



AUSTRALASIAN INSTITUTE
OF MARINE SURVEYORS

Shipshape

Newsletter May 2021

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From the Bridge

President's Message

“

The Barbarians are at the gate. Man is to be removed from ships – to save ships from man.”

Our Future in a Decadent World?

It's good to be in something from the ground floor. But lately, I'm getting the feeling that I came in at the end. The best is over. (Tony Soprano)

When I first went to sea in the early 1970's change was sweeping not only the global shipping industry – but the world in general.

Containerization was mercilessly disrupting the traditional shipping companies. Bulk carriers and tankers were getting much bigger due to improvements in vessel design and construction. Shoreside infrastructure struggled to adapt and keep up.

In time came smart color radars equipped with the first nascent anti-collision systems (totally useless), the first (very large) satellite navigation systems, ballast / cargo control rooms, computerized loadicators, standardized hydrostatic tables and so on.

Fifty years later progress has obviously stalled. We are still reading draft marks – in all sea conditions – to calculate weight loaded. Hydrometers of varying design and accuracy – rarely if ever re-certified once purchased – are used to measure the specific gravity of the water the vessel floats in. Not to mention the paucity of obtaining the representative dock water sample. Ballast tanks are still sounded with steel tapes. The mean of means is the best we can do to average large hull deflections to try and achieve accuracy reportedly +/-0.25% or better. What chance the draft survey versus the much-loved weighbridge?

In contrast great progress has been made on the bridge and in the engine room. We are told AI is now the future. The Barbarians are at the gate. Man is to be removed from ships – to save ships from man.

But will man still be needed to plan and load vessels? The container trade is perhaps the most advanced here – using remote “ship planners” in centralized international hubs. Recent container losses may indicate that remote may be “cost effective”, but it isn't “smart”. On arrival in most Terminals the Chief Officer is handed a USB stick and told “here it is – have a look and let us know”. Sure.

So - what about bulk carriers? The autonomous vessel berths at a load terminal. (Who puts this vessel alongside we are not sure yet - robot tugs, robot pilots?) What happens next? I have yet to see any articles explaining how this area will work.

What skills will a surveyor in the new world require? Bulk terminals are a major employer of marine surveyors. We need them to stay that way.

Surveying in Bulk Terminals is a tough job. Relentless sameness. Day in, day out. But the Surveyor needs to be accurate - all the time, every time. It is a job tailor made for AI.

Technology will be developed to assist the surveyor of the future. The surveyor of the future will not come from a seafaring background. He will be a skilled technician - able to arrive at results quickly and accurately.

AIMS needs to be planning for this new world. We need to get in at the beginning. We need to engage positively with the forces of change.

The Membership is now voting on proposed changes to the Constitution that will allow us to be true industry leaders - respecting our tradition whilst embracing our future.

Best wishes to everyone.



Peter Murday
President

“

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CEO Report

We are now in full swing heading towards the end of the financial year with many changes to our operations and corporate structure about to take place.

This month sees the closing down of our offices in Canberra and a relocation of main membership services to Gladstone with Tim our marketing manager working from NSW and myself remaining in Canberra. This move, a positive outcome from the COVID pandemic, will result in a significant saving on the Canberra expenses which can be used to better promote and advertise the AIMS and goes a long way to establishing more member benefits.

It has been 10 years since I plunged blindly into the maritime industry and started my career with AMSA and that was a trial in and of itself. The National Law was due to come into effect but was delayed for some years but my role at AMSA was to specifically develop a marine surveyor qualification to counter the expected skill shortages due to the demise of the traditional influx of seafarers and to aid the training of domestic commercial surveyors from the coastal sector.

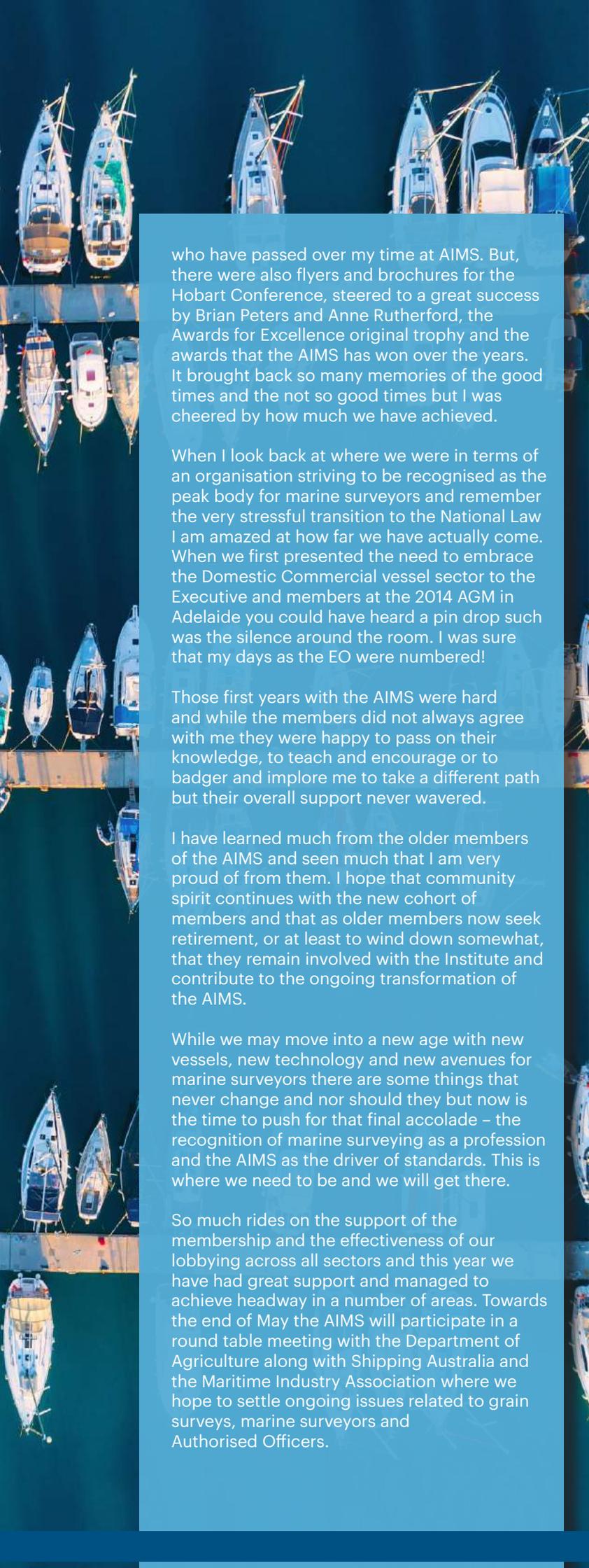
I had never worked before in the public sector at a regulatory level and the challenges were great. Trying to identify the requirements for a qualification in marine surveying when you don't really know what a marine surveyor is was a tricky task. Just go out there and do it was the instruction and that is how I met Steve Beale. The NMSC (National Maritime Safety Committee) didn't have a reputation for getting things done and there were times when it was pretty much non-existent. But to do what I needed to do it was essential and so it's resurrection was vital. AIMS was a part of that original committee and so I contacted Steve Beale and Russ Behan and the rest is history.

There is no doubt that at times I have certainly felt every moment of this journey and I have been awake many a long night worrying about our future. Looking back though there has been so much work to do that the time has flown past quickly and we are now at an exciting point in our evolution with much to look forward to.

While I was packing up the office this week I came across historical records and memorabilia such as a bronze plaque that used to be issued to members, the original certificate of registration – which by the way showed the name to be the Australian, not Australasian Institute and the sad obituaries of Mike Bozier and Steve Beale and members

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Now is the time to push for that final accolade – the recognition of marine surveying as a profession and the AIMS as the driver of standards.”



who have passed over my time at AIMS. But, there were also flyers and brochures for the Hobart Conference, steered to a great success by Brian Peters and Anne Rutherford, the Awards for Excellence original trophy and the awards that the AIMS has won over the years. It brought back so many memories of the good times and the not so good times but I was cheered by how much we have achieved.

When I look back at where we were in terms of an organisation striving to be recognised as the peak body for marine surveyors and remember the very stressful transition to the National Law I am amazed at how far we have actually come. When we first presented the need to embrace the Domestic Commercial vessel sector to the Executive and members at the 2014 AGM in Adelaide you could have heard a pin drop such was the silence around the room. I was sure that my days as the EO were numbered!

Those first years with the AIMS were hard and while the members did not always agree with me they were happy to pass on their knowledge, to teach and encourage or to badger and implore me to take a different path but their overall support never wavered.

I have learned much from the older members of the AIMS and seen much that I am very proud of from them. I hope that community spirit continues with the new cohort of members and that as older members now seek retirement, or at least to wind down somewhat, that they remain involved with the Institute and contribute to the ongoing transformation of the AIMS.

While we may move into a new age with new vessels, new technology and new avenues for marine surveyors there are some things that never change and nor should they but now is the time to push for that final accolade – the recognition of marine surveying as a profession and the AIMS as the driver of standards. This is where we need to be and we will get there.

So much rides on the support of the membership and the effectiveness of our lobbying across all sectors and this year we have had great support and managed to achieve headway in a number of areas. Towards the end of May the AIMS will participate in a round table meeting with the Department of Agriculture along with Shipping Australia and the Maritime Industry Association where we hope to settle ongoing issues related to grain surveys, marine surveyors and Authorised Officers.

We have also formed a new relationship with Shipping Australia, which I hope will allow greater collaboration across the blue water sector.

There is a very good chance that at long last, a group insurance scheme will be launched this year that will provide members with the opportunity to purchase PI insurance as part of their membership. This was a project that started in 2015 at a meeting in Canberra with Wade Cadman (now our broker and manager from Austbrokers Countrywide) and has been a long time coming to fruition but we can see the horizon now and hope to be able to announce the scheme before too much longer. This initiative will bring great benefits to members and the AIMS as an organisation and will further cement our reputation as being an Institute of marine surveyors who have a professional approach and mature business structures. It will go a long way to promoting consumer confidence in AIMS members.

I am really pleased to see members taking the time to have their say regarding the AIMS corporate structure and am looking forward to seeing the results and hopefully moving on to the next phase in our evolution. I think that the conference and AGM this year will be a pivotal moment in time for the AIMS and celebrations will be the order of the day so if you can come, please do so and help us ring in a new era.

Despite the strangeness of moving the office and packing up the memories I am sure that there will be many more memories to come and that the AIMS is continuing to grow and flourish.

Our finances, while always tight, are healthier than in previous years and with Stacey steering us so competently I am confident that we can meet any challenge that we face.



Susan Hull
CEO

Bunker Surveys

By John Holden

This time I will share my experiences of Bunker Surveys from a survey practitioner's point of view.

Bunker Surveys are simply a survey to establish the quantity of bunkers held in dedicated tanks to provide fuel for ship's propulsion, running generators for electricity production and other ancillaries. A bunker survey can address the quantity at the time of survey or, more commonly, an on or off hire bunker survey to provide before and after quantities so concerned parties can come to a mutual agreement about fuel used, fuel purchased and fuel on board at commencement and conclusion of charter or period of hire, in line with the terms of the charter party or hire agreement.

Since bunker fuels account for a substantial cost in the operation of a vessel, the bottom-line concerns who will pay for what and how much. On and off hire surveys often require the surveyor to account for bunkers received during the period of charter or hire.

The closely related 'bunker quantity survey' aims to confirm the quantity of bunkers delivered to a vessel by calculating before and after quantities on board the vessel, and where possible, on the bunker barge or shore facility supplying the bunkers. Given that under delivery of bunkers through a variety of ingenious and under-handed practices is widely acknowledged by the shipping industry, the value of such a survey may provide some recourse for the party responsible for the bunker delivery costs. All these surveys utilise



a few basic principles that are standard across the petroleum inspection sector, generally in line with American Petroleum Institute (API) standards.

Marine surveyors will be engaged for such surveys, with the appointment stating what the purpose of the survey is and any concerned parties for the purposes of reporting and invoicing. It is most important that the scope of work is clearly understood, and all concerned parties are aware of the intention to conduct the surveys, thus avoiding unnecessary attendances. This most important point should apply to all engagement with clients as a matter of course.

To reiterate my advice from the previous article, positive communication is key, and the first step towards a successful conclusion to any survey appointment.

Now that you have arranged access to the terminal and the vessel, and assembled available information for the job file, proceed by first taking some photos of the vessel at berth (or elsewhere as the case may be) and reading the forward and aft draughts to enable calculation of vessel trim. Please make sure you can take photos as you may require prior permission for this. Photos are only required if you include as part of your reporting style or client has requested same.

Board the vessel, introduce yourself to the Chief Officer or Master, stating why you are there and request to meet the Chief Engineer C/E. Check if vessel is heeled (listed) and make a note. If the vessel is about to load or discharge, immediately arrange to get bunker tank soundings. Ask the Chief Engineer to provide number and description of all bunker tanks, including overflow tanks. Soundings should be taken prior to cargo/ballast operations so the vessel is not moving about – this should take 20 – 30 minutes but can take considerably longer where vessel has a lot of tanks or tanks are hard to access. Sometimes crew is just plain slow – a little cajoling may speed things along, otherwise, exercise that most basic of surveyor attributes, patience!

On some occasions, the bunker survey may be arranged for after cargo operations are completed, and this can benefit if vessel has loaded because the likely minimal trim and heel (list) will generally provide for a more accurate survey.

Once you have taken the bunker soundings from deck accessible tanks, proceed with the accompanying engineer/s to obtain engine

room tank quantities by sounding or gauges as may be the case. Engine rooms can be hot and noisy, so use appropriate hearing protection and PPE.

After the short workout on stairs in the engine room, obtain temperatures (often available from engine control room system readouts) and commence calculating the bunker quantities from the calibration tables provided by the C/E, who will also be able to provide the specific gravities for each tank. You can verify this from previous bunker delivery receipts as required.

The calculation will depend upon the style of tables, however, all should provide corrections for both heel and trim that should be applied to ensure accuracy. You may have to interpolate several times to calculate each tank quantity – I recommend you learn to use the memory functions of your calculator as this can become quite time consuming. You will get better at this over time!

Assuming you have a spreadsheet for bunker calculation, you may still need to obtain the VCF (volume correction factor) from a set of tables unless your bunker program automatically calculates this. If looking up, use Table 54B - applies across all similar petroleum products.

Okay! You have calculated the quantities and have small difference with the C/E's figures, but there is a more substantial difference with the current engine room logbook figure. This is not of great importance if only quantity at time of survey is required, however, if for on or off hire purposes, this is far more important in establishing the actual on or off hire quantities, as any consumption considered will be derived from the engine room logbook entries.

On hire bunker surveys are often conducted sometime before, or more commonly, after the vessel delivery or on hire time, requiring consumption between delivery and time of survey to be accounted for when establishing the actual delivery quantities. Now we start to get to the pointy end of the survey. If your surveys do not require confirmation from the C/E or Master, you can proceed to report as calculated if you are happy that your figures are correct and you have taken all variable into account, however, most bunker reports require confirmation of agreement from Master, C/E or both.

Anyone who has conducted bunker surveys will attest to the myriad excuses for differences between logbook and survey figures, including:



“never accurate with too much trim”, “too much heel”, “tables are not correct”, etc. You must be firm and able to demonstrate your calculations are correct. You will be asked to revise figures and they will often want to negotiate. Some surveyors will negotiate; however, this is not in the best interests of maintaining the good reputation of Australian surveyors – so please think carefully about this!

Unfortunately, some clients will request that discrepancies in their favour only be reported. Here again, you must decide what to do – take the appointment and comply with this unethical request, take the appointment and report correctly (you will get no more work from that client) or decline the appointment, stating the reasons why. If marine surveyors as a group stand up to these dodgy principals, we are only strengthening our profession and our reputation.

As previously mentioned, upfront communication to establish scope of appointment can provide the perfect opportunity to set some ground rules – perhaps direct them to your terms and conditions that includes ethical practice. Perhaps you should develop a Business Ethics Policy.

The aforementioned “Bunker Quantity Survey” utilises the same calculation principles with a before and after survey providing the loaded figures. I will not elaborate further in this regard.

So, we have covered the bunker survey essentials. I have not gone into greater detail of the actual calculation as this is based upon standard practice around the globe and readily available. Remember that your continuing business success will be built upon what you provide to clients and how they perceive your service provision.

My last word on bunker surveys – you will experience confrontation, so be prepared to be firm.

I have not decided on a topic for my next article but welcome any suggestions – please be kind!

Until next time,

John Holden
Vice President

Your ship, is our ship.



You keep our world moving, we keep you in business.

Shipping is the lifeblood of our country and it's our job to keep you working safely and hassle free. Trusted. Experienced. Certified Commercial Marine Surveyors™.

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Email us on info@aimsurveyors.com.au
or call us on 02 6232 6555



AUSTRALASIAN INSTITUTE
OF MARINE SURVEYORS



Changes to Membership

There is a saying we all know well, "Times change, and if you don't change with them you get left behind". We as an Institute are not exempt from this and the recently proposed changes to the Constitution highlights the changes we need to make to ensure we are not left behind.

Below is a summary of our new membership levels starting 1st July 2021 and what they mean to you:

There will be 4 types of voting members:

- a) Life Members
- b) Fellow Members
- c) Certified Members
- d) Full Members

There will be (2) types of non-voting members:

- a) Associate Members
- b) Student Members

If you are currently a Student Member:

Nothing will change with your membership.

If you are currently a Probationary Member:

You will automatically be transferred to an Associate Member as our Probationary Membership level will no longer exist. You will be able to remain as an Associate Member for a maximum of 4 years before you need to progress to Full Membership. If you do not already hold a qualification in Marine Surveying you will need to work towards this to become a Full Member unless an exemption is granted by the board for industry specialists.

If you are currently an Associate Member:

You will remain as an Associate Member. You will be able to remain as an Associate Member for a maximum of 4 years before you need to progress to Full Membership. If you do not already hold a qualification in marine surveying you will need to work towards this to become a Full Member unless an exemption is granted by the board for industry specialists.

If you are eligible to upgrade to a Full Member you may elect to do this under the current membership criteria prior to the changes taking place on the 1st of July 2021.

Rather than the current 5 years' experience required to upgrade to Full Membership, Associates will now be eligible to upgrade once they hold 2 years' experience as a surveyor and a Diploma of Marine Surveying which you may be eligible for some Recognition of Prior Learning towards from your previous work experience.

If you are currently a Full Member:

Nothing will change with your membership. Full members will still be voting members of the Institute but to nominate for a position on the board will need to upgrade to a Certified Member.

If you are currently a Certified Commercial Marine Surveyor:

All conditions and criteria for Certification will remain the same, but Certification will now be the pinnacle level of membership for applying members and will become part of the membership renewal process each year. Individuals and Organisations can still be Certified but the fee structure will change:

- Individuals will pay a flat fee of \$700 per year which will cover their Membership

and Certification fees and will cover all their categories of experience. The current application requirements of Insurance and QMS will still apply.

- Organisations will pay \$700 per eligible employee (not associates or students) for their organisation to be Certified. This will cover each employee's membership fees and Certification fees, no separate Organisation Certification fees will apply. The current application requirements of Insurance and a QMS will still apply.

There will be CCCMS electronic stamps issued to all Certified members instead of Full Stamps, all other existing marketing materials will remain the same.

Certified Members will be voting members of the institute and eligible for nomination to a position on the board.

If you are currently a Fellow Member:

Nothing will change with your membership unless you are also Certified.

If you are currently a Life Member:

Nothing will change with your membership.

The Results are In....

Our members have voted and the overwhelming majority are in favour of the change of the corporate structure of the AIMS from an Incorporated Association to a Company limited by Guarantee.

We are excited about this move which is a direct reflection of the growing national organisation we have become and the opportunities for further growth into the future this change will afford us.

As a member, you will notice little change in your day to day experience with the Institute. Most of the changes are administrative with the biggest being a change of governance from an Executive Committee to a board of Directors.

Do you want to be involved in the AIMS's future direction, building upon the great work of our current and previous Executive teams?

Why not consider a position on the Board of Directors?

For information of what being a member of the Board entails and how you can become involved, contact Stacey at:

gm@aimsurveyors.com.au



- 20th – 23rd May – Sanctuary Cove International Boat Show
- 21st May – QLD Networking Event, Boardwalk Tavern, Hope Island
- 29th July – 1st August – Sydney International Boat Show
- 10th September – AIMS Awards for Excellence & Dinner
- 10th September – AIMS Annual General Meeting



Great [or not so] Adventures in Marine Surveying

by Howard Peachy

My first real surveying job was in Adelaide, whilst on secondment from the design and drawing office where I worked in Sydney about 1973.

I had been sent to Adelaide to help in the construction of an 8m timber sailing yacht to our design, which was to be the prototype model for a range of GRP cruising yachts to be built in the USA by Columbia Yachts.

The builder of the prototype was a personal friend who had been an apprentice boat builder with me in Sydney in the 60's and whilst I was in Adelaide he received a request to conduct a Pre Purchase Survey on a sailing yacht that was to take part in the upcoming Sydney Hobart yacht race. The builder suggested I did the survey for him, as we were up against a time limit to launch and sail the prototype saying that he could not take the time off to do the survey and leave the working team without a "leader".

The vessel to survey was a typical 11m GRP cruiser/racer of the period with a fin keel and rudder on a skeg. She had the cabin style at the time of sloping cabin sides and front, which I thought at the time was rather more for that "racy" look rather than being practical for an ocean going vessel. There was a larger than normal companionway hatch with sloping sides and the breadth of the vessel was the style at the time to give a good rating under the current rating rule.

I asked the owner about his intentions for the vessel and he said he was buying it to go in the up-coming Sydney-Hobart yacht race and since the yacht had already competed in the two previous Sydney-Hobarts, thought it would be perfectly suitable.

With the vessel out of the water I proceeded with the survey and started by percussion testing all over the hull, inspection of the rudder, rudder stock and skeg, "P" bracket and

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As with some other yachts in the race, the yacht my friend was on lost its rudder, the rig was gone, bulkheads had separated from the hull, ports stove in with the interior a complete shambles”



propeller and propeller shaft [not withdrawn], which all seemed normal. Also up on deck the structure which was GRP plywood cored, seemed sound and all the deck fittings etc. in good condition and well fastened. All windows were inspected and any high stress structural areas were inspected for cracking.

Going below I proceeded to look at the structure to ensure that all the bulkheads and all the other hull supporting structure was well bonded to the hull, keel bolts appeared sound [but not withdrawn without dropping the keel]. The usual inspection of instruments, electrical equipment, bilge pumping and all piping including fuel lines, tankage and venting etc.

Although not necessarily to be commented upon, I thought that the rather wide breadth of the vessel, in the event of a capsize might lead to the vessel staying upside down for quite a while.

Some items I was concerned with were:

1. The 9mm thick plywood hatch boards in my opinion were too thin for the width of the companionway. I thought that (a) They were not strong enough to resist a boarding sea from aft, (b) They might flex and pop out of the hatch slides, (c) Due to the hatch slides being well angled, I thought that it would not take much of a heel, say in a knockdown if the boards moved, for the hatch boards to fall out [there was no way of fixing the boards in place.
2. The plexiglass sliding hatch I also considered too flimsy and likely to deflect under load and pop out. Also there was no arrangement for fastening the hatch so that one could open it from the inside.
3. Due to the "racy" angle on the cabin sides, I thought that the cabin required a bit more support in the way of hanging knees and a few deck beams to avoid cabin collapse or fracture of the cabin to deck join, if the vessel was capsized or knocked down.
4. The rudder stock whilst strong enough when the vessel was in forward motion, I thought that if the vessel went astern at more than 4-5 knots when sliding stern first down a Bass Strait wave, it had every chance of breaking or getting bent.
5. I thought that the vessel needed some framing to support the bow in way of bottom and topsides areas when falling off waves and slamming.
6. There was no way of positively keeping the doors on storage cupboards and ice box lids locked shut, to prevent items falling out if the vessel was knocked down or picked up by a wave and dropped. Similarly bunk top hatches and cabin sole boards could come loose. I have seen a bottle of strawberry jam demolish itself after bursting out of a cupboard, flying across

a cabin and hitting a bulkhead. The three crew became very sticky and had small cuts to their feet before deciding to put footwear on. Trying to restore order in a cabin with no lighting due to water inundation [these things nearly always happen at night], whilst floating cabin sole boards swish about in the mixture of jam, mushy paper, with loose onions and potatoes underfoot, the contents of burst porridge container and other food containers, whilst stepping into a void where the cabin sole boards were supposed to be, was not pleasant and something not to be repeated.

7. The batteries [lead/acid] were not in a securely held down vented leak proof box.

8. Up forward the anchor and rode were stowed in a box just forward of a half- height bulkhead at the head of the V Berth. No arrangement had been made to keep the items in place if the vessel was capsized or knocked down. Similarly the spare anchor and rode kept in a box under the cabin sole would have just come out and possibly injured the crew.

9. Again, there was not any noticeable positive restraints for heavy items such as tools, spares etc.

10. I suggested that as the vessel might be going to Hobart, it would be wise to get a qualified rigger to inspect the rig. However the prospective owner said he would get a "mate" to do it.

The concerns I found were put in my report for Pre Purchase purposes and to be presented to an Insurance company, if the prospective owner bought the vessel.

As far as I was aware, the vessel was purchased, my concerns were not commented nor acted upon and presumably the vessel competed in that years Hobart race without any incidents.

Fast forward to the 1979 Fastnet Yacht race, when we watched or heard the appalling loss of 15 lives and abandoned yachts. A close friend joined a 10.4m yacht for the race just "because he was on leave" from the R.A.N. and "had nothing to do" whilst in England. He ended up rescued from the battered yacht by a French trawler two days later. The yacht was never seen again.

As with some other yachts in the race, the yacht my friend was on lost its rudder, the rig was gone, bulkheads had separated from the hull, ports stove in with the interior a complete shambles, after a couple of times being picked up and thrown down and rolled over twice. The skipper, a Royal Navy Lieutenant had a broken arm and head injuries. My mind went back to that yacht I had surveyed in 1973 in Adelaide which was a similar styled cruiser/racer.

Statistics for damage to vessels in that race are available in the enquiry published by the Royal Ocean Racing Club and various books. [Fastnet, Force 10 by John Rousmaniere].

Further forward to the similarly disastrous Sydney - Hobart race of 1998, anyone who reads FATAL STORM by Rob Mundle will find most of the items I was concerned with happened to yachts in that race. The photograph of "VC Offshore Stand Aside" [between pages 174 and 175] with her cabin top partly stove in and companionway open to the sea was a sobering sight. The description of the conditions and damage on pages 128 - 130 should have been a wakeup call to all those who race or cruise offshore.

The question I am raising is whether a qualified Marine Surveyor/Naval Architect should document some of the above possible failings as part of an Insurance or Pre Purchase survey. In case of an accident where persons may be injured or die, could the surveyor be held responsible [regardless of disclaimers] if he knew but failed to document that an item that he considered unsuitable for an ocean going vessel, had been responsible for the injury or death.

By doing the above, a surveyor may get the name of being far too rigorous in surveying vessels and as such by word of mouth, start to lose business.

Surveyors of commercial vessels are on safer grounds in the above respects, as the rules that govern their certification are far more onerous and wide ranging. Although I still find that the Surveyor is apt to get a "bad" name as far repeat work if some of the above items are mentioned. As far as smaller vessels are concerned, the authorities do not seem to approach the particular problems smaller vessels can face in the open sea such as higher than anticipated accelerations, slamming pressures and a much higher chance of being swept by breaking waves. In the 70's Hatteras yachts in the USA drove a 13.7m power yacht at 22kn. through 2.5m to 3.7m waves and discovered that on the Fly bridge of the vessel, impact with a wave could produce forces up to 12 g, fortunately only for 0.15 sec.

However the forces that can be produced in bad weather can ultimately have an effect on humans as well as a vessels structure. Have these problems been taken into account?

It is all very well to have at the design stage tables or graphs to say that in a certain sea state a certain speed should be used. But as we know the sea can be an unpredictable mistress.

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The question I am raising is whether a qualified Marine Surveyor/Naval Architect should document some of the above possible failings as part of an Insurance or Pre Purchase survey.”

Dying for a new boat?

It shouldn't have to come to that.



Boats are what we do, not what you die for.

Getting out on the water is a favourite Aussie past-time and we want to help you make sure that the boat you purchase is suitable for you and what you want it to do.

Purchasing a boat is a big investment and things can and do go wrong so you want the best advice possible.

Engaging a Certified Commercial Marine Surveyor™ to help you buy a boat makes a lot of sense. A quality condition survey is the best investment that you will make as part of the buying process.

Getting it right the first time may just save your life.

So how do you choose a surveyor that is right for you?

There are no Government controls that regulate the minimum qualifications or experience required by a marine surveyor in the recreational boating industry.

The Australasian Institute of Marine Surveyors encourages boat owners to only engage a Certified Commercial Marine Surveyor™.

We care passionately about getting you out on the water because we love it too – but more than that we care about your safety and that means we care about your boat.

Check your marine surveyor's qualifications yourself or talk to us before you purchase a boat or engage a marine surveyor.

It's our profession, not our part time job.

To become a Certified member of the AIMS, surveyors must provide evidence of their qualifications and experience that support the areas of specialisation they advertise.

AIMS Surveyors also commit and adhere to the AIMS Code of Professional Practice giving you, the boat owner, greater peace of mind.

We want you to have a new boat but you shouldn't have to die for it!

Find a surveyor at www.aimsurveyors.com.au
Email us on info@aimsurveyors.com.au
or call us on 02 6232 6555



AUSTRALASIAN INSTITUTE
OF MARINE SURVEYORS

Pilot cross (Devil's Cross) Standards, Usage and Spread

by Lacka - Sevgi Girgin

ITU - Maritime Faculty - Marine Machinery Management Engineering

The pilot cross is the ladder that the pilot captain uses to get on and off the ship. Also known as the Devil's Cross. It is made of sızal rope and has standard dimensions. Rope size and millimeter, step spacing, step width and length are standard. However, their length may vary according to the length of the ships.

The lower parts are made up of rubber steps, the reason is to be closer to the water and to prevent the danger that may occur in case of jamming between the ship and the boat or between the ship and the boats. A 180 cm long step is used just behind the rubber steps. This step ensures that the ladder does not rotate in suspension, which is called the spinner of the pilot cross.

The pilot cross consists of a rubber step, a short tree step, a long tree step, an amulet and a pumice rope. The amulet prevents the steps from sliding down the rope. Crosses are made of braided and pressed. Knits are made by façuna by means of tarred knives. Pressing is done with light aluminum prints.

It is all too common that during embarkation / disembarkation, many pilots, seafarers and marine surveyors have been injured or killed around the world due to accidents due to non-compliance.

Usage Standards

Since accidents are considered an issue of international importance, the International Maritime Pilots Association (IMPA), the International Maritime Organization (IMO) and the International Standardization Association (ISO) have worked to prevent such accidents.

All ships must fully comply with Rule 17 in section V of the SOLAS Convention on Navigation Safety to prevent accidents during embarkation / disembarkation.

We can summarize the 17th rule in section V of the SOLAS Convention, which explains the "use" and "construction and size" standards of the guide crosses, which should be used for a pilot to get on / off the ship safely:

- 1) The cross shall be sufficient to enable pilots to safely get on / off the ship, and shall be kept clean and in good condition.
- 2) The cross will be securely tied away from the sidelights, each step will fully abut the ship's aisle and the steps will be parallel to the horizon (sea surface).
- 3) The crucifix will be tied to a place away from any liquid discharges from the ship or the liquid discharges located close to the crucifixion will be stopped.
- 4) The cross that extends from the entry point to the sea will not be an attachment, in other words, the cross will consist of one piece.
- 5) Under normal conditions, the lowest rung of the cross will be at the height requested by the pilot from the sea. (This varies from place to place depending on the height of the pilot motor deck from the sea.)
- 6) When adjusting the height of the lower rung of the cross from the sea, a margin will be left to the opposite side up to 15 ° with loading and trim conditions, besides the side height of the ship.
- 7) The pilot will be able to enter the ship safely and properly after climbing from a cross of at least 1.5 meters and at most 9 meters.
- 8) When the height from the sea surface to the entry point of the guide to the ship is more than 9 meters, the pilot cross will be used with the gangway.
- 9) Safe and useful hand holding places will be provided where the guide enters / leaves



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It is all too common that during embarkation / disembarkation, many pilots, seafarers and marine surveyors have been injured or killed around the world due to accidents due to non-compliance.”

the ship. When this entrance is from a side, handrail (or bulwark) door, there will be suitable hand grips on either side of the door. When the entrance is made from the top of the rail, the part above the rail is 120 cm, 4 cm in diameter and not less than 70 cm from each other, with two hand holding bars, the part below the rail will be tightly tied to the ship's body from the bottom and top; There will also be a handrail ladder between the handrail and the deck, firmly attached to the parapet and the deck.

10) At night, the deck section where the cross and the guide board the ship shall be properly illuminated, from top to bottom and from head to aft.

11) A life ring equipped with a self-luminous (burning) lamp will be kept at hand ready for use.

12) A handhold will be kept at hand to be used when necessary.

13) The cross shall be usable with all kinds of equipment on both sides of the ship (one each).

14) The cross will be equipped under the supervision of a responsible officer.

15) The pilots will be on board and disembarking under the supervision of a responsible officer.

Structure and Dimension Standards

1) The side ropes on each side of the cross shall be made up of two manila ropes with a circumference of not less than 6 cm and their tops (covered with anything), and each rope will be one piece from the bottom of the upper step to the bottom.

2) Two lifelines and a safety rope with a circumference of not less than 6.5 cm, which

are duly tied to the ship, shall be kept ready to be used when necessary.

3) The steps of the cross will be made of hardwood without knots and from one piece or another material of equal quality, and their surfaces will be non-slip. The lower four rungs of the cross can be made of a material of equal character of sufficient strength and hardness.

4) Crucifix steps shall be at least 40 cm in length, 11.5 cm in width, and 6 cm in thickness (excluding the non-slip material).

5) The distance between the steps of the cross shall be equal and this distance shall not be less than 30 cm and more than 38 cm. (the most suitable is 31 cm.)

6) While the steps of the cross are being made, they will be tied together so that they remain parallel to each other.

7) In order to prevent the cross from turning over by twisting, a single piece of hardwood or other material of equal quality, not less than 180 cm, shoulders (long steps) are to be placed at appropriate intervals starting from the fifth step below, and more than eight There will be no steps.

8) There will be no more than two steps on a cross that have been altered by connecting with a method other than its original structure, and these will be replaced and renewed in the shortest possible time with the steps to be connected by the method used in the original construction of the cross.

Since a minor negligence or improper situation causes the pilots to be injured, disabled or killed, the standards we have summarized above, which are meticulously determined by IMO and ISO on pilotage crosses, have been learned from the events over the years. It reveals how much attention and care piloting removal operations actually require.

Moreover, it should not be forgotten that the ship pays thousands of dollars in fines as a result of any accident. In addition, since his life depends on the safety of wooden steps with ropes passing along the edges, the pilot who encounters a cross that does not comply with IMO standards has the right not to go on the ship (or not to disembark) until the cross is brought into compliance with the standards.

Despite the close connection of the cross with the life of the pilot, we have to say with regret that in some of the ships we go to piloting, we see that the importance of the issue is not sufficiently understood, ignored and many mistakes have been made.

Since a minor negligence or improper situation causes the pilots to be injured, disabled or killed, the standards we have summarized above, which are meticulously determined by IMO and ISO on pilotage crosses, have been learned from the events over the years. It reveals how much attention and care piloting removal operations actually require.

We can list the mistakes made as follows:

- 1) The cross is tied longer than necessary; such that sometimes the lower steps are in the water.
- 2) The steps of the cross are not connected parallel to the sea surface and are one side down and one side up.
- 3) The cross is not well fastened to the deck or has a gap because it is loosely attached, so there are rapid jerking and shifts when the pilot is crucified (which is why many pilots fell into the sea).
- 4) There are no handrail stairs or there are dangers and accidents during the transition because they are not placed directly opposite the cross.
- 5) Since the handrail ladders are not fully fixed between the deck and the handrail, they sway, slide or even fall when pressed.
- 6) The long steps (stays) of the cross that prevent it from turning over do not exist or do not work because they are rarely placed.
- 7) There are no handholds or stanchions at the entry / exit point (on the rail).
- 8) At the entrance / exit point of the ship, the loads, the back part of the cross left in an unsuitable condition, etc. there are obstacles.

9) Since some of the marsepets that fix the steps of the cross on the sides have fallen off, one end of such steps has slipped down.

10) There are broken and missing steps in the lower parts of the cross.

11) Although the free side of the ship is higher than nine meters, the cross and the scaffold are not used together.

12) When the cross and the scaffold are used together, the lower pan of the scaffold and the cross are not adjacent, connected to each other and kept away from each other.

13) When the cross and the sidelight are used together, the upper steps of the cross do not extend, although they should extend at least two meters above the lower pan of the scaffold.

14) Handcart and lighted life buoy are not available on board.

15) At night, the deck section where the cross and the pilot will pass is not properly illuminated.

16) At the head of the guide cross, there are no officers who must meet the pilot and take him to the bridge.

17) The officer in charge of welcoming the pilot captain at the beginning of the cross does not have a hand-held radio to connect with the bridge.

18) No attention is paid to go upwind while taking / removing the pilot captain.

19) In order to ensure that the pilot engine can safely dock on the side of the ship, a forward path of around 5 knots is not protected, the ship either accelerates more or stops completely; Meanwhile, while taking / removing the pilot, even though it is very dangerous, there are even ships making astern.

Undoubtedly, each of the negativities mentioned above can cause an accident. Therefore, it is required that all ships fully comply with the rules set by IMO and ISO.

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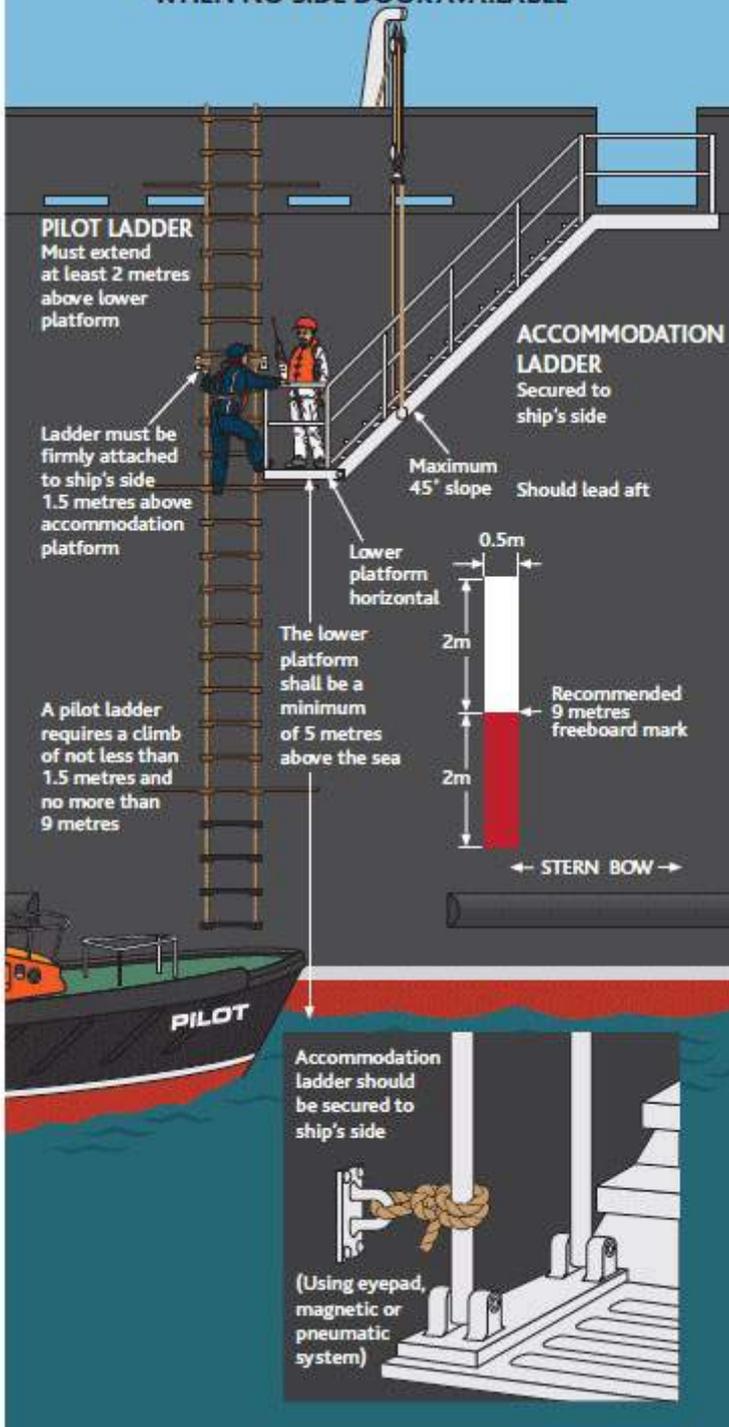
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Mehmet Furkan ALP

Originally published in Dargeb Ufkun Magazine.

COMBINATION ARRANGEMENT FOR SHIPS WITH A FREEBOARD OF MORE THAN 9 METRES WHEN NO SIDE DOOR AVAILABLE



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Undoubtedly, each of the negativities mentioned above can cause an accident. Therefore, it is required that all ships fully comply with the rules set by IMO and ISO.”



Training on the Brain

What is Continuing Professional Development (CPD)?

It can seem overwhelming, the need to always be learning and developing professionally. When you are very experienced, established and well respected in your field, the need for additional formal training may seem futile. So why is CPD necessary?

There is a misconception that to fulfill CPD requirements, you need to be out there undertaking courses, attending seminars and conferences, or learning new skills. But this is not the case. We all undertake CPD activities as part of our everyday professional practice, it is just a case of identifying and recording these activities.

Keeping abreast of industry news via publications online or in print – they all count.

Tuning into a live or pre-recorded discussion around something new happening either locally, nationally or globally in the industry – this counts too.

Attending a meet up, either formal or informal to broadly network or discuss a particular topic or relevant area of interest – you guessed it, this also counts.

And if you really don't think you do any of these things each year, why not share some of your experience in a piece for inclusion in our newsletter to help our up-and-coming members achieve their CPD – and sure enough, this will also count!

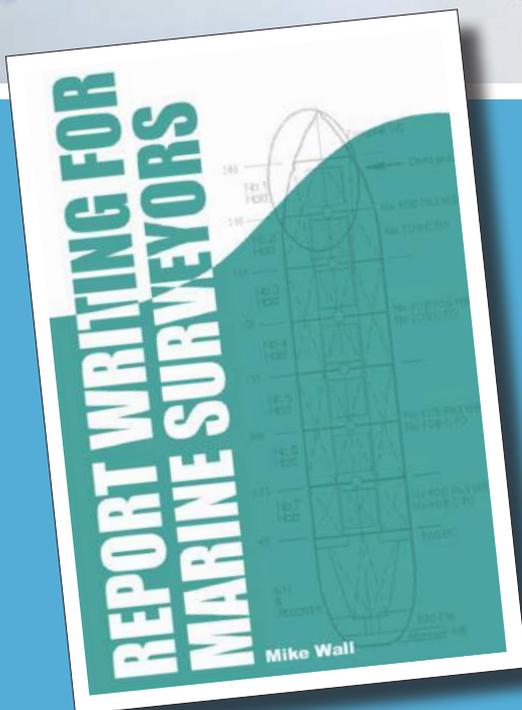
Report Writing for Marine Surveyors – by Mike Wall

Marine surveyors/reviewers have described this as a 'must have' book on their shelves, ideal to help a new surveyor learn his craft with some useful tips for more experienced surveyors.

Half of the work carried out by marine surveyors is report writing and, as Mike Wall makes clear in his introduction, a quality report is both legally and commercially critical. This 320 page guide to writing a good report is a welcome addition. One might question how 320 pages worth of guidance is required but it soon becomes clear that writing the report is just the tip of a very big iceberg that includes evidence gathering, interviewing skills and legal knowledge..

It is an excellent primer on surveying, with an abundance of templates, and a fair number of examples of issues that a surveyor may encounter. It is a relatively small book that fits in a rucksack or a laptop bag, and you will find it dog eared after a period of time. It is considered to be part of a marine surveyor's kit, along with a flashlight, a tape measure, callipers, a metric/SAE ruler, a camera and what-ever gauges might be necessary.

Available from www.petrospot.com/books





A day in the sun

Being a marine surveyor does not only bring you the opportunity to have an office on the waterfront, but also gives you DREAMS.

The DREAM to one day be the surveyor and witness the lift of your very own brand new motor yacht.

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Roger Weiller
Young Surveyors Committee

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Don't Look Back

by Kent Stewart *Courtesy of Baird Publications.*

A friend of mine, a pilot in Townsville, invited me to join him during an inbound pilotage of a car carrier back in the 1980s. The bridge is forward on car carriers and there was a strong crosswind on the day. My friend said the trick in bringing in these high windage ships was to never look back. I sneaked a quick look aft to see what he was talking about. The ship was coming down the channel, crabwise at an angle of about 30 degrees to its path. I've never forgotten that experience. Every time I see a car ship or a container ship stacked to the heavens presenting such a big windage profile I think of that experience on the car ship.

As soon as I heard the circumstances surrounding the grounding of the Ever Given in the Suez Canal, my immediate thought was "it had to happen". The high windage area of container ships as they continue to grow in size causes one to consider this ever-growing problem. Even back in the 1970s on much smaller ships I can remember steaming along with a list caused by wind on the beam. Containers are stacked so high on today's mega-carriers that they make car carriers almost small by comparison. Given the millions of dollars lost during this grounding, one questions if ship sizes have outgrown the canal? The canal, at the point of grounding, was 300 metres wide. The Ever Given is 400 metres long.

Which brings me to the other topic that is of concern. The high stacking plans on modern ships.

When Malcolm McLean introduced standard containers in the 1960s, he revolutionised ship's cargo carrying capability. Better security of cargoes and quicker turnarounds resulted almost immediately. But he probably never conceived that container ships would become so big. Even his mighty 33 knot SL7 Sealanders only carried containers three-high on deck. Today they are stacked up as high as 8 levels. Container losses are on the increase. The ONE Apus collapse last December is only one of the most recent embarrassing and extremely costly losses. The YM Efficacy's losses of 60 containers off Newcastle is another of the many lashing failures attributed to heavy weather.



The list goes on, the APL England, the Rena and the Napoli. Even the breaking in half of the MOL Comfort and its 4293 containers has been thought to be due to mis-declared container weights (although the evidence is lost forever). The reasons for these losses are hard to quantify. Certainly, accelerations at great heights above the ship's centre of gravity are the cause. But why are some parts of the cargo stack unaffected?

Were the twist locks a standard pattern? That is, a quarter turn to the left to lock? I have encountered, during my surveying days, non-standard twist locks that are opposite handed to the standard ones. That is, a quarter turn to the right to lock. The problem is obvious; the observer could think they are locked when they're not.

Then there are the lashings themselves. Are they always fully tensioned up? During my time on container ships, I can confirm that lashings are often left loose. The constant clanging at night is a testimony to this. And these big ships do bend. Which causes the lashings to become loose.

There are any number of reasons why a shipper's valuable cargo doesn't reach him. Another serious issue is the undeclared container contents such as dangerous goods, flammables or simply the weights in the



containers themselves. Even incorrect packing of containers can cause failures. Years ago, the sight of a forty-footer broken in half, the result of incorrect packing, starkly reminds me that incorrect loadings can be dangerous and costly.

Often ships officers don't have any idea of the container weights particularly in high stacks. In fact, they only hope that their entries in the stability programs can be accounted for within the constraints of the ships GM. The World Shipping Council pushed for mandatory verification of container weights prior to loading and in 2016 the SOLAS convention was amended to mandate the verification of the gross weight of containers. But this has not been particularly well enforced, if at all. Container weights continue to be poorly estimated or wrongly estimated.

Obviously, a heavy weight, high in the stack and accelerated during a heavy roll can and does cause lashing failures.

The economy of scale of these huge mega carriers is only the tip of the iceberg when it comes to possible losses.

The World Shipping Council (WSC) has made efforts to estimate the number of containers lost overboard each year. A recent study of their 15,000 members concluded that, on average, 1372 containers in total are lost overboard each year. This figure is at odds with anecdotal figures of upwards from 2000 containers. The One Apus lost 1812 containers alone which makes the WSC figures questionable. Bear in mind that these figures are for containers lost overboard. It doesn't account for containers in collapsed stacks still remaining on board. That's the figure that interests cargo underwriters.

Catastrophic container losses are becoming more prevalent. The ONE Apus was a fairly big ship, about 20,000 TEU. The mega-carriers approaching 23,000 TEU are increasing in number. Currently there are about 266 million containers shipped each year, a figure that is almost double the number shipped fifteen years ago. I believe we will see more losses in the future. Is there a need to improve lashing arrangements on mega-carriers?

The rapid growth of container ship sizes throws up more problems than purely getting cargo from A to B as cheaply as possible. The failure of lashings and the Suez Canal issues are just another consequence of the economy of scale.

Safety & Changes

by Paul Nicholson - Cargo Care

After reading the last, very informative, newsletter from the association, it made me think back some 56 years ago to just how things have changed. Back in those days surveyors would squeeze their bodies into hatches to go and inspect deep tanks and heating coils, to ensure they had been properly cleaned for the next cargo (mainly tallow). Surveyors would go down in the bowels of the vessel to check the condition of the bilge water as often broached cargo's , including barrelled liquor, would seep down. I am sure many of the members could add a few stories on drunken crew who had along with the rats participated in the liquid!

In those days' safety gear was a good pair of boots, no hard hats or in many cases no "Fluro" vests. If you had asked about PFD's no one would have understood! I'm not sure whether OH&S had even been coined, let alone procedures for walking up gang planks, working at heights or confined spaces and other protocol that are now in place.

Wharf workers (wharfies), who rolled bales and stowed cargo from nets in vessels, tween deckers etc, were much the same, good boots and blue vests and sometimes a floppy hat! Many of the wharfies had nicknames, which in many cases they were known as, even by the agents and the local publican. Apart from the usual names with "o: at the end of them, such as "Jacko, Tommo etc., there was the odd one that better described them, such as one called "the snail"!

The clerks were different, they had white shirts and a trilby hat which they wore like a badge of honour when on the wharf. The clerks had their own office in the "shed" and for most visitors, after passing security at the gate, they were the first people to talk to. They arranged someone to take you to the ship or on the wharf to inspect cargo's and controlled the "Dead House" where high value cargo, surplus cargo and damaged cargos were held, a true "Aladdin's cave of goodies ".

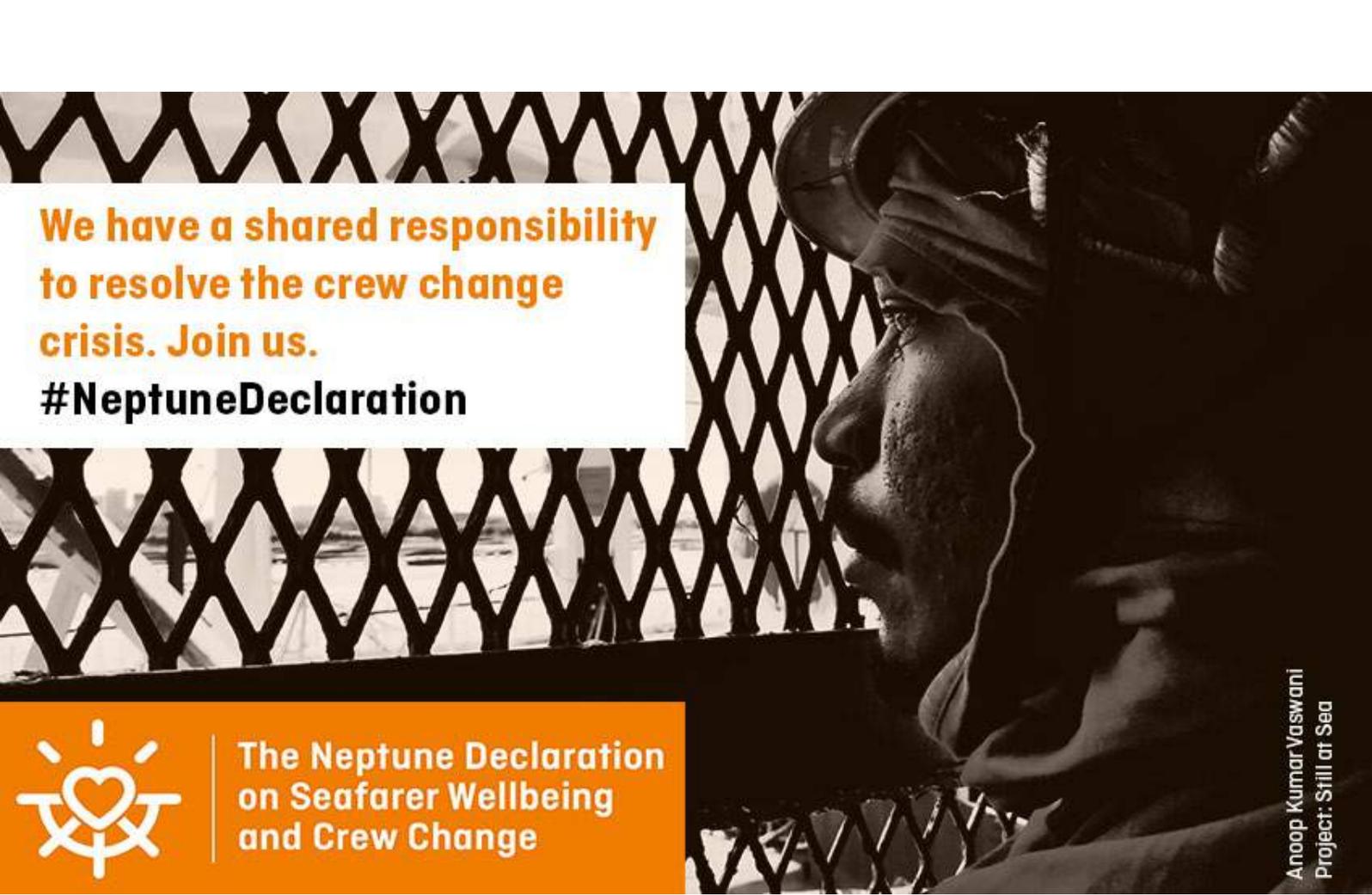
The union Delegate of which there were often 3, one for the DCU, WWF & TWU looked after their respective members. I was told that there were 13 different unions involved in bringing in, discharging, and sailing vessels - stoppages, authorised and unauthorised, were a regular occurrence.

As I see the automated wharves, it is amazing to see how things have changed, mainly for the better with improved and safer security and working conditions. However, with computer log ins, all authorities are putting more of their administration back on the contractors who also bear these costs.

So, what will the future bring? Crewless vessels, self-lashing container vessels, fully automated terminals and cranes, surveys by drones or via video? All of these have been tested and to some degree, are currently being used.

We can't stop these innovations, but we can plan for them!





**We have a shared responsibility
to resolve the crew change
crisis. Join us.**

#NeptuneDeclaration



**The Neptune Declaration
on Seafarer Wellbeing
and Crew Change**

Anoop Kumar Vaswani
Project: Still at Sea

AIMS joins forces with over 800 companies and organisations to help resolve a humanitarian crisis on the world's ocean

More than 800 companies and organisations recognise that they have a shared responsibility based on their roles across the entire maritime value chain, and beyond, to ensure that the crew change crisis is resolved as soon as possible. In April, the Australasian Institute for Marine Surveyors signed the Neptune Declaration on Seafarer Wellbeing and Crew Change that defines four main actions to facilitate crew changes and keep global supply chains functioning:

- Recognize seafarers as key workers and give them priority access to Covid-19 vaccines
- Establish and implement gold standard health protocols based on existing best practice
- Increase collaboration between ship operators and charterers to facilitate crew changes
- Ensure air connectivity between key maritime hubs for seafarers

“Seafarers play a significant role in the global race to halt the coronavirus pandemic by providing critical medical supplies to the world's population, particularly in developing economies. They are crucial to millions of peoples' wellbeing. We call on our peers, government bodies and other stakeholders to join us in our efforts to ensure that the rights and wellbeing of the frontline workers of global supply chains are respected,” says Graham Westgarth, Chairman of V. Group.

The Neptune Declaration has been developed by a taskforce of stakeholders from across the maritime value chain including A. M. Nomikos, Cargill, Dorian LPG, GasLog, Global Maritime Forum, International Chamber of Shipping, International Maritime Employers' Council, International Transport Workers' Federation, ONE, Philippine Transmarine Carriers, Sustainable Shipping Initiative, Synergy Group, V. Group, and World Economic Forum.

Learn more about the Neptune Declaration and see the full list of undersigning companies and organizations here: <https://www.globalmaritimeforum.org/content/2020/12/The-Neptune-Declaration-on-Seafarer-Wellbeing-and-Crew-Change.pdf>

The Ubiquitous Marine Surveyor

by Mike Wall

“

Singapore has the largest number of marine surveyors per square kilometre than any other city in the world”

Some twenty years ago it was suggested to the UK Government that marine surveying should be a recognised profession and that they should help fund apprenticeships. A meeting was held in London where all stakeholders attended. It was clear that the Government representatives had no idea what a marine surveyor is. Their representative asked all around the table for their opinion to which each and every one responded that they could not operate without them. More about this later

Yes, they are everywhere. Often hidden from public view. Singapore has the largest number of marine surveyors per square kilometre than any other city in the world, particularly since the island state has such a large shipping industry, including ship building, ship repair, container handling, bunkering and logistics services.

Marine surveyors are the ‘eyes and ears’ of their clients, being employed to assess the condition, value and risk factors affecting all types of vessel together with investigating losses. Their product is a formal, written report to the client.

They are in two main groups, merchant vessel surveyors and pleasure craft surveyors. These can be further subdivided into ‘Staff’ and ‘Independent’ marine surveyors. The former is employed by organisations such as Classification Societies, Government departments, Flag States, etc. The latter tends to be self-employed and ‘independent’, assessing the risks not covered by the former.

The Class surveyor will be a staff surveyor with one of the 20 or so recognised and approved societies, eg, Lloyds Register, American Bureau of Shipping. They attend at various times during the vessel construction, eg, in the ship building yard, the foundry where the anchors



are being cast, etc. Using Class is no guarantee of quality as it is impossible for the Class surveyor to be on site every day.

There have been some classic (excuse the pun) errors, eg, faulty casting of 18 Class approved anchors for 6 new Asian-built container vessels. During the maiden voyage across the Pacific of the first vessel the starboard anchor broke in two at the upper end of the stock. All 18 anchors had to be replaced at the Classification Society's cost. Many vessels built in China in recent years to Class rules have been so poorly constructed that buyers have sold the new vessel to other buyers on the vessel's delivery.

Insurance may be for hull and machinery (H&M) or Protection and Indemnity Association (P&I) cover. The former relates to the hull and machinery only whilst the latter protects ship owners against most other risks, eg, cargo damage, crew injury and pollution.

The P&I surveyor will be an independent surveyor subcontracted by the managers of the P&I Club, eg, UK P&I Club, Swedish Club. Owners apply to a P&I Club to have their vessels 'entered' on the understanding that a condition survey will be carried out by one of their independent and accredited marine surveyors, usually within six months. When defects are found a follow-up survey will be carried out. When there are accidents and incidents an independent marine surveyor will attend on behalf of the Club. This puts the surveyor in a difficult position of 'piggy in the middle' as he is appointed by the managers to survey a members' vessel. Bedside manner is thus a critical asset in difficult situations.

Those buying a second-hand vessel, will usually hire an independent marine surveyor to carry out a pre-purchase condition survey to assess the condition of the vessel. The surveyor's report should help the client decide whether to buy the vessel or not. A competent surveyor should be able to assess all areas of the vessel and calculate costs for any necessary repairs.

Ship owners often hire their vessel or 'charter' them to others, known as 'charterers'. When the vessel goes 'on hire' an independent marine

surveyor may inspect the vessel and record its condition. When the ship comes off charter another independent marine surveyor will carry out an 'off-hire' inspection to assess the condition and report on any damage. Such surveys usually include a bunker survey where the amount of fuel and lubricating oils on board is recorded.

Ships are built to carry cargoes and earn 'freight' for their owners. It is a well-known fact that 95% of the world's commodities are carried by sea, from bulk cargoes to processed goods. Marine surveyors are often required to inspect a ship and its cargo before and during loading aboard ships to ensure that they are in good condition and cargo stowed in an appropriate manner. When damage occurs during a voyage a marine surveyor will be appointed by cargo owners or insurers to assess the damage and costs. Consequently, marine cargo surveyors tend to be the largest sub-group of merchant vessel surveyors.

Marine surveying can be further subdivided into pro-active and reactive surveys, ie, those carried out before a voyage to ensure that the vessel or cargo are in an appropriate condition and those carried out when damage has been sustained to the vessel, cargo or other property. Independent H&M surveyors will often be called upon to carry out reactive type surveys, eg, to investigate the cause, nature and extent of damage due to fire, explosion, grounding and collisions. The surveyor will report to the H&M underwriters so that they can set aside the necessary funds to compensate the assured.

Another branch of our profession is marine warranty surveying (MWS) who provide an independent third-party technical review and approval of high value and/or high risk marine construction and transportation projects. The need for this type of surveyor is becoming greater each day with the increase in the number of offshore operations being undertaken, eg, oil/gas exploration and recovery, offshore wind farms, etc.

Like merchant vessels, larger pleasure craft, ie, those over 500 GRT, tend to be built to Class rules. Smaller craft may be built to other standards, eg, European standard, American Boat Council or the National Standard for the Australian Builders. For other than Class, an independent marine surveyor will attend at various stages during construction to ensure that the vessel meets requisite standards. Marine surveyors will also attend on board a vessel on behalf of insurers when involved in an incident.

Pleasure craft surveying tends to be the most litigious. The prospective buyer may be in love with the boat and nothing you can say will change their view of the vessel, despite the marine surveyor offering an independent, objective and expert opinion of the vessel.

Then there are those marine surveyors who progress to become marine consultants, specialising in specific areas of shipping in which they have become experts. During litigation, when lawyers cannot agree on the technical aspects of a case, a marine consultant may be appointed to offer an expert opinion on the matter. In the event that the matter still cannot be resolved, the marine consultant may appear in court as an expert witness.

As to my first paragraph, a Marine Surveyor Apprenticeship scheme has recently been given formal UK Government Ministerial approval. Full details of the apprentice scheme can be found at the Institute for Apprenticeships & Technical Education website.

“

Many vessels built in China in recent years to Class rules have been so poorly constructed that buyers have sold the new vessel to other buyers on the vessel's delivery.”



Business for Sale

You may be aware of "George & Sim", a Melbourne based Marine Surveying firm that was first established in 1923.

Over the many years the firm has, under the guidance of several Principals, established and maintained a substantial reputation in the surveying field in Australia and Overseas. Over times it has grown and shrunk as the available work and circumstances required.

I have been at the helm for the last 40 years, and despite still thoroughly enjoying the challenges of self employment, it is, at the age of 74, time to pack up. I would hate to see such an old established name simply disappear, and would like to sell the company, preferably to an enthusiastic young Surveyor who will push it past its hundredth birthday.

For the last 10 years I have run the business on a quiet easy going "semi-retired" basis, and the turn over has reduced to a level that it would not support a young Surveyor with a family. It does, however, still have a steady annual income stream of some \$50,000, which would very well compliment an already existing business.

The current work mainly covers Lashing Surveys, Project Cargoes and Cargo Surveys for Overseas (mainly European) Underwriters. I propose to sell it for the equivalent of the average annual fee income over the last three years.

If you are interested, give me a call !

Capt. Peter Bosman
George & Sim Marine Surveyors Pty. Ltd.
Port Melbourne, Australia
Phone: 0408 367 074



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