



# SEATIMES

## The Newsletter of the Nautical Professional Education Society of Canada

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

Affiliated Members: The Company of Master Mariners of Canada & The Canadian Institute of Marine Engineering.

---

October 2015

**Ethiopia is a landlocked country (the most populous) and yet:** The Ethiopian Maritime Training Institute (EMTI S.C.) is a private company established to provide professional **maritime training** for Ethiopian Engineering graduates. Through its elite maritime training program, EMTI has established superior standards for selecting and training its Cadets to become world class Marine Engineers.

In partnership with Bahir-Dar University (BDU), EMTI S.C. is training more than 500 Marine Engineering and Electro Technical Officers annually, and this number will increase to more than 1,000 officers annually.

EMTI S.C. training centre is located on Lake Tana shore in Bahir-Dar of the Amhara region.

<http://www.emticorp.com/>



---

**The future of super ships:** When the 366-metre-long container ship *MV COSCO Fortune* docked at Port of Prince Rupert's Fairview Terminal last July, it dwarfed almost everything else in the harbour and offered west coast ports a glimpse of the future.

Longer than the next generation of U.S. Navy aircraft carriers, the *Fortune*, capable of carrying 13,000 containers, is the largest ship of its kind to dock in western Canada.

It is 66 metres longer and can carry almost twice the number of containers as the typical workhorses of trans-Pacific shipping that we typically see in local ports.

COSCO put the *Fortune* on the Prince Rupert run to help handle a surge of containers flowing to Canadian terminals during a labour slowdown at U.S. ports. But as world trade continues to grow, the trend in international shipping of using fewer, bigger ships to gain economies of scale will rise. As a result, ports and terminal operators are embarking on multi-billion-dollar campaigns to be ready for them.

"It means in order to compete in the new world of container shipping, terminals are going to have to upgrade," said Capt. Stephen Brown, president of the Chamber of Shipping, B.C.

And not just by building berths that are longer and deeper, and installing portside gantry cranes that are taller and have a reach to unload wider ships. Everything in port terminals, from rail networks to customs inspections, needs to be beefed up to handle the surge in deliveries from bigger vessels, Brown said.

The Prince Rupert Port Authority and Port Metro Vancouver (as well as its terminal operators) have expansion plans underway, both to grow along with expected increases in global trade, and with an imperative to accommodate ever-bigger ships.

"We're building something scaled for what we anticipate to be the later-generation of vessels, those either operating now, or likely to be introduced in a reasonable horizon," said Peter Xotta, vice-president of planning and operations at Port Metro Vancouver, referring to the planned \$2-billion Terminal 2 container facility at Roberts Bank.

That won't be the absolute biggest ships being built today — those are reserved for the world's biggest, busiest and longest trade route from Asia to northern Europe. Terminal operators, however, can expect a "cascading", as the industry calls it, of the previous generation of giants to trans-Atlantic and trans-Pacific routes as they are displaced by even larger ships.

**RISE OF THE GIANTS:** Launched just three years ago, the *COSCO Fortune* has already been surpassed by the next class of true super-ships: 18,000- to 20,000-container leviathans being built specifically to ply the Asia-to-Europe trade route.

Measuring about 400 metres in length, they stretch almost as long as three CFL fields. Danish-headquartered container giant Maersk Group led the way, launching the first of 20 18,000-container Triple-E Class ships, the *Mærsk Mc-Kinney Møller*, in 2013. It now operates 15 of the vessels.

Then, last November, China Shipping Container Lines launched the 19,100-container *CSCL Globe*, which was quickly surpassed by Mediterranean Shipping's 19,224-container *MV MSC Oscar*.

Now, Japan's Imabari Shipbuilding has an order to build 11 20,000-container ships, and Korea's Samsung Heavy Industries is building four 20,100-container ships for Mitsui O. S. K Lines.

Stretch that number of containers end to end and they would line the roads from the Deltaport terminal at Roberts Bank almost to the end of the Sumas Prairie past Chilliwack — 123 kilometres.

"The biggest container ships in the world, they currently cannot be managed anywhere on the West Coast," Brown said. Anything over 15,000 containers is "too big," requiring too much depth below their keels and maxing out the capabilities of their cranes. However, the delivery of those big ships will mean a "cascading" of ships in the 12,000- to 15,000-container range to local routes.

**A CASCADING IMPACT:** Xotta anticipates that on the West Coast, those big ships will first ply the trans-Pacific routes that serve the container mega-complex of Los Angeles and Long Beach, which together handle about 15 million containers per year (compared with Port Metro Vancouver's 2.9 million containers in 2014).

Those facilities have huge capital plans underway to expand and streamline facilities. The Port of Los Angeles has a \$1.1-billion plan over five years to improve rail efficiency and deepen its channel and berths, the trade journal AAPA Seaports Magazine reported.

At the Port of Long Beach, the plan is for \$4 billion in infrastructure improvements, including a new bridge and more-efficient equipment to accommodate 18,000-container ships.

Xotta expects the biggest ships now serving L.A.-Long Beach will in turn cascade to the shipping routes that land at Port Metro Vancouver. Today, 6,000- to 8,000-container ships are most common, with an occasional 10,000-container ship thrown in.

"We expect 10,000 (containers), in the next five years, to be the norm rather than the exception," Xotta added.

And while both of Port Metro Vancouver's Burrard Inlet terminals have major improvement projects in the works, limitations of the inner harbour mean the biggest vessels will wind up calling at Deltaport.

Port Metro Vancouver spokesman John Parker Jervis said there isn't a physical limitation on the length of ships that can enter First Narrows under the Lions Gate Bridge - vessels up to 350 metres transit the passage now.

The port authority might need to adjust the route of the designated deep-sea channel to more easily accommodate ships of 400 metres - the size of Maersk's Triple-E ships - and has not yet studied whether it has the depth and clearance under the bridge to handle the larger vessels.

However, the port already knows that berths at the inner harbour terminals are not deep enough for the giant container ships. The Deltaport terminal is already "big-ship ready", and had the cranes needed to unload the biggest ships it is likely to service in the foreseeable future, said Louanne Wong, manager of market initiatives and development at GCT Global Container Terminals, operator of the Roberts Bank facility and Vanterm in Vancouver's inner harbour.

And it has ordered four additional container-stacking, rolling gantry cranes for its Deltaport yard to increase its handling efficiency and for traffic surges from bigger ships.

"With larger ships, there will be fewer calls, concentrating on ports that can efficiently handle volume surges," Wong said in an email. "That is why we have focused our efforts on process improvements and adding yard densification to improve land-side fluidity."

The strategy behind using bigger ships depends on a more-efficient flow of containers onto trains or trucks, said transportation economist Trevor Heaver, professor emeritus in the Sauder School of Business at the U. B.C.

On the landside, Heaver said there is "a long history of shipping making investments in what it sees as being optimal (for the size of vessels) without taking fully into account the costs on the land side."

**BUILDING FOR BIGGER SHIPS:** Port Metro Vancouver is jumping in with its own, controversial, Terminal 2 project for a new, three-berth facility at Roberts Bank, designed to handle another 2.4 million containers, and Xotta said the plans include the depth to accommodate 18,000-container ships.

The project is in the environmental assessment process now, and faces opposition from conservation groups, such as the group calling itself Against Port Expansion in the Fraser Valley, which is critical of the impact the facility would have on sensitive Fraser River estuary and migratory bird habitat.

"In trans-Pacific trade, we're planning on continual growth, it's why Terminal 2 is important to us," Xotta said. "From a technical perspective, Terminal 2 goes quite a considerable distance in terms of (keeping the port competitive)."

The trade-off will likely mean more automation of those new facilities and fewer jobs, Brown said.

"It's proven technology," Brown said. "One guy sitting in a control room managing several gantry cranes pre-programmed to (unload and load) that vessel."

Brown said the new technology is contentious with port unions, but "trade is growing so fast — we're talking about an average of five-per-cent a year hopefully that compensates for some of the job losses."

Prince Rupert, the deepest natural harbour in North America with berths already deep enough to accommodate the biggest ships, is less fussed by the prospect of bigger ships.

"When we opened the terminal in 2007, we had a view toward (serving) the largest ships deployed in the Pacific, and those planned," said Shaun Stevenson, vice-president of trade and development at the Prince Rupert Port Authority.

At the time, they were expecting 12,000- to 13,000-container ships, Stevenson said. Now there is a \$200-million expansion underway to add a second berth, allowing it to handle even longer ships, as well as new cranes and additional rail capacity to increase its capacity to handle over 1.3 million containers from its existing 850,000 capacity.

Prince Rupert's Fairview Terminal, which is being sold to Dubai-based terminal operator DP World, was underutilized when it opened, but has seen volumes increase. In 2014, Fairview handled 618,167 containers.

Stevens didn't offer a guess when those 18,000-container-plus giants might hit the trans-Pacific routes.

"That's up to carriers that call on Prince Rupert," he added, but "it is certainly a steep change. I'm sure it's only a matter of time before they look at high-density trade lanes."

[depenner@vancouver.sun.com](mailto:depenner@vancouver.sun.com) [Twitter.com/derrickpenner](https://twitter.com/derrickpenner)

With three berths and Post Panamax-capacity gantry cranes, the Deltaport container terminal at Roberts Bank receives the biggest container vessels that call at Port Metro Vancouver. Photograph by: Nick Souza/GCT Global Container

<http://www.vancouver.sun.com/business/future+super+ships/10982559/story.html>



## British Columbia Institute of Technology (BCIT) Nautical Sciences & Marine Engineering Convocation Ceremony, July 17<sup>th</sup> 2015.

Captains Richard Smith and Brian Johnston represented the Society at this ceremony. Also in the audience were Stan Bowles and myself, David Whitaker. I was very pleased to see that the Master of Ceremonies was Brook Walker, Assistant Manager, Marine Personnel for Seaspan Marine. Brook had been the recipient of the NPESC Bursary in 2004. Following is an extract from the May 2005 edition of "Seatimes" recording that event.

### NPESC Scholarship for 2004 for 2<sup>nd</sup> or 3<sup>rd</sup> Year Cadets —

awarded to Nautical Science Cadet Brook Walker who has been sailing with P&O Princess during his sea training. Brook is seen here with David Whitaker, Stan Bowles and John Clarkson, Associate Dean at the Marine Campus.





After this year's Ceremony Captain Brian Johnston and I had a long, interesting chat with Brook about his experiences and his current position. He explained how much he had appreciated the bursary that he had received from the Society.



**Captain Richard Smith** presented the "MARINE Fire Fighting" book to Nautical Science Graduate, **Willem de Haan**.

**Captain Brian Johnston** made the presentation to **Colton Dececco**, a Marine Engineering Graduate.



As mentioned earlier, the Master of Ceremonies, Brook Walker, received the Society's Bursary in 2004.



Dylan Adams was the Nautical Sciences Class Valedictorian. He received the Oak Maritime Award plus the Vancouver Maritime Arbitrators Association Award. Earlier this year Dylan was awarded one of the Nautical Institute/Vancouver Transportation Foundation Scholarships.

**The Nautical Professional Education Society of Canada** has made book presentations at every BCIT graduation ceremony for Nautical Science students. At the first ceremony in 2003 we were the only organization to do so. One of the recipients, David Willows, was a regular attendant at NIBC branch meetings at that time and later became the Branch treasurer. He has recently been accepted as a British Columbia Coast Pilot.

The Society began awarding books to Marine Engineering Students when we chose to present the book "Marine Fire Fighting". An article similar to the following appeared in the March 2015 edition of Seatimes.

**BCIT Marine Campus Achievement Awards:** At the first Nautical Sciences Convocation in **2003** our Society was the only body making awards. It awarded books to two students. In 2004, at the graduation of the second intake of Nautical Sciences Cadets, the Society was joined by the Vancouver Conway Club (see program below). By 2015 many more organizations were making awards.



At the **2015** BCIT Marine Campus Convocation Ceremony, Achievement Awards were made by: -

1. Oak Maritime
2. Transport Desgagnés Inc.
3. Algoma Central Corporation
4. Chamber of Shipping
5. Vancouver Maritime Arbitrators Assoc.
6. BC Ferry & Marine Workers Union
7. British Columbia Ferry Services
8. Lloyd's Registry
9. Vancouver Conway Club
10. Nautical Professional Education Society of Canada

**Book Awards:** At the Society's AGM held at Camosun College in 2014 we agreed to donate a "Marine Fire Fighting" book to a student of the Nautical Department at Camosun College in Victoria and to a student of the Western Marine Institute at Ladysmith on Vancouver Island.

**The origin of seafaring words:** Old English, which for practical purposes can be defined as the language spoken by the Anglo-Saxons before William the Conqueror arrived, came up with a handy word for something that floats and carries people.

So useful was this word "boat" that the Scandinavians took it over. Less surprisingly, it has equivalents in all major European languages, even if not quite with the same meaning - "bateau", "boot" and so on.

But there is a clear split in Europe over the word “ship”. The Germans and the Dutch use basically the same word as the English, “schiff” and “schip”. The French and the Spanish borrowed this and the English borrowed it back with changed meaning as “skiff”.

Other borrowings and re-borrowings include the word “equip” which the French coined originally as “esquiper” to mean “to equip a ship”. The same thing happened to “skipper”, only this time it went into Dutch and German before coming back, having acquired its “sk”.

“Naval” comes from Latin like the French “navire” and the Spanish and Italian “nave” for ship. The nave of a church is also the same word as the construction of a wooden church posed the same problems as shipbuilding, only upside down. By a nice piece of translation or similar thought-process, the Germans and Dutch also call the nave of a church by the same name as a ship.

“Navigate” comes from simply putting the Latin for “to drive” on the end of the word for “ship”.

But “nautical” goes back further through the Latin for sailor, “nauticus”, to the Greek for ship “naus”. And guess where “nausea” comes from? **Fairplay Magazine. May 3<sup>rd</sup> 1990.** <http://magazines.ihs.com/Fairplay/>

**Watch Officer Competence Questioned:** The UK Confidential Reporting Programme for Aviation and Maritime (CHIRP) has questioned the training of bridge officers after receiving confidential reports about incidents at sea.

“A report we have received related to very serious concerns over the competency of an Officer of the Watch (OOW) Deck,” says Captain John Rose, Director of Maritime at CHIRP. “Despite onboard coaching over a period of two days whilst in port, the individual made many serious errors during bridge watches. These on occasion put the ship at risk.



“We have also received concerns regarding the quality of officer training. This includes a reduction in the amount of qualifying bridge watchkeeping time in exchange for attendance on a bridge simulator course. Reports also challenge the quality of mandatory training and issuance of certificates. In one case certificates were issued prior to the completion of the course.”

Rose now questions whether the current system of training and certification, in some countries, is in the best interests of the industry. He urges anyone encountering a problem to use the Safety Management System (SMS) and report the hazardous occurrence to the ship managers. “We believe any reluctance to use the SMS indicates a weakness in the safety culture onboard. It is also a lost opportunity to reveal weakness in the recruitment process, or the need for additional training in some circumstances or preparation for particular assignments.

“If the company does not react to the report, the details should be sent to the Flag state of the vessel that issued the certificate or endorsed the initial certificate of competence for service on that ship.” Rose says a [confidential CHIRP report](#) can also be made.

#### **DISREGARD FOR COLREGS: -**

In another example of problems occurring on the bridge, Rose cites this anonymous report: “We were sailing from Cherbourg to Southampton via the Needles on a 10 metres sailing yacht equipped with an AIS (Automatic Identification System) transponder and active radar reflector. Visibility was about four miles, our speed about eight knots. As we crossed the eastbound shipping lane, several AIS targets were approaching on the port side and eventually became visible.

“One target was of concern because the closest position of approach (CPA) was almost zero. The speed of this ship, the xxxxxxx, was about 18 knots. After monitoring the situation for some time, I called up on VHF radio and informed the crew who answered, that according to our AIS our CPA was near zero. The response was “I agree.” I then asked if he planned to alter course to avoid risk of collision and he replied in the negative.

“I politely pointed out that we were a sailing vessel and the stand on vessel under the Collision Regulations and asked once again if he would alter course. The reply was “I could do but I’m not going to.” I decided at this point that further discussion was unlikely to be productive, ended the conversation and instructed the helm to turn 20 degrees to port and harden up the sails. This allowed us to pass behind the ship by a safe distance.”

The lesson learned, says Rose, is do not assume that another vessel will take avoiding action even if it is aware that a risk of collision exists.

CHIRP contacted the ship’s manager who forwarded the information to the ship and subsequently discussed the report when the superintendent visited the ship. Unfortunately the crew had changed before the ship had received the report. The master appreciates CHIRP publications and the in depth analysis of dangerous situations but after several months it was difficult to reconstruct a specific situation. The master stated the use of VHF unfortunately causes confusion a lot of the time. By [Wendy Laursen](#) 2015-06-17.

<http://www.maritime-executive.com/article/watch-officer-competence-questioned>

**Students Sea Vision for their future:** In July Seavision held an interactive maritime festival at Wyvern College in Hampshire, England, to help celebrate, enthuse and educate the youth of today about the maritime industry and its fundamental role in lives. The educational initiative aimed to spark an interest in shipping to help students overcome generational 'sea-blindness' and encourage them to think about a career at sea. <http://www.seavision.org.uk/education-training/home>



**Ewen Macdonald, Director of Seavision said,**

"Amongst young people there seems to be this ubiquitous lack of knowledge about shipping and in order to encourage them into the sector we need to engage them at an early age. We need to start educating them at school so that growing up they are aware of its importance. Generally most children will develop an interest in professions that they are familiar with or constantly surrounded by, so we need to try and do the same with the maritime industry."

During the weeklong venture at Wyvern College, the curriculum focussed almost entirely on maritime related topics and STEM tasks to foster educational development so that students of today may consider the maritime opportunities of tomorrow. It aimed to address the current marine skills gap and provide insight into a range of different career paths and possibilities for students.

Wyvern College's Maritime Week involved 29 different maritime sector companies and a number of SV and STEM Ambassadors to talk about their occupation and create activities to reflect the skills used in their workplace. These companies and organisations include the likes of Southampton Solent University, Mary Rose Museum, Marine Skills Centre and Lloyd's Register to name a few.

As part of the maritime festivities there was a community event aimed at targeting not only the students and parents from Wyvern College, but also six feeder Primary Schools and three associated FE Colleges. The evening included presentations from the Royal Navy, Warsash Maritime Academy and the National Oceanographic Centre, as well as fun activities such as an exhibition inside a shipping container next to the school's tennis court.

"We are hoping that this pilot venture be a beacon of proven success, motivating young people into maritime jobs and encouraging the sector to stage similar engagements in other maritime hubs around the UK," said Macdonald. **July 6<sup>th</sup> 2015.**

<http://www.maritimeindustries.org/Member-News/students-sea-vision-for-their-future>



---

### **Crowley Awards Four Scholarships to CMA Cadets at 2015 Connie Awards Dinner:**

Crowley Maritime Corporation awarded four Thomas B. Crowley Sr. Memorial scholarships to California Maritime Academy (CMA) Cadets at the Containerization & Intermodal Institute's Connie Awards Dinner in Long Beach, Calif., last night. Crowley's Vicky Ellis, manager, marine development and compliance, presented the scholarships to Andrew Leonard, Griffin Sims, Bonnie Claire Muchnick and Alex Yonkman.

"Crowley is proud to support the education of these Cadets and future leaders in the U.S. maritime industry," said Ellis. "Andrew, Griffin, Bonnie and Alex are very deserving recipients of the Crowley scholarships and should all be proud of their academic achievements at CMA."

Leonard, from Glendale, Ariz., is a senior at CMA. He will graduate in April with a bachelor's degree in marine transportation and a Third Mate Unlimited Coast Guard license. The summer after his sophomore year, he spent three months working aboard Crowley's articulated tug-barge (ATB), *Integrity/650-4*, in the waters between Texas and South Carolina. After graduation, he looks forward to a career at sea. He said that Crowley's scholarship gave him a great deal of pride as he worked on his academics and training at CMA. Sims, from Monterey, Calif., is a CMA graduate with a bachelor's degree in marine transportation and a Third Mate Unlimited Coast Guard license. The summer after his sophomore year, Sims spent three months working aboard Crowley's Alert class spill prevention and response tug, *Aware*, in Valdez, Alaska. Receiving the Crowley scholarship made it easier for Griffin to concentrate on his academic studies and he is grateful for the opportunity to represent Crowley.



Muchnick is a junior marine transportation student from Oakland, Calif. As a part of her CMA commercial cruise experience, Muchnick spent the summer sailing aboard the Crowley-managed, Jones Act tanker, *Florida*, in the U.S. Gulf. After graduation, Muchnick plans to go to sea. She said that she is grateful for the Crowley scholarship, which is allowing her to focus on her education and offering relief for her family's financial burden.

Yonkman is a marine engineering technology sophomore at CMA. Yonkman is also minoring in marine science and hopes to work on a research vessel in the future. Originally from Whidbey Island, Wash., Yonkman grew up near the sea and chose CMA because of his lifelong interest in the maritime industry. He is looking forward to a commercial cruise with Crowley next summer and is grateful for the financial support this scholarship provides.

To learn more about the Thomas B. Crowley Sr. Memorial Scholarship program, please click [here](#).

Sept. 30 2015. <http://www.ajot.com/news/crowley-awards-four-scholarships-to-cma-cadets-at-2015-connie-awards-dinner>



Left to Right: Griffin Sims, Alex Leonard, Bonnie Claire Muchnick and Crowley's Victoria Ellis

---

**Have you seen the Suez Canal recently?** As you are probably aware, a new canal has just been opened. The expansion aims to increase the traffic handled by the canal. You can read more about it at <http://www.bbc.com/news/world-middle-east-33800076>. You can also travel through it aboard the *Adrian Maersk* at <http://www.shippingtv.co.uk/?p=2646>.

---

**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,  
20 – 1030 Hulford Street, Victoria, B.C. V8X 3B6**

**Thank you.**

---



Articles or comments for inclusion in future editions of *Seatimes*  
can be sent to me at [whitknit@telus.net](mailto:whitknit@telus.net)  
or to 509-15111 Russell Avenue, White Rock, B.C. V4B 2P4.  
Sincerely, David Whitaker FNI.

