SEA TIMES

The Newsletter of the Nautical Professional Education Society of Canada

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

August 2023

CROSSED THE BAR

Captain Brian Johnston FNI 1931 - 2023: It is with great sorrow and sadness that we report the passing of a Founding Member and a long-time supporter of the British Columbia Branch of The Nautical Institute (NIBC) and of the Nautical Professional Education Society of Canada (NPESC). During the past year Brian had experienced medical problems but, more recently, falling down had been the problem. At one time this left him with cracked ribs and later a broken hip. He had surgery for the hip but one week later, on June 3rd 2023, he passed away.

Brian went to sea at the age of 17 as a Cadet with "Eagle Oil" and remained with that company until he had obtained his Foreign Going Masters Certificate of Competency.

In 1959 he left the sea and moved to Canada, working his way on a ship bound for ports in the Gulf of St. Lawrence. He had to find work and one job he took was as a steeplejack. But ships and the sea were what he knew and in 1961 he found a position on a Canadian Coastguard vessel based in Prince Rupert. He was Master of the weather-ship, *Alexander Mckenzie.* Then, in 1964 he became a Steamship Inspector and ultimately a Port Warden for the Department of Transport in Vancouver, BC where he remained for 25 years. He had an extensive knowledge of cargo operations and was known as the 'go-to-person' in Transport Canada, Ship Safety. He was well known throughout the marine Industry. Brian was very technically oriented and was often in his workshop inventing and developing new things to enhance marine safety

He became a Member of The Nautical Institute and was a Founding Member of the British Columbia Branch. He was one of the Founding Members of The Nautical Professional Education Society of Canada, one of the first actions taken by the Branch, and had been a Director of the Society since 1995.

He was a Fellow of The Nautical Institute and an avid supporter (Past Chairman) of the NIBC Branch. Brian was a warm, kind and humble man, He will be sadly missed!

Cape Horn Rescue by Thomas James

In 1893 I was serving as Second Mate in the full-rigged ship *Port Patrick* of Glasgow. We sailed from Swansea in Wales with a cargo of coal bound for San Diego, California, and had an uneventful passage until nearing Cape Horn. Here we struck a bad patch of weather but after a few days the wind fell off considerably and we were able to make five or six knots. At about 2200 one day, when I had the first watch, the Master wished me "good night" and went below. Shortly afterwards, the lookout reported a light on the port bow.

Port Patrick, **A full-rigged steel ship built in 1889 by Russell and Co., Port Glasgow. (260'2x38'2x23') (1666 GRT / 1594 NRT)**
First Owner: Robert Crawford and Robert J Rowat, Glasgow

Steadying my binoculars I was immediately aware that there was something odd about the light, which seemed to be flickering and sending out sparks. I decided it must be a flare and called the Captain who had not yet retired: he examined the light through the glasses and gave orders to steer down for it. After some minutes we were able to make out a flare burning aboard what appeared to be a deeply-laden full-rigged ship.

She was hailed by our "old man" through the megaphone and asked what was her trouble. Her answer came to us across the water immediately. The vessel, the *Derbyshire* of Liverpool, was sinking: the crew wished to be taken off at once. It was seen that they were preparing one of their own boats, which was soon in the sea. Only half the crew were in this boat and as soon as they reached us, four of our crew and myself manned our boat, pulled towards the sinking ship and brought off the remainder of her crew. The ship seemed to have had much buffeting and was very much down by the head with a pronounced list to starboard. I had felt uncomfortable vibrations that caused me to wish that I was back aboard the *Port Patrick.* I have no doubt that the stricken ship sank in the night as the weather deteriorated and was very bad by next morning.

The *Derbyshire* was homeward bound from Talcahuano, in Chile, to Falmouth, for orders, laden with a wheat cargo. She had sprung a leak off the Horn, and despite continuous pumping, the crew failed to stop the water gaining; the water had risen causing the wheat to choke the pumps. They were at their wits' end to a man when we arrived on the scene. Her Master was Captain Jones and the Second Mate's name was Owens, but these are the only names I can now remember. Our problem was how to feed the survivors and our own men.

On rounding the Horn our Captain was considering the question of which would be the best port to make for, when we sighted another vessel. We signalled a brief message outlining our plight to the stranger when he agreed to take aboard the Mate and his watch. She would then continue her voyage to Iquique. These survivors were then transferred to the other vessel and we continued our voyage to San Diego.

Among articles that I saved from the *Derbyshire* during a hasty second visit was a bale of ladies' underclothes, which was later divided among the crew. When sewed up, these

elegant garments made excellent pyjamas and it was quite a sight to see our fo'c'sle head on washing days. There was also a parcel of smoking caps. These were also given to the crew and were worn as we entered San Diego. What a sight it was to see each man arrayed in a tasseled smoking cap! Next day we were very sorry to see our passengers go over the side as they had been a great help to us in working the ship. That was the last I saw of them.

Sea Breezes November 1953.

When writing about Brian Johnston I searched for information about Eagle Oil & found the following:

THE "SAN BOATS" - EAGLE OIL AT WAR, *by Captain Ivor C. Little*

Address to the South African Military History Society on 16 August 2007

My curtain raiser this evening is a simple story of bravery and courage of an order that those of us present here tonight would be hard put to imagine. There is spontaneous bravery, bravery under fire, and another type of bravery in which one knows that one is going to an almost inevitable and horrendous death but one goes anyway and of one's own free will. It can be compared with "martyrdom" but the people I am going to speak about would laugh at that notion. In their eyes they were simply "doing their job".

However, before going on to them it is necessary, as in all stories, to set the background.

Read the rest of this article at: http://samilitaryhistory.org/lectures/sanboats.html

ClassNK releases "Guidelines for Electronic Logbooks"

Tokyo - ClassNK has released "Guidelines for Electronic Logbooks". The guidelines specify basic requirements for approving electronic logbooks used on ships. The electronic logbooks for decks, machinery, etc., are expected to become more widespread because of the benefits of reducing the workload on crews for recording tasks, improving accuracy, and transitioning to a paperless system. Meanwhile, under the current conventional framework, only logbooks required by MARPOL have their electronic media specifications defined. Unified requirements for electronic logbooks in other areas, such as the deck, have not yet been established. Therefore, the use of electronic logbooks for such purposes requires individual approval from flag state governments. ClassNK has developed these guidelines to contribute to the expansion of the safe and effective use of electronic logbooks for any purpose on ships. The guidelines specify technical and operational requirements for the approval of electronic logbooks, as well as product testing, drawing on existing IMO guidelines and international standards on the functional requirements of electronic logbooks. ClassNK will proceed with the approval of products based on these guidelines in order to support shipping companies in selecting electronic logbooks and obtaining the smooth approval from flag state governments. The guidelines are available to download via “Guidelines” of My Page on ClassNK’s website after registration.

https://www.classnk.or.jp/account/en/Rules_Guidance/ssl/guidelines.aspx May 20th 2023

Society Presentations at the Western Maritime Institute (May 2023)

Captain John Lewis

with

Jacqueline Jantzen

and with

Sterling King.

Plus

the Presentation of the

Third Bursary in Memory of

Captain Brian Silvester:

Captain Joachim Ruether with

Rodney Amos at Camosun College

The following is a letter received from a Spring 2022 Bursary recipient.

Dear NPESC Committee,
I would like to express my heartfelt gratitude for being awarded the Spring 2022 NPESC bursary. This bursary has gone a long way in supporting my academic and professional goals, and I am deeply grateful for this opportunity.
With this bursary, I was able to focus on my studies and gain valuable experience that will help me advance in my career.

Over my sea phase I had the opportunity to work on a ship traveling the Northwest Passage and in a dry dock in the Canary Islands. Working on a ship traveling the Northwest Passage was a unique and exciting experience. The opportunity provided me with valuable exposure to challenging and dynamic conditions, giving me the chance to develop my problem-solving and critical thinking skills. I was able to learn about tanker operations at ports without much facilities and all the environmental training that goes along with them. Seeing the untouched landscape and the mountains of Labrador were definitely highlights. Additionally, working in a dry dock in the Canary Islands enabled me to work on projects I wouldn't be able to otherwise and gain practical experience that will certainly help me later on. I am now very familiar with replacing pump bearings and mechanical seals as I believe I helped overhaul 8 pumps the first week.

I believe that the knowledge and experience I gained through these opportunities will help me achieve my career aspirations of becoming a Chief Engineer. I am grateful for this bursary, which allowed me much peace of mind and freedom to chose experience over financial burden.

Once again, I would like to express my sincere gratitude for this incredible opportunity. I promise to make the most of everything I've learned and work hard to achieve my goals.

Sincerely,
Kaylee James, BCIT Marine Engineering 23

Why B.C. Ferries cancellations persist and what needs to be done. B.C. Ferries' new CEO Nicolas Jimenez said a global shortage of marine workers is making it hard to recruit staff.

If you ask Jeremy Miller what life is like on Bowen Island, his answer is entirely dependent on whether B.C. Ferries is running on schedule.

It's just a 20-minute ferry ride between the idyllic island in Howe Sound and Horseshoe Bay in West Vancouver. But that commute to work or school has become more frustrating than traffic in the Massey Tunnel, with persistent ferry cancellations forcing some to consider moving off the floating suburb.

The *Queen of Capilano* prepares to dock in Horseshoe Bay.
PHOTO BY NICK PROCAYLO /00101385A

"This place that we chose for various lifestyle or family reasons is suddenly surprisingly becoming possibly unviable," said Miller, speaking to Postmedia by phone while travelling by ferry back to Bowen Island with his wife, Kendall, and their nine-month-old daughter, Sloane. "The ferry really is the lifeblood of our community. But one cannot function without a functional ferry. There's certainly an undertone of stress about that among residents."

The latest example was on the Saturday of the May long weekend when B.C. Ferries cancelled 12 sailings between Bowen Island and Horseshoe Bay from 3:30 p.m. onward because of a lack of staff.

Ferry cancellations are rippling across the entire ferry network, impacting major sailings between Tsawwassen and Swartz Bay and smaller routes from the gulf islands to the mainland and Vancouver Island.

In total, 1,304 sailings have been cancelled between January and May of this year, according to the most recent figures provided by B.C. Ferries to Postmedia. Of those, 555 sailings were cancelled because there weren't enough crew, 266 due to mechanical difficulties, 369 due to weather, and 114 for other reasons.

B.C. Ferries' new CEO, Nicolas Jimenez, acknowledged those cancellations are frustrating, but he pointed out they represent 1.7 per cent of the 74,105 sailings during that time.

"There's no secret we're in a difficult place as a business," said Jimenez, who took the helm in March after five years leading the Insurance Corporation of B.C. "We've done a lot in the last year to really address these critical staffing issues, but these problems won't go away — certainly not in a week or a month. It's going to take a while for us to rebuild the resilience that we might have once had a number of years ago in the business."

While Jimenez could not provide a figure for the number of current staff vacancies, the ferry service has job openings across almost all positions, including engineers, deckhands, terminal staff, food service workers, and cashiers.

B.C. Ferries has to maintain minimum staffing levels on all vessels, so if a deckhand or chief steward calls in sick, that could mean a last-minute cancellation for that vessel.

The ferry service has hired 900 employees since January but its bracing for a wave of retirements — between 450 to 700 marine-certified employees are expected to retire in the next five years, according to B.C. Ferries' March 2023 filing to its regulator, the B.C. Ferries Commissioner.

It estimates there will be 181 vacancies for marine-certified employees — the trained seafarers who operate vessels — in 2024.

"B.C. Ferries has prioritized the recruitment of licensed officers, but there has been a growing number of declined employment offers," the ferry service wrote to the commissioner. B.C. Ferries has also seen an increasing number of candidates turning down employment for seasonal and casual employment, depleting the pool of back-fill staff.

One main reason: the wages aren't high enough.

Wages have not kept pace with inflation and many ferry workers can't afford to live in the communities in which they work, said Paula White, vice-president of the B.C. Ferry and Marine Workers' Union, which represents 4,500 ferry workers.

For example, deckhands make $30.70 an hour, which is 25 per cent less than deckhands working for marine transportation company Seaspan.

White said the ferry service's approach to these problems has been akin to "patching a leaking ship."

Jimenez acknowledged B.C. Ferries must "address the issue of compensation." Starting in August, B.C. Ferries and the union will be negotiating mid-contract wage adjustments.

BC Ferry *Queen of Surrey* prepares to dock as 1,304 sailings have been cancelled between January and May of this year due to lack of staff, in Horseshoe Bay, B.C. PHOTO BY NICK PROCAYLO /00101385A.

B.C. Ferries is also grappling with a global shortage of marine workers, a problem rippling across ferry services in Washington state and Europe, Jimenez said.

B.C. Ferries is working to recruit licensed mariners from abroad, taking advantage of reciprocal agreements Canada has negotiated with other countries. For example, Jimenez said B.C. Ferries recruited 76 licensed officers from Ukraine since Russia's invasion of that country.

B.C. Ferries is also looking to modernize its check-in and boarding process at five major terminals, but Jimenez insists this isn't an effort to pare down the workforce. The company has submitted an application to the B.C. Ferries Commissioner asking for the green light to overhaul the current paper ticket system, which is labour intensive and can be easily bogged down if there aren't enough staff to collect the tickets.

The goal, Jimenez said, is to create a more efficient movement of people through the terminals to avoid "these big backups that create anxiety and sometimes safety issues."

White says management should focus on boosting wages, not automation.

"I'm disappointed this is something that they're choosing to invest in, particularly at this time, considering we don't have enough crews to make regular sailings happen," she said. "I think that, in my opinion, is a much higher priority."

Miller would like Jimenez to come to Bowen Island for a town hall meeting with residents. Bowen Island Mayor Andrew Leonard said he has met with Jimenez to discuss the service disruptions.

"He let us know that the staffing issues would likely continue into the future," Leonard said.

The May ferry cancellations, for example, left hundreds of tourists stranded on the island as municipal staff scrambled to help them find overnight accommodation and bring water to tourists waiting in the sun for a water taxi back to West Vancouver.

"It's been particularly challenging, and we do worry about what this portends for a busy summer coming up," Leonard said. "And then as well as the future for residents who rely on B.C. Ferries as a public transit service to get to work, to get medical appointments, to access amenities on the mainland."

Leonard said he knows people who have already moved away from the community of 4,200 because of the ferry insecurity.

"It is definitely affecting the livability and the quality of life for residents," he said.

kderosa@postmedia.com

https://vancouversun.com/news/local-news/why-b-c-ferries-cancellations-persist-and-what-needs-to-be-done-to-fix-it **June 16th 2023**

Have you got time to read an interesting article? If so, take a look at this: -

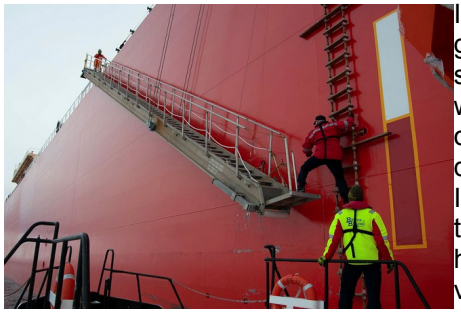
How to rescue the world's biggest cargo ships

https://www.bbc.com/future/article/20220530-how-to-rescue-the-worlds-biggest-cargo-ships

Bridge Resource Management – A pilot's perspective

By Capt. Halvard Grøneng, pilot. Norwegian Pilot Services

From boarding to berthing – our Bergen based author describes the interaction within the bridge-team and concludes that effective communication is key to safe navigation.



I see my next vessel looming on the horizon on the pilot boarding-ground, as the pilot-cutter navigates the choppy waves leaving sea-spray running down the windows only to be whisked away by the windshield wipers. What and who is awaiting me as I enter the bridge of this vessel? Will they expect teamwork, or will I have to make all the decisions by myself?

I asked the newly graduated pilot-trainees about what surprised them the most when they entered their pilot training. I did this at a course I held for them recently. The answer was that they never expected such variation in ships, people, and situations. This variation is hard to describe. Pilots in our region service most vessel types, virtually all seafaring nationalities, all kinds of equipment working and not working, and bridge teams ranging from 1 to 25 persons. It's really no wonder the trainees felt a bit overwhelmed. I experience as many ships and bridge-teams in a duty week as a mariner does his or her whole career!

It takes a certain type of individual to handle this variation in an unpredictable working environment, and the perception of this in the industry seems to have changed in the last decades. There has been a gradual transition in the role of the pilot to more integration into the bridge team due to the focus of Bridge Resource Management (BRM), and to the introduction of Electronic Chart Display and Information System (ECDIS) both operational and in a regulatory sense.

The pilot, just like the captain, used to be viewed as some kind of superhuman that could handle any situation that may arise, and take care of any problem while navigating and handling the vessel. However, over the last decades this notion has been reconsidered. As BRM dictates, a single team member's misconception should be corrected by the team. We are not as flawless as we seem to think.

And still, accidents occur with a pilot onboard. We cannot change the fact that under pilotage the margin of error decreases and the level of criticality rises due to narrow and shallow waters, traffic density, tight harbour operations with tugs involved among other things. What we can influence is how we communicate, exchange information, and coordinate the work of the bridge team.

"Ladder looks okay, ehh?" - the voice of the skipper of the pilot-cutter pulls me back from my musings. "Yes – looks good" and I begin my climb towards the bridge. As I enter the bridge, I try to get some kind of overview of the situation - people on the bridge, traffic around the vessel, the position of the vessel, the layout of the bridge equipment and so on.

gard

June 14th 2023

There is very much more to this article. It can be found at: -

https://www.gard.no/web/articles?documentId=35524572

For more information about Bridge Resource Management and Pilotage, see Gard's *topic page on Navigation*.

Captain Joachim Ruether with

Adam Sirk from BCIT

Recipient of a Spring 2023 Bursary

Measuring Ship's Speed

All nautical instruments that measure the speed of a ship through water are known as logs. In ancient times, mariners used to gauge how fast their ship was moving by throwing a piece of wood or other floatable object over the vessel's bow then counting the amount of time that elapsed before the vessel's stern passed the object. This method was known as a ***Dutchman's log***. By the late 16th century, sailors had begun using a ***Chip log*** to measure speed. In this method, knots were tied at uniform intervals in a length of rope and then one end of the rope, with a pie-slice-shape piece of wood (or "chip") attached to it, was tossed behind the ship. As the vessel moved forward, the line of rope was allowed to roll out freely for a specific amount of time, which was typically tabulated with a sandglass. Afterward, the number of knots that had gone over the ship's stern was counted and used in calculating the vessel's speed.

In *Seaman's Practice* (1637) the English navigator Richard Norwood recommended the use of a line knotted at intervals of 50 feet (15 metres) and a 30-second sandglass; knotted intervals of 47 to 48 feet (14.3 to 14.6 metres) and a 28-second sandglass were later adopted to accord with nautical miles of slightly different lengths.

Use of a log did not give an exact speed measure. The sailor had to incorporate several considerations:

- The amount of following sea
- The effect of currents
- Stretch of the line
- Inaccuracy in the time measurement—because ambient temperature, humidity and sea state affected the sandglass.

Frequent measurements helped mitigate some of these inaccuracies by averaging out individual errors, and experienced navigators could determine their speed through the water with a fair degree of accuracy. Because a log measures the speed through the water, some errors—especially the effect of currents, the movement of the water itself—could not be corrected. Navigators relied on position fixes to correct for these errors.
As early as 1688 an English instrument maker, Humphrey Cole, invented the so-called ***Patent log,*** in which a vaned rotor was towed from the stern, and its revolutions were counted on a register. Logs of this kind did not become common until the mid-19th century, when the register was mounted on the aft rail, where it could be read at any time.

Examples of ***Taffrail logs*** include those made by Thomas Walker and Son. Thomas Walker & Son were inventors and makers of nautical instruments in the 19th and 20th centuries. The firm made one of the most commonly used navigation instruments, the 'log' which allowed sailors to measure distance at sea, one of the main measurements used in nautical navigation. The firm was founded by Thomas Walker in Birmingham, England in the 1830s.

Thomas Walker and his son, Thomas Ferdinand Walker (1838-1921) developed the original log design into several improved versions. An example is the ***Walker Harpoon Log***, patented in 1861, which featured the inclusion of dials into the rotator, thereby reducing the total bulk of the instrument.

This important innovation added to the company's success.

Thomas Walker died in 1871 aged 67, leaving his business in the hands of his son, Thomas Ferdinand Walker. The younger Walker made a further fundamental improvement to the design of the Walker Harpoon Log by taking the dial out of the rotator and installing it remotely, on the side of the ship.

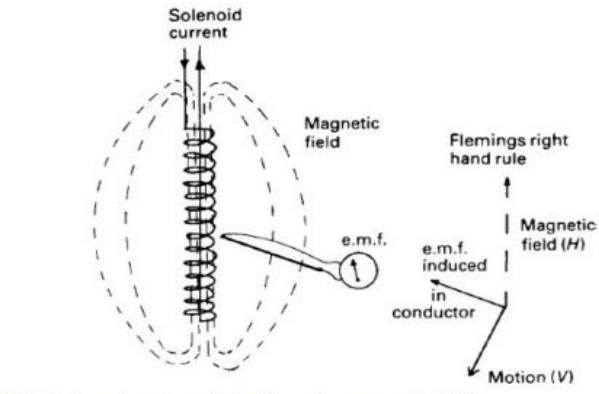
First known as ***'Walker's Taffrail Log***', it became officially named the ***'Cherub' log***. The Cherub log was designed so that the log did not have to be hauled in every time a reading was required – a highly significant development. Production of the Cherub log started in the 1880s with 400 sales in the first year, by ten years later they were selling around 2,000 per year.

This instrument is a recorder for determining distance travelled and thus ship's speed. It is made of brass with a ceramic dial, with the main scale marked from 0 to 100 miles and two inset dials marked from 0 to 1000 miles and 0 to 1 mile.
It has a fixing plate, on which it can turn, with which it would be attached to a suitable part of the ship, typically the taffrail, the rail at the stern of a ship. As a result, this type of log was often called a ***Taffrail log***. The recorder would have been connected to a rotor that was towed behind the ship. The revolutions of the rotor registered on the indicator, thus measuring the distance travelled.

For this model, 900 revolutions of the rotor registered as 1 nautical mile.
Thomas Ferdinand Walker (1837–1921) first patented the Cherub log in 1878. It was one of the first logs in which the recorder was placed on board the ship rather than being part of the rotor. ***The Cherub Mark III*** series proved to be very successful and was produced in great numbers between 1930 and 1994.

In 2002 Lilley & Gillie Ltd, manufacturer of magnetic compasses, acquired Thomas Walker & Son Ltd (Walker Marine),adding Walker's electromechanical speed logs and anemometers to the firm's list of products. The name continued to trade, as it had since 1838, under the brand name Walker Marine.

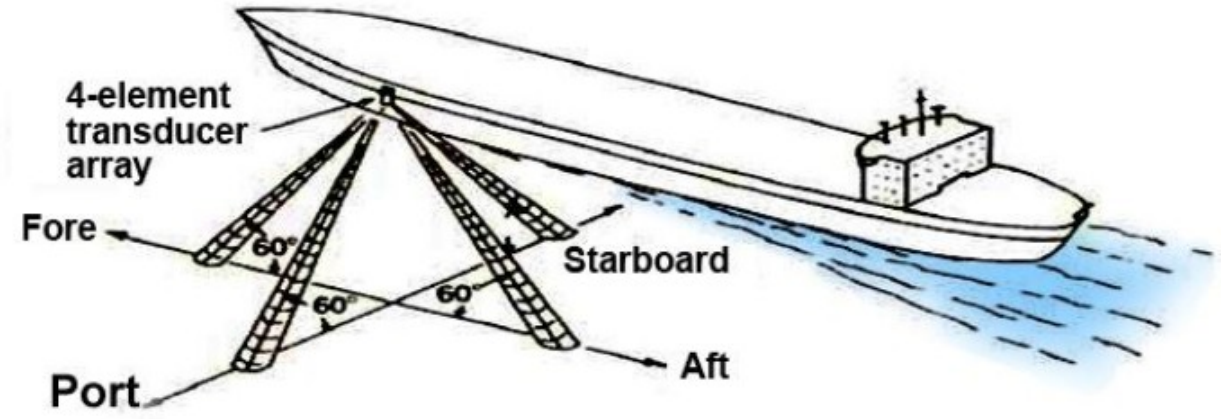
Though the patent log is still used to this day, in many instances, the most used however (especially on merchant ships) is the electromagnetic log. This is more reliable as there is no mechanism subject to breakdown. An Electromagnetic Log, sometimes called an "EM log", is an electronic sensor which measures the speed of a vessel through sea water. Like many other technologies, its name derives from the traditional chip log. It makes use of Faraday's law of induction by measuring the EMF induced in water moving through a magnetic field generated by the sensor.



Effect of moving a conductor through a magnetic field.

In recent years ultrasonic speed sensors have become available. These use two ultrasonic transducers—one forward, one aft—that send ultrasonic pulses through the water flowing past the hull. By calculating the time differential in pulse propagation from one sensor to the other, the device calculates the speed of the hull through the water.

Another very accurate maritime speed measurement comes from Doppler measurement, either derived acoustically with Doppler-Sonar —or with radio interferometrically by Doppler measurement of satellite signals, such as those from the Global Positioning System (GPS). However, most commercial GPS systems are not configured to operate in this mode.



Whatever the method used to determine speed it is worth noting that after all these years and advances in technology that today's, sailors, and aircraft pilots, still express speed in knots.

Submitted by Richard Smith.

De-risking the Carriage of Lithium-ion Batteries: At the heart of efforts to draw attention to the hazards inherent in transporting lithium-ion batteries, specialist freight insurer TT Club now urges debate leading to a balanced, yet realistic awareness of the dangers, and a united approach to enhancing their safe carriage. Improved regulatory clarity is required and auto manufacturers need to address transport safety issues more thoroughly.

Rapid development of battery technology and the uncertainties created by these developments, particularly concerning safety when the energy packs are being transported require the logistics industry to have a clear understanding of the dangers which can include fire, explosions and toxic gas emissions. Moreover, there needs to be increased efforts to minimize the risks, and if necessary, make sure there is an effective response to any catastrophic event.

Alarmist reports in the media can overstate the number of incidents involving electric vehicles. Indeed Peregrine Storrs-Fox, Risk Management Director at insurance Mutual TT Club points out that "Lithium-ion (li-ion) battery fires are not an everyday occurrence. But when thermal runaway does happen, the result is release of toxic gases such as carbon monoxide and hydrogen cyanide, a very high temperature fire and can spread very fast."

The release of toxic fumes may be the first alert, but fire with temperatures higher than 1,000degs centigrade can be reached in a matter of seconds and, as the mix of chemicals and metals ignites, devastation can ensue.

In keeping with its mission to extend awareness and achieve a united front, TT Club was delighted to be part of a forum of interested parties which was held recently in London. Much was revealed by the speakers and valuable debate ensued. "Supply chain players including ship owners, carriers, forwarders, terminal and port operators and insurers are engaged with these debates. Indeed, the maritime regulator IMO (International Maritime Organization) has its guidance for carriage of these batteries under serious review," says Storrs-Fox. "But we need to bring manufacturers of EVs and the batteries that power them actively into the debate. Their ambitions for the development of more

powerful, lighter and diverse battery cells must not be allowed to outstrip prioritizing safety concerns surrounding their future transportation around the globe."

Such concerns regarding the battery packs within electric vehicles (EVs) have been raised in the US and the National Transportation Safety Board (NTSB) has carried out a study. The forum heard that EVs were reported to have incurred fewer fire incidents than internal combustion engine (ICE) cars. However, there are a few provisos to be highlighted here – not least that there are far fewer electric cars on the road than ICE vehicles.

Secondly it is understood that newer batteries are less likely to ignite or explode than used batteries, effectively the older the li-ion unit, the greater the chance of an incident. As a result, it is not clear how the batteries will perform through the intended life, given that the switch to EV's is only now gathering pace and most battery packs are new.

Regarding the rapid spread of fire, Eva Mckiernan, the technical director at firefighting consultancy Jensen Hughes highlighted the dangers of thermal runaway as the most pressing issue after ignition. She explained that these energy packs are thermo-dynamically unstable. When the batteries are damaged, they can release hot and poisonous gases into containers or onto car decks of ro-ro ships and other vehicle carriers within seconds. When the batteries explode those extraordinary temperatures can be reached.

Of course, EVs are just one use for li-ion batteries, which can be found in a variety of goods including e-bikes and scooters, as well as computers and mobile phones. All of these goods are transported with batteries in containers. Whilst transported as new, it may be reasonable to expect appropriate packaging, although state of charge is variable, used and damaged batteries present considerable uncertainty for the transport supply chain.

About TT Club: TT Club is the established market-leading independent provider of mutual insurance and related risk management services to the international transport and logistics industry. TT Club's primary objective is to help make the industry safer and more secure. Founded in 1968, the Club has more than 1100 Members, spanning container owners and operators, ports and terminals, and logistics companies, working across maritime, road, rail, and air. TT Club is renowned for its high-quality service, in-depth industry knowledge and enduring Member loyalty. It retains more than 97% of its Members with a third of its entire membership having chosen to insure with the Club for 20 years or more.

Global Trade Magazine. June 22nd 2023

https://www.globaltrademag.com/de-risking-the-carriage-of-lithium-ion-batteries/

I was asked to send a photo of me and my instructor Al de Konick with my NPESC Certificate. Sorry it took so long, my life has been very busy since we spoke last! I did the ISET (Initial Service Entry Training) program with Canada Coast Guard, then immediately joined a ship! I have been working two weeks now and it's awesome! My dream has come true!!

Have a wonderful day!

Deanna Kent

(Recipient of a Fall 2022 Bursary)

The evolving role of the seafarer in a more digitalized and sustainable shipping industry

Over the past decade, digitalization has risen to a mega-trend in shipping. The calls for more environmentally sustainable shipping practices are growing louder, with decarbonization-driven trials and technologies resonating through the seaborne supply chains of many major charterers and operators worldwide. Serving as the backbone of global shipping, but standing at the forefront of this rapidly changing landscape, are the world's seafarers.

In light of International Day of the Seafarer 2023, we took the opportunity to speak with two of our seafarers, serving as veteran and recent recruit, on how the maritime revolution has evolved the modern seafarer.

Captain Robert-Dragos Valcica, a Klaveness veteran of 13 years, serves as Master aboard MV *Barracuda*. Cadet Mary Jane Enhambre Siy Chuan, an Electrical Engineer aboard MV *Barracuda*, has sailed with Klaveness for almost 1 year. Both share their thoughts on what they believe are essential skills and knowledge required in this new era, how they envision the seafarer of tomorrow, and share with us a personal experience that spotlights the significance being a seafarer in our rapidly changing world.

Navigating the digital seas: The advent of digitalization has equipped shipping with more capabilities when it comes to operational efficiency, some examples being navigation, weather routing systems, remote monitoring technology, and digitizing of records for more efficient storage and transfer of information. In addition, energy efficiency initiatives essential for spurring forward decarbonization of global shipping, increase the count. Klaveness Combination Carriers (KCC) currently has a number of such initiatives underway or under consideration in the fleet, each one requiring new competence and commitment.

Asked how the integration of these technologies has changed the role of seafarers, both remark how the advancements have triggered several transformations in the daily tasks and responsibilities of seafarers aboard. Capt. Valcica comments, "we have to be proficient in the use of various software, hardware, and communication systems, in addition to traditional navigation and maintenance tasks. We must also be familiar with the latest regulations and environmental standards and implement them onboard." Cadet Siy Chuan concurs, citing that growing environmental concerns means seafarers, "must continually upgrade our skills to keep pace with the evolving demands of the shipping industry."

Both are strong believers in the value that they believe the change has brought them and to shipping in general. Capt. Valcica adds, "the ability to identity and resolve potential problems in real-time has reduced the risk of accidents and improved safety standards," with Cadet Siy Chuan appreciating, "seafarers can embrace a more tech-savvy, environmentally conscious, and innovative approach to their responsibilities."

Cadet Mary Jane Enhambre Siy Chuan, Electrical Engineer

Skills of the modern mariner: KCC's fleet of combination carriers, being able to carry both dry and wet cargo, already require a unique skill set from our seafarers. With the introduction of new technologies aimed at improving both operational and energy efficiency, it is easy to see why the seafarer of today needs to be a versatile and adaptable professional ready to equip themselves with an expansive skill set. Capt. Valcica, a seasoned seafarer with Klaveness acknowledges this and comments that from his tenure, he believes skills of paramount importance today are digital literacy, environmental awareness, safety management, multicultural communication, and a commitment to continuous learning.

Cadet Siy Chuan, still a relatively fresh recruit, remarks, "I have already undergone a continuous journey of skill development, having recognized the importance of technological proficiency in our rapidly advancing industry". She outlines some examples of her self-initiated actions onboard to stay sharp, such as mastering the operating and troubleshooting of digital systems and equipment onboard.

Both highlight seafarers need to be aware of energy-efficient practices and environmentally sustainable measures in the shipping industry, commenting that for every new technology making its way onboard, the seafarer must be ready. While the prospect may appear challenging, both are encouraged to see it as an opportunity. They believe these skills will empower seafarers to, "better navigate the complexities of modern

shipping, implement sustainable practices, foster effective teamwork, and adapt to ever-evolving regulations and industry trends."

The seafarer of tomorrow: As technology advances with increasing pace (with Artificial Intelligence (A.I.) now beginning to push boundaries) and as shipping continues its journey towards net-zero, the role of the seafarer is destined to undergo waves of transformation.

Capt. Valcica envisions a future where seafarers embrace cutting-edge green technologies, optimize vessel operations for energy efficiency, and may be able spend more time working onshore as they collaborate with remote teams through digital communication channels. He suggests, "smart automation and digitalization will enable more streamlined operations," but points out that the seafarer of tomorrow will face new challenges, including cybersecurity risks and technical complexities. Capt. Valcica also adds that the implementation of the fuel of the future may require more extensive knowledge from seafarers and greater collaboration between stakeholders in the industry to ensure its success.

Cadet Siy Chuang supports this, acknowledging that to get there, "seafarers will need to enhance their digital and technological proficiency, focus on energy management, ensure environmental compliance, and adapt to evolving safety and emergency response measures."

Asked what opportunities they see for the seafarer of tomorrow, both believe we will see more opportunities for career growth and seafarers becoming more tech-savvy and sustainability-driven individuals. Capt. Valcica adds, "they will have the opportunity to take part in reducing the industry's greenhouse gas emissions and play a key role in helping to shape the future of shipping."

Capturing the essence: In light of International Day of the Seafarer and its theme 'Oceans Worth Protecting', we asked both to share a personal story from that they believe encapsulates the significance of being a seafarer in today's world.

Cadet Siy Chuang refers to a power surge as the vessel sailed through rough seas, with the clock ticking to restore normal power and maintain the vessel's stability. She comments, "this fuelled my motivation to continue my career in the maritime industry. It showed me the real-world impact of my work, ensuring the safety and operational integrity of the ship. The dynamic nature of the job, the opportunity to work with advanced technologies, and the camaraderie among the crew members inspired me to further develop my skills and contribute to a more sustainable and efficient shipping industry."

Capt. Valcica takes the opportunity to commend seafarers globally for their continued commitment and cites the COVID-19 pandemic as an example that has highlighted the vital role seafarers play and the challenges they face. He concludes, "some find fulfillment in serving a humanitarian need and supporting global trade, while others view their profession as an adventure and opportunity to explore distant lands and cultures. Whatever their motivations, seafarers remain an essential and integral part of the shipping industry, and their contributions are invaluable to society."

Conclusion: In this ever-evolving maritime landscape, seafarers hold a vital role. While a sailor in the past typically focused on operations onboard related to a safe voyage, cargo handling and maintenance of the vessel, the future sailor will now also stand at the forefront of shipping's decarbonization journey and be an operator of technological equipment driven to meet the future demands of owners, operators, regulators, and the general public. Through their embracement of new technologies, acquisition of essential skills, and unwavering dedication, seafarers will be instrumental in guiding the industry toward safer and greener horizons.

To get there, building confident and self-secure crew with in-depth knowledge will be key. The activities of KCC and Klaveness Ship Management (KSM) are of such nature, that there is no off-the-shelf-crew that can meet those requirements. As with Capt. Valcica and Cadet Siy Chuang, we take pride in building them up through our Cadetship – (Officers) and Manpower Development Program (Ratings) initiatives and join the maritime industry in extending our sincere gratitude to both, as well as well seafarers globally, on this International Day of the Seafarer 2023 and its theme 'Oceans Worth Protecting'.

HELLENIC SHIPPING NEWS WORLDWIDE
Online Daily Newspaper on Hellenic and International Shipping
Leaders in global shipping news for over 10 years

Source: Klaveness. 27/06/2023
https://www.hellenicshippingnews.com/the-evolving-role-of-the-seafarer-in-a-more-digitalized-and-sustainable-shipping-industry/

Handling of cargo samples – Skuld: **Cargo samples hold significant importance in protecting tanker ship owners against potential cargo claims, necessitating the utmost care in their proper handling. This article delves into some critical aspects related to sampling.**

Type of sample bottles: When it comes to which type of bottles to be used, there are a few considerations to keep in mind. Pure acids or basic cargoes (e.g., sulphuric acid, phosphoric acid, or caustic soda) should be kept in plastic bottles (type HDPE). The reason for this is that such products will deteriorate glass over time resulting in the product containing increased levels of silica (e.g., sand or glass), but also because the bottles will become brittle and may break easily after a period of storage.

Inhibited and light sensitive cargoes are often stored in amber bottles. But if the samples are stored in dark sample lockers, then transparent bottles can be considered. Furthermore, quality complaints typically concern parameters that are not affected by light.

The downside of using plastic and amber (or dark) bottles is that they are not transparent and visual deviations (colour, water, particulate matter) in a manifold, foot or final sample are therefore not easily observed by a ship's crew assessing these samples. For immediate visual assessment, which is vital especially when assessing the manifold sample, transparent glass bottles should be used.

For vegetable oils (and other food grade products) transparent plastic bottles should be used (of a type which doesn't shrink under the effect of heated cargo). The reasons are food safety, and to prevent bottles from breaking inside the tank whereby food grade products become contaminated by glass. These cargoes may, however, be sampled in glass bottles as long as drain samples are drawn (manifold or recirculation), i.e., as long as the glass bottle is not lowered into the cargo itself.

Labelling and log keeping: Proper labelling of the samples is crucial. In some cases, vessels follow the correct sampling procedures but have poor labelling practices, such as: -

- including excessive information except for the essentials,
- using only a permanent marker to write the tank number without proper labels,
- having unreadable labels.

Such labelling issues weaken the value of samples as evidence in joint witness analyses.

A label should as a minimum contain the following information: -

- a) Name of vessel and voyage number
- b) Type of cargo, port of loading and discharge
- c) Details of sample (manifold, final etc.)
- d) Date and name of the person who took it.

To record the sampling in the Port Log can also serve as evidence. If the samples are sealed, then the seal number should be recorded as well.

Retention time: A concerning trend we see is that shipowners are shortening the on-board retention period of samples, disposing of them before a claim is brought against the vessel. This has led to costly settlements in cases where counter evidence could have been presented through retained samples. While sample lockers may be overfilled, it is crucial to maintain proper retention periods for potential disputes which in most cases are twelve months from the date of discharge.

Cargo surveyors: It is important to clarify the role of cargo surveyors and the misconception that issuing Letters of Protest for "failure to draw samples for the vessel" relieves the vessel from the responsibility of sampling or being involved in the sampling process. Cargo surveyors represent the cargo interests and follow their instructions, which may differ from the vessel's interests. This can result in a lack of samples or disagreements regarding the representation of available samples.

Occasionally we experience ship owners who refrained from sampling by the ship's crew because 'unilaterally drawn and unsealed samples did not bear any value as evidence'. It is essential to remember that all samples can serve as evidence and samples taken by a ship's crew are often the only evidence there is. Should a discussion regarding authenticity of samples persist, most products allow for fingerprint analyses, which would confirm that the samples are indeed representative.

By considering these recommendations and addressing the challenges related to handling of samples, the sampling procedures on board can be improved to ensure accurate monitoring of cargo quality and to secure evidence. https://www.skuld.com/topics/cargo/liquid-bulk/handling-of-cargo-samples/ **June 28th 2023**

Scholarship program: The PPA is thrilled to announce the creation of the Captain Kevin Obermeyer scholarship in recognition of his dedication to the marine industry during his exemplary 23-year career with Pacific Pilotage Authority. This scholarship was presented by Dhaval Shah, Associate Dean of the BCIT marine campus, at the Change of Leadership Ceremony held on June 15 to honour Kevin and recognize the leadership transition to PPA's new CEO, Julie Gascon. The scholarships will recognize deserving students in the BCIT Nautical Sciences Program and the Bridge Watch Rating Programs with a total of $15,000 for scholarships and awards annually. The Bridge Watch Rating entrance awards will foster inclusivity and diversity within the marine industry by giving preference to students of traditionally underrepresented backgrounds. Kevin has always been a strong supporter of diversity initiatives and developing the next generation of mariners. We cannot think of a more fitting way to recognize his leadership while at the helm at Pacific Pilotage Authority.

#pacificpilotageauthority Pacific Pilotage Authority - Administration de pilotage du Pacifique

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Bulk carrier safety: be aware of vessel structural limitations

Not long ago, a member's vessel was detained at load port because the density of the solid bulk cargo being loaded exceeded the maximum allowable cargo density for that particular vessel. Recently, we were also approached by another member because the Master of a capsize bulk carrier had refused charterer's request for alternative hold loading due to serious concern about the ship's safety.

Read the rest of this article at: -
https://www.gard.no/web/articles?documentId=34599269

Did you sail with Clan Line? If so, this may interest you: -

Clan Line Reunion 2023

The annual Clan Line reunion will take place at The Liner Hotel in Liverpool on Wednesday 04 October 2023. The Clan Line reunion is one of the last remaining reunions to be held by a former major UK shipping company.

The event is open to and welcomes all former employees, spouses and partners, both sea-going and shore-staff of the British and Commonwealth Shipping Company. If you sailed in any of the British and Commonwealth Shipping Company line's vessels, or meet the above criteria, you are welcome to attend the reunion.

The reunion consists of a three course lunch, bar refreshments and raffle and is generously supported by the Cayzer Trust Company, with in excess of a hundred former employees, spouses and partners attending last year's event.

We look forward to welcoming all our former shipmates, especially new and first timers to this year's reunion. No walk-ups, you have to be registered on the invitation database to attend.

For further information regarding this year's reunion and to be added to the invitation database please contact Catharina Smith at Cayzer House. Email: Catharina.Smith@Caledonia.com Tel: 07740 403037.

We look forward to seeing you all there.

Dave Tyler
Clan Line Reunion

Burnt-out Car Transport Ship Limps Into Dutch Port: A burnt-out freighter carrying thousands of cars was towed into a Dutch port on Thursday, as an environmental disaster was averted more than a week after the ship caught fire off the coast.

Fremantle Highway entering the Dutch port of Eemshaven

Tugboats brought the *Fremantle Highway* to the northern port of Eemshaven, where dozens of spectators lined a sea wall to watch the scorched, blackened hulk move slowly into the harbour.

One sailor died jumping from the ship and 22 others were rescued after the vessel caught fire on July 25 while carrying 3,700 vehicles, including nearly 500 electric cars and many luxury autos.

Dutch Infrastructure Minister Mark Harbers said the fire appeared to be out, adding that there was "no question of any outflow of liquids or other matter. The owner of the ship remains responsible for the further handling of the cargo and everything that goes with it."

The ship is expected to remain at the port until October while salvage operations are carried out on the boat and to remove the cars, Harbour Master Pieter van der Wal said.

"I am very happy that it all worked out," he said.

Port workers later stacked a wall of yellow shipping containers around the moored ship, hiding it from view, an AFP journalist said.

The Panamanian-flagged freighter, which was travelling from Germany to Egypt when it caught fire, is owned by Japanese firm Shoei Kisen Kaisha and was being chartered by Japan-based K Line.

The blaze had raised the spectre of an ecological disaster on the nearby Wadden chain of islands, an area spanning the Netherlands, Germany and Denmark which has been declared a UNESCO World Heritage Site.

The fire-stricken ship was carrying more than 3,700 vehicles including almost 500 electric cars.

While the situation had been largely under control for several days, bad weather in the North Sea in recent days raised further concerns it could leak oil or even sink while being towed to port.

"This time the Wadden Sea has escaped a major environmental disaster," local environment group the Wadden Association said in a statement.

"However, we continue to be very concerned about shipping that takes place north of the Wadden Islands."

Hundreds of shipping containers fell off one of the world's largest cargo ships after a storm in the same area in 2019, littering swathes of pristine coastline with plastic.

The cause of the fire on the *Fremantle Highway* remains unclear, although the owner said one of the electric vehicles on board may have been the source.

The blaze forced several members of the all-Indian crew to jump overboard from heights of up to 30 metres (100 feet), including the man who died.

A number were taken to hospital suffering from smoke inhalation or injuries from the fall.

The freighter was carrying 3,783 new cars, including 498 electric vehicles, K Line said.
They included BMWs, Mercedes, Volkswagen, Porsche, Audi and Lamborghini brands, with the total loss likely to exceed 300 million euros ($328 million), Dutch news agency ANP reported.
© Agence France-Presse August 3rd 2023
https://www.barrons.com/news/burnt-out-car-transport-ship-limps-into-dutch-port-6be4eb54

Fremantle Highway reinforces the Questions that *Felicity Ace* raised about BEV Transportation.

On February 16, 2022, a fire broke out inside the *Felicity Ace*. This roll-on/roll-off (RoRo) cargo ship was carrying 3,965 cars from the Volkswagen group to the US. Several battery electric vehicles (BEVs) were also inside, which made Captain João Mendes Cabeças comment it was really hard to kill the fire. As the ship capsized and sank, it was never determined what caused the blaze. We are now seeing a similar event with the *Fremantle Highway* – and the same questions the *Felicity Ace* posed.

If you are not aware of the Japanese RoRo cargo ship, the *Fremantle Highway* left the Bremerhaven port in Germany bound for Singapore. On July 26, when it was close to the Dutch island of Ameland, a fire broke out inside the vessel. Unlike the *Felicity Ace*, one member of the *Fremantle Highway's* crew died. Nobody talked about what killed the seafarer, but there are reports of an explosion on the ship and that 7 of the 25 crew members had to jump from the boat. Considering how tall these vessels are, the sailors that jumped hit the water at speeds of around 130 kph (81 mph), which can be fatal. That is another possible cause of the crew member's death. Sal Mercogliano, from the "What is Going on With Shipping" YouTube* channel, said the fall was what killed this sailor. Although he seems to be a reliable source, we have yet to confirm that.

*** See the videos at: https://www.youtube.com/channel/UCT_yBgKSiwb3WP4ACPnF5nA**

The *Fremantle Highway* was carrying 3,783 new cars, and 498 of them were BEVs. At first, it was said that the fire was caused by one of these electric cars, but the Dutch Coast Guard denied that was for sure. At this point, that is the least of the concerns the whole thing presents. After all, the fire could have started for any reason. It is having BEVs on board that makes everything more complicated. If these vehicles are affected, the fire will be almost certainly out of control until the battery packs burn to the ground.
The reason for that is chemical: the ternary cells that are used in most battery packs are composed of oxides. When they burn, they release the very oxygen that keeps fires alive and which firefighters try to avoid with water, carbon dioxide, dry chemical, foam water, or any other means that "cut communication" between the gas and whatever is combusting. This is why blazes involving BEVs are extremely difficult to kill. Now imagine that multiplied by 498. How will RoRo ships deal with that danger in an effective way?

Read much more at: -
https://www.autoevolution.com/news/fremantle-highway-reinforces-the-questions-felicity-ace-raised-about-bev-transportation-218878.html

Also read: Stream Marine Training calls for urgent update of STCW fire safety training to cover battery fires following *Fremantle Highway* fire | Hellenic Shipping News Worldwide at: -
https://www.hellenicshippingnews.com/stream-marine-training-calls-for-urgent-update-of-stcw-fire-safety-training-to-cover-battery-fires-following-fremantle-highway-fire/

This week, the Chamber of Shipping presented bursaries to top BCIT students at at the college's Marine Campus in North Vancouver. Ashley Obeck received the award for her academic achievement Nautical Science program, and **Landon Wilson** was awarded a bursary for his Marine Engineering program. There were 16

graduates in attendance, 10 students from the Nautical Sciences program, and 6 from the Marine Engineering program. Many of the graduates are already employed with Canadian shipowners and are looking forward to adventures to follow. The BCIT Marine Campus has opened up "naming" opportunities for its classrooms, simulator and training labs, and other student areas. This is an opportunity for organizations to support marine educational and training spaces with new technology, tools and learning effectiveness. Contribution will be used to add advanced training simulators, training tools, course development, scholarships and other resources for the students, and will especially benefit mariners from underrepresented group (Indigenous, gender diverse, women and new immigrants) all leading to supporting Canada's Marine Transportation system. This philanthropic participation will be made visible by formal recognition by BCIT with naming ceremony. **Chamber of Shipping Weekly Newsletter. August 4th 2023**

For more information contact BCIT Marine Campus Associate Dean, Dhaval Shah: dhaval_shah@bcit.ca.

The Vancouver Transportation Foundation Scholarships

The Nautical Institute
British Columbia Branch

Vancouver Transportation Foundation
M.P.O. Box 5239, Vancouver, B.C. Canada, V6B 4B3
www.vancouvertransportationfoundation.org

This year $13,250 was made available to Nautical Science students in Vancouver Transportation Foundation Scholarships administered by the BC Branch of The Nautical Institute.

Following are the successful applicants: -

Jacqueline Jantzen & Jaime Prussin (both from the Western Maritime Institute). Melissa Blake, Caue Longhi Canelli, Liam Colbourne, Rishi Mayer, Tyler McLennan, Christine Mehain, Tasha Niver, Ashley Obeck, Kishan Parhar, Superv Paul Singh, Adam Sirk & Chris Volkers (all from BCIT).

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.

Please make your cheque payable to the NPESC and mail it to: -

Nautical Professional Education Society of Canada,
3648 Glenview Crescent, North Vancouver, B.C. V7R 3E8

Thank you.
Contributions to the NPESC are tax deductible. Charitable Registration # 1039049-20
Do you want to know more about the Society? Take a look at the website: http://npesc.ca

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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

The Nautical Institute
British Columbia Branch