

SEATIMES

The Newsletter of the Nautical Professional Education Society of Canada

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



January 2018

Facebook: Have you looked at The Nautical Institute BC Branch pages on Facebook?
You will find them at <https://www.facebook.com/nauticalinstitutebcbranch/>

The Second Annual NPESC Christmas Party was held on Saturday, December 16th at the home of Joachim and Helga Ruether in North Vancouver. It was a potluck affair, which worked well. A good time was had by all.

Visitors to the house included Ed & Wendy Monteiro, Richard & Karen Smith, Don & Ann Tranter, John & Lyn Roberts, Brian Johnston, Terry Stuart and David & Joan Whitaker.

Terry Stuart is the President of the BC Supercargoes' Association, which has been so generous to the Society in its efforts to support nautical students in British Columbia.



Bursaries/Scholarships: 2017 was a very successful year for the British Columbia Branch of The Nautical Institute (NIBC) in the support of students at nautical schools. Twelve students received awards that added up to \$15,400.

Through an agreement with the Vancouver Transportation Foundation the NIBC was able to award six BCIT Nautical Science students a total of \$8,000.

The Nautical Professional Education Society of Canada (NPESC), founded in 1995 by members of the NIBC, presented four awards totalling \$6,000 with funds generously donated by the BC Supercargoes Association supplemented by income from the NPESC Endowment to the Vancouver Foundation. Three of these awards went to Cadets at the Marine Campus of the British Columbia Institute of Technology (BCIT), including one Marine Engineering student and two

Nautical Science students. The fourth went to a student of the Western Maritime Institute on Vancouver Island.

For the awards mentioned above eligible students competed by making the appropriate application and supplying documents that included references from vessels on which they had sailed, a one-page budget, and a letter describing their experience and their aspirations. Awards Committees met to appraise the merits and needs of all the applicants to select the successful candidates.

The NPESC also made awards of \$700 each to two students at BCIT, one to a Nautical Science Cadet and the other to a Marine Engineering Cadet (although the Engineer Cadet will not receive the award until returning from sea early in 2018). In this case the faculty at BCIT selected the recipients. These funds were generated from the income of the NPESC Endowment to the BCIT Foundation supplemented by donations to the NPESC.

What are Chinamax Ships? Classifying vessels after port or harbour facilities is a popular and common norm in the maritime domain. Chinamax is a classification of ship type based on the dead weight tonnage or carrying capacity of bulk carriers. Often classed under the ambit of VLOCs (Very Large Ore Carriers), the Chinamax ships are also synonymously tagged as Valemax vessels. Although not an official categorization, Valemax ships gain their name and reputation from their engaging company, the Brazilian shipping conglomerate Vale.



Brazil has been a key operator since the initial heydays of ore supplying operations to China with the Vale conglomerate strongly helping to address this demand. Although initially the most commonly utilised vessels to supply ores to the Oriental nation were the Capesize ships, in the year 2011 the company came up with its first purpose-built ore carrier ships, which came to be referred to as Chinamax ships and later on as Valemax ore carrying vessels.

The need to cater to Chinese demands for mass quantities of ore-based cargo in a cost-efficient way facilitated the development and rise of Chinamax vessels. Chinamax ships were thus primarily and solely intended to ply between Brazil and the various Chinese harbour facilities, to provide the required mass quantities of ores in the least time-period possible. Presently, just as the ore-based trade industry is not restricted to Brazil and China, even the utilisation of these bulk ships is not restricted only to the Chinese port and harbour facilities.

The categorisation of these bulk ships thereby entails to include all those harbour and port facilities that offer a faster unloading capacitance for the bulk ore-based cargo. Unlike other vessels' classifications that are named for the meshing entryway limits set by authorities of important international water conduits, these bulk carrier ships are stipulated to certain pre-set dimensions and are amongst the world's largest bulk carriers operating presently.

- The Chinamax vessels have a DWT (Dead Weight Tonnage) of up to 400,000 tonnes
- These vessels measure about 360 metres lengthwise with a breadth of about 65 metres and a draft of about 25 metres
- About 35 vessels are expected to be launched by the Vale conglomerate under the Chinamax class of vessels in the year 2013

Problems Surrounding Chinamax Ships. Although the utilisation of Chinamax vessels bodes well in terms of management of time and high economic returns per voyage, owners and operators of smaller-sized bulk carrier ships feel that their returns have diminished.



Another aspect dimming the sheen on the efficiency of the largest bulk carriers is that of the number of port facilities that can cater to this variance of bulk cargo carrier.

While these are indeed well contested points, maritime experts believe that the usage of these bulk carriers will help to streamline the maritime ore-based cargo operations like no other previous yardsticks.

<http://www.marineinsight.com/types-of-ships/what-are-chinamax-ships/> July 22, 2016

CBC: LAND AND SEA NETWORK - HARBOUR PILOTS

DESCRIPTION: □ The remarkable history of the people who guide ships coming in and out of Maritime ports.

Watch the video – turn up the sound. Duration: 22:26

<https://watch.cbc.ca/land-and-sea-network/season-17/episode-8/38e815a-00d6f92a096>

The Tricky, Terrifying, Tedious Work On A Tugboat Barge: From shore, tugboats pushing long barges up and down the Northwest's biggest rivers seem to move in a sort of slow-motion dreamtime.

"It's relaxing," said [Tidewater Barge Lines](#) Captain James Fletcher. "The Snake River canyons are beautiful. During part of the year they're green, and as summer comes along they get more brown. It's just a different kind of beauty."

Fletcher and his deck engineer, Tim Johnson, make up half of the two-team crew that pilot a Tidewater tug everyday — six hours on and six hours off — for 15 days straight every month of the year. For a good portion of the 360 miles between Lewiston, Idaho, and Vancouver, Washington, Fletcher can enjoy the beauty and natural history of these big rivers. On this day, it was the Snake between Boyer Park and Almota.

"The river's carved into this — you know this whole thing," he said, gesturing to the steep, sheer canyon walls looming above.

Clearly, Fletcher enjoys his work. It's a job he's been doing for more than 30 years and a vocation he shares with his father, uncles and cousins who also spend their lives pushing the loads of wheat, corn and other products that make the Columbia River the third-largest grain export corridor in the world.

But being a tugboat captain is also a classic example of a job with long hours of tedium, punctuated with moments of terror. If the gruelling schedule and minimal sleep weren't enough, there's also manoeuvring through tricky locks, hidden navigation channels and unpredictable currents.

One channel at the bottom of the Snake River's Ice Harbor Dam is about half the size of a normal navigation channel.

Tidewater pilot Darren Smith gives it a "10 out of 10" for difficulty:

"It's 300 feet wide and our tow is 84 feet wide. So it's a narrow channel."

Smith referred to a navigation screen as he waited at Ice Harbor for the lock to drain.

The screen looked deceptively like a video game and showed the "tow" — the 105-foot tug pushing two football fields of barge — blinking just above a placid channel marked with a series of tiny red buoys. But these buoys are more than suggestions.

"When I was training, everybody told me you don't want to crowd the buoys because they're sitting in shallow water and they sit on a shelf," Smith said. "They actually drilled and blasted and cut [the channel] with dynamite."

The slim margin of error is made exponentially harder when the river runs high and the spillways at Ice Harbor Dam gush full-blast at the tow as soon as it exits the lock.

"Today they are doing 86,000 cubic feet per second, which is a fair amount of water for this time of year. The highest I've seen it is a little over 200,000 and when it gets that high we take one barge at a time," Smith said.

Those 86,000 cubic feet per second — or 5.3 million pounds of water per second — greeted the tow as the big guillotine gate of the Ice Harbor lock lifted.

"You definitely want to be paying attention when you come out of here," Smith said with a nervous laugh.

So began 7 miles of white-knuckle navigation through the cut.

Smith has eight years as a pilot under his belt and handled the difficult passage without breaking a sweat.

Once the Snake flowed into the mighty Columbia at Pasco, Smith, who grew up near Astoria, settled back for another scenic stretch on what he considers his home river.

"I do feel like this is my river, definitely," he said. "And you know when I'm home in my off time, I'm fishing in the lower river and spending time on it, even when I'm not at work. I love it."

When Tidewater tug Captain James Fletcher is working long hours pushing huge barges up and down the river, he occasionally writes poetry. Here's one he shared with us about contending with daredevil kiteboarders on a windy day: -



Exiting the Ice Harbor Lock.

You will have to click on this link to hear that poem and to watch the video of the TV broadcast.

<http://www.opb.org/television/programs/ofg/segment/tug-boat-barge-columbia-snake-river/>

The Sino-American Cooperative Organization (SACO): Many people do not realize that China was an important ally of the United States during World War II. Not only was China a vital ally in the battle against the Japanese, but the Chinese theatre was one of the most critical -- and yet least known -- of the entire war. An obvious question is: *What was the U.S. Navy doing in China during World War II?* There are several answers to this question.

The SACO "What-the-Hell?" Pennant: This patch from World War II includes the SACO "What-the-Hell?" pennant. The American SACO commander during WWII, Milton Miles, created the pennant in 1934 when he was a junior officer on the destroyer *U.S.S. Wickes* in the Pacific Ocean. Occasionally during tight manoeuvres, one of the ships in the fleet would do something unexpected and, during such instances, Miles wanted to send a pennant up the mast saying "What the Hell?" Miles asked his wife "Billy" (Wilma) to create such a pennant without using obscenities. Billy suggested using characters like exclamation points, saying that when newspaper writers wanted to use an obscenity, they did the same. Soon afterwards, Billy created a pennant that included question marks and exclamation points.

Miles enjoyed using the pennant for the next several years in light-hearted situations. However, in 1939, two years before the U.S. entered World War II, the pennant proved to be useful in a potentially serious situation with the Japanese Navy. Miles was skipper of the destroyer *John D. Edwards* that August and was ordered to Hainan Island, off the coast



of China, where the Japanese Navy was threatening a coastal village, including American missionaries. When Miles arrived at Hainan, he saw several large Japanese naval ships bombarding the village. The Japanese flagship hoisted a flag warning the American destroyer to leave, which put Miles in a quandary, since his orders were to protect the American missionaries in the village. After considering the situation, Miles decided to ignore the Japanese threats and hoisted a pennant of his own -- his "What-the-Hell?" pennant.

Upon seeing the American destroyer hoisting a pennant, the Japanese halted their bombardment, giving Miles time to nestle his destroyer between the Japanese Navy and the village. The Japanese commander was puzzled about the pennant, though, since it wasn't in any of the Japanese code books, but he decided to err on the side of caution and backed the Japanese fleet away from the village. Milton Miles went ashore that afternoon, gathered up the missionaries, and departed the following morning. The Japanese Navy, meanwhile, sat offshore, still wondering about the meaning of the curious pennant.

Throughout World War II, Milton Miles' "What-the-Hell?" pennant was the unofficial emblem of SACO, often found flying at SACO camps throughout China.

SACO: One of the most interesting stories about the Chinese theatre in World War II involves the **Sino-American Cooperative Organization**, also known as SACO. SACO (pronounced "socko") was a unique and unprecedented joint military effort between the U.S. and the Chinese Nationalist forces during World War II. It consisted of about 2,500 Americans, mostly from the U.S. Navy and Marines, who lived, led, trained and fought with tens of thousands of Chinese Nationalist troops in China. Often stationed behind enemy lines and hundreds of miles from supplies, they were incredibly brave and resourceful.

Many American SACO soldiers totally immersed themselves in Chinese culture: they lived in Chinese huts, spoke Chinese, ate Chinese food, and began to think "the Chinese way." Together, the American and Chinese military forces effectively battled the Japanese in China from 1943 until 1945. This was the first and only time in U.S. history that an American military unit had been completely integrated into a foreign military force and placed under the command of a foreign leader. SACO was an amazing and unique military unit -- and it was also one of the most effective combat forces in World War II.

SACO was jointly led by the American U.S. Navy Commander (later Vice Admiral) Milton E. Miles and by China's General Tai Li (pronounced "die lee"), who was, at that time, in charge of China's version of the C.I.A. These two men forged a friendship that transcended the suspicions held by colleagues and superiors on both sides. The U.S. portion of SACO, which Miles commanded, was also known as Naval Group China.

INTERNATIONAL FLAGS AND PENNANTS									
SIGNAL FLAGS					HOMING PENNANTS				
Alpha	Bravo	Charlie	Delta	Echo	1	2	3	4	5
Foxtrot	Golf	Hotel	India	Juliett	6	7	8	9	0

<https://www.delsjourney.com/saco/saco.htm> <https://ospreypublishing.com/the-rice-paddy-navy>
http://www.saconavy.com/what_the_hell_flag.htm

US Navy turns on AIS – Useful Tool, Band-Aid or Both? Following the recent collisions between US Navy destroyers and merchant ships, various internet sites posted the AIS tracks of the collisions. Well, they posted half the AIS tracks anyway. The merchant ships used AIS while the Navy did not. While US Navy ships have AIS transponders onboard they do not transmit their positions nor apparently do Navy crews regularly consult the receivers showing the location and course of other ships. It was possible to track merchant ships' courses but not the destroyers'. That now appears to be about to change. The Navy appears ready to finally switch their AIS transmitters on.

If the acronym AIS is not familiar, the Automatic Identification System (AIS) is an automatic tracking system which broadcasts a ship's unique identification, position, course, and speed to other ships close by. AIS is required by the SOLAS (Safety of Life at Sea Convention) for almost all commercial ships. Use by military vessels is optional.

There are obviously circumstances where a naval vessel broadcasting its position might be a very bad idea. On the other hand when navigating in extremely crowded waterways, being able to easily see and be seen by other traffic may be a good thing. The USS *Fitzgerald* and the USS *John McCain* both were in collisions while operating without AIS in the middle of the night in the highly congested approach to Tokyo harbour and the Strait of Malacca near Singapore, respectively.

Recently, Secretary of the Navy Richard V. Spencer and Chief of Naval Operations Adm. John Richardson faced intense questioning when they appeared before the Senate Armed Services Committee earlier this week. Richardson suggested that part of the problem is that the US Navy ships are, by design, hard to see. Stealth technology results in ships with smaller radar profiles and even the haze gray color scheme decreases the ships' visibility to other vessels.

USNI quotes Richardson saying, "We design our warships to have a lower radar cross-section. Some are designed to be very low. That degree of stealth makes us more effective from a warfighting standpoint."

But this stealth also imposes a burden on Navy crews to understand non-threatening marine traffic will have difficulty recognizing the size, location, and speed of Navy ships, Richardson added. Crews need to be more like a "defensive driver."

A quick fix, Richardson said, is now the surface fleet is supposed to use its automatic identification system – AIS – when in high traffic areas. While the Navy has for years had AIS onboard, Richardson said the system was rarely used.

Turning on the AIS systems will, no doubt, provide an additional tool to US Navy officers in avoiding collisions, but does it really address the larger problem? AIS will make US Navy ships more visible to merchantmen. If properly used, it should also make it easier for navy ships to avoid hitting other ships. That being said, the two destroyers who were recently in collisions have some of the most sophisticated technology ever developed, designed to target incoming missiles. Nevertheless, both ships proved incapable of missing two large and relatively slow merchant vessels. Both destroyers are faster, more manoeuvrable and possess advanced radar and electronics. AIS may help, but it is indeed a "quick fix" and little more than a Band-Aid on a much larger wound.

Sept 22 2017 by Rick Spilman

<http://www.oldsaltblog.com/2017/09/us-navy-turns-ais-useful-tool-band-aid/#more-47674>



Crowther does it again!! Tony Crowther, the Society's first Treasurer and first Life Member, is also a member of the "Friends of Empire. For more than 10 years the "Friends" of Empire have met monthly for a pub lunch. What was "Empire" and who are the "Friends"?

"Empire" was Empire Stevedoring. It was engaged in stevedoring ships with grain and general cargoes in the ports of British Columbia. In 1970 when container ships began arriving in Vancouver, Empire was selected to operate Centerm, the first container terminal in the Port of Vancouver. In 1975 its operations moved to the larger and newly opened Vanterm. In the nineties the company's name changed to "Terminal Systems Incorporated". Then it began operations at an additional terminal, Deltaport. Today it operates under the name of "Global Container Terminals"



<http://globalterminals.com>.

The "Friends", mostly retired now, are people, union and non-union, who worked for Empire Stevedoring or were associated in any way with that company. Some were ship's agents, some worked for transportation companies that served the container terminals. The group includes a Ship Safety Inspector and someone from a competitive stevedoring company.

You may recall that Tony sold two chairs that once belonged to Jack Hopkins, the President of Empire, and he donated the proceeds to the NPESC (see Seatimes March 2012).

At the December 2017 lunch of the "Friends of Empire", Tony held a raffle for a never-been-used 25-year old "Empire" cap. Tickets were \$5.00 each. At the end of the lunch, a ticket was drawn and the winner was Brian Johnston. Brian told Tony he did not really need the hat, so then Tony auctioned it off. There was just one bid and the hat went home with Peter Senior, at one time the President of Empire Stevedoring. Tony then presented the proceeds of the raffle and auction, \$190.00, to the NPESC.

Eighteen were at this lunch including 2 who had been the President of Empire and 7 who had held Managerial/Supervisory positions with Empire. Other statistics show that 2 were Fellows of The Nautical Institute, 6 were Members of the Master Mariners of Canada, 7 had Masters Certificates, 1 had been the President of The Terminal City Club and 4 had been President of the Vancouver Transportation Club. Two of these are now Directors of the Vancouver Transportation Foundation. No Supercargoes attended the lunch on this occasion although some are on the mailing list.

To see the whole group at lunch, click on: <https://photos.app.goo.gl/NRDoy31l2t0yAOPW2>

But wait – who remembers Tony donating a framed John Horton painting? In 2002 Tony chaired a committee involved in the Richmond Tall Ships Festival that was held in Steveston. Later he was presented with a John Horton painting in recognition of his services. Tony had no place to hang the painting and so he offered it as a prize. To be eligible you had to buy one of his "Reardon Smith" calendars. The names of the purchasers were entered into a hat, a name was drawn and the lucky winner received the painting. Then Tony donated \$5.00 from the sale of each calendar to the NPESC. That amounted to \$170.

What will Tony do next?

50-years ahead, boxships will be autonomous and carry 50,000 TEU: McKinsey. In 50 years from now, containerships could be capable of carrying up to 50,000 TEU in a single voyage, autonomous, and perhaps plow the seas alongside modular, drone-like floating containers, according to a report by consultants McKinsey.



In McKinsey's world of 2067, global container trade volumes will be between two and five times greater than they are today, Singapore's Splash 24/7 reported. "On balance, we do not view 20,000 TEU as the natural end point for container ships - 50,000 TEU ships are not unthinkable in the next half-century. However, progress will probably be much slower than it was in the past decade: overcapacity means that new ordering will be slower over the next five to ten years," the McKinsey report was cited as saying.

"If demand catches up with supply, as it may well do in the early 2020s, the logic of scale will once again drive orders for bigger and bigger ships," the consultants wrote.

Short-haul intraregional traffic will rise, the consultants suggest, as manufacturing footprints disperse more widely because of converging global incomes and the increasing use of automation and robotics. Container flows in East and Southeast Asia will continue to be huge, and the second most significant trade lane may link that region to Africa, with a stopover in South Asia.

On further consolidation within the sector, McKinsey predicts: "After multiple value-destroying cycles of overcapacity and consolidation, three or four major container-shipping companies might emerge.

"These businesses could be either digitally enabled independents with a strong customer orientation and innovative commercial practices or small subsidiaries of tech giants seamlessly blending the digital and physical realms." Fifty years from now, McKinsey suggests freight forwarders might not exist.

"Freight forwarding as a stand-alone business will be virtually extinct, since digital interactions will have reduced the need for intermediaries to manage logistics services for multiple participants in the value chain. Across the industry, all winners will have fully digitised their customer interactions and operating systems and will be closely connected via data ecosystems," the report noted.

<http://www.seanews.com.tr/50-years-ahead-boxships-will-be-autonomous-and-carry-50-000-teu-mckinsey/170373/>

The following is a letter published in the January 2nd edition of the "Master Mariners Newsclips" issued by Captain Ivan Lantz, the National Secretary of the Master Mariners of Canada. I thought that Alec Provan's reasons for remaining a member also apply to membership in The Nautical Institute.

Why I maintain my membership in The Company of Master Mariners of Canada (CMMC).

Now well into my eighties and proud possessor of a Certificate of Competency which expired years ago, I wonder if I should cough up the \$100 to keep my CMMC membership up to date for another year. Searching for justification I am reminded that my membership gives me the privilege of belonging to an exclusive group of individuals, male and female, authorised by the Federal Government to command commercial vessels registered in Canada. At a more down- to-earth level I find myself enjoying lunch once a month with a talented, friendly group of mariners and ex-mariners.

More importantly, for the benefit of individuals still actively engaged in the marine industry, afloat or ashore, CMMC provides a means of informing mariners of changes taking place in the industry, and an opportunity to express their views on the impact of these changes. If in doubt regarding the efforts of the CMMC Executive and individual members, the attached document authored by Captain Rick Gates demonstrates the need for advocacy on behalf of Shipmasters and Senior Officers, and a sampling of the various initiatives in which CMMC has been involved.

Those of us no longer in need of advocacy, or likely to be affected by changes in marine legislation, can support our active members by payment of our annual dues, by participating in the affairs of the Company wherever possible and encouraging potential members to “take the plunge”! Now – where did I leave my chequebook?

Alec Provan. Vancouver Division.

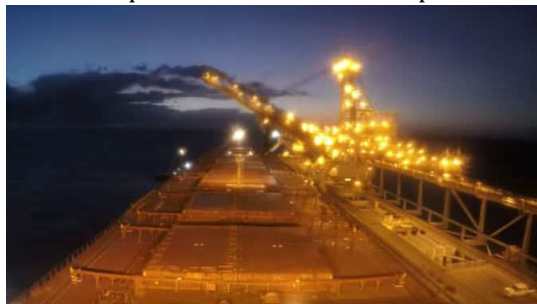
FROM THE MASTER’S DESK (Edited) Captain Patrick (Rick) Gates (2017):

There seems to be no end to the ways the ship owners / managers / governments are trying to figure out how to get rid of European, Canadian and American seafarers. Currently there are attacks to strike down the US Jones Act, and here at home we have seen CETA quietly slipped through without any discussion on securing any reciprocity that would allow Canadian ships to enter into the EU coasting trades. Further efforts to diminish the need for a Canadian Merchant Marine appear on another quietly submitted report on the Canadian Transportation Act Review. CMLA suggests we need an Act similar to the Jones Act because that will be an issue with the US and EU Free Trade Agreement and we have given the shop away to the EU. There is no chance of a Canadian ship ever on the US coastal trades! As there were a number of issues raised, I will just highlight a few of the concerns for CMMC: -

- CETA (Comprehensive European Trade Agreement) at a June 2015 meeting discussed the repositioning of containers.
- A legal review has been completed and NO changes to already agreed cabotage.
- Coasting Act will be amended.
- Free trade between ports Halifax/Montreal but what about Vancouver/Prince Rupert and others. Is it just empty containers or could it be extended to breakbulk and dredging?
- Nairobi Convention on Wreck Removal insurance – compulsory insurance for vessels over 300t.
- TC Arctic Development – STCW amendments for Masters and Officers to have Arctic training for Polar Code.
- SOLAS container weight.
- Draft Regulations for Passenger insurance.
- Amendments to the Coastal Fisheries’ Protection Act passed in 2014 and are now starting the Regulatory process.

Hackers Could Sink a Bulk Carrier: Penetration testing experts “Pen Test Partners” have highlighted how hackers could sink a bulk carrier by manipulating the loading data of its hull stress monitoring systems (HSMS) to deliberately cause an imbalance of cargo on the vessel without the crew being aware.

The consequences could be catastrophic with the vessel being put under intense strain leading to it breaking up and sinking.



“The reason it is feasible is that when HSMS were first developed, there was no concept of a vessel being connected to the internet, allowing it to be accessed remotely. Therefore, many HSMS are just PCs connected to the ships’ network,” said senior partner, Ken Munro.

A hacker could interrupt the loading data being fed to and from the monitoring system, having previously compromised the network either via the satcom unit or a phishing e-mail.

“Once in control, hackers can manipulate the loading of cargo and turn off any stress monitoring alarms that would alert crew to any undue strain on the vessel,” said Munro.

Last month, the company warned that container ship stowage plans could be hacked. The issue stems from the absence of security in a messaging system used to create ship loading and container stowage plans from the

electronic messages exchanged between shipping lines, port authorities, terminals and ships. Instead of taking 24 to 48 hours to load and unload, it could take weeks to manually re-inventory the ship.

"Even more sinister is the threat to the ship itself. Load planning software is used to place heavier containers towards the bottom of container stacks and to prevent a stack from being overweight. This keeps the centre of gravity low and maintains stability," said a spokesman for the company.

"How about if a hacker manipulated the load plan to deliberately put a ship out of balance? Disguise the data, so that the loading cranes unintentionally put the heavy containers at the top and on one side? Whilst some balancing actions are automatic, the transfer pumps may not be able to cope with a rapidly advancing, unanticipated out of balance situation. It really wouldn't take much. You jeopardize lives and potentially block a tight shipping lane in to port with a shipwreck."

The company warns of using USB sticks to transfer data between terminal and ship. There is a chance that the computer with the load plan software is also used for email or web browsing, opening the potential for malware.

Dec. 20th 2017. **The Maritime Executive.** <https://maritime-executive.com/article/hackers-could-sink-a-bulk-carrier>

The Seafarer of the Future: This is a long article and can be found on the link shown below.

It begins: Autonomous ships are buzzwords of the industry. The conversations have shifted from "if" to "when". Self-driving cars and the successful use of remote controlled drones have stirred the expectations of the maritime world. The estimates for "when" range from next year to 40 years away, depending on how you want to portray yourself – as an innovator, a pragmatist or a non-believer.

Read more at: <http://splash247.com/the-seafarer-of-the-future/> Nov. 3rd 2017.

An amazing feat of engineering: Wreck removal of the *Baltic Ace*. On December 5, 2012, the car carrier *Baltic Ace* sank in the North Sea with more than 1,400 cars on board after [colliding with a containership](#) near the entrance of the main shipping channel leading to the Port of Rotterdam, claiming the lives of 11 crew members. Read more about it and watch the video of the wreck removal at: <http://gcaptain.com/video-baltic-ace-wreck-cut-up-and-removed-off-rotterdam/>

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.

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



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

