



The Newsletter of the Nautical Professional Education Society of Canada

(Society founded in 1995 by the British Columbia Branch of The Nautical Institute)



February 2023

Joining My First Ship: It is October 1967 and the train pulls out of Temple Meads Station taking me to London. My friends are left behind, laughing, waving, cheering. I'm 17 and my last two years have been great – lots of girls (Rolling Stones – Let's Spend the Night Together), parties, mods and rockers, young liberals and bowling allies and clubs. I know everything. I'm full of confidence – Harold Wilson tells our generation that's very important. My work in the local factory during summer was dreadful, but I've a bit

of money to spend. As the train rushes towards London I am scared and so tiny; confidence is dribbling away, my stability suddenly diminished. Everyone and everything that is my foundation (Mum, Dad, friends, school, Bristol and even my big sister) are rapidly receding. In my bag a telegram advising me to report to a hotel in Kensington and from there to be transferred to Hong Kong and join my first ship as a Cadet. I am alone, terrified but soon... excited. For all of my short life I have wanted to travel to the other side of the world.



Here I Go. A very large and intimidating doorman greets me at the hotel and in a friendly but superior manner asks my intentions. After stating my reason for entering the foyer he abruptly stands upright, distancing himself from me and points to a visibly inebriated middle aged gentleman. I followed the suggestion and introduced myself. The gentleman shakes my hand and indicates for me to sit, and then starts speaking in some indeterminable tongue. I apologized for not understanding his language, so in a painfully slow and exasperating manner he described that he was the Second Engineer and had travelled from Belfast!!!

The 2nd Engineer, whom I was now calling sir – I thought it expedient at this stage of our association – went on to describe the ship. Old, no air-conditioning (meant nothing to me), busy (no time at sea to repair engine) and built in Sunderland, which to him seemed to be an issue, and Chinese crew (in his view apparently always a problem). At the appropriate moment I ask where the ship would be voyaging (Here I

"I ASSUME WE WILL THEN SAIL BACK TO ENGLAND - WELL ACTUALLY, NO!" Go) and was told it would load around the Far East and S.E. Asia (Marco Polo eat your heart out).

I assume we will then sail back to England. Well actually, no! East and South Africa and back to the Far East taking about 5-6 months. Hmm, bit long but

then fly back home from Hong Kong, what tales I will have to tell. Just one major drawback – we have to do that three times. Whoa! That could be 18 months – 1968 wiped out of my life.

The Chief and Third Officer (both from Scotland), two more Engineers (also from Belfast) and two other first time Cadets, one from Yorkshire and thankfully the other from London, joined us. The language barrier for





me will be enormous. The Chief Officer took control and led us to a small bus taking us to a hotel at Heathrow in preparation for our '24-hour' flight the following day.

I arrive at the departure gate the next day to discover that I had no certification of the many vaccinations that had been administered to me in the preceding three weeks. The Chief Officer not very pleased with me as he spends the next hour using telephones that looked as if they were props for a black and white film from the fifties. Eventually a very old doctor appears and asks if I had received the various injections. In terror, prompted by Chief Officer's disdain for anything English, I answer 'yes' and receive a whole bunch of stamps in my brand new passport. The BOAC Boeing 707 dashes along the runway with me stuck to the back of my seat, and gracefully leaves terra firma bound for all stops to Hong Kong.

Will I ever see my homeland again? Think, school poetry, Robert Brooks, 'some corner of a foreign field forever England'; but suddenly, wow, Windsor Castle, Wembley Stadium, English Channel. Belgium and we are landing in Frankfurt. We wander the airport terminal for an hour before re-boarding and continuing on our way.

Our next stop is Rome about 45 minutes away. Here one in our motley crowd manages to wander out of the transit area and finds himself in the taxi rank bound for the city. Escorted by two 'Carabinieri' he is



returned to us with assurances from the Chief Officer that he is legitimately a passenger bound for Hong Kong and we will take care of him, muttering something about we should all hold hands. In the air again to Athens, Beirut, Tehran (very cold and soldiers with machine guns), Karachi (night time, very hot and humid), New Delhi, Bangkok and finally weaving our way through the maze of high-rise buildings to land at Kai-Tak Airport, Hong Kong. What a journey, even viewing Da Nang and the Vietnam War en-route; this truly is Star Trek.

Hong Kong is astonishing. Full of Chinese people and Chinese writing, warm, sun bright, noisy and lots of London buses. We coach to a hotel, and then myself and Dave, the Cadet from Yorkshire, decide immediately that discovery is the order of the day and set out into the wilds of Kowloon – but that is another tale. The following morning we are taken to a very busy Star Ferry and board a boat to transport

us to our new home. There she is anchored to a buoy in the middle of the harbour amongst a huge array of ships and marine craft of all descriptions, including junks and ubiquitous houseboats. Surrounding the vessel at all parts of her hull are barges and cranes. There are great streaks of white dust at numerous places and swinging from the ship's derricks is cargo being loaded and discharged simultaneously. Lots of people are shouting, waving and pointing but there appears to be a system that most seem to understand. It is a scene from Joseph Conrad's 'Lord Jim'.



Our boat nudges the gangway and I join my first ship, the formidable Carronbank.

This article was written by Captain Graham Davey and it appeared in "The Master Mariner, March 2021," the National Journal of The Company of Master Mariners of Australia. www.mastermariners.org.au

Stunned sky-watchers in the US state of Wyoming have snapped photos of a rare cloud formation crashing across the horizon like ocean surf: "This was special and I immediately knew I needed to capture it," said local Rachel Gordon.

The billowy phenomenon was visible above the crest of the Bighorn Mountains from the city of Sheridan. Known as Kelvin-Helmholtz instability, they form when a faster stream of air moves above rising air below.





Ms. Gordon, who told BBC News she took the images from her parents' back door before posting them to the Facebook page "Wyoming through The Lens', said: "It was an awe-inspiring moment." "I'm just glad others can enjoy the experience now, too."



BBC Weather's Matt Taylor says the pictures are one of the most stunning and epic examples of Kelvin-Helmholtz clouds he has ever seen. "Part of the beauty of Kelvin-Helmholtz clouds is that they really show up the fluidity of the atmosphere," he said. "How, like waves in the ocean, the atmosphere responds moves and to environment around it. The air is effectively rising up and tumbling over on itself."

The cloud formation is named after scientists Lord Kelvin and Hermann von Helmholtz, who studied the physics behind the phenomenon.

The UK-based Cloud Appreciation Society describes such formations as the crown jewel in many cloud spotters' collections. Also known as "fluctus" clouds, they are seen as a possible inspiration for Van Gogh's painting Starry Night.

December 8th 2022. https://www.bbc.com/news/world-us-canada-63912257

NOR-SHIPPING INTERVIEWS CAPTAIN HAGERTY ON "AN INDUSTRY FOR ALL!"

We're delighted to welcome Captain Alexandra Hagerty to the "An Industry for All" series. Who better than Capt. Hagerty, one of the industry's star female officers and founder of "Captains without Borders" https://captainswithoutborders.org, to discuss, showcase and celebrate diversity, inclusion and talent within shipping?

(Nor Shipping - https://nor-shipping.com/about/)

What is your current position? I am Captain/Chief Officer on the USNS Invincible, a government vessel owned by the Maritime Administration that's being converted to a Cadet Training Vessel for Maritime Academies. I am also an Expert Witness for several maritime law firms and founder of the non-profit "Captains without Borders", providing maritime scholarships to Cadets in need around the globe.



How did you get involved in the maritime industry? I started working on tall ships when I was 18 and was asked to work for Etoile Marine Cruises in Saint Malo, France for the summer as a "Stagiare" or Apprentice. I fell in love with being on the water. I was then asked to join Jens Krogh, a Danish vessel, and sailed all over northern Europe.

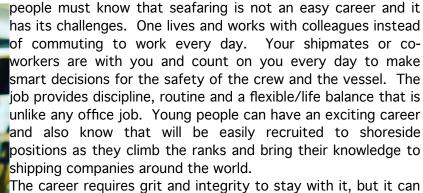
After studying in Denmark, I decided to go back to New York to pursue my dream of becoming a Captain by attending SUNY Maritime College in New York. I worked to obtain a Master's degree, paired with an unlimited tonnage Third Officer's Licence. I loved the idea of making great money,





navigating the world and only working six months a year. I could not think of another job with that much freedom and opportunity!

Why do you believe young people should consider a future within the maritime industry? Young



The career requires grit and integrity to stay with it, but it can be more rewarding than most desk jobs because there is a camaraderie amongst shipmates than cannot be found in an office setting. When our lives and quick decisions impact one another, building trust through training, learning about vessels and your shipmates' strengths and weaknesses, create a

completely different work experience. Technological developments are also changing this industry like never before and that provides massively exciting opportunities.

What key lessons have you learnt during your time in the industry, and what advice would you give to others? There have been many people who want to challenge and doubt me, but when emergencies happen, or serious issues arise, I've always been able to take command, in the worst and best of times. So, never doubt your ability to think critically and take charge when it is necessary, especially in a time of need... that's when great leaders emerge.

What do you think are the industry's key strengths and weaknesses – how would you like to see it evolve? Maritime has had more issues embracing technology and smarter electronics than other sectors. There has been a reluctance to change from paper to electronic charts, to semi-autonomous ships.

Slowly but steadily, change is taking place. I now see a plethora of young officers coming out of maritime academies thirsty to work on state-of-the-art ships with cutting edge technology. Engaging older mariners to embrace this will take time, but electronic logbooks, e-bills of lading and other measures for higher technology-driven security, fuel efficiency software and sustainability are being embraced as they ease different burdens for mariners.

What do you like best about a) your current role and b) the industry in general? I love the fact that I can be whisked away to another part of the world with a simple phone call from my dispatcher, asking me to jump on a plane and embrace a new micro bubble vessel getting ready to start its journey. I truly enjoyed the years working on survey vessels that went to remote islands in the Marianas, Philippines, Japan and South Korea with groups of scientists. The work was interesting and no two days were the same.

Maritime is a funny little industry and, over time, we all get to know each other. As such it is a uniquely close-knit community. I can talk to another Captain and there's an instant sense of mutual respect.

I also love laughing with Port Agents, hearing about their funny interaction with Captains and crew over the years – there's a lot of quite eccentric personalities! In general, it is quite an entertaining and international industry that can take you to the corners of the Earth you never though you'd





travel to. From conferences in Dubai, to Norway, through to Virginia, the people I meet are fantastic and brilliant, often with innovative ideas.

What are your personal ambitions within the industry? I am currently running for Vice President of Government Relations in the largest American Merchant marine Union in the United States, American Maritime Officers. I am also seeking other opportunities in maritime technology companies, while building international clients as a maritime Expert Witness.

I hope that the scholarship fund I started with several Captains and Engineers will gain notoriety so that we can start giving out more scholarships to Cadets around the world in need of assistance. That way they too can embrace the exciting career that I've been able to enjoy over the last decade. Watching the Cadets grow into Officers, Captains and Chief Engineers will be incredibly rewarding.

Any final comments you'd like the reader to take away? One thing I love about shipping is that it is an age-old industry with tone of traditions and unique words and expressions across multiple languages. Here are a few of my favourite quotes: -

"There is no better tool or equipment you can on board than a well-trained crew" – Larry Pardey "I am the master of my fate. I am the Captain of my Soul" - William Henley

"It is good to have an end to journey toward, but it is the journey that matters, in the end" -Ernest Hemingway.

https://captainswithoutborders.org/f/nor-shipping-interviews-captain-hagerty-on-an-industry-for-all

November 21st 2022

U.S. Coast Guard says to avoid loading Electric Vehicles with Saltwater Damage on Ships

The U.S. Coast Guard is warning the shipping industry of the extreme risk of loading electric vehicles (EV) with damaged Lithium-lon onto commercial vessels.

Marine Safety Alert 01-23, issued last Friday, addresses the issue and provides recommendations to vessels, ports, shippers and regulators. The safety alert comes about four months after Hurricane Ian made landfall in South Florida as a Category 4 hurricane with maximum sustained winds at 150 mph. In the aftermath of the storm, first responders encountered numerous EV fires where investigations have

determined were caused by exposure of the Lithium-Ion batteries to

saltwater.

Saltwater exposure can severely harm Lithium-lon batteries, leading to a chemical reaction that creates a high fire risk.

Felicity Ace seen burning in the Atlantic Ocean off the Azores Islands. **Photo courtesy Portuguese Navy**

Records show there are over 7,000 EVs in Lee County, Florida with the potential for damage. "Vessels, ports, and shippers should be aware of this extreme risk and avoid loading EVs with damaged Lithium-Ion onto commercial vessels," the safety alert reads.

A previous safety alert (Safety Alert 01-22) issued last March highlights a recent incident where improperly discarded Lithium-Ion batteries caught fire in a container while en route to the Port of Virginia, where it was set to be loaded onto a ship. The container's bill of lading listed the contents as "computer parts," not lithium batteries.

The carriage of electric vehicles containing Lithium-Ion batteries presents new challenges to maritime transportation and firefighting.

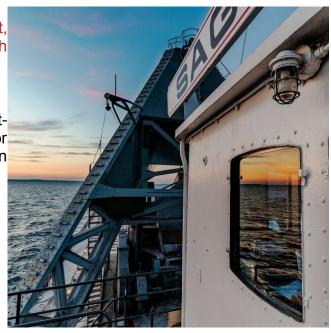




<u>Imagine Marine</u>: Connecting your talent, dreams, skills, goals, imagination with careers.

The Captain, or Master, is a ship's highestranking officer with overall responsibility for crew and operations, including the protection of the vessel, its cargo and the environment.

Learn more here https://bit.ly/3Fdc7nb



The following appeared in the gCaptain daily news on January 5th 2023 in an article about "Hurricane Force Storm with 40+ foot waves off U.S. West Coast".

https://gcaptain.com/hurricane-force-storm-with-40-foot-seas-off-u-s-west-coast/?subscriber=true&goal=0_f50174ef03-4b05b03507-169937937&mc_cid=4b05b03507&mc_eid=35ccf165ad

The Other Hurricane Season. Fred Pickhardt Nov. 5, 2021.

https://gcaptain.com/the-other-hurricane-season/

Each year there are, on average, about 6 hurricanes in the North Atlantic, 8 in the Eastern North Pacific and 17 Typhoons in the western North Pacific. Few people (outside of Mariners) realize that there is another season of hurricane winds that occurs over both the North Atlantic and the North Pacific Ocean and runs from September to May. These storms do not track through the tropics, but instead are associated with the extratropical cyclones of the mid-latitudes.

Extratropical Storms: An extratropical cyclone, also called a mid-latitude cyclone, is a storm system that gets its energy from horizontal temperature gradients and is most often associated with frontal zones. Tropical cyclones, in contrast, are generated by the energy released as clouds and rain form in warm, moist, tropical air masses. Extratropical cyclones occur throughout the year and can vary widely in size from under 100 NM to over 2,500 NM. On average, extra-tropical





cyclones last about 5 days, however, hurricane-force wind events when associated with these systems typically last 24hr or less.

Hurricane Force Storms: It had been long known that extratropical cyclones can sometimes produce hurricane force winds but not until the deployment of modern satellite technology did meteorologists discover that hurricane wind events were much more frequent than previously thought. The risk for a winter hurricane wind event begins to increase in September and October, peaks in December and January, then tapers off sharply in April and May, although quite infrequently we have observed them in each month of the year in the North Atlantic.

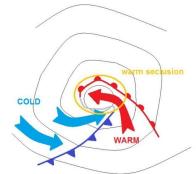
A hurricane-force extratropical cyclone in January 2016 with a distinct eye-like feature, caused by a warm seclusion. Image credit NOAA

Each winter season has, on average, about 37 non-tropical hurricane force wind events occur over the North Pacific and about 45 events over the North Atlantic. NOAA Ocean Prediction Center issues a "Hurricane Force Wind Warning" when sustained winds, or frequent gusts, of 64 knots (74 mph) or greater, either predicted or occurring, and not directly associated with a tropical cyclone." Hurricane force wind events occur mainly during the warm seclusion or mature stage of the extratropical cyclone lifecycle as described by Shapiro & Keyser in a paper in 1990. During this stage there can be an eye-like feature of relatively calm wind and clear skies.

During the mature stage of the extratropical cyclone lifecycle, many of these cyclones deepen very rapidly with a core of hurricane force winds developing along the cold side of the bent-back portion of the warm front. Generally, these conditions are short lived, on average, lasting less than 24 hours in duration.

Schematic of the surface fronts involved in a Shapiro-Keyser cyclone in the Mature stage (courtesy European Organization for the Exploitation of Meteorological Satellites (EUMETSAT)

Impact: When these hurricane force storms occur along shipping routes they pose a significant threat to life and property due to high winds and waves. The 1991 Halloween Storm of "Perfect Storm" fame produced hurricane force winds with verified waves to 100 feet!. In 1998 the containership *APL China* lost 388 containers with another 400 damaged when it encountered hurricane force winds and a 70 ft wave in the North Pacific from an extra-tropical



cyclone that was infused with energy from what was once "Typhoon Babs". When these intense storms make landfall they also can cause widespread damage along the coast from high winds and flooding, not to mention heavy snowfalls.

Click here for more detail on "The Shapiro-Keyser Cyclone Model"





Fred Pickhardt is a marine meteorologist and founder of Ocean Weather Service, providing optimum ship routing services and forensic marine weather reports to the maritime industry.

Brokering Ships and Relationships - Singapore Maritime Foundation Singapore Maritime Foundation



Shipbrokers play a vital role in the global shipping industry as mediators between owners/ buyers and charterers/ sellers of ships. Besides solid technical knowledge, strong interpersonal skills are essential. Ms. Sophia Low, Director and Lead Shipbroker at M3 Marine has been in shipbroking for over 13 years after transitioning from a career as an offshore drilling engineer working on rigs and continues to exude passion for the profession.

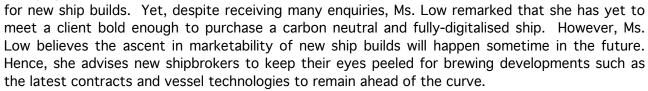
Shipbroking in Turning Tides: While many shipbrokers come into the field from affiliated professions such as research and maritime studies, Ms. Low's transition to shipbroking from being a drilling engineer working on oil rigs was unique.

"The transition (to a shipbroking career) was not too difficult," Ms. Low recalls. "What I learnt during my time offshore, such as the technical aspects of the rig and the understanding of how oil wells are drilled, helped me pick up the technicalities of the OSV market easily." Instead, she

identifies the building of a strong client base as a new shipbroker as her primary challenge when she first started out. Thirteen years on, much has changed in the industry. How then is the shipbroking team at M3 dealing with the pressure of a changing industry? According to Ms. Low, being adaptive and flexible are key. For example, many of her clients have stopped asking for hardcopy contracts, since digital signatures for invoices and contracts are now recognised under most jurisdictions.

Sophia Low, Director and Lead Shipbroker, M3 Marine Group

M3 shipbrokers are also gearing up for digitalisation by changing how they deal with vessels and client-sourcing



A Profession Anchored in Relationships: For all the changes buffeting the industry, Ms. Low believes that shipbroking at its heart remains an "old-school" job. She explains, "The foundation of shipbroking work depends on the relationships a broker builds diligently over a long period of time." Therefore, even as times change, Ms. Low notes that the core methods of shipbroking are She shares, "With the advancement of technology, many modern shipbrokers think that they could try to be 'Internet' shipbrokers, and they set up websites to contact parties. But somehow that always fails." In other words, strong people skills are a must for aspiring

"This business is all about relationships," she says. Shipbroking entails managing negotiations and balancing the desires of multiple stakeholders. For every deal taken on, Ms. Low believes it is essential for shipbrokers to exhibit "fairness and an ability to translate 'angry' words into convincing words."





She elaborates further: "As an intermediary, I need to always remember that I am the middleman whose job is to ensure the best outcome for both parties." Being a convincing mediator, Ms. Low feels, is one of the hardest parts of being a shipbroker. This is especially the case when she must ease tensions between heated parties during negotiations. It is the shipbroker's job to put out the fire by formulating a plan that addresses the interests of everyone.

To be an outstanding shipbroker, however, one must also possess sound values. Ms. Low cites inquisitiveness, ethics, trustworthiness, and perseverance as key values that every good shipbroker should embody. The ideal broker should be inquisitive about the latest ship-related updates and keep abreast of world news. A broker with strong ethics will also naturally inspire the trust of their clients. When clients trust that a shipbroker is looking out for their interests, they will return to them for services.

Lessons in Persistence: Stressing the importance of perseverance for a broker, Ms. Low advises, "When a deal negotiation goes downhill or when it seems like there are no suitable vessels in the

market, it is essential to stay in the game and persevere a little more. You never know when the tide will turn for you."

A modern Saturation Diving Vessel, "Southern Star" which M3 Marine brokered. In fact, Ms. Low recounts her most memorable negotiation experience as a lesson of persistence. She had spent a whole year trying to close an S&P deal. A bank had engaged Ms. Low to sell a vessel that was marked as a "distressed asset," or an asset that is typically sold below market value. Despite this, the bank demanded top dollar for the vessel.

The low oil price climate at the time further complicated the situation as few buyers from the offshore sector had the financial means to purchase the ship. Just when she thought she had secured a buyer, he suddenly had cold feet about the transaction, worrying that he would not be able to transport the vessel back to his own country.

Not giving up, Ms. Low made numerous phone calls to allay the concerns and fears of the stakeholders. She finally closed the deal after assuring the buyer that everything could proceed without a hitch. Indeed, perseverance does pay off!

As an industry veteran, Ms. Low continues to demonstrate passion in her profession amid the changes that are taking place. Check out our MaritimeONE Connect Career Portal to embark on a purposeful career in maritime today!

About M3 Marine: Based in Singapore, M3 Marine Group and its subsidiaries provide a comprehensive range of offshore marine services tailored to meet the needs of the offshore marine and oil & gas industry. With decades of relevant extensive multi-faceted experience, direct access to a vast network of operators, offshore vessel owners and shipyards and backed by a wide network of Associates in Europe, Asia, the Middle East and Australasia, M3 Marine is committed to meeting the growing local and international demand for specialized marine services.

https://www.smf.com.sg/brokering-ships-and-relationships/ January 10th 2023

Bulk carrier safety: be aware of vessel structural limitations. This is a long but important article. It can be found at:



https://www.gard.no/web/articles?documentId=34599269





All-female launch crew makes Port Taranaki history: In a first for Port Taranaki and what is believed to be a landmark moment for all New Zealand ports, a pilot launch or tug has been operated by an all-female crew.

Long-time Port Taranaki Launch Master Andrea Chadfield and recently qualified marine deck crew Aleisha Pelham reported for their first official seven-day launch vessel shift together on Thursday morning. And while their first shipping movement was delayed twice, finally at 0500 on Friday they motored out on the pilot launch *Mikotahi* and safely removed Pilot Neill MacKean from tanker *Aliakmon* as it left Port Taranaki.

"It was great. We had a big northerly swell going through and had to go out and do a sweep, so there was a little more action than usual for an outward bound vessel. But the Pilot was very happy and complimented Aleisha on her work helping him off the vessel safely," says Andrea.

Andrea and Aleisha, whose shift includes carrying out general launch maintenance and handling all shipping movements for the week, now hope that their history-making moment will encourage other girls and women



to consider a career in the maritime industry. "It's really exciting," says Aleisha. "It's been a hard and long journey for females to get into the marine industry, so it feels like we are setting a precedent."

"It's amazing, really," added Andrea. "It's a maledominated industry, so I just really didn't know if this would ever be possible – yet here we are. Hopefully we are paving the way for the new generation of women with a passion for life on the water and they see that there are opportunities for women to work in these roles."

Aleisha Pelham, left, and Andrea Chadfield onboard Port Taranaki launch *Mikotahi* during their first shift together.

Aleisha joined the port as a casual member of the communications and security team, before recently

obtaining a Qualified Deck Crew Certificate and being added to the marine crew roster. The job involves deckhand work of pulling up and letting go of the vessel alongside the wharf, being another set of eyes for the Launch master, and assisting Pilots off and on the visiting ship.

Andrea is the daughter of well-known local skipper Dave Chadfield, formerly of Chaddy's Charters, and spent time working with her father before joining Port Taranaki about 17 years ago. As Pilot Launch Master she must carefully navigate alongside the visiting ship and hold position as the Pilot is assisted on or off. And, do they work well together?

"Of course," laughs Andrea. It's awesome – you couldn't ask for a better team."

"We thrive off each other," adds Aleisha. "Andrea set the pathway for me so it's great to be working with her."

Port Taranaki Chief Executive Simon Craddock says it's a fantastic moment for the port and for Andrea and Aleisha. "Andrea and Aleisha are both hard-working and dedicated so it's great that they've made this bit of history together. Congratulations to both of them – I'm sure they'll make a wonderful team," he says.

"At Port Taranaki we have women in positions across the entire operation – from on the water and wharfside to engineering and executive leadership. We hope that Andrea and Aleisha's story will encourage more girls and women to see the marine industry as a potential career path."

Port Taranaki is the only deep sea port on the west coast of New Zealand.

Read more at: https://www.porttaranaki.co.nz

https://www.porttaranaki.co.nz/news/all-female-crew-makes-port-taranaki-history/ February 4th 2023





Container ship capsized and sank in Iranian port: The container ship *Anil* capsized and sank in the port of Asaloyeh on January 24th 2023 during cargo operations. The ship rested with the port side on the bottom and alongside the pier. A number of containers fell into the water and were afloat in the harbour. The 12 members of the crew were safe.

The *Anil* had arrived in Asaloyeh from Bandar Abbas. As with many things in Iran, *Anil* is somewhat of a mystery. The ship is registered in international databases either as a LPG tanker or a container ship. She was sold in 2021 to Iranian interests.

https://www.fleetmon.com/maritime-news/2023/40917/container-ship-capsized-sank-iranian-port-persian-/

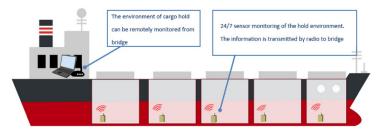


NYK Group Conducts Successful Demonstration of New Cargo Hold Monitoring System Featuring IoT Sensors.

On December 5th, Nippon Yusen Kabushiki Kaisha (NYK), NYK Bulk & Projects Carriers Ltd (NBP), and MTI Co. Ltd (MTI) completed a 35-day experiment using IoT sensors* to measure the holds of dry bulk vessels, effectively confirming the effectiveness of the system in actual voyages.

The quality of the hold environment during the voyage is an important factor in maintaining the quality of marine transport on dry bulk vessels. At present, it is common for crewmembers to periodically enter the hold to visually check the condition of the cargo, but there are issues such as the risk to crewmembers

overlooking abnormalities and the inability to enter the hold to conduct inspections during rough sea conditions. To solve these problems, technologies for monitoring the hold environment using equipment that requires communications and a power supply have been developed, but their use has been limited because they require large investments and construction work to be done on the ship.







The tree companies have therefore developed a new system that requires no construction work on the vessel. The new system is a comprehensive management system for reducing the risk of damage to cargo. It features 24-hour remote monitoring and data collection of the holds of dry bulk vessels, analyses of past data, and visualization of cargo-damage risks based on predictions of future conditions. (Patent pending) In dry bulk vessels, it is difficult to supply power to wireless communication and sensor parts from the hold. In sensors using LPWA wireless communication technology** can be used to monitor the transport environment, such as temperature and humidity in the hold, and the sensors can be remotely monitored in real time from the ship's bridge during the voyage. In addition, the system has a function to notify the crew with alarms and other means if it observes data that could cause damage to the cargo. Furthermore, sensors monitoring temperature and humidity can be replaced to monitor acceleration, water leakage, illumination, CO (carbon monoxide), etc. By accumulating this data, it will be possible to predict conditions based on past voyage analysis, which is expected to further improve the quality of transport.

The experiment conducted this time was an operational experiment of 24-hour remote monitoring and data collection in the hold. With the cooperation of Nippon Steel Corporation, temperature and humidity sensors were installed in the holds of *Global Mirai*, a steel carrier bound for Mexico, and data was collected. The data was then transmitted to the ship's bridge, and the status of the holds was monitored from a dedicated PC. In the future, we intend to increase the number of vessels equipped with the system, accumulate more data, and analyze it.

The NYK Group will continue to improve transport quality by developing new technologies and applying existing technologies.

On February 3, 2021, NYK released the "NYK Group ESG Story," which aims to further integrate ESG into the company's management strategy and promotes activities that contribute to the achievement of the SDGs through business activities. On March 24, 2022, NYK released the updated "NYK Group ESG Story 2022," which introduces initiatives for integrating ESG into the Group's management strategies set forth in the "NYK Group ESG Story" and provides a partial explanation of the Group's sustainable growth strategy from a long-term perspective.

- * Sensors connected to a network to collect and manage information as part of IoT innovation, or the Internet of Things, which makes it possible to connect everyday things to the internet.
- ** Low power wide area (LPWA) wireless communication technology requiring low power consumption to provide long-distance communication

https://www.vesselfinder.com/news/25131-NYK-Group-Conducts-Successful-Demonstration-of-New-Cargo-Hold-Monitoring-System-Featuring-loT-Sensors December 8th 2022.

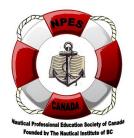
Your Society. Do you wish to make a financial contribution to the Society? Is it time for you to renew your membership? The Annual Membership Fee remains at \$40.00 but any amount that you can donate will be greatly appreciated.

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Articles or comments for inclusion in future editions of Seatimes can be sent to me at whitknit@telus.net
David Whitaker FNI

