THE REPORT

JUNE 2019
ISSUE 88

The Magazine of the International Institute of Marine Surveying

INTERNATIONAL INSTITUTE OF MARINE SURVEYING

IIMS HEADQUARTERS REVEALS ITS RICH HISTORY & SECRETS

SHOCKING SPIKE IN CONFINED SPACE FATALITIES

SECURING OF CONTAINERS ON DECK

PITFALL IN DEEP WATER PIPE-LAY A WARRANTY SURVEYOR'S PERSPECTIVE

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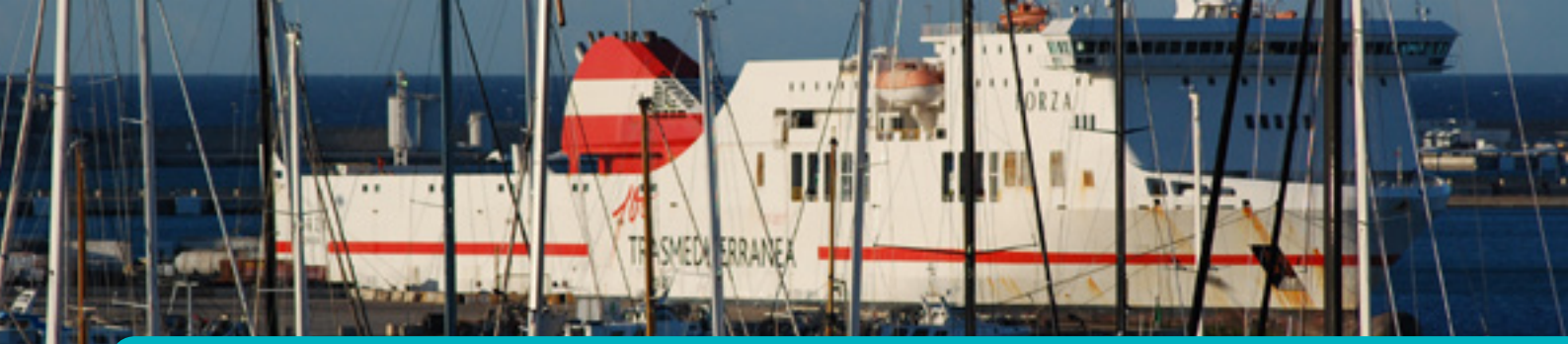

Editor's Letter

Dear IIMS Member

This is a rather different Report Magazine to what you are used to reading and for good reason. This edition is slanted much more towards IIMS matters with lesser emphasis on other marine surveyor related articles. I make no apology for that and, as you 'thumb through' this edition of The Report, it will soon become apparent why.

Last year, IIMS members approved a vote for the Institute to search and purchase a property by mortgage when the lease on Murrills House, our current location, expires in February 2020. In a strange turn of events, IIMS is now closing in on the purchase of Murrills House, which is set to become the new permanent headquarters for the Institute. With this in mind, I have devoted a dozen pages in this issue to explain our reasoning and to share with you the astonishing history of Murrills House, which can be traced back some 500 years; and it is a fascinating story.

IIMS would like your help and I am unashamedly reaching out to the members and other supporters of the Institute to invite you to make a financial donation towards the property purchase and essential maintenance. Any financial donation will not simply go to the bottom line of the business. Rather, we plan to invest it in paying for the stamp duty on the property purchase with any balance left being put towards replacement windows and so on. All those who choose to make a donation (unless done so anonymously) - no matter how small - will be recognised with a special, individual Founders Plaque displayed permanently at the offices. We have made it simple to donate by setting up a 'Just Giving' page at **https://bit.ly/2VU4Qnr**. Please turn to page 36 to learn about the rich history of the ancient Murrills House.

Thinking about Conferences, the first announcement is made of the two-day seminar that we have organized in Brisbane, Australia on 1st and 2 August. I hope our members in Australia and New Zealand will take advantage of the range of speakers and excellent content we have lined up and I hope to meet a number of you in person. News is also starting to emerge about the IIMS UAE Branch bi-annual Conference taking place in Dubai on November 20 to celebrate the branch's 10th anniversary. What makes this event even more special is that it is being held aboard the QEII, an inspired choice in my opinion. Watch for more details coming soon.

Elsewhere in this edition, you can learn about some of the challenges associated with the carriage of soya bean cargoes (page 56). Pitfall in Deep Water Pipe-Lay – A Marine Warranty Surveyor's Perspective by Cdr Balakrishnan G Nair (page 48) is a well authored article explaining how something seemingly quite simple can become complicated when it goes wrong!

The subject of unnecessary deaths in enclosed and confined spaces is one that just will not go away. I have penned a short article on the back of recent statistics which have shown last year to be the worst since records began back in the last century. Please, don't allow yourself to become a statistic. Read the article on page 62, risk assess when faced with a confined space and take care.

Survey well.

Mike Schwarz
Chief Executive Officer
International Institute of Marine Surveying

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The President's Column

Dear IIMS Member

It's the time of the year when surveying becomes as challenging as it possibly could be in many parts of the world, but especially for us in the Middle East. It's summertime and as one can imagine working on the hot deck of a vessel, or in the engine room, or still worse inside confined spaces becomes an extremely demanding task for a professional marine surveyor.

Conditions where the temperature is 45°C and sometimes exceeding 50°C with 90-100% humidity requires one to be well hydrated and protected against heat stroke.

In the circumstances, I thought it appropriate to dedicate this edition's column to the occupational health and safety of our surveying fraternity.

It is known and understood that marine surveyors are extremely vulnerable to unknown hazards and risks because we often go onboard unknown ships, workboats and small craft too, entering unknown access areas where there are sometimes variable safety cultures.

We must remember that our families rely on us to go and return safely from these jobs. I mention this especially in the context of jobs requiring entry into enclosed spaces and draw your attention to the opinion article on this subject on page 62.

I do appreciate the odd safety tour or safety briefing that is required during say the introduction phase to a dry dock or to a new vessel. Additionally, there may be a more extensive health and safety briefing that most safety conscious clients require us to undergo when we attend their vessels. However, is this enough?

In my view we must keep our guard high and be always aware of safety risks we are exposed to particularly when we have a hard day working in testing weather conditions. At the end of the survey when physical constraints overtake our alertness that is when complacency can set in and when we are at our most vulnerable. We at IIMS know the diploma module that we have which is dedicated to health and safety for marine surveyors. I would recommend each member should access it and consider it.

Although we, as your Institute and professional body, care about upgrading your knowledge and your concerns to remain up to date in your profession, we can assure you that we are equally concerned about your wellbeing and safety standards.

I have therefore dedicated this column towards encouraging you to include some basic health and safety points into your own disciplines, both for your company and for your colleagues and to rigorously carry out those procedures irrespective of whether you're on maybe a rig, a ULCC or a small craft.

Please remember this reminder from your IIMS President about the importance of your personal safety and wherever you are do stay safe.

Good wishes

Zarir.

Capt. Zarir Irani, *President*
International Institute of Marine Surveying
Email: Capt.Irani@constellationms.com

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AMSA CHANGES TO SHIPPING REGISTRATION HAVE COME INTO FORCE

Starting from 1st April 2019, the Australian Maritime Safety Authority (AMSA) has applied changes to shipping registration laws.

Registering a ship: There are no changes to the way that you register a ship on the Australian Registers unless you do not know the vessel's full ownership history.
Namely:

- Ships registered on the Australian general shipping register have Australian nationality.
- Registration of a ship on the Australian general shipping register provides legally and internationally recognisable nationality to your ship. When registered, you will have Australian protection on the high seas and in foreign ports.

A vessel may require certification in accordance with:

- the Navigation Act 2012, for a regulated Australian vessel;
- the Marine safety (Domestic Commercial Vessel) National Law Act 2012, for domestic commercial vessels.

Australian owned ships are required to be registered on the Australian general shipping register if they are one of the following:

- a commercial vessel, 24 metres or over in tonnage length, capable of navigating the high seas;
- any vessel travelling overseas.

The following vessels are exempt from the requirement to be registered (except if they are travelling overseas):

- pleasure craft;
- fishing vessels;
- government vessels.

These vessels are permitted to be registered and may be registered on the Australian general shipping register if the owner chooses to do so.

Notice of intention to register a ship: If you buy or acquire a vessel and you do not know its full ownership history you must lodge a notice of intention to register a ship to be published on our website. This is a change to the old requirement for a Gazette notice to be submitted to the Federal Register of Legislation. The information in the notice of intention to register will be published on AMSA website for 30 days: This allows any former owners to notify AMSA of any claim they may have to the vessel.

Objections to an intention to register a ship: If you have a claim to a ship for which an notice of intention to register has been received you can submit objections to an intention to register to us.

Closure of registration: The way you close a registration — for ships not required to be registered — has changed:

- It is now possible for the legal owner to make an application to close a registration if the Australian registration is no longer required. Previously this application could only be made by the registered owner.
- An application for closure of a ship not required to be registered needs to be completed and a statutory declaration provided.
- In some cases, a Bill of Sale will also be required.

CONCERNS REMAIN FOR GLOBAL MARINE UNDERWRITING SAYS IUMI

Whilst in general, major losses remain stable, the continued erosion of the global premium base means that attritional losses are becoming much more significant. The increased risk of large, more complex and costly claims has the potential to impact all marine underwriting sectors in 2019. The International Union of Marine Insurance (IUMI) gave expert opinion on the current state of the hull, cargo and offshore energy insurance markets at its Spring Conference in Hamburg on 7-8 April 2019.

Hull casualties

Although the global fleet continued to grow at around 3% in 2018, the number of total losses (vessels over 500GT) stood at a 20-year low. Only 21 total losses were recorded last year and this is on the back of a general downward trend witnessed since 2010. The reduction was seen across all vessel classes.

Serious casualties (excluding total losses) have stabilised over the past three years but are still higher, on average, than in 2014. There is likely to be a spike in Q1 2019 when numbers have been finalised. 900 incidents were recorded in 2018 representing 1.6% of the global fleet (or 1.2% in GT).

Rama Chandran, Chairman of IUMI's Ocean Hull Committee commented: "We are pleased to see a stabilisation in total losses and serious casualties and this is a clear indication of an enhanced safety culture, improved vessel design and more effective regulation across the industry. Statistics show total losses of younger tonnage (<15 years) are dramatically lower in 2014-2018 than in 2009-2013. Underwriters welcome the industry's overall improvement in safety but also recognise that increasing size, scale and complexity of new tonnage is affecting the current risk profile."

Read the full story at **https://bit.ly/2DI45Up**

RECONSTRUCTION OF CLASSIC 1954 SUPERYACHT ISTROS BEING UNDERTAKEN BY FEADSHIP

Dutch shipyard Feadship is set to completely rebuild 42-metre (138-foot) classic motoryacht Istros. Built in 1954 by Amsterdam yard De Vries Lentsch and previously regarded as one of the largest superyachts to be built in the Netherlands, the yacht is now undergoing a total refit at Feadship's facility.

H2 Yacht Design and Laurent Giles Naval Architects made a first attempt to restore the yacht in 2013, but the project was rejected due to lack of funding.

Under new ownership, the current rebuild project began last year with the removal of the superstructure and reconditioning of the hull at a shipyard in Malta. The yacht has since arrived back in the Netherlands.

Istros is due to be relaunched in mid-2020.

A new engine room will also be constructed for two C18 engines, a C4.4 diesel generator and a Capstone DC560 gas turbine generator.

Feadship has grand plans to restore the yacht's original glamorous aesthetic from its currently rusty hull. The combination of old and new features will be impeccably incorporated into the superyacht's interior.

The yard has worked directly with the yacht owner in order to create a vessel that is family-orientated and child-friendly, perfect for charter use.

BRITISH COATINGS FEDERATION TO LAUNCH PROTECT, COLLECT AND DISPOSE ANTIFOULING INITIATIVE

The British Coatings Federation (BCF), along with the Green Blue (a joint initiative between the Royal Yachting Association and British Marine) and the Yacht Harbour Association (TYHA), will launch their Protect, Collect and Dispose Antifouling Initiative at the 2019 Marina Conference in Bournemouth on 24th-25th April. The objective of the initiative is to inform as many people as possible about environmental best practice when antifouling boats.

This initiative builds on the successful, award-winning DIY Safe Antifouling programme BCF, RYA and British Marine launched in 2017. It is intended for those who antifoul their own vessels, as well as for marinas and boatyards who are offering professional antifouling services.

An informative trifold leaflet has been produced explaining how to best protect yourself and the environment, especially with regard to collecting paint debris and disposing of waste. A weather resistant poster is also available for display in chandlers, marinas and boatyards.

British Coatings Federation to launch protect, collect and dispose antifouling initiative

NEW TECHNOLOGY AIMS TO REDUCE UNDERWATER RADIATED NOISE GENERATED BY SHIPS' PROPELLER CAVITATION

A new technology aimed at reducing the underwater radiated noise (URN) generated by ships' propeller cavitation has been developed by Strathclyde University and Oscar Propulsion.

The patented Oscar PressurePores system reduces propeller tip vortex cavitation by applying a small number of strategically bored holes in the propeller blades.

The addition of these pressure-relieving holes now allows ships to operate with a more silent propeller with a minimum of compromise on its efficiency or having to slow steam. Reducing cavitation also reduces its associated erosive effect.

David Taylor, CEO, Oscar Propulsion, said: "Underwater radiated noise is one of the most adverse environmental by-products from commercial shipping, yet unlike other forms of marine pollution, there is no legislation yet in place to prevent this type of environmental damage.

Read the story in full at **https://bit.ly/2vtDnKt**

LEADING MARITIME CAPITALS OF THE WORLD REPORT 2019 PUBLISHED

The Leading Maritime Capitals report for 2019 is out, with fresh insight on which maritime metropolises provide the best support for companies in shipping and related services. Criteria include soft and hard infrastructure and access to world-class talent and services – all key components that maritime businesses need to thrive in their chosen locations.

Singapore maintained its top position at the head of the 15 leading maritime capitals. Despite a somewhat weak trade cycle in traditional shipping and offshore oil and gas markets yet to recover, Singapore was able to retain its lead in three of the five pillars of the ranking: Shipping, Ports and Logistics as well as Attractiveness and Competitiveness. In the two remaining pillars, London is number one in Maritime Finance & Law, while Oslo is number one in Maritime Technology. On the overall ranking, Hamburg remains in the number two spot, while Oslo drops from third to seventh. Rotterdam and Hong Kong show the biggest improvement, climbing to third and fourth respectively, with London rounding out the top five, and Shanghai at number six.

Read the report at **https://bit.ly/2DFIL2Y**

The yacht's eco credentials continue below decks with a reversible heating/air conditioning Webasto pump, that will heat and cool the yacht using minimal power.

SPIRIT YACHTS SET TO LAUNCH ITS FIRST ELECTRIC YACHT IN EARLY 2020

Spirit Yachts has begun construction of its first electric yacht, a 13.4m vessel due to launch early 2020.

The Spirit 44E, has two solar panels integrated into her deck, colour matched to the teak. These will charge OceanVolt 48VDC 30.4kWh batteries (made up of 48 1.9kWh batteries), which will power an Oceanvolt SD15 electric drive.

"From afar, the Spirit 44E will look like any other Spirit sailing yacht," said Spirit Yachts head designer Sean McMillan. "Low freeboards, long overhangs, flush decks and the timeless beauty of quality wooden craftsmanship. Up close, she will display signs of the sailing yachts of the future."

Hydrogeneration via the propeller is used to regenerate the batteries while sailing, calculated at 1.5kW while sailing at five knots.

In addition, Spirit Yachts is working with OneSails GBR (East) to develop a solar solution for the Spirit 44E's sail wardrobe.

Read more at **https://bit.ly/2UWKvdw**

OCEANCO'S BRAVO EUGENIA RECEIVES NEW YACHT CLUB OF MONACO AWARD

Oceanco's recently delivered 109-metre motoryacht, Bravo Eugenia, won the accolade in the category Technology and Innovation at the Yacht Club of Monaco's awards.

This newly conceived award is based on the Yacht Club of Monaco's fundamental values and criteria, which include Naval Etiquette, Preservation of the Ocean and its biodiversity, and Technological Innovation.

Bravo Eugenia, Oceanco's first LIFE-designed yacht, developed in collaboration with Lateral Naval Architects, is characterised by its Lengthened waterline, Innovative layout, Fuel-efficient hull design and integration of Ecologically conscious technologies.

The LIFE Design not only adds a slender elegance to the yacht, but also leads to a reduction in the overall demand for propulsion power. As a result, the engine room is condensed to a single tier – a rarity in large yachts. This affords additional room for lifestyle areas – particularly on the lower deck, where space is usually restricted.

Bravo Eugenia, Oceanco's first LIFE-designed yacht, developed in collaboration with Lateral Naval Architects.

GUIDELINES ON CYBER SECURITY ONBOARD SHIPS

Ships are increasingly using systems that rely on digitisation, digitalisation, integration and automation, which call for cyber risk management on board. As technology continues to develop, information technology (IT) and operational technology (OT) onboard ships are being networked together – and more frequently connected to the internet. This brings the greater risk of unauthorised access or malicious attacks to ships' systems and networks. Risks may also occur from personnel accessing systems on board, for example by introducing malware via removable media.

To mitigate the potential safety, environmental and commercial consequences of a cyber incident, a group of international shipping organisations, with support from a wide range of stakeholders have participated in the development of these guidelines, which are designed to assist companies in formulating their own approaches to cyber risk management onboard ships.

Approaches to cyber risk management will be company and ship-specific but should be guided by the requirements of relevant national, international and flag state regulations. These guidelines provide a risk-based approach to identifying and responding to cyber threats. An important aspect is the benefit that relevant personnel would obtain from training in identifying the typical modus operandi of cyber attacks.

Download the guidelines in full at **https://bit.ly/2Ftn4lG**

THE BRITISH BOATING SECTOR HAS GROWN FOR THE SEVENTH CONSECUTIVE YEAR

The figures produced by British Marine show a 1.7% growth in revenue, with the marine industry contributing more than £1.1bn of Gross Value Added (GVA) to the UK economy and supporting more than 33,000 direct employees.

Leisure marine exports in 2018 surpassed £1bn for the first time since 2013, an increase of 16% compared to 2017.

The increase in exports has been attributed to the strong global economic growth over the last year and a weakened sterling as a consequence of Brexit.

Half of the exports went to the Eurozone and wider EU, however the USA is a growing sector accounting for 25% of British exports, an increase of 30%. In addition, Asia has seen growth of 20% and South America 39%.

"These latest figures illustrate that the British boating sector has continued to prosper, despite challenging conditions and the ongoing uncertainty about Brexit," said Lesley Robinson, BM CEO.

"Business confidence within the industry relies on consumer confidence and if this uncertainty continues the industry will pay the price. After all, leisure activities are almost always the first thing consumers drop during tougher times."

The increase in exports has been attributed to the strong global economic growth over the last year and a weakened sterling as a consequence of Brexit, making British products stand out as price competitive compared to their international rivals

The BM survey also showed the majority of members are positive about their future prospects, though less so than in 2017.

REDUCING THE RISK OF INCIDENTS DUE TO SYSTEMIC FAILURES BOOKLET PUBLISHED

The guide 'Reducing the risk of incidents due to systemic failures' is based on the partnership between Bureau Veritas, TMC Marine and the London P&I Club. It offers guidance on decreasing onboard systemic failures and highlights the challenges in shipping with the aim of preventing injury, loss of life and damage to ships and cargo.

Essentially the booklet focuses on enhanced onboard systems so that they are in line with the requirements of the International Safety Management (ISM) Code's Safety Management Systems to reduce risk and develop a culture of continual improvement.

The publication provides an insight into systemic failures on board ships in response to a global trend of increases in system deficiencies related to the requirements of the ISM code.

Sometimes systemic failures can result in a vessel's detention by the port state control due to pollution, injuries and/or fatalities sustained.

According to the booklet, the two main causes of systemic failure are non-compliance with the SMS in place on board the ship, or an ineffective and deficient SMS.

Download the booklet at **https://bit.ly/2VJDFfe**

ICOMIA SMALL CRAFT STANDARDS BULLETIN EDITION 2019-1 HAS BEEN PUBLISHED

The International Council of Marine Industry Associations' (ICOMIA) Small Craft Standards Bulletin provides industry stakeholders with early notification on changes to existing standards and modifications to production methods; as developed and maintained by the ISO (International Organization for Standards) Technical Committee for Small Craft Standards – TC188 and SC2. The 11th edition of the ICOMIA Small Craft Standards Bulletin provides an update of standards.

Current news

- ISO TC 188 Working Group 12 will be re-opened to review ISO 9094 Fire protection as well as potentially ISO12133 dealing with Carbon monoxide detection systems.
- The next ISO TC 188 & SC2 Plenary and Working Group meetings will take place from 24– 28 June 2019 in Toronto, Canada, kindly hosted by NMMA Canada.
- A new proposal to create a work item addressing Lithium-Ion batteries and their installation within small craft will be implemented in Toronto.
- The European Commission has informed ISO TC 188 that only normative references that are dated may be used if an ISO standard will become harmonized and its reference published in the OJEU. There are some exceptions to this but require extensive justification and an assessment to show that it can be done without risk to safety requirements.
- ICOMIA along with the Swedish Standards Institute (SIS) and the ISO TC 188 'Advisory Group' maintain a TC 188 Improvement List & Glossary of Terms

Download the bulletin at **https://bit.ly/2WgzrIL**

THE FUTURE OF FISH FARMING VESSELS IS HERE NOW IN THE FORM OF A FULLY ELECTRIC WORKBOAT

'Astrid Helene' is a fully electric salmon farm workboat designed and built by Grovfjord Mekaniske Verksted, Norway. Owner/ operator Northern Lights Salmon saves the planet from up to 90t CO2 and 900kg of NOx particles annually – the average emission of a diesel powered fish-farm workboat.

There are no longer any diesel fumes on deck either. For crew, the fumes could be quite annoying – particularly if the wind was blowing it in their direction. Now, there is just clean air.

Fully electric work boats such as Astrid Helene will play a key role in the industry's future: "Electric work boats are perfect for fish farming. The lack of engine noise is not only an advantage for the crew, but also for the salmon. It actually reduces stress levels in the fish. And the environmental benefits are obvious. This is key for us. Our aim has always been to run our business in as green a way as possible." Explained Søren Balteskard, Chairman of Northern Lights Salmon.

The disadvantages? According to Søren Balteskard there really aren't any. Electric boats are easy to manoeuvre and go from zero to full speed extremely fast. And the typical concern about lack of charging possibilities during long distance sailing, is not a problem as fish farms are located close to shore.

Read the story in full at **https://bit.ly/2GRnoLo**

RESTORATION WORK BEGINS ON LOCH LOMOND PADDLE STEAMER

Work on the iconic paddle steamer berthed in Loch Lomond has taken significant steps forward, in a bid to get the historic Maid of the Loch fully restored to her former glory.

Following a £950,000 cash injection from The Scottish Government, the Loch Lomond Steamship Company (LLSC) has contracted out vital structural work to naval architects, Marine Design International Ltd. This particular stage is necessary for meeting the required safety standards and will place a strong focus on the vessel's current state by surveying, calculating and designing any adjustments which may have to take place.

The ship will also see the installation of two-boiler feed pumps, which were last year donated by Summerlee Heritage Museum, along with new pipework and valves being manufactured by Stevenson-based McEvoy

Engineering Ltd. Once the £1 million refit is completed, visitors to the Maid will be able to enjoy the ship 'in steam' again and watch her majestic engines and paddles slowly turning.

Work has also begun to restore the Maid's appearance back to the original 1950s style. This will be carried out by Dumbarton company, Ferguson Flooring, who will source the appropriate materials for refurbishing the promenade aft deck saloon, originally known as the deck bar, and the main deck saloon aft. Once complete, this will house an education facility for hosting school visits and a main room for holding functions and events. A lift will also be fitted to provide assistance between decks.

Read more at: **https://bit.ly/2QuTwZO**

SURVEYOR'S FALL FROM A STEPLADDER CAUGHT ON CAMERA IN US TERMINAL

The North of England P&I Club has given details of a recent incident involving a surveyor's fall at a US terminal, such that when a vessel is in port and something happens, there is a strong chance it has being caught on camera.

According to data provided by Gary Hemphill, from Phelps Dunbar LLP, a surveyor onboard a ship moored at a US terminal, fell from the stepladder when departing the vessel. A crew member alerted the Master, who saw the surveyor lying on the concrete wharf apron about 20 feet below with his leg badly broken.

The terminal operator contacted emergency medical personnel and the injured surveyor was taken away by ambulance. The ship's crew took photographs of the surveyor as he lay on the wharf apron and as he was loaded into the ambulance.

The Master interviewed crew members who were on watch at the time and they all prepared written statements of what they had observed.

The witnesses' recollections were consistent – the surveyor descended to almost the bottom of the ladder when he lost his footing and fell a short distance. They all gave the opinion that the surveyor fell because of being overweight. The P&I club was not notified of the incident before the ship sailed.

Read the story in full at **https://bit.ly/2V6vgms**

BIG FOUR HAVE FORMED THE DIGITAL CONTAINER SHIPPING ASSOCIATION IN JOINT INITIATIVE

Four container shipping heavyweights, Maersk, MSC, Hapag-Lloyd and Ocean Network Express, have come together to establish the Digital Container Shipping Association on 10 April 2019 in Amsterdam.

The parties said that the aim of the association is to create common information technology standards to make the industry more efficient for both customers and shipping lines.

The plan to create a neutral, non-profit association for ocean carriers was first announced in November 2018. The association, focusing on driving standardization, digitalization and interoperability in container shipping, is now starting operations with a leadership team made up of industry veterans, including Thomas Bagge (pictured) from A.P. Moller – Maersk, who was appointed CEO and Statutory Director of the Digital Container Shipping Association.

Thomas Bagge is appointed CEO and Statutory Director of the recently formed Digital Container Shipping Association

To create value quickly and to overcome some of the biggest pain-points in the industry, one of the first projects of the association is focusing on standards to overcome the lack of a common foundation for technical interfaces and data.

Additionally, the association is creating an industry blueprint for processes, which will be another significant part of the future of shipping. The work undertaken will be for the benefit of the entire industry, as all standards will be openly published and available free of charge to interested external parties.

USCG PUBLISHES A SAFETY ALERT AFTER THREE CONFINED SPACE FATALITIES ON A MODU

The US Coast Guard (USCG) has issued an important Safety Alert on the dangers of confined space entry following a recent incident where three people were asphyxiated in a confined space on a drilling rig (MODU).

The USCG says that studies show that people often miss the obvious clues while working under enhanced stress and because their focus is on another activity. Several sources indicate that over 50% of those who perish in enclosed and confined spaces accidents do so while trying to assist and rescue their co-workers.

Ten crewmembers were on board the MODU preparing it for a heavy lift transport to an overseas ship breaking facility. They were successful in dewatering three of the MODU's four legs.

In light of this incident,the Coast Guard strongly encourages all who work or may be employed onboard vessels in any role, whether they be senior shipboard officers or crew, riding crew, shore side managers, owners/operators, and other personnel to:

- Obtain the requisite level of knowledge and training of confined space entry procedures including emergency and rescue procedures;
- Ensure crews undergo periodic confined space training and participate in routine and practical onboard emergency drills;
- Verify all required confined space entry and rescue safety equipment is onboard, maintained, tested and fully functional; and
- Continually appreciate the dangers involved in confined space entry and educate yourself by further study.

Read the safety alert at **https://bit.ly/2JdR1cZ**

MAIB REPORT ON THE FATAL CAPSIZING OF LAURA JANE FISHING VESSEL IS PUBLISHED

At 1311 on 7 May 2018, the single-handed fishing vessel Laura Jane capsized off Mount Batten Breakwater in Plymouth trapping its skipper in the wheelhouse. The vessel remained afloat with a few centimetres of the wheelhouse protruding above the water. Two RNLI lifeboats arrived at the scene within 15 minutes of the capsize and Laura Jane was towed to the nearby Batten Bay beach, arriving at around 1400. The skipper was extracted from the wheelhouse by two of the RNLI crew who broke a wheelhouse window to get access to him. He was immersed in water, was unconscious and not breathing. Attempts to resuscitate him by the lifeboat crew and paramedics from the emergency services were unsuccessful. He was then airlifted to Derriford Hospital, where he was pronounced deceased at 1450.

Safety lessons

- The weight of the fishing gear on Laura Jane reduced its freeboard to the extent that water entered the vessel through its freeing ports, causing it to capsize.
- Between 2012 and the vessel's loss, the Maritime and Coastguard Agency (MCA) inspected the vessel a number of times. However, the presence of low level freeing ports on an open boat was not challenged.
- Laura Jane's owner had not undertaken a stability assessment of the vessel, as recommended in guidance published by the MCA, and had taken the successful outcome of MCA inspections as assurance that the vessel was safe to operate.
- The skipper had not completed the mandatory Safety Awareness and Risk Assessment training course or any stability awareness training.

Recommendations
Laura Jane's owner has been recommended (2019/107) to ensure that crew employed on its vessels possess all mandatory safety training course certificates, and to require its skippers to complete the voluntary Seafish <16.5m skipper's certificate scheme with a view to enhancing their stability awareness.

They have also be recommended (2019/108) to carry out stability assessments, in accordance with published guidance, of any <12m fishing vessels that it may own.

Read the report in full at **https://bit.ly/2XWT7Sp** Read the Annexes in full at **https://bit.ly/2XS9Ztw**

UK MAIB ISSUES AMENDED GUIDANCE TO MGN 564 ON MARINE INCIDENT REPORTING

The MAIB investigates marine casualties involving UK vessels worldwide and vessels of any flag in UK territorial waters with the aim of preventing further avoidable accidents from recurring in the future. The UK MAIB has published amended guidance on marine incident reporting – what who and when an incident should be notified – with modifications made to MGN 564.

Who must report
The master/skipper, or senior surviving officer of a UK ship must notify the MAIB of any marine casualty or marine incident.

The master/skipper of any ship must notify the MAIB of any marine casualty or marine incident if:

- the ship is within UK waters and carrying passengers to / from the UK, or
- the marine casualty or marine incident occurs within the jurisdiction of a UK harbour master.

The ship's owner must notify the MAIB of any marine casualty or marine incident, unless s/he is satisfied that the master/skipper or senior surviving officer has made the report.

In addition to the above, the following must notify the MAIB of any marine casualty or marine incident, if it occurs in their area of responsibility:

- Harbour authorities, for occurrences in or adjacent to their harbour area;
- The person, authority or body having responsibility for an inland waterway;
- An official of the Maritime and Coastguard Agency (MCA) for all occurrences in UK waters.

Read the amended MGN 564 at **https://bit.ly/2HFbXJQ**

PORT STATE CONTROL COMMON DEFICIENCY AREAS ON LIQUEFIED GAS CARRIERS CITED

This article addresses five common deficiencies that Sector Houston-Galveston Port State Control Officers (PSCOs) have fund on liquefied gas carriers. In 2018, Sector Houston-Galveston conducted 141 Certificate of Compliance (COC) exams on liquefied gas carriers, seven of which resulted in IMO detentions. This equates to a 5% detention ratio, which is more than double the national average for IMO detentions in 2018 (1.5 %).

Some combination or other of the listed deficiencies were cited in all of the Sector's aforementioned gas carrier detentions. The purpose of this article is to share information and prompt owners, operators, surveyors and other involved parties to take proactive steps to identify and correct sub-standard safety and environmental stewardship conditions before Coast Guard port state control intervention, including COC removal, cargo cessation and/or detentions, becomes necessary.

Read the article in full at **https://bit.ly/2VEtt7u**

SAFE LOADING PRACTICES HIGHLIGHTED IN FISHING VESSEL SINKING

The Transportation Safety Board of Canada (TSB) has published an investigation report on the sinking of the fishing vessel 'Western Commander' off Triple Islands, Dixon Entrance, British Columbia, in April 2018. The report highlighted issues related to safe loading practices and proper risk identification.

Probable causes
TSB said the factors that potentially affected the vessel's safe passage included:
- the rudder shaft leak,
- the adverse weather conditions,
- the lack of a damage assessment following the bottom contact, and an uneven load distribution.

Lessons learned
Loading practices
During loading, each of the 11 harvesters that delivered urchins to the Western Commander provided bags of different sizes and shapes at various times over the 2-day period. Some of the bags delivered near the end of this period did not fit through the vessel hatches and were therefore stacked about 1m high on the hatch covers.

Stacking the bags on the hatches blocked access to the holds and the lazarette and eliminated the possibility of identifying points of water ingress or adding portable pumps to these areas. Stacking bags on top of the hatches also raised the vessel's centre of gravity and created an opportunity for the cargo to shift, which could adversely affect stability.

It could not be determined how water entered the port forward fish hold or whether the loading practices adversely affected the vessel's stability to the extent that they contributed to its sinking.

The vessel had a stability booklet for catching and transporting herring, but the stability booklet did not reflect the vessel's current configuration and operation to transport herring. In this occurrence, given that the vessel was transporting sea urchins, it was not required to have a stability booklet.

Read the full report at **https://bit.ly/2XSgRHk**

FIRE ONBOARD A FISHING VESSEL CAUSED BY MECHANICAL FAILURE SAYS NTSB REPORT

NTSB has published its report into the circumstances that led to the fire on board the commercial fishing vessel Ole Betts Sea, on 18 March 2018 in the eastern Gulf of Mexico. The fire burned for 16 hours and the vessel eventually sank about 18 miles northeast of the island of Garden Key, Dry Tortugas, Florida. No pollution or injuries were reported. The ship was a total loss valued at $200,000.

Before getting under way on March 13 for the voyage that was to turn into disaster, the captain performed a pre-departure check of the vessel and its gear. He also checked the items listed on a post-voyage work-list form, which was submitted to Trico's shop foreman at the end of the previous 3-week voyage. He found all in good order, and the Ole Betts Sea departed its Fort Myers Beach berth.

As the sky was getting lighter, a rigman took the helm during the last trawl so that the captain could rest. About a half hour later, while the vessel was proceeding at "idle speed", the rigman heard something that sounded like a small "boom" or "heavy thud."

The captain returned to the wheelhouse when he heard the sound and told the rigmen to pull in the nets and gear. Lighting remained on and the vessel's main engine continued to propel the boat. About a minute later, the vessel started shaking. While the rigmen retrieved the rig, small boomlike noises were coming from the engine room.

While the rigmen tried to retrieve the fishing gear, the captain went to the engine room door, located on the port side of the main deck, and slid the door open. Thick grayish smoke prevented him from entering, so he closed the door. The captain went to the wheelhouse and called another nearby fishing vessel on VHF radio to inform the other ship's captain that Ole Betts Sea was on fire.

About 3 minutes after the shaking began, it stopped, and the lights went out, however the main engine continued to propel the boat. The crew donned lifejackets, and the captain decided it would be prudent to launch the rigid liferaft in order to be ready to evacuate the vessel in case the fire grew. He could not access the engine room further aft because of heavy smoke and heat. The vessel did not have, nor was it had to have, a fixed firefighting system for the engine room.

The fire did not abate and a little later, a large explosion took place. After the explosion, thick black smoke emerged from the engine room and the vessel stopped. One rigman abandoned the boat into the liferaft with the dog. The captain and the other rigman jumped into the water and held onto the liferaft.

Probable cause
The National Transportation Safety Board concluded that the probable cause of the fire and sinking of fishing vessel Ole Betts Sea was a mechanical failure of the generator's diesel engine, which led to a fuel-fed fire that burned out of control.

Click to read the report in full at **https://bit.ly/2Jfzb9x**

MAIB SAFETY DIGEST WITH ANALYSES OF 25 ACCIDENTS VOLUME 1 2019 PUBLISHED

The Marine Accident Investigation Branch (MAIB) has published a digest and analyses of twenty five marine recent incidents and accidents with short descriptions about each involving vessels from the merchant, fishing and recreational sectors. The 70 page report can be accessed below.

In his introduction to the Digest, Andrew Moll says, "I'd like to thank this edition's introduction writers. I am delighted that Captain Nick Nash, Andrew Locker and Steve Gravells have agreed to write the introductions to the merchant, commercial fishing and recreational craft sections of this digest. All three have written from both their professional and own personal perspectives, and their words are very powerful. If you read nothing else in this issue, I would encourage you to read the section introductions.

Download the 70 page digest at **https://bit.ly/2Lf2bkb**

VESSEL STABILITY COMPROMISED BY WEIGHT CREEP SAYS USCG ADVICE NOTE

The US Coast Guard has published its Findings of Concern with essential information it wishes to share about unsafe conditions that investigators have identified as causal factors in a casualty that could contribute to future incidents. The Findings of Concern follow the sinking of a fishing vessel in February 2017.

Probable causes
The investigation showed that the owner failed to properly use the services of a qualified individual to formally evaluate and update vessel stability instructions following changes to vessel structure and loading conditions.

These included:
- installation of a bulbous bow,
- addition of bulwark on the bow, and
- use of larger, heavier crab pots.

The weight of the larger, heavier crab pots exceeded that of the pots used to formulate the existing and most current stability instructions. Although investigators do not know if the vessel master referred to existing stability instructions for operating the vessel, but the instructions were incorrect and any decisions based on them would have been faulty.

Additionally, a decision to place an additional 3,080 pounds of crab bait on top of the 5 tiers of stacked crab pots, raised the vessel's center of gravity and further reduced the vessel's stability.

The Coast Guard believes that these issues, combined with the master's decision to depart port with a fatigued crew, active NWS freezing spray warnings in the area of transit and in a heavily loaded condition, negatively impacted the vessel's stability, contributing to the vessel's capsize and sinking.

Read the article in full at **https://bit.ly/2TyZzML**

POOR MAINTENANCE THE KEY CAUSE LEADING TO SINKING OF MS NANCY C SAYS REPORT

The NTSB has published its investigation report into the flooding and sinking of the towing vessel 'Nancy C' on Lower Mississippi River, near Dyersville, Tennessee, in March 2018. The investigation has identified poor maintenance as the principle cause of the incident.

On 6 March 2018, about 1630 local time, the uninspected towing vessel Ms Nancy C was moving and positioning cargo barges while operating in Everett Lake, a tributary of the Mississippi River, when a deckhand discovered water in a void at the stern of the vessel. While the captain and deckhand attempted to dewater the vessel, it sank in 15 feet of water. Both crew members disembarked to a barge prior to the sinking without injury. Damage was estimated at $667,306.

Probable cause
The National Transportation Safety Board has determined that the probable cause of the flooding and sinking of the towing vessel Ms Nancy C was inadequate maintenance of the vessel, resulting in corrosion and the loss of watertight integrity on the main deck, which allowed uncontrolled water ingress into the vessel's stern voids.

Read the report in full at **https://bit.ly/2vCruBT**

CRACK IN CARGO HOLD COVER LEADS TO WET DAMAGE DESCRIBED IN LATEST SWEDISH CLUB BULLETIN

In its monthly safety scenario, April edition, the Swedish Club describes a case of cargo damage caused by water ingress due to a crack in the hatch coaming. The incident resulted in several days of delay for the ship to get the wet cargo off the vessel, while most of the cargo was refused by the buyer.

The bulk carrier had a full cargo of zinc concentrate onboard and was sailing from the west coast to the east coast of South America. When the vessel passed Cape Horn, it experienced heavy weather of Beaufort scale 9 with green sea covering the cargo hold covers 1, 2 and 3. This continued for 4 days as the vessel battled the waves. The vessel had no weather routing.

During discharge the surveyor found that the sounding pipes for the cargo bilges were blocked by debris. The sounding pipes should be clear of any debris or cargo, as they are important for taking soundings before loading and during the voyage.

Findings
When the vessel was alongside, and the cargo hold hatches were removed, puddles could be seen in hold 1. It is important to be aware that zinc concentrate may liquefy if shipped with a moisture content in excess of their transportable moisture limit (TML) as per the IMSBC code. Puddles of water will obviously exceed the TML.

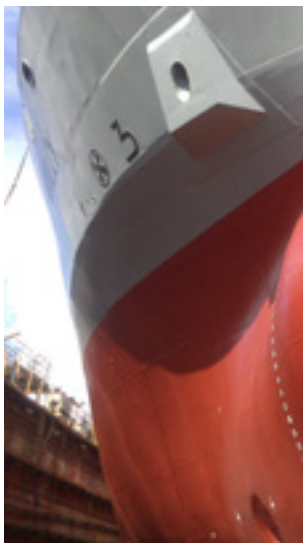
When the chief officer inspected the hatch coaming and cover for hold 1, a crack was found on the hatch coaming. The drain pipes for the non-return drain valves were full of debris and cargo. It should be a PMS job to check that the drain pipes and drain valves are not clogged and that the float (ball inside) moves freely.

Hatch covers, and coaming steel structures are heavily loaded elements. Their condition has a direct effect on the load carrying capacity and the safety of the vessel. The steel construction should always be inspected after an unusual loading case, and there should also be regular checks as per the PMS.

When repairs are carried out, only steel approved by the classification society should be used. High tensile steel is commonly used for cargo hatches and coamings. The classification society should be contacted before making any structural steel repairs.

Lessons to be learned
As a result from the incident, the Swedish Club provided 15 questions to consider in order to prevent similar incidents in the future:

- What were the immediate causes of this accident?
- Is there a risk that this kind of accident could happen on our vessel?
- How could this accident have been prevented?
- What are our procedures for inspecting cargo hatch covers?
- How do we ensure cargo hatch covers are weathertight?
- Do we use weather routing?
- Do we record all maintenance in the PMS?
- How often do we inspect the hatch coamings?
- How often do we inspect the drain lines and valves?
- How often do we inspect the sounding pipes?
- What sections of our SMS or PMS would have been breached if any?
- Does our SMS or PMS address these risks?
- How could we improve our SMS and PMS to address these issues?
- What do you think was the root cause of this accident?
- Is there any kind of training that we should do that addresses these issues?



Read dozens of other categorised safety briefings and reports on the IIMS web site at https://bit.ly/2V4QgtP

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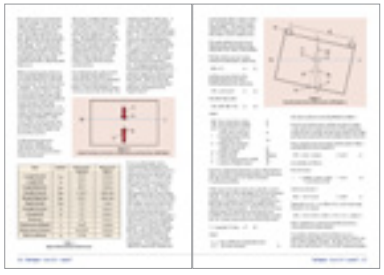
IIMS member, Jason Rudd MIIMS, writes,

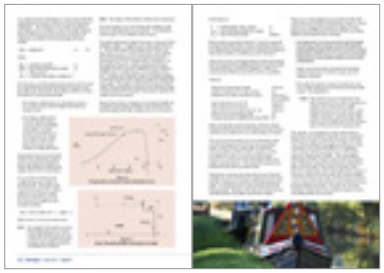
I read Jeffrey's piece in the latest issue of The Report with interest, and as always he made a fine job of simplifying a very technical subject; however there were a couple of parts where references are made to "Category of Waters" that I believe may be misleading.

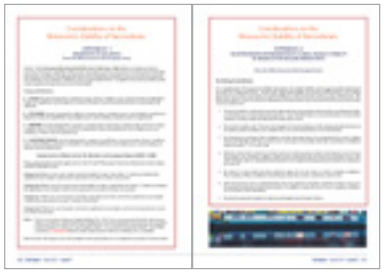
As you are aware I spent ten years employed as the Marine Surveyor for the Port of London Authority, and I can say without doubt the most commonly asked question relates to categorisation of waters and the limitations of vessels. Whilst I believe that Jeffrey has a sound knowledge of this subject, the way in which some of the article is worded may lead to confusion for surveyors less well informed about the subject. In the foreword to the article Jeffrey makes reference to vessels EU Category C & D waters which in its self is a little confusing. If the intention was to point towards RCD categorisation of vessels, which I believe it was when you read onto Appendix 1, it would have been better worded as "EU Design Categories" so as not to confuse it with Categories of Waters. When Stating EU Category C waters for passenger ships, this could lead to confusion with vessels operating in Category C waters, which are Inland waters as defined in MSN 1837.

As I read on I was also surprised to note that EU 94/25/EC was quoted in Appendix 1. As far as I am aware this Directive has been repealed and superseded by EU 2013/53EC, albeit the point of discussion contains the same text as that uplifted for the article. Furthermore "Category Definitions" should have read "Design Category Definitions" as these have been lifted from RCD (EU2013/53) and relate to the design and construction standards and not sea areas as the title would suggest. The second part of Appendix 1 makes reference to MSN1719 which I can not find, but looking at the first sentence would suggest that this has been lifted from MSN1747 - The Merchant Shipping (Passenger Ships on Domestic Voyages) Regulations 2000, which could quite easily add to the confusion, as the following text is all about the Categorisation of Inland Waters set out in MSN 1837.

Also in relation to N.B.4; the safety bulletin issued by the PLA (01/2012) was at the time aimed specifically at narrowboats operating in Central London, on a section of the Thames which are considered to be Category C waters. I would just like to clarify that Category C waters do not extend downriver to Sea Reach No.1 buoy. The outer limits of Category C waters are Denton Wharf as defined in MSN1837, and beyond this point the River is classified as Category D waters until it meets the Sea where MCA Coding takes over. The River Medway upstream of Garrison Point is also defined in MSN1837 as Category C waters.







...and Jeffrey Casciani-Wood, HonFIIMS, replies,

EUR. ING. JEFFREY N. CASCIANI-WOOD
C. ENG.

Diligentia, Probitas et Veritas

Consultant Forensic, Diagnostic and Marine Engineer,
Naval Architect, Ship and Boat Surveyor
Marine Corrosion Engineer

First, I would like to thank Jason for a) reading the article carefully and b) giving a reasoned criticism and pointing out the errors. He is quite correct in his remarks and I have to confess to a bit of carelessness on my part. I think it bad form to start making excuses when, quite clearly, you are at fault. However, the reason for the error was that I was under some considerable family pressure at the time and downloaded the bit about EU Category waters from an old report. For the record, I stopped working while the 94/25/EC was still valid and have never carried out a survey after that Directive had been repealed and superseded. Perhaps, if I had, I would have spotted my mistake. Jason's comments are all valid, and I would agree that my writing would (not could) be misleading and offer an apology. His comments on the extent of the Category C waters are also noted. My original thoughts on the matter were occasioned by comments about taking a narrowboat down the river on the social media. I would say, however, that having traversed those waters many times albeit of cargo ships outward and homeward bound I personally feel that such a boat is totally unsuited to traverse those waters whatever Category they may be as they can be very rough and narrowboats simply do not have sufficient stability to operate on them safely. Stability not only means metacentric height but also the area under the statical stability curve and the various downflooding heights and angles etc. Few owners have any idea of such matters and the main purpose of the article was to point out that such boats are not suitable for use on the lower reaches of the London river. Although such boats do not require a floodable length curve to be calculated, they would be classed as single compartment boats and, if one shipped a biggish sea over the stern flooding the accommodation, that, combined with the loss of metacentric height due to the resulting free surface, would cause her to sink like a stone.

Thanks once again, Jason and I look forward to meeting you again at the next IIMS assembly.

Best Regards

Email; Jeffreywood959@googlemail.com

LORNA ROBINSON IS THE NEW IIMS EDUCATION, TRAINING & EVENTS CO-ORDINATOR

Following the departure of Cathryn Ward, Lorna Robinson has been appointed as Education, Training & Events Co-ordinator.

Lorna has previously worked in Education for 8 years and is the newest member of our team. She has an A Level in English Language, as well as Music, Sociology and Media and is keen to learn lots more to help in her new role. In her spare time, Lorna loves spending time outdoors, visiting different areas within the UK, taking in the beautiful scenery and testing out the coffee and cakes in quirky tearooms! When she's not out exploring, she likes to catch up with friends and also enjoys keeping fit at the gym and signing up to races and fun runs, particularly ones that involve obstacle courses!

NEW IMAGES AVAILABLE AT THE IIMS ROYALTY FREE PHOTOBANK

IIMS has added a generous amount of new photographic content to the members' password protected area of the website.

Remember, the photobank, which contains hundreds of images, categorised by type, is a benefit for IIMS members only. Images may be accessed, downloaded, cropped and resized to be used in marketing materials, or on web sites and in brochures and other marketing collateral. There is no need to credit IIMS.

To make use of the IIMS royalty free photobank go to **https://bit.ly/2uIpaIN**.

AU REVOIR CAPT BERTRAND APPERRY ET MERCI BIEN

After many years' valuable service to the Institute, long standing IIMS board member and ISM specialist, Capt Bertrand Apperry, has decided to stand down. With immediate effect he has relinquished his role as an Executive Director of the International Institute of Marine Surveying Ltd and with it his seat on the Management Board.

Bertrand, who served a two-year term as Institute President from 2014-2016, will be missed by all those who know him and especially by his colleagues on the management board. IIMS is grateful to Bertrand for his support and efforts over a long period.

IIMS is pleased to announce that Peter Broad FIIMS, who operates in the LNG ship arena in South Korea and who is currently the Deputy Vice President will join the Management Board.

Would the real Bertrand Apperry please reveal himself?

TONNAGE TRAINING AT ITCHENOR A SUCCESS

IIMS held one of its occasional tonnage training days at Itchenor Sailing Club on the UK's south coast in early April. The event drew surveyors from all parts of the country and the group was blessed with fine weather. Under the tutelage of John Excell, Chairman of Large Yacht & Small Craft, the morning was set aside to study the theory in the classroom. John and the delegates worked their way through the IIMS tonnage manual assessing how to measure a vessel, but also looking at how to complete the essential accompanying paperwork in accordance with the regulations.

After lunch, the group split into two sections and headed on to the pontoons to complete example tonnages by measuring a motor boat and a RIB. Once completed the group transferred next door to the North Shore yard and measured two sailing yachts. At the end of what proved to be a long and exhaustive day, the group went back into the classroom to compare notes and, more importantly, the measurements taken. There were discrepancies between the two groups proving that tonnage measurement is not an exact science. IIMS is considering running this course in a central European location later this year subject to demand from members.

Footnote. The Institute is poised to sign a new tonnage agreement with the U.K. Maritime & Coastguard Agency. Anyone wishing to carry out tonnage measurement surveys through the IIMS must have attended one of these training days and completed some sample tonnage surveys to prove their competency before being authorised. Stipulated in the new agreement is the need for all organisations providing tonnage measuring services to have demonstrated appropriate training in the subject for those who do this work.

IIMS CERTIFYING AUTHORITY SPRING TRAINING WITH A DIFFERENCE

The annual spring training event for IIMS Certifying Authority examiners and would be examiners took place on Monday 13 May at Trafalgar Wharf opposite the Institute's headquarters, attended by nearly 20 surveyors. This year the training had a different emphasis on it. IIMS had two sub 24 metre vessels at their disposal, one in the yard on the hard and the other on the pontoons in the water. Under the watchful guidance and tutelage of Certifying Authority Chairman, Fraser Noble, aided by Steve Moffat, the aim of the day was to code both vessels and complete two mock SCV2 forms. As it transpired, for a variety of reasons, neither vessel was suitable to be coded!

On completion of the practical exercise, the group headed back across the road to the IIMS offices to discuss the various documentation in more detail.

WESTERN MEDITERRANEAN LYSCWG TRAINING REPORT

The Western Mediterranean Large Yacht & Small Craft Working Group met for its annual training event in Palma in late April. The event, which stretched over three days this year, was attended by 20 surveyors across the various days, all of whom agreed that it was one of the best events IIMS had organised on the island of Majorca. John Excell, Chairman of the LYSCWG, said it had been the best event since the resurrection of the group some seven or eight years previous in terms of the breadth and quality of the content. John Walker who co-ordinates IIMS activities on the island for the event agreed; and Mike Schwarz thanked all the presenters for giving their time to share their specialist knowledge.

There were two special highlights worthy of mention. Margaret Green, widow of the late Peter Green, whose ashes were scattered in Palma last year, joined the group for dinner at Celler as Premsa to commemorate the first anniversary. Peter who had been a long-standing member of IIMS was responsible for getting the group together 20 years ago. The second highlight was the practical sea trail on the Saturday.

Thursday morning opened up with a specially prepared two and a half hour training session hosted at the Camber Marine facility, main Volvo Penta dealers on the island. Our hosts presented something of a masterclass about the Volvo Penta IPS engine system.

After lunch it fell to Karen Brain, Matrix Insurance, to speak. Her topic? What is a contract and why surveyors need them. It certainly provided food for thought. Paul Hamill from Tides Marine was on hand to speak about shaft seal systems in great detail. And Karsten Hertrich brought the first day to a close when he presented the Dockmate self-docking system.

Day two who was opened by Mike Schwarz who gave a detailed overview of head office activities at the beautifully appointed Varadero Restaurant. Melina Lettau briefly addressed those present on nanotechnology to whet delegates' appetite for a future presentation on the subject.

Once back into the classroom, Paul Madeley gave a well delivered and insightful presentation about electrics with practical advice for surveyors on what to look for, especially when it is less obvious. He gave some hints and tips for surveyors of what to look for and where to identify potential trouble spots too.

Stefano Scarpa and colleagues from RigPro spoke about handling, maintaining and repairing superyacht masts and rigs. Ken Hickling certainly made delegates take note with his upbeat presentation entitled 'Superyacht project management – Surveyors: Whose side are you on anyway?' Delivered in his unique style, Ken gave those present much to think about.

The final two sessions of the day came from two highly experienced surveyors. First up was Tim Rowe, a former shipwright turned surveyor. In his presentation Tim spoke about surveying steel vessels. And to conclude the group heard from Kim Skov-Nielsen, who talked with panache about the impact synthetic rigging is starting to have in the yacht world.

On Saturday morning, a group of eight surveyors joined John Walker and his colleague Juanjo Casimiro for a practical sea trial out in Palma Bay aboard an 82 foot Italian motor yacht. The group had an hour's briefing meeting about the job in hand, what to inspect during the sea trial and when to do it. A further hour was taken onboard to familiarise the group with the lay out of the vessel, in particular the engine room. And finally, the one hour sea trial itself was undertaken with ear protectors certainly the order of the day! IIMS is very grateful to the vessel owner (and John Walker) for facilitating such an unusual training opportunity.

Mike Schwarz presenting a certificate of gratitude to the skipper of the vessel, White Queen.

JOIN IIMS IN BRISBANE FOR AN ESSENTIAL TWO DAY WORKSHOP ON 1 AND 2 AUGUST

Members and non-members from Australia and New Zealand (and even further afield) are welcome and encouraged to register to attend the IIMS two day workshop that has been arranged in Brisbane on 1 and 2 August 2019. If distance and travel is an issue and prevents you from coming in person, you are welcome to join us as an online only delegate via the Zoom platform. The workshop is kindly sponsored by Kedge PTY Ltd.

The venue is: Novotel Brisbane Airport, 6-8 The Circuit, Brisbane Airport QLD 4008, Australia

The cost for both days to include refreshments, tea, coffee and buffet lunch is just AUS$ 275. Attendance at the event earns 5 CPD points.

To reserve your place please register at **https://bit.ly/2VnP8wA** and we will invoice you in Australian dollars.

The programme is as follows:

Thursday 1 August

09.00	*Registration*
09.30	Mike Schwarz: update on IIMS head office activities
10.15	*Coffee*
10.30	Adam Brancher: Achieving ISO 9001/14001/45000 certification - a practical guide to the process and why a surveyor should consider doing it
11.45	Mick Uberti: From the ISM Code to Marine Order 504 - Changes to Safety Management Systems for DCV's
13.00	*Lunch*
14.00	Russell Fraser: New developments in NDT and their application in marine survey
15.00	*Tea*
15.30	Graeme Normington: TBC
16.45	Close and networking hour

Friday 2 August

09.00	*Registration*
09.15	Mike Schwarz: Driving international surveying standards and the Marine Surveying Practitioner scheme
09.45	Nick Parkyn: An introduction to Synthetic Rigging
11.00	*Coffee*
11.30	Speaker to be confirmed
12.45	*Lunch*
13.30	Video: Gary Lowell: Wooden boat surveying
14.00	Speaker to be confirmed
15.00	*Tea break*
15.30	Nick Parkyn: The importance of GDPR and data privacy
16.00	Mike Schwarz: 19 tips for business success
16.30	Close

19.30 *Thursday night - group dinner at a nearby restaurant at own cost*

JOIN US AT SEAWORK FOR THE ANNUAL SCSF PRESENTATIONS

Members of IIMS are reminded that the annual Small Craft Surveyors Forum will take place at the Seawork Show at Southampton on Wednesday 12 June from 1330 to 1630 in Conference Room 2. The event is free to attend and open to all marine surveyors no matter what their affiliation. This year's schedule looks good and is sure to draw a strong attendance.

Although a free seminar please reserve your place online so we have numbers for Health & Safety reasons, chairs and catering.

PROGRAMME OF PRESENTATIONS

1330 Welcome by Seminar Chairman John Wills, IMarEST
1335 WINDFARM TRANSFER VESSELS
Problems of Ageing vessels – Mike Schwarz (IIMS) will moderate a session between Mike Proudlove (windfarm vessel operator) and Steve Moffat (surveyor).
1420 Tea break
1445 OVERVIEW OF EVOLVING REGULATION OF CODED BOATS, INCLUDING WORKBOATS
Bas Edmonds from Maritime & Coastguard Agency Small Commercial Vessels Department.
1535 SILICON AND FLUOROPOLYMER FOUL RELEASE COATINGS
Matthew Goodall, South Coast and Naval Account Manager from Akzo Nobel, will look at the latest developments and performance of these coatings.
1625 Conclusion and Close

The Small Craft Surveyors Forum member organisations are:
RINA, IMarEST, IIMS, SCMS, NI, YDSA

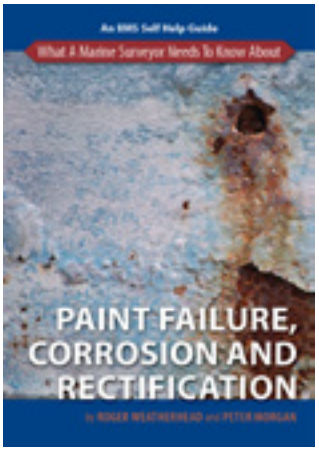
IIMS UAE BRANCH WOULD LOVE TO WELCOME YOU ABOARD THE QEII FOR ITS BI-ANNUAL CONFERENCE 2019

The date: 20 November 2019
The theme: Safe Ships, Safe Cargo – The P&I Perspective
The venue: Queen Elizabeth II, Dubai, UAE.
The time: 08:30hrs - 17:30hrs (lunch at 13:00hrs)

SERIES OF IIMS HANDY GUIDES REACHES 20

With the recent launch of two new titles to the ***What a marine surveyor needs to know about*** series of handy guide series, the collection has now reached 20 publications. Mike Schwarz says, this a remarkable output and something of a landmark given the humble beginnings when the first handy guide was published just three years ago.

Two new handy guides have been released in recent weeks, available in paperback or pdf eReader formats...



What a marine surveyor needs to know about paint failure, corrosion and rectification by Peter Morgan and Roger Weatherhead is an essential companion that any surveyor should have as part of their reference collection.

Most metals found in nature exist in their stable oxidised form as oxides, carbonates, silicates, sulphates, sulphides and chlorides. These are refined to produce the various metals used today; however, since they are more stable in their oxidised form they try to revert to this state. We try to prevent this corrosion process by the application of coatings of many different types – organic, inorganic and metallic. In this handy guide, the authors take readers through an A-Z of specific words, phrases and jargon giving clear advice on how to spot and rectify issues. There are also examples of coating materials, how the finished product should look and photographs to illustrate some of the faults and defects which may be encountered in their use.

Roger and Peter mention some of the different examination and analytical techniques, from simple observation through to sophisticated analysis that is used to determine the causes of coating failures. Techniques include coating thickness measurements, optical and electron microscopy, eDX analysis and ftIr (fourier transform Infra red Spectroscopy). ultrasonic techniques can be used to determine metal thicknesses and metal loss due to corrosion.

What a marine surveyor needs to know about paint failure, corrosion and rectification runs to 224 pages and is published at £35 in paperback or £32 in pdf eReader format. The handy guide may be purchased online from the IIMS web site at **https://bit.ly/2uxuY7k**.

What a marine surveyor needs to know about using computers in marine surveying

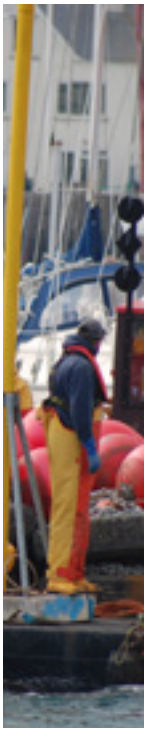
Nick Parkyn has an extensive background in both the marine and information technology disciplines. His work in the marine industry includes marine surveying, yacht and small craft design and marine software development. As an IT&T consultant he has held positions which include senior consultant positions with Hewlett Packard and the Centre for Information Technology Research at the university of Queensland. Based on his experience and background, he brings together experience from all the contributing disciplines to apply to this subject.

Computers play a vital role in all aspects of marine surveying in today's world and this handy guide sets out to explain the use of computers and computer software available to enable the marine surveyor in the operation of his/her business. There are many software packages to choose from and making the right selection that fits with your requirements as a surveyor is of key importance. Get it right and your computer will become an invaluable friend. And as Nick himself says, "The potential use of computers in marine surveying is limited only by your imagination".

What a marine surveyor needs to know about using computers in marine surveying is an essential addition to the big ship or small craft surveyor's library.

The handy guide is 64 pages and is published at £18 in paperback or £16 in pdf eReader format. The handy guide may be purchased online from the IIMS web site at **https://bit.ly/2LHY4gO**.

REMAINING TRAINING EVENTS AND SEMINARS FOR 2019



JUNE		
17 June	Monday	IIMS London Conference, Regent's University, London
18 June	Tuesday	IIMS London Conference and AGM, Regent's University, London
19 June	Wednesday	eCMID London seminar, Regent's University, London
AUGUST		
1 August	Thursday	IIMS Australia seminar and workshop, Brisbane, Australia
2 August	Friday	IIMS Australia seminar and workshop, Brisbane, Australia
7 August	Wednesday	IIMS Singapore seminar and eCMID AVI seminar, Singapore
8 August	Thursday	IIMS Singapore seminar and eCMID AVI seminar, Singapore
SEPTEMBER		
23 September	Monday	Certifying Authority Training Day, Portsmouth area
OCTOBER		
7 October	Monday	Inland Waterways training day - UK location to be confirmed
15 October	Tuesday	Tonnage training - European location to be confirmed
16 October	Wednesday	IIMS training day at the same location as the 15 October
NOVEMBER		
4 November	Monday	IIMS Scotland Large Yacht & Small Craft Working Group training
5 November	Tuesday	IIMS Scotland Large Yacht & Small Craft Working Group training
20 November	Wednesday	UAE 6th bi-centennial Conference aboard the QEII in Dubai
25 November	Monday	Large Yacht & Small Craft Working Group training day, Portsmouth area
DECEMBER		
10 December	Tuesday	Marine Surveying International Fest 2019 online for large yacht and small craft surveyors
12 December	Thursday	Marine Surveying International Fest 2019 online for commercial ship surveyors

RECENT NEW IIMS MEMBERS

Full members

Andrew Madden	*MIIMS*	USA
Atif Sidahmed	*MIIMS*	Qatar
Gordon Forbes	*MIIMS*	Trinidad & Tabago
Guy Nicholls	*MIIMS*	UK
Olivier Van der Kruijs	*MIIMS*	Netherlands

Associate members

Christian Mancebo	*AssocIIMS*	Mexico
Geoff Skinner	*AssocIIMS*	Portugal
Lee Wilkes	*AssocIIMS*	UK
Justin Jenkin	*AssocIIMS*	Vanuatu
William Weyant	*AssocIIMS*	USA

Technician members

Alexandra Thomson	*TechIIMS*	UK
Alistair Ferguson	*TechIIMS*	UK
Peter Phillips	*TechIIMS*	Vanuatu

Affiliate members

Arnold Jose Torres Cuello	*AffilIIMS*	Colombia
Peter Tedder	*AffilIIMS*	UK
Revel Boulon	*AffilIIMS*	USA
Ufuk Timur	*AffilIIMS*	Turkey

Graduate members

David Aquilina	*GradIIMS*	Malta
David Borgman	*GradIIMS*	UK
Frederik Giepmans	*GradIIMS*	Monaco
Martin Brown	*GradIIMS*	UK
Stuart Richardson	*GradIIMS*	UK

Regent's University is located by Regent's Park in the heart of London and just a few minutes' walk from Baker Street underground station.

IIMS London Conference 17/18 June 2019

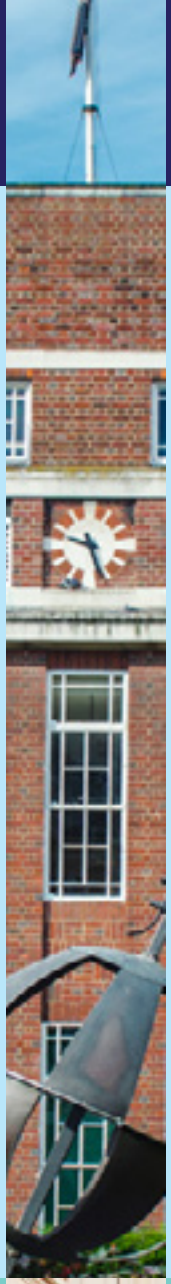
IIMS is gearing up for its London Conference 2019 and is looking forward to welcoming you to Regent's University. Just still time to book your place!

IIMS is pleased to announce that after a break the IIMS Conference makes a welcome return to London, UK this year. The Conference is sponsored by Constellation Marine Services LLC and supported by Matrix Insurance and Cygnus Instruments Ltd. The Nautical Institute and the Institute of Chartered Shipbrokers are media partners.

The Annual General Meeting will be held as part of the Conference schedule at 14.00 on Tuesday 18 June.

Both Conference days and the AGM are available to real-time and online-only delegates.

DAY ONE – MONDAY 17 JUNE 2019



Herringham Hall, Regent's University

The speaker schedule is subject to alteration:

09:30 *Welcome from IIMS President, Capt Zarir Irani*

09:45 Update on IIMS activities, new innovations and enhanced member benefits by Mike Schwarz

10:20 Peregrine Storrs-Fox, Risk Management Director, TT Club – Cargo integrity in the context of cargo inspections and surveys

11:00 *Coffee*

11:20 Neale Rodrigues, Divisional Director, Loss Prevention, Britannia P&I Club – What a P&I Club expects from a surveyor

12:00 Capt Nick Sloane, Resolve – Challenges of the Southern Iceberg Project

12:50 *Lunch (in the Knapp Gallery - adjacent to the reception)*

14:00 Nick Deal, Bond Solon – Beware the pitfalls of expert witness work

14:45 Capt Zarir Irani, IIMS President – Cyber vulnerability for terminals and vessels in confined waters

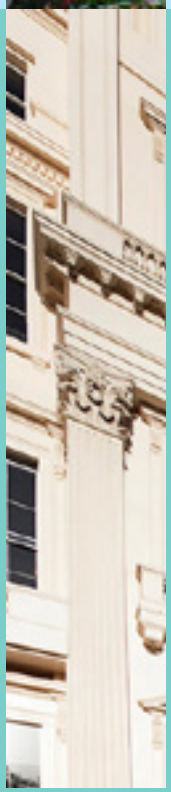
15:10 *Coffee*

15:30 Karen Brain, Matrix Insurance – What are contracts and why do you need them?

16:10 Panel discussion

16:40 *Close*

10-11 Carlton House Terrace, St. James's, London SW1Y 5AH



19:00 *Dinner in the magnificent Regency building adjacent to The Mall.*

Order of Events

19.30
Dinner is announced

Remembrance Poem
Mr Peter Broad

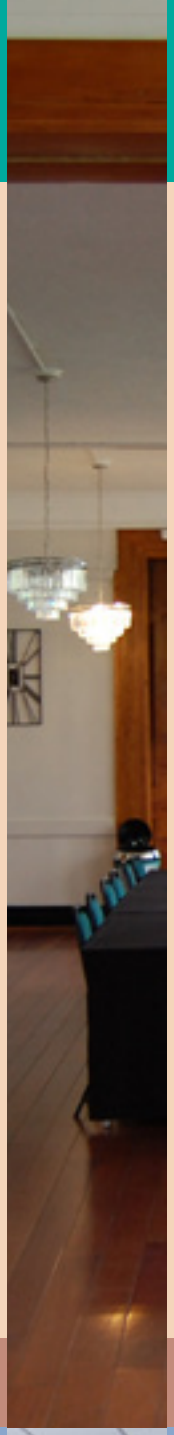
Grace
Mr John Excell

Loyal Toast to Her Majesty The Queen
Capt John Noble

19.45
Dinner to be served
(please advise of any special dietary requirements before the event)

21.30
Speakers
Capt Andrew Moll
Mr Mike Schwarz

22.30
Carriages



DAY TWO – TUESDAY 18 JUNE 2019

Tuke Common Room, Regent's University

The speaker schedule is subject to alteration:

09:30 Gary Lowell, Lowell Boats – Wooden boat inspections

10:30 Bas Edmonds, Regulatory Delivery Officer – Ship Standards, Maritime & Coastguard Agency update on new and recent regulations for small craft surveyors

11:30 *Coffee*

11:50 Craig Norton, President, Inspect X – Report writing software for surveyors by surveyors (delivered by live videolink)

Tuke Cinema, Regent's University

The speaker schedule is subject to alteration:

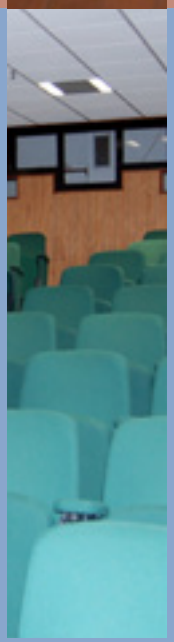
09:30 Keith Chappell & Tom Montgomery, Cyber Prism – A Pentest is not enough with an introduction from an insurance perspective. A demonstration of why Pen-testing is only part of the solution set by giving practical demonstrations of hacks and breaches that would not be found by penetration testing alone

10:30 Jayan Pillai – Fire on Ships & Boats

11:30 *Coffee*

11:50 Jon Blower, Cordstrap – Update on the Cordstrap system

12:45 *Lunch (available at the back of the Tuke Common Room)*



14.00 IIMS Annual General Meeting free to attend

Both Conference days and the AGM are available to real-time and online-only delegates, meaning that no matter where in the world you are, it is possible to participate.

AGM Agenda

1) Apologies
2) Minutes of previous AGM held in June 2018
3) President's Report
4) Chief Executive Officer's Report
5) Directors' Reports
6) Elections
   a) Management Board
7) Voting on
   a) Proposed fee structure for 2020 membership
8) Fellowship Awards and Honorary Membership
9) Any Other Business

CONFERENCE FEES...

OPTION 1
Day 1 Conference only real-time delegate (Member £165, Student £140, Non Member £175)
OR
Day 1 Conference only Zoom online delegate at £140

OPTION 2
Day 2 Conference only real-time delegate (Member £110, Student £100, Non Member £120)
OR
Day 2 Conference only Zoom online delegate at £90

OPTION 3
Conference Dinner on the evening of Monday 17th June at £100

OPTION 4 (Full Package)
Attend all of the above events which include Day 1 and Day 2 at Regent's University and the Conference Dinner (Member £350, Student £315, Non Member £380)

You can still make your reservation for what promises to be an excellent day and a half's conferencing. Visit the Conference page on the IIMS web site at https://bit.ly/2VjSnW8 and we will invoice you on receipt of your instructions.

Reserve your place now at
https://bit.ly/2VjSnW8

Murrills House

set to become the new permanent home for IIMS

Right:
Porchester Farmhouse 'Murrills' 1925

In a strange turn of events, Murrills House in Portchester, UK, is set to become the new Head Quarters of the IIMS. But wait a minute I hear you say. IIMS is already headquartered in Murrills House isn't it? Yes you are right of course.

IIMS has been renting these offices for the past decade since its move from Gosport. But with the end of the lease looming, IIMS entered into talks with our landlord, who occupies the ground floor, earlier this year with a view to the Institute acquiring the freehold of the property and adjacent land. The outright purchase of suitable office accommodation rather than renting one was something that the membership voted in favour of at the last AGM.

IIMS needs your help, please!

It became clear from our initial discussions that this was a deal that would work very well for both parties. IIMS carefully and diligently explored the financial opportunities of obtaining a business mortgage and assessed the likelihood of getting the deposit together, both of which reached a successful conclusion. If all progresses as expected, IIMS hopes to finalise the purchase of Murrills House in Q1 of 2020.

Commenting on the proposed purchase of Murrills House, Mike Schwarz, said, "I am delighted to be in a position to acquire Murrills for the long-term benefit of the Institute and its members. I believe it represents excellent value for money and underpins the very future of the organisation." He added, "This is a unique opportunity to purchase a building of significant local historical interest and knowing we will be helping to preserve it for future generations is indeed a privilege."

IIMS has been on a long term property search going back over the past 18 months. Nothing suitable to purchase in the area has been identified and there is a real lack of such properties coming to market. So, the opportunity to acquire Murrills House is an exciting prospect. It meets the needs of the business very nicely. Sure it has a few faults, but what building that is centuries old doesn't? There is some maintenance work to do, but one gets that with any property, no matter how old it is. It also works perfectly for the existing team and there is no cost to relocate the business and the upheaval this undoubtable creates for all involved.

There are still some formalities to undertake, including the actual survey on which the mortgage offer will be based and the necessary final financial checks and balances. But IIMS is closing in on the deal.

IIMS would like your help. We are reaching out to the members to invite them to make a financial donation towards the property purchase. Any financial donation will not simply go to the bottom line of the business and get lost. Rather, we plan to invest it in paying for the stamp duty on the purchase (a rather irksome UK property tax) with any balance left being put towards some of the maintenance work we would like to do, which includes replacing some windows and so on. All those who choose to make a donation (unless anonymously) will be recognised with a special, individual Founders Plaque for each person making a donation being displayed in the offices. And rest assured that any donation, no matter how small, will be very gratefully received. We have made it simple to do by setting up an online 'Just Giving' page, which can be accessed at

https://www.justgiving.com/crowdfunding/iims

Below: artisit 's impression of the Founders Plaques

Murrills House is a Grade II listed building and is believed to have preservation orders on two of the trees in the grounds as well. A Grade II listed building requires further explanation for those not familiar with the term. It is defined as a UK building or structure that is "of special interest, warranting every effort to preserve it". Grade II is a classification that can be applied to a wide variety of buildings and other structures, in a range of ages, styles and locations. The special listing status means that we have to work closely with the local planning authorities to ensure any maintenance we do is in keeping with the building and its age. For example, we now know that some of the glass in the windows is centuries old. We also know that the original chimney builder inscribed his initials in the mortar before it set centuries ago.

IIMS is proud to be in a position to acquire Murrills House, a property so rich in history, and to become the next guardians of a building believed to have its origins in the 1500s. Murrills House is set on a half acre plot, has 20 parking spaces and a large garden area. We are close to Portchester village and railway station and the nearest motorway junctions are handy too.

There are many old and original features remaining in the property since it has been transformed into office accommodation in more recent years from the local 7 bedroom manor house it was in the late 1800s and early 1900s. There is a rather spooky basement too where, on occasions, sightings of a friendly lady ghost – the *Grey Lady* - have been made over the years. The original flint retaining wall is still well preserved in places and is little changed for more than a century and a half.

Since owning Murrills House became a possibiity in recent months, IIMS Chief Executive Officer, Mike Schwarz has been on something of a mission to find out as much as possible about its rich history. Indeed, the current IIMS landlord has been very helpful and has provided many of the historical clips and accounts you are about to read in the following pages.

What we do know is that Murrills House started life as a tenant farm, part of a much larger estate in the area around 400 years ago. Its origins can be traced back centuries and the oldest part (beneath the current Accounts Office), is believed to date from the 1500s when cattle routinely lived in the house. Once it was purchased from the Southwick estate, Murrills House owned in the region of 200 acres with land running down to the water and a large working pig farm. Looking around at the urban sprawl today, that seems almost impossible to imagine. Censues have been viewed going back to the early 1800s, not long after the census first began in the UK in 1801. Various families are named as having lived at Murrills House, many of them large in number.

The Curtis family were prominent owners of the building from the late 1800s until just after the second world war. At that time Murrills was clearly well known as the local manor house of the area. The Curtis family it seemed enjoyed an enviable and halcyon lifestyle – the house was often thrown open and tennis was a much enjoyed sport on the grass court set within the gardens (sadly a car park now) in what must have been splendidly manicured gardens too.

Interestingly, Murrills House has a fascinating connection with the maritime world. In 1952, Associated British Combustion Ltd acquired the property as their head office and built a factory unit in what was the back garden. Their two most prestigious contracts, both with a Royal connection, were to provide and install the oil-fired heating system at Windsor Castle and to provide the boilers on board the iconic H.M Royal Yacht "Britannia". How ironic that more than half a century on, IIMS should be set to pick up that nautical mantle once more.

Top left:
The house features some Terracotta chimneys.

Center:
Murrills House was one of 12 buildings to be presented with a blue plaque by The Portchester Society in 2005.

Right:
The flint boundary wall.

Porchester Farmhouse 'Murrills' 1925

Our Life at Murrills

An extract from a book by Barbara Curtis, daughter of the owner of Murrills House from the late 1800s

Left: Barbara Curtis

My mother, Daisy (nee Edmonds), was a town girl from Portsmouth who had absolutely no idea about life in the country. At Murrills we had a cook, a house parlour maid and Kate Cousins. Kate was a member of the Girls' Friendly Society created by my mother's sister, Dora, who lived in Southsea. Aunt Dora would take these girls in sometimes having one for a cook and sometimes having one for sewing. Kate was born with what we called in those days 'curvature of the spine'. She had a kind of 'waist coat' that was about eighteen inches high and made of plaster of Paris. It was set quite firm and I recall that she kept it on tied with laces. At night she would put it on her dressing table and my sister and I used to love to go in and look at it. It was known as her KUR - I don't know why though. She was a great sewer and very good with her needle.

Left to right: Mother, Father, Kathleen (sister), Mrs Moore 1937. Father is smoking a clay pipe made by Leigh & Co of Portchester. He kept six clay pipes on the go. They would sit on the fender to cool off.

There was a boiler in the cellar at Murrills that ran two radiators in the winter - one in the front hall and one in the back hall. They were black, not very big, and heated the passageways. They were used to dry the washing on rainy days. A coke fire fuelled the boiler. Tom Marchant, the gardener, looked after it. Even though he lived ten minutes' walk away, he would come back every night at ten o'clock and go down the perilous steps outside the kitchen window to the cellar to stoke the boiler. It only worked when the cellar was not overflowing with water. Every time we had heavy rain in the winter it used to flood, up to about two feet, and put out the fire. My sister and I could reach the cellar from the house and would sometimes go down the stairs and have a game which was rather fun, although it did depend on how much water was there.

In the kitchen at Murrills we cooked on an Eagle Range. It was black and had two ovens on each side and a fire in the middle. There was a flap at the front of the fire that could be lowered to make toast. I can remember the words written on the flap – 'keep as small a fire as possible except when roasting in front'. At the bottom of the grating there was a small platform where you could rest a saucepan. Our next range was a Triplex. This had a little open fire with a tiled front and over it there was a trivet for a kettle that could be swung across the fire to have a quick boil up. At the side of the fire there were two ovens - one hot and one cooler. There was a pantry with a sink and a breakfast room where we had our lessons.

We had a little gas stove in the scullery. This was a huge room with a red stone floor that was very uneven and unsafe for walking on. There was a big stone sink with an enormous plate rack over it made of solid wood. The first job on a Monday morning was to light the fire underneath the copper with sticks. The copper was filled with water via a pipe from a tank that had collected rainwater from a hole in the roof. The clothes were washed in two large baths on a stand – each about half the size of a modern bath. Mrs Jerome used to come from Portchester village to do the laundry. Big wicker baskets were filled with the wet washing and the maids would hold a handle on each side and go outdoors to peg up the clothes. The washing line could be raised high with the aid of a pulley that had been rigged up by Mr Basher, so the clothes blew dry in the wind. Irons heated on the range would be used to do the ironing.

Lighting at Murrills was by small paraffin lamps with handles, which were left every morning on a large tray on the copper in the scullery. Mother insisted on dealing with the lamps herself. First of all she would take the chimneys off the lamps and clean and polish the paper-thin glass. Then she would trim the charred wicks with special scissors - a very skilled job. The wicks were just slightly shaved and curved at the end so that the biggest flame would burn in the middle and not smoke. The little lamps were refilled with paraffin and spread about the house on landings and passages and could be picked up to carry upstairs. In the dining room there was a large lamp on a pulley over the dining table. Another lamp was fixed to the wall by the dinner wagon over the large 'butlers' tray and a further lamp was fixed to the wall over the sideboard for carving. Father would carve the meat for us and send it out on plates for the maids. We never disturbed the maids in the kitchen when they were having their meals.

When father was at home after tea, we went into the drawing room where there was a paraffin standard lamp that could be moved about and father had a reading lamp too.

At about the age of seven we started playing bridge every evening there - Mother, Father, my sister and I. It put me off for life! I can remember squirming with fright and being so uncomfortable at the bridge table. I can still feel the relief when I tell people now that I don't play bridge! We used to have bridge drives and whist drives in the village hall at Portchester from ever since I can remember. People were always coming to the door and asking for whist drive prizes!

There were seven bedrooms at Murrills, including father's dressing room, and just one bathroom with a lavatory. There was also a lavatory out in the yard (used for father's shooting friends), and another round the side of the pig yard that was just a bucket with a hole in the ground for the farm men. We were not supposed to use the outside lavatories. Each bedroom had a jug, and bowl for washing, and the maids brought the water up for us and emptied our chamber pots. I always shared a bath with my sister taking it in turns to go first. Two maids shared one bedroom where there was a cupboard with a hot water tank heated by the kitchen range. Kate spent a lot of time in her room doing the sewing.

We had a wonderful garden at Murrills and a tennis court too. There were two summerhouses, one of which was thatched and built in the flint wall. In the summer, tea would invariably be served outside, come rain or shine. The poor maid would stagger across the lawn with trays laden with crockery and cakes. Mother was rather renowned for her triple layer sponge cakes and the Mothers' Union came for a garden party every year because she was the Enrolling member.

Tom Marchant did everything - milked the cows, fed the hens and generally did the vegetables. We kept quite a lot of vegetable garden - of course everybody did then. All through the winter we would have lovely dirty vegetables, full of flavour, such as beetroot, carrots, potatoes and swedes, kept earthed up in a shed, fresh as the day they were dug. We grew masses of fruit that we had to pick in the summer. I can remember that Mr Basher would arrive back from Chatham late in the evening in the fruit season with big round baskets full of white and black Kent cherries. We guzzled the fruit 'til everybody else would have been under the table.

Clockwise:
Odd-job man Tom Marchant and the Potato Crop

Barbara in the garden of 'Murrills' 1930

Father, Mother and the thatched summerhouse in the garden of 'Murrills' 1929

Thomas Curtis at the door of his home in Portchester, Murrills, arched by yellow roses on the left and an old vine. This picture was taken in the 1930's and Mr. Curtis lived on into the Second World War and died at the age of 84.

The upstairs-downstairs lifestyle at Murrills

Extract from an account by Mrs Marchaut whose husband worked for the owner for nearly 40 years

When prominent and prosperous south-east Hampshire corn merchant Thomas Arthur Curtis moved from Portsmouth out into the country, at Portchester, early in the 20th century, there was one habit that he found difficult in breaking which was going before breakfast to Clarence Pier and diving into the sea for an early morning swim.

He was so determined for a while that his new country life at Portchester would not stop him having his dip that he would walk the seven miles from his new home in East Street right down to the pier and enjoy the water. Then he would walk back to his offices in the heart of Portsmouth and get down to business.

The ever-lasting memory of one of his two daughters, Barbara, was always of their open-air life at Murrills, the family mansion in East Street, Portchester, which still stands today. In 1984…

"It was always cold baths before breakfast", she'd never forget. "My sister and I were out swimming a lot when it was high tide at Portchester. We also did half and half, a week each, checking the rain gauge on the front lawn every morning. My father insisted that we kept a record of the rain as it was important to his business. I know that on August 7, 1938, we recorded that 1¼ inches of rain fell at Portchester in half-an-hour. Even now, in the 1980's, I still keep a record of the daily rainfall.

"In our young days, my sister, Kathleen and I spent a lot of time in our stables with the cart-horses. There were nine of them: I can remember Violet, Daisy, Blossom and Prince. We used to ride them to work in the fields and at the end of the day went with them into the sea at high water. The mud and salt water were good for their legs.

We also had a pony and trap and every Sunday used it to go for picnics. The trouble was that Punch was a very unreliable pony and we could only travel in the trap on the level and had to walk the rest of the time".

Besides dealing in corn, Mr. Curtis also farmed more than 200 acres around Murrills, his Portchester residence and grazed sheep up to the brow of Portsdown Hill, where he would go riding and shooting. He was a strict disciplinarian, but did not go with the family to church at St. Mary's on Sunday mornings. "We always walked, come hail or high water", said Barbara, "and we had our own pew, No. 17."
The Curtis sisters were a bit too young, though, to remember the arrival one day, about 1914, of a bright-eyed young lady called Beatrice Russell, who had come to join other servants at the imposing house that was painted by many artists, who did not know that it had an enormous cellar that flooded 2ft. deep on occasions.

More than 60 years later, at the age of 86, Beatrice recalled some of those memorable upstairs-downstairs times: "The servants had to wear proper print dresses and white aprons and later fancy aprons. The days were long. I had only one afternoon and one evening off once a fortnight and the most I ever earned in my four years full-time there as kitchen help, then parlour maid and cook, was £20 a year with my keep.

"I used to get up about half-past-six and get the coffee ready for Mr. Curtis for his breakfast at half-past-seven. The cooking was done on a range (it bore the inscription 'Keep smallest fire possible except when roasting in front') and the coffee took time to prepare as ground coffee was used in a perculator. On one occasion, the coffee was late and Mr. Curtis made a fuss to his wife, Gertrude, about it.

"There was a large table for cooking, and Mrs. Curtis did a lot of this herself and also taught me how to cook, as well as prepare and make bread. I also made some of the cakes and did the soups. Things were kept cool in the dairy in the backyard and from the milk, butter and cream and ice cream were made. I had to clean the carpets, with Chivers carpet soap, and Mr. Curtis used to say to me, 'Beatrice, you're the only one who can clean the carpets properly and always make them look lovely'.

"My husband, Tom, (Marchant) who worked for Mr. Curtis for 38 years, mainly as a gardener, used to drive a tractor up on the hill and bring home our milk each day in a little can from the farm's own cows. He used to make his own butter by carrying a bottle of milk round with him on the tractor: the cream got so shook up that it turned into butter."

Murrills, which is reputed to date back to the 16th Century, was always full of life and activity. Said Barbara Curtis: "We always had three maids, a parlour maid; an odd-jobber called Kate; a Mrs. Jerome, who did the washing and ironing every week; Nanny Raggett, who looked after us, and later we had a governess. My father would not have gas in the house, so the lighting was by paraffin lamp before electricity was installed. There were eight or ten paraffin lamps and every morning they were taken into the scullery and mother trimmed their wicks with her fingers".

For young Beatrice Russell, the highlight was serving the afternoon tea in the elegant drawing room, gently gliding with the silver tray across the carpets she so meticulously cleaned and loved.

In the immaculately-kept grounds of Murrills, with a fountain playing in front of the thatched, boundary wall summer-house, Thomas Curtis (centre left) relaxes with his wife, Gertrude (left). He is smoking a Portchester-made clay pipe and always kept half-a-dozen at the ready on the fender by the fire as they would get too hot at some stage and he would need to change over, said his family. Also in this picture, is another pipe-smoker, Major Frank Gillson, a village personality of the 1930's who was a great churchman and lived in Hospital Lane. The major, a much-respected solicitor, would ride on his horse through the village, doffing his hat to the poorer residents, who would raise their caps to him.

Thirty years of Murrills House history from 1952

An extract from Margaret Bell's memoires

Associated British Combustion Ltd (ABC) acquired Murrills House and moved in during 1952. Not a great deal is known about them, but ABC was at that time a small but flourishing company that began life in the late 1940's at nearby Meonstoke after the Second World War.

Their logo proudly declared that they were 'the makers of the World's finest oil burners'. It was aptly matched by their products and was greatly assisted by breaking into the market at the point in time when oil was the cheapest fuel available.

The Company Chairman and Managing Director, Commander R.B. Cooper MBE, BSc, ARCS, who was a retired naval officer, gathered around him a loyal, enthusiastic staff. My husband, Colin Bell, joined them in 1955 and stayed with them until 1983, rising through the ranks to become Technical Director. He thoroughly enjoyed working at Murrills House and loved the surroundings.

For a long time the gardens and tennis courts at Murrills House were proudly maintained in their original state by the gardener who had worked for the previous owner. Commander Cooper threw the house and gardens open for the Portchester Conservative Association to hold the annual garden party throughout the '50s and '60s.

The Transport Manager and Caretaker lived on site at Murrills Cottage. As the business developed a factory, a large drawing office, test rig and canteen were built on the site and the workforce rapidly grew in numbers as the business flourished.

The house also had a residential ghost - a grey lady - and there were some staff members who were not happy to be left on their own at the end of a day's work.

ABC had secured contracts with the admiralty, War Office, Foreign Office, Ministry of Supply, Central Electricity Generating Board, South of Scotland Generating Board, leading shipping

companies and leading industrial companies. Their oil fuel burning products were well known nationally and internationally. They had agents in most European countries, Scandinavia, USA, Canada, Jamaica, Australia and Japan. They exhibited at trade exhibitions, both in this country and abroad. Their work took them as far afield as South Africa, Australia and Japan.

However, much closer to home they oil fired the heating system at St.Mary's Church Portchester. But without doubt, their two most prestigious contracts, both with a Royal connection, were the oil firing of the heating system at Windsor Castle and providing the boilers on board the iconic H.M Royal Yacht "Britannia".

In the early '70, Margaret Bell recounts that there was quite a local stir when the cashier drew money from the National Westminster Bank in Portchester for the wages of the task force working at Brunswick Wharf London and disappeared with the cash. A very ugly situation developed as the waiting workforce threatened to burn down the site hut and overturn the site caravan. The day was saved by the arrival of further funds - but the erring cashier was never traced, nor heard of ever again.

In 1972 Combustion Equipment Associates from America bought into the company and they traded under the name of C.E.A. Combustion Ltd, which in turn changed to Combustion Technology International Ltd (C.T.I.). Eventually one of the subsidiaries in America went into 'chapter 11', the USA equivalent of filing for bankruptcy. In 1983 the receivers were called in.

Sadly, this was the end of a firm that came from a small beginning, which grew to a worldwide trading company. It was a massive blow for all the staff at Murrills House, especially for the ABC company chauffeur who had taken great pride in driving around the 'Rolls' and 'Bentley'.

Former members of staff supplied me with the names of some of the power station sites where ABC burners were used in their conversion to oil fuel and it is an impressive list. They were... Battersea, Didcot, Poole, Bankside, Fulham, Brunswick Wharf, Rugeley, Grangemouth, Long Annet which was the most advanced power station in the world in 1970 and Table Bay Power Station in South Africa.

An extract from a document written by Margaret Bell.

Left: Windsor Castle
Below: The iconic H.M Royal Yacht "Britannia"

Millennium 'Blue Plaque' awarded to Murrills House Hampshire PR HQ

Reprinted from the Meon Valley News May 2005

The Portchester Society nominates 18th century Murrills House for top accolade.

An 18th century former farmhouse in Portchester is sporting a new blue plaque commemorating its historical importance, thanks to funding from the Millennium "Awards for All" Project.

Murrills House in East Street, which has been the headquarters of Hampshire and Dorset-based PR and marketing agency Hare Carding Communications Group (HCCG) since 1982, was nominated for the accolade by The Portchester Society.

HCCG managing director Neil Fowler was presented with the plaque by John Towse, Chairman, Plaques Committee, of The Portchester Society.

"This is a lovely building that has clearly been cherished through the years," said Neil, "Although it has had to be adapted to meet commercial needs, it retains the elegant entrance and sweeping staircase through which countless generations have passed.

"It now buzzes with creative energy and houses an array of hi-tech equipment - a far cry from the gentle way of life to which it was accustomed in times gone by. We are very aware that we are the custodians of a very special piece of Portchester history." Records show that there had been a farm on the site for at least 500 years before the 1950s. The plaque states that documents from the 16th century show the site as the Manor of Morrels and part of the Southwick Priory Estate. Later it became known as Portchester Farm and was the home of the Curtis family from 1871 to 1951.

Now known as Murrills House, the stylish cream-painted listed building has a large walled garden unchanged for a century or more and is backed by the industrial units of the thriving Murrills Estate.

"It must have been a sad day when the farm was sold off and broken up," said Neil Fowler. "We're delighted, though that the house and some of its land was saved for posterity. Hare Carding puts the lovely garden to good use each summer by holding a 'family day' for staff, where bouncy castles have taken over as entertainment from the gentile croquet and tennis matches of yesteryear.

"We appreciate how lucky we are to work in such a charming building and we're very proud that its importance has been officially recognised in a way that encourages people to understand and appreciate local history."

Murrills House is one of 12 buildings to be presented with plaques by The Portchester Society. Others include The Old Castle Street School and the Turret House site, now the Portchester Library and Health Centre. The site of the previous Church of the Ascension in White Hart Lane, the Castle Powder House and Myrtle Cottage in Castle Street also now have the latest plaques.

Pitfall in Deep Water Pipe-Lay – A Marine Warranty – Surveyor's Perspective

By **Cdr BALAKRISHNAN G NAIR**
COO, OCEANSTAR MARITIME Pvt Ltd

When one steps into a very sophisticated offshore construction barge, wearing the mantle of a Marine Warranty Surveyor (MWS), one would hardly imagine that operations, as innocuous as pipe lay could throw the whole project team into a tizzy and render the entire schedule go haywire on account of the unknowns. Yet that's exactly what happened during the first quarter of this year somewhere in the Indian waters.

Introduction

It was a bright Sunday afternoon in January 2019. I walked up the gangway of a modern Pipe-Lay Barge. There, at the special enclosure on the main deck of the vessel, a smartly dressed (meaning cover-all clad) crew member with a printed list of on-signers was waiting to usher in those who were boarding the vessel.

I presented my credentials as MWS. I was greeted well and my Passport, Seaman Book, BOSIET and HUET certificates and Medical report were collected and I was guided to the safety-induction hall of the sparkling vessel. There stood the cheerful HSE officer who would "brief" you for an hour plus, on the subtle nuances of health, safety and environment and the laid down policies. Signatures were taken, tag issued and cabin allotted. The walk through that followed was even more impressive. The vessel was a floating factory complete with a 2000T capacity crane four massive Tensioners and a 500T Abandon and Recovery (A&R) Winch perfectly engineered to a 'T'.


The Tensioner

That night I could hardly sleep, not as though there were any rolling or pitching that could otherwise pose a threat to a comfortable snooze, but as I was excited about the pipe-lay scheduled to commence the very next day. Next day morning I had a meeting with the project team consisting of the Offshore Construction Manager (OCM), The Field Engineers (FE) and the Client's

Site Representative (CSR), besides the Captain and Chief Engineer of the vessel. All were gung-ho about the readiness of the project.

Getting into Action

I was presented with test certificates of rigging and crane operators' certificates – current and valid. I inspected all the freshly minted rigging complete with color coding. Everything was found in order. Weather report from Fugro couldn't have been more conducive and favourable. I noted that the welder qualifications were complete and the WPS/PQR was in place.

I noted that all parameters specified in the approved Pipe-lay procedure were met. The stinger was already lowered into the water to the requisite angle. After informing my base office, I issued the CoA (Certificate of Approval) for retrieving the pipeline lying at the seabed.

It was no ordinary pipeline – they were 18"/4" Piggyback pipelines – 18" for the hydrocarbon and the 4" for venting. They are held together by the Piggyback blocks placed between the two pipelines at regular intervals. The piggyback blocks and the pipelines are held in place by flexible straps made of special material.

The Stinger

Pipe Recovery

On issuance of the CoA, the vessel was aligned with the location of lay-down head of the pipeline at the seabed. The vessel was in DP mode. A&R wire was lowered into the seabed and the same was hooked on to the laydown head with the help of ROVs. The pipelines were recovered successfully by application of pull by the A&R winch. The load of the pipes was transferred slowly and systematically to the Tensioners.

Once the tensioners took charge of the pipeline, the winch was relieved of the tension. The lay-down heads of both the pipelines, big and small, were severed with clinical precision.

The much anticipated moment arrived. The project team was now ready for the Normal Lay of the pipeline for the next several kilometers. As usual I had the honor of checking and satisfying myself of the readiness in all respects and then issued the CoA for the Normal Lay.

The Normal Lay

Hunky-dory! New pipes were welded at the inner end of the pipe strings. The pipeline was progressively pushed into the waters by the tensioners. Piggyback blocks were added by the crew with impeccable regularity. ROVs were pressed into service to keep track of pipelines' progression to the seabed.

After the initial euphoria and several hours of delight gradually tapered, something amiss was noticed at the ROV console. The pipelines, big and small, ordained to be together, enforced to be so by means of the piggyback blocks, were no longer together. They were 'separated'. Several re-runs of the ROV confirmed the unwelcome news.

The shock

The above news was a jolt for all or a bolt from the blue (or better still, bolt from the blue water, shall I say?). This was something completely unanticipated.

The client was in shock. How could this happen! The question went abegging. Nobody seemed to have an answer. That's when new theories emerged, as to how the straps could have given way.

The "Theory"

One such theory was that the tension on the straps holding the pipes together was far more than what should be allowed; perhaps close to the limiting value and gets aggravated while the pipes negotiate the "S" bend over the stinger. The straps' tension exceeds the yield value and eventually gives way. This theory gained currency fast. It manifested itself as an MoC (Management of Change).

MoC

Well, an MoC is a potent tool by which last minute changes during an installation activity at sea are tackled. Sometimes MoCs are resorted to for a flaw in the approved procedure that hasn't taken into account subtle aspects peculiar to the vessel or process. An MoC is resorted to when there is a change in execution plan.

An MoC, typically, will state the current scenario, the problems faced on account of the same and the proposed change. The proposed change must be backed up by engineering calculations/ analysis to show that the control parameters would be within limits even after the proposed changes are incorporated.

The HSE team onboard and the management would brainstorm the change to identify the potential risks and the severity of impacts and incorporate measures that would mitigate the risks and minimize the severity of impact.

The document that runs into several pages with enclosures of engineering drawings, hand sketches, photographs and often prints of e-mail correspondence, takes shape after incorporating the views expressed by all the stakeholders. MoC gets signed by all concerned before it becomes an extension of the approved procedure and gets implemented. The MoC drafted for reducing the tension in the straps was debated for several days by all stakeholders including MWS and finally approved.

Dissenting note

I stated in no uncertain terms that they were treating the symptom rather than the cause. I advised them to identify the root cause and tackle it scientifically rather than embrace an ad-hoc solution. My advice fell on deaf ears and was not at all taken cognizance of. Even the client representative stated that the stinger is not within the scope of the MWS. Was he politely saying, "none of your business"? I wasn't too sure.

Piggyback Pipelines

"Re-Lay"

With the MoC in place the euphoria was back on track. Pipelay recommenced. The resumption of pipelay was a much needed boost for morale of the personnel on board. Though on a slow pace Initially, the pipelay gradually picking up momentum. However to everyone's utter chagrin, within 24 hours of resumption, a few straps parted. Work was halted. Quite a few eye-brows were raised. Soon the concerns were brushed aside stating that the failures of straps were stray incidents.

The pipeline was pulled back, necessary repairs effected and the work resumed. New piggyback blocks and straps were incorporated and once again pipes were pushed to the seabed.

The Red Flag. As MWS, I tried to reason out that the latest strap failures are not adequately explained in the light of the reduced tension now being applied post MoC. The OCM snapped back that exceptions must be treated as exceptions and must not be a cause for worry. However after a while more number of straps failed. I told the management that the problem lies in the stinger. The pipeline while being lowered into the water was rubbing against some hard portion on the stinger leading to the failures. I suggested that the stinger be raised out of water and thoroughly examined for defects.

No one was willing to pay attention, though the losses due to frequent failures were mounting. The saga of pipelay, strap breaking, work stoppage, pull back, repairs and resumption of work gradually became the order of the day. It was cyclic in nature. Not a single day passed without a failure. But sadly though, complacency had set in. The mighty modern vessel with immaculate track record became home to unprofessional approach. No one had courage to offer an explanation nor had the guts to hazard another 'MoC'. In the process the vessel could lay only about 5 KM of pipeline in nearly 10 days since commencement of operations.

The Fall-out

The morning meetings witnessed muted mumblings. Nobody offered an alternate blue-print. No one was looking the MWS in the eye! Morale of the crew was beginning to go down.

The progress of work became tardy. Surprisingly the management was yet unwilling to buy into my argument that the problem could be with the stinger. It was brushed aside as mere conjecture.

The fact was that despite the major loss of face and massive loss of productivity, they had got comfortable with the pattern that emerged, consisting of Pipelay - Strap breaking - Work stoppage – Pull back – Repairs - Resumption of work. The cycle went on and on. As pipes got deeper and deeper their confidence turned shallower. They even seemed to turn a blind eye to the sagging self-esteem of the men on the job.

Clinching Evidence

Finally the day arrived when I chanced upon a close encounter that the ROV had with the stinger. The display at the console showed that the straps were rubbing against a hard portion on the stinger, exactly the way I had surmised. I was prompt to take a photo of the view from the console. It was evident that the damage caused by this contact that the straps were making with the hard portion on the stinger was the root cause of the strap failures. The clinching evidence was presented to all concerned, OCM down the line. This was incontrovertible proof of the cause of the failures. I had nailed the problem.

Remedial Action

Now there was no escape from acknowledging the findings and taking appropriate remedial action. The management got into a huddle and held a closed door meeting. The decision to raise the stinger for repairs was in place within the next 15 minutes. The client ashore was taken into confidence.

Thereafter the pipeline was laid down and the stinger was raised. The stinger was observed to have precisely the same defect that I was harping on. Some of the rollers were not rolling and were jammed and had ended up virtually as hard metallic objects creating notches on the straps leading to their subsequent failures.

Necessary repairs were carried out. Thereafter the stinger was lowered to the designated position. CoA was issued for recovery of pipeline and the temporarily laid pipeline was recovered for resumption of production.

Happily Ever After...

After the repairs, there was no looking back. The production resumed with full vigor. Strap failures were a thing of the past. Gradually the optimism of the work force improved.

The smiles were back in place. The vessel started clocking miles in turn. She laid nearly 20 KM of pipeline in the next 8 days or so – nonstop - without a single failure of straps. Thus she successfully completed the full scope of the campaign in good time. The mighty modern ship moved on with flying colors!

The Lesson Learnt

There was a valuable lesson to be learnt, as is evident. But the question was who will learn the lesson. The crew of the vessel may change. The operator may move on. Hence it was decided that the MWS must share it with fellow surveyors so that the industry benefits. What better forum to share the experience other than "The Report"? Hence this brief write-up…

At the end of the day one question lingers on: ***Was the "MoC" required...?*** I wouldn't comment; what is your take?

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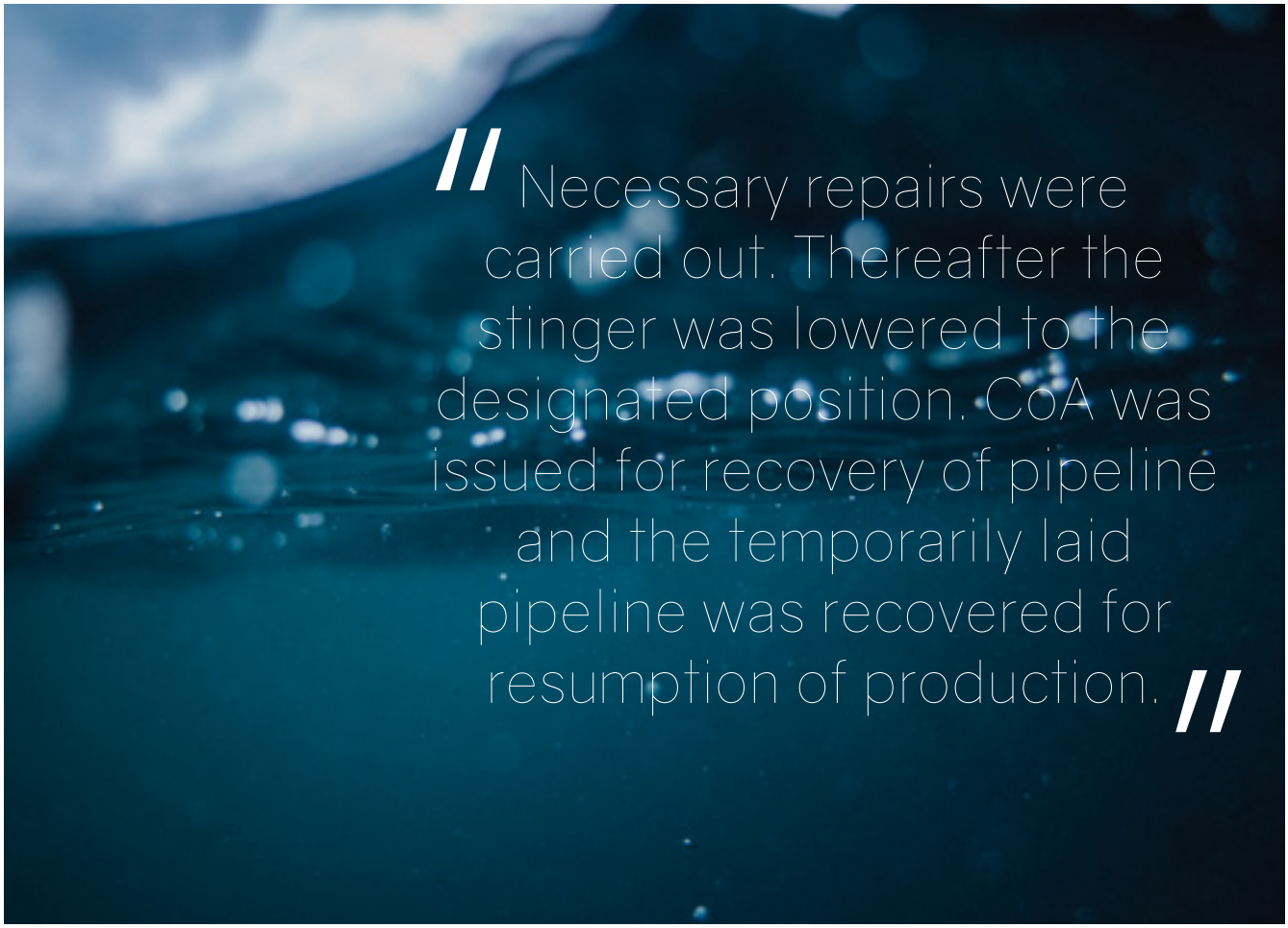

The securing of containers on deck on a container ship

BY **UWE-PETER SCHIEDER**

Uwe-Peter Schieder, Loss Prevention Manager at GDV (German Insurance Association – Gesamtverband der Deutschen Versicherungswirtschaft) and Vice-Chair of IUMI's Loss Prevention Committee, provides a commentary on securing containers on deck on a container ship.

Uwe-Peter Schieder started his professional career in 1978 with the Hamburg Süd where he was trained as a sailor. Following his studies at the Technical College of Bremen, Department of Navigation and the acquirement of a master's certificate, he worked on container ships for Hapag Lloyd. In 1994 he joined the Deutscher Transport-Versicherungs Verband (DTV) (German Marine Insurance Association) in Hamburg as a loss prevention manager. Since the DTV merged with the German Insurance Association (Gesamtverband der Deutschen Versicherungswirtschaft - GDV), Mr. Schieder has been active as a technical expert in the Marine Insurance Department responsible for the fields of loss prevention and hull insurance. He is Vice Chair of the Loss Prevention Committee of IUMI.

There are six different ways in which ships move in the sea, primarily pitching, heaving and rolling.

Lateral rolling motion represents the greatest challenge for stacks of containers. If containers are to be transported safely on the deck of a container vessel, they must be firmly connected to the ship. This is done with the aid of what are known as twistlocks. These twistlocks are inserted into the corner castings of the containers. These corner castings have elongated holes in which

the rotating lug of the twistlock engages, locking the containers together. In addition, the bottom two layers of the stacked containers are connected to the ship with lashing rods. Initially, it was common practice to stow stacks of containers on deck in such a way that the individual stacks were connected to each other laterally using special stowage equipment. In contrast to this, nowadays each stack stands separately so that it can be stowed or unloaded independently of neighboring stacks. A ship carrying containers on deck thus transports a kind of "forest" of independent towers which, in heavy seas, sway back and forth due to the elasticity of the material in much the same way as the ears of corn in a field.

The lashing rods are arranged crosswise in front of and behind each container stack and absorb lateral movements of the stack. Depending on the intended height of the container stacks on deck and their permitted weight, the 5th layer of the stacks are, for example, secured at the bottom by the rods. To allow these rods to be attached, ships have what are known as lashing bridges running across the ship between the rows of containers. The workers can stand on these to work and fasten the rods.

The lashing systems are calculated individually for each ship by specialist companies and are inspected and approved by the classification societies. The results of these calculations are recorded in a Cargo Securing Manual approved by the flag state and in which all details can be found. The weight of the containers is of crucial importance, because the higher a container is in a stack of containers on deck, the less it may weigh.

You can think of this in terms of the weights on a seesaw. On one side of the seesaw is the securing capacity of the lashing system, consisting of twistlocks, lashing rods and turnbuckles, and on the other side there is the weight of the containers. With this seesaw, the side on which the container weight is sitting must always be up in the air. In other words, the securing system must provide more securing force in an emergency than the containers and their weight require. If containers weighing 28 tonnes are located in the 8th layer, where only containers weighing 5 tonnes are actually permitted, the securing balance of the "seesaw" is massively impacted and the securing capacity is hanging in the air. Applied to the securing system on board, this means that it would be loaded beyond its calculated limits in heavy seas and would fail. The result is that the container stack would sway back and forth in the swell and would lean against the neighboring container stacks. This would in turn overload their securing systems, which already have their hands full holding their own container stacks, and they would therefore also fail. The obvious consequence is a domino effect, such as the one seen recently on the the MSC Zoe.

However, the securing balance on our seesaw can also be disrupted by the cargo in the container itself. This is because the securing systems on board ships are calculated on the assumption that the dynamic behavior of the cargo is neutral. Static masses are assumed for the containers, and it is assumed that this mass always acts at the same point in the container. If a cargo weighing 30 tonnes is inadequately secured in a container, it will break loose in a rough sea and bang from side to side in the container. This violent sideways motion has the same effect on our securing system as a wrecking ball on a house. If the bad weather lasts long enough and the ship's movements are violent enough, the securing system will fail and cause a domino effect similar to that described above.

The extent to which a ship rolls in the swell will also depend on its stability. The stability referred to here is the ability of a ship to right itself after an external force is applied, for instance as a result

"If a cargo weighing 30 tonnes is inadequately secured in a container, it will break loose in a rough sea and bang from side to side in the container. This violent sideways motion has the same effect on our securing system as a wrecking ball on a house."

of swell. A ship with high stability will right itself again quickly, and a ship with less stability will right itself more slowly. Too much or too little stability is bad, because high stability results in high acceleration, whereas inadequate stability could cause the ship to capsize.

The securing systems of a container ship are designed according to longitudinal, lateral and vertical acceleration values, which are calculated using empirical formulas of the classification societies. These formulas are based on swell statistics and transfer functions for ship behavior. Because container ships are still evolving in terms of size, speed and container stowage height, these formulas are also constantly being revised. However, they never show the worst case scenario, and instead represent assumptions where there is only a very low, but generally accepted level of probability that they will be exceeded.

> "On average, between 450 and 650 containers are lost on the world's oceans every year, which is only a millionth of the total number of units transported."

The actual amount of acceleration caused by swell will depend on the characteristics of the ship and the swell itself. As a rule, the larger the ship, the less likely it is to be caught in seas that will cause it to move violently. Unfortunately, there is an important exception to this rule in respect of rolling movements. If small stimuli, even from relatively mild seas, strike the ship time and again at something even approaching a frequency that is in sync with the ship's own roll oscillation, which is a function of its stability, the oscillation will be reinforced. This is known as resonance and works in the same way as children working a swing ever higher. This results in large roll angles and large lateral acceleration.

It is easy to see that such resonance can occur in particular when the swell strikes the ship transversely or at an angle. But there is also a special form of rolling motion, which can occur due to the periodic fluctuations of the ship's stability in a longitudinal swell, i.e. when the waves come from the front. Due to the stability parameter, this form has been called parametric excitation. It is considered by practitioners to be particularly insidious, since it had previously been believed that rolling oscillations could be minimized by steering into the swell.

Technical aids for the early detection of resonance of any kind are under development, but a decisive breakthrough does not yet seem to have been achieved.

On average, between 450 and 650 containers are lost on the world's oceans every year, which is only a millionth of the total number of units transported. But if they are lost close to the coast, as was the case with the MSC Zoe, the cargo being washed ashore can cause major damage and attract unwelcome publicity. Hazardous goods can also be a threat to ecosystems and people. The reality is that such accidents are to be avoided if at all possible, and a great deal of effort is therefore being invested in exploring and clearing up the last of the unknowns. But container ships are getting bigger all the time, which brings along new problems. The container itself is part of the problem, as it experiences loads that test it to its limits. The onboard lashing systems, on the other hand, will generally have a 100 percent safety margin. But it only takes one link in the securing chain to fail and loss of cargo could well be the consequence. The way in which the cargo is secured in the containers would have to be monitored more closely, as would the weight of the containers themselves, although the verified gross mass (VGM) should long ago have ensured that this was correct. So there will always be a residual uncertainty, and this needs to be further reduced.

Ensuring safe passage for a steel coil cargo

Often cargo planners who are preparing the stowage of steel coils in the cargo hold of a general dry cargo ship or bulk carrier, do not have the necessary cargo type specific information required to help them decide the permissible cargo load, thus preventing damage to the ship's structure.

As Jan Rüde, Ship Type Expert MPV, DNV GL explains, according to SOLAS Chapter VI, Reg. 5, every ship must have an approved cargo securing manual.

Nonetheless, the majority of these manuals do not include detailed information about the carriage of steel coils or the only contain only particular types of steel coil.

This fact leaves it upon the loading planner to determine the loading limits, and some planners simply divide the coil weight by the coil surface area and compare the resulting pressure acting upon the tank top with the allowable uniform tank top load (t/m^2).

This approach fails to account for the true forces acting upon the ship's structure when carrying steel coils. The result could be a deformed inner bottom and floor buckling.

Steel coil loads are not uniform
Regarding steel coils, they are loaded with their axis pointed in the ship's longitudinal direction.

They are located on wooden dunnage arranged in transverse direction. This dunnage creates a protective layer between the coils and the inner bottom plating.

The weight of the steel coils is then transferred by the dunnage onto the bottom structure of the vessel, which incorporates the inner bottom plating, the longitudinal elements, the double bottom girders and the hull girder structure.

Moreover, the force of this weight is not distributed correctly across the tank top.

Instead it acts upon the inner bottom structure of the vessel as concentrated, short line loads.

This leads to the fact that the permissible uniform distributed load information in t/m^2 as provided in the cargo securing manual cannot be used as a basis for concluding in the maximum load when carrying steel coils, Mr. Rüde adds.

STRENGTH INFORMATION FOR CARGO PLANNERS

Steel coils come in many sizes and weights, and can be arranged in various ways regarding the placement of the locking coil, the number of tiers, and the dunnage.

The cargo planner has to have reliable information to decide fast if a certain type of steel coil can be transported by the vessel.

If this is possible, then the planner must figure out how the cargo should be stowed to ensure safe carriage.

For this reason, the planner should set out the maximum cargo capacity and the minimum requirements for safe stowage without overestimating the necessary number of dunnage elements.

ENHANCING CAPACITY

When a ship is moving, its vertical acceleration varies along the length of the cargo hold. Thus, the position of coils in the individual holds of a vessel must be accounted for when calculating loading tables, Jan Rüde concluded.

Carriage of soya beans

This article first published April 2019 the Standard Club and can be found at https://bit.ly/2WlBuvd www.standard-club.com

BY **BRETT HOSKING**
SENIOR CLAIMS EXECUTIVE

AKSHAT ARORA
SENIOR SURVEYOR

INTRODUCTION

The Standard Club has seen an increase in claims activity relating to the carriage of soya bean cargoes in the past few years. This is especially evident in the trade of this cargo between Brazil and China.

With the first harvest of the year in Brazil taking place in January/ February and delivery of cargoes in the northern hemisphere in Spring, the club has collaborated with CWA to produce the following bulletin on best practices specifically pertaining to the carriage of soya bean cargo. It provides advice on how to ship this cargo in the most prudent manner to reduce the risk of cargo claims, providing some useful case studies of various claims activities and top tips to help protect members involved in the carriage of this cargo.

The International Maritime Solid Bulk Cargoes (IMSBC) Code contains useful information under the heading of 'Seed Cake', which also pertains to soya bean derived products. The club's previous bulletin (https://bit.ly/2DJMBqy) on seed cake cargoes contains general information regarding the stowage of bulk agricultural cargoes.

BACKGROUND

The bulk soya bean trade between South America and China has never been greater. In 2018, approximately 83.8 million tonnes of soya beans were exported to China from Brazil alone, an increase of 23.1% when compared to exports in 2017[1]. Exports from South America were boosted by the trade war between China and the United States, which resulted in a steep tariff of 25% on US soya bean imports. However, the soya bean import landscape may change once again for China as it enters into further talks with the US in an attempt to reach a trade deal[2]. The import and export of soya beans can be impacted by various external factors and these political shifts represent the latest impact on the soya bean market. Other factors to have affected the trade include meteorological and economic factors. The club has experience of a various claims being presented including some claims of more of an opportunistic nature. A general awareness of market conditions is therefore helpful.

1 https://macaudailytimes.com.mo/more-demand-fromchina-increases-soy-exports-from-brazil.html
2 https://www.channelnewsasia.com/news/business/china-buys-us-soybeans-a-day-after-trade-talkstraders-11196936

LOSS PREVENTION ADVICE

Soya beans are naturally liable to self-heat during long storage and transport periods because of their high oil content. The natural breakdown of the oil over time generates heat. A small increase in temperature will not usually have an effect on the cargo quality. However, soya bean's high moisture content and its storage in close proximity to external heat sources can increase the rate of this process and, over time, lead to cargo temperatures of up to 90°C. The interaction between the moisture content and temperature of a soya bean cargo will additionally influence whether mould can grow. The growth of mould will deteriorate the cargo physically and further increase the temperature of the affected cargo, while also heating other beans in close proximity.

Soya beans

The main signs of damage associated with soya bean cargo claims include discolouration of the beans, malodour (often a result of high temperatures) and mould growth. Whilst some cargo damage may be quite obvious, even upon a brief visual inspection, masters and their crews will be unable to fully determine the inherent quality or condition of the soya beans. Only laboratory analysis of representative samples can provide an overview of cargo quality and condition.

There are, however, a number of steps that can be performed at various stages in the transportation of soya bean cargoes to prevent or minimise claims activity.

Preloading

- The holds should be prepared to 'grain clean' standard before loading.
- The weather-tightness of the hatch covers should be checked by ultrasonic test equipment.
- The usual checks for water-sensitive cargoes should be carried out. These may include checking cargo hold ventilator ducts, access hatches, manhole covers, air and sounding pipes. In addition, bilge lines and non-return valves should be tested for any backflow, whilst the cargo hold water ingress alarms and dewatering system (if fitted) should be tested for proper functioning.
- The bunker tanks adjacent to the cargo spaces that require heating should be identified and measures should be agreed with the ship's chief engineer to ensure that the heating is sufficient (but not superfluous) for heavy fuel oil (HFO) to be pumpable. Bunker planning should be done in advance and steam supply valves should be closed for empty bunker tanks. The use of 180cst HFO can be considered when carrying heat-sensitive cargo as it can be easily transferred without heating. When carrying heat-sensitive cargoes such as soya beans, it is also recommended that the electrical supply leading to the cargo hold is isolated. Prepare to record fuel oil temperatures during bunkering and throughout the voyage.
- Understand the voyage route and whether there is a risk of ship's sweat. Ensure the crew understand the cargo ventilation instructions prior to the voyage.
- Prepare for cargo temperatures to be measured through the temperature/sounding pipes and recorded during the voyage.
- Consider carrying out a preload survey of the cargo.
- Ensure that any carriage instructions received from the charterers are clear and understood by the crew. If there are any concerns, members should contact the club for advice.

During loading

- The crew/surveyor should take date & time stamped high-quality, colour photographs of how the cargo is delivered and loaded.
- Ensure the loading sequence is recorded in all circumstances.
- A protest should be issued by the master if any damaged cargo is presented for loading and reject visibly mouldy or darkened cargo.
- Instruct a surveyor to obtain moisture content and temperature measurements for the cargo being loaded.
- A surveyor should regularly enter the holds to inspect the cargo condition, when it is safe to do so.
- The master should ensure that when loading soya bean derived products a cargo declaration form is received (as specified in section 4.2 of the IMSBC code). It is also recommended to obtain a grain and oilseeds quality certificate well in advance of loading in order to ascertain the grade and oil/moisture content of the intended cargo. This would assist with a timely response in cases where the cargo could pose potential issues during the voyage due to its inherent condition.
- For the most accurate representative samples, cargo superintendents should refer to the guidelines as published in the Federation of Oils, Seeds & Fats Associations Ltd (FOSFA) sampling rules (see below section on sampling).
- The weather must be monitored closely by the crew. If there are periods of precipitation, loading should be discontinued as soon as possible and ideally prior to the start of any precipitation. If cargo is found to be wetted, photographs of ineffectively covered cargo prior to loading as well as any wetted loading equipment should be obtained. A protest should be issued by the master and any wetted cargo rejected. Any delays to the loading process should be detailed in both the protest and the deck log.

Ventilation of cargo

- Ventilation will not stop a cargo of soya beans from heating, but it will assist in reducing the risk of condensation (ship's sweat).
- Ventilation should be conducted in accordance with sound maritime practice and/or fumigation instructions and/or voyage instructions.
- The decision to ventilate should be based on either the 'Three Degree Rule' or 'Dew Point Rule' when the weather/sea conditions permit. The Three Degree Rule is normally recommended since it provides instructions which are more practicable whilst under sail.
- The decision to ventilate should be reviewed at least every four to six hours, since frequent changes in weather conditions may affect when ventilation should be undertaken.
- The ship should always record the ventilation strategy followed during the voyage. In other words, a ventilation log should be kept which notes which ventilation rule is being followed, all temperatures on which the ventilation decision is based and for how long each hold is ventilated. Any reason for lack of ventilation must also be noted in the ventilation log. If bad weather prevents ventilation, photographs should be taken as evidence and a sea protest which includes these photographs should be issued to all concerned parties.

Delays

- If the holds are sealed, all parties should be informed that the holds may require unsealing during prolonged delays in order to provide more efficient ventilation or permit regular cargo condition inspection.
- The condition of the cargo surface should be visually inspected on a regular basis to check for signs of ship's sweat or cargo damage.
- Cargo subsurface temperatures should be measured using a calibrated temperature probe to assist in assessing whether the cargo is heating. Updated cargo temperatures also provide a more accurate basis for continued ventilation if following the Three Degree Rule. If the holds cannot be opened, the temperature should be monitored through the temperature/sounding pipes in each hold.
- The decision to ventilate must be reviewed during any delays. It may be necessary to partially open or crack the cargo hold hatch covers to allow a more efficient exchange of air. This must only be done under suitable sea and weather conditions, and is inadvisable at night since approaching precipitation is less visible.

Cargo damage during discharge

- Evidence:
  - Damaged soya beans usually appear brown to black in colour and/or mouldy. Compacted cargo is not always damaged and can be caused by cargo settling during the course of the voyage/delay.
  - Notify the club as soon as possible in order to appoint a suitable/experienced local surveyor.
  - The location, depth and (if possible) extent of the potential damage should be recorded immediately. Detailed photographs and drawings of the location and the pattern of damage are useful.
  - Cargo temperatures of visibly damaged as well as visibly sound cargo must be obtained using a calibrated temperature probe to assess the extent of heating.

- Segregation:
  - Effective segregation of visibly damaged beans can reduce a claim amount significantly.
  - If the damage is restricted to the cargo surface, then effective segregation can often be undertaken either by hand or by grab during the first stages of discharge, depending on the extent of the damage.
  - Segregation should take place as close to eventual discharge as possible so that the newly exposed layer of cargo does not have time to deteriorate.
  - Damaged portions of soya beans uncovered during discharge should also be segregated.

- Sampling:
  - It is essential to sample the cargo according to FOSFA sampling rules throughout discharge if there are allegations of damage. Samples of any segregated cargo should be kept separate to samples obtained from accepted, sound cargo.
  - Upon completion of discharge, the representative bulk sample material should be mixed and reduced by method of coning and quartering to produce laboratory samples for analysis.
  - All laboratory samples should be approximately 2kg to 3kg in weight unless there are specific allegations of mycotoxins (which require greater sample sizes). The sample material should be placed in a clean, dry, plastic bag, which should be tied. This should then be placed inside another plastic bag and sealed with a numbered seal.
  - All samples must be clearly labelled, stating the following: ship name, commodity, port of discharge, date of sampling, seal number, hold/quantity represented by sample/lot and from where it was taken.
  - A sampling report should be produced and signed by all parties involved in the sampling operation.
  - The samples should be analysed for the parameters specified within the commercial contract/quality certificate.
  - All parties should be invited to jointly sample and analyse representative samples. Suitable accredited laboratories should be used.

Cargo Shortage Claims

In the agricultural sector it is very common to use a shore scale (conveyor belt, etc.) to establish the cargo weight. Usually if the cargo is loaded by the shore scale at the load port, it should be discharged by the shore scale at the disport. The issue arises if the cargo is loaded by shore scale and then at discharge port quantity is ascertained by draft surveys. In such cases a joint hatch sealing survey (at load and discharge ports) may assist in defending cargo shortage claims.

Members are recommended to refer to club's article (https://bit.ly/2vHAZzR) on 'paper shortages' for other preventative measures that can be taken to avoid such quantity related claims.

CASE STUDIES

Case study 1
(Highlights the importance of good segregation)

Problem: A ship fully laden with soya beans, originally intended for discharge in China, was delayed for approximately five months at a South American loading terminal. Cargo was on board the ship for over 150 days and underwent severe heating, resulting in visible discolouration and reduction in oil and protein quality.

Action: Daily cargo temperatures were obtained throughout the delay and weekly sampling of the cargo surface was performed for the determination of moisture content. The crew also undertook appropriate ventilation. A salvage sale of the cargo was arranged with the cargo being discharged at a closer port than that originally intended.

Conclusion: The cargo was segregated into three visual categories during discharge. Each category was sampled representatively and the results of sample analysis were used to provide an accurate idea of quality. This ensured that the subsequent claim could be assessed on the best possible analytic evidence.

Case study 2
(Highlights the importance of properly characterising alleged preshipment problems)

Problem: A seven-hold bulk carrier fully laden with soya beans from South America arrived for discharge at a Mediterranean port. The authorities rejected the cargo due to the presence of fungal sclerotia, which are considered a phytosanitary threat in some countries. The ship was delayed at anchorage for approximately three months, leading to deterioration and subsequent mould growth in the upper layers of the cargo.

Action: Inspection and sampling of the cargo surface was undertaken jointly. Sampling of the cargo using a pneumatic sampler assisted in assessing the condition of the cargo deeper in the stow. The samples indicated that the damage was limited to the surface. Spot samples of the fungal sclerotia were obtained and DNA analysis confirmed the fungal species. Samples were taken according to FOSFA rules in order to estimate the extent of the damaged cargo segregated from the surface.

Conclusion: The authorities rejected the cargo because of the phytosanitary regulation. As a result of identifying the fungal species, the cargo was able to be resold in a European port where this fungus is not considered a phytosanitary threat.

Case study 3
(Highlights the importance of cargo temperature monitoring and appropriate ventilation)

Problem: A ship partly loaded a cargo of soya beans at a South American port. Due to lack of cargo, the ship was shifted to anchorage for several weeks. On return to port, elevated cargo temperatures were measured in one of the slack holds due to load additional cargo.

Action: The master was advised not to load additional cargo. The ship sailed to the intended discharge port and was appropriately ventilated throughout the voyage. The cargo in the affected hold was rerouted to an alternative discharge port during the voyage in order to reduce the on-board storage time.

Conclusion: The cargo was discharged without complaint or any sign of condensation damage on the cargo surface despite the elevated cargo temperature and relatively cooler external temperature experienced during the voyage.

CLAIMS ADVICE

There are a number of additional protective measures that members may take in order to mitigate against the risks of carrying soya bean cargo beyond the technical loss prevention advice already set out in this bulletin. Such measures may include careful drafting of charterparty clauses; however, much will depend on the relative bargaining position of the parties.

Some of the relevant provisions will include those relating to the fumigation and cleaning of cargo holds. The cleaning of cargo holds prior to loading is essential given the nature of soya bean cargo as a foodstuff. Fumigation requirements can, however, pose problems for the master, not just for safety reasons, but also because it may prevent him from ventilating the cargo during the voyage. If the master does not ventilate the cargo, he is open to criticism if the cargo surface is degraded on arrival at the discharge port. It is understood that the Chinese courts in particular have previously found owners liable for cargo damages that they

believe could have been prevented by ventilation, particularly when ventilation was not carried out or there was a failure to keep a proper ventilation record.

The club is aware of several clauses which members may consider adopting, including the BIMCO Cargo Fumigation Clause for Charter Parties. This provides clear allocation as to the responsibilities, risks and costs arising from cargo fumigation operations on board ships. Other relevant provisions include Clauses 10 (Seaworthy Trim) and 11 (Fumigation) of SYNACOMEX 2000 and Clause 16 of GRAINCON.

Other contracting arrangements may include the division of responsibility for cargo damage and loss. When preparing a fixture, an owner may want to, for example, look to specifically shift responsibility for cargo claims resulting from soya beans loaded off-specification with an excessively high moisture content on to the charterers. The club would in any event usually recommend incorporation of the Inter-Club Agreement (ICA) as a minimum, whereby the ICA serves as a useful mechanism in apportioning responsibility for cargo claims in certain circumstances. See the guide to the ICA on the club's website.

The club has previously provided members with updates on the club's website on the case of the Yangtze Xing Hua from the English courts, which dealt with soya bean meal and delays to the cargo. In this case, the Court of Appeal upheld the decision of the Commercial Court[3]. The case serves as useful confirmation that damage to a cargo which is caused by the prolonged stay of the ship at a port at the express orders of the charterers will be treated as a cargo claim falling under Clause 8(d) of the ICA 1996. It was held that the term 'act' in the phrase 'act or neglect' in Clause 8(d) of the ICA should not be confined to culpable conduct and should be given its broader meaning. The decision confirmed the role of the ICA as a rough and ready mechanism to apportion liability, whereby the ICA deals with causation and not culpability as the measure for apportionment.

Notwithstanding best efforts by members in their contracting arrangements, some factors may be beyond the control of even the most prudent carrier. These may include the various loading and discharge conditions as well as the acceptable margins for moisture content in Brazil compared to what may be considered as acceptable in China. For example, in Brazil, the generally maximum allowable moisture content of soya beans for export is 14%. However, the national standard set up by China (GB1352-2009) states that moisture content should be equal to or less than 13%. It is important that clear evidence is obtained to show the exact water cargo condition on loading.

The club is aware that the Chinese courts will usually not acknowledge or accept expert findings from other jurisdictions, so a preloading survey demonstrating poor preshipment quality may not help defend the case. The Chinese courts often only accept findings from local experts.

The International Group is working with local partners in China to try to raise awareness of this issue such that local experts may in future be able to attest to any deficiencies in the preshipment quality where applicable.

Should members face any potential claims relating to soya beans, the following list of documents is not exhaustive but usually serves as a useful starting point in the investigation of such claims and the club would encourage members to collect and retain at least this information:

- Bill/s of lading
- Mate's receipt/s
- Preloading survey report
- Moisture certificate or certificate of quality at shipment
- Stowage plan
- Ventilation records.

The club has experience of claims for soya beans in various jurisdictions and most notably in China, with the club's Hong Kong office providing valuable insight into the practice of receivers and local courts. In the event that a member is presented with a claim relating to soya beans, they should approach their usual claims contact for assistance.

This advice has been prepared with the kind assistance of the Food and Agricultural Commodities Department of CWA International, London.

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3 Transgrain Shipping (Singapore) Pte v Yangtze Navigation (Hong Kong) Co Ltd (The "YANGTZE XING HUA") [2017] EWCA Civ. 2107

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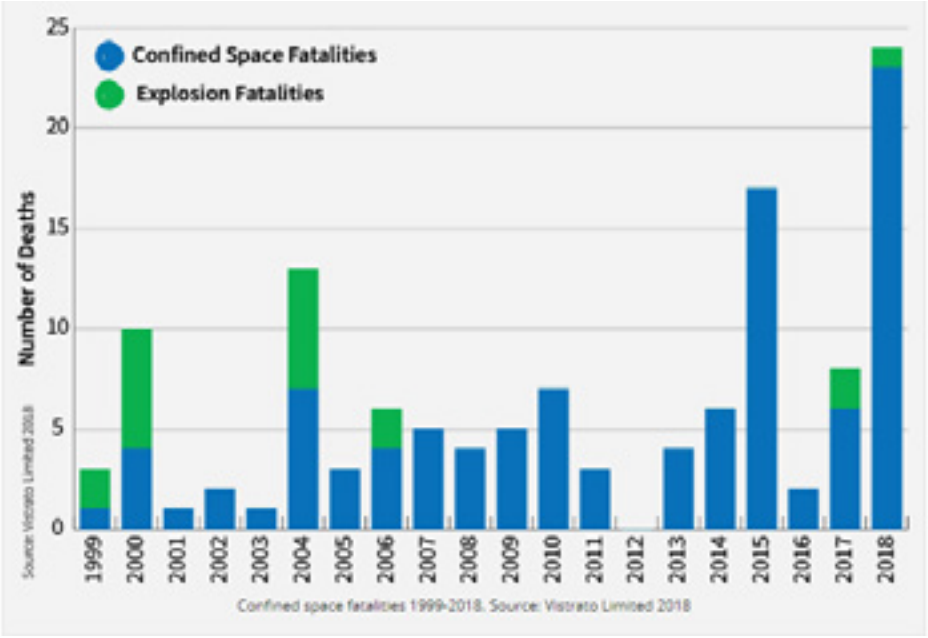
SHOCKING SPIKE IN CONFINED SPACE FATALITIES REVEALED - BUT WHY?

AN OPINION ARTICLE BY **MIKE SCHWARZ**

Once again the subject of enclosed space fatalities is back in the marine news headlines for all the wrong reasons following a spike of fatalities and incidents over the past 18 months. And let me assure you, marine surveyors are not immune from this awful possibility either. I thought carefully before penning and publishing this article as it provokes strong emotions; but I for one find it very distressing to read about this phenomenon on a regular basis. Surely it could be - must be - prevented, or is this just one of those age old problems we have to accept?

A recently published article by the International Transport Workers Federation (ITF) brings the numbers into stark reality and, as it clearly shows, 2018 was a shockingly bad year, in fact the worst since statistics became available back in 1999; and 2019 has started in a similar vein with more high profile cases. Seemingly we do we not learn and make progress in this area as an industry. Why?



To quote the article in full:

"The International Transport Workers Federation (ITF) has underlined a shocking spike in deaths in confined spaces, as a workplace hazard long familiar to the shipping industry. Since January 2018, 16 dockers and 12 seafarers have died from asphyxiation or explosions in confined spaces – or from falls after passing out due to bad air.

To put the recent deaths in perspective, there have been a total of 145 in the past 20 years, and alarmingly 28 in the past 16 months. We know that maritime workers are generally aware of the risks associated with entry into confined spaces, but they may not be aware of the details and extent of the varied dangers posed by forest products, coal, iron ore, grains, gases and other cargo.

As such, ITF emphasized it is not enough for a worker to rely on opening the hatches for 30 minutes and hoping for the best, or to do the best they can to protect themselves on their own.

It is also not enough for workers to take all available precautions but sometimes still be caught without sufficient protection by pockets of gases and lack of oxygen.

Last November, two dockers died while unloading logs from the hold of a bulker in Montevideo, likely following exposure to an unexpected fumigant they were not told about. A crew member saw them in distress and entered the hold wearing a face mask, determined to rescue them. During his efforts to assist, his mask was reportedly removed, and he passed out, eventually landing in hospital in an induced coma. A third docker required medical help before the tragic incident was over.

Shipowners have a duty of care for their crew and dockers employed to carry out their cargo operations. Education and procedures are not optional.

The International Maritime Solid Bulk (IMSB) Cargoes Code governs the carriage of bulk cargo worldwide. The IMSB code:

- *Identifies and groups cargoes based on hazard*
- *Provides guidelines for safe handling*
- *Sets procedures for testing*

The ITF Dockers' and ITF Seafarers' sections will be at the IMO working with shipowners to ensure that the regulations governing confined space stand up and are strong enough to protect all maritime workers."

Quote ends.

At the very least it would seem sensible to take appropriate precautions before entering an enclosed or confined space. However, I wonder if it simply is a lack of training and education, because I suspect it runs deeper than that. None of us is indestructible. We think it will not happen to us - until it does. As I said earlier, marine surveyors are far from immune from the dangers of working in enclosed and confined spaces. So, I urge any marine surveyor to take extreme caution when entering an enclosed space and let me remind you that small and hard to get into spaces in yachts, small craft and workboats can present an equally challenging and potentially hazardous enclosed space environment as do commercial ships.

OK rant over, but please take care in your work, risk assess beforehand and take every precaution to ensure you do not add to the statistics!

The Human Side

BY **CAPT. JONATHAN KJAERULFF,**
BUSINESS DEVELOPMENT
MANAGER, MITAGS-PMI

How passengers and crew respond in an emergency can make all the difference.

When the Titanic sank in 1912, many crewmembers went down with the ship so that passengers could survive. When the cruise ship Oceanos foundered off the coast of South Africa in August of 1991, most of the crew – including the Master – abandoned the vessel, leaving the passengers to fend for themselves. In 2012, after running his ship onto the rocks, Captain Francesco Schettino of the Costa Concordia gained infamy and imprisonment when he claimed he fell into a lifeboat and lost consciousness, leaving his passengers and most of his crew behind.

Article first published in The Maritime Executive and reproduced here with their kind permission. Web site: https://www.maritime-executive.com

How will the crew respond in the next big passenger vessel emergency? Will they lead their guests to safety, attend to their special needs, help them up or down the stairs, make sure everyone is accounted for, and assist the old and infirm into lifeboats? Or will they fall short of expectations?

How will passengers respond? Will they go to the correct muster station, follow the crew's instructions, don their lifejackets properly, board the lifeboats in an orderly fashion? Or will they go back to their rooms, pack up their belongings and fight their way into the nearest survival craft? These are questions that keep ships' officers and safety managers awake at night.

PAYING ATTENTION

At the beginning of every trip IMO regulations mandate a passenger safety drill and instruction. As with pre-flight safety briefings aboard airplanes, most passengers consider these proceedings an annoyance and imposition. But since they can't avoid them, they do their best to studiously ignore them. When was the last time you saw the person in the seat next to you "pause the use of electronic devices" to read the flight safety information card and pay attention to the potentially life-saving procedures being demonstrated?

Muster drills are no different. Because cruises are all about having a good time, few things sound less like fun than crowding cheek-to-jowl with 150 of your fellow pleasure-seekers at the designated muster station and being told how to climb into a lifeboat that feels full after the first 50 people are in it. And that's before anyone starts to scream, pass out or throw up.

Given that perspective, it's easy to bury your head in the sand and just reassure yourself that nothing bad is going to happen, and if it does the crew will take care of it or the Coast Guard will come to the rescue. And that's usually true. In fact, almost all cruises end without incident. Except when they don't.

And while the probability of a passenger ship casualty is exceptionally low, the potential consequences can be very high. In addition to death and serious injury, vessel operators know that the loss of a vessel – not to mention the attendant environmental pollution, fines, legal penalties and damage to the brand's reputation – can sink a company and lead to possible jail time.

As a result, modern ships are built to SOLAS standards with multiple redundancies to improve safety and reduce the chances of passengers ever having to abandon the vessel after a casualty. The IMO's Safe Return to Port requirement, applicable to ships whose keels were laid after June of 2010, effectively turns passenger ships into their own lifeboats.

The IMO's Safe Return to Port requirement, applicable to ships whose keels were laid after June of 2010, effectively turns passenger ships into their own lifeboats.

THE HUMAN SIDE

But is it realistic to leave people out of the equation and simply let the ship take care of itself? Probably not. So what about the human side of the equation?

Emergencies have a lot to do with perception. One person's emergency is another person's Monday morning. Most passengers are not mariners. Much of what they see is new to them, and they look to the crew to help them make sense of things.

For example, twenty-foot seas and forty-knot winds may be a mild inconvenience to seasoned mariners but the "Storm of the Century" to people who have never before seen salt water. They may ask their room steward, "Are we going to be OK?," and the steward's reassurance carries great weight and allows the guests to relax and enjoy the experience.

Likewise, if the ship is on fire or listing after a collision or grounding, it can be expected that passengers will ask the nearest crewmember, regardless of rank, department or level of training, if the Captain's instructions are reasonable. Even after repeated announcements they may plaintively ask:

"Do we really have to go to our muster stations?"

"Do we really have to stand outside in the cold?"

"Is the ship going to sink?"

"Is someone looking for my wife?"

Even if lacking in maritime knowledge, most passengers are excellent observers of crew behavior and interaction. If they perceive the crew working well together during routine tasks, they will be more likely to trust their ability to successfully help them in a crisis. On the other hand, if they deem the crew clumsy, incompetent or uncaring in their everyday activities, they are not likely to suddenly put faith in them when the world around them is falling to pieces.

In such a case, passengers may determine their best chance of survival is to fend for themselves, ignoring officer and crew instructions. This is what happened with the Costa Concordia when even though the ship had lost power and was obviously sinking, bridge announcements and crew members kept insisting that passengers stay in their rooms. They refused. Chaos ensued.

Passengers' will to survive may be strong, but the odds of their survival are directly related to the useful survival skills they bring to the table – which in the case of untrained non-mariners is virtually zero.

To be of value in an emergency, crew members must know how to manage passengers and instill confidence. They must learn and practice how to rapidly convert from "passenger service" mode to "passenger safety" mode. What's the difference?

When providing passenger service, such as serving a steak or cleaning a room, "the customer is always right." Even when they're not. In passenger safety mode, the tables are turned, and the customer may have to take orders from the service provider. This requires not only that the passenger perceive the crew member as a capable professional trained in emergency procedures but that the crew member have the willingness and self-confidence to stand up assertively to passengers who may challenge their authority.

Real emergencies are unexpected and scary. They may also be messy and confusing. Things that were never supposed to go wrong just did. Survival depends on decisions that must quickly be made based on very little information about things with which people have no prior experience. Everyone affected will want to survive, but who will lead and who will follow? Or will anybody lead? Or everybody?

TIGHTENING THE RULES

In an age of ever-increasing regulatory requirements, too many owners and operators see the STCW Crowd Management Training requirement the same way passengers see the obligation to participate in emergency drills – an irritating box to be checked with as little inconvenience as possible. With its content suggested but unregulated by most flag states, the sum total Crowd Management training received by most passenger vessel crew members amounts to a brief talk from a junior mate or maybe an hour or two trying to stay awake in front of a computer screen.

Prior to the Costa Concordia disaster, the company checked the Crowd Management training box by subjecting new hands to a 37-minute video. Crew members often receive this training after flying 24 hours or more to join their ship as the law says they must have it before they can go to work.

The odds of recalling any course material a year after reporting on board are usually pretty unlikely. Since there is no refresher training requirement, any knowledge that still remains at that point continues to atrophy until it's gone.

Because the quality of many Crowd Management training programs is so poor, the IMO has commissioned new model courses in passenger safety procedures. These specify a minimum of eight hours for Crowd Management and sixteen hours for Crisis Management and Human Behavior. They also call for assessments of competence by qualified instructors and crew members. While IMO model courses are only advisory in nature, flag states do have the ability to adopt them as minimum standards for courses approved for use on their countries' vessels.

Predicting how crewmembers will perform their duties to passengers in an emergency will always be a difficult task. Companies and officers who simply hope for the best may be disappointed. Companies and officers who implement realistic training programs, incorporating objective assessments followed by periodic refresher training, can still only speculate how their crews will actually perform in a real emergency. But their speculations will have the benefit of insight gained from first-hand observation of their crews' knowledge, training and behavior.

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Seawork, Europe's leading commercial marine exhibition is always a thriving hub of information, offering updates and insights across all sectors of the industry.

Over six hundred exhibitors from over seventy countries attend, offering a wealth of knowledge, experience and advice as well as the chance to acquire the latest from the ten thousand products and services.

New technology and its applications are always at the heart of Seawork. Each year the Innovations Showcase features the latest in exhibitor's research and development for the past year, with every entry having the potential to win the prestigious 'Spirit of Innovation' trophy, as well as an award in the individual categories. This year the feature is sponsored by National Maritime, the UK's maritime SME network and HSSMI, a manufacturing innovation institute. Together they support UK maritime business through funding, expertise and talent.

The Commercial Marine Conferences at Seawork are always well attended and offer in depth examinations of the hottest topics in the commercial marine industry.

The latest in commercial marine applications of unmanned surface vehicles will be revealed at the morning session of the Conference, held on the second day of Seawork, Wednesday 12 June.

The unmanned surface vessel market is expected to reach around $US1billion by 2022. The keynote address is by Jukka Merenluoto of One Sea / DIMECC Ltd, a company aiming to enable commercial autonomous maritime traffic by 2025. With Rolls-Royce and Finferries already successfully demonstrating the world's first fully autonomous ferry in Finland and many other companies in advanced planning,

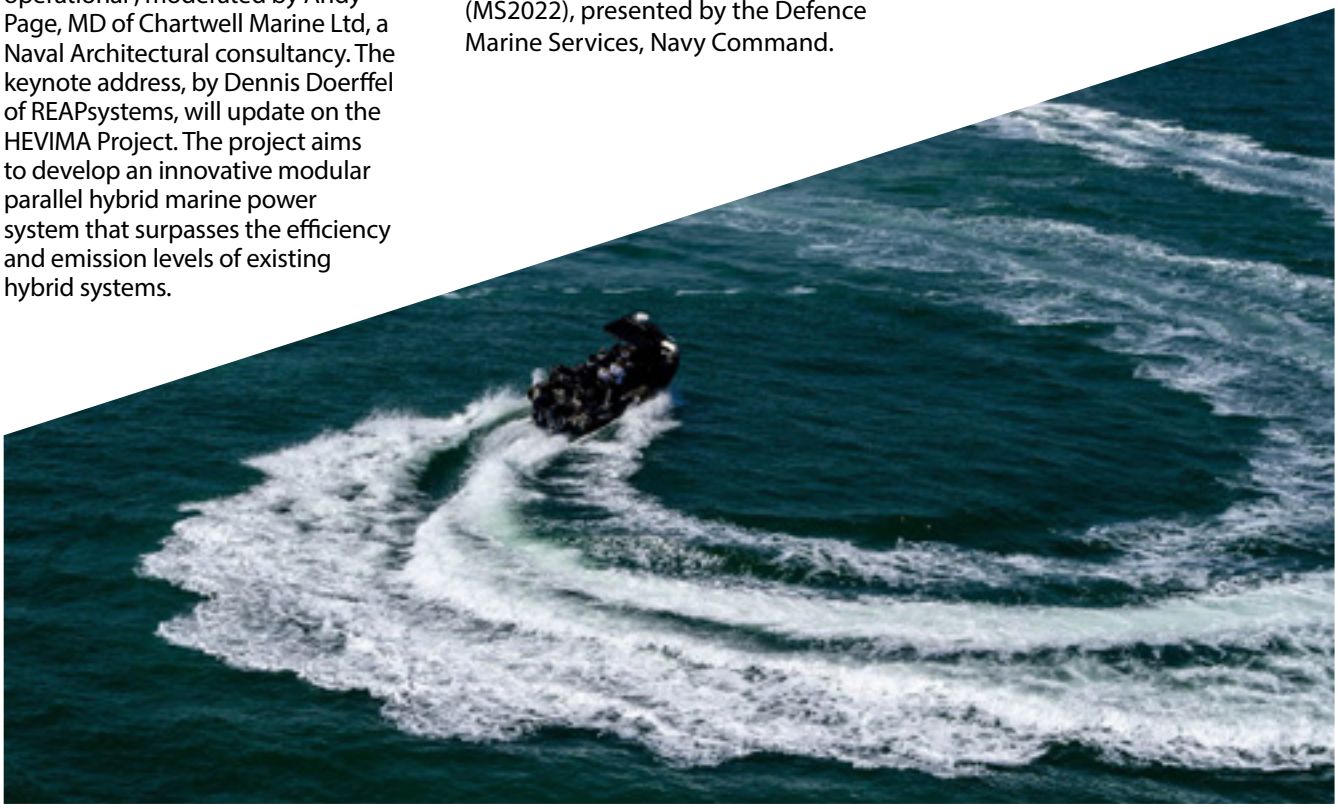
or even production, of vessels and equipment in the autonomous sector the conference will offer a valuable insight into the future.

With the ever increasing need to reduce operating costs and minimise fuel consumption, together with growing environmental and legislative pressures to bring down emissions, vessel operators are constantly looking for solutions and hybrid propulsion is high on the list.

The second Seawork Conference session will focus on this topic with a fascinating Panel discussion on "The case for hybrid pilot boats – economic, environmental & operational", moderated by Andy Page, MD of Chartwell Marine Ltd, a Naval Architectural consultancy. The keynote address, by Dennis Doerffel of REAPsystems, will update on the HEVIMA Project. The project aims to develop an innovative modular parallel hybrid marine power system that surpasses the efficiency and emission levels of existing hybrid systems.

In addition to the paid-for Commercial Marine Conference Seawork also offers free Business Briefings featuring presentations from supporting associations and other keynote speakers. Dates for the diary include the Composites Forum, presented by Composites UK at 1400 on Tuesday 11 June; Challenges and Environmental Benefits of the use of HDPE Material in Boat Building, presented by İzmir Shipyard at 1500 on the same day; Unsafe Access in Port - An Industry Problem, by the National Workboat Association at 1030 on Wednesday 12 June and the must-attend MoD Procurement Sessions from 1100-1300 on Thursday 13 June, followed by Project Marine Services 2022 (MS2022), presented by the Defence Marine Services, Navy Command.

This year Seawork will not only quench the thirst for knowledge it will also quench the thirst for water. The exhibition is committed to being environmentally friendly and sustainable. As part of this the organisers are installing water stations which will encourage visitors and exhibitors to bring their own re-usable water bottles, rather than resort to single use plastic. Other green initiatives planned for 2019 include recycling exhibition carpets where possible, using 80% more efficient LED spotlights on stands, using 100% recyclable sugar cane-based carrier bags and adding improved waste recycling on site at Seawork.



NEW PRODUCTS

Each quarter The Report brings you an update on some of the new products and innovations to hit the boating, shipping and maritime industry.

Design award for Dometic

Dometic's PLB40 portable battery has received a distinction for high design quality in the Red Dot Award: Product Design 2019.

The battery received the Red Dot, which the jury only awards to products that feature outstanding design.

"Innovative design is a key element of our product leadership in the market," said Juan Vargues, Dometic president and CEO. "Outstanding design and functionality are what we strive for when we create a new product."

The PLB40 is a next generation portable battery that has been engineered to satisfy outdoor and mobile lifestyles with high electrical demands.

New GIGA turbines reduce wind noise

GIGA Turbines' enclosed rotor design reduces the noise traditionally associated wind generated turbines and can be installed on all types of boats, yachts, motor cruisers, canal boats and RIBs.

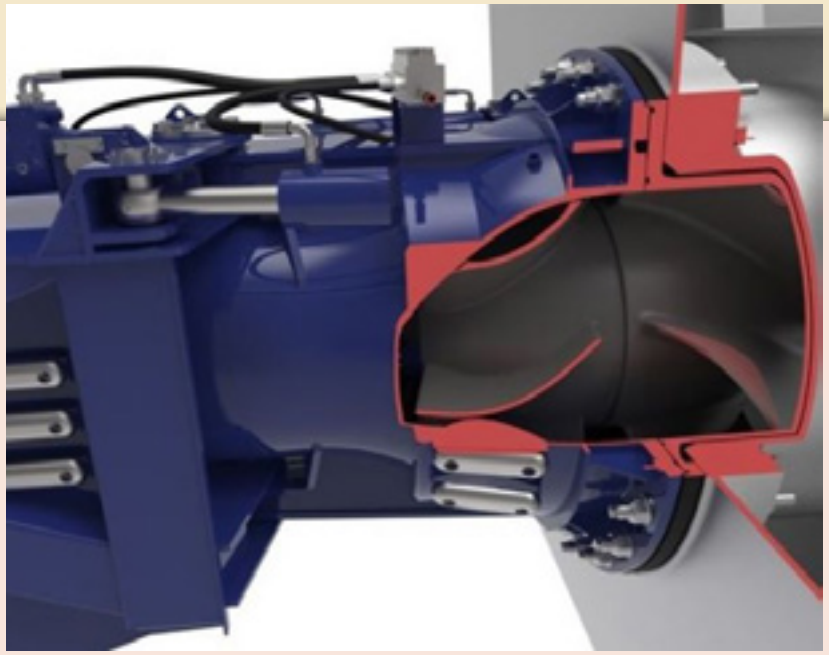
Made from injection moulded UV stable ASA plastic, GIGA turbines are compact, lightweight, durable and fully weatherproof.

"Our single turbine is just 325mm in diameter, making it the smallest wind turbine for leisure battery charging currently available," says Steve McLoughlin, CEO.

The GIGA wind turbine will start generating power from 1.5m/s (3 knots) of wind and is capable of producing up to 30W from a single unit and 60W from a double unit at wind speeds of 13m/s (26 knots).

The GIGA turbine comes with integral electronic braking meaning that there is no upper limit to the wind speed in which the turbine can generate power.

The company – based on the Isle of Wight – is committed to keeping waste at a minimum and uses bioplastics for the prototyping of new designs. In addition, the copper used in the coils is from recycled sources.



First installation of the Wärtsilä WXJ series of modular waterjets

The first installation of the Wärtsilä WXJ series of modular waterjets will be carried out on a new 100m long wave-piercing catamaran ferry being built for the Government of Trinidad and Tobago at the Incat shipyard in Tasmania, Australia.

Powered by four Wärtsilä WXJ1200 waterjets, the ferry will be capable of a service speed of 36 knots. Launched in March, the WXJ series is designed to offer greater efficiency, with lower cavitation and underwater noise levels than with the LJX series.

In addition to the four WXJ waterjets, Wärtsilä will supply the Wärtsilä ProTouch operational control system. The equipment is scheduled for delivery in May 2020, and the ferry is expected to be handed over to the owners in late 2020.

Wärtsilä axial waterjets are single stage, compact, high performance systems that combine mixed flow properties with an axial construction. This results in much less space being needed on the vessel's transom, and greatly increased waterjet cavitation margins for optimum vessel operational flexibility.

New antifoul performance guarantee

Jotun Yachting has introduced a UK fouling performance guarantee for its antifouling products.

The initiative covers the company's NonStop II, Racing and Mare Nostrum products and will give users up to nine months guarantee.

"Making the decision to change antifouling has always been a difficult one, with concerns regarding compatibility and performance being a major factor," said a Jotun spokesman.

"Jotun Yachting has full confidence that our antifoulings will protect hulls throughout the season.

"The vast majority of existing coatings (apart from silicone-based coatings) can be overcoated but we but know it is difficult to take our word for it. For this reason, the antifouling performance guarantee was created."

The antifouling guarantee is administered by Jotun Yachting UK's retail distribution partner, Bainbridge Marine, with the guarantee length varying depending on the product purchased.

New carbon canopy can be fitted to any boat

C-Quip has developed a new carbon canopy system that allows a sunshade to be fitted to virtually any boat.

The system includes a set of four carbon poles that are available in different lengths, base sockets and a canopy and can be mounted in several different ways.

"A variety of configurations are achievable," said Ian Cooke, C-Quip MD. "The hardware is stainless steel with two deck mount options and a rail mount solution.

"It can be free standing using the poles or the canopy can also be attached to a boats' superstructure such as a flybridge or bimini for instance meaning the options are limitless."

The system is suitable for a raft of craft from open day boats to larger cruisers and can be retro fitted for the aftermarket or installed by boatbuilders as a standard part of the design.

Customers can buy the appropriate mounts and poles for their specific application.
Canopies can be made to customers' own designs and in their choice of material.

New icebreaker concept to be launched by Finnish Transport Infrastructure Agency

The Finnish Transport Infrastructure Agency is launching a new icebreaker concept equipped with an innovative motorised removable bow.

The removable bow, to be delivered by Turku Repair Yard Ltd, is part of the Winter Navigation Motorways of the Sea II project. The €7.6 million scheme, co-funded by EU Connecting Europe Facility programme, aims to develop and enhance the maritime winter navigation system and its safety during winter times. One of its key targets is the creation of a motorised icebreaking removable bow concept, which will enable ice-strengthened vessels to be used as icebreakers during the winter.

Danfoss Editron's hydrid electric system is powering the removable bow with two generators, built as a DC system, and two propulsion systems. In addition, the company has provided a front supercapacitor so that peak powers can be efficiently controlled. The Editron software also cuts fuel and delivers high efficiencies as the diesel-generators in the DC system can be driven at variable speeds. The power plan and propulsion system of the removable bow has been designed to be operated from the pusher tug wheelhouse, and the machinery can operate unmanned.

Jukka Väisänen, Project Operator at Väylä, commented: "Lake Saimaa's ice is more solid than sea ice and can reach up to 80cm thick. Developing this innovative design concept for the removable bow and equipping it with its own propulsion system means that we will achieve savings in capital costs, as we will charter the pusher for only part of the year. We are also expecting to see savings in fuel consumption thanks to the hybrid propulsion system."

First series of workboat replacements underway

The prototype for a new series of eco-friendly workboats is under build for delivery next year to German shipping and waterway authorities. The 31 x 7m wide boat is being built at specialist small builder Schiffswerft Bolle in Derben for the Shipping and Waterways Administration (WSV) in Bonn and is expected to be delivered ready for operation in 2020. Costing about €5 million it draws 0.95-1.1m and has a speed of 16kms/h.

The prototype will specifically replace the multi-purpose 25.5m Grieth which was introduced in 1991 as the first of four boats capable of a wide range of duties on the busy Central Rhine. Its workload includes wreck and obstacle recovery, the setting of fixed and floating shipping notification markers and their maintenance and repair.

TheWSV said the new boat from Bolle will reflect modern ecology concerns and also what it calls the extensive practical experience and technical knowledge gained from the operation of the earlier boats. That is reflected in the improved design of the deck house and equipment such as crane plant and landing ramp, it said.

Yuchai International launch range of marine diesel engines

Yuchai International was founded in 1951 and is the largest subsidiary of Guangxi Yuchai Machinery Group Co.

"We're delighted to be able to offer Yuchai engines in addition to our already comprehensive range," said Mermaid Marine sales manager Julian Osborne.

"Yuchai is a very well-respected company with a philosophy of continual diesel engine development using more environmentally friendly technologies; it's committed to providing cleaner, greener engines that are high-tech and energy saving with high fuel efficiency and low maintenance and repair costs."

The engines are solid, reliable and robust making them the ideal choice for heavy duty commercial marine applications where reliability, fuel efficiency, low noise and low emissions are key. Characteristics also include high strength, high torque and high adaptability.

Marlec introduces new sunpower panels

Renewable energy company Marlec, has introduced a new range of SunPower semi-flexible solar panels developed to deliver greater efficiency.

Available in four sizes from 50W to 170W, the panels have Maxeon 'back contact' solar cells and are said to be between 22% and 25% more efficient than standard silicon panels of the same area. Their flexible design means that onboard space can be maximised.

Interest has been high with the 170W version in particular proving attractive to electric boat owners, according to Teresa Auciello, Marlec's MD. The panels help boat owners live environmentally on board by reducing fuel consumption, she explained.

The SunPower panels are shade resistant and can perform in extremes of temperature and even when light levels are low. They are suitable for use with both 12 and 24V batteries, with recharging is faster than standard solar panels.

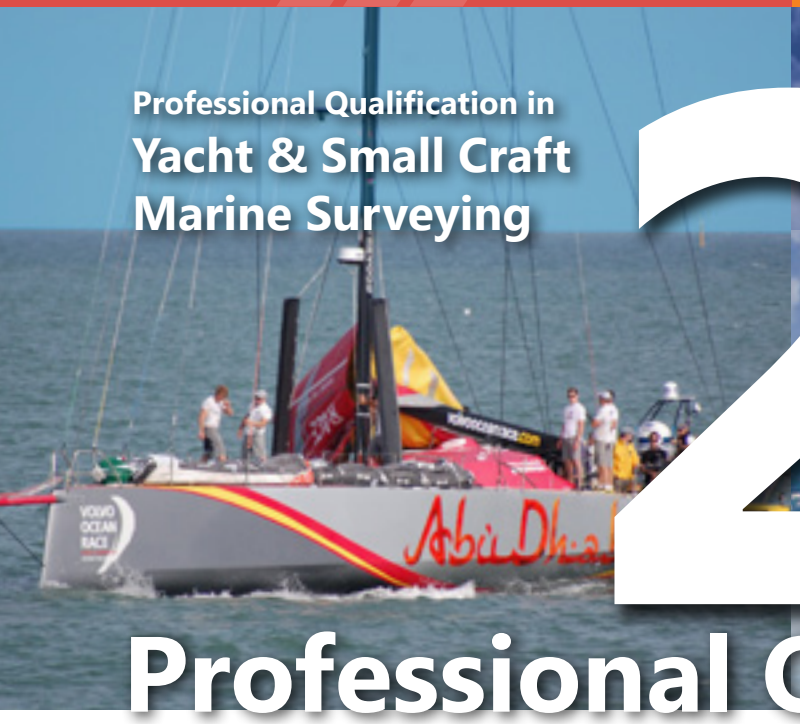
The Maxeon Solar Cell is built on a copper foundation making it resistant to cracking and corrosion while the substrate is constructed of a lightweight polymer designed to withstand high UV exposure.

Scania to launch two new IMO Tier III-compliant engines at Seawork

Both power units – a six-cylinder, 13-litre DI13M and a V8 16-litre DI16M – feature Scania's XPI injection system and use selective catalytic reduction (SCR) to meet the IMO Tier III standard. The injection system reduces emissions of nitrous oxides by more than 70% and the engines can also be run on hydrotreated vegetable oil.

"While the IMO Tier III standard is already in force in the North American and US Caribbean Sea areas, all new ships constructed on or after 1 January 2021 destined to operate in European waters will also require IMO Tier III-compliant engines," said David Bamber, general manager of Scania Engines.

Scania produces marine engines in the power range 162-846kW (220 - 1,150hp). The company's products combine low revs with high torque and are suited to a wide range of propulsion and ancillary applications, including fishing vessels, ferries, fast patrol boats and survey ships.



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Chapter 4
Fifty Shades of Law

Financial Loss – What is it and when is it covered?

You are probably wondering;

"why should I be interested in knowing how the law and insurers view financial loss"?

For most of your daily life you are probably correct; but when it comes to covering your business against risk or understanding the risk to your business then, yes, it is important to understand how the law and insurers view financial loss and particularly at a time when "financial loss" cover is increasingly given as an extension to liability policies.

As this area of law and insurance is extensive, we are going to tackle the subject over a few IIMS magazine publications – so keep scanning the IIMS publication for our article!!

Well let's start with "what is it"!

English law divides situations into two:

- situations where there has been physical injury or damage, and
- situations where there has not. ***"financial loss" as understood by insurers exists only in the second situation.***

Hence, the way the law changes, and the insuring of "financial loss", are intimately bound up with each other.

It is in the law of tort that most of the legal changes have taken place, particularly the tort of negligence and we will "take a look" at these changes and how the two main strands have developed:

- physical injury or damage cases rely on the case of Donoghue v Stevenson
- special relationship cases rely on judgement in Hedley Byrne case

Generally, for there to be a liability for "financial loss" in negligence, there must be a special relationship. A special relationship can be formed within the law of contract. Interestingly, if an insured has entered into a contract the question often arises of whether he or she has a liability in tort at the same time. This is known as concurrent liability, and this is something of a moving legal target. It is important, because:

- many policies restrict cover for liability in contract.
- claims in contract usually become barred sooner than claims in tort, so claims can often only be advanced in tort.

There also seems to be an increasing exposure to liability under statute in almost every area of commerce. Sometimes such liability arises where there has been physical injury or damage, and sometimes where there has not.

In order to understand how liability for "financial loss" arises, it is of course necessary to understand what is actually meant by "financial loss".

There is plenty of scope for confusion. For example, what are the differences between the following?

- economic loss
- pure economic loss
- consequential loss
- financial loss

"Economic loss" and **"pure economic loss"** have clear meanings in law – they are the phrases used by judges.

Judges almost never refer to "financial loss", and yet, that is the phrase usually used by insurers to refer to what the law calls "pure economic loss".

We will be using ***"financial loss"*** as insurers do but, where necessary and to be legally precise we will use the phrase ***"pure economic loss"*** in preference to ***"financial loss"***.

Let's summarise to try to simplify some important definitions:

> **Economic loss:** pecuniary loss consequential on injury or damage.
> **Pure economic loss:** pecuniary loss not consequential on injury or damage.
> **Consequential loss:** often used to mean economic loss.
> **Financial loss:** a term usually used by insurers to mean pure economic loss, but often loosely used to mean any of the above. Three example policy definitions:
  - A pecuniary loss cost or expense incurred by any person other than the insured
  - A pecuniary loss cost or expense incurred by any person other than the insured resulting from the sale or supply of Products
  - A pecuniary loss cost or expense and not occasioned by injury or loss of or damage t0 property

Are you *"scratching your head now!"*

Confusing? Yes! So, it is always good practice to read your policy wording very well or seek professional help if you are unsure. We try as professional insurance intermediaries to take a simple approach to the application of law and insurance to business and we hope this is exemplified by our articles.

So, to help simplify this muddled area, courtesy of the insurance industry for not following the legal definitions, in our next article we will revisit in more detail what is financial loss and delve into how liability arises?

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Tel: 01892 724060
kxb@matrix-ins.co.uk

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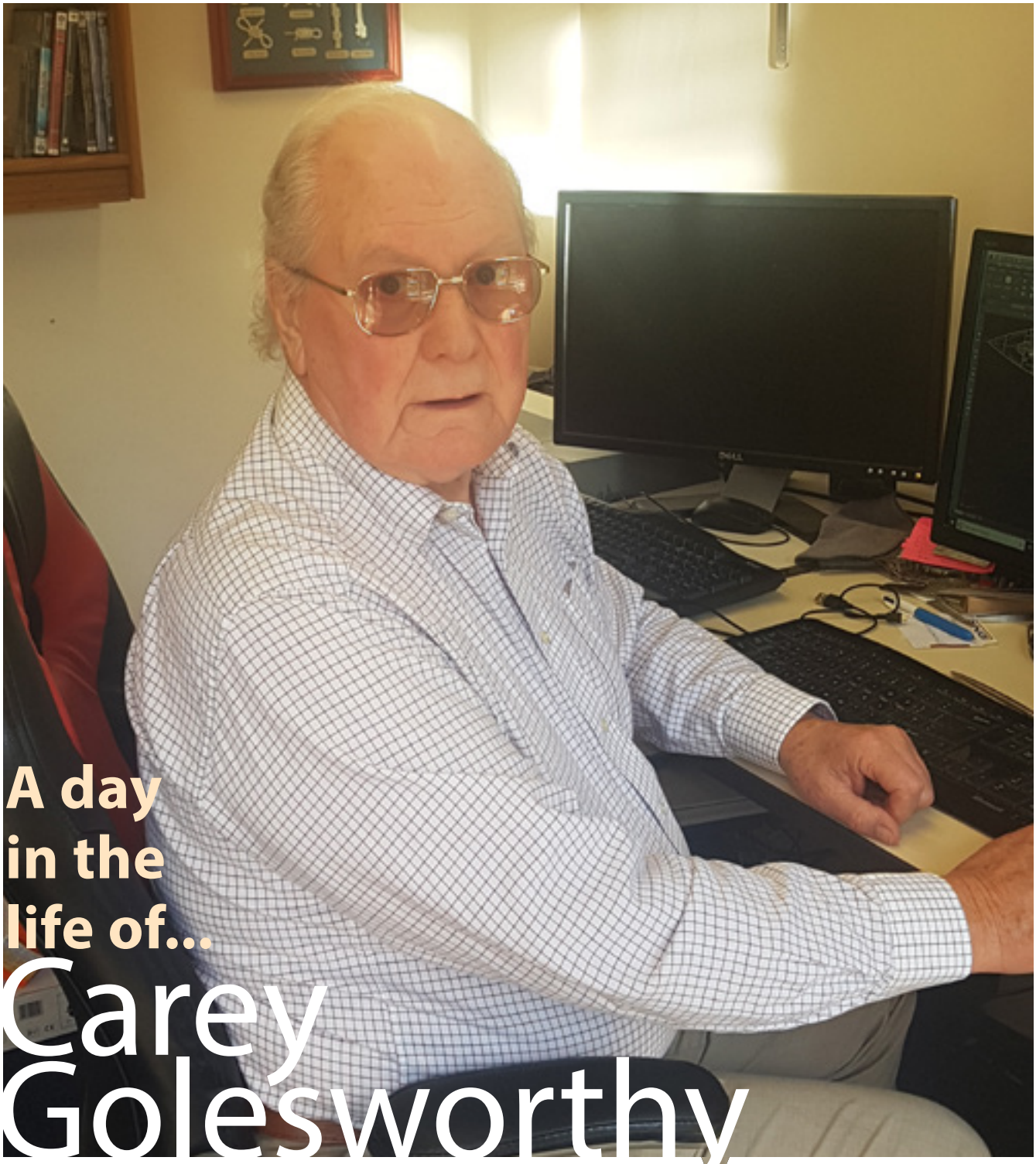


A day in the life of... Carey Golesworthy

Carey Golesworthy has been a stalwart and long standing member of the IIMS education committee that oversees the development and delivery of the Institute's Professional Qualifications programme. A qualified Naval Architect, Carey has authored several of the modules and is a marker and assessor too. He can often be found popping up online via Zoom to welcome new students to the programme and to share his passion and wisdom about ships and boats. Here, in an exclusive interview with Mike Schwarz, Carey talks about his life in the marine world going back decades and his hopes for aspiring new marine surveyors entering into the surveying profession.

Q1. I hate to ask you to admit to how many years you have been in the marine industry, but please tell me something about your career, how you got started and what the attraction was of the marine line of work in the first place?

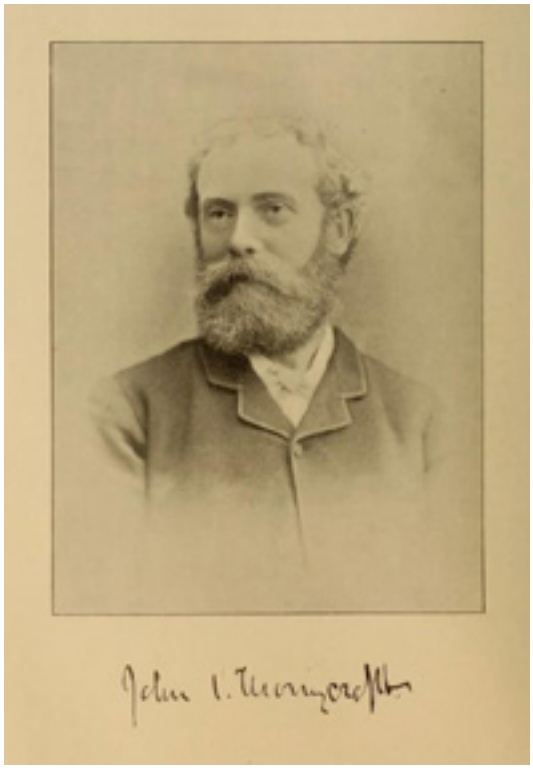
My father loved to sail, and so when he came back from the war, my brother and I spent our childhood out on the Solent in a boat that we built in the garage. In those days after World War II plywood was the coming thing, and the boat we built was a Hornet as designed by Jack Holt. Hornets were considered fast in those days. Those were happy times and we both learned to love sailing. When I left school and finished National Service my father got me an apprenticeship at the old John I Thorneycroft shipyard at Woolston. This was a wonderful place with about ten thousand employees where every skill under the sun was practiced. I was a Technical Apprentice which meant that as well as studying Naval Architecture I got to carry out work on vessels in steel, aluminium and timber; and in all the workshops with foundry work, machine shops and pretty much everything else to do with ships and boats. This included work in the drawing and design offices as well as purchasing and estimating. At the end of the apprenticeship I was a Naval Architect and I went on from there to an old fashioned timber boatyard and eventually to become Naval Architect to a famous GRP manufacturing company, where I had my own drawing office and my own team of draughtsmen and a seat on the board.

Q2. What would you say are the key development changes you have observed with the design and development of boats and ships over your time in the industry?

Since that time there have been vast changes in every aspect of our lives, both social and technical, and of course, every kind of vessel has changed significantly too. In the leisure market we saw the abandonment of traditional timber building in favour of GRP. This meant that the old skills were mostly lost but new skills were learned and the market is now supplied with not too excessively priced craft in GRP in the sort of numbers that suit today's market and climate. Warships and merchant ships have changed too, together with methods of construction. When I started out there were still frames and riveter gangs. Now it is all welding and sub-unit construction in a series of boxes that are brought together at a central yard for final assembly. Most significantly the coming of computers has had a huge influence on every aspect from design and drafting, to building, loading, and even to navigation.

Q3. You are a stalwart of and have been involved as an IIMS Education Committee Member for a good number of years as well as a marker and author. The Committee oversees the Distance Learning Professional Qualifications in Marine Surveying. What can you say about the IIMS course and its content?

All this means that the surveyor can no longer get by like they used to on only a boat builder's knowledge. He or she now has to be aware of a considerable amount of the calculation side as well as complying with the increasingly complicated requirements of maritime law and construction rules. Although it is normal for a surveyor to operate principally in one field of marine expertise - leisure, mercantile, or, in some cases, Naval - now that will mean that they have to cover a very wide field indeed in which they will be expected to be experts and all-knowing. It is in these developments that the International Institute of Marine Surveying has such a large and important part to play. The course offered under the Distance Learning schedules gives would-be surveyors as well as those already engaged in surveying practice the chance to carry out study and research in a way focussed on a whole series of subjects in the knowledge that once a qualification has been achieved it will be respected worldwide. The actual disciplines of the course are backed up by excellent guidance manuals and overseen by the most highly experienced practitioners in the respective fields.



John I Thorneycroft
Cassier's Magazine of New York had an article about the British naval architect and shipbuilder John Isaac Thornycroft in Volume IX, 1895-96. It was accompanied by a number of illustrations, including this portrait. https://bit.ly/2EeFQxn

Q4. I am sure we both agree that just completing a theoretical course does not make or guarantee a competent surveyor at the end of the process. What advice would you give to someone who completes their Professional Qualification as they start to make their way in their chosen profession and what role does mentoring play?

Of course and it is very important for the student to remember that the Institute and the Distance Learning Course can only provide the theoretical outlines and basis of each subject. Although this sets an international standard, the student will then have to go out into the field and start to gather practical experience. Many of the students already have experience before they sign up, because they have already worked in one of the many trades or disciplines in their earlier careers. This means not only that they will need to learn about, say, hands-on laminating, sail making, welding, or any one of the other necessary skills, but they should ideally work alongside an experienced surveyor until they have learned to be thoroughly competent.

Q5. Are there any books or resources you would regard as essential reading material for marine surveyors and, if so, what are they?

Besides picking up invaluable knowledge in the yards and workshops around the various trades as well as afloat, there are many technical information sources to which the student and indeed more experienced marine surveyors should be guided. In addition to the excellent IIMS series of twenty What a Marine Surveyor Needs to Know About handy guides there is a wealth of independent information available out there covering everything you will ever need to know on the theoretical side. For instance, nowadays it is possible to go on the web and merely type in your question on any subject at all. The student will be rewarded with a very large amount of up to date information which should lead to further sources and further questions. The student both in his/her studies and in his/her later career as a practicing surveyor will of course need his/her own library of reference books and these he/she will need to purchase. The IIMS will always be happy to help you with guidance as to which publications to buy. These reference books will be invaluable to the surveyor throughout his/her career. There are also reference libraries in every large town and the staff there will help you. They are often full of students studying many subjects.

Q6. You are a highly experienced marine professional with experience gained from many years in the sector. What would you say are the main keys for success in today's marine surveying profession?

One. In the long run, the key to operating as a successful surveyor is basic knowledge and understanding of the skills and the theory behind them coupled with as much experience as it is possible to get in your chosen field of expertise.

Two. The surveyor must also understand that he/she has to be capable of quickly producing a report that is technically correct and accurate that is also understandable by the client as well as his/her insurance agents, which is regarded as a legal document and could be presented in Court at a much later date.

Q7. If you had just one piece of advice for a marine surveyor, what would it be and why?

It is essential for the surveyor to be constantly aware of technical progress as well as of the technical standards which would have been standard practice at the many dates at which any of the many craft he/she sets out to survey would have been built. He/she will need to constantly keep in touch with progress and be constantly aware of the materials supply market and the phraseology in current use.

Q8. What over the course of your life might you have changed if you had the opportunity to have another go?

Well nothing fundamentally, but I think I did my very first survey when I was sixteen and still at school, although even at that time I had a lot of woodwork and associated experience to call on. I think if I remember correctly, I was paid with a packet of fags! Everything was far less regulated in those days although you still had to get it right. I wrote the report by hand in my terrible hand writing and got a well-meaning friend to type it up for me and that should have made it clear that I needed to go on a typing course. Reports need to be completed whilst everything is still fresh in your mind. Progress came in the form of hand held tape recorders; then word processors, followed by digital cameras - not to mention thickness gauges, moisture metres and many other aids. Also came liability insurance, so the surveyor needs to constantly look forward into the future.

Q9. What hobbies do you have and how might we find you relaxing?

Talking about myself personally, what do I do in my spare time? Well I don't get out and about as much as I used to, due to advancing years. In particular I don't get out on the water as much as I would like. It is some time since I last had a boat of my own, and although I have a lot of friends who have boats, but also don't get to use them enough, that is not quite the same thing!

I try to avoid gardening and DIY, although I do still have a small workshop and racks of tools. Then again, I have always read a lot, and I always have two or three books on the go. Usually at least one non-fiction, mostly history or technical and fiction authors of one sort or another. Favourite authors? Sandford, Connelly, Kellerman and James Lee Burke. Of older more classical authors? Du Maurier. There are too many to mention. I don't write so much myself any more. Poetry and fiction hardly at all, but of course there is still plenty of technical stuff to do. I still work for local companies on design and development work and that is something I love, but I suppose it is true to say that my happiest hours when not sailing have always been in my workshop, making something.

THE IIMS UAE BIANNUAL CONFERENCE 2019

THEME

Safe Ships, Safe Cargo – The P&I Perspective

VENUE
Queen Elizabeth 2
Dubai, UAE

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20th November
2019

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