

British Tugowners Association 20th Annual Safety Seminar Recovery of Persons from Water





Northern Lighthouse Board, 84 George Street, Edinburgh

The 2022 BTA Annual Safety Seminar was held at the Northern Lighthouse Board in Edinburgh on Thursday 10 November with a wide spread of towage industry representatives. The Seminar sought to share innovative ideas and drive progress regarding safety in the towage industry, focussing on establishing improved equipment and methods of recovering persons in the water.

With thanks to the Maritime Skills Academy (MSA) for their sponsorship of the day.

BTA Annual Safety Seminar 2022 was kindly sponsored by Maritime Skills Academy.

Nick Dorman, the **BTA's immediate past Chairman,** provided opening remarks and welcomed delegates to the Seminar. Nick praised the open candid dialogue that the British Tugowners Association embodies and reflected that while towage was imperative to the wider shipping industry accidents can have profound impacts that go beyond business.

Nick warned against being stuck in established ways of doing things "because that is how it's always been done" and advocated for events such as the Annual Safety Seminar to enable stakeholders, business, and individuals to "work together for continuous improvement". While Nick stressed to those present the importance of working as a collective to improve safety standards, he also noted that there was opportunity to work with those not present, including wider groups in the maritime sector such as port operators, pilots, lawyers as well as insurers to raise the safety standards across the board.

Alan McPherson, Chief Harbour Master at Forth Ports and UKHMA representative opened proceedings on the perspective of the harbour master when dealing with emergencies including MOB incidents.

Alan discussed examples of perilous behaviour occasionally seen in ports. Alan spoke of his frustrations of how unsafe conduct was begrudgingly permitted by senior seafarers and thought of as part of the job where in fact there are policies and safety management systems in place to prevent unsafe practices.

However, Alan noted the "divergence between company instructions and working practices." He endorsed for a strengthening of safety culture among seafarers and operators recommending there should be a narrowing of what is imagined and what is being done.





George West & Phil Dryburgh from **Quiksling** demonstrated their pioneering idea in recovering persons in water.



Following a harrowing experience in which George had witnessed a girting incident where the rescue attempt of the persons in water had been poorly executed, George thought there must be a better solution.

The light but sturdy design of the Quiksling allows for the self-rescue of conscious persons in water. The Lloyds Register approved design allows for the rescue of conscious causalities and the fishing industry in particular has shown interest in the Quiksling. The low deck chair position in which they are rescued also mitigates against the effects of hydrostatic squeeze, a potentially lethal condition after prolonged immersion in water.

Naomi Harper and Sam Kelly from the Maritime Skills Academy discussed creating a balanced workforce through tailored training. MSA are part of Viking Maritime Group made up of Chiltern Maritime, Viking Crew, and the Maritime Skills Academy. With offices across the UK, the USA, New Zealand, the Philippines, and Guernsey, they are well placed to influence the safety culture of cadets and future seafarers across the globe.





They emphasised the need to engage new recruits in safety procedures from a young age to ensure that a culture of continuous learning and zero blame culture was nurtured within the industry. Highlighting the importance of trust between all crew and the importance of

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following instruction during a person in water situation it was recognised that crews cannot be reliant on just one person and need self-sufficiency in life or death situations.

The **Chairman of the BTA Scott Baker** from **Svitzer** launched the anticipated Recovery of Persons in Water Guide to Good Practice for Small Vessels.

Scott extended sincere thanks to the experts in their field, **Professor Mike Tipton MBE**, **FTPS**, from the University of Portsmouth and **Paul Savage OBE**, of Saviour Medical Ltd for their contributions to the guidance as well as to the Workboat Association and RNLI for their oversight.



Key areas of discussion for the guidance include:

- the ineffectiveness of lifejackets without crotch straps
- cold water immersion its effects and common incorrect confusion with hypothermia
- the truth around vertical and horizontal rescue
- demystifying the use of Automatic External Defibrillators (AEDs)
- post recovery trauma, an often neglected area

Scott emphasised the importance of crew members training and participation in drills of rescuing persons in water. While it was stated that having the correct kit on board was imperative, he highlighted that if the crew did not have the experience / training and therefore muscle memory of having used lifesaving equipment the chances of it being used correctly in serious circumstances were low.

Scott also specified the chances of a safe and effective rescue were raised by crews having a suite of rescue equipment on board, with crew therefore having the correct tool for the circumstances. The Guide to Good Practice is available for download here. Feedback and comments on it are encouraged.

James Robinson-Burge from **Svitzer** presented to the Seminar on the BTA's Annual Safety Statistics of the towage industry from 2021.

Thanks were extended to the membership for the 100% response rate in 2021, and key points included:

- 2021 being the second year with no illicit heaving line incidents reported
- Seasonality has little to no impact on Lost Time Injuries (LTI) occurrence and minimal impact on incident and near miss occurrence
- Machinery, ropes, and navigation being the main cause of near misses, with machinery also causing the most LTI's & incidents
- Most near misses occur whilst crew are on the job
- The highest frequency of incidents and LTI's occur during "alongside" segment of the voyage

Oliver Burke from Svitzer presented the OB rail recovery development journey.

Oliver discussed the limitation of the designs of cradles that are currently used within the towage industry such as the limited width of the cradle and the poor visibility of casualties associated with the current positioning of the davit. The OB rail allows for improved access and visibility to the person being rescued and should be accompanied by the relocation of the davit. Used in conjunction with each other this creates a purpose-built solution for the towage industry. The effective design places a railing on the bulwark of a vessel overcoming the shortcomings of other cradle rescues and is free from copyright. Oliver and Svitzer are keen to see installation on other vessels.

THE SOLUTION

THE OB RAIL AND DAVIT RELOCATION







Sam Mayall and **Andy Tripping** from **Zelim** offered up a rethinking of the way that search and rescue could be conducted. Zelim are exploring three innovative methods to find, recover and protect seafarers in a person in water situations.

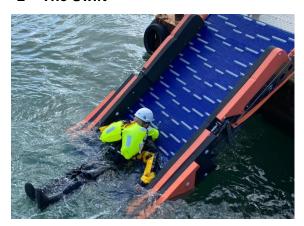
1 - SAR Box

The SAR Box offers up a revolutionary method of utilising AI, overcoming the limitations of the human eye, in searching and identifying for persons in water. It can see up to six times further than a human in stormy or foggy conditions, an invaluable tool in time constrained situations.



Capable of tracking multiple persons in water at once as well as identifying if they are wearing PPE Zelim believe there is applicability to ports and harbours across the globe.

2 - The Swift

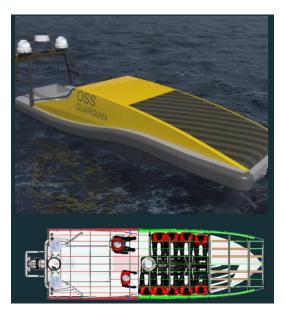


The Swift, a rescue conveyor, enables seafarers to bring the person in water to deck in less than 10 seconds. It is rapidly deployable and can be operated by a single crew member, with a manual back up should power from the vessel become unavailable. It can be incorporated into the design of vessels as well as being retrofitted to vessels in some circumstances. The dynamic capabilities of this life saving device will prove invaluable in rescuing casualties in adverse conditions.

3 – Unmanned Rescue Vehicles (URV's)

Zelim also discussed the next generation of URV's they are developing. Capable of being remotely operated and able to carry up to nine casualties the URV's named the Guardian and the Survivor promise making rescue efforts safer and more effective for both the rescue party and the persons in distress.

The Guardian utilises the Swift recovery system and has launch capabilities from a mothership or shore side. Built to cope with extreme sea conditions it has manned rescue potential and designated heli-hosting areas for adaptability to rescue efforts. Following scenario testing, Zelim believe the vessels have the potential to dramatically reduce rescue times.



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Jim Hyslop Director of Design Development from **Robert Allan Architects** discussed designing recovery of persons from water into vessel construction.

Jim highlighted current problems with available rescue methods such as the height of the deck on tugs making reach, recovery, and communication with casualties difficult as well as the process of reboarding the vessel almost always requiring some degree of self-rescue. Jim outlined one solution proposed was a platform that folds out and descends the side of the vessel.

Already established on fire boat it provides a readymade solution to the issue of rescue from tugs. The second solution proposed was to cut strategically into the hull of the vessel to provide an easy access point to the water in a MOB situation. A grating can then be used to cover the notch to maintain maximum use of the working deck area.



Tom Woolley from **Targe Towing**, the BTA Honorary President ended proceedings with closing remarks surrounding the importance on focusing on the wellbeing of people within towage and wider businesses.

Reflecting on his time in the Royal Navy, Tom commended their focus on conducting drills regularly and believed this contributed to exemplary safety and efficiency, a lesson that the towage industry could learn from. Tom focussed on the importance of people, suggesting "a direct link between a culture of caring for your seafarers, leading to safety and efficiency and resulting in commercial success."

It is in the interest of all seafaring and towage companies to put safety and the forefront of their businesses. Tom lauded events such as the Annual Safety Seminar and called for all stakeholders to engage on such occasions and use them for essential learning and improvements for the towage industry. Tom concluded events by thanking Nick Dorman for chairing the 20th Annual Safety Seminar, noting it was the 20th such Safety Seminar that Nick had run.

William Rann 23 November 2022