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 2019

Following is a document submitted to the Directors of the fledgling Society at a meeting in 1995.

Nautical Professional Education in British Columbia

The Nautical Professional Education Society of British Columbia
Enhancing Nautical Education and Careers

Gerald B. Stanford F.N.I.

The Canadian Problem: The post Second World War demise of the Canadian Merchant Fleet saw loss of jobs, career opportunities and deep-sea training for Canadians. Companies continuing to operate under the Canadian flag, bound by Canadian tax law and facing increasing competition from shipowners in countries with subsidies or more beneficial taxation, also moved to off-shore registries under "flags of necessity". Canadians seeking nautical careers faced difficulties of access in international shipping and competition by Third World nationals. Former career progression through company contract manning was replaced by short-term placements through manning agencies. The loss of Canadian flag shipping also caused growing concern over the lack of younger, qualified, experienced replacement officers for management, regulatory and instruction positions in Canada. Yet it was not Canadian government policy to help restore a Canadian flag merchant fleet.

Early moves to change: Increasing concerns were raised by members of The Nautical Institute, British Columbia Branch, the Company of Master Mariners and the Canadian Institute of Marine Engineering. In 1991 Pacific Marine Training Institute (P.M.T.I.) at Vancouver, British Columbia, proposed a three-year Maritime Studies Diploma Program. A common first year academic phase would be followed by elective specialization for Deck, Marine Engineering and Marine Transportation, the latter incorporating an existing Shipping and Marine Operations program. Six college semesters and two 6-months periods of deep-sea training would lead to O.N. II and Marine Engineer 3rd Class, but it stalled for lack of government support.
Liberalisation, by the then Conservative government, of the Canadian *Income Tax Act* allowed offshore companies to relocate their headquarters of operations offices to Canadian Maritime Centres with tax exemption for their offshore operations and income (see SEAWAYS May 1991, p.27). Aimed at shipowners in Hong Kong, the first to come was Teekay Shipping Ltd from Long Beach, California (*gratia O.P.A*) and several Hong Kong companies have moved or are in process. At the same time, some companies realising the shortcomings of manning agency crewing, re-considered cadet training and company career progression. Teekay was one, with commercial cadet training ships, as is being reinstated by some U.K. companies.

The Problem: Good solutions still have problems and, in Canada, the suddenly opened curtain on this window was drawn closed by government funding restraints and lack of political motivation. Education being under Provincial government funding, low voter appeal would not merit the cost. Meantime, under the existing programs, Canadians became qualified to Watchkeeping Mates and Marine Engineers 4th Class certificates, basically coastal qualifications, creating a large pool of such officers who found their qualifications not accepted by international deep sea owners, and too few coastal positions to employ them. Consequently some sail as seamen and many are unemployed with seemingly nowhere to go: a logjam to be broken.

Study and Trial Program: A study was made by members of The Nautical Institute, British Columbia Branch, and faculty of P.M.T.I, including Captain Gavin Brown MNI, Captain John Swain MNI (Stolt Tankers), Mr. Barry Sheppard M.Can.I.M.E., and Ms. Heather Hathorn Comp N.I. (Hathorn Agencies), and working groups for funding, a training scheme and positions. A Cadet Junior Officer Training Plan, modifying the previous P.M.T.I plan, was proposed as a 4-year program including shore and sea phases, with costing for pay, but the immediate problem was the situation of un- or under-employed Watchkeeping Mates, not qualifying for off-shore due to lack of qualification, deepsea service and critical job specifications.

The immediate solution lay in providing opportunities for the necessary 12 months watchkeeping seatime, with assigned self-study to bring such trainees to O.N.II. This applied similarly to junior marine engineering officers. A trial program was initiated by Captain Brown and Heather Hathorn to place four junior officers on offshore deepsea container and ro-ro ships operating in the Pacific and Caribbean. Members of The Nautical Institute, British Columbia Branch, raised funds to pay the trainees the equivalent that the company paid their Cadets, for a 3-months trial period. The success of this trial, leading two of the junior officers on to permanent positions, showed the value of such a program. At the time the Provincial government, to combat general unemployment, committed funding for job skills improvement programs. Approaches to the Ministry of Skills, Training and Labour (the Ministry) by Captain Brian Silvester MNI showed the feasibility of applying for such funding for our program.

The Nautical Professional Education Society: As the scheme proposed was for deck and engineering officers, it could not be limited to The Nautical Institute. It also required a society registered as a charitable organisation. To this end the British Columbia Branch directors and a couple of other venturesome members applied for incorporation as the **Nautical Professional Education Society of British Columbia** ("the Society"). The Society is the directing organisation, affiliated with The Nautical Institute and open to affiliation with the Canadian Institute of Marine Engineering and other marine related professional organisations, and open for individual memberships and corporate memberships for professional in-put, working assistance, and financial support.

A formal proposal to the Ministry through Camosun College by Captain Brian Silvester, as Head of Nautical Studies at the College, obtained approval for funds. The proposal took into account the contribution by the Society in managing the scheme, and the contributions by the shipowner in provision of positions, accommodation and training, against funding providing grants for payments by the Society to shipping companies to give monthly payments to the trainees. The funds to be paid or held through Camosun College, payable to the Society for its requirements on demand, providing a short term "kick-start".

The companies will sign the trainees on, and pay related costs, for a 6-months period or as further agreed, and so will have an extra watchkeeping officer on board, subject to supervision and training by the Master and officers, and completion of training sea requirements set by the Society and professional training publication programs such as The Nautical Institute **Bridge Watchkeeping Guide.** The aim will be to assist trainees to get their seatime to sit for O.N.II or Marine Engineer 3rd Class certificates and develop them to a high standard of training and expertise to qualify them for further career progression in deepsea shipping.

Officers and directors of the Society, elected and confirmed at inaugural meeting are: -

Captain E.G. Monteiro MNI	Canadian Transport Co.	President & Chairman
Captain (N) J.K. Steele C.D. MNI	R.C.N. Retired	Secretary
Captain A. Crowther MNI	Pacific Coast Shipping	Treasurer
Captain D. Whitaker MNI	Fraser Surrey Docks	Director: Fund Raising
Captain Janice Kenefick AMNI	P.M.T.I.	Director: Public Relations
Ms. Heather Hathorn Comp. NI	Hathorn Agencies	Director: Placements
Captain J. Arnott MNI	P.M.T.I.	Director: ex officio The Nautical Institute (British Columbia Branch)
Lt.-Cdr. G.B. Stanford C.D. LL.B. FNI	Honorary Counsel	

Work is now developing selection and training criteria, training programs, positions and the contracts. Candidate selection will start in April 1995, and it is hoped to have twenty junior officers placed this year. With application for further funding in the next fiscal year. The long term aim of the Society, while dealing with the logjam of partially qualified officers and assisted by short term government assistance, is a full cadet Junior Officer program, but that needs wait until next year! **But we can't do it by ourselves; the Society needs your support and funding through memberships, affiliations and corporate support.**

For those who do not know Lt.-Cdr. Gerry Stanford,
he is one of the Founding Members of the BC Branch of The Nautical Institute.

NPESC Bursaries for 2018: The Society's Bursary Selection Committee met on the evening of October 18th at Stan Bowles' house. This committee comprised of Richard Smith, Joachim Ruether, Stan Bowles and Kate Armstrong. Missing on short notice was Raman, while Ivan could not connect and participate due to being at sea. David Whitaker was present but not on that committee because he was involved in the CMMC Baugh Fund Scholarship selection.

The scoring was found consistent and even, and the awards recipients were identified easily. It was determined that there was sufficient money in our account to be available to offer a sixth Bursary, including one funded primarily by Captain Harry Allen, a retired BC Coast Pilot and long-time member of the Master Mariners of Canada.

Recipients are two Deck Cadets at BCIT, two Engineering Cadets at BCIT, one Deck Student at WMI and one Deck Student at Camosun/WMI.

Soon after the 2018 Bursary applications had been assessed, Captain Richard Smith contacted each applicant to let them know if they were successful or not. Almost immediately he received replies from four of the successful applicants and here are their comments: -

Thank you very much Captain! This is a big help for me! I will definitely contact you guys next season and let you know about my year!

This is amazing news to hear as I approach my fourth year in the cadet program! I intend to use the funds directly towards the tuition. The fourth term does not commence until the second week of March I believe, this being said I hope I don't miss out on the presentation, as I do not live in Vancouver.
Thank you once again:

That's great news, thank you very much. I'll be sure to write you a letter next year, hopefully as a 4th engineer sailing up north.
Kind regards,

I am very grateful for this good news! Currently I am three months through my contract with Princess Cruise Lines and have one remaining. I am enjoying my time here on the Star Princess and gaining lots of experience doing what I enjoy.
The ship is doing 15-day cruises that are sailing from L.A. to Hawaii and back.
I would like to thank you again for selecting me to receive this scholarship, I am planning to use this scholarship for my books or tuition for this coming school term starting in late January.
Many thanks,

And then there is an earlier email response from a Member, who, after being thanked for his donation, replied, *"It is my pleasure. The industry and NPESC has been good to me, and this is a small way for me to give back. I have the pleasure of mentoring a Cadet, and if he is any indication, the industry has some bright young people coming into it."*

Life at Sea. The experiences of apprentices who served with four different British shipping companies. From 'Ships Monthly' May 1996.

3. Blue Star Line: My first voyage to sea was in 1948 to the Antarctic whaling grounds in the Floating Factory Ship *Balaena.* Following this introduction to life, and in particular the sea, I joined the Blue Star Line as Cadet and following various standbys and a coastal voyage in mv *Napier Star*, was appointed to the passenger cargo liner *Empire Star.* My Discharge Book records:

Engagement: Victoria Docks, London 15/11/**1949**
Discharge: Victoria Docks, London 04/08/**1951**

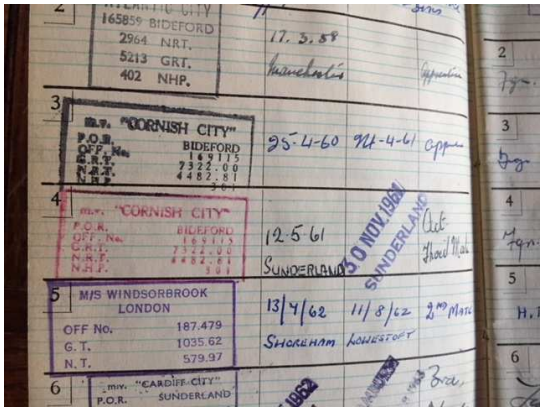
During nearly two years, only three voyages were completed, all to Australia and New Zealand via Cape Town and the Panama Canal. Long periods strike-bound in Sydney, and especially Auckland, I recall vividly. However, life on board *Empire Star* at sea for the two Cadets was very much a training period with weekly study tests under the eagle eye of Captain George Bernard (later of Trinity House and a Knight of the Realm). Our main duties at sea were looking after the lifeboats and other boat deck equipment. While fraternising with the passengers was discouraged, we were called upon to attend dances in our 'No. 10s' from time to time. For some reason the occasional bottle of cider was permitted although alcohol was strictly forbidden.
Accommodation for the Cadets was a 'suite' no less, on the after end of the boat deck, having private shower, washroom and entrance lobby. Watchkeeping while coasting was a regular duty in Blue Star Line

and while study time was allocated at sea by the Chief Officer, the holds and bilges were very much on the agenda in port when Cadets would be either on gangway duty or working with Bosun or Carpenter.
During our regular calls round the Australian coast there were frequent meetings with ships of our competitor lines: Port Line, Federal, N.Z.S.C., Bank Line, Blue Funnel, Shaw Savill and P&O, to name a few. On one occasion, while lying ahead of Alfred Holt's *Menelaus* (1923) at Melbourne station pier, the four apprentices of that vessel visited their opposite numbers in the 'Star Boat'. By coincidence, one of them was a friend of mine and this led to several joint shore excursions in later ports. However, the reason for their visit on this occasion was to request shower facilities, which they had heard were available on Blue Star ships and were not, in those days, in existence in the older ships of Blue Funnel. Our colleagues had just completed a coalbunker transfer on their own ship and were most grateful to receive a sympathetic welcome, and a shower, aboard *Empire Star.*
Those were the days! **Mike Pheby, Louth, Lincolnshire.**

(No. 4, Bank Line, will appear in the next edition of Seatimes.)

In the October 2018 edition of Seatimes, the shipping company featured in this segment was "Smith's of Cardiff". Afterwards we received the following comments from Tony Crowther, the Society's first Treasurer (and first Life Member – but that's another story).

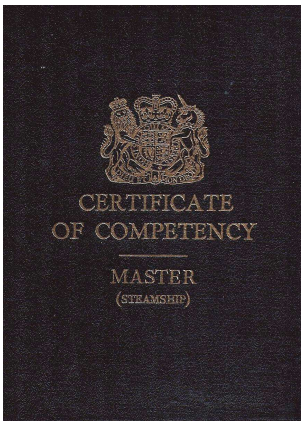
Thanks for the latest very interesting issue of "Seatimes". I was particularly pleased to see the article by Capt. Vic Pitcher describing life at sea as an apprentice with the Reardon Smith Line, with which I was also employed for 20 years.



I can vouch that all he says is very true! He joined the "Cornish City" in 1956 and I started my apprenticeship one year later on the *Atlantic City*. However, after 2 years on that vessel and a couple of weeks leave I too joined the *Cornish City* as the senior apprentice in 1960. That voyage lasted 12 months during which I was encouraged by the Master to learn the Collision Regs parrot fashion and to be proficient in all bridgework undertaken by the Third Mate. I was able to achieve this and as a result he recommended me to the company. After a few weeks leave I was instructed to return to the *Cornish* as Acting Third Mate. I must confess that money was my main motivation to get that promotion, as there was a big difference between the pay of a 4th Year Apprentice and the Third Mate. At the end of that trip I had completed my apprenticeship and went to College in Cardiff to study for my 2nd Mates ticket. After 4 years at sea with very little time at home I was determined to enjoy myself and as a result of that I managed to fail the exam at my first 2 attempts. In the summer break due to a lack of funds I got a 2nd Mate's job on a coaster belonging to Comber Longstaffe, which I enjoyed. Fortunately I passed 2nd Mates in the September and joined the *Cardiff City* in October 1962 - a maiden voyage that lasted until April 1964! Just enough time in for my Mate's ticket.
I latterly worked as a Port Captain for the company and my last deep-sea voyage was Master of the *Chiyoda* (ex *Eastern City*), which had been converted to a lift on/lift off car carrier on long-term charter to Nissan. I left the company in 1976 and a few years later went to work for Gearbulk in the UK and then later in Vancouver.
The attached photo was taken from the bridge wing of the *Cornish* in 1961 - John Cann the 2nd Mate on the left, who I am still in touch with, had a fancy "Plath" sextant!
I have to say I enjoyed my sea career immensely and have no regrets about any of it and have wonderful memories.
I appreciate that things have changed since then but I still consider it a good career choice these days too.
Best wishes, Tony Crowther.

Sorry Tony, but I just had to include the following letter. It appeared in the Journal of the Honourable Company of Master Mariners, Issue 3/2018. Dave W.

Letter to the Editor: Contained in a number of articles that have appeared of late in the HCMM magazine has been the reference 'ticket' when associated with that of Master or Mates examinations. This terminology took me back some 60-odd years when nearing the end of my apprenticeship.



Part of the training scheme of the company in which I was serving demanded a 'diary of events', to be written daily and to contain all relevant aspects of the past 24 hours, including sketches and diagrams where appropriate. These particular diaries were subject to the Captain's scrutiny prior to his making ship's rounds on Sunday mornings.

In one such entry I idly added that I needed only 30 days 'seatime' to be eligible to present myself to the then Board of Trade to sit for my Second Mate's 'ticket'. Later that particular Sunday morning I was summoned to report to the Captain, a certain F.S. Hall (Extra Master), a gentleman with a distinguished war record, and of immense personal presence.

After standing to attention in his office for what seemed like a 'dog watch', Captain Hall eventually made his entrance. I was immediately informed, in no uncertain terms, that should I ever indeed make it to the examination room – and should I unbelievably be fortunate enough to be successful in fooling the examiners – I would then be granted a **Certificate of Competency** – for the rank I was hoping to achieve.

His parting words still ring in my ears: ***"You get a ticket for a tram!"***

I do hope I am not being too pedantic, but I still remember that salutary lesson every time I purchase one of those that gains me entry on to a Coach or a Train, but sadly, seldom nowadays do I find a Tram!

Yours sincerely, **Captain C F Parfitt.**

Did you know? ***By and large*** is originally a sailing term meaning alternatively *close-hauled* and *not close-hauled.* A ship that is sailing close-hauled is sailing as directly into the wind as possible (typically within about 45 degrees of the wind). The ***by*** part of the phrase means *close-hauled.* (This *by* also appears in the term *full and by*, meaning sailing with all sails full and as close to the wind as possible). ***Large,*** by contrast, refers to a point of sail in which the wind is hitting the boat abaft the beam, or behind the boat's widest point. A 1669 variant of the spelling of *by and large* gives us a sense of the range implied: thus you see the ship handled in fair weather and foul, *by and leарge.* **"Merriam Webster's Word of the Day"** <word@m-w.com>

The cargo ships that 'liquefy': Think of a dangerous cargo, and toxic waste or explosives might come to mind. But granular cargoes such as crushed ore and mineral sands are responsible for the loss of numerous ships every year. On average, 10 'solid bulk cargo' carriers have been lost at sea each year for the last decade.

Solid bulk cargoes – defined as granular materials loaded directly into a ship's hold – can suddenly turn from a solid state into a liquid state, a process known as liquefaction. And this can be disastrous for any ship carrying them – and for the crew.

In 2015, the 56,000-tonne bulk carrier Bulk Jupiter rapidly sunk around 300km (187 miles) southwest of Vietnam, with only one of its 19-strong crew surviving. This prompted warnings from the International Maritime Organisation (IMO) about the possible liquefaction of the relatively new solid bulk cargo bauxite (an aluminium ore).

A lot is known about the physics of the liquefaction of granular materials from geotechnical and earthquake engineering. The vigorous shaking of the Earth causes pressure in the ground water to increase to such a level that the soil 'liquefies'. Yet despite our understanding of this phenomenon, and the guidelines in place to prevent it occurring, it is still causing ships to sink and taking their crew with them.

Solid bulk cargoes are typically 'two-phase' materials as they contain water between the solid particles. When the particles can touch, the friction between them makes the material act like a solid (even though there is liquid present). But when the water pressure rises, these inter-particle forces reduce and the strength of the material decreases. When the friction is reduced to zero, the material acts like a liquid (even though the solid particles are still present).

A solid bulk cargo that is apparently stable on the quayside can liquefy because pressures in the water between the particles build up as it is loaded on to the ship. This is especially likely if, as is common practice, the cargo is loaded with

a conveyor belt from the quayside into the hold, which can involve a fall of significant height. The vibration and motion of the ship from the engine and the sea during the voyage can also increase the water pressure and lead to liquefaction of the cargo. When a solid bulk cargo liquefies, it can shift or slosh inside a ship's hold, making the vessel less stable. A liquefied cargo can shift completely to one side of the hold. If it regains its strength and reverts to a solid state, the cargo will remain in the shifted position, causing the ship to permanently tilt or 'list' in the water. The cargo can then liquefy again and shift further, increasing the angle of list.

At some point, the angle of list becomes so great that water enters the hull through the hatch covers, or the vessel is no longer stable enough to recover from the rolling motion caused by the waves. Water can also move from within the cargo to its surface as a result of liquefaction and subsequent sloshing of this free water can further impact the vessel's stability. Unless the sloshing can be stopped, the ship is in danger of sinking.

The International Maritime Organisation has codes governing how much moisture is allowed in solid bulk cargo in order to prevent liquefaction. So why does it still happen?

The technical answer is that the existing guidance on stowing and shipping solid bulk cargoes is too simplistic.

Liquefaction potential depends not just on how much moisture is in a bulk cargo but also other material characteristics, such as the particle size distribution, the ratio of the volume of solid particles to water and the relative density of the cargo, as well as the method of loading and the motions of the vessel during the voyage.

The production and transport of new materials, such as bauxite, and increased processing of traditional ores before they are transported, means more cargo is being carried whose material behaviour is not well understood. This increases the risk of cargo liquefaction.

Commercial agendas also play a role. For example, pressure to load vessels quickly leads to more hard loading even though it risks raising the water pressure in the cargoes. And pressure to deliver the same tonnage of cargo as was loaded may discourage the crew of the vessel draining cargoes during the voyage.

To tackle these problems, the shipping industry needs to better understand the material behaviour of solid bulk cargoes now being transported and prescribe appropriate testing. New technology could help. Sensors in a ship's hold could monitor the water pressure of the bulk cargo. Or the surface of the cargo could be monitored, for example using lasers, to identify any changes in its position.

The challenge is developing a technology that is cheap enough, quick to install and robust enough to survive loading and unloading of the cargo. If these challenges can be overcome, combining data on the water pressure and movement of the cargo with information on the weather and the ship's movements could produce a real-time warning of whether the cargo was about to liquefy.

The crew could then act to prevent the water pressure in the cargo rising too much, for example, by draining water from the cargo holds (to reduce water pressure) or changing course of the vessel to avoid particularly bad weather (to reduce ship motions). Or if that were not possible, they could evacuate the vessel. In this way, this phenomenon of solid bulk cargo liquefaction could be overcome, and fewer ships and crew would be lost at sea.

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http://www.bbc.com/future/story/20180905-the-cargo-ships-that-liquefy

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From the pages of "Port News", Autumn 1983, the newsletter of the Port of Vancouver, B.C.

Learning the Ropes, Pacific Fashion: The Pacific Marine Training Institute is the next best thing to actually being at sea. Inside the new, $6 million landmark in the Port of Vancouver is a training facility that reflects both the changes that have revolutionized shipping, and its many enduring traditions. Here, tomorrow's marine engineers are learning about electronic circuit boards of machinery control systems, and diesel engines. And tomorrow's deck officers are learning about push-button position fixing with intercontinental radio signal networks, and the use of the sextant.

Learning the ropes, whether deckhand or Master, grows ever more complex. So, while doing much of the teaching on land has become a necessity, there are gestures to the sea.

The Institute, its award-winning architecture resembling a ship's superstructure, peers out over its modest dock on the north shore of Burrard Inlet at the daily parade of ships calling at Vancouver, Canada's window on the Pacific Rim. The building incorporates circular windows, like giant portholes. Each of its three floors containing a total of 66,000 square feet (triple the previous premises) is called a deck.

In its classrooms, trainees use radar to simulate navigating through a fog in any port they please, from New York to Kitimat. They can plumb an intricate maze of pipes that, to the uninitiated, Rube Goldberg might have assembled, and trouble-shoot engines as big as a locomotive.

It may be dry land, but trainees have to get their feet wet. In an indoor training tank survival suits are tested, lifeboat drills are rehearsed and an overhead winch helps simulate helicopter rescues.

Now, some 70 years since formal nautical training first began on Canada's west coast, the Pacific Marine Training Institute has evolved as the regional centre most responsible for raising the levels of professional seamanship.
"British Columbia has one of the finest marine training institutions in the country," Principal Derek Hughes says proudly. Mr. Hughes, formerly a Marine Surveyor with the Canadian Department of Transport, was seconded in 1976 to run the old Marine Training Centre as an independent operation so that the Ministry of Education could assess its viability as a self-governing, post-secondary educational institution. The Pacific Marine Training Institute is the result. The British Columbia Ministry of Education funds its operating costs. More than $3 million worth of instructional equipment is leased at no cost from the Government of Canada, while industry has donated more than half a million dollars worth of engineering control equipment and navigation aids.
The Institute's wharf says it all about the federal-provincial-industry cooperation the facility attracts: the wharf is provincial, two lifeboats and two sets of davits are federal, while another set of davits and several large inflatable liferafts are from industry.

Towboats hauling log booms and woodchip barges are a major marine activity in the maze of coastal waterways, where at times the tides flow at more than ten miles an hour, require a unique skill. Growth in arctic transportation has mushroomed. Both fields have overlapping basic and specialized demands.
"Coastal expertise takes just as long to learn as ocean expertise. In fact, with coastal tides and traffic, you're sailing closer to danger all the time," said Mr. Hughes.
The Institute provides emergency duties training for the whole range of occupations at sea – from the roughneck on an oilrig to one of the catering staff on a B.C. ferry. Introductory courses are taken by the wives of fishermen (a woman has already qualified to become Master of a Great Lakes vessel, but an Institute brochure cautions: "some difficulties may still prevail for women to enter a field that has been a male domain for a long period of time").
Advanced nautical courses are offered for officers aboard towboats and icebreakers. Veteran pilots come in for refresher courses on radar navigation. Would-be marine engineers can bypass the traditional three years as an oiler and enter an apprenticeship program that gives them a much greater knowledge of the engineering complexities of a modern ship.
Statistics indicate that Canada has been training only about one-third of the deck and engineer officers its shipping industry requires. The Pacific Marine Training Institute, with 24 instructors, can comfortably accommodate about 320 trainees at a time.
Economics dictate that most of the training on the West Coast take place on land. One of Mr. Hughes' chief laments is that Canada has no deep-sea fleet. For senior officers there is no substitute for ocean-going experience on a commercial ship trading worldwide.
"There are people in the marine community in Vancouver who have qualified to become second-in-command of a ship trading around the world and who have never taken a sextant sight using an ocean horizon."

(In 1994, the Pacific Marine Training Institute became the Marine Campus of BCIT)

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HOW TO SIMULATE SHIPBOARD LIFE

Suggestions for the land-locked sailor who misses the "good old days".

1. Sleep on the shelf in your closet. Replace the closet door with a curtain. Six hours after you go to sleep, have your wife whip open the curtain, shine a flashlight in your eyes, and mumble "Sorry, wrong rack".
2. Renovate your bathroom. Build a wall across the middle of your bathtub and move the showerhead down to chest level. When you take showers, make sure you shut off the water while soaping.
3. Every time there's a thunderstorm, go sit in a wobbly rocking chair and rock as hard as you can until you're nauseous.
4. (Optional for ex-engineering types) Leave lawnmower running in your living room six hours a day for proper noise level.
5. Have the paperboy give you a haircut.
6. Once a week blow compressed air up through your chimney, making sure the wind carries the soot across and on to your neighbour's house. Laugh at him when he curses you.
7. Set your alarm clock to go off at random times during the night. When it goes off, jump out of bed and get

dressed as fast as you can, then run out into your yard and break out the garden hose.

8. Use 18 scoops of budget coffee per pot and allow it to sit for 5 or 6 hours before drinking.
9. Invite at least 85 people you don't really like to come and visit for a couple of months.
10. Have a fluorescent lamp installed on the bottom of your coffee table and lie under it to read books.
11. Raise the thresholds and lower the top sills on your front and back doors so that you either trip over the threshold or hit your head on the sill every time you pass through one of them.
12. When making cakes, prop up one side of the pan while it is baking. Then spread icing really thick on one side to level off the top.
13. Every so often, throw your cat into the swimming pool, shout "Man overboard, shipboard recovery!", run into the kitchen and sweep all the pots/pans/dishes off of the counter onto the floor, then yell at your wife and kids for not having the place "stowed for sea".
14. Set your alarm for 0330. Get up, hang two coke bottles around your neck and stand under a sprinkler in the back yard for 4 hours.

Submitted by Captain David Batchelor FNI

New Report Explores Human Impact of Autonomous Ships: The Institute of Marine Engineering, Science and Technology (IMarEST) has released a report on the human impact of autonomous ships in what it describes as a major piece of research.

For the report, IMarEST's Maritime Autonomous Surface Ships Special Interest Group (MASS-SIG)) sought to gauge the potential impact of self-governing ships and plot out a new course for the shipping industry's valued workforce.

One of the conclusions reached in the industry-wide investigation was that while autonomous technologies could create a competitive advantage for shipping companies, adoption will likely vary significantly between market segments.

An initial survey went on to inform a roundtable discussion, which in turn formed the basis of the report, titled "Autonomous Shipping – Putting the Human Back in the Headlines". (You can download the report here)

While only one in six believe that industry is fully geared up to exploit the autonomous or remote operation of commercial vessels in the immediate future, the general sentiment was that such technologies will deliver benefits over the long term. However, somewhat ironically, the success of unmanned ships will hinge ultimately on accommodating the human-in-the-loop.

MASS-SIG's investigation blended quantitative analysis in the form of an online survey with qualitative analysis of the results in a roundtable discussion held during Singapore Maritime Week in April, with the support of BMT Defence and Security and Braemar, as well as the British Chamber of Commerce (Singapore) and the Institution of Mechanical Engineers.

Senior figures from several high-profile shipping companies, two major classification societies, shipyards, regulators, technology providers, academia and research groups, as well as representatives from both Singapore's Maritime & Port Authority and its navy took part in the conversation.

The survey sought opinion on the drivers for autonomous technology; the business case for automation and remote operation; amenability to such solutions by vessel segment; the relationship between man and machine, and by extension the human element; societal acceptance; and workforce succession planning.

"We had more than 600 responses to the survey, providing us a unique insight into current industry sentiment on an incipient – and often controversial – technology. This dataset was a keystone in the round-table, where industry leaders reflected on the results, and drew on their own experience and inject additional insight in order to validate and fortify the research," commented Gordon Meadow, MASS-SIG Chair, IMarEST.

Interest in autonomous or remote vessel operation has arisen from the convergence of several technologies, including machine learning, new sensors, and improved connectivity at sea. Together, these systems could fundamentally transform the way ships operate in the future. But Meadow warns against a fixation on new hardware: "If fully realized, this technology will also transform the way the whole industry functions – and the way we will work with it."

Building a better understanding of the impacts is necessary so as to measure the changes required in workforce capability, competency and training requirements so that those charged with managing and ensuring the safe operation of automated vessels are as effective as they can be.

The mapping of new skill-sets is a major part of MASS-SIG's remit and the report produced highlights ways in which employers, organizations and regulators can work together to understand the skills required in the future and the training framework within which they will be taught.
September 13, 2018. https://gcaptain.com/new-report-explores-human-impact-of-autonomous-ships/

Two Windows – a Mayan aid to navigation: During a recent vacation on the Mayan Riviera in Mexico we took a guided tour of the ancient Mayan walled city of Tulum. The walls surrounding the site allowed the Tulum fort to be defended against invasions. Tulum had access to both land and sea trade routes, making it an important trade hub, especially for obsidian. Access to the site from the ocean involved crossing a hazardous reef through a narrow channel that provided a natural protective barrier and further strengthened defences. The precise location of this channel was nigh on impossible to discover without some form of navigational aid. During the day the entry could be located by paddling across the face of El Castillo (The Castle) until both square and rectangular windows could be seen. By keeping the bow lined up with the mid-point between the two windows safe passage through the channel could be made. At night, lights would be lit in the windows. The light shining through the rectangular window and falling on the water would provide a pathway to follow through the channel.

Submitted by Captain Richard Smith MNI

Food and fitness – a healthy and happy crew: Life at sea is challenging and most seafarers spend more time onboard than at home. One of the keys to a long career at sea is to ensure a healthy lifestyle and to reduce the risk for lifestyle diseases. How can this be achieved?
Tasty, good and nutritious food is welfare but unfortunately such food might be more expensive compared to more greasy food, and the managers might not be eager to increase the victualing budget. One solution is to work closer with the food suppliers or the sea catering services being used. Many of them provide services such as training for the chief cooks, setting up suggestions for weekly menus and they will also help to ensure a good inventory control. A good inventory control will lead to less food waste, which is good for the environment, and it gives more value out of the victualing budget.

Some of the benefits of healthy food onboard

- Controls weight
- Flag states might have different BMI requirements
- Reduces fatigue
- Reduced risk for diseases
- Risk of heart disease and stroke will be reduced when the cholesterol and blood pressure are within a safe range
- Risk of diabetes will be reduced
- Increases life expectancy
- Better mood

Besides having focus on the food, the managers will benefit from motivating their seafarers to conduct physical exercise onboard. Sports onboard is not only good for the physical health but it is fun, it is social and it can also be

a teambuilding effort.

Some of the benefits of physical exercises onboard

- Physically and mentally stronger
- Less stressed
- More balanced
- Better sleep
- Better digestion
- Stabilising blood sugar
- Gives self-confidence

Ship managers who facilitate for tasty, healthy and nutritious food onboard as well as physical activities will benefit from this. A healthy and fit seafarer is a safe and happy seafarer.
Source: Skuld. Nov. 10 2018 https://www.hellenicshippingnews.com/food-and-fitness-a-healthy-and-happy-crew/

The following appeared in an issue of a "Daily Newsclippings". I suppose it is from Twitter or some such media & it takes me quite a while to interpret it.

SeawayNNY @SeawayNNY 25-Nov-2018 Cloudy day meet of #AlgomaCentral ALGOMA TRANSPORT and #Fednav FEDERAL WELLAND at Clayton #1000islands

After much thought I think it says that "Two ships, the Canadian flagged *Algoma Transport* and the Marshall Islands flagged *Federal Welland,* meet on a cloudy day near Clayton, NY, in the Thousand Islands region of the St Lawrence River." (I suppose SeawayNNY is the author.)

French court fines P&O captain over polluting fuel: The US captain of a P&O cruise ship found to be burning fuel with excessive sulphur levels was fined 100,000 euros ($114,000) in a Marseille court Monday, the first such ruling in France. The prosecution was intended by authorities to signal a new intent to tackle pollution from cruise ships after a spot check in March on the *Azura*, operated by P&O Cruises, found it contained unauthorised bunker fuel.
The case has shone a spotlight on practices in the multi-billion-euro cruise industry, with prosecutor Franck Lagier saying P&O "wanted to save money at the expense of everyone's lungs". Captain Evans Hoyt knew the fuel was illegal—it contained 1.68% sulphur, surpassing the 1.5% European limit, Lagier said during the trial.
The judge handed Hoyt, 58, a fine of 100,000 euros, but specified that P&O's parent company, US-based cruise giant Carnival, should pay 80,000 euros of the sum.
Bunker fuel, also known as heavy fuel oil, is one of the most polluting transportation fuels and is high in sulphur, which when burnt can cause respiratory problems and acid rain. Regulations on the amount of sulphur authorised vary internationally, with ultra-clean fuel mandated in areas such as the North Sea and Baltic Sea in Europe, as well as around North American ports.

The European Union introduced new continent-wide norms in 2015, but their enforcement is patchy.

Tightening regulations: Marseille, France's biggest port, is locked in fierce competition for cruise business with other destinations along the Mediterranean coast in Spain and Italy. But the city has struggled with increased smog in recent years and shipping is thought to be responsible for a large part of the pollution, which can cause lung disease.

The *Azura*, one of the largest ships operated by P&O capable with passenger capacity of 3,100, had taken on 900 tonnes of fuel in Barcelona in March before heading to Marseille.

Prosecutor Lagier calculated that the company had saved 21,000 euros by buying higher-sulphur diesel. "The cruise market is expanding fast, in particular in the Mediterranean, creating increasingly large problems," Lagier said.

French environmental groups France Nature Environnement, the Surfrider Foundation and the League for the Protection of Birds each obtained 5,000 euros in damages in Monday's ruling.

Lawyers for P&O had attacked allegedly grey areas in French legislation during the trial, saying there were different rules depending on the type of vessel and the route it was using.

Under new international regulations organised by the International Maritime Organisation, only fuel with 0.50% sulphur will be permitted for ships from 2020.

For ships operating outside designated emission control areas the current limit is 3.50%

Rules have been progressively tightened since 2005.

November 26, 2018 by Francois Becker

Read more at: https://phys.org/news/2018-11-french-court-fines-po-captain.html#jCp

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Viewpoint: Smoke signals: SHIPPING has often been described as an industry that operates “on the frontier”, which could be taken to mean there are always many hostile tribes out there, which bear it no goodwill. Anticipating where the trouble will flare up next may be thought of as an essential skill in the experienced frontiersman, who, in the best Westerns, was always alert to smoke signals or other signs of danger. For the professional Master, exposure to criminal or civil sanctions has always been the downside of the job, inextricably part of the responsibilities that come with the ship they command. But in recent years, this risk has been greatly increased along with port state control, which for better or worse, has enabled anyone with a bit of authority to march on board a ship and throw a lot of weight around. Time in port, once a place to perhaps relax a little after a stormy sea passage, is often a place of tension and one of perpetual inspection. It is also threatening to become a whole lot worse, with coastal states, international regulations and local bylaws, all combining to make the air cleaner and the sea free from harmful alien species which might be transported around in ballast water. The charges for which a Master may end up in court are multiplying fast. There are plenty of smoke signals to be seen. This month the Master of P&O cruiseship *Azura* will find out whether charges he faced at the Criminal Court of Marseilles for burning non-compliant fuel will stand. In theory, he and the company face heavy financial penalties with up to a year’s custody for the Master, after it was discovered that a local sulphur limit of 1.5% was breached, the ship having bunkered in Spain with 1.68% sulphur fuel. It is regarded as something of a “test case”, but any criminal record for any Shipmaster is a very heavy penalty, that is magnified hugely by the demands of his profession to travel unhindered. There is already a growing number of cases of ships that have been detained, after contraventions of emission regulations have been discovered. Even more sinister, there have been warnings that bogus “environmental inspectors” have been plying their trade on certain Black Sea waterfronts, looking to make some easy money. Anyone with a little common sense may wonder why it is the Master of a ship, who probably has limited exposure to the contents of the bunker tanks, or indeed the operation of the ballast management systems, who would be the person dragged into court concerning any alleged infraction. Nothing new about this, of course! Think back to those infamous “Perben” court cases in France, where Masters found themselves fined and given criminal records, after an overflying aircraft had photographed a ship that appeared suspiciously near what may have been an oil slick on the sea. No other corroboration was needed. A very experienced retired Master of my acquaintance tells of a nasty time he experienced in a Spanish port after his Second Engineer, who did not speak English very well, made an innocent mistake with the oil record book and suggested in error that sludge had been discharged overside. Only the helpful intervention of a classification society surveyor saved the Master from a court appearance.

But all around the world, the authorities are anticipating the 2020 sulphur cap and sharpening their investigative powers. And it is Shipmasters who stand to be out there, “on the frontier”, when these new powers are exercised.

Corrupt authorities: They hope that justice and fairness may be watchwords in this new environmental regime, but one does not imagine they are counting on this. In too many parts of the world, corrupt authorities will regard it as just another opportunity to make some money. But even in places where normally the authorities will be scrupulous regarding their regulatory powers, there are unanswered questions. There is a presumption of tremendous precision about the performance of environmental equipment, along with a largely misplaced belief that the blended fuels that are taken on board are formulated to the standards that it says on the tin. Scarcely a week elapses without some P&I club

warning about horrible things somebody has managed to tip into a tank of ship's fuel, whether it is cutter stock, shale, or just the odd tonne or two of chemicals they wanted to get rid of. The clubs are chiefly warning about the harm it can do to the ship, or the machinery, but is this the sort of behaviour that provides the Master with confidence that the sample taken by the inspector will come back from the laboratory smelling of roses and fulfilling all the environmental criteria?
It has occurred to me from time to time that some friendly agency ought to be providing Masters with some sort of global analysis of prosecution risk. Smoke signals for the 21st Century, they could be much like the old Admiralty Sailing Directions also known as Pilots, which would warn mariners of poor holding ground, or other local navigational hazards. It might grade the country for its corruption — an index may be a useful indicator — or the propensity of its courts to deal with visiting masters in an unjust manner. A colour code would provide ease of use. The problem, in these politically correct days, is that nobody would be sufficiently brave to publish such advice. Maybe a seafarer union would take it on board. "Sailor, beware of the Bight of Benin..." began an old sailing ship shanty, which nobody would dare to recite these days. Source: lloydslist. **By: Michael Grey.**
DAILY COLLECTION OF MARITIME PRESS CLIPPINGS 2018 – 337. http://newsletter.maasmondmaritime.com

The BC Ferries "***QUEEN OF CAPILANO***" crossing Howe Sound to Bowen Island during a major Southwester on the B.C. Coast.
Photo: David Verlee.
www.maasmondmaritime.com
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https://www.marinelog.com/index.php?option=com_k2&view=item&id=30575:nyk-containership-gets-next-generation-bridge&Itemid=231

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