname

Boat Number(s)

Address

Rule	I agree	I disagree
3.2.2 Alloy Boom Section		
4.3.2. Veneer Thickness.		
4.4.3 Bulkheads		
4.5.3 Replacements for Refurbishment		
4.5.4 Replacement for Breakage		

***Return to Rob Ebert, 15 Gilbass Ave, Hamilton. Or email to: ebertr@xtra.co.nz
Deadline is Friday, 27th July 2012!***