

LIVERPOOL SAILING CLUB NEWSLETTER

AUTUMN 2018

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Hove-To

First, my apologies that this issue is and then Ravenglass (Cumbria). seriously late. more than another fortnight before lifts (again) round that this is very seriously late.

Despite the storms as I write, and the occasional severe storm during the season, we have generally been blessed with a much better summer than we have enjoyed for some years previously, made good use of it.

For a select few of us this has been a good cruising vear. chronologically, Derek and I safely delivered Just Olivia to Conwy. Then I was delighted to hear that while I was sailing a desk (due to examining duties) in the early part of the summer Marcyn much about day to day club activities and Bozena had sailed Halcyon out to because Mike has taken on that mantle Then a little later in the season I was delighted hear that Newsletters, and very welcome they are. during my own absence cruising Rob had That frees me to focus on other things. taken Margarita out to Hilbre and then on to Preston, and back; it is even rumoured that next time he will consider using his sails ...! I think I am right in saying that all three trips represent an expanding of horizons for most of the members concerned, so very well done.

My own cruising was a successful and almost complete circuit of this part of the Irish Sea; outward from the club to Conwy, then Anglesey, then Isle of Man (with about three weeks in the island),

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First, I unfortunately one fly in the ointment was that I ran out signed it off about a fortnight later than I of time when the weather broke in originally intended - and I am acutely Ravenglass, so instead of sailing home I conscious that it is the second time in recovered the boat by road, and did succession that that has happened; minor damage to the keel (actually to a then when I emailed it to Mike for bodged repair, if one is brutally honest) publication it apparently went adrift in the course of recovering her onto her somewhere in cyberspace, but it was trailer, which is why she is now up in the An unfortunate either of us realised.. So apologies all consequence of that was that the boat was not seaworthy for the Club Yacht which therefore had to be Cruise, aborted, and Derek & Chris simply did their own thing - but I gather that they had a good time cruising Anglesey waters.

and a pleasing number of members have On the powerboating front it was good to hear that Madness is now operational again. And it was also good to hear that Sailing Committee are having some difficulty in finding worthy recipients for both the Golden Tow Rope and for the **Rock Bottom Trophy!**

> Beyond that I am not intending to say with the much more frequent mini-

> So now that the season is coming to an end for most of us, it merely remains for me to wish you a successful (and effective) laying up, and we look forward to a good season in 2019.

> > Miver

A DATE FOR YOUR DIARY

CAPT DAVID BRAY

As reported in the Summer issue, we have booked Capt David Bray, FNI, to give us a talk next spring, and we can now confirm the date: **Friday 12th March**.

To recap on what we said last time, David is a retired Master Mariner, a Fellow of the Nautical Institute, and a maritime historian and marine artist. He is also one of the world's leading experts in dynamic positioning, the technique used by some dive support ships and other vessels working in the offshore industry to hold themselves accurately in position more precisely than can be achieved by anchoring.

He is also much in demand as a guest speaker for clubs and other organisations, and as a visiting lecturer on cruise ships, with a substantial repertoire of talks.

And to cap it all he is a sailing man, and is personally involved in the restoration, preservation, and operation of the Norfolk Wherry *Albion*.



He has a very considerable repertoire of talks, which were outlined in the Summer issue, but it is likely that on this first occasion our choice will be Antarctic Antics, based on his experiences working as Navigating Officer in the research vessel RRS "John Biscoe", in Antarctica during the 1970s. That was a time when the technology was more akin to that of Shackleton and Scott than to the 21st century. This talk is a look at work in Antarctica from the standpoint of operating a ship, with a few of the more humorous episodes.

https://nauticalnostalgia.com

As previously, this will be a social evening as well as a talk, with a hot meal provided before the talk.

And again, as previously, we will be offering tickets to our own members (and their personal guests) first, but very shortly after booking opens for LSC members we will then offer them to our kindred clubs both locally and throughout the northwest.

So if you are interested, do put the date in the diary now, and get your bookings in early once we open bookings.

Friday, April 12th

SOME PERSONAL MEMORIES OF THE CLUB'S EARLY YEARS

Continued from the Summer Issue

In the early years of the club, continuing throughout the sixties, we were predominantly a dinghy racing club, and in particular we raced Herons, GP14s, and Enterprises. Later a mixed class of catamarans was added, as later still were Marks and Graduates, and the Herons rather dropped out, although some Herons raced in the Handicap fleet from time to time. We also had in the late sixties a number of Mirrors, which raced in the Handicap fleet. Over the course of the sixties the situation evolved to the point where our most popular dinghies were GP14s and Enterprises, and although the Enterprise was nominally slightly the faster boat our experience was that in most conditions which we experienced the reverse was the case; whereas an Enterprise would be seriously slowed down by an estuary chop a GP14 would punch through it, and at the time many of us also felt that the GP14 would point slightly higher than the Enterprise when working to windward. But in very light winds and flat water the boot was firmly on the other foot; the Enterprise, a superb lake boat, is lighter than the GP14, and (I think) with a larger sail area to weight ratio, so in the conditions which favoured that combination the Enterprise had the edge.

As a design the GP14 is most remarkably successful. The design brief was a true General Purpose boat; a family boat, capable of being rowed or sailed or of taking an outboard motor, suitable for exploring and fishing, and capable of lying at moorings but at the same time light enough to permit both easy launching and transport on a road trailer. Although a reasonable performance under sail was sought, racing was very much an incidental consideration, and I doubt whether anyone envisaged what a splendid and highly competitive racing dinghy she would turn out to be. Given the design brief, and how well it meets it, it is quite remarkable that the class is able to provide the very highest of top class competition; in the World Championships, not only did the class periodically attract entries from reigning Olympic dinghy champions, but said world-class experts were sometimes then beaten by our own members!

When I bought *Tantrum* in January 1967 all GP14s had wooden spars, but very shortly afterwards the Class Association allowed metal spars as an option. Although the specification was specifically designed to make their performance indistinguishable from that of wooden spars, most owners felt that there was nonetheless a real advantage, and many wanted to change. The major insurers were quite remarkably tolerant of some very dubious claims: indeed it was remarkable just how many highly experienced and safe and totally reliable car drivers suddenly had momentary fits of aberration, and reversed over their own masts while they were lying on the ground; just as it was remarkable how many highly experienced GP helmsmen, many of them fine seamen, went out three-up in their GPs in gale force winds - while wearing the absolute ultimate in slack rigging - and drove the boat as hard as they possibly could until the mast broke.

My own technique three years later, in autumn 1970, was different; the gooseneck track was screwed along the centre line of the mast - with the screws driving straight into the glued seam, so when these started to split the seam and thus pull out I 'forgot' all the engineering I had so painstakingly learned, and simply inserted bigger screws. Then when a horizontal shake appeared I took it to a professional woodworker for testing; he leaned his entire weight against it, whereupon it duly broke, and he then condemned it as unsound and beyond economic repair!

My insurers' letter was a gem; it noted the likelihood that I might wish to replace with a metal spar, so they offered me a cash settlement to the value of the wooden spar and effectively said "We will wear it this time, but don't ever try it again."

One splendid memory was the occasion of the annual Gresford S.C. Regatta. They were of course very welcoming and hospitable, but the dominant memory is of what happened on the water, largely as a result of the weather.

They had, as usual, invited all kindred clubs in the area, but at first the event had not attracted any of our members. However when the weekend came it was clear that we were in for a gale and that our own racing was almost certain to be cancelled, so half our GP fleet descended on Gresford, as did Stan Dobby and John Byrom with their Mark dinghies, as also did numerous other visitors. I had the impression that they were embarrassed by the numbers, which certainly presented some formidable challenges for the facilities available, but nonetheless they were unfailingly hospitable - both ashore and afloat.

They sail on quite a small lake, so to get laps of reasonable length the course has to cross the lake several times, and in order to get a decent length of course they also chose to set 6 laps. With a large fleet in several classes and with staggered start times this meant that boats at different stages of their respective races were continually criss-crossing in all directions - which made it more than usually entertaining, to put it mildly!.

The place is surrounded by small hills, so with a gale blowing the wind was funnelling between the hills, and on the lake it was gusting absolutely viciously and from all sorts of different directions. It was so extreme that I decided to take a leaf out of Bill Skutil's book for such situations, and settle for concentrating <u>only</u> on getting round the course without capsizing; never mind our position in the race; if we could complete the course and avoid capsize that itself might well prove to be a winning strategy.

We sailed our race, as we thought, and I believe to this day that by the time we crossed the line we were the only boat that had not either capsized or retired, but we had suffered damage; a broken floorboard and two broken sail battens. And that speaks volumes; how on earth does one manage to break two sail battens in the course of sailing, without having capsized? ...

Having crossed the line I decided that discretion was the better part of valour, so we dropped sail and paddled downwind until we reached the shore, and then walked the boat home. Only when I went to sign off did I discover, too late, that we had miscounted and that we still had another lap to go! And of course we had now disqualified ourselves, when we might otherwise have had a sail-over.

On the second of the four races of the day there were only three boats sailing; everyone else (ourselves included) was either licking their wounds and/or repairing damage.

For the third race my crew expressed a wish to stand down if I could find a replacement, and I then found that Brian Graham (whom some of our longer established members may perhaps remember) was in a similar position with his crew, so the two of us decided to team up for the remaining two races, sailing my boat and helming a race each. Brian had recently taken a season out from Liverpool in order to do a lot of inland sailing, and this had considerably honed up his skills of anticipating windshifts. We agreed that I would helm the first afternoon race, and Brian the second. While I helmed I concentrated entirely upon tactics and boat speed and the position of the other boats, while Brian fed me with almost non-stop and always accurate information as to what the wind was about to do next. We soon found that this was a winning combination, so at Brian's insistence we stayed that way round for the final race.

Overall, considering my original crew and I had thrown away the first race (which we might so easily have won by a sail-over) and not entered the second, we were very highly placed. However the ultimate honours inevitably went to those very few boats (no more than three, if memory serves correctly, and possibly only two) that had sailed the second race as well as the two final ones, and deservedly so; the mere fact of having sailed the second race after the battering of the first one was a very considerable achievement, and they well deserved their points.

Decades later there was a sequel to this, although I regret that the original file has become corrupted, so I have to rely on memory. I published the above account in the club Newsletter of Easter 2004, and that prompted a Letter to the Editor from John Byrom, and I duly published his very interesting letter in the following issue.

Amongst the things he recounted were the journey home, loosely in company with Stan Dobby, also towing a Mark dinghy, when one of them had a close encounter with a ditch; sadly I no longer remember the details, and the file appears to be irretrievable. Also from his letter, apparently during the final two races, when Brian Graham and I were out there on the water and racing, the rest of the Liverpool contingent were standing on shore "cheering us on", albeit in derogatory manner; and he also said (in effect) "pints in hand, although in the case of David Bell it would more probably have been a gin & tonic". In years of maturity I can now fully relate to David in that preference!

After I had left Liverpool, so I have no personal experience of it, the club introduced an occasional race of which I like the concept; "By Guess And By God". Start from the club, turn at a mark upriver, and back to the club. Choose your own time of start, but the race is decided on individual elapsed time, after correction for boat handicap. This therefore involves a considerable degree of seamanship in working the tides to best advantage, and in deciding when is the optimum start time to get best advantage from the tides. At my instigation, we revived this concept this year.

I was however able to sail in the early Tideway races; down from the club to New Brighton on the ebb, time ashore at New Brighton, and back to the club on the flood. Some of the later ones, after I had left Liverpool, also had a low water race from New Brighton, round one of the buoys (probably Brazil) further down the channel. Three separate memories come to mind, of which first is the very long length of unforgiving sea wall, which permits no landing should anything go wrong. Fortunately, as it turned out, I had long previously learned a degree of self-reliance

One of these Tideway races gives my second recollection of them. Sailing my first GP14 *Christabel*, on the beat back upriver the starboard shroud failed somewhere in the vicinity of the Pier Head. I had already learned to recognise the situation instantly, learning this in a Firefly the hard way when it had cost me the mast, in the middle of a race, and so this time I was able to save the rig by tacking immediately; the tiller went down almost simultaneously with hearing the bang. That took the strain off the rig, but we still had to get home. There was no spinnaker on that boat, so no spinnaker halliard; we therefore dropped the jib, and the jib halliard was then brought into use as a jury shroud and sweated up as hard as we were able to achieve, and we successfully sailed home - albeit desperately slowly - under mainsail alone.

A couple of years later, in my second GP14, *Tantrum*, I again had a shroud fail in the Malltraeth esturay, on the west side of Anglesey. However this boat had a spinnaker, so the spinnaker halliard was used as a jury shroud, sweated up as tight as we were able to do, and we therefore still had the use of the genoa. We made it home very much more easily than on the previous occasion when we had mainsail only.

The third recollection of the early Tideway Races is a reported conversation involving Bill Skutil on New Brighton beach. He was one of our most senior members, and was also a retired senior Naval officer. One of our lady members had noticed the whistle signals made by ships and asked him about them. He explained: one blast means I am about to turn to starboard, two to port, three means my engines are going astern. A minute or two later a ship blew a succession of five or six blasts, and he was asked what that means: "Unprintable, but it means get out of the b***** way!"

Herbert Jones was another prominent member of Liverpool Sailing Club in the sixties, a retired Master Mariner. He sailed a Wayfarer, and he regularly took a bit of good-natured stick because he so frequently displayed an intimate hands-on knowledge - or should that be keel-on knowledge? - of just about every sandbank in the Upper Mersey. The rest of us, who were not Master Mariners, felt that this was a poor advertisement for his professional qualification; but I stress that the stick which he took was entirely goodnatured.

During the time when he was a member of the Club he happened to be involved in a car smash, and he maintained that it wasn't his fault. Those who knew him well enough to judge felt that his own verdict in such matters was entirely reliable, and that if he said it wasn't his fault then it almost certainly wasn't. And in passing, how many others of us can claim a reputation as fine as that?

Unfortunately the other driver became very obstreperous and abusive, and then was foolish enough to say, "And what's more, I'd have you know, I've got the OBE."

Herbert's response was a classic: "I don't care if you have got the OBE - the Other Buggers' Emblem; I've got the MBE - My Bloody Emblem!" (And he did indeed hold that decoration.)

As with our previous dinghies I frequently trailed the boat over to Chester, mainly for evening sails on occasional weekdays in the summer months, although occasionally also at weekends, or in the daytime during the school holidays. We launched from Sandy Lane, and one particular fond memory is full-blown knife-and-fork picnics eaten aboard while <u>tacking</u> up the river; I think we made a point of doing this as much for the challenge of the boat handling as anything else.

In the early years I also took her up to the Lakes on a number of occasions, when we had some enjoyable camping and caravanning holidays, and we combined walking and motoring and photography with sailing on some of the lakes. One such trip was with a Dutch friend, now I gather a leading hand surgeon and university professor (if not now retired), whom I had first met as a boy at the sailing camp at Milford Haven, and after a couple of days on other lakes we had a day on Ullswater. It happened to be convenient to launch from the Glenridding end, which made it a downwind sail to the far end, and then we started beating back; since we were both in our twenties at the time and fairly fit the prospect of a long beat home did not worry us.

About halfway up the third and final reach of the lake on our return passage we were both sitting out moderately hard when there was a loud bang from above; we both reacted instantly and assumed that the windward shroud had failed, so without waiting to check anything we immediately put the boat about; tiller down, dive across the boat, and be prepared to handle the sheets for the new tack. As we did so we looked up, and then discovered that both shrouds had gone; the boat had the original wooden mast, and the hounds band had torn off the mast. So we very rapidly ended up sitting in the bottom of the boat, head to wind, and then proceeded to drop all sail and row the rest of the way - but we had saved the mast. That incident caused me to redesign the attachment system, and thereafter the hounds band was through bolted as well as being secured by screws.

And the follow-up to that is that arising from four shroud failures between three boats in comparatively few years I have never lost a shroud since. I had learned my lesson. It doesn't happen by chance, or bad luck. The lesson was clear, and it was well learned; the way to avoid such disasters is by proper maintenance! As a result, I have had no further rig failures in the ensuing 49 years.

Of course there is always the first time

Amongst some other delightful recollections from the sixties, one was a social and fund-raising event which was inspired by the then popular April Fool Concerts put on in Liverpool and elsewhere in Merseyside by Fritz Spiegel. Not being a musical organisation we did not aim to do a concert as such, but we borrowed the idea for a rather mad varied entertainment, and since it was put on in March we gave it the title March Hares. Being one of the musicians in the club, and moderately heavily into folk music at the time, I got a group together to perform our own take on (and sometimes our own words to) some popular folk songs of the day, many of them by The Spinners; and we called our group The Spinnakers. There was still within recent memory at the time an erstwhile long-running radio light comedy programme about a fictitious village called Much-Binding-in-the-Marsh (broadcast 1944-54), which had an eponymous theme song; so we adapted this, with the same tune but our own words, as Much Muddling in the Mud.

My late mother was highly talented in speech and drama, teaching it professionally, and much in demand as a producer for amateur dramatics. One item which she wrote and produced for this entertainment was a completely "guyed" skit on the Pyramus and Thisbe scene from *A Midsummer Night's Dream*, something which is almost slapstick comedy in the original, and we "guyed" it unmercifully. We were performing in the (original) Clubhouse, using as a stage the area in the main room between the doors (at either side) to the separate changing rooms, and we were using the changing-room doors for entrances and exits. When we realised that quite by chance we had unwittingly preserved the sex discrimination as regards which actors used which changing-room doors we then made it a feature, until the point where the Lion chases Thisbe off the stage. She duly made a hurried exit, into her changing-room, and the Lion then brought the house down when he stopped in his tracks and announced "I can't go in there; I'm a Gentleman Lion."



Official Opening of the Clubhouse, 1963;

Presentation of the Barograph,

Presented by Royal Mersey YC

Commodore, Dickie Derbyshire (standing)
My father, Ted Shaw, Hon. Sec, seated, facing camera



Tantrum, Malltraeth 1968



Tantrum, GP14 Nationals, 1970, Plymouth

Now wearing what was to be my "trademark" livery for GP14s ever since.



A LIFTING CONUNDRUM - THE SOLUTION





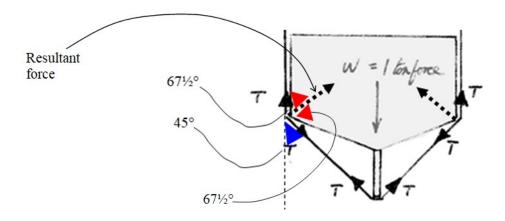
Well, I did tell you that a degree of deliberate guile had been used to lead you astray

Given the circumstances specified, the tension is indeed equal throughout the strop; that part of the analysis last time is fully correct. So T will suffice for the tension at all points; there is no need for separate tensions T_1 and T_2 since these values are indeed equal.

However I also stated that "if there is no friction at the chines, the only part of the strop which can exert an upward force on the boat is where it passes beneath the keel." Sorry, but although I hope that seemed correct, it is not actually true and was deliberately misleading you; an upward force on the boat is also applied at the chines, even in the absence of any friction there.

The force diagram was complete and correct, but it deliberately failed to point out that the tension in the two parts of the strop acting together on each chine produce a resultant force which is both inwards and upwards, see the dotted arrows in the diagram below. The upwards component of it provides exactly the "missing" upwards force which is necessary to balance the equations.

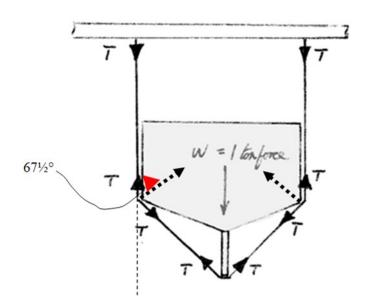
If you don't enjoy maths, you may wish to just accept that this is the explanation, and read no further. But read on if you wish to verify that the situation does in fact work out correctly.



Simple geometry shows that this resultant force is at an angle of 67%° to the vertical, as in the diagram above. This angle is found because the tension is equal in the two parts, and therefore the resultant force bisects the angle between the two parts;

thus it is
$$\frac{1}{2}$$
 x (180° - 45°) = $\frac{1}{2}$ x 135° = 67½°.

So the two elements of the tension either side of each chine are equivalent to, <u>and can be replaced by</u>, a single resultant force of the appropriate magnitude and direction. These resultant forces are now shown by the dotted arrows.



Further school level (alright, probably Sixth Form) analysis shows - trust me - that

Each resultant force is T sin 45° / sin 67½°

For any readers who want to check this out themselves, one reasonably simple method (amongst several methods possible) is to draw the vector diagram (a.k.a. parallelogram of forces) and apply the Sine Rule to either of the two triangles which form the parallelogram.

The vertical component of this resultant force is then found by multiplying by the cosine of the angle to the vertical.

Thus the upwards component of each resultant is $(T \sin 45^\circ / \sin 67\%)$ x cos 67%.

That simplifies to T sin 45° / tan 67½°

So the total vertical component of these two resultant forces, one at each chine, is twice this.

And we still have the upward component of the tension on each side acting on the keel, which as correctly shown last time is $T \cos 45^\circ$.

So putting all this together, we have the now correct equation:

 $2T \sin 45^{\circ} / \tan 67\%^{\circ} + 2T \cos 45^{\circ} = 1 \text{ ton force.}$

Simplifying, we have:

 $2T (\sin 45^{\circ} / \tan 67\%^{\circ} + \cos 45^{\circ}) = 1 \text{ ton force.}$

Solving this, with the aid of a calculator, we find that the trigonometric function (inside the brackets) comes to <u>exactly</u> 1, which is very satisfying. Isn't it nice when the maths works out to exactly the value that we want! And this is the precise point where it becomes clear that it does indeed do just that.

Indeed a real mathematician (or even a good A Level Maths student) could work that out without using a calculator, just using the formulae for combinations of angles, which would be even more satisfying - but it would probably be beyond most of us here!

So we now have

2T = 1 ton force.

And thus:

T = 0.5 ton force.

This exactly matches the (perfectly correct) equation given last time for the conditions at the top of the diagram. All the rest, although apparently plausible, arose from a single untrue statement allied to a sin of (deliberate) omission!

PRODUCT REVIEW - ROCNA ANCHOR

This is a new series, of reviews by members of particular pieces of equipment which we have used, although the Editor has not yet decided whether it will be an occasional series or whether something will appear in every issue.

We start with a review of my Rocna anchor. Other products in the immediate pipeline for the future include (in no particular order) Phil's new Icom M93D hand-held radio, the Omnia oven, and the Garmin GPSMAP451 chartplotter. The latter is scheduled because, although it is now an elderly and discontinued product, it is the plotter which is fitted to *Safety 1*, and I suspect that comparatively few safety boat coxswains are fully familiar with everything which this quite versatile instrument can do; and as a bonus the functionality of the equivalent current product seems to be very similar.

Members are warmly invited, and indeed encouraged, to submit their own reviews of equipment which they feel may be of interest to other members.

So, the Rocna anchor. Perhaps it is helpful first to ask what one intends to use an anchor for. Answers are likely to range from purely short term non-vital anchoring as a matter of convenience, to vitally important situations where life might depend on the anchor holding reliably. Examples of the former include the fisherman, with a sound engine, choosing to anchor in a chosen fishing spot; if the anchor occasionally drags it is not a disaster, since it can be hauled up again, the boat can be repositioned, and the anchor re-laid. Dragging in those circumstances is no more than a nuisance. Likewise in many cases the dinghy sailor or yachtsman kedging briefly against an adverse tide while waiting for better wind or for the tide to slacken off, or the cruising skipper anchoring over lunch, is normally in no danger if the anchor happens to drag.

But it is a very different matter if you are lying to an anchor in storm conditions off a potentially dangerous lee shore; then the anchor, like Caesar's wife, must be above suspicion. It absolutely must not drag, under any circumstances, come what may. And if you are ever caught out in such situations - and I have been, once - you will be immensely thankful if you have invested in ground tackle which is fully up to the job. I know; "been there, done that", as they say.

Some skippers choose to carry two anchors, a comparatively light one for use as a "lunch hook", and a more meaty one for serious use when needed.

It is not always realised, but there is no anchor yet invented which is the best possible anchor for all bottoms and for all situations. The large mushroom anchor is arguably the best available anchor for really soft glutinous mud; but it is almost useless on any other bottom. The fisherman anchor, a.k.a. Admiralty pattern anchor, is probably unrivalled on rock and is also one of the better ones on heavy kelp, but is seriously challenged on other bottoms, and can be potentially dangerous in areas which dry out (because it leaves one sharp fluke sticking upwards, which can hole a boat or injure a swimmer).

One solution to the question of different anchors for different bottoms is to carry two, of different types.

Broadly speaking, anchors for small craft fall into four broad groups:

Historic anchors, known and used from time immemorial, of which the fisherman is the only one still in regular use today;

Mid-twentieth century designs of higher holding power, which are primarily the Danforth and the CQR;

So called "New Generation" anchors dating from the late 20th century (and more recently), such as the Rocna, the Manson Supreme, the Spade, the Vulcan, and several others.

Almost totally useless anchors, deserving of the nautical equivalent of the infamous "Square Wheel Award". My leading contender for this category is the equally infamous folding grapnel, which to my unending surprise is still manufactured and marketed. I confess that I do have one aboard *Tarka II*; it came with the boat when I bought her, and in my ownership it is permanently folded and trussed, and serves <u>only</u> as a convenient weight for use as an anchor weight (sometimes called a kettle, or dolly, or angel) positioned part way along the warp to improve the angle at the bottom or to keep the upper part of the warp low enough in the water to ensure that it won't wrap around the keel - and similarly to weigh down the middle of a long mooring warp when moored alongside a tidal quay. That is its only purpose!

It is a matter of debate whether the Bruce (and its generic clones) and the Delta fall into the second group or the third.

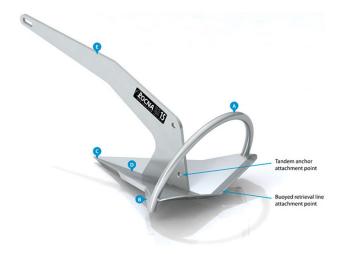
As a broad generalisation, in the majority of situations those in the second group hold better than those in the first, and those in the third group hold better than those in either of the first two groups. But there are exceptions within that broad categorisation. And of course no more need be said about the fourth group.

A series of high profile independent tests of most of the anchors then on the market were carried out a few years ago in Californian waters by an international team of testers, the British testers representing Yachting Monthly magazine. An anchor which came out as probably the best general purpose anchor in those tests was the Rocna. This is a New Zealand design, and it is extremely similar to the Manson Supreme, so similar that claims of copying (and quite possibly of copyright infringement) have been made. Both companies, perhaps naturally, extol their own product and denigrate the opposition - surprise, surprise; and unfortunately the two headline comparative reports which were available a few years ago both represented vested interests. All that I feel prepared to say is that both products are excellent, and that I am in no position to judge between them. I happen to have chosen a Rocna, and my good friend Ed Wingfield happens to have chosen a Manson Supreme; and we are both very well satisfied.

http://rocna.cmpgroup.net/original-rocna

The tests also showed very conclusively that detail differences in the design of an anchor, which may arise if a cheaper generic copy comes on the market (such as differences in the weight distribution, or the sharpness of the points) can make an enormous difference to the holding power. So a cheap generic version of an anchor may <u>or may not</u> hold as well as the genuine original; and in some cases the holding of the cheap generic "copy" was conspicuously poor.

As a particularly noteworthy example, the testers found that the Fortress anchor, a very good generic Danforth, had the best holding power of all, consistently refusing to drag even under the maximum available test load, while a different (and cheaper) generic Danforth failed to set at all in any of the tests.



Original Rocna 15 kg anchor.

Available sizes range from 4 kg to 110 kg,

and a fisherman's model with slotted shank

(to make breaking out easier) is also now available

It has to be said that both the Rocna and the Mansom Supreme are "full price" anchors; so far as I am aware there is no cheap generic equivalent on the market. But they are priced well within the mainstream of other "full price" anchors; when I checked the prices a few years ago, for at least some sizes the Rocna came somewhere between the price of the Fortress and that of the genuine CQR. But the price has to be seen in context; for anyone doing serious cruising, for example, (and for many other boating people) your anchor is an important piece of safety gear, - and if you are in potential danger and relying on your anchor to keep you off the rocks to leeward, then what price is your life worth?

I bought my Rocna in time for the 2013 season, after the generic plough anchor which came with the boat had twice dragged, in different locations. That was a risk which I was not prepared to accept any longer. Since installing the Rocna I have had no such problems beyond one self-generated one; at first I always used a buoyed tripping line, just in case the anchor became fouled, until the time when the boat dried out on a falling tide, and the trip buoy drifted into proximity with the rudder. Then she swung as she lifted on the flood, and picked up the trip buoy between the rudder stock and the hull; whereupon the trip line did the job it was designed to do and tripped the anchor. Nowadays I no longer set a trip line unless I am expecting it to be needed, and if I do set it then I tend the situation as the boat swings.

The shape and weight distribution of the Rocna and the sharpness of the point are all designed to bury the anchor effectively in those bottoms where this is possible, and also to work as well as possible on rock and coral and also again in kelp. It features a roll bar, and this (together with the alignment of the shank) is designed to ensure that if the anchor lands on its back it rolls over and starts to bury as quickly as possible. And it is also designed to ensure that if it pulls out as the boat swings when the tide reverses, it will immediately start re-burying in the new direction.

The Rocna can be a trifle cumbersome to stow, but I have found two stowage locations which work well on my boat.



Rocna stowed on the foredeck, to starboard, with the end of the shank shackled to a deck eye (using a stainless steel shackle so that it won't jam, and finger tight is then sufficient), and the roll bar lashed to the pulpit leg.

The stowage of the chain in a shallow well on deck has nothing to do with the choice of anchor; this is the location provided by the yacht designer, and there is no chain locker below decks, and no space to install one.



Another owner stows his Rocna with the shank in the bow roller; although the anchor is specifically designed to be stowable in a bow roller, whether that is viable depends in part on the design of the bow roller cheeks.

My own alternative location - with a different bow roller - is a variant on this, with the roll bar securely docked into the bow roller.

My ultimate test of it came when I was in Ravenglass in 2014, and heard that the tail end of Hurricane Bertha was on its way to us. At that point my two options were the open sea passage to Whitehaven Marina - where I would be safe once I arrived, but I would be very exposed in making the passage to get there in winds that were already strong and were likely to now increase - or staying put. So I decided that it would be safest to stay put.

That left me totally relying on my Rocna anchor, and on a somewhat difficult bottom.

We had a seriously wild ride on that night's tide, and I was monitoring the live weather reports from St. Bees Head (just a little further along the coast) which was consistently reporting force 9. And I had a stone sea wall to leeward. But that Rocna held me securely throughout, and I was very thankful that I had invested in it; although I did suspect that I might have been near the limit, so by way of belt and braces I subsequently increased the amount of chain.

Yes, I did indeed have a reserve strategy in case of need; I could have started the outboard and used that to reduce the strain, or even motored across to the far side of the estuary to find a bit of a lee, but I did not in fact need to do so.

So for anything larger than dinghies I am an enthusiast for the Rocna.

Having said that, Vyv Cox, the well known yachtsman metallurgist, and guru on anchoring and on metals in boats, reports that at one stage after the company changed hands (some years ago now) the new owners tried to economise with their production costs by using a cheaper grade of steel, and that this resulted in issues of the physical strength of the shank. But he also advises that these problems were adequately addressed many years ago, and that current Rocnas do not have this problem.

Much more recently the manufacturers have also brought out their Vulcan anchor, which is designed specifically for "customers seeking to experience the exceptional holding power and setting performance of a Rocna, but who had difficulties accommodating the roll-bar design on their bow." The present writer has no first-hand knowledge of the Vulcan anchor, although it comes from a good stable, so I merely mention it without further comment, for the benefit for anyone for whom the roll bar is a difficulty.

The one problem, for the dinghy sailor, is that they make nothing smaller than 4 kg, which is a little over the top for a dinghy. So I was pleased to see a few months ago that the Mantus dinghy anchor has come onto the market (see our previous issue), which is a broadly similar design to the Rocna but in a dinghy size.

NAUTICAL DEFINITIONS

Several terms this time, all to do with anchoring.

Gypsy This is the specially shaped fitting, a highly modified pulley wheel, on an anchor winch which engages with the chain and prevents it slipping around it as the winch rotates. The dimensions of the gypsy needs to be matched to those of the particular chain being used, and "calibrated" chain is sold which is a match for the gypsy.



Navel pipe The name of the pipe which leads from the foredeck down to the chain locker. On a small boat this may be no more than a hole in the deck, although it usually has some means of preventing any green seas which come aboard from percolating down below; either a stopper or a fitting such as the one shown can be used. If no fitting or stopper is provided, it should be stuffed with cloth before putting to sea. If this type of fitting is used, it should ideally face aft, to reduce the risk of green seas percolating down below.



Hawse pipe The name of the pipe which, on ships and some large yachts, leads the chain downwards and forwards from the anchor winch through the deck and emerges through the side of the bow of the ship. The anchor will be shackled on this end of the chain, and the hawsepipe may incorporate or interface with protective plating to protect the hull from being damaged by the anchor.



Bitts A fitting on deck, around which warps or the anchor chain may be secured; they serve a similar purpose to a cleat, but are more substantial.



Bitter end The inboard end of the anchor chain or warp (and see also below). This gives rise to the expression "to the bitter end", meaning going absolutely all the way; once the bitter end is reached there is no more chain (or warp) left.

It should be permanently secured to the vessel, but the place at which it is secured may or may not be the bitts, although it is the bitts which give the name to the bitter end. It should always be secured in such a way that it can always be released in emergency, by cutting if necessary; so on a small boat if chain is used for the full length of the anchor rode the bitter end should be secured with rope - which can be cut - and never shackled to the boat.

Spurling bar The most entertaining way to explain this is to quote a onetime contributor to Openboat, in the course of a discussion some years ago. As you may gather, this is a highly experienced skipper, but a man of what we might call forthright views, and he has little time for surveyors. Read on, and enjoy:

P.S. Ask a surveyor what a spurling bar is; if he knows, employ him. One should have a list of questions for these so called experts. In my experience they go red in the face & b---r off.

"Goodness me I thought I was going to get lots of flak for chucking my genoa tracks over the side (they landed on a surveyor's head & he asked me what they were).

"I got dragged into a refit on the *Queen Galadriel* = Baltic trader = big lump of wood. A top surveyor was doing a survey complete with spotless white overalls, & asked me why the spurling bar was missing. I said I'd go & find it; difficult 'cos I didn't know what it was. After admitting defeat he told me it was a **chamfered pin on a windlass that stops the chain wrapping itself round & round**. Oh God, was he wrong! Was he?

A hawse pipe is the pipe the chain goes through the deck & into the sea, so what is the pipe called that goes to the chain locker? And a bonnet comes into it somewhere, never mind the lizard. A cranse bar, Oliver, is another thing you could drop on a surveyor's head.

"Just spotted that Bill had the spurling pipe answer in his post. More clearly, a gypsy has two cheeks (where am I going with this?) and in between there is the chain; from the underneath, the pointed spurling bar sticks up between the cheeks (are you over 18?) & stops the chain winding round the gypsy, making it go down the spurling pipe.

"The Anchor is shackled to the Anchor Cable (US Anchor Chain), the cable passes up through the Hawse pipe, through the pawl, over the Windlass gypsy (US Wildcat), down through the "Spurling pipe" to the Chain/ Cable Locker under the forecastle (or poop if at the stern (US Fantail)) - the Anchor bitts are on a bulkhead in the Cable locker and the bitter end of the cable is connected to the bitts using the bitter pin, which should be able to be released from outside the locker to "slip" the Anchor. This would occur if the Windlass brake has slipped in a storm for example and you have reached "the bitter end". Despite what you may read this is the true origin of the expression "to the bitter end". It originally applied in sailing vessels where the cable was a rope, and the windlass or capstan was powered by many sailors below decks

"Look at all the bother surveyors cause."

And it seems from this that the spurling pipe is another name for the navel pipe. I also note in his penultimate paragraph the distinction between UK and US (naval) terminology; once again a case of two nations divided by a common language.

BAR CHAT

One of our kindred clubs, West Lancs YC, have a group within the club called "Ladies Who Launch". As the name implies, this is (of course) a female group, and it is intended to encourage lady members to sail. The group operates as part of the training operations of the club, and it seems a very worthwhile initiative; I float the concept here as something that it might be worth LSC adapting and developing for our own lady members, if there would be enough interest.

At the West Lancs Annual Dinner the upcoming Commodore gave an impassioned talk about the scheme, and offered assistance to any kindred clubs who wished to set up something equivalent.

So how about it, ladies? Would you be interested?



Home of the 24 Hour Race

- · Sail your own boat or someone else's
- · Gain confidence and time on the water
- Practice skills
- Help with rigging and returning safely to shore

Come and join an already established friendly group, take turns providing a light lunch, and enjoy the sailing!

WEDNESDAYS

Summer lunch & launch 12.30 pm
Winter launch and light bite 11.00 am

Contact: Judith Kirkby (Ladies.Who.Launch@WLYC.org.uk)



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A few months ago the club were alerted by the RYA to a marine licence application for the dumping of spoil dredged up from Garston Docks, and some of the disposal sites listed in the application gave us cause for concern; one in particular was off Garston Rocks. That is right on our doorstep, and if it is dumped on the flood tide - as has happened on occasion in the past - it seems likely to exacerbate the already severe silting problems which we experience.

RYA invited us (along with other clubs) to make submissions to them about this, which we duly did, and I think we presented a good case. They then made a case to the licensing authority.

I am delighted to be able to report the outcome. The licence was duly issued, as expected; but **the Garston Rocks site was specifically not approved, and the site off Bromborough is approved only for use in adverse weather**. There is also a consultation group to be set up, to enable stakeholders to have an ongoing involvement. So this is a significant victory, and is probably the best outcome we could expect. We now need to monitor the situation, and ensure that we either have a seat on or are adequately represented on the consultation group.

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There is often more than one way to skin a cat. You will be aware by now that some months ago we installed a (tall and heavy) lamp standard in the boat park / car park area. Once it was nearly ready for erection, discussion in committee of how we might erect this led to Howard offering an amusing account of a group of trainees tasked with each devising a plan for erecting a 50-ft mast with an antenna on the top of it, out in the field. If I remember correctly one of them proposed using sheer legs, and another said that if it is out in the field there must be a farm around somewhere, so he would borrow a tractor. However the best of them delegated; he would call in the local rugby club, and inform them that their practical task was to erect this mast, and that there was beer on offer once the job had been done.

That in turn reminded me of the apocryphal story of the University of Copenhagen degree examinations in Physics, in (I think) 1906. During the face to face oral part of the examination a candidate was asked the horny old chestnut about being on the roof of a tall building, equipped with a good quality barometer, and asked how he would use the barometer to find the height of the building. One candidate suggested tying a long length of string to the barometer, then lower it over the edge until it just touches the ground; measure the length of string used, add the length of the barometer, and you have the height of the building. The Examiner agreed that this would work, but commented that it did not display any knowledge of physics, and asked the candidate to offer an alternative method which would demonstrate some physics.

The candidate then sat in silence for several minutes until the examiner pressed him for an answer.

He then said "Well, you could throw the barometer off the roof, and time its fall. Bad luck on the barometer, but if you use $h = \frac{1}{2}gt^2$ that will give you the height of the building.

"Alternatively, if the sun happens to be shining, you could stand the barometer vertically and measure the length of its shadow; then go down to street level and measure the shadow of the building, and it is then a simple matter of similar triangles.

"Alternatively again, you could swing the barometer as a compound pendulum" - and he quoted the relevant equation - "to find the value of g at the roof top, and then repeat at ground level, and then knowing the difference in the value of g and also the radius of the earth you can use the inverse square law together with the binomial expansion to find the height of the building.

"Of course if you wanted to be merely conventional, and thoroughly boring, you could measure the atmospheric pressure on the roof and again at ground level; the pressure difference will be $h\rho g$, where ρ is the density of air.

"But probably the most accurate method of all would be to knock on the door of the janitor's office, and offer him this rather nice barometer if he would tell me the height of his building."

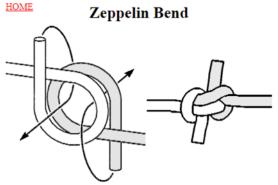
The candidate concerned was Neils Bohr, the only Dane ever to be awarded a Nobel Prize for Physics.

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I was recently pointed towards the online **Notable Knot Index**. This is a fascinating collection of immensely useful knots, and other ropework, which is well worth not merely a visit but serious study. I commend it to members.

I thought I was reasonably proficient in rope work until I found this site! ...

Just three extracts here:

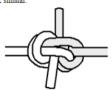


Also known as the Rosendahl Bend, it's perhaps the best way to connect two ropes that there is. It's exceptionally secure and shake-resistant in all materials and its perfect symmetry makes it simple to check. It's also remarkably easy to untie after heavy strain, even when wet.

If you're trying to learn it, think "b" and "q" with reference to the starting shapes of the ropes.

Although the Zeppelin Bend can join ropes of different sizes and materials, no bend works properly when joining ropes of vastly different diameters. You'll often notice this when the bend doesn't draw up neatly. In such cases, you should consider joining the ropes with a hitch like the Sailor's Hitch, treating the larger rope as a passive object, or just use interlocking loops.

Note: The Zeppelin Bend is not the Rigger's Bend/Hunter's Bend (which jams)! They only look similar.

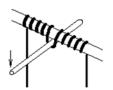


Double Zeppelin Bend made by repeating the final tucks

An article by Lee and Bob Payne called "The Forgotten Zeppelin Knot" in Boating Magazine (March 1976) revealed how this knot was used until 1982 by the US Navy to tether its lighter-than-air ships. Able seaman Joe Collins, a marlinespike seamanship instructor in the 1930s, told the Paynes that he had served under the American aeronaut hero Lleutenant Commander Charles Rosendahl, skipper of the dirigible Los Angeles, and: "There was only one knot he allowed... either for bending lines together on the airship or fo use on the mooring lines. I called it the Rosendahl bend."

-Excerpt from The Complete Book of Sailing Knots

HOME The Rope Wrench



Need to apply torque to a pipe? As demonstrated in the <u>Power of Friction</u> page, rope can really grab, given a few turns.

This same principle can be used to torque a smooth cylindrical object. Use a long bar as shown above and plenty of turns of rope to get a grip. You can use fewer turns of rope if you put a tight binding knot on the ends or if you weight the ends of the rope to resist what little force is left at the ends of those coils.

If you don't want to mar the object you're turning, wrap the lever with leather or some other cushioning material.

If the cylindrical object is free to rotate or roll, the lever can winch or windlass the rope in with considerable force, depending on the lever length and drum diameter.

Related page: Versatackle

HOME Untangling Rope



The Ashley Book of Knots gives the following procedure:

To untangle a snarl, loosen all jams or knots and open a hole through the mass at the point where the longest end leaves the snarl. Then proceed to roll or wind the end out through the center exactly as a stocking is rolled. Keep the snarl open and loose at all times and do not pull on the end; permit it to unfold itself. As the process is continued the end gradually emerges. No snarl is too complicated to be solved by this method; only patience is required.

http://notableknotindex.webs.com/knotindex.html

Also on ropework, last year *Yachting Monthly* carried out an interesting survey, in conjunction with Marlow Ropes, with practical tests to destruction (using Marlow Ropes' test machine), for a range of different knots etc. and in four different types of rope (all of 10 mm diameter). The ropes tested, in order of breaking load, were: a 3-strand prestretched polyester, Marlowbraid (which has a 3-strand polyester core with a 26-plait polyester cover), Doublebraid (12-strand braided polyester core with a 24-plait polyester cover), and D2 Racing (which has a 7 mm SK78 12-strand dyneema core with a 24-plait cover).

The report can be found in their November 2017 issue.

We all know that most knots will weaken a rope, but to varying degrees. We also all (I hope) now know from last year's RYA Safety Advisory Notice that high modulus polyethylene ropes (HMPE), such as dyneema and spectra, lose up to 80% of their strength when forced into tight radii.

https://issuu.com/rya1875/docs/12392 rya safety advisory notice a5

However there were some surprising results from the YM tests:

Many knots were stronger in 3-strand than in braided rope in percentage terms, while for two knots (both the round turn & two half hitches and the anchor bend) 3-strand was also stronger in absolute terms (actual breaking load).

The knots which were strongest in D2 Racing (i.e. the rope with the dyneema core) generally performed worst in conventional rope, and vice versa.

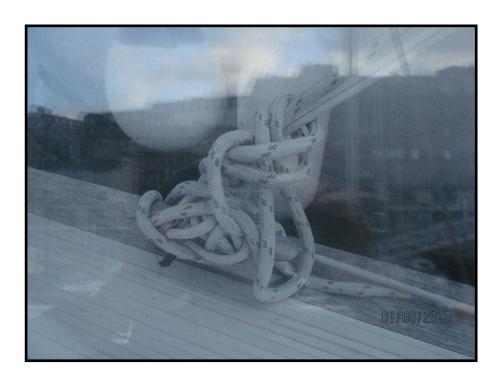
There is no single "best" knot for a given application; the strongest knot varies between different types of rope.

For all but one of the knots (the figure-of-eight loop), D2 Racing lost a higher proportion of its strength than any of the other ropes; but because this reduction is starting from such a very high figure for the strength of the rope the actual breaking load for the knot nonetheless did not come out bottom of the table, but at various positions in the table for different knots. For both the Scaffold knot and the bowline it came out top of the table for actual break load, while for the buntline hitch it came out second from the bottom!

Many of the strongest knots were ones which (in my personal opinion) were not all that widely known - surprise, surprise! These included more sophisticated variants on the familiar basic knots which we all should know (but do we?).

There were occasional surprising results. The strongest knot for joining two ropes, retaining 80% of the strength of the rope, was the anglers' blood knot - but this is quite a bulky knot when made in rope rather than fishing line, and thus it also uses up a lot of rope. The sheet bend and the reef knot fared worst, both slipping at a load of less than 50% of the breaking strength of the rope.

And still on the matter of ropework, I like this photo in the window of the Harbour Office at Douglas, Isle of Man, when I was there during August. The Harbourmaster clearly believes in gentle lampoonery as a means of instruction, and in this instance I fully concur.



The Harbourmaster's caption was

"This week's winner of the magic knot competition"!

He had a number of other photos on display inside the office, and I myself could have photographed several examples.

Food for thought; extracts from a conversation on Openboat in April:

"I sail alone as I am pretty friendless, and have not found any other small boats cruising on the Medway; on the night mentioned above I didn't see anything move on the river after dark except waterfowl. Given the option of company, I would have it in a trice. I am quite jealous of the DCA xxxxxxx section and their regular outings ensemble, but xxxxxxxx is a little far for me and I am enjoying the Medway."

And part of a reply:

"Look, the xxxxxxxxx have cameraderie, and they have great knowledge/advice. This is good. But they don't encourage self-sufficiency. You will be informed of HWs, LWs, where to launch, tidal streams and weather forecasts. No need to switch your brain on.

"Solo sailing is the best. Only yourself to blame when it all goes wrong ... A small driftwood fire on the foreshore where you cook your grub, a peaceful night on the mud with the birds calling. Its unforgettable. "And this takes us back to proper DCA beginnings."

Other than the somewhat sad point of the original writer being "pretty friendless" (which may of course be merely self-deprecating, and may mean no more than that his friends are either not sailing people, or they are not available to sail with him - perhaps because of geography, or other commitments, or even sailing their own boats elsewhere), that reply is perhaps food for thought for us as a club. We also provide tidal data, suggested launching times, and often weather forecasts. And of course we provide our slipway as a launching point. We virtually have to do so. But does this discourage self-sufficiency? It quite possibly does!

And the second paragraph of that reply evokes some of the delights of estuary cruising, which is also epitomised in the following post, also from Openboat, and quoted by the original writer (above) ...

"Ian Barrett – Heron; Alastair Law - Paradox *Little Jim*. I arrived at Warsash in light fog and still air but rigged and launched alone, making for Ashlett Creek. After 45 minutes I'd made it to the end of the Hamble and a small square sail came into view through the mist. Slowly the wind was building to a useable breeze and contact was made with Alastair sailing his Paradox from an overnight at Calshot. We then continued in company across the main channel, accompanied by the relentless fog horns or passing car transporters. Alastair followed me into Ashlett Creek, eventually dropping sail and sculling the last stretch while I drifted in. The sun then started to break through and lunch on the quay filled the time while the wind filled in to a force three and the fog cleared. The return was much quicker; Alastair lead me across the Solent back to Warsash in bright sunshine and good breeze, and with a single reef in the main of the Heron we were evenly matched for speed. After de-rigging and packing up I left Alastair to continue his cruise up the Hamble for another night afloat."

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Also from online chat earlier in the season in another sailing forum, this one the Privateer 20 Group:

"Just saw this available on ebay and thought the group might be interested." (URL deleted, but it was an advert for a Privateer)

"(I have no connection with it).

"Regards Tony"

Reply from one of our Dutch members:

"Hai tony

"Thanks but,

"I already have one, and it is like a Woman; one is enough

"Met vriendelijke groet,

"Heiko"

Reply from the original member:

"Hi Heiko

"Brave men have two Boats or 2 women.

Stupid men have 2 Boats AND 2 women."

"Happy sailing.

"Tony"

<u>UNUSUAL BOATS – 14</u>

Several people had great fun with this one!

A GP14 converted to a 1/13 scale model of *HMS Belle Isle*, one of Nelson's line of battle ships, for the Burlsedon regatta re-enactment.









The conversion:

(There is a GP14 underneath all that somewhere \dots)









Where it started

Figurehead



Bursledon Regatta Re-enactment

For the full story visit http://www.festinalente.org.uk/belleisle/belleindex.html

NEXT ISSUE

Press Date will be 15th December,