April 2003

**Editorial**Michael Juer
Warpath

My apologies for such a late Bulletin - a combination of my schedule and to some extent a lack of material/input! More of that later. Well most of us have our boats in the water and probably some miles under the keel. But not us! 2 years ago I broke my heel when I fell off my ladder whilst mid way through boat painting and this year I decided to finish the job off. A bad idea. Not because I fell off the ladder again but because in the end I went cap in hand to the yard and asked them to do it properly! Some jobs you can do and some you get professionals for! It looks great but has curtailed early season sailing.

The coming season looks very full of sailing with 3 Rallys including one to Cherbourg, Round the Island Race, (I believe 5 boats at least have entered and Tomahawk crews from other parts of the country are looking for rides!), a summer mooring in St Mawes (for a change of scene) and in May a trip from Ipswich across the North Sea ending eventually in Bergen (although

this not in a Tomahawk). Should be a good

few miles to add to the log book.

Well it gets harder and harder to get material for the Bulletin. There are the faithful few who have regularly contributed, (thank you) the less reluctant heroes who are coerced into it by me (I will get you again) and then the many who sit silently somewhere in the country sailing their Tomahawks but never telling us of their exploits, amusing tales or maintenance challenges! Furthermore as the editor I don't actually know how many of you read the Bulletin or whether you think it is worth the paper its printed on! So for this edition I have included a small questionnaire to give us some feedback and help us make future editions as relevant as possible.

<u>Please can you take the time to complete</u> <u>and return it to me – M Juer 11 Portway</u> <u>Wantage Oxon OX12 9BU</u> it will be greatly appreciated and perhaps we can produce a Bulletin more closely tailored to your wants and needs – all for the price of a 2<sup>nd</sup> class stamp!

I have also included some more extracts from the Marine Accident Investigation Board, Safety Digest courtesy of Ian Fairgrieve.

I wish you all a good seasons sailing and look forward to receiving the questionnaire back.

#### Some Words from our Commodore

Sadly, I must report the sad death of James Barnes, one of our founder members at the end of March.

Jill and I attended his Cremation at Taunton on the 11<sup>th</sup> April on behalf of the Association. The service was well attended by His family and friends, including many members of Redcliff SC at Wareham where He spent much of his time. He was an active member of the Association and became a very good friend whom we last saw at Gins Farm on the

Beaulieu River at the Rally about this time last year when he sailed in with his son and a friend. On the way back to Wareham they had to call for assistance when they picked up the line from a lobster pot around the prop off Hengistbury Head.

The second hand boat report on Incamoon appeared in the May edition of Sailing Today and has generated a lot of Interest in Tomahawks and the web site: so keep up the good work and make as many contributions to the website as you can.

The Solent branch of the Association remains active.

We held a luncheon at Warsash SC on the Hamble on the 1<sup>st</sup> March of which you can read more elsewhere in this bulletin.

The Lymington Rally took place the weekend of the 10<sup>th</sup>/11th May Crystal ,Bumble B ,Swift Wind, Moon Maiden , Moccasin and Incamoon all moored in Lymington Yacht Haven . We were visited in the afternoon by one of the persons who had contacted the Association

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as a result of the article in Sailing Today. Mike and Pauline Cox joined us by road as they are doing major repairs to Red Warrior's engine. We dined at Lymington Town SC where we were joined by Richard Rochfort the owner of Chimo who is a member of that club. It was a great weekend despite the cold and rain, both Saturday and Sunday. We hope to have some pictures available to put on the web site shortly.

Now, looking forward, there are three further events in the area this season:-

- 1. 21<sup>st</sup> June The Round The Island Race run by the Island SC. As far as we know at present Crystal, Bumble B, Warpath and Incamoon are entered. Crystal and Incamoon are intending to book in to East Cowes Marina on the Saturday night and possibly the Friday night as well. If there are any other Tomahawks taking part please let me know. Remember, there s the Bill Garrod Cup to be won by the first Tomahawk.
- 2. A cruise in company across the Channel to Cherbourg. We are meeting at Haslar Marina on Thursday 3<sup>rd</sup> July at 2000 for an overnight crossing and returning Monday 7<sup>th</sup> July. Weather permitting we may go round the corner to St Vaast La Hogue. So far we have four Tomahawks interested, the same as are taking part in Round The Island Race. If you are interested please call Bill Garrod or me.
- 3. Chichester Rally 13<sup>th</sup>/14<sup>th</sup>
  September Bill Garrod has arranged berthing in Chichester Marina .They require numbers and boat names, so if you can come please contact Bill at least a week before and at the same time let him know the number you will have on board . An evening meal will be available at the Marina Yacht Club on the Saturday night with a choice of menu on the night.

Finally may I ask you to let David Collinson or myself know of any change of address; telephone or mobile number or e-mail address in order that we can keep in touch and let you have all the latest news. My son Gerard is kindly designing a new data base for use by the Association which we hope to have up and running soon. We will circulate a copy of the information we have to date with the next news letter and a form for you to complete with the new and amended information.

Peter Llewellyn Incamoon

#### The 1st Cruise of the Season!

Iola's First (and nearly last!) cruise of 2002

As normal I had "lola" ready for launching for the first week in April ready for the passage round to the Menai Straits from her winter "home" in the vard at West Kirby Sailing Club on the Dee Estuary. Unusually the weather was most unseasonal - no rain or gales but light winds and sun on launch day Thursday 11th April. "lola" floated off the launching trolley at 1015 and we lay on a mooring until just before local HW before setting sail on the passage out of the Dee and then along the coast of North Wales to Anglesey.I was sailing single handed and, despite the winter break, soon settled into my normal routine. The wind was Northerly, cold and fitful but at least it wasn't "on the nose" and I made the 39NM passage to near Menai Bridge in 8 hours, half under sail and half motor-sailing. The secret of this passage (and most others in the Irish Sea) is to go with the tide and progress was good with 1.5/2.0 knots of fair tide over the 26NM from Point of Air to Puffin Sound. I picked up a vacant mooring for the night near to Menai Bridge there were plenty to choose from as there were very few other boats afloat yet this early in the season.

We passed through the Swellies at HW slack at 1015 on Friday morning and then enjoyed a very pleasant sail down the Southern part of the Straits, past Caernarfon, through the narrows at Abermenai and over the Caernarfon Bar in a gentle Northerly 2/3 breeze. As you may

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remember from my ramblings in the article "lola around Anglesey" in an earlier TOA bulletin I have a very healthy respect for the Caernarfon Bar and, even in today's light breeze, the stretch between the narrows and C6 buoy past the Mussel Bank buoy was choppy. I also noted that C3 buoy was missing and that C2 at the entrance had dragged 2 or 3 cables to the North, both probably victims of the winter gales. As it was only 1 hour after HW there was plenty of water and, having left C2 to starboard, I dropped sail and motored the mile or so to Llanddwyn Island where I anchored in Mermaid's Cove. This is one of my favourite spots and I spent a lovely and peaceful 5 hours in this idyllic setting which I had all to myself apart from the seals and birds on the rocks a few yards away.

The pilot books recommend not starting the crossing over the Caernarfon Bar until 1-1/2 hours after LW so I prepared to leave Llanddwyn 1-1/4 hours after LW and sailed up to the entrance buoy C1 passing there at 1830, 1-1/2 hours after LW. "lola" had 1 reef in her main and 4 or 5 rolls in her genoa as the wind had picked up during the afternoon and veered slightly and was now blowing NE 15-20 knots. I had crossed the Bar in similar conditions on many occasions so did not expect any problems. I had in my mind the position of where the missing C3 buoy ( which marks a dog-leg in the channel) should have been and "lola" was sailing on a starboard close reach at 5 knots to leave that "position" well to starboard. After a minute or two I saw white caps ahead both to port and starboard - I thought are they caused by wind over tide ( that part of the channel runs NE ) or are they due to shallow water? I decided to furl away the genoa to reduce the angle of heel and the draft ( she is twin keeled ) and to start the engine. No sooner were these actions completed than we touched bottom and "lola" slewed round to starboard to face SW and the 2 knot flood. Full power astern had no affect so I knew we were well and truly aground with the wind pushing us further on. Maybe it is just my imagination but it seemed to me that the wind chose that moment to increase - it was howling! - and we were surrounded by breaking waves. Realising that I had to act quickly I decided that the first priority was to get the anchor down to stop us being driven further aground so, within a minute or so of having touched, the 20lb plough anchor and 75 feet of chain had been deployed over the bow and I was clawing down the mainsail. "lola" was grounding heavily in the troughs of the bigger waves which were also breaking into the cockpit and it seemed

like the bottom was concrete not sand! I have to admit I thought "if the anchor doesn't hold we will be in the s-t" and really for the first time in the 29 years I've been sailing I considered a "Pan-Pan" call to the Coastguard. A couple of transits showed that we were not moving so I decided to wait, the pounding gradually lessened and 15 minutes later we were fully afloat again. A thorough check down below found bone dry bilges and no sign of any damage - a testimony to Alan Hill's design and to the Tomahawks build quality (I am convinced that had I been in one of the Tomahawks contemporaries with bolt on keels and an unprotected rudder a keel or the rudder would have been lost ). I waited another 30 minutes for more water and then continued over the Bar in the gathering darkness to Port Dinorwic where I picked up a vacant mooring and drank a toast ( quite a few actually!) to Alan Hill and the Tomahawk!

I went back through the Swellies on Saturday morning onto my moorings at Beaumaris. Lessons learned? Quite a few I hope – never take anything for granted and certainly never assume the position of a missing buoy – if in doubt don't make the passage or at least wait for more water. Also make sure that you have 100% faith in your ground tackle and have it set up in such a way that it can be let go very quickly.

Geoff Hilditch "lola"

P.S. I made the passage over the bar 3 weeks later, this time at neaps, C3 was still missing but I did some "survey work" with the echosounder and found where the channel ran – it appeared to run further to the North than before with a more pronounced dog-leg. I have a set of courses to steer to stay in the channel but will certainly wait for more water at springs until C3 is back on station!

P.P.S. A month or so later C3 was back on station slightly to the North of its position the year before.

#### The South Coast Winter Lunch

Saturday 1<sup>st</sup> March saw a boat-less lunchtime gathering of the tribe at Warsash Sailing Club. With a commodore called Llewellyn and 1<sup>st</sup> March being St David's Day expectation was obviously Leek Soup! In fact not only did we have pasta, which

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was delicious, but nobody even turned up with a daffodil in their hair!

Numbers were slightly on the low side with eleven people representing five boats, Incamoon and Moonmaiden from Warsash plus Crystal, Red Warrior and Swiftwind. The place set for the Editor was taken away when a 'phone call elicited the comment "is it today?" - this also explains the paucity of this report! (Thanks lain - Ed). Suffice it to say that it was a very enjoyable lunch in good company with plenty of chat about our splendid little boats. It is to be hoped that the overheard muttering of "something bigger" from one side and "possibly time to think of going motor boat" from another will disappear as the season progresses. It remains to thank Peter and Jill for organizing the event and to look forward to continuing the chat at Lymington. Iain Fairgrieve Moonmaiden

The Transport Safety Bill

What, I hear you ask, has this got to do with me? Unfortunately the answer is quite a lot. The Bill has been published in draft and is presently going through committee stages prior to enactment. No date has yet been set for it's coming into being. The whole Bill can b e accessed on <a href="https://www.publications.parliament.uk/pa/pabills.ht">www.publications.parliament.uk/pa/pabills.ht</a> m

The part of concern is Part 4 "Shipping: Alcohol and Drugs". Sub section 77 refers to non-professionals i.e. we leisure sailors. It applies to a person who is on board a ship that is under way and is exercising or purporting or attempting to exercise a function in connection with the navigation of the ship. This person commits an offence if

the proportion of alcohol in his breath, blood or urine exceeds the specified limits. The specified limits are the same as for driving a car i.e. for blood 80 milligrams of alcohol per litre of blood.

The Bill allows for imprisonment or fine if found guilty and detention of the vessel by a marine official (a harbourmaster) pending the arrival of the police.

The only light on the horizon is a let out clause that the Secretary of State may make regulations providing or the Bill not to apply in specified circumstances with reference to the power of the motor, the size of the ship or to the location.

I'm sure that we are all aware of the tragic "Bowbelle" accident some years ago on the Thames which is the reason behind the Bill. However to me it seems a "sledgehammer to crack a nut". How many accidents to leisure craft occur because of the slowed reactions to being over the drink/driving limits – few if any with the exception of high speed craft? If reaction time is the measure then it is boat speed and not engine power which counts.

The purpose of this note is not to set out all the pro's and cons to the situation but to generate an awareness of what is happening at this moment. We are all able to have some input into this either through the RYA or by direct communication with our own MP's.

Iain Fairgrieve

Moonmaiden

May 2002



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# A Pause for Thought

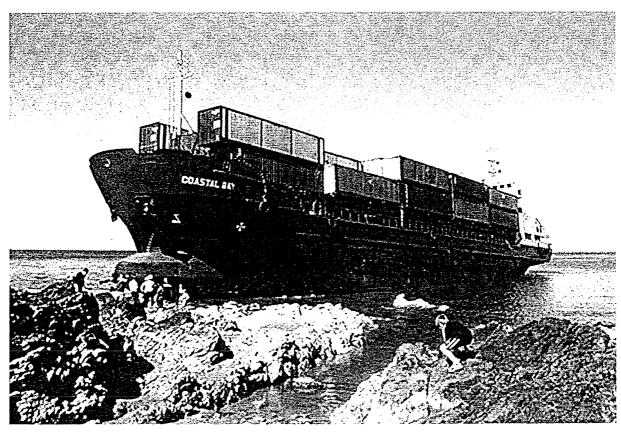
# When the draught of your vessel exceeds the depth of water.....

The mariner can experience few more humiliating situations than going aground. A stranded vessel can make an outstanding spectacle and, if they can get anywhere near the scene, the media will make the most of it.

In its most benign form, the vessel will take the bottom gently on a mud or sandbank, and those on board will suddenly realise the ship's log is registering zero. The tide will rise and, at the appropriate moment, she will come afloat. The passage will be resumed with nothing much to show for it other than injured pride or a delayed ETA.

Leisure craft sailors who find themselves in such circumstances will hope against hope that none of their friends have noticed. They are likely to be disappointed. By the time they creep back to their mooring they will find it is the talking point in the sailing club bar.

For other types of vessel the consequences of a more serious grounding fall into a totally different category. A VLCC that finds herself impaled on rocks, with tonnes of crude oil pouring out of ruptured tanks, will have her name embedded in people's minds forever. You only have to ask the average person in the street to recall the name of any ship and, after the obligatory reference to the *Titanic*, he or she will almost certainly come up with *Torrey Canyon*, *Exxon Valdez*, *Amoco Cadiz*, *Braer* and *Sea Empress*. They were all oil tankers, and they all went aground, albeit in differing circumstances.



This is what can happen when it all goes wrong

Grounding can happen to anyone, and hardly a day passes without the maritime press reporting such an event somewhere in the world. In recent years cruise ships, tankers, cargo vessels, fishing vessels, a warship or two, and numerous leisure craft have all found themselves aground with the inevitable consequences of damage, delays, unwelcome publicity, injury, pollution, the attention of the salvors and, from time to time, and very sadly, loss of life.

In times gone by, stranding was the most common form of marine casualty. A reliance on wind as the main means of propulsion and an inability to determine one's position with any accuracy in certain weather and visibility, meant that many a vessel would find itself running out of sea room and being driven ashore.

Coastal communities would look on a good wreck as an act of providence, and you only have to go into any British seaside town's bookshops to find volumes of books about local shipwrecks to demonstrate the continuing fascination with this particular type of marine accident.

Advice to the navigator of yesteryear to prevent grounding, focused on the four L's of safe navigation: Lead, Log, Latitude and Lookout. Many hundreds of years ago some unknown mariner wrote 'navigating is not by chart and compass, but by the sounding lead'. Although much has changed since then, the sentiments expressed still have some relevance today. A common feature of many recent groundings reveals that whoever was in charge of the vessel's navigation prior to going aground, had little idea of how much water was beneath the keel. Such knowledge does help!

Modern ships do not have to endure the handicaps of the low powered steamers and sailing vessels of yesterday. Today's ships have reliable means of propulsion, excellent aids to navigation, and the seas are well charted. The seamen of today have everything going for them, but despite the improvements, groundings still occur. Why? And what can be done to prevent them happening again?

Scrutiny of a number of recent groundings and analysis of their causes, reveals certain features which repeatedly crop up. Very few new lessons emerge, but plenty of old ones are worth revisiting.

There are, arguably, three typical scenarios for grounding: machinery breakdown, the failure of a watchkeeper to stay awake and, most common of all, that emotive catch-all state known as navigational error.

#### Machinery failure

The first scenario, machinery breakdown, is not as common as many would suppose, and does not happen quite as frequently as some embarrassed seamen might have you believe.

The initial cause is frequently attributed to steering failure. It is a convenient way of explaining how a well-found ship with a well-trained crew lands up on the rocks. Whenever possible, the steering system is subjected to expert inspection after such an incident, and it is interesting to note how often it is found to be working perfectly.

Sometimes the helm is put the wrong way. Everyone who ever gives a conning order, or who selects a new course to steer on the auto-pilot, should instinctively look at the rudder indicator to verify the rudder is turning in the right direction. Helmsmen do make mistakes from time to time but, when they realise the ship is swinging the wrong way, often compound the problem by increasing the wheel, rather than reversing it.

Such mistakes can lead to a grounding. When the helm is applied the wrong way, the effects can be contained providing someone spots it immediately. The most effective way of making sure the correct helm is applied, once the error has been noticed, is to use the single word "midships", followed by the correct wheel order. Such a technique means the helmsman will automatically

reverse what he was doing previously. Giving the order calmly will ensure success. It is not the moment to give the unfortunate helmsman his annual appraisal! A second source of error often occurs when attempting to change from auto pilot to hand steering.

Genuine steering failures do occur from time to time. An analysis of such situations reveals that the bridge watchkeeper very often fails to recognise what has happened in time to do anything about it. Sometimes the time available is measured in seconds.

Understanding the alarm system is a basic first step. When the alarm sounds do you know if it is an indicator problem, a system defect or a rudder failure? If the alarm analysis is correct and the appropriate action is taken, the transition to the alternative mode of operation should be seamless. If not, there is the prospect of an ominous grinding sound under foot, and a frantic search for three black balls.

The more thoroughly the bridge users know their steering system, the better, and there are few better places to learn than in a simulator. Not only does constant practice ensure that when the system fails for real, the person in charge of the ship will probably know, instinctively, what to do.

Some precautionary measures should be taken in advance. If in confined waters the anchors should be cleared away, both steering motors per rudder should be running, and there should be sufficient people immediately available to identify, and rectify, any problem.

If an alarm sounds, the watchkeeper must know what it means, and the measures needed to deal with it. Among the initial questions to pass through the operator's mind are "How long have I got to resolve the problem?" and "What must I do to prevent things deteriorating further?"

An intimate knowledge of the system will do much to ensure you take the correct action to restore whatever has been lost.

Whenever the steering or main propulsion fails and there is any risk of subsequent grounding, the first, and overriding priority is to ensure the safety of the vessel. If there is any suggestion that the fault is anything other than temporary, and there is even the remotest possibility that your vessel could drift ashore, tell the local authorities straight away. Time and time again masters show an extreme reluctance to do so, but are usually quick to discuss the position with their owners. Their usual explanation for not informing the authorities, or for downplaying the potential seriousness of the problem, is that those charged with repairing the system are confident they can fix it with little delay.

Don't risk it. Tell the coastguards (rescue coordination centre), or the port authority, what has happened and keep them informed. If the problem is resolved after just a few minutes — wonderful. Nobody will be more delighted than those you have kept informed. They will, however, be less amused and also placed at a severe disadvantage if you fail to alert them to a problem that, despite your optimism, cannot be resolved. The more notice you can give them, the greater the prospect of a successful outcome. Nobody will thank you if you do go aground and it subsequently transpires help would have been possible had more notice been given.

But the most effective way of preventing mechanical failure is to ensure it doesn't happen in the first place. Rigorous testing of the gear, proper maintenance with effective quality controls and regular training, will minimise the likelihood of a system failure.

## **Fatigue**

When a well-found vessel, equipped with the latest navigation equipment, ploughs into some well charted coastline, island, lighthouse or other obstruction in the middle of the night, usually between the hours of 0100 and 0600, the chances

are that two ingredients were in place. The officer of the watch was asleep in a comfortable chair, and the lookout was not on the bridge.

The problems of fatigue and sleep deprivation have featured in other *Safety Digests* and it is not the intention to repeat them here, but falling asleep on watch (no matter how loud the bridge alarm, or how effective its fall-back alert capability) is a surprisingly common cause of grounding. (The MAIB has evidence of both bridge watchkeeper and the master, in whose cabin the alarm was remoted, sleeping through an extremely loud such alarm system.)

The fishing vessel that sails soon after midnight, having just landed a catch, is particularly vulnerable to going aground. The night watchkeepers are often very, very tired.

The risks can be reduced if additional care is taken in planning the passage, particularly at night. A longer route that takes you further offshore, or well clear of obstructions, might pay dividends.

Ultimately however, falling asleep on watch can be prevented by keeping your mind occupied, insisting on having the lookout posted throughout the night, drinking adequate quantities of water and, above all, recognising the moment when you are getting sleepy. When this happens, get out of the comfortable chair. If your body is relaxed and you realise you are having difficulty keeping your eyes open, there is nothing to prevent you from going to sleep if you are sitting down.

The saving grace is that you can always recognise the symptoms of drowsiness. Heed them.

### Navigational error

Very few vessels run aground if the passage has been planned with care, dangers are highlighted on the chart and the person on watch retains an instinctive feel for the depth of water under the keel. Add to these practices the discipline of fixing the ship's position regularly by at least two methods, calculating the dead reckoning after every fix, and working out when to put the wheel over, the prospects of going aground are much reduced.

Navigating in coastal or pilotage waters in poor visibility introduces additional risks. An in-depth knowledge of radar as an aid to navigation including the ability to use parallel indexing techniques, will do much to reduce the risk of going aground. Safe navigation in poor visibility has to compete with the need to avoid collision. When the navigation dimension is relegated to the back of the mind, the risks of grounding increase significantly. Sometimes two heads are better than one in a busy situation with one person concentrating on ensuring the ship remains in safe water.

The fact that vessels continue to go aground is evidence enough that the navigation in some vessels is at best, sloppy, and at worst, negligent.

Some of the most frequently observed navigation shortcomings are predictable. An inspection of a vessel's chart after a grounding will often reveal that no track had been prepared, and fixes were, at best, sporadic.

We live in the age of the GPS, a very accurate, very reliable and very easy system to use. We use it all the time to fix our position and we all have come to rely on it. The younger generation will have been brought up on it, and will invariably assume that the position given on the read out, or the marker on the automatic chart plotter, will be correct. Everything else must, by definition, be relative to where our own ship is. But there is one big problem. What happens if, on rare occasions, it isn't working for some reason? Can we spot when it isn't functioning correctly, and can we still navigate safely if it isn't available? The ancient mariner will be in his element, but the younger one may find he is not as familiar with the traditional methods of navigating as he should be.

The traditional concept of working up a DR is still a very effective way of preventing groundings. It is interesting to note that so far as we can ascertain, we have no recent record of a vessel going aground because of 'navigational error' where the DR has been worked up from the last fix.

Modern navigational systems that rely much more on electronic charts, integrated radar displays and GPS derived positions provide excellent navigational information. The navigator, however, still needs to know their limitations. He needs to continually check that the information he is using is accurate against some other reference, and is a reliable indicator as to when to put the wheel over.

Misidentifying navigational marks, especially by day, is a common feature in many groundings. Being familiar with an area is a great asset but, to adapt an old military adage, time spent in preparation is seldom wasted. Close scrutiny of the largest scale chart and the sailing directions will pay dividends. Other basic techniques such as identifying natural transits, calculating clearing bearings and working out minimum depths of water, all play a valuable part in ensuring a safe passage when navigating close inshore.

Other groundings have been caused by the decision to veer off the planned track for, perhaps, very good reasons. You may be altering slightly to give a wider berth to a vessel coming the other way, or perhaps keeping well clear of one that is at anchor. There is nothing wrong in doing so provided the new heading, no matter how temporary, isn't leading you into shallow water or towards some other hazard.

Whenever it is necessary to alter course in confined waters, the careful mariner will project the new track ahead on the chart to make sure it is safe. It is interesting to note the number of times ships will do this without anyone checking to ensure there is sufficient water available.

This leads to the final and, perhaps, the most useful tool in the navigator's armoury to prevent groundings: the echo sounder. It is probably the most ignored item of equipment on a ship's bridge. Whenever a ship runs aground one of the first questions the accident investigator will ask is whether the echo sounder was switched on and, if so, was anyone monitoring it. The answer to both questions is, very often, no.

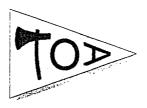
It should be at the heart of every navigation system.

- Think draught.
- Think depth of water.
- Think echo sounder.

The navigators of old had the right idea, 'Navigation is not so much knowing your latitude and longitude, but finding your way by the lead'.

As the title of this article states, when the draught of your vessel exceeds the depth of water available.....

You can always consider the delights of gardening!



#### TOMAHAWK OWNERS ASSOCIATION

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FROM:- Hon. Secretary David Collinson, Ormonde, 30 Storeton Road, PRENTON. CH43 5TR.

Tele/Fax 0151 652 5687 Email collinson15@ntlworld.com

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We had a wonderful response to the circular regarding the AGM and the new Constitution, 45% of our membership, who were not able to attend, returned the slip, which is truly remarkable, thank you!

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#### **Bulletin Questionnaire**

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