SEATIMES

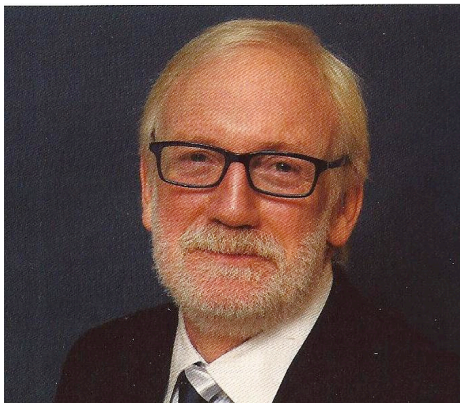
The Newsletter of the Nautical Professional Education Society of Canada
(Society founded in 1995 by the British Columbia Branch of The Nautical Institute)

October 2017

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

Say it loud and proud: seafarers matter! ***The Sea*** **speaks with The Nautical Institute President, Captain David Snider, about his plan to bring the mariners' world to a wider audience. By Carly Fields.**

When multibillionaire and Amazon founder Jeff Bezos tweeted the world to ask for worthy philanthropic ideas, he likely didn't expect a response from the maritime industry suggesting that he invest in a fund and an organization to aid the repatriation of stranded seafarers.



Nautical Institute President, Captain David (Duke) Snider saw Mr. Bezos's request as an opportunity to bring the plight of abandoned seafarers to a wider, and extremely affluent, audience. While Captain Snider has not yet received a response from Mr. Bezos, he hopes that the act will help remind the general public of "forgotten" mariners.

"Depending on the 'census' you might refer to, there are perhaps 1.6 million men and women working at sea in international seagoing positions," explains Captain Snider in conversation with *The Sea.* "Many hundreds of thousand more are engaged in coastal or cabotage trades. Within those numbers, again, depending on what source you quote, there are estimated to be thousands that are trapped, stranded and unpaid, far from home either on board ship or restricted ashore".

Yet, while the public reaches out with ease to international refugees when newsworthy calamities occur, few people ashore know about the all-too-frequent abandonment of seafarers. "The general public remains very poorly informed; every day those of us that closely follow marine-related media read of mariners trapped and destitute".

While there are proactive organizations that strive to assist stranded and trapped seafarers, including The Mission to Seafarers, the herculean and costly effort of repatriating those mariners is often beyond their resources. So, when Mr. Bezos asked for philanthropic ventures via Twitter, Captain Snider took action.

Perhaps, he says, we shouldn't need to fall back on the philanthropy of billionaires to aid our seafarers, but if there are billionaires out there that can assist, it makes sense to see if they might consider a supporting role.

"At the very least, I would hope that a single tweet has spurred on others, in our industry and outside, to cast more than just a thought to the invisible or forgotten stranded mariners," he says. "It can come from each and every one of us, from simply volunteering or financially supporting welfare and support organizations that aid seafarers globally, to encouraging governments and public agencies to step up".

The message that needs to be spread is that transportation at sea takes more than ships; it takes the trained and experienced seafarers in those ships to operate them safely and efficiently. The IMO's *International Day of the Seafarer* initiative is a good start, but the message should be ongoing, says Captain Snider. "It should spread out from only one day a year to

throughout the year. Our industry itself should step away from the quiet practices of the past and begin to tell the world: 'We are here and we bring you what you need'". He adds that industry also needs to "break the bonds of silence" about the weak underbelly of shipping and the plight of those who need assistance.

"We need to speak out for those that are less able to speak out themselves and reach out to do our own part". That said, the industry does well to look after its own as best it can, he says, acknowledging that there are many incredibly good owners and operators out there who recognize that their seafarers are their most valuable asset. He is also impressed by the company-run seafarer and family welfare programmes that exist around the world. Here, some companies directly support the welfare of seafarers through donations or indirectly offer support by giving employees time off, sometimes paid, to volunteer in seafarer support organizations.

Support for seafarers: Supporting seafarers how ever he can is a central tenet of Captain Snider's Nautical Institute presidency. Part of that drive has seen him actively promoting human-centred design of ship's systems and equipment. He expresses his exacerbation at how often new gear and equipment arrive and are installed on board a ship with little regard to their integration with existing systems or their impact on prevailing practices and capabilities. To make matters worse, many equipment manufacturers build in 'features' to set their particular version apart from competitors, making the crossover from one piece of equipment to another difficult and possibly dangerous.

Compounding this, some equipment may not integrate well electronically with other equipment and seafarers are not always given adequate training on the new or replacement equipment before the ship is intended to sail. To that end, The Nautical Institute is encouraging equipment designers and manufacturers to work closely with active seagoing professionals, either through the organization, or by incorporating seafarers directly in equipment concept, design and manufacture.

"This also should be in the forefront of thinking of shore managers that are responsible for selecting and acquiring equipment," says Captain Snider. "They should actively involve the seagoing teams with input and provide sufficient practical training".

The muscles of maritime commerce

OUT OF SIGHT, out of mind – that's the challenge that the maritime industry faces in getting its message out to the public.

"Very few people not directly connected to the maritime industry are aware of the thousands of mariners that are at sea around the world at any given moment, ensuring the continual carriage of cargoes that enable economies and ourselves to flourish," says Capt Snider.

Modern shipping moves raw resources, manufactured goods, livestock and people around the world in the cheapest way possible. But, he points out, who pauses for even a moment to think about the seafarer who is thousands of miles from home, for months at a time, at times facing heavy weather, and hard living conditions and who is denied even a few hours ashore in port to contact family or buy personal necessities by extreme security regulations?

"Seafarers are out of sight, out of mind. All most people see is the new TV from Japan, the new car from Germany, the holiday on a cruise ship, or the fuel that drives their car and powers the generators that electrify their homes."

Yet, seafarers are the "muscles of the body of maritime commerce", he says. "Without those muscles, the body is a limp shell without movement." ■

Seafarers, he adds, can help themselves by individually seeking to participate in the design, manufacture, purchase, installation and development of training programmes. They can do this through either active participation in The Nautical Institute's various working groups, or through volunteer participation as Nautical Institute subject matter experts in industry consultations and at IMO. "We are very proud of the impact that some of our members have had in directly affecting IMO and other standards, participating as Nautical Institute delegates in these forums", he says.

This participation at cross-industry forums is helping to break down boundaries, but industry needs to open its mind further and seek further support and input from representative bodies, he adds.

The Nautical Institute is also involved in efforts to improve regulations governing hours of work at sea, seeking to reduce the negative impact of fatigue on seafarers. Its IMO delegation has worked directly with a number of like-minded flag states to put forward and defend proposals for improved hours of work regulations.

In further pursuit of the benefits of knowledge-sharing, The Nautical Institute is actively promoting mentoring to enhance careers and best practice. Mentoring at sea improves safety, commercial services and, crucially, life on board.

It has also recently launched an Ice Navigator Training and Certification Scheme in response to the growing demand for officers with proven expertise in handling ships in ice. This is a subject close to Captain Snider's heart. In addition to his role as President of The Nautical Institute, he's also chief executive and principal consultant at polar water specialist Martech Polar Consulting (MPC), based in Victoria, British Columbia, Canada. Joining the practical and theory loops, he is also currently updating his *Polar Ship Operations* best practice guide for operations in ice, cementing his drive to support the seafarer by whatever means possible.

theSea. Issue 249 Sept/Oct 2017 www.missiontoseafarers.org

Desgagnés' Arctic business is thriving: It was another challenging season in the Far North for Desgagnés Transarctik, but not nearly as bad as in 2015 when Arctic shipping was plagued by unusual stationary ice and wind conditions that delayed the delivery of several shiploads of cargo. "This year was not as bad in Iqaluit and Pangnirtung, but there was lots of ice early in the season in Ungava Bay where we lost precious days," said Waguih Rayes, General Manager, Desgagnés Transarctik. "It was a similar situation on the East Coast of Hudson's Bay."

The company usually delivers cargo to Resolute Bay in mid-August, but the community was only accessible in mid-September, another costly delay. "When people talk about global warming, it's not always good news, because it can cause a shift in wind and ice patterns."

Desgagnés is the preferred carrier for Baffinland Iron Mines Corp., said Mr. Rayes, where the construction phase is completed and production is ramping up. It is one of three mining projects it is supplying in the north. The others are Agnico Eagle's Meadowbank gold mine 80 kilometres northwest of Baker Lake, Nunavut and TMAC Resources Inc.'s gold project in Hope Bay, Nunavut. "But we mustn't forget our bread and butter is servicing 26 out of 27 communities in Nunavut," noted Mr. Rayes. "We deploy six ships, including four heavy lift vessels with a 110-tonne limit per crane, due to the heavy mining equipment and barges we transport."

One area where business has dropped off is the federal government's new housing projects in northern communities, which are in limbo, but there are certain opportunities in the decontamination of old radar sites, said Mr. Rayes.

And the Iqaluit deep-water port (officially called the Iqaluit Marine Infrastructure Project) is going ahead, backed by $63.7 million in federal funding which could be open by 2020, according to government officials. Geotechnical studies for the project took place in mid-October. The project is to include a deep-water port, with one fixed berth and a secondary off-loading wharf. Improvements to the city's breakwater to allow dock space and 24-hour access to open water are also planned.

Asked if Desgagnés would be interested in taking over the Mackenzie River business of Northern Transportation Co. Ltd. (NTCL) which faces an uncertain future, Mr. Rayes wasn't sure if his company wanted to operate at the other end of the Arctic. "They (the communities) would be better served by a Mackenzie system, because our unit prices would be high with lower volumes than we're accustomed to. In addition, the window of opportunity for shipping in the Peel Sound of the Northwest Territories is limited to around mid-August to the end of September. But there's always room to work with tug and barge services if somebody wants something from Eastern Canada."

Saddled with over $130 million in debt, NTCL of Hay River, N.W.T. went into receivership, leaving communities along the Mackenzie River wondering who will barge in their goods next season. While there is another barging company serving the Mackenzie River, Cooper Barging Service of Fort Nelson, it doesn't operate in the Western Arctic, with its main route between Fort Simpson and Norman Wells.

NTCL, owned by NorTerra, an Inuvialuit-owned holding company, traditionally resupplies ten communities in the Northwest Territories with at least one barge a year between June and October. It also has a fuel supply contract from the N.W.T. government for homes, vehicles and the aviation sector in most of the communities.

The N.W.T. government had called for tenders for the assets of NTCL with a Nov. 4 deadline. When no suitable bids materialized, the government of Northwest Territories purchased the assets in December, to ensure that vital supply services to the communities previously served by NTCL would continue.

By Brian Dunn. March 12th, 2017. https://www.arcticsealift.com/en/
http://www.canadiansailings.ca/desgagns-arctic-business-is-thriving/

Canadian Sailings | Transportation & Trade Logistics

The following story is from a letter appearing in the April 1980 edition of "Sea Breezes". L. Roskell, the author had written after seeing a story about the *Calvittoria*, a ship that had been the *Mendoza Star.*

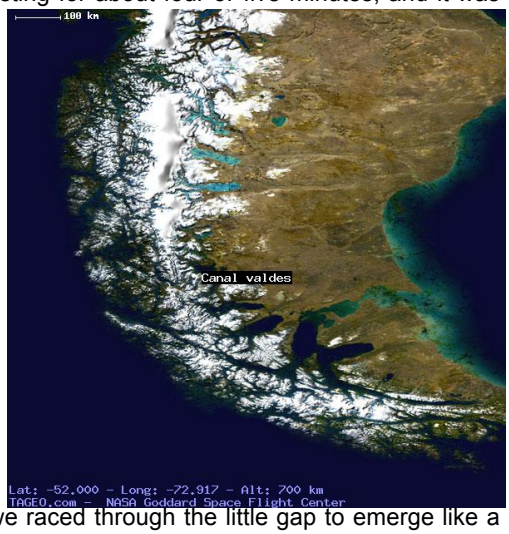
With Blue Star Line through Magellan: I joined the *Mendoza Star* as Third Mate in the River Blackwater, near West Mersea in Essex where she was laid up in the summer of 1966 by a seaman's strike. A few days later, in common with many other ships around the coast of the U.K. at that time, we went to sea with no definite orders other than to

proceed in the general direction of South America. We took bananas from Santos to the River Plate and received a charter to carry chilled and frozen meat from there to Valparaiso via the Magellan Straits, topping off with frozen lamb at a place called Puerto Bories, somewhere in the Patagonian Channels. Having previously traded no further south than Central Argentina I found the prospect of visiting Patagonia fascinating.

Our pilot had boarded in Montevideo and would only take over from us when we had well and truly entered the eastern end of the Straits. To make his point he had noticeably stayed away from the bridge during the run from the River Plate southwards and was somewhat taken aback when he did come up to find us heading into the night at 17 knots, without a radar set, it being company policy, at that time, not to provide them for purely cargo vessels.

At Punta Arenas we picked up the pilot with the special licence to take us through the Kirke Narrows and on to Puerto Bories. This part of the voyage, in the vicinity of Punta Arenas, was undertaken at night, which entailed many journeys from chartroom to top compass platform and back via the wheelhouse muttering compass bearings and occasional oaths concerning ships without wing repeaters. The pilot sadly watched the rapid progress of the chaotic cross bearings and adjusted our course as necessary with urgent grunts to the helmsman.

To negotiate the Kirke Narrows at the mountainous western side of the region involved an extraordinary ritual. As far as I can remember, slack water occurred only once each day in daylight, lasting for about four or five minutes, and it was during this time and no other that the gap could be negotiated. Between rock walls several hundred feet high, a long narrowing approach terminated at the Islas Zeta beyond which was the vast expanse of the Canal Valdés. The channel at this bottleneck was 100 metres wide between the shoal off Punta Restinga and the Isla Merino. Although the tide rose only between two and three feet, it tore through this particular gap at 10 knots and around the north side of the tiny island at 14 knots, causing eddies that would render any vessel uncontrollable.



On this occasion it had been arranged for a motor launch to set out from Punta Bories to meet us and, as we cautiously entered the approaches to the narrows, we could just make it out through our binoculars, clinging somehow against the rocky margin of the southern shore. The little boat was there to watch the surface of the water for the first sign of the slack. We waited for over an hour before we saw it venture across the gap; as it did so we heard the sound of a horn and could make out a tiny figure waving a flag. A pre-arranged "double ring ahead" signalled to the engineers that this was our big moment and we were soon pounding towards the Narrows. For all our speed of reaction, the tide began to turn and run with us and our speed was greatly enhanced as we raced through the little gap to emerge like a cork from a bottle on to the choppy, green surface of Canal Valdés.

One can only speculate as to the adventures the original explorers must have had, but Puerto Bories lies at the end of Estero Ultima Esperanza, which I believe means "Last Hope Sound". That may give us a clue.

Note: The photo of the *Mendoza Star* was taken in Valparaiso on that voyage. http://www.bluestarline.org/mendoza.html

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If you live in B.C. you might like to watch the following show on TV: -

"Freightened": The Real Price of Shipping.

Discover the mechanics and perils of cargo shipping, an industry that relentlessly supplies seven billion humans and holds the key to our economy.

"Knowledge Network". Tuesday, October 24th at 2100.

https://vimeo.com/159232505 https://www.freightened.com/the-film/

The following appeared in the pages of BEAR FACTS, the Algoma Central Corporation Newsletter for Summer 2017.

BCIT 2nd year Engine Cadet Josh Bains (middle) was the recipient of a scholarship from NPESC (Nautical Professional Education Society of Canada).

Josh served onboard the *Algosea* during his first sea phase and is expected to return to Algoma to continue his career.

Is technology making ships too complex? "I was on a ship and in order to look at the read outs of equipment and to operate it, you had to be like an octopus." It comes across as slightly tongue-in-cheek, but Allan Graveson, senior national secretary at Nautilus International, is deadly serious. "When you come to the bridge layout itself, a pair of running shoes wouldn't go amiss. I'm just surprised there aren't more accidents."

Graveson is speaking on the topic of human failure on ships; the hook being a report from maritime safety company Propel that claims human failure is still top of the agenda when it comes to reducing accidents at sea. Speaking in June, Benedikte Wentworth, Propel CEO, said, "Collaboration, trust and engagement of all personnel – ship and shore – are vital to reduce major accidents. The whole industry needs to change its focus when it comes to improving maritime safety."

It's a bold assertion and one that opens an interesting thread of debate: technology on ships is seen as par for the course in the 21st century, but is the environment becoming too complex for seafarers?

Bigger ships, added complexity: a dangerous combination? It's imposing, making man and woman seem insignificant in its wake: the *OOCL Hong Kong*, classed as an ultra large container vessel. At 399.87m long and with a capacity of 21,413 twenty-foot equivalent units (TEU), it stands as the world's largest container ship.

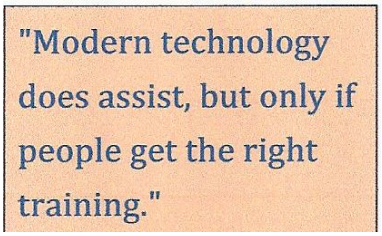
Of course, not all vessels reach such Olympian heights, but the *OOCL Hong Kong* represents a new breed, one that over recent years has become known as the 'megaship'. But what of the humble seafarer who has to work on these floating giants of steel?

"As ship sizes and complexities of operations increase, the risk of major accidents has increased due to higher potential consequences," Wentworth said in June. But what are the consequences? "Looking at the data, we have reduced the total loss frequency of ships," explains Didrik Svendsen, partner and senior consultant at Propel, "but if you look at the consequences, it's the size and reputational problems that have gone up. It's more a risk now than it used to be."

As Svendsen alludes to, total vessel loss has decreased. The Allianz Safety & Shipping Review 2017 states that 85 large vessels (of 100 gross tons) were reported as total losses in 2016, down 16% compared with a year earlier, and 50% over

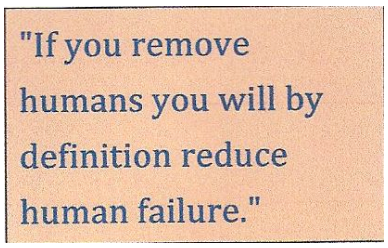
the last decade. Casualties have also declined year-on-year by 4%, with 2,611 reported in 2016.
Taken on its own, it is promising, but there's genuine concern in some quarters that seafarers are struggling to adapt to an ever-changing work environment – both the size of ships and complexity onboard, such as electronic chart displays for navigation. According to the Allianz review, human error accounted for "approximately 75% of the value of almost 15,000 marine liability insurance claims over five years; equivalent to over $1.6bn."
"I'm just surprised there aren't more accidents," says Graveson, who adds that people often "focus on the immediate cause of an incident, not the roots causes of it". And, then there's the potential for over-reliance. Captain Rahul Khanna, global head of Marine Risk Consulting at Allianz Global Corporate & Specialty, spoke of this earlier this year, saying that "the shortcomings and limitations of technology" must be understood, adding: "Sometimes replacing common sense decisions with digital inferences is not such a good idea."

Technology for maritime training. This school of thought is backed by Mark Johnson, counsel in the shipping group at Reed Smith, who argues that information can be misunderstood, as people "add their interpretation to it". He continues, "Modern technology does assist people, but only if they get the right training. You shouldn't be making your decisions based on one bit of information here or there. It's about looking at the bigger picture."



Training is, therefore, a key plank of the debate – it has to keep pace with technological change. In essence, it actually calls for more technology to be used, most notably simulators, to enable seafarers to understand the look and feel of systems before they board a ship.
"How effective is training?" asks Svendsen. "Are we measuring learning? I think we are still in compliance mode. If an inspector finds a gap in competence, you are sent on a training course. Although, if that course doesn't provide the training you need, it's not effective.
"Simulations are important. There's a bunch of new technology coming in to improve training. I think one thing is to change the habit of ticking boxes and seeing training as just compliance." Svendsen also believes "we have to get deeper into learning analytics" to understand how people learn. There are, he adds, some mandatory training courses that are more about compliance and not necessarily the need.
Adopting a human-centred design approach is also paramount. 'User-friendly' is not the most attractive of statements, but it goes to the heart of what is required. "You might implement something that is counterintuitive," adds Svendsen. Johnson, a former mariner, agrees: "As more systems are coming onboard, the way that information is presented is improving. Again it comes back to how it is set up."

The drive for autonomy: a drop in human error? The well-documented prospect of autonomy is also part of the mix. As ships become 'smarter', it's realistic to expect more training to cope with the myriad of systems onboard, but also consider that less direct human-interaction will be needed as autonomy takes over.



"If you remove humans you will by definition reduce human failure," says Johnson, "but as you do that you will expose the element of system failure. There could still be elements of human failure associated with how something is implemented into a system, or how a human interacts with a system if we're talking about remote control. If you go fully autonomous it would be more machine failure."
There's a mixture of fascination, intrigue, but also apprehension. The state of flux is keenly felt. No one quite knows how it will play out – cue plenty of ifs, buts, and maybes.
"Smart shipping, as it becomes more integrated, might be some assistance," says Graveson. So, is he confident human failure will reduce? "No. I don't see that being the case in 20 to 30 years. Technology will take time to develop, embed and be accepted. There's that hurdle to move against."
Graveson is also concerned about the wellbeing of seafarers. "I don't think they are very happy. It's been a long, long while since I met a happy seafarer. There's no problem attracting people to the sea, but retaining is a very difficult issue. It could be an awful lot better than it currently is. We should not have to deal with this in the 21st century." **July 26th 2017.**
http://www.ship-technology.com/features/featureis-technology-making-ships-too-complex-5881688/

Two twenties: Here is something you hope will not happen to containers on your ship.

https://www.youtube.com/watch?v=HH6IFPsGGdw&app=desktop

First 13,000teu containership transits under New York and New Jersey's raised Bayonne Bridge.

The 13,208 TEU *OOCL Berlin* became the largest ship to call at the Port of New York and New Jersey when it arrived after transiting under the newly raised Bayonne Bridge. *OOCL Berlin* sailed into Newark Bay docked at Maher Terminals Berth 68 on Monday afternoon.
At 13,208 TEU, the *Berlin* measures more than 1,200 feet in length. It is now the largest vessel to transit under the Bayonne Bridge, which was only recently raised to a height of 215 feet (65.5 metres) from its original 151 feet (46 metres) vessel passage clearance. Previously, the air draft clearance of the bridge limited the size of ships able to call at the port, but it's now possible for larger ships to enter Newark Bay without any air draft issues.
Various carrier alliances have announced their intention to deploy even larger vessels of up to 18,000 TEUs to the Port of New York and New Jersey as cargo demand grows and as fewer East Coast ports are able to provide infrastructure sufficient to safely handle and work ships of this size. *Jul 17, 2017*
http://gcaptain.com/first-13000-teu-containership-transits-under-new-york-and-new-jerseys-raised-bayonne-bridge/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+Gcaptain+%28gCaptain.com%29&mc_cid=f46dce02ff&mc_eid=35ccf165ad

When the bridge was built in 1931 and until recent years the air draft was sufficient for most ships to be able to reach marine terminals in Elizabeth and Newark, New Jersey. But with the size of today's large container vessels, the bridge became an obstacle and without a drastic measure such as "raising the roadway", the Port would lose valuable business
What will the bridge look like when this is all over? The "Raise the Roadway" solution leaves the iconic Bayonne Bridge arch in place while raising the roadway to meet the navigational clearance needs. As part of this effort, the roadway was upgraded to be more consistent with modern design standards, improving safety and security, considering innovative traffic management techniques to balance vehicular demand and more efficiently manage congestion, and plan for a more sustainable, transit oriented transportation network in the future.
Construction began in 2013, the increased navigational clearance was achieved in 2017, and construction is expected to be completed in mid 2019. http://www.panynj.gov/bridges-tunnels/bayonne-navigational-clearance-project-faqs.html

To see how the road was raised take a look at: https://www.youtube.com/watch?v=lW5I6lFFXRU and https://www.youtube.com/watch?v=fmUK3uErmIs
Also see: http://www.joc.com/port-news/us-ports/port-new-york-and-new-jersey/largest-ship-call-us-east-coast-passes-under-bayonne-bridge_20170717.html

Ship Channel Pilot encourages kids to follow in her wake. A Houston Chronicle article by Andrea Rumbaugh brings forward the difficult public duty that Maritime Pilots carry out: Ship Channel Pilot encourages kids to follow in her wake
Capt. Kristi Taylor watches the approaching ship from the bridge of the *Pamisos*, an oil tanker 750 feet long and 138 feet wide. She lets the giant vessels go bow-to-bow until they're 6/10 of a mile apart. The crew awaits her orders.
It's a manoeuvre both commonplace and potentially catastrophic.
Taylor has met and passed thousands of ships along the channel without incident. But she knows just one wrong move could cost millions or even billions of dollars in damages, spill oil into the channel or risk the lives of those onboard.
The Captain and Crew know this, too, and don't hesitate to follow orders through Houston's especially narrow channel.
At this point on the *Pamisos*, with the ships side by side, Taylor increases the urgency of her commands.
"Starboard 20," she says to the helmsman, who moves the rudder 20 degrees to the right.
But she can still feel the *Pamisos* being pulled into the passing ship's wake. "Hard to starboard," she says to counteract the pull, "full ahead."
The increased speed does the trick, and the two vessels continue down the Houston Ship Channel without incident.
She begins to guide the *Pamisos* back to the centre of the channel. "Ease to 20 … ease to 10 … midship ... ." With another successful manoeuvre behind her,
Taylor looks at the differential GPS displayed on her laptop to see when and where the *Pamisos* will greet its next vessel. She returns her attention to the path ahead.
Ships cannot enter or leave the Houston Ship Channel without guidance from Taylor or one of her 96 colleagues, who have memorized every nook and cranny of the waterway and undergone years of training.
They're trusted to avoid shallow spots along the channel, manoeuvre around other vessels and not anchor on pipelines during the especially bad bouts of fog that Houston is prone to getting. The coveted positions require years of experience and, like the maritime industry overall, have long been dominated by men. Taylor is one of four women in the Houston Pilots Association.
To educate the next, more diverse generation of pilots, Taylor will be featured in the television show "So You Want To Be?" The program introduces children to potential careers, and Taylor recently watched a preview of her episode. "I hope it will inspire kids who might not know there's that opportunity," she said.
Piquing girls' interest at a young age could help boost the number of women at sea - a number that remains low. "Because shipping is so global and it's the engine of world trade, women ought to have a role to play," said Cleopatra Doumbia-Henry, president of the World Maritime University. "And there is a place for women."
Taylor stumbled into her career at sea. Growing up in Colorado, she first went to a traditional college and considered becoming a teacher.
But her love of travel, coupled with her father's wishes that she not follow in his footsteps as a math teacher, pushed her to look for other options.
She graduated from the U.S. Merchant Marine Academy in 1995 with a Bachelor of Science degree in marine transportation and a third-mate license - the hierarchy goes Captain, Chief Mate, Second Mate and then Third Mate - and began seeing the world.
She's traveled to Japan, Hong Kong, Australia, India, Hawaii and Mexico, to name a few destinations.
It was rare to be the only woman on board, but there were never more than five on any given ship.
Crediting her predecessors as the trailblazers, Taylor said discrimination wasn't really an issue.
"Since I wasn't the first wave," she said, "by the time I got to shipping we were just old news."
Fellow pilot Capt. Sherri Hickman, who graduated from the Maine Maritime Academy in 1985, recalled it was common to be the only woman on board during her nine years sailing on oil tankers.
An additional challenge was overcoming historical superstition about women on ships being bad luck. But after a few days, she said, she would prove to the other sailors that she knew the job and there weren't any issues. The converts included one Captain, she added, who initially had complained he didn't want a woman serving as Second Officer. She won him over, too, and he eventually helped her earn a Captain's ranking.
Hickman became a pilot in 1994.
"It's not such an eye opener to them anymore," Hickman said. "It's just accepted."
Now Hickman's daughter, Coronado, is joining the next wave of women at sea.
She graduated from Maine Maritime last May, making them the first mother-daughter pair to complete the school's cadet program, and is sailing as Third Officer on a container ship. Still, the numbers show there's room for growth.
A 2003 report from the International Labour Organization found that women represent between 1% and 2% of the world's 1.25 million seafarers, and most of them worked as hotel personnel on cruise ships.
Doumbia-Henry said this figure was confirmed in a 2013 report from that organization. She likewise cited estimates from two other global shipping groups, BIMCO and the International Chamber of Shipping, showing there are currently 16,500 women out of the 1.6 million seafarers on merchant ships. Barriers include gender discrimination and the difficulty of attracting women to a career at sea or enrolling them in maritime academic institutions, Doumbia-Henry said.
Traditional stereotypes also play a role. She hopes advances in technology and regulation can help overcome such hurdles.

New technology makes it easier to stay in touch while at sea, she said, and more efficient shipping creates shorter stints away from home. On the regulatory front, Doumbia-Henry said the International Labour Organization's Maritime Labour Convention has gender-sensitive language, contains strong anti-discrimination provisions and includes requirements for new ships to have separate sleeping areas for women.

Amendments adopted in 2016 provide a zero-tolerance policy for bullying and harassment. Some signs suggest more women will move into leadership positions. Doumbia-Henry said 48 women are enrolled to earn their Master of Science in Maritime Affairs at the World Maritime University. That's 37.2% of the 2016-2017 class. Maritime and Shipowners' Associations now have women on their boards or in senior management positions, said Karin Orsel, President of the Women's International Shipping & Trading Association. That was not the case 10 to 15 years ago. Roughly 40 women work as pilots in the U.S., said Capt. Robert Shearon, presiding officer for the Houston Pilots. The local association also has two African-American pilots, one Indian, one American Indian and three Hispanics. "I think the whole industry is diversifying," he said.

To educate the next generation of seafarers, the local pilots group works with local high schools, San Jacinto College and Texas A&M University at Galveston.

Taylor's video, complete with animations and vocabulary lessons, will reach a younger audience. The episode is hoped to air in the fall. But becoming a Pilot is no easy feat. Jobs become available only when someone retires or activity increases at the port. Applicants generally have 10 to 20 years of maritime experience.

"For a long time, I didn't think that I would ever be accepted," Taylor said, "so I didn't even think about applying."

She eventually submitted an application, which was accepted four years later. At the time, she had 14 years of sailing experience and an MBA in supply chain management and finance.

Before beginning her three-year apprenticeship, Taylor had to draw from memory detailed charts of the Houston Ship Channel, including buoys and beacons, underwater obstructions and fathom curves that indicate the contour of the channel floor. That took about three months.

"Within a pencil width," Taylor said. "It's got to be exact." After that, she spent six months shadowing other pilots before she was allowed to guide ships herself.

Pilots don't actually steer the ships but instead direct the helmsman on how to steer.

Taylor became a full-fledged pilot in 2014. Shearon, declining to elaborate on salaries, said pilots are "adequately compensated for the amount of risk we assume."

Each year, about one pilot in the U.S. dies while working and several others are severely injured.

He said the most dangerous part is transferring between the pilot's boat and the ship; using a ladder to climb up and down the side of the vessel.

Pilots work as independent contractors bonded together by an association.

They evenly split expenses, such as hiring pilot boat captains or dispatchers, and the money earned from guiding ships in and out of the port.

Taylor said the different weather patterns, traffic scenarios and ship characteristics keep her job interesting and provide opportunities to improve. Some seafarers have been surprised to meet a woman pilot, she said, but none have been intentionally rude. They just struggle with the terminology. "They don't know what to call you," Taylor said. "They'll call you 'Mrs. Pilot' or 'lady pilot.'"

March 24, 2017

http://www.houstonchronicle.com/business/article/Ship-Channel-pilot-encourages-kids-to-follow-in-11022941.php

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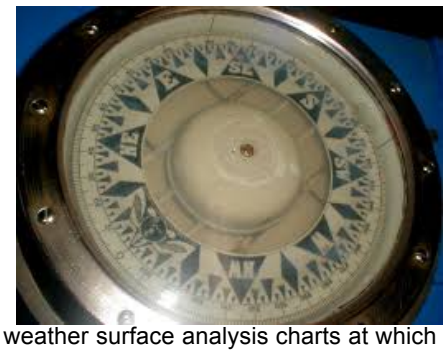

Conflicting futures? I think my career at sea was during the most interesting period of our profession. As a young man when contemplating a career, one of the attractions about going to sea was the prospect of navigating a ship around the world. Seamanship came naturally to me in every respect that the word “seamanship” involves. Many of the ships in which I sailed from apprentice to Master had no navigation aids; we had a wheel and a compass and a chronometer and, of course, our own personally owned sextant. We also had radio direction finding equipment that was helpful in some areas but not everywhere and was not very accurate. There was no radar, no echo sounder (we had a deep sea sounding machine), no gyrocompass, loran, no VHF, no computer, no Fax. Navigation was interesting and challenging and successful. We had a barometer but had to draw our own weather surface analysis charts at which

we became quite expert.
I have just read two conflicting articles in *Seaways, April 2014.* On page 25 we are told of ships that are expected to travel without any crew. No navigator and apparently no need to keep a lookout. Presumably these ships will have flawless power that will never fail. Now turn to page 26 where we are told that Masters and ships' officers can hardly cope with the volume of paperwork due to the ever increasing list of rules and regulations and bureaucracy, (and under manning?). This on top of the normal duties of running a ship and stowing cargo etc. Much of this paperwork requires nautical knowledge so I don't know how the aforementioned unmanned 'drones' would handle this extra work; or would it become conveniently unnecessary?
Captain Malcolm C. Armstrong FNI. Letter to the Editor: Seaways. July 2014. www.nautinst.org/seaways

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Autonomous container loading technology to cut time in port. Autonomous container loading and offloading concepts to cut time in port, costs and manning levels have been developed: The CargoFlow concepts base operations on CargoCat, a Ro-ro vessel that may be a monohull or multihull ship and CargoKitten, a smaller vessel delivering feeder operations between smaller ports and the service.

Dagfinn Aksnes, owner and CEO of Norway-based Seaway Innovations, which developed the technology and vessels alongside FluXXWorks, said the concepts have been modelled and proved through simulations that visualise the cargo flows, automation and the multimodal integration
15-20 knots speed: A container ship today normally travels at 8-14 knots while CargoCat will travel at 15-20 knots with reduced fuel consumption and minimal emissions. Loading and offloading will run on renewable energy.
The speed of operations reduces waiting time in ports, allowing ships to maximise revenue at sea.
Automation technologies for cargo handling renders cranes and their high purchase and installation costs and expensive maintenance obsolete, said Seaway Innovations.
Revenue increase: As manning levels in port and onboard are significantly reduced, revenues will be increased and costs reduced for both ship owners and cargo owners, said board member Roald Toskedal.
Ship owners, cargo owners and ports are also expected to benefit as the process will transfer some volumes from road to sea, increase turnover for stakeholders.
Seaway Innovations are now seeking investors and potential collaboration partners for CargoFlow.
By Rebecca Jeffrey. 05 Sep 2017
http://www.maritimejournal.com/news101/industry-news/autonomous-container-loading-technology-to-cut-time-in-port

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

The Nautical Institute
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