



AUSTRALASIAN INSTITUTE
OF MARINE SURVEYORS

Shipshape

Newsletter December 2021

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From the Bridge

Chairman's Message

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The AIMS has evolved and transformed to become recognised as the leading Marine Surveyor representative body for the Indo/Asia/Pacific region.”

With the end of another year and holiday season fast approaching, marine surveyors are juggling leave requests with last minute job enquiries, checking their schedules, and sending RSVPs to Christmas parties with the comment “available pending ship movements” or something similar. It is under these circumstances that the AIMS has recently accomplished what is likely the biggest change since its establishment in 1986.

Before I move on, I want to acknowledge the traditional owners of the lands and seas upon which we work, live, and gather, their peoples, their elders, past, present, and emerging.

There are many ‘firsts’ to celebrate this year! The AIMS will now operate under the new Australasian Institute of Marine Surveyors Limited business structure. Previously the AIMS was an association registered in NSW.

The AIMS will be run by a board of seven, with the operational support of the management, media, and administration team. The board may engage consultants where specialist advice is required.

Long-serving, past President, Captain Peter Murday, became the first Chairman of the Board this year. After taking on the role of President in 2013, Peter has been at the helm to navigate the ambitious and forward-looking business plan proposed by previous President, the late Captain Steve Beale. There have been numerous challenges along this journey; however, with amazing support, untiring efforts and diligent contributions of our CEO, Susan Hull, the AIMS has evolved and transformed to become recognised as the leading Marine Surveyor representative body for the Indo/Asia/Pacific region. I personally acknowledge the invaluable contribution of their combined efforts towards the success of the AIMS as we know it today.

Having served alongside Peter Murday as Vice President since 2013, I have become the first non-seafarer or Master Mariner to take on the role of Board Chair.

After completing an apprenticeship as a boilermaker in 1984, and working within a variety of industries, I made my way to Queensland's Sunshine Coast, whereupon I soon found myself engaged in boat building – steel trawlers and aluminium yachts. This led to stainless steel bright work and general marine fabrication, honing skills, and developing a depth of knowledge and reputation in these areas. After working for numerous companies in the marine and maritime sectors, I moved to

Gladstone, Queensland to start my own marine fabrication business, leading to time working in the Gladstone Harbour and gaining an open Coxswain licence along the way. The die was cast!

Self-actualisation: a chance meeting in 2000 with a retired Harbour Master and Master Mariner, Captain Mike Hanson, both fuelled and fed a developing midlife crisis, providing a pathway to marine surveying, and the rest, as they say, is history.

So, it is with honour and great pride, that I take on this new role, and I look forward to working with my fellow board members and our capable management, media and administration team, to meet the challenges that lay ahead. Both Peter and Susan will remain as integral members of the AIMS Board and Business Management teams as we move into 2022, thus providing their wisdom during this inaugural year under the new structure.

Pending the much-anticipated opening of borders and relaxation of travel and quarantine restrictions imposed during the COVID 19 Corona Virus pandemic, I hope to be able to meet with many of our members in person during events already in the planning. Notwithstanding, I am available at most times to discuss matters of concern, field suggestions for improvement and address issues relevant to the very important, and often under-valued services that Marine Surveyors provide. I trust that AIMS members will find all board members are similarly approachable and consider increased membership engagement to be pivotal to the growth and ongoing success of the Institute.

As we celebrate this transformational period in the history of the AIMS, we must remain focussed upon the tasks ahead. The new board has much work to do over the coming 12 months as we focus on developing and implementing the AIMS Business Plan, growing and expanding our membership into emerging markets, and reviewing, improving and marketing AIMS training. I would like to see more Australian marine surveying companies training young talent from non-traditional pathways like mine: if they can see it, they can be it!

Naturally, we (the Board) will also be tasked with support for day-to-day business operations, management, and administration; this never stops.

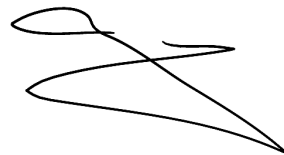
Another key focus during 2022 will be the monitoring of current complaints and disciplinary processes in efforts to identify opportunities for improvement in this increasingly vital area of our business, to meet the challenges expected as a result of legislative changes requiring the AIMS to administer professional marine survey standards and compliance.

During the past two years, as the world has grappled with the Coronavirus pandemic, we have witnessed many changes to how the world works. Sure, some things have changed little; however, many things have completely transformed. Many jobs can be performed remotely, and new opportunities have surfaced. The AIMS must be on the front foot with newly developing marine survey opportunities to ensure they are undertaken professionally and ethically, as befitting the expectations the Board have of all AIMS members.

I want to make special mention of our dedicated management, media and administration team of CEO-Susan Hull, GM-Stacey Taylor, and Marketing Coordinator-Tim Hull. It is their behind the scenes work, endless on-line meetings and attending to member and student enquiries that keeps the AIMS ship on an even keel and on course for even greater successes during 2022.

To all members and their families, on behalf of the AIMS Board, I wish you Happy Holidays, Happy Christmas, or just Happy December as may be appropriate. I am sure that many of you are feeling as I am... well and truly over the last two years and just wanting to take a break. For some Marine Surveyors, this is a reality (full time employees, small craft surveyors); however, for many of us servicing the shipping industry, particularly cargo surveying, holidays are rare and cherished.

Please enjoy this festive season; drive carefully if travelling; care for your loved ones and stay safe.



John Holden
Chair – AIMS Board

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I would like to see more Australian marine surveying companies training young talent from non-traditional pathways like mine: if they can see it, they can be it!”



CEO Report

“

I have stated on numerous occasions to AMSA that managing surveyor accreditation is essentially doubling up on the work of AIMS when there is no need to.”

2021 has been another year of achievement for the AIMS and a summer break will be well deserved.

The recent AGM highlighted our strengths in the financial management of the organisation and the new Board has committed to holding a planning meeting early in 2022 to review the business plan submitted by Stacey Taylor and kick off the next phase of the AIMS.

The new Board, with now 7 members to help spread the workload, will allow much more work to be done on key projects and having Greg Marsden (New Zealand member) as a Director will also help to progress work in the DCV sector across both countries. If there is an existing DCV surveyor with super yacht experience that would like to work with Greg and I over the next year please email me directly for more information.

There have been a few developments in terms of our lobbying efforts and in relation to changes in Government regulator operations and legislative reforms.

There has been a major structural change at AMSA with several senior staff, most notably Deputy CEO – Sachi Wimmer, GM Standards Brad Groves, and GM Operations Al Schwartz all moving on and there appears to be many changes to staff numbers across different divisions of the organisation.

At the recent National Safety Council meeting CEO Mick Kinley advised the members that a rumour was circulating that AMSA is broken and that the organisation has lost its way. CEO Kinley did stress that this is not the case, however, after a gruelling at the Senate Estimates in October a major restructure has occurred.

AMSA CEO will be taking on a more hands on role than he has done previously and Government has requested that operations are streamlined where appropriate and to that end AMSA has engaged Peter White to review how or if AMSA should divest itself of operations that could be done by other agencies or key stakeholders and focussing on major structural change.

VESSELS OVER 35M

AMSA have progressed the policy on vessels over 35m and vessels to 40m and have confirmed that these surveys will be undertaken by DCV surveyors. The legislation is due to be amended in the 4th quarter of 2022. What should be noted is the lack of clarity around vessels over 40m – which I suspect that AMSA will outsource to an approved organisation (Class) probably DNV. While there have been no announcements made I think we will continue to approach AMSA in writing for answers and our position on the capability and capacity of our membership to undertake these surveys.

QUESTIONS ON AMSA ACCREDITED SURVEYOR REQUIREMENTS FOR MEMBERSHIP OF AN APPROVED ASSOCIATION

The question of why the requirements for membership of an approved association were included on the recent Surveyor Workshop notice was fielded directly to the AMSA CEO at the NSC meeting and we have been advised that the legislation is lacking rigour and that the new requirements are intended to be strengthened which presumably means that surveyors will have to provide evidence of membership on an annual basis.

PRODUCTIVITY COMMISSION REVIEW

This review is still ongoing but COVID and other delays have set the timing back to the first quarter of 2022. We have been further assured by the Department of Infrastructure that marine surveyor accreditation will be covered in the review.

As everyone is aware, I have stated on numerous occasions (ad nauseum) to AMSA that managing surveyor accreditation is essentially doubling up on the work of AIMS when there is no need to.

More recently I have advised that as the AIMS is currently moving to an agreement to accredit grain surveyors perhaps there is an opportunity for AMSA to reconsider the use of Certified Surveyors for the DCV Sector and to revisit this issue

I am currently working on a proposal to Peter White and in doing so trying to identify where we might add value to the work being done and what information on marine surveying and surveyors we can provide to assist the process. If there are any members who would like to work with me on this please let me know.

DAWE – GRAIN ACCREDITATION

The DAWE project for changes to the accreditation of FTL surveyors is now pretty much finalised with the exception of the Deed of Agreement and final draft of the FTL standards.

The consultation process has now concluded and the AIMS will attend a meeting on Dec 6th to review the feedback provided by industry and to identify the next steps in the implementation of the reforms.

To date the feedback has resulted in the revised qualification requirements for Master Mariners. While the requirements will still include the provision for Diploma holders, and Deck Watchkeepers to enter the industry the Master Mariner requirements will now require 6 months on a bulk carrier in the capacity of Chief Officer; or 3 consecutive years' verifiable experience as a marine surveyor in the inspection of bulk carriers.

It is expected that evidence for accreditation will include a Certified copy of current or previous Master grade (Unlimited) Certificate of Competency, Sea Service record showing 12 months served on a bulk vessel with at least 6 months in the capacity of Chief Officer, or 3 x Fitness to Load certificates for each of the past 3 years (2019-2021) plus job description and Statutory Declaration from your employer or verifiable client references and Statutory Declaration from at least one client.

The Adv Dip, Diploma and Watchkeeper qualification requirements have not changed. Consultation and feedback on proposed amendments to the Export Control Rules 2021 closed on **30th November 2021**. The next meeting to review feedback and consolidate progress on the reforms will be held on Monday 6th December.

On a lighter note, I am delighted to say that the AIMS was shortlisted as a Finalist for the External Marketing Campaign of the Year through the Associations Forum for our marketing initiatives this year for the recreational sector. Tim did a great job with all of the collateral and the campaign itself, which, although was seen by some to be controversial, it was hard hitting and got the attention we were seeking.

It was great to be noticed and rewarded for bringing boating safety and the need for a surveyor to the forefront of the industry and doubly great to have been recognised in this category of association work.

Stacey also contributed with articles in Trade A Boat Magazine and the campaign was really successful for the AIMS and our recreational vessel surveyors. Well done Tim and Stacey. In closing, I would like to congratulate the new Board and John as the Chair. They have very big shoes to fill but I am sure will be up to the task and ready and raring to go in 2022.

Thanks also to Tim and Stacey for the work they have achieved this year under very trying conditions. I am sure that summer can't come quick enough for either of them!

I would also like to both personally, and on behalf of the membership, thank Peter Murday for his tireless efforts, his humour, his Friday afternoon missives and directions and his endless dedication. I will most certainly miss working with him and for him and have been very privileged to have had that honour for almost 10 years.

I wish all a peaceful festive season without restrictions and celebrated with family and friends.



Susan Hull
CEO



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AUSTRALASIAN INSTITUTE
OF MARINE SURVEYORS

A Tribute to Captain Peter Murday

His 6 foot 6 stature does, at times, appear overwhelming but Captain Peter Murday also boasts an uncanny ability to go largely unnoticed while quietly and unassumingly achieve great strides.

He has held the watch and Captaincy of the AIMS for the past 10 years in committed voluntary service, never once wavering, and always there for members, staff and the Executive.

Peter, an AIMS Fellow and member for the past 30 years, began his leadership of the AIMS in 2011, serving as Vice President for 2 years before taking the reigns as President in 2013.

The AIMS we know today was only a vision on a draft business plan when Peter took his first executive position in 2011. At this time, there were no permanent staff carrying out the daily duties, no formal training for marine surveyors, no pathways for new surveyors to enter the industry and limited eligibility for membership and no past Executive to assist.

The transformation of AIMS from a relatively 'closed shop' association to the professional body encompassing the full spectrum of marine surveyors that we see today has been a passionate mission requiring strong leadership and direction.

Peters' determination to continue to raise the bar on industry standards and recognise the professionalism of members paved the way for the introduction of the Certified Commercial Marine Surveyors initiative, an industry first in the recognition of superior practice.

Today we look at the fruits of Peter's leadership and celebrate these hard won results.

Certainly, there were challenges and many barriers along the way however, an ongoing dogged determination resulted in forward progression and positive change.

Captain Murday has also been recognised for his achievements throughout the wider industry during his tenure with the AIMS, receiving the Lloyds List (DCN) Maritime Services Award for an Outstanding Contribution to the maritime industry in 2014 and Highly Commended for the same award in 2019. The AIMS, under Peter's leadership, won the Association Forum's Award for the Turnaround Association on the Year in 2018 as well as being short listed for the External Campaign of the Year Award this year.

There is no greater recognition of achievement and success than the respect and position of high esteem held by your peers of which Captain Murday deservedly has.

As the AIMS moves into its next phase of leadership, the shadow of those who have come before is a constant reminder of the importance of ensuring that you have a vision and hold fast to it, but more important is to hold and demonstrate the level of temerity needed to ensure success.

Although he has stepped down from the bridge, and will be sorely missed, it is typical of his commitment to the AIMS that he will continue on as a Director of the Board during the transition period.

On behalf of all the members, executive and staff past and present, we thank you Capt. Peter Murday for your many years of voluntary service, your humour, vision and your statesmanship.

While the AIMS may continue to grow and mature in its purpose under a new watch, it will, as always, not forget those who came before and paved the way and will certainly not forget such an esteemed leader.

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Meet the Team

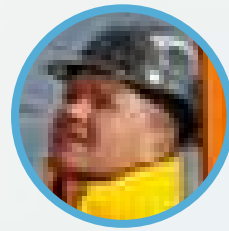


John Holden
Chair

John is the Managing Director of Seaweigh Pty Ltd a marine survey and consultancy company with over 20 years experience as a marine surveyor. John started his maritime career as a ship builder and holds an Advanced Diploma in Marine Surveying.

John became a member of AIMS in 2009 and was elected as Vice President in 2013. John has been a vital contributor to the Executive team over the past 8 years, becoming the Chairman of the Board in 2021.

As Chairman, John is responsible for the development and oversight of strategic direction, succession planning and sound business operations in conjunction with the Board and CEO.



Scott Aiton
Vice Chair

Scott is the Director of Gibson, Minto and Aiton Marine Consultancy, with over 20 years experience as a Marine Surveyor. Prior to this Scott began his seagoing career with BHP Transport before moving into tugs working as a tug master in the ports of Newcastle, Sydney, Port Botany and Port Kembla.

Scott has been a member of AIMS since 2003, following in his father Neil's footsteps who is one of the founding members of AIMS

As Vice-Chairman, Scott will support the Chairman in his duties including stepping in on occasion where the Chairman is unable to fulfill his role.



Andrew Graver
Secretary

Andrew is a Director of Hunter Marine Surveyors in NSW and holds a Master Class 1 (Unlimited) qualification. He is a past Executive Treasurer and State Representative for NSW.

Andrew is a firm supporter of the AIMS education arm and sits on the Education and Training subcommittee with the CEO. His commitment to training extends to Hunter Marine Surveyors workplace and he has personally sponsored most of his current employees in their enrolment in AIMS training courses.

As Secretary his role is to monitor the compliance of all board activities and processes in conjunction with the Chief Executive Officer.



Abdur Razzak Syed
Director

Razzak is the Managing Director of Australian Marine Surveys, with over 25 years experience as a Marine Surveyor, joining AIMS in 2000. Prior to coming ashore Razzak had 16 years seagoing experience and holds a Master Class 1 (Unlimited).

Razzak's experience of the industry is diverse, spanning many different sectors and specialities and he is well known throughout the industry for not only his immense knowledge but also his integrity as a surveyor.

Razzak brings with him all of his experience as well as his expansive relationships gained over many years within the industry to contribute to the continuing success of the AIMS and the Marine Survey industry.



Peter Murday
Director

Peter began his career as a marine surveyor in 1986 following many years as a Master Mariner holding a Master Class 1 (Unlimited) qualification. Peter is the Managing Director of MCC Marine in Brisbane and has been a member of AIMS since 1992.

Peter was the Queensland State representative from 2006 to 2011 followed by Vice President until 2013 at which time he was elected President, as position he held for 8 years. In 2021 Peter became the first Chairman of the Board with AIMS corporate restructure, later retiring his position in November 2021.

Peter has made substantial contributions to AIMS success over his many years of service, working closely with the CEO to grow and enhance membership, raise the profile of AIMS within the industry and working tirelessly to uphold high industry standards and professional practice.



John Petiquin
Director

John is the Australian Operations Manager for Christy and Griffin Marine Surveyors with over 24 years experience in the shipping industry, the past 10 of those as a Marine Surveyor. John holds qualifications in transport and logistics, stevedoring and marine surveying.

John has a proven track record of working successfully as an individual and as part of a team throughout his career with a particular focus on upholding marine survey standards and is looking forward to bringing these skills to his role as a board member for the betterment of the institute and the industry as a whole.



Greg Marsden
Director

Greg has been a marine surveyor for over 5 years prior to this working within the defence industry, experience that has trained him in the art of strategic and critical thinking. Greg is the director of Marsden Marine in Wellington, New Zealand, is a Maritime NZ qualified and recognised marine surveyor and the first New Zealand representative to join the AIMS board.

Greg is keen to establish stronger linkages between our Australian and New Zealand membership and surveying community and is looking forward to working with the board to establish these goals.



Susan Hull
Chief Executive Officer

Susan has worked with AIMS since April 2013 and holds tertiary qualifications in Business Management, Education and Quality and Governance. She has significant senior management experience in industry associations, the vocational educational sector and industry marketing and communications.

Prior to AIMS, Susan was employed in national and state roles with AMSA, REINSW, and ASIAL and was the NSW Executive Officer for the Property Services Industry Training Advisory Board. In 2011 she became the Project Lead for the AMSA Marine Surveyor Qualifications and Accreditation reforms and since then has developed the first nationally accredited marine surveyor qualifications for inclusion in the Maritime Training Package.

As Chief Executive Officer, Susan is responsible for the strategic and day to day operational management of the Institutes' business units including Finance, Marketing and Communications and Industry Education and Training as well as the development of the AIMS Certified Commercial Marine Surveyor TM criteria.

Under her stewardship the AIMS has been awarded with the Maritime Services Award and the Industry Association award for most turned around association.

Insurance aspects of a marine casualty

by Capt. Harshvardhan Kumar

Charles Taylor – Marine Technical Services

This article is intended to provide a general update on the subject matter and is for guidance purposes only. Nothing herein shall be taken as legal or other advice and should not be relied upon as such. Any information within this article referring to statute, law, regulation, guidance, or other publication should not be regarded as a substitute for reading in full and seeking professional advice on the relevant law, regulation, guidance, or other publication and any amendments to such documentation from time to time.

According to the Allianz Global Corporate and Specialty's Safety Shipping Review 2021, in the period from 1 January 2020 to 31 December 2020, globally, there were a total of 2,703 incidents and casualties including 49 total losses of vessels. From grounding on reefs to the loss of containers at sea, each case gave rise to numerous issues and resulted in much debate.

A marine incident ranges from loss of or damage to cargo all the way up to the damage to or the loss of the vessel itself. There may be salvage involved, loss of lives, damage to the marine environment among other matters. These may give rise to various claims against all or some of the parties involved and this is where insurance comes into play.

Claims by cargo owners against the carrier

Most cargo globally is carried under the terms of the Hague-Visby Rules (The Hague Rules as amended by the Brussels Protocol 1968). These rules could be construed to be biased in favour of the carrier.

Article III of the rules, impose upon the carrier, some basic duties in terms of carrying the cargo.

1. The carrier shall be bound before and at the beginning of the voyage to exercise due diligence to:

- (a) Make the ship seaworthy;
- (b) Properly man, equip and supply the ship;
- (c) Make the holds, refrigerating and cool chambers, and all other parts of the ship in which goods are carried, fit and safe for their reception, carriage, and preservation.

2. Subject to the provisions of Article IV, the carrier shall properly and carefully load, handle, stow, carry, keep, care for, and discharge the goods carried.

However, Article IV subsequently relieves the carrier from almost all liability **"unless caused by want of due diligence"**. This section then states 17 exemptions, (a) through (q) for which **"neither the carrier nor the ship shall be responsible for loss or damage"**. These exemptions cover a wide array of all the perils that a vessel is likely to encounter, thereby relieving the carrier of any liability in the majority of the cases.

The rules also do not provide for any liability for damages due to delays and are silent on this aspect.

While some aspects relating to carriers' liabilities were addressed in the subsequent Hamburg Rules and Rotterdam Rules by shifting some responsibility onto the carriers, the widespread non-application of these rules makes it difficult for any cargo owner to pursue claims against the carrier.

Additionally, there are usually terms in a typical Bill of Lading, granting to the carrier, lien on the goods, and any related documents for **"all sums payable to the Carrier under this contract and for general average contributions to whomsoever due."**

Thus, it becomes challenging for a cargo owner to enforce the carrier liability for damage to the cargo, especially due to delays. All that needs to be done by the carrier is to show that they exercised due diligence at the beginning of the voyage as required by Article III.

Claims by the carrier for damage to the vessel and salvage charges if incurred

In any marine incident, there is every likelihood that the vessel itself has suffered damages to its hull and or machinery. In some incidents, there could be salvage costs involved if a ship had to be refloated after running aground.

Most hull policies include the ITC Hull clauses 1/10/83 or 1/11/95 and considering these, it is noted that there are numerous perils against which the vessel is covered as per Section 6.

Sections 11 and 10 of the above clauses cover the vessel's proportion of general average and salvage.

Thus, any damage to the hull, machinery, and the vessel's contribution towards salvage and General Average is covered by the Hull and Machinery insurers.

General Average

If the costs involved in an incident are beyond that which the shipowner is prepared to accept, they have the option of declaring General Average.

General Average is a principle of **"That which has been sacrificed for the benefit of all, shall be made good by the contribution of all"**. It is a centuries-old practice whereby all parties involved in a common maritime adventure contribute proportionately towards the costs relating to an incident.

Thus, the vessel's owner would contribute, along with the various cargo owners, their share of contributions as determined by the Average Adjuster appointed to calculate these costs.

There are strict guidelines (Rule A) on what is a General Average act set out in the York Antwerp Rules 1994. The expenses allowed in General Average are clearly set out in the above rules. It is noted that there is no provision specifically for any fines to be considered under the York Antwerp Rules.

The General Average adjustments are done as per the above rules and the basis of contributory values for the loss is the value of the property to the owner (vessel) where the voyage ended. However, for the value of the cargo, the contribution is based on the invoiced value at the port of loading.

Once General Average is declared, the cargo owners are required to provide salvage security and GA deposits as set out by the Average Adjuster. As an example, if the salvage security is set at 30% of the cargo value and the GA deposit as 10%, then a cargo owner with goods worth \$ 100,000 would need to pay a combined deposit of \$40,000 to get their cargo released.

The responsibility of making the above payments would depend very much on the INCOTERMS for the sale of the cargo and would be borne by either the shipper or the consignee.

Third-party claims against the vessel

A P&I club in which the vessel is entered would cover most of the third-party liabilities (subject to cover and conditions) that are not covered under the hull and machinery cover.

Typically, some of the items covered by the club in a marine casualty would be:

- Loss or damage caused to property (FFO or Fixed and Floating objects)
- Pollution risks
- Unrecovered general average contributions
- Ship's proportion of general average by reason of ship's value being assessed as higher than the insured value under the Hull policies.
- Special compensation to salvors
- Fines
- Sue and Labour and legal costs
- Some or all of the above costs are subject to conditions and the club's manager's decisions.

The P&I clubs have an individual limit of US \$10M which goes up to US \$100M when taken up by the International Group of P&I clubs under their pooling arrangement, beyond which it is handled by the reinsurers.

Third-party losses

It is quite likely that other parties and shipowners may be affected by the incident indirectly. This could be economic losses due to delays to other vessels caused by any blockage to the ports or canals.

Such third-party losses are not covered specifically by any maritime convention, and it would be up to the various shipowners affected to explore their legal options on this. Shipowners who have the strike and delay cover may be able to cover such losses as these are not generally under the standard P&I cover.

Cost to cargo owners and abandonment

If the cargo was insured and General Average was declared, it would be a simple matter for the cargo owner to pass on the claim to their insurers who would then settle the General Average contributions and then try and recover this from the carrier by perhaps claiming breach of contract.

However, if the cargo was not insured, then the cargo owner would have to either pay the general average costs to collect the cargo or abandon it.

If there are unreasonable delays in delivering the cargo by the carrier, some cargo owners may opt to abandon their cargo. This would make practical sense to a cargo owner who receives an intangibly reduced value consignment of goods that are not technically damaged. Consider a cargo of frozen food that is within its temperature carriage criteria that arrives several months late, but owing to a subsequent shorter shelf life caused by the delay, is no longer commercially viable.

Similarly, a cargo of seasonal goods meant for specific days e.g., Christmas that arrives too late for the intended market may become a liability. In such cases, it may not make any commercial sense to the cargo owner to pay additional general average charges and they would rather suffer one loss only.

In case of abandonment, the carrier would be able to sell the cargo to recover the General Average contribution of the cargo owner.



Limitation of Liability by the shipowner

It is an option for the shipowners to cap their losses by seeking to limit their liability under the 2012 amendment to the 1996 Protocol to the Convention of Limitation of Liability for Maritime Claims (LLMC) 1976. The limitations are based on the size of the ship involved in the incident.

The losses covered by the LLMC are:

- claims in respect of loss of life or personal injury or loss of or damage to property (including damage to harbour works, basins and waterways, and aids to navigation), occurring on board or in direct connexion with the operation of the ship or with salvage operations, and consequential loss resulting therefrom.
- claims in respect of loss resulting from delay in the carriage by sea of cargo, passengers, or their luggage

Claims for salvage, general average contributions, claims for oil pollution under the International Convention of Civil Liability for Oil Pollution Damage 1969 along with other matters (relating to nuclear damage) are however exempt from such limitation, but claims for oil pollution damage caused by bunker oil are not.

No convention is without bias and there will always be parties affected that are not entirely satisfied by them. After every major incident, lessons are learned and tactics for the future are formulated. Changes to major conventions and rules take time as the issues are debated and for the effects of these to come into effect takes even longer. Judicious use of insurance covers by various parties can and does go a long way in reducing exposure.

Should you wish to discuss further any content of this article you can contact Capt. Harshvardhan at: Harshvardhan.kumar@charlestaylor.com



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Membership Update

with Stacey Taylor

Professional Indemnity Insurance

It has been over 12 months since we commenced our partnership with Austbrokers Countrywide to provide our members with access to competitively priced tailored Professional Indemnity and Public Liability insurance through professionals who understand our industry and the needs of our members.

Over the past 12 months many members have taken advantage of the service offered by Austbrokers for their Professional Indemnity and Public Liability insurance requirements. We are hearing the feedback from members though, particularly small to medium operators, that more is still needed in the provision of affordable insurance options, and we are continuing to work with Austbrokers towards this goal.

In order for insurers to offer a reduction in premiums, we need to firstly centralise our members purchasing power to create a 'pool' purchase. The larger the pool the greater the ability to reduce average premiums inside that pool. The idea being then we can leverage off the size of our pool to get a better deal, particularly for those small or part time operators where the price of insurance is often not commensurate with the volume of work undertaken.

We will soon be updating our website to include an online quote form which can be submitted directly to Austbrokers and you can receive a personalised call back at a time that suits you to discuss your insurance needs.

As previously communicated, Wade Cadman who has been our Account Manager up until mid this year has taken another role within the industry, and we are fortunate to have two Managers at Austbrokers available to help our members:

Imesha Perera
Account Manager- Professional Risks
Phone 03 9835 1379
Office: 03 9835 1300
Mobile: 0422 701 483

Greg Hansen
Director – Professional Risks
Phone: 03 9835 1310
Office: 03 9835 1300
Mobile: 0437 410 810

While Greg has been busily assisting our members since Wade's departure, Imesha has recently joined the Austbrokers teams and has over 15 years' experience in the insurance industry with much of her experience specialising in Professional Indemnity insurance across various roles in Underwriting and Insurance Broking.

She has a good understanding of the profession and has developed strong relationships with the Professional Indemnity insurers that specialise in Marine Surveyors PI both locally and overseas and can assist in obtaining multiple quote options on behalf of AIMS members.

She can advise on policy coverage, conduct contract reviews and answer any questions AIMS members may have on their Professional Indemnity Insurance policy.

Please get in contact with Imesha and she will be happy to assist with your queries.

Upcoming Events



23rd Dec – 10th Jan – AIMS offices CLOSED

17th – 20th Mar – Auckland Boat Show

22nd Mar – WA Maritime Day, Fremantle

10th – 12th May – Indo Pacific Expo, Sydney

12th – 15th May – Hutchwilco New Zealand Boat Show

Grain Accredited Marine Surveyors

There has been a lot of planning this year as we move towards a formal agreement with the Department of Agriculture Water and the Environment for AIMS to facilitate the Accreditation of Marine Surveyors in conducting the survey of bulk vessels fit to load grain.

From initial inception, the initiative quickly gained momentum and it was looking like we were going to move forward with this from 1st October 2021, but due to a few delays within the department, this is looking likely to begin mid 2022 in preparation for next years grain season.

This additional time frame gives us extra preparation time for the new accreditation requirements so there should be minimal disruptions for our members who work in this area.

There will be no grandfathering arrangements for existing accredited surveyors, everyone will need to go through the application process to ensure we are compliant with our agreement with the Department but be assured AIMS will be here to support our members to make the application process as streamlined as possible.

We do have to wait for a few last preparatory requirements to be finalised before we can move forward with this, but we anticipate early next year we will be in a position to start liaising with current accredited members in assisting them in the provision of required documented evidence to fulfill their accreditation under the new scheme.

I will be here to assist our members to make this process as straightforward as possible and will be contacting each accredited member as soon as the accreditation requirements have been firmly finalised. Be assured that as AIMS members you will be welcome to contact me anytime if you have queries with relation to your accreditation.

Continuing Professional Development

Yes it's that time again where we ask members to provide us of an update of what CPD activities you have undertaken over the past 12 months, remember you only need 10 'points' of CPD each year. It has been yet another year of limited face to face interaction, but I'm sure you would agree digital platforms such as ZOOM and Microsoft Teams have become commonplace for meetings and information sharing opportunities, which are more readily available than ever before and likely to remain a part of our communication channels even as life returns to some semblance of 'normal'.

WHY DO WE ASK OUR MEMBERS TO COMPLETE CPD?

It is commonplace for professionals to have to maintain CPD as work related learning and development throughout their career. For many professionals, yearly CPD is mandatory to maintain registration within their professional field, while for others it is discretionary but no less important. CPD is a key mechanism by which high standards of professional practice and currency of qualifications and experience are maintained.

It is useful to think of CPD as an investment, an investment into your career and development as a professional in a fast-paced world where nothing is more certain than change and future advancements.

A SMORGASBORD OF CHOICES

CPD may be, but is not limited to, formal study or training programs. We all undertake CPD in aspects of our roles, it is really a case of recognising our activities which would be accepted as CPD and diarising or recording

these for future reference. From this list below I am sure many of you have undertaken at least one or two of these in the past 12 months:

Formal CPD

- Formal study courses or short courses
- Conferences and seminars (in person or online)
- Undertaking research
- Writing papers or delivering presentations
- Formally arranged mentoring

Informal work-related CPD

- Discussions with colleagues
- Sharing knowledge and information at meetings
- Participation in work related team meetings
- Internet research
- Participation in activities/meetings within your professional association
- Subscriptions to industry related publications or updates

External CPD

- Improving your interpersonal, computer or business skills
- Learning something new which will help in your career progression such as a foreign language or public speaking skills

Keep a record of your activities during the year, they will quickly add up. For a comprehensive list of industry related CPD activities and their value in 'points', visit the members area of the website.

All CPD submissions can be emailed to me at info@aimsurveyors.com.au, but if you are not sure how you are going to reach your required 10 points or wondering if you have already submitted enough throughout the year, I'm happy to help with all of these enquiries also.

Transitional survey requirements and certification



Australian Government

Australian Maritime Safety Authority

An extract from AMSA's Survey Matters publication in December 2020

The transitional vessel requirements under MO503 are now well known. This article provides guidance on managing some of the changes mentioned in Schedule 1 of MO503 citing some recent examples.

Addition of active fin stabilisers

MO503 SCHEDULE 1 CLAUSE 7 – CHANGE TO VESSEL STRUCTURE AND WATERTIGHT INTEGRITY

Vessels that undergo a Schedule 1 clause 7 change must complete an initial survey. This type of change requires application for a new certificate of survey which generates a full set of survey codes.

The intent of this requirement is for the vessel to undergo initial survey to the transitional vessel standards. However, you may apply for an alternate survey process if you believe the requirements specified in MO503 Schedule 2 can't practically be applied. For example, if the changes to the watertight envelop or structure are minor and localised, you may be able to propose an alternate process to meet the requirements.

Recently, for the addition of active fin stabilisers, an initial survey to the extent of the change and renewal survey for the rest of the vessel was approved. This was due to the design basis of the vessel being well documented and no other changes taking place.

Submit any alternate survey applications before making changes. This allows us to confirm the approved form of survey beforehand. It also ensures the correct surveys are undertaken before, during and when commissioning the change.

Installation of hydraulic knuckle crane

MO503 SCHEDULE 1 CLAUSE 6 (F) – REMOVING REPOSITIONING, INSTALLING, CRANES, NET REELS, TANKS ETC

This clause requires vessels to complete an initial survey for the areas affected by the change and a renewal survey for the rest of the vessel. Again, these changes require an application for a new certificate of survey, to capture the vessel changes in the MARS certification system.

This type of change doesn't require an alternate survey approval. Assess the scope of the change to vessel structure and systems and undertake initial survey as required. On completion of surveys, submit the applicable documents with your recommendations. Forms may be annotated to indicate the extent of the change if required.

Ensure you provide justification for any surveys you mark as not required. A detailed justification allows the assessor to understand the rationale for the recommendation. Areas of the vessel not subject to initial survey must undergo renewal survey confirming compliance with the transitional vessel standards in Schedule 2.

Lightship changes

MO503 SCHEDULE 1 CLAUSE 6 (C) AND/OR (D) – VARIATION TO DISPLACEMENT OF AT LEAST 4% AND/OR LCG BY AT LEAST 2%

Unlike the examples mentioned above, lightship variations don't necessarily need an application for a new certificate of survey. This is because Section 9 (d) of MO503 requires only renewal type surveys for this change.

Follow the process below during renewal survey when a vessel becomes transitional due to lightship changes only.

Inform the owner that the vessels lightship particulars have changed, and the vessel is now considered transitional. The vessel must be surveyed to the transitional standards mentioned in Schedule 2 of MO503. Explain that the change requires the vessel to undergo further surveys. The vessel will need to undergo a new stability assessment to the transitional standards. This may result in a change to the number of persons permitted on board the vessel.

Email DCVApplications@amsa.gov.au to notify us of the change, including evidence you've been engaged to conduct the survey(s). If the owner has applied to renew the certificate of survey, we will add a stability assessment to the application in MARS and provide you with the code. Let us know if you need any further codes created.

Submit your survey reports and recommendations as normal when the additional survey activities are complete. You must also provide AMSA with a list of the applicable

transitional standards the vessel has been surveyed against. Note: the AMSA 901 form contains a checklist for transitional vessel renewal surveys.

AMSA will assess the renewal application once we receive all the transitional survey reports. During assessment we will make any updates or changes to the person numbers from the new stability assessment. We will record the transitional standards that apply to the vessel in MARS. This will display on the certificate and future vessel reports.

General requirements and reminders

All activities must be marked either recommended, recommended with conditions, not recommended or not required for the application to progress to assessment. An application will not progress if survey activities remain as ready for assessment or assessment in progress. You must provide a reason for surveys marked not required.

Chapter 2.9 of SAGM Part 2 also requires justification for any conditions proposed when recommending with conditions.

You must notify the operator if their vessel becomes transitional and inform them of their obligation to notify AMSA. The vessel may require a temporary operations permission to continue operating.

A lightship declaration is not an acceptable form of lightship survey for initial surveys.

Low Sulphur Fuel, Piston Rings, Cylinder Liners, and Lubrication

by Christopher Brown

Sometimes a failure of any part of a mechanical System, is a combination of more than one event. Ship Main Engines are no different.

Some vessels have run quite successfully on Low Sulphur Fuel, others have had numerous problems.

One problem identified is that the fitting of new piston rings on a seemingly good unit, can, very quickly, if burning VLSFO cause scuffing and excessive wear to cylinder liners.

Marine low speed engines and their lubricants have been optimised for operation on heavy fuel oil (HFO) with a high sulphur S content. During the combustion process is happening, the sulphur S is converted to the sulphur trioxide (SO₃). In combination with water from the combustion and the scavenge air, SO₃ forms sulphuric acid (H₂SO₄) is be generated.

When the liner temperature drops below the dew point of sulphuric acid and water, a corrosive on the liner wall. The high alkaline lubricants (high-BN oils) neutralise the acid and prevent corrosion of piston rings and cylinder liner surfaces.

Vessels operating on LSFO or VLSFO have already observed a number of issues with the changeover. There are cases of high wear rates, severe scuffing, heavy deposits and piston rings sticking leading to heavy blow-by/ring breakage – some of the issues occurring just a few days after changing over.

Sulphur is no longer present in the fuel oil (or only present to a limited extent), which means that the cylinder lubrication method has to be managed correctly in order to prevent the above-mentioned issues. The root causes of failure are to some extent related to fuel lubricity, deposit formation and lubrication oil distribution.

New piston rings that are not bedded in can allow this effect to occur rapidly, and cause extreme wear and ovality to cylinder liners.

There are a number of remedies:- but generally all three items should be considered.

Firstly, old stock piston rings may not be entirely suitable, and ship operators need to confirm with engine manufacturers that old stock piston rings are the most suitable. Generally, a Cermat coated piston ring is recommended.

Secondly, the grade of Cylinder oil may need to be changed, again the lube oil and engine manufacturers will recommend the best option.

Thirdly, the feed rate of the cylinder oil may need to be increased.

Avoid that sinking feeling.



Pick the right marine surveyor.

The wrong surveyor could cost you more than a new boat.

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.

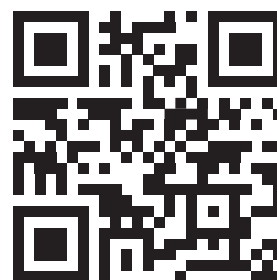
Check your marine surveyor's qualifications yourself or talk to us before you purchase a boat or engage a marine surveyor.

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.

Avoid that sinking feeling, pick the right marine surveyor.



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**

Unsung Heroes

by Mike Wall



“

It is said that the sign of a true professional is somebody that makes a skill look easy and who does not draw attention to themselves. This could also be said of dredgers which go about their business almost invisibly.”

Dredging is the removal of bottom sediments from in shallow waters such as streams, rivers, lakes, coastal waters and oceans. The resulting dredged material is transported by ship, barge or pipeline to a designated disposal site on land or in allocated dump grounds at sea.

Along with several other types of ship, dredgers are probably the least ‘sexy’ vessels in merchant shipping. However, without them the other types would be unable to access harbours and ports to carry on their trades. It is said that the sign of a true professional is somebody that makes a skill look easy and who does not draw attention to themselves.

This is surprising considering that the dredging market was valued at USD 10.3 billion in 2018, being projected to reach USD 12.6 Billion by 2026 with a projected compound annual growth rate of 2.62% from 2019 to 2026. This international market is divided into North-America, Europe, Asia-Pacific and the rest of the world. The key players in the market include Royal Boskalis Westminster NV, Jan De Nul NV, Dredging Environmental and Marine Engineering NV, Great Lakes Dredge and Dock Co, Van Oord NV, Coastal Dredging Company, Inc., Weeks Marine, Inc.

There are many different types of dredger required to perform various functions. These are broken down into two main groups, maintenance and capital dredging. Maintenance dredging involves the removal of sediments that have accumulated since the previous dredging operation. This is common in ports and harbours where tidal currents dump sand, etc, after each spring tide. A classic example is the River Mersey where Westminster Dredgers were employed in this role for many years. Those in the know often commented that this was a job for life.

The market is further divided into mechanical and hydraulic dredgers. Mechanical dredgers,

include bucket dredgers, grab dredgers and backhoe dredgers used to remove heavier and more solid material. Hydraulic dredgers are classified into suction dredger, cutter suction dredger, trailing suction hopper dredger and barge unloading dredger being used to lift looser material. End-users include governments, shipyards, oil/gas companies, mining companies and property developers. They may be found in ports/harbours, inland waterways, at captive jetties, around the coast and in recreation water bodies.

Mechanical dredgers, which do not have any means of propulsion, tend to be used in restricted areas to increase depths for vessel access such as Southampton container terminal and Portsmouth harbour to accommodate the aircraft carrier Queen Elizabeth. In the 1970s bucket dredgers were used by Cammell Laird fitting out basins to discharge the spoil into hopper barges. The barges then discharged the spoil in foul ground areas outside the port. Up until then, single hulled hopper barges with chain operated bottom doors were used. The above two projects involved the use of the first twin-hulled hopper barges. The two hulls are split down the centre line with hinges at either end of the hopper. Using hydraulic jacks, the hulls are tilted to discharge the spoil from the gap created at the bottom. This means that each hull has its own engine room, rudder, propeller, etc, whilst the superstructure is on transverse slides.

Dredging is a discipline with its own working practices and traditions. Dredgers operate 24 hours a day with few port visits, stopping only to be replenished, repaired and essential maintenance carried out. The crew are employed as contract workers rather than as seamen on articles. Consequently, crews may work 12 hrs on/12 hrs off watches with varying tours of duty.

One of these traditions is that of 'finders-keepers' where anything recovered is considered to belong to the dredger crew. Many crews have wire strippers to recover copper wire from the spoil. In the 1970s the Cammell Laird fitting out basin was dredged using the bucket dredger 'Africa'. Tonnes of copper, brass and bronze were recovered and loaded into trucks to be sold on the scrap market. When the trucks got to the gate they were stopped by the security staff.

The general manager was called who confirmed that the scrap belonged to the shipyard. The trucks were then returned to the quay and the load dumped into the dock for later recovery. Needless to say, the shipyard GM capitulated.

The work can be hazardous as dredgers often pick up unexploded bombs in the dredge head. Mechanical dredgers also tend to operate in a limited area where they will be anchored using a six or eight point system and spuds (pillars) to maintain position. These can create navigational hazards and are usually well marked but there are often incidents involving local vessels fouling the anchor wires.

Capital dredging involves the removal of initial dredging there by increasing the depth. It also involves the movement of large amounts of sand to reclaim land where it is expensive and/or in short supply. Examples of this are the land reclamation for the new HK airport in the mid-90s when almost 80% of the world's dredging fleet was employed to enlarge Chek Lap Kok island. The three artificial Dubai Palm Islands, Palm Jumeirah, Deira Island and Palm Jebel Ali were also created in this fashion.

The types of dredger involved in such operations will also depend on where the aggregate is being sourced and how it is to be brought ashore. The fastest and most efficient system is using suction hopper dredgers which suck up the material from designated areas whilst travelling at speed. As the hopper fills the water drains off leaving the spoil. Once the hopper is full the vessel approaches the project ground where the material is to be landed. Access to the site will determine the methods used, eg, pumping ashore using floating pipelines or rainbowing the spoil from a jet at the bow. If access is more difficult the material may be dumped at a predetermined site where a cutter-suction dredger recovers and pumps the spoil ashore via pipelines.

Dredgers nowadays are technically advanced with highly efficient pumps, heavy compensating devices, electronic equipment for automatic controls, water jets, sophisticated navigational equipment and advanced instrumentation. Quantities of material to be dredged are determined from past records. Planning for a dredging project will be based on long term requirements and hydrographic surveys. Position location and surveying equipment are +/- 1 m or better using global positioning systems. Newer, larger dredgers built in Spain are capable of dredging to 140 m with a deadweight of 78,000 t with discharge pumps of 16 MW and accommodating a crew of 46.

Having cleared channels and created new land, dredgers have another very important function. Suction hopper dredgers around the world are continuously recovering sand and gravel used to produce cement and concrete for the construction industry. Like many other ship types, dredgers have proved themselves to be indispensable. They are the unsung heroes of ports, harbours and the construction industry.



Training on the Brain

The quality of student assignments rose a notch or two this quarter with three students completing their Diploma's with Distinction. Congratulations to Bill Kenchington, Vimlesh Singh and Brian Keller – outstanding results in some difficult times.

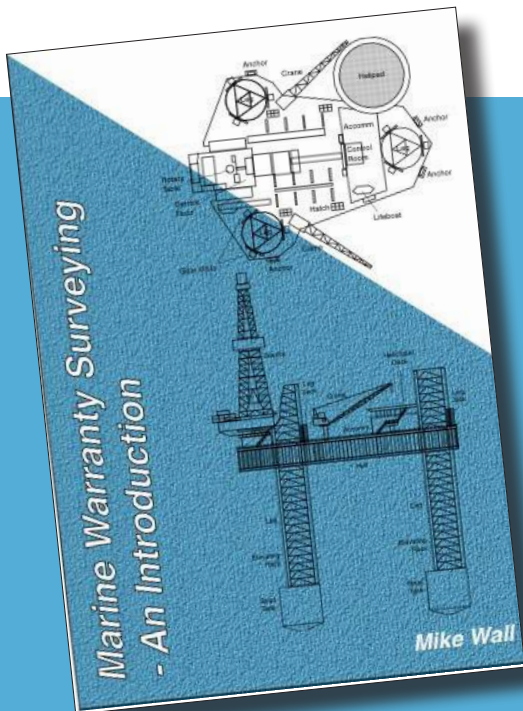
John Gerbstadt also achieved 3 Distinctions out of 9 subjects and 4 awards of credit.

Great to see the cross skilling of maritime personnel do so well on both the practical and theoretical tasks.

On that note, stand out submissions from students on surveyor negligence and fitness for purpose reminded me of a great presentation by Michael Underwood to the NZ branch of MLAAANZ in 2004.

It was such a good presentation and great read that we decided to acknowledge his work. Its worth a read regardless of what type of surveys you undertake or how experienced you are. New students take note – the article is eerily similar to some of the more recent cases seen in Australia.

The end conclusion is also food for thought given the article was written in 2004 and it seems not much has changed either in NZ or Australia despite the public push for greater safety and accountability.



Marine Warranty Surveying – An Introduction – by Mike Wall

Mike's book brings an understanding of the complexities and the variety of experience and training that an MWS must have to practice in the field. He combines the practical – recommended procedures, list of guidelines necessary to fully practice that are, I think, meant to complement a seaman's skills.

Like his report writing book before, it is a practical guide that, while it can point you down the path, requires practical application in Marine Warranty Surveying to have its full effect. Marine Warranty Surveying especially takes experience, mentorship, and a good level head to be successful in the field. It also requires the ability to put that field experience on paper in a way that is understandable and easy to read. The combination of the right experience and the ability to write, make the two books of Mike's useful tools.

Mike has done an exceptional job in putting words together to describe a complex subject. I look forward to the publishing of the book with its future use in the industry as a tool for training and a reference source for the new and experienced Marine Warranty Surveyor.

Self-published Jan 2017 by the author. Cost US\$99 + P&P.
Contact: mikewallassociates@gmail.com

Surveys & Negligence

by Michael Underwood

Edited version of Address to the MLAANZ
New Zealand Branch Seminar 3 April 2004

Introduction

The impulse for this article has been my experience in a number of cases involving survey companies and shipbrokers, on the one hand, and boats breaking up or proving unsuitable for their intended purpose, on the other. I have been forced to confront the fact that, seemingly alone of all the people carrying out statutory safety functions in New Zealand, those working for the 11 Safe Ship Management ("SSM") companies do not have to take care in their work.

Lift inspectors, scaffolding inspectors, boiler inspectors, building inspectors and even vehicle testers all have a duty of care. Why not those responsible for issuing SSM Certificates? Because the New Zealand Court of Appeal, in *Attorney-General v Carter and Wright*, held that they (or, strictly speaking, a precursor) were not obliged to take care and could issue an SSM Certificate negligently. The only breach of statutory duty might be in issuing an SSM Certificate erroneously.

I am not alone in believing that the Court of Appeal's decision is wrong. In the first place, there is still confusion about surveys and SSM inspections. This arises, in part, because many people, including employees of SSM companies, loosely use the term "survey" for what is really not a survey at all but an inspection akin to a Warrant of Fitness (WOF) inspection. Even the checklists are similar!

Then, there appears to be not infrequently a too close relationship between SSM companies, shipbrokers and ship financiers. Finally, there are the problems with the SSM system as a whole, which were identified in the study commissioned by the Maritime Safety Authority of New Zealand ("MSA") and undertaken by Thompson Clarke Shipping Pty Ltd in association with Rutherford Sloan Ltd and Marketmetrics Pty Ltd.

These matters are disturbing enough for practitioners, but they are even more so for those who have to go to sea in negligently checked boats and for the marine insurers who — thanks to the Court of Appeal decision — have to pay out for the consequences of carelessly performed inspections.

Attorney-General v Carter

This case arose prior to the introduction of the SSM system in New Zealand on 1 February 1998. Nevertheless, it did concern the issue of a survey certificate under the then current Shipping and Seamen Act 1952 (NZ). The respondents alleged that the survey had been carried out negligently and that as a consequence they had suffered loss and damage. They claimed in negligence and for breach of statutory duty.

The Court, however, held that the survey company owed no duty of care to the respondents since the purpose of providing the certificate was to ensure their safety at sea and the seaworthiness of their vessel (section 199 of the Shipping and Seamen Act), not to avoid harming their business interests.

A survey certificate could not be relied on as confirming that the vessel was fit for the purpose of fishing, even though section 206(2) of the Shipping and Seamen Act stated that the purpose of the statutory surveys was "to determine ... whether or not the ship is in all respects satisfactory for the service for which the ship is intended to be used." In my view, this purpose seems to go beyond simply ensuring safety at sea and seaworthiness of vessels.

Incidentally, Part 46 of the Maritime Rules promulgated under the Maritime Transport Act 1994 (NZ) provides that surveyors undertaking surveys of new ships, existing ships and barges must be satisfied that the structure and

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The Court of Appeal was also just plain wrong in stating that there is no difference between “safety” and “seaworthiness”. These are quite well understood concepts in maritime law.”

equipment of the vessel are “in satisfactory condition and fit for the service for which it is intended”. And the MSA itself, on its SSM website, states that “design and construction will have to be checked as being “fit for purpose ... [and] all structural engineering, electrical, sanitation, fire protection, anchoring and pumping arrangements will have to be in accordance with the Rules and fit for purpose”. “Fitness for purpose” is, of course, a term used in consumer protection law, and specifically in section 29 of the Consumer Guarantees Act 1993 (NZ) with regard to the supply of services.

However, there is no reason why a similar approach should not be taken by the courts with respect to SSM inspections as is taken with guarantees of fitness for purpose and the related guarantee that services will be carried out with reasonable care and skill contained in section 28 of the Consumer Guarantees Act.

The Court of Appeal was also just plain wrong in stating that there is no difference between “safety” and “seaworthiness”. These are quite well understood concepts in maritime law, as evidenced by section 40 of the Marine Insurance Act 1908 (NZ).

Arguably, even if it is not possible to recover pure economic loss (loss unconnected with and not flowing from physical damage to property or person), financial loss is recoverable where the loss was foreseeable and consequent on physical damage to the property.

Of course, if you are a skipper whose boat is breaking up in heavy seas as a consequence of a negligent survey, as in the case of the *Owenga 8* at Westport in New Zealand in 2001, it is a legal nicety whether it is your life or your livelihood that is in danger.

Surveys and SSM

There have always been, and still are, a wide range of ship surveys, including pre-purchase surveys, valuation or insurance appraisal inspections, insurance surveys and damage surveys. One of the problems, as I have already noted, is that both “old salts” and those working in the SSM companies sometimes use the term “survey” to mean different things.

In particular, it needs to be emphasised that somebody contemplating purchasing a vessel requires a pre-purchase survey and/or a valuation or insurance appraisal inspection. An SSM Certificate can only be issued to someone who already owns a vessel.

A particular problem arises when prospective boat owners are talked out of a pre-purchase survey by an SSM company. This normally occurs along the following lines: “You don’t need one. She was surveyed recently. Don’t worry, we’ll see she gets a certificate.”

In fact, the boat may perhaps have been surveyed 2 years earlier. The effect is that what would definitely have been a contractual relationship between a contemplating purchaser and a ship surveyor becomes a relationship between somebody “pressured” into purchase and an SSM company.

It has been put to me that the relationship between an SSM company and the MSA is “inconsistent with a contractual relationship” between the SSM company and the ship owner. This may be correct insofar as it relates solely to inspections for the purposes of issuing an SSM Certificate, where what we have is really payment for a licence, although in my view a distinction still has to be drawn between a public servant and a company contracted (in this case, quasi-self-appointed even if approved) to undertake some regulatory function (a distinction recognised in the non-applicability of the tort of misfeasance in public

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Formal recognition of a duty of care by marine surveyors is one of the best means of promoting the safety of lives and seaworthiness that the SSM system is intended to achieve.”

office to the latter).

However, in the case of ship surveys — as distinct from SSM inspections — there very definitely is a contractual relationship between the boat purchaser/boat owner and the survey company.

It is important to stress that the current SSM system only replaced the former system of periodic annual surveys that mainly applied to larger commercial vessels. It was not intended to, and does not, replace all the other ship surveys, even though the New Zealand Parliament envisaged that periodic inspection would cover the “hull, machinery and systems” of ships (section 36(f) of the Maritime Transport Act 1994 (NZ)), and if carried out with care such inspection or testing would greatly enhance safety and seaworthiness.

Breach of statutory duty

An action in tort for breach of statutory duty involves having an express or implied right to sue for a breach of that statutory duty. Contrary to the Court of Appeal decision in *Attorney-General v Carter*, it is particularly in situations involving public safety that such a right will be implied if there is no express statutory right.

For example, there have been several cases in Australia in which electricity companies have been held liable for damage caused by fires sparked by faulty power lines. It is not questioned that the SSM system is intended to ensure the safety of mariners and the seaworthiness of their vessels.

The two main tests applied by the courts in such cases are the “class” test and the “alternative modes of enforcement” test. The former test, which was referred to in *Attorney-General v Carter*, takes into account whether the relevant legislation benefits an ascertainable class of persons.

The SSM system applies expressly to registered owners of ships (Maritime Rules, Rule 21.2), a class that is quite specific and readily identifiable. The latter test would involve ascertaining whether an SSM company failed to conduct an SSM inspection in such a manner as to ensure safety at sea and seaworthiness of a vessel.

The fact that it is an offence to put to sea without a valid SSM Certificate (under section 144(2) of the Maritime Transport Act 1994 (NZ)) lends weight to the inference that the New Zealand Parliament must have intended that those charged with the sole responsibility for managing the statutory SSM scheme would be civilly liable for any breach of their statutory duty.

Conclusion

It is high time for the MSA or New Zealand Parliament to take action to correct the anomaly I have been addressing, because if they do not do so very soon the marine insurance industry is likely to take matters into its own hands and mandate independent surveys before they write policies of marine insurance. Formal recognition of a duty of care by marine surveyors is one of the best means of promoting the safety of lives and seaworthiness that the SSM system is intended to achieve.

Thanks and acknowledgement to Michael Underwood.

Shore to Boat Connections - Who needs to be Compliant and Why

by Mark Smith

Over the past few years, I have attended many vessels as an Accredited Surveyor, and have observed many types of shore connections, some of which were not compliant. I feel it would therefore be beneficial to share some much topical and specific information regarding polarity testing in shore connections gained from many hours of research and reading standards and legislation, and first-hand knowledge as an Electrical Surveyor/Contractor.

In 2017, MSQ released a Marine Information Bulletin with relation to electrical standards and licences for **Regulated Ships**, and how they now need to comply with **AS/NZS 3004: 2014** Electrical installations – Marinas and Boats – Boats.

The term for a **regulated ship** has been defined in Queensland Legislation “Transport Operations (Marine Safety) Regulation 2016” as **Vessels that are not ships**, making reference to the Marine Safety (Domestic Commercial Vessel) National Law Regulation 2013 for this definition.

This Regulation identifies that each of the following are a ship:

- a) a boat;
- b) a canoe;
- c) a dinghy;
- d) a dragon boat;
- e) a kayak;
- f) a pontoon;
- g) a tinnie.

NOTE: This legislation has mandated that all ‘recreational ships’ and ‘other Queensland regulated ships’ are to meet these standards.

For single phase shore connections to be safe and compliant, the verification of correct polarity is paramount. Correct polarity is illustrated in Figure 1. The reversal of polarity (Figure 2.), is when the neutral conductor is terminated to where the active conductor is supposed to be.

This may seem like a minor problem, as all electrical devices will still operate, and in the event of a short for example will still be live even after turning the “switch” off. Because of this, all switching is in the neutral conductor.

To elaborate further, Figure 1 shows correct polarity, and with the switch open, there is no potential between the load and the earth. Figure 2 shows that incorrect polarity, and with the switch open, there is potential between the load and the earth. Allowing for an increased risk of electrocution, short circuit and/or fire. Another issue is that of polarity sensitive RCBO devices that are available within Australian.

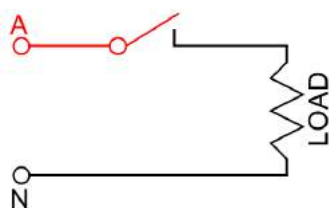


Fig. 1

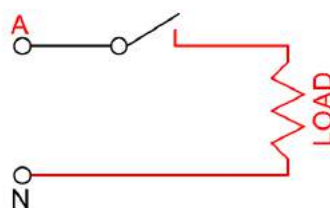


Fig. 2

In the event of using this device when the polarity is reversed, these units will likely function as required, and then can be reset. However, irreparable damage can be caused to its operation because of the reversal, and is unlikely to function correctly subsequently, and will not provide any earth leakage protection (Justice, 2018).

To prevent this reversal of polarity for shore to boat electrical supply as detailed in AS/NZS 3004.2, the following functionalities as listed below, need to be in place to ensure the correct operation of safety devices, and protect the personnel from electrocution and damage to the electrical installation:

1. A circuit breaker operating in all live conductors of the supply, including neutral, and is fitted adjacent to the shore supply inlet on the vessel.
2. A test device, connected on the supply side of the vessel's shore supply circuit breaker to check and visually indicate the polarity of the shore supply in relation to the vessel's system*.
3. An interlocking circuit to ensure the shore power cannot be connected unless the polarity is correct*.
4. An indication to show when the shore supply is energised.
5. Appropriate switchgear to facilitate the reversal of polarity.

*** Except where shore power is supplied to the boat by an on-board isolating transformer or converter with a polarized output.**

The Standard also stipulates that instructions for connections of shore power are to be posted at the connection point.

The testing of Polarity is the foundational requirement that all shore connection devices need to address. The AS/NZS 3017:2007 Electrical Installation - Verification Guideline for energised systems, detail testing voltage potential between the active and earthing conductor, with no potential between the neutral and earthing conductor. This is normally achieved by using a multimeter and is a momentary test.

For Vessel shore connections this testing regime requires it to be part of a permanent installation and the need for a Functional Earth. Within AS/NZS 3000:2018 Wiring Rule, 1.4.66 Functional earthing (FE), it states that:

“An earthing arrangement provided to ensure correct operation of electrical equipment or to permit reliable and proper functioning of electrical installations.”

Further details are provided in 5.2.2 Functional Earthing (FE), where it states that:

“Equipment may be required to be connected to the earthing system for purposes of correct operation rather than the safety conditions associated with protective earthing. In such cases, functional earthing conductors are not required to be selected and installed to withstand fault currents or to be identified in the same manner as a protective earthing conductor.”

Examples for FE use:

- connections fitted to certain types of RCDs
- conductors connecting cathodic protection systems
- radio interference suppression
- clean earth

Therefore, a vessel where a permanent Polarity testing arrangement is required, the use of a functional earth is required. However, this test needs to be a momentary test, as Protective earthing conductors shall not normally carry current, so cannot be a permanent connection; (AS/NZS 3000:2018 - Clause 8.3.8.1).

What has been noted by myself over the past few years, is that some shore connection arrangements use a permanent functional earth for testing Polarity, to provide an indication of the correct connection of the conductors.

The below Figure 3., is an extract from an Approved electrical circuit arrangement for a shore connection which is in fact incorrect and not compliant.

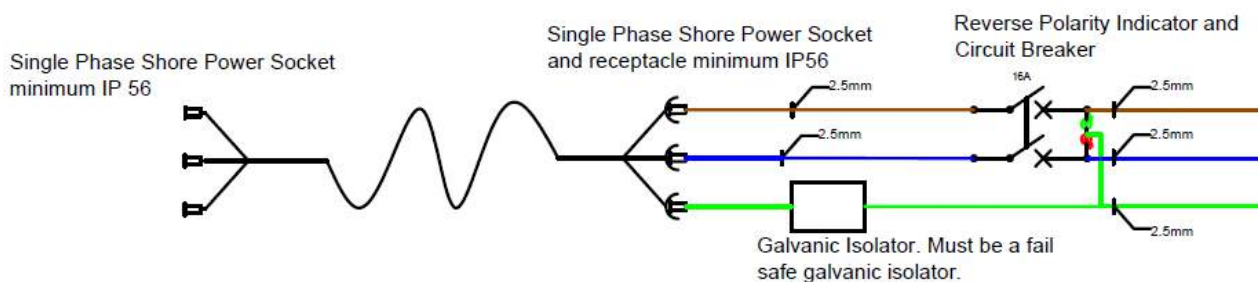


Fig. 3

The above device has an appliance inlet, circuit breaker, and polarity indication. The Polarity indication consists of 2 LED lamps connected across the Active/Neutral conductors, with the centre point having a Functional Earth connected to the Protective Earth. As required by the Standard, all functionalities need to be addressed, and as can be seen it only shows 2 out of the 5 have been met.

This polarity indication circuit allows for current to normally be carried in the Protective Earth conductor. The following Figure 4, demonstrates the current path of the above circuit arrangement, for a correct and incorrect polarity within the protective earthing conductor.

This then shows current being carried normally in the Protective Earth conductor, however when compared against the AS/NZS 3000:2018 Clause 8.3.8.1, it fails to meet compliance.

For a Polarity Test to be conducted on an energised system, it is required to allow current to be carried in the Protective Earth conductor. To prevent current being normally carried in the Protective Earth conductor for polarity test, the test needs to be a momentary connection.

The below Figure 5., shows a simple method that the circuit through the Functional Earth needs to make and break to test polarity. This type of circuit arrangement will prevent current being normally carried in the Protective Earth conductor and would then meet compliance.

A further safety consideration should to be given to the installing of a resistor in series with the Functional Earth to limit the current to the Protective Earth conductor in order to protect this circuit (Refer Figure 6.). If the failure of any of the components that lead to a short circuit, the current will be limited by the high resistance. This will reduce the effects of burning/melting, electrical-shock and other hazards to personnel (Michael D. Seal).

From experience, I know that there is a lot of misinformation out there regarding this subject, however the above functional requirements are all necessary to meet compliance to legislation and standards to facilitate the basis for a safe and compliant electrical installation for shore connection devices.

Citations: Justice, T. G.-D. (2018, July). Polarity Sensitive RCBO Devices. Hobart, Tasmania, Australia. Michael D. Seal. (n.d.). GE Senior Specification Engineer.

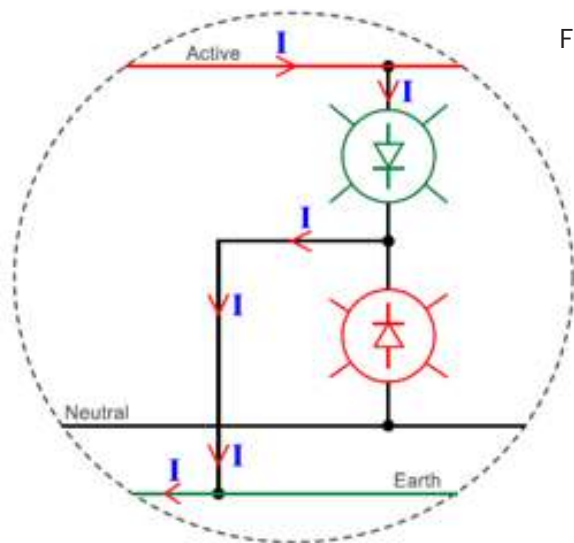


Fig. 4

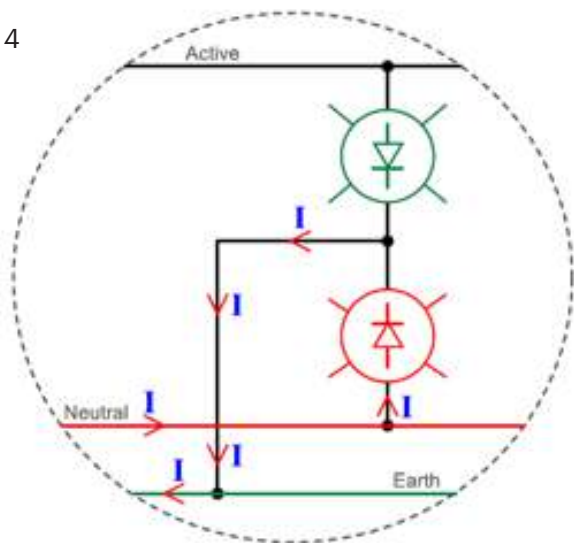
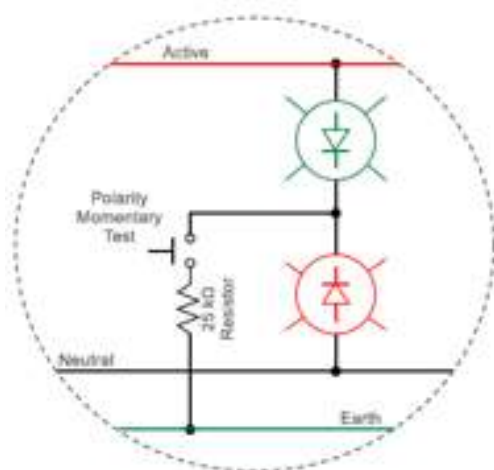
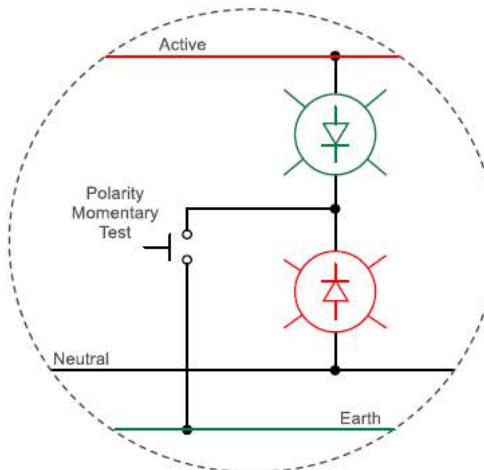


Fig. 6

Fig. 5



The pros and cons of LNG as a maritime fuel

As the world looks at ways of reducing GHG emissions and limiting the impacts of climate change and adhering to the Paris Agreement's temperature goals, the maritime industry continues to look for meaningful ways to reduce its emissions.

Shipping is coming under increasing pressure to change course to more efficient and sustainable operational practices. International groups like the International Maritime Organisation (IMO), as well as private companies and the wider public are pushing for this change. To achieve this, alternative fuels are seen as a key factor in making the maritime industry more sustainable.

The aim of zero emissions from the maritime industry aligns to RightShip's Vision of "A maritime industry that causes zero harm".

There are already plenty of fuels being used within the maritime industry, such as heavy fuel oil, marine diesel oil, as well as some less common alternate fuel types like liquified natural gas (LNG), liquid hydrogen (LH2) and biofuels.

However, LNG has gained the most attention and is arguably the most widely used alternate fuel. LNG as a fuel.

Liquified natural gas (LNG) is a fossil fuel which primarily consists of methane and significantly reduces emissions of SOx, NOx, particulate matter, and CO2. It has historically been used in LNG carriers, which typically use dual fuel engines and can switch between LNG and conventional bunker fuels, often when one fuel is cheaper than the other.

However, it is gaining popularity in vessel types such as ultra large containerships and capesize bulk carriers. Compared to other marine fuels it is seen by some as a better, less harmful fuel in terms of its air emissions, mainly due to its low sulphur content. Supporters of LNG also say that while other alternatives are unproven and still in development, LNG can be used now and should have a wider role as a transitional fuel, until other fuels are ready for large scale use.

While LNG is seen to have some beneficial features it also has many negative issues and attracts controversy. A lack of bunkering infrastructure allowing it to be provided as a viable fuel type is one such issue, and one that the World Bank has given its opinion on in a report on decarbonising maritime transport and said that countries should minimise investment in LNG infrastructure.

To find out more visit www.rightship.com to read their LNG position paper

Source: Rightship

About: RightShip is the maritime industry's leading third-party due diligence and risk management provider. Our team believes that a successful voyage is one that meets best practice safety, sustainability and crew welfare standards.

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