

British Tugowners Association 21st Annual Safety Seminar - Operational Safety 16 November 2023



The Insurance Hall, 20-21 Aldermanbury, London

The 2023 BTA Annual Safety Seminar took place at The Insurance Hall in London on Thursday 16 November with a record attendance of over 100 registered attendees spanning across towage operators, pilots, port & harbour authorities, insurers, accident investigators and manufacturers. With an overarching theme of operational safety, the seminar was an excellent opportunity for the tug industry to share lessons learned and best practices.

With sincere thanks to Sanmar Shipyards for their sponsorship for the day.



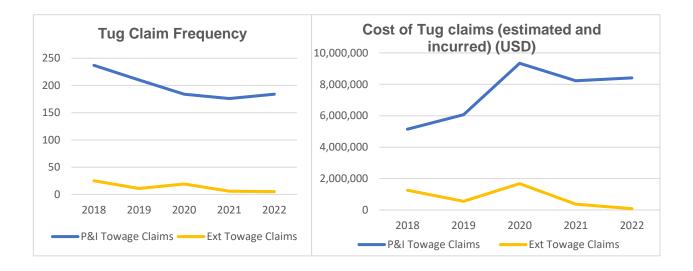
Alasdair Smith, the **BTA Technical Chairman**, opened the day's proceedings. Alasdair emphasised the utmost priority of safety and the need for those in the industry to be "our brothers' keeper". He further reflected that the phrase underscored the value in looking out for fellow colleagues and seafarers, especially those on the front line of the towage industry to ensure all return home safe and sound every time.

Alasdair advocated for proactive engagement with regulators, innovators, and other operators to adapt to evolving safety regulations, technological advancements, and the requirements of the work force. He encouraged for continuous training and education as well as investment in the technology as the cornerstones for the towage safety.

The first speakers were **Shipowners' P&I's Robert Shearer** and **Ian Grainger** who offered a P&I perspective to tug related claims over the last five years.

They examined trends in the towage market, observing that while the total number of claims had decreased since 2018, the costs had increased, particularly since 2020. Several case studies were presented, and key learnings shared. One example detailed a well-maintained tug which suffered a mechanical failure and led to a collision. Another incident showcased the deadly nature of enclosed spaces and the importance of clear emergency procedures thoroughly understood by crew.

Shipowners' advocated for the core message of "back to basics" to be endorsed throughout towage operations and noted that by remembering the foundations of safety such as watchkeeping, keeping bilges clean, and adopting a safety management system some of the top defects of tugboats could be avoided.



Captain Andrew Moll, Chief Inspector at the Marine Accident Investigation Branch (MAIB) presented on the critical aspect of pilot-tug exchange in ensuring maritime safety. He emphasised the pivotal role of effective communication between pilots and tug operators, and underscored the need for a thorough pre-operation briefing, without which towage operators should not conduct work.

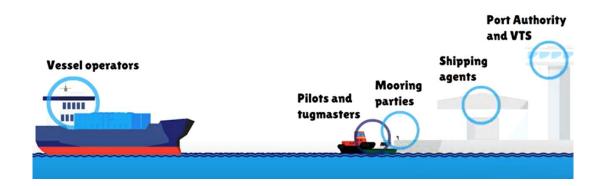
Andrew outlined the concept of Heinrichs triangle, which suggests that by reducing the frequency of minor accidents, a proportional decrease in the occurrence of serious accidents can be expected. Accordingly, Andrew stressed that crew should feel empowered to report all incidents and near misses to ensure that the relationships between the severity of incidents can be accurately analysed.

Outlining severe incidents that had occurred in 2023, Andrew informed delegates that the MAIB investigation report into the girting of the CMS Biter on the Clyde which led to two fatalities would be released in early 2024. The MAIB and BTA encourage all towage and port stakeholders to carefully consider the findings of the report.

Andrew discussed recurring safety issues in the towage industry of more than 20 years which still require close attention. Those being, use of a gog rope, training and competence, emergency release, pilot/master exchange and awareness of competences.

It was reported that the MAIB were examining training, certification and the signing off of competences. Are the NOS standards fit for purpose, how are they signed off, do they need update were question posed, along with whether there need to be formalisation of the Tug Pilot Exchange in the same way there is with Master/Pilot.

Kimmo Lehto, of Alfons Hakans and Technical Chair of the European Tugowners
Association showcased the newly released animation produced from the ETA EMPA
Recommendations for Energy Efficient Harbour Towage. Emphasising the need for clear and concise communications between vessel operators, pilots, tug masters, mooring parties and port authorities in order to maximise the efficiency of harbour towage.



Phil Thompson, Director of Maritime Products at **BMT** demonstrated the S-100 data standards and opportunities for enhanced situational awareness and realism in pilotage and tug master training. The previous data standard, S-57, has been in place since 1992 and the update will allow for more granular data to be integrated into electronic navigational charts.

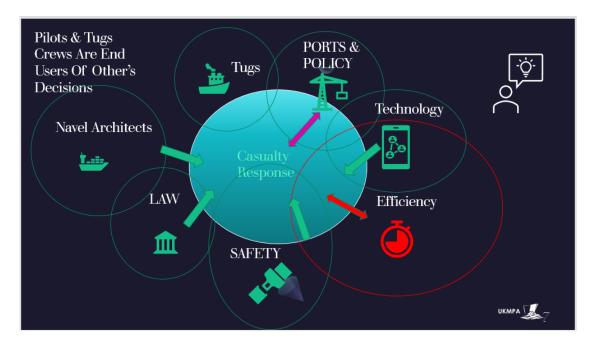
Phil discussed how Harland & Wolff have utilised the capabilities of S-102, which analyses bathymetric surfaces, to demonstrate their capabilities of dry docking the QE2. Phil further highlighted the potential for S-100 data standards to review and evaluate incidents, such as the CMA CGM Centaurus Container ship collision with shore cranes in Jebel Ali. By leveraging S-100 data, the BMT simulator reconstructed the manoeuvre, pinpointing the decisions that led to the incident. It facilitated the identification of crucial lessons that, to the greatest extent possible, should prevent the recurrence of similar scenarios in the future.



Chris Hoyle, Vice Chairman of the UK Maritime Pilots' Association and Marine Pilot and Tug Master Lloyd Thompson from Svitzer provided insight into the operational complexities and safety considerations that went into the refloating of the containership MOL Treasure in the Solent in January 2023 and averting a serious incident which could potentially have blocked the UK's second busiest container port.

Chris noted that combined over 40 years of pilotage experience and over 100 years of towage experience went into the MOL exercise. However, he reflected that collective experience could create experts but questioned what blind spots, knowledge gaps and biases crews and staff have that could lead to accidents and injuries.

Chris emphasised that in a casualty response scenario, the actions of stakeholders, including tug crews, significantly impact the outcomes for the casualty. Key players, such as those in port operations, legal, towage, and naval architecture all hold critical roles in determining the result of a casualty scenario. Achieving optimal results requires ongoing collaboration among stakeholders to address each other's blind spots and knowledge gaps to ensure continual progress in safety.



Peter Farthing, CEO of **Sensor Technologies** demonstrated the revolutionary technology of Sureline. A fountain pen sized rope tension sensor that offers a step change in safety to allow for crew to have greater confidence in the operation of winches and integrity of tow or mooring ropes.

Peter explained how the sensors can be placed into marine ropes and a variety of metrics such as tow angles, slew angles, tension and time under tension, can monitored in real time from a central control box. The limitations of the ropes can also be visualised with aim of preventing snap back scenarios and resulting injuries.

Sensor Technologies are aiming to collaborate with five operators in partnership in 2024 to continue the trial of this potentially lifesaving piece of equipment. Peter stated that he wanted it to become a safety feature for all operators in the marine industry that utilise marine ropes.



Kalvin Baugh, Port Marine Safety Code Project Lead at the MCA provided delegates with an overview of the Code. Developed following the Sea Empress disaster in 1996 its aim is to "improve safety for those who use or work in ports, their ships, passengers, cargoes and the environment." Kalvin highlighted that the Code has recently undergone a review and was actively seeking input from industry through the PMSC Steering Group. This collective effort aims to ensure the creation of a comprehensive and inclusive Code. He further outlined that the Code would require regular, industry wide review to keep up with the requirements for new regulation within ports, for example net zero considerations including bunkering safety and autonomous ships.

James Evans from **Boluda Towage** presented on the BTA's Annual Safety Statistics of the towage industry from 2022, with the following key points highlighted:

- First Aid Cases and Medical Treatment Cases were most likely to occur with the vessel "alongside".
- Near misses were most likely to occur "on the job" but slightly decreased from 2021.
- Illicit heaving lines caused three First Aid Cases.
- Poor working conditions, inadequate leadership and human error were the leading root causes.

James advocated for member organisations to examine the root causes of the statistics and endorsed for thought leadership to prevail and examine why root causes such as inadequate training, excessive wear and tear and inadequate tools were being reported and asked delegates to examine how they could be resolved.

The BTA sincerely thanks James for his analysis of the 2022 Safety Statistics.

In the final afternoon session delegates were separated into working groups and asked to discuss questions surrounding Reporting, Safe Work, Safety Learnings, and a Review of the Safety Statistics.

Reporting key messages:

Trust in colleagues as well as leaders.

Ensure positive action is taken following a report and don't just reward the action of reporting.

Further reporting will be incentivised if crew see a change in the working environment following a report.

Safe Work key messages:

Time pressures, culture, costs, fatigue, complex tasks, complacency and peer pressure all make safe working difficult.

Some staff have a lack of motivation to speak up about safety issues.

Pilot ladders, guilting, poor standards, weather, fatigue and complacency all have the potential to kill you.

Safety Learnings key messages:

Safety flash newsletters were commonly used to distribute safety learnings across operators.

Emil and safety meetings were the most popular desired methods to disseminate safety learnings. Mentoring, observations on the job, simulations, forums and discussions were all tools used to aid learning.

BTA Safety Statistics key messages:

The roots causes could be a result of a lack of training, or ineffective implementation of safety procedures.

The safety statistics could be improved by greater positive reporting.

The Seminar's chair Alasdair Smith ended proceedings with closing remarks surrounding the importance of not resting on laurels and being proactive within the realm of safety. He noted that despite the drop on incidents reported by Shipowners' preventable accidents were still occurring and advocated for the continued engagement from pilots, port authorities, and the wider towage industry to drive out preventable accidents.

Past BTA Chairman, Nick Dorman from Targe Towing, was recognised for championing and chairing the 20 previous years of the BTA Safey Seminar and current BTA Chairman Nick Jeffery presented Nick with a gift and commemorative certificate to recognise his dedication to improving safety culture within the towage industry.

The BTA's Tug Trainee of the Year Award, kindly sponsored by Sanmar Shipyards, was launched at the Seminar, and will award its first recipient at the BTA's Annual Conference and Dinner on 1 May 2024.

The BTA wishes to celebrate and honour trainees, and recently certificated candidates working in the UK towage sector who have shown exceptional dedication and attitude to their learning and career development.

Full details of the terms of eligibility and scope of the award can be viewed via the BTA's
website

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