Ferro News

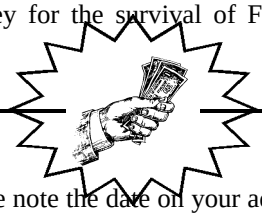
September 1999 Quarterly Newsletter for Ferrocement Boat Owners Issue 11

I was rather disappointed and annoyed with the recent article on buying a second-hand boat that was published in *Cruising Helmsman Sept 1999*. The writer was obviously such an expert with ferrocement boats that he felt that a whole column could be devoted to it. Or so it would seem. *"if your considering long-distance cruising ... a heavy ferro yacht will need bigger, more expensive sails, and a bigger, thirstier engine"* . Please! Would someone write to the editor and give the author a dressing down! Some of his points I could let slip, but not this one. As we all know, ferrocement yachts of the cruising size and above are no heavier than their counterparts if built to design.

I feel better now that I've had my grumble! This issue Trudy and I head north to Darwin on our 4WD trip, meeting up with Ray & Cindi Jones aboard Ray's Hell, and Bev and Darrel Westlund on Bevarel our feature yacht last issue. Photos inside.

Our thanks are extended to our regular contributor Keith Flemming aboard Zodiac! Not only does Keith make the time to forward FN material each issue, but gave Ferro News a plug amongst his regular contributions to *Australian Yachting.* Welcomed inquiries have since been received. A warm welcome goes to all our new members, which I would like to encourage to write to FN about their boat, their projects and their dreams. Participation is key for the survival of Ferro News.

RENEW NOW!



Yes time to renew your subscription folks. Join us again for another year of ferro-ripping fun. Please note the date on your address label on the envelope that FN was sent to you in. This date is the date your subscription is paid up-to, so if yours says Sept 99, then your number is up! The FN team is well known for its lousy book keeping and administration so if you spot something that you think is wrong, get in touch, it probably is.

DARWIN OR BUST *by Trudy Snowdon S/V Lilly Ann*

Ian and I were determined to undertake a trip of some description this year after our long-planned cruise north was promptly snatched from our grasp when Ian plunged 50 m into the ground. Six months later Ian was still not up to sailing after this misadventure. I'd had quite enough of being full-time nurse and then going straight back to work without a holiday, and not to mention Lilly-Ann laying to her berth with no work to her over this period was in no condition to cruise anywhere. With the cruising season slipping away our thoughts turned to a land-based adventure. The Northern Territory was an unexplored State for us, and it had the remote and distant feel about it that attracts us both to cruising. We spent what remained of our cruising budget on a second-hand Holden Rodeo Dual Cab Ute 4WD. Being both tall the slightly lower clearance in comparison to the Hilux was forgone for its extra leg room in the second cab. Ian fitted the Ute out with drawers and a slide out table. Still unable to bend and in much pain he lay flat on the ground to weld up the frame. The

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NT Border. Ian , Trudy and the Rodeo with the car-top camper.

Whats On ...

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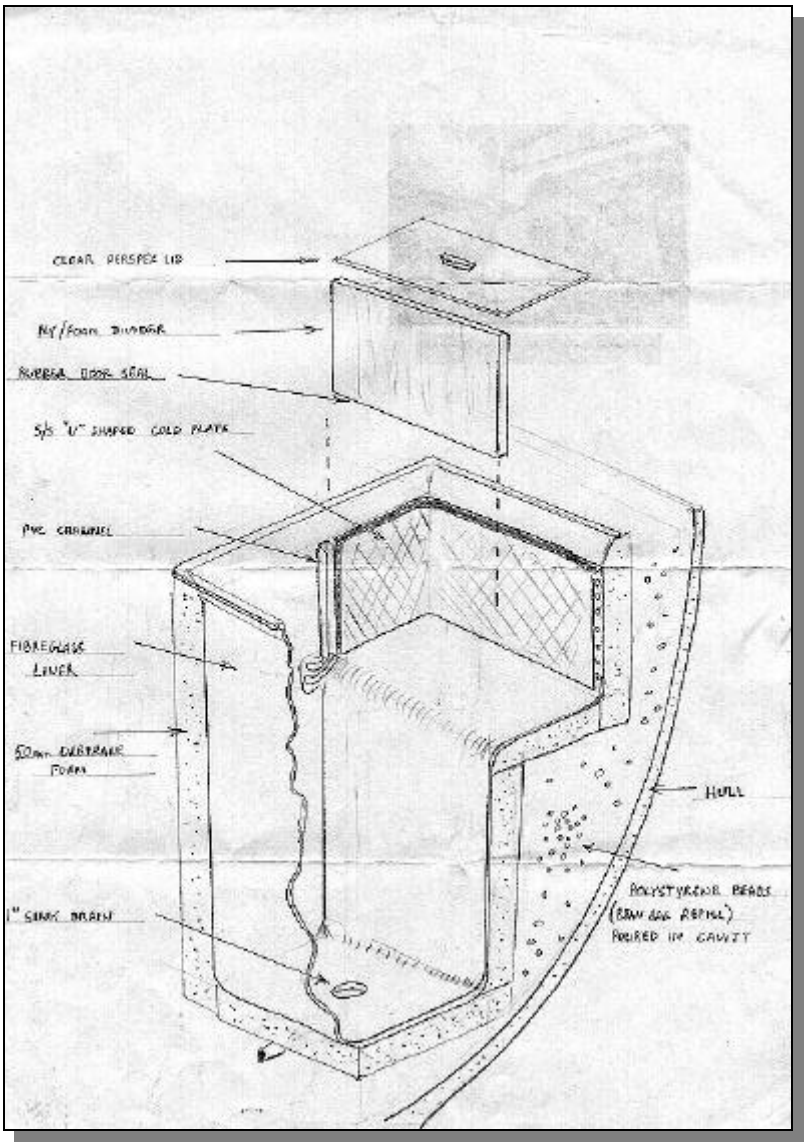
Cold Beer at Last - The New Fridge

by Doug Wallace S/V "Mystery"

Thanks for yet another informative and entertaining issue of Ferro News. I was intrigued to read of spray on reinforced concrete. I wonder how long the steel fibres are? How thick are the strands? Surely there must be some continuous steel rods in the vessel, (longitudinally at least). Was also interested to read Keith Flemmings advice on stacking the freezer since my fridge/freezer is installed and ready for experimental test runs. My cabinet is 70 litres volume in the shape of an inverted "L". The fridge part of it is the deep side and the freezer is the shallow side. (The cabinet is that shape to fit the curvature of the hull) There is a vertical divider between the fridge and freezer. This partition is 10mm urethane foam sandwiched between 5mm ply. The divider slides in plastic "U" shaped channels screwed to the sides of the liner so it can be removed to make cleaning the freezer easy. I made a freezer section lid from 4mm clear Perspex so that draughts don't take the cold out of the freezer every time I lift the main insulated lid to access the fridge section. In one preliminary test I was freezing a litre of water and the freezer was -5 degrees. Enough "cold" was seeping through the partition to keep the fridge part 8 degrees. I am considering making a row of holes in the partition blocked off with corks so I can adjust the temperature differential between freezer and fridge. If I put a lot of warm stuff in the fridge, I will be able to take some corks out until the fridge gets cold, and if my lettuces and tomatoes start to freeze, I can put the corks back. One problem I may have with such a deep fridge is stratification, where the cold air sinks to the bottom at freezing or near freezing temperatures while the upper parts are relatively warm at around 10 degrees. One thought would be to have a 25mm P.V.C. tubing duct standing vertically in one corner with a tiny 12v motor with fan to pump the air around and distribute the temperature evenly. Another way would be to put the foodstuffs that would survive freezing at the bottom, eg, margarine, cheeses ,fresh meats etc and keep the fruit and vegetables nearer the top. Shopping in Woolworths (with a tape measure), I found a set of stacking plastic storage trays with ventilation slots all around which are exactly the right size for my fridge. Instead of just screwing a knob or handle on top of the lid, I am making a 100mm diameter X 30mm deep hemispherical hollow in the laminex,7mm ply and 50mm urethane foam so the top of the knob is flush with the top of the laminex. This means I can use the lid as a useful benchtop for food preparation (the chopping board will sit flat) and the rounded depression containing the knob can easily be wiped clean of crumbs etc. The cost of the refrigeration unit and cold plate was $1700 The fibreglass liner, mold to make the liner, 50mm urethane insulation, 12v and 240v wiring, sockets and plugs, circuit breaker, plumbing, plastic vents, paint etc $400. One day, anchored in a remote tropical lagoon as the sun slowly sinks into the sea and succulent seafood sizzles seductively on the pushpit I will open an icy cold beer and it will be worth every cent.



Best wishes and good sailing.

Boat Talk *by Keith Flemming S/V Zodiac*

I was reading in a magazine where the reviewer of a yacht was pointing out one of the attributes of the inside finish of this boat was the extra high fiddles. This might sound good in theory but obviously the reviewer has never been a serious cruiser or lived on board. Most serious cruisers wilt tell you that 'fiddles' around tables and along benches are a pain in the arm and not really necessary. Every time you rest your arm on the table the fiddle digs in to the under side of the arm. As the seat at the table is also the lounge seat and you spend quite an amount of time sitting there reading or talking or watching T.V. the last thing you need is a sharp edge digging constantly into your arm. These days with the modern non skid mats that can be bought by the metre you can do away with fiddles. Another problem with fiddles is that they are dirt collectors where germs gather and the inside edge always looks dirty. I haven't had them on the boat for 10 years and have never regretted doing away with them. On the edge of the bench in the galley they get in the way of your knife when cutting any food and once again are germ catchers. Another plus is if y you use your main table as a chart table it is much easier to work on charts with a flat surface. If you are going sailing you never leave anything on the table or bench anyway.

Good will is still alive in Tasmania Early last year an English couple lost their yacht near Maatsuyker Island right on the southern tip of Tasmania. After being rescued they
were all set to return to England when the local fishing fleet offered to salvage their yacht and take it into Kettering. The local Oyster Cove Marina donated hard stand space white the local community rallied around and provided private accommodation and one of the local marine firms Skeels and Perkins rebuilt their rudder for free. Early this year the boat was re launched and some time later finished. The owners departed Kettering late in May this year bound for New Zealand and the continuation of their circumnavigation. The cruising community really got behind them and it is great to see this sort of goodwill.

Date Your Batteries. Because everything seems to wear out more quickly in a marine environment it is important to know just how long they last. One of the reasons for this is that warranties can often be used for many items. Batteries of all sorts,like the engine and clocks, and hand held units should all have the date they were installed written on the batteries. The same should apply to paint and varnish tins. Smoke detectors and there is no reason why they should not be fitted to a boat, are another item in which they should be dated. Often knowing how long a battery has been fitted can give you some indication of the current state of the appliance or perhaps an indication that you are buying the wrong brand of battery.

USE FRESH PAINT. One thing you do learn as a full time cruiser is to buy quality items. This should also extend to paint. There is no advantage in buying cheap paint and like films you should buy from a big store that has a big turnover and so stocks are fresh all the time. Paint has a short use by date and especially tinted paint where it can change colour after a period. Never store paint and when you buy it mark the date on the can. I always buy the quantity that I think I will use and never more. If you run out it easy to go and buy another can. But if you buy too much you can be sure that you will end up wasting what is left over. I often obtain an empty tin half the size of the full one I bought so that I can decant what is left over into a small can that will have very lithe air inside.

TWIN HEADSAILS. A cruiser might roll along down wind with the Genoa poled out and the preventer keeping the boom on the opposite side. The emphasis here is on the rolling along bit. Not a bad days sailing but we could do without this consistent rolling. Why don't we spend some time considering having twin head sails. There is no guarantee that this will stop the rolling.You can spend a lot of money experimenting along these lines and still not get any benefits. The first step is often to install a second forestay and then to have a furler on each stay. There is never enough room to place the forestays side by side as you often find back stays. Even without a furler and using hanks you will haste problems trying to lower the sails with side by side fore stays. The problem arises from the sag in the stays. The only way to go is to have the stays one behind the other but not too close. When going down this track you might stop and consider just how often you are going to get a chance to use twin forestays? If using twin furlers one behind the other the spacing is critical as the sag in the forestay can once again cause them to be too close and to try and wrap up the second stay when furling the first one. Of course all this will require another sail which will add cost, wind resistance, weight up high and the possibility of more turning blocks and even a couple of winches.
This is a great mental exercise but very costly and only of any use when you have the wind directly astern. Of course you could always tack down wind on those occasions that you have the wind right up your bum.

Mackay Marina Development

Queensland we headed west to Normanton and south to Mt Isa and finally we crossed the NT border. On route to Darwin we decide to take the Barkley Highway north to Booroola and to King Ash Bay in the Gulf. Deciding that having come this far, throwing a fishing line in was a must, if only for a few hours. Well from the muddy banks Ian landed a Threadfin Salmon and a Queenfish within 10 minutes. Deciding that this alone would feed us for 4 days, Ian filleted both fish and was packed up ready to head out within the half hour. Two weeks had slipped by and we were keen to catch up with our Darwin Ferro News correspondents aboard Ray's Hell and Bevarel. Ray's Hell was tied up in the Duck Pond and we spend an afternoon enjoying the hospitality of Ray and Cindi. We again dreamed of the west coast as they described their recent Kimberly adventures. Ian also admired the considerable anchoring equipment Ray had aboard ready to launch in a time of need.

A Hartley South Seas 38' , Ray's Hell tied up in Darwin's "duck pond".

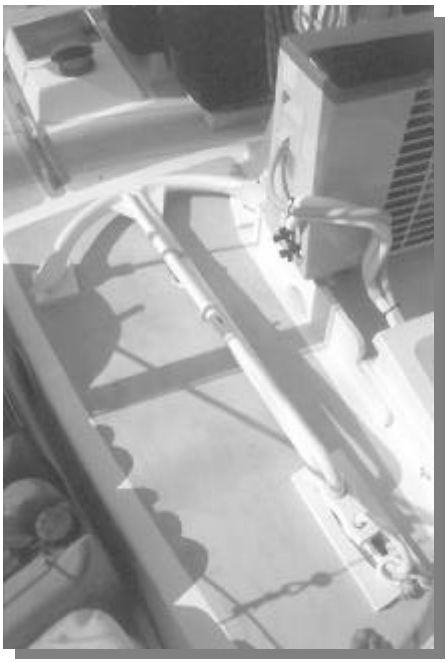
(Continued from page 1)

industrial Singer treadle sewing machine that we use to sew up boat awnings and canvass was put to work re-sewing and repairing the car-top camper that would be attached to roof racks of the 4WD. In mid August we set off northward stopping first at Mackay to check-out the marina berth we had bought in the new marina that was under construction. The marina development will be better by far than most along the east-coast. It was then on up to Cairns to catch up with some friends that we promised to drop in on when we were to cruise north. Whilst having lunch in the Cruising Yacht Club, I think we both dreamed of what it would have been like cruising just offshore from this green and lush paradise. With a week already passed and still in

Ray and Cindi hard at work in the cockpit of Ray's Hell.

(Continued on page 5)

In Darwin you need an aircondi-tioner. Ray has the best.



Cruising the west-coast, you don't muck around with anchors either. This is anchor number 3 - on deck and ready to go!

Darrel and Beverly

(Continued from page 4)

thinking about how it would look on Lilly-Ann. After Darwin we set-off south to get out of the heat! We finally made it back to Brisbane after another 10,000km of red dust, rough roads and even a trip back to Mt Isa strapped down to the top of a road train after a the fuel pump decided to give us trouble.

A Whimoway 14 Metre . A Truely Fine Example

The following day we met Bev and Darrel on their immaculate yacht Bevarel moored in the Cullen Bay marina. Darrell was working on his latest project designing and constructing a solid dodger. To keep the weight down and a create slick streamlined look whilst being strong he chose to construct it out of Aluminum, a surprising choice I would have thought until Darrel talked us through the design and we imagined the finished product from the partly constructed shell. Darrel plans to powder-coat the whole lot when finished. We would love to see some photos when its finished. It got Ian

Cullen Bay Marina Boardwalk

Beverly shows us around the spacious galley and cabins

Darrel considering the windows in the new aluminum dodger template.

A QUICK WORD

From some of our readers

Rock of Ages

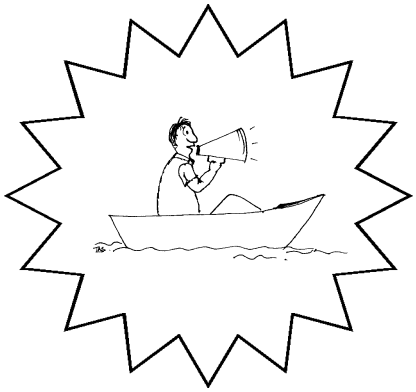
by Bob Cooke S/V Rock of Ages

I've been intending to write to you folks for ages, today, for me, is still recovery time after my experience of the past 10 days. But firstly, I sold Rock of Ages November last. A week later I was sailing across to N.Z on friends' 44' trimaran. 16 days in all. The first 3 were light winds, then 10 days of 40-50 kt, E head winds. The last 3 pure magic, sailing down the east coast to Auckland. Easter I bought plans for an Easy 10.5, dare I say it! A CAT. At the moment I have almost finished hull no #1. I won't bore you with any more details, apart from saying that this project has been on my mind for the past 5 years, so it's not a mad decision. Others might disagree! So I guess the main reason I'm writing is to say I'll stop subscribing to Ferro News. How are you doing - Ian. I hope your body is recovering quickly from your horrendous accident. Once only I did a sky-dive at Great Keppel, a real buzz, although I had always thought people were mad for such activity - likewise? These past 10 days I've helped deliver a Farr 40 from Hamo' to Mooloolabah, what a machine, sails at 45 deg on the nose as it was most of the trip, SE from 15-30 Kts! We sheltered at Hexam for 30 hours, dragging 3 times, once at 3:30 am. No bow roller, light weight anchor. The yacht sails at anchor (5 Kts) .. ha .. ha. The steering wheel was two metres in diameter. The easiest way to visit the stern was through the wheel. The cockpit was 20ft long and 1ft deep. Safety harnesses were needed all the time. Cooking was only possible at anchor, but it was a real buzz steering at 27 deg to the apparent wind. Rock of ages was more like 90 deg. Ok enough of this. If ever you folks are up this way, soon, I hope next year? Think positive and give us a bell or drop in. The new marina is at the end of my road. So for the next few years I will be taking it EASY.

Yep! You'd never get me leaping out of a plane in one of those dangerous looking parachutes Bob! Your right you were mad. As for me, I thought it seemed quite safe. But still I don't remember even a blink from the time I took off. No Fear! Anyhow thank-you for your contributions to FN over the past years. And if we make it up that way we will indeed drop a line. **ED**

For Sale

Bruce Anchor For Sale 30 Kg $1000.00. c/o 07 54445782 (Mooloolaba)



Year 2000

Are you taking Y2K seriously? Many people think it will just be business as usual. They could be right, I hope so!

But I have no faith in the industry from which I derive my income - IT. So our yacht *Lilly-Ann* is going to be prepared and provisioned to sail

I expect that services will be interrupted and that essential merchandise could be rationed. But such chaos is more likely to occur over a period of months not just on 1 Jan 2000.

ED

Smash Repairs *by Ian McFarlane S/V Lilly Ann*

In March this year, our yacht Lilly Ann was the victim of an unfortunate mishap. The neighboring yacht in the marina, a timber gaff rigged ketch, with a very long bow sprit stretching at least 10 feet, sheered its gearbox/shaft coupling when approaching it's berth. With the coupling sheered the shaft pulled itself back through the stern bearing until the rudder stopped its escape. This further added to the problems by jamming the rudder in the hard over position. The result effect had the yacht in a tight turn heading straight for Lilly-Ann. Fortunately, Lilly-Ann was facing bow-out of her pen for some work I was performing on the stern, and so instead of the bow sprit punching through the arf-ward cabin side, it was captured by the forward stanchions preventing further progress toward the cabin top. The ferrocement toe-rail that provides the anchoring point for the stanchions gave way under the stress fracturing a section 2 feet long. To further complicate matters the fractures extended under the forward chain plate. Having just renewed the chain plates I knew that to remove the chain-plates meant removing the also new timber belting. If it had been necessary to do this, the repair effort would have been significant. Bearing in mind our intended cruise north in only a couple of months this would be time I could ill-afford. Despite this, I was not confident finding any competent profession help, I felt the only option was to undertake the work myself. Firstly I removed all the surrounding stanchions and fittings, I then used a steel punch and a hammer to shatter the concrete around the mesh and reinforcing and so leaving it intact. To ensure the mesh was not damaged this process took quite a while, for the area involved it took around a day. To re-plaster the small section I decided to use an epoxy grout (EPIREZ 133) and quartzite aggregate (EPIREZ QA2). The new-to-old bond was provided by the EPIREZ 133 and allowed to set. The aggregate was then mixed to form a thick plaster and I forced this into the mesh. Once set it was very hard. This was skimmed and faired with epoxy filler to provide the finished surface. But I was still left with the cracks that extended under the chain plate. I was worried that if left, they would let water in and slowly rust causing a longer-term problem. I chose to use a pressure injection system to inject these cracks with epoxy. The system I chose was Silka pressure injection epoxy supplied in a two-pack cartridge. I drilled holes into the cracks at intervals and glued plastic injection flanges over these, connecting these flanges in-turn to the cartridge I was able to force the epoxy into the cracks closing each preceding flange as epoxy oozed out.

So after new coat of paint and re-drilling the stanchion base, and around 25 hours of work - it looks like new again. I will be keeping an eye on the area to make sure that further cracking or rust does not appear.

CONTACT US

Ian McFarlane
Trudy Snowdon
"S/V Lilly-Ann"
69 Manly Road,
Manly Q 4179
PH: 07 3348 6567
Email: mcfarlanei@yahoo.com.au

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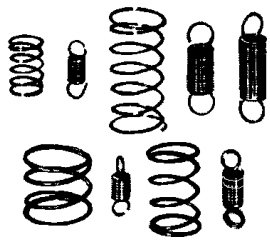
Practical Corner *by Keith Flemming S/V Zodiac*

TOO MUCH NOISE

It is often a good idea to go sailing with someone else to make you realise that you have problems on your own boat. On a trip on another yacht you might notice how quiet it is compared with your boat. It might be just sailing, or at anchor,or motoring along. Noise comes from many places not the least being from flapping halyards. But noises of loose gear on the boat, or prop shaft noises' or plain old engine noises can all be addressed in your request for quietness. When I first bought my boat I had this knocking noise at certain speeds every time I went sailing. It sounded like a little man under the hull knocking to come aboard. I eventually found that it was caused by a worn stern bearing. I found that replacing the bearing made the noise go for awhile but it was soon back again so I then had to look for the cause of the worn bearing. It turned out to be a slightly bent blade on the prop which caused it to be unbalanced. Once I had sent the prop away to be re pitched and balanced I found that my rear shaft bearing lasted about 3 times as long. Of course other noise problems can be caused by bent shaft' worn shaft where it goes through the bearing? misaligned engine, broken engine mounts? Or engine mounts that are too soft. Those considering building their own boats would do well to consider giving thought to their placement of the drive train. When forward gear is selected and you are driving the boat forward there is considerable forward pressure on the gear box and thus on the engine mounts. This forward pressure can cause a lot of vibrational noise coming from the engine room. One smart idea I saw in Lyell Perldns new yacht at Mooloolabah was that he mounted the gear box a short distance behind the engine and so this forward thrust was absorbed by the gear box mounting and he was able to use a much softer rubber in the engine mounts to lessen the noise of vibration. Using universal joints he was able to lessen the amount of vibration from the rotating shaft and so engine alignment was not so critical. This also causes less wear on the stern bearing. Other ways to lessen the noise is to sound proof the engine box. When working on this idea please remember that engines require enormous amounts of fresh air to operate and if you make the seal too good then you might get less power from your engine. You can always take a tube from the air intake through the side of the box so you are not drawing the air from inside the box.

A SAFE SHAFT

The loss of the drive shaft with the prop attached can not only be very expensive but you could sink the boat. The usual cause is that the shaft becomes detached from the rear of the gear box and if you are sailing the twist of the prop with the water passing by simply screws the prop and shaft out of the bearing. Then you are left with a rather large hole that allows lots of water to flow inside the boat. First signs of anything amiss is the water slopping over the floor boards in the cabin. Should you should be on deck this may increase until the boat nearly sinks. Whether this happens depends a lot on how the flange at the back of the gear box is affixed to the shaft. Once the shaft becomes detached from the flange there is nothing to stop it sliding out the stern bearing. This does happen? I know of several boats that have nearly sunk. To stop this happening some type of clamp or boss is required on the shaft in front of the rear seal. By simply fitting a hose clamp to the shaft in this position can save your shaft. Should you find the inside of the boat flooded as you are sailing along me first place to look is to see that the shaft is in place before you tear the boat apart and chase up every skin
fitting



SAIL WEAR

Any trip to the sail maker is usually an expensive trip and any way we can put these off is saving money. One of the many culprits causing wear is the topping lift. With the continual rocking of the boat when sailing the topping lift seems to rub constantly across the leech of the main. The part that cops the wear is the fold with the leech line in it and often the rope will drag over the full length. Get rid of the topping left and you will reduce the noise as well as the wear. This can be done with a solid vang. In a recent edition I showed a photo of a solid yang with a slide fitted under the boom to give sufficient twist to the mainsail. Most of the time I unclip mine and tie it up out of the way. Of course you need to remember to clip it back on before you drop the main. If you do use a topping lift choose a rope that will cause minimal wear. I worry a bit about swept back spreaders on some of the more modern yachts as this is a prime spot for wear.

Buying and Owning a Ferrocement Boat

Courtesy - Hartley Ferro Cement Boat Owners Association Inc (NZ) - Ferro Flyer Newsletter

Every one seems to have an opinion on ferrocement boats. Some swear by them, others swear at them. Some people do know what they are talking about, some people sound as if they know what they are talking about and lots do not have a clue. I don't no many impartial experts on anything, let alone ferrocement boat construction, so all that could be done is to gather as many facts and as much common sense as possible, put it on paper and let you, the reader, make up your own mind. First of all, lets start off with what ferrocement really is.? Essentially, it is steel reinforced concrete. The term refers basically to a thin shelled structure consisting of a close-knit matrix of small diameter hi tensile steel rod sandwiched between layers of wire mesh, and embedded in a rich mortar cement which just covers steel matrix. Ferrocement is really a "hybrid" reinforced concrete, differing in the fact that the steel reinforcement matrix predominates rather than the concrete (mortar). In reinforced concrete the steel is used simply as a strengthening addition. By altering the ratio of cement to steel we end up with a product that exhibits properties superior to those of either material separately. The tensile strength of ferrocement can be high, assuming an average figure of 5,340 lbs/sq in ultimate. The comparative tensile strength of high quality timber can reach

about 6,000 lbs/sq in, but it must be remembered that this is only with the grain, while across the grain, tensile strength, from a structural consideration is almost negligible. Tensile strength of a ferrocement hull is in all directions, by virtue of the steel mesh reinforcement. Where compressive strength is concerned, a ferro hull can achieve an

ultimate strength of about 12,000 lbs/sq in, in 28 days of curing, a figure which will increase with aging far more than can be obtained with wood. A particular characteristic of ferrocement construction is that it gains strength with age, rather than losing it. Detractors like to argue ferrocements failure at point impact. This may be true, but the damage is very little worse than grp or wood, tends to be localised and is very easily repaired at little expense, compared to grp and wood. Ferrocement hulls are fire resistant. GRP and wood will burn and melt, whilst a steel or alloy can buckle and distort. Only very high temperatures will damage ferrocement.

the main reason is that the constituent materials, mortar and steel, have almost identical coefficients of expansion, which means they will expand and contract at the same rate with the changes in temperature. There is therefore no, or very little, cracking or

separation at the steel/mortar interface.

A ferrocement hull is not damp and cold. The material has a very low thermal conductivity. this being the case, the rate of heat transference is low, thus allowing for the probability of the hull remaining cool in hot weather and relatively warm in cold weather. The material is, of course, impermeable, so there is no dampness, and there should be no leaks either. Condensation in a ferro hull is minimal, how often is the comment heard of cobwebs in the bilges of ferro hulls. Ferrocement is thought to be a heavy building material. *Actually the weight disability disappears as the size increases. At about 30 feet in length, the length/weight ratio improves to the point where ferro boats can be built much lighter than equivalent wooden or steel vessels*, and as light as those constructed with "hand laid" GRP So, after considering all of the above, why does it seem that so many people appear to be prejudiced against ferrocement as a boat construction medium? Why are there so many self proclaimed experts voicing their opposition? And why are there so few new ferro boats being built these days? Nobody knows for sure what motivates others to take a stand one way or the other, but could the following be some possible explanations? As regards to new construction, no longer is ferrocement the low-cost option. You need quality steel, mesh, cement, aggregate and these costs have risen significantly since the boom days of the 60 s and 70 s. More importantly the techniques used in quality construction are labour intensive, and this is an area where costs have increased greatly. Many of the fine examples of ferrocement construction available today were built by professionals, or by amateurs with professional help, or by amateurs with a truly professional and time consuming approach to the construction. Seldom are these attributes available today at a cost effective price. Initial reaction to the thought of building boats from ferrocement is usually cynicism. Most people relate to the term of ferrocement with thoughts of typical reinforced concrete structures, massive clumps of heavy brittle masonry, something you would construct a building or a footpath from, not a beautiful boat. Possibly people thought

that a thin shell structure of mortar and steel wouldn’t be sufficiently impermeable, strong,or impact resistant, nor could it have the degree of flexibility required for this application. As you are aware all of these beliefs have proven to be incorrect, but they still come to mind for the uninitiated. What about the so called"experts"?? We had a seasoned cruiser and otherwise knowledgeable sailor tell us once that he didn't like ferro boats, "because the only time he was on a ferro boat it sank", how s that for logic? No thoughts about whether any other medium would have stayed afloat or not, no consideration about the abilities of the skipper or crew, just a simple "Don't confuse me my mind is made up". When you run into that "Yacht club or Broker expert" who bad mouths ferrocement, just ask how he/she came to their conclusion about the medium. Find out if they know anything at all about which they speak. Consider the facts above and ask them to specific about their criticism. Find out for yourself. Draw your own conclusions. Chances are, after all the study, reading, and checking you have done, you will have more knowledge of

the subject than they. Each and every boat building medium has it's strong points and it's weak points, anyone trying to convince you differently is foolish. The only question should be