



SEATIMES

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



April 2016



BC Supercargo's Association: In November 2015 the President of the BC Supercargo's Association, Terry Stuart, contacted the Society. He asked, "Would the NPESC be interested in a collaborative arrangement with the BC Supercargo's Association? Details would have to be worked out but it would involve his Association providing the Society with funding for distribution as bursaries". We answered in the affirmative of course and met with him on a few occasions in order to work out the details. Then in March, after the Supercargo's had held their AGM, Terry was finally able to announce that they had agreed to a collaborative arrangement with the Society and to provide \$4,000 in annual funding for scholarship purposes. So for 2016 the Society is offering five bursaries, each worth \$1,000, four of them courtesy of the BC Supercargo's contribution and the other from funds earned with our endowment to the Vancouver Foundation.

(You can read about the BC Supercargo's at <http://www.supercargo's.bc.ca/>).

Details about the Society's Bursaries for this year can be found at <http://npesc.ca/category/bursary>.

Extraordinary General Meeting: This meeting was called for April 25th 2016. It was held in Room 110 at the Marine Campus of BCIT. The main purpose of the meeting was to vote on a Special Resolution to affect changes to the Society's Constitution and By-Laws.

Advantage was taken of the occasion to make two presentations. The first was the First Year Achievement Award for 2015, created from funds endowed to the BCIT Foundation. At this time the endowment generates less interest than we would like so we always add a Society cheque to bring the award up to \$1,000. The award alternates between Nautical Science and Marine Engineering Cadets and

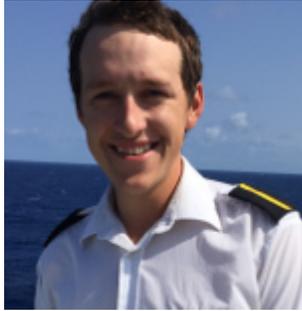


the faculty at the Marine Campus selects the recipient. For 2015 it was the turn of an Engineer Cadet. The award went to Cadet Andrew Lehman, shown above receiving the cheques and certificate from Richard Smith.

The second presentation was a plaque given to the Marine Campus in recognition of the fact that the Campus is the Society's official address. Accepting the plaque from Richard is Philip McCarter, the Associate Dean of the school.



My Nautical Institute: *"I joined the NI to meet like-minded people and to develop my knowledge of shipping. I have enjoyed participating in discussions with experts and senior mariners. The NI has given me the opportunity to broaden my view on all types of shipping-related topics. Being a cadet I was asked to join the committee of my branch to give my views and opinions so it could reach out and continue bringing relevant talks/seminars to persons of my age.*



I have been fortunate to meet people with so much experience in a variety of fields, from serving and retired Master Mariners to surveyors, insurance brokers, junior serving officers and many more. I have been able to remain in contact with them and I've been able to further develop my future career with the help of these people." **Scott Edwards, Associate Member of The Nautical Institute and Cadet Deck Officer.**

From: The Nautical Institute News, January 2016

Visit the NI Library: The Nautical Institute aims to help maritime professionals learn about and promote best practice at sea. Our online Knowledge Library is a valuable resource that offers practical information on ECDIS, e-navigation, lifeboat safety, marine spatial planning, mentoring, bulk carrier safety (including cargoes), AIS, enclosed spaces, fatigue and container weighing. A section on ice is in preparation.

The Institute's Knowledge Library should be your first port of call when you need to explore one of these subjects. The enclosed spaces section, for example, includes Seaways articles and branch meeting reports relating to the topic, P&I club bulletins, regulations and official guidance, casualty investigation reports of enclosed-space incidents, and links to other sources of information.

http://www.nautinst.org/en/forums/index.cfm?utm_source=NewZapp&utm_medium=email&utm_campaign=NI%20Enewsletter

How's your Geography? I thought mine was quite good but I had no idea where this place was.

CMA CGM makes Reunion Island its Indian Ocean hub: French shipping line CMA CGM has made Reunion Island its new Indian Ocean maritime hub, with five weekly calls compared to three previously. The carrier's services will link Reunion Island, which is 175 km southwest of Mauritius, with Europe, Australia, Asia, India, East Africa, West Africa and South Africa.

Rodolphe Saadé, CMA CGM's vice-chairman, said that the announcement would "restore its [the island's] position as the maritime crossroads between Europe, Asia and Africa".

He added that the move would bring new sourcing and export opportunities to the island, which is an overseas region of France.

The French company, which has had a presence on Reunion Island since 2003, has doubled its office area to support the increased activity generated it expects to be generated by the new hub. Amongst the five weekly calls, one will link Europe and Australia, with Reunion lying 16 days from the Port of Fos and 21 days from the Port of Le Havre.



Two calls will link the hub to East Africa, South Africa, West Africa, Arabian Peninsula and India, one will serve CMA CGM's existing Port Kelang hub in Malaysia and another will be a local service to Mauritius and Madagascar. **January 29th 2016.**

<http://container-mag.com/2016/01/29/cma-cgm-makes-reunion-island-its-indian-ocean-hub/>

This wildly beautiful and rugged volcanic island (with a very active volcano) was uninhabited when discovered by the Portuguese in the early 16th century. In 1643 the French claimed it. They named it Bourbon and established their first colony here in 1662. In the years that followed, slaves from Africa were imported to work the sugar plantations. The island was renamed Reunion in 1793, and it remained a French colony, except for a brief British occupation from 1810 to 1815. Over time, French immigration, supplemented by influxes of Africans, Chinese, Malays, and Malabar Indians, gave the island its ethnic mix. The island's economy is dominated by the sugarcane industry, and its main exports include sugar, seafood, rum, and vanilla. Tourism, especially from Europe, is a significant economic factor.

<http://www.worldatlas.com/webimage/countrys/africa/re.htm>

Latitude/Longitude 21° 06' S, 55° 36' E



The following appeared in the June 1997 edition of "Harbour & Shipping": -

Nautical Professional Education Society Reports High Success Rate: The Nautical Professional Education Society of British Columbia is evaluating its future, and developing options that would allow it to continue its work should the provincial government be forced to withdraw its financial support.

The Society was created by the British Columbia Branch of The Nautical Institute (NI) to explore ways of providing Canadian merchant sailors who are based in British Columbia with the necessary experience to advance in their careers. Members of the NI, all experienced seafarers, and others involved in or interested in the future of the industry, recognized that the lack of a deep-sea commercial shipping fleet makes it difficult for Canadian seafarers to obtain enough seetime to allow them to write examinations for higher qualifications. This has led to a lack of trained, experienced and highly qualified Canadian officers and managers, both ashore and afloat, for domestic industry, and the situation will steadily worsen as older seafarers retire.

Since started, the program has made a significant contribution. The members and directors of the Society are volunteers, who receive no remuneration for their work. The President of the Society, Captain Harry Martin, Vice-President, Corporate Safety and Standards with the BC Ferries, provided this description of how it works: -

"The Society obtains seetime for Canadian seafarers from British Columbia by arranging berths aboard foreign flag vessels for a period of six months. The candidates, who are carefully screened prior to being accepted, are provided with a stipend of \$1,000 per month, and expenses are paid for travel to and from the ship. Once aboard, the candidates go through a mutually agreed training program, developing their capabilities as deck or engineering officers.

The funds have been provided by corporate sponsors, and by the generous support of the British Columbia provincial government. In 1996, a total of 13 Canadian seafarers, both male and female, were placed aboard foreign vessels. The success rate, i.e., the number who completed their six-month shift, was over 85 percent, which is very encouraging for a new project like this."

The corporate funding provides for essential expenses such as stationery, production of information packages, fax and phone charges, and miscellaneous expenses, but the provincial funding is crucial, and not assured. Recognizing and appreciating the financial difficulties the province faces, the Society is drawing up a list of alternative ways to continue its work. Options include: -

- acting as an organization that promotes training, and attempts to assist seafarers who want to obtain berths on foreign flag ships for training purposes (the Society will be careful not to interfere with the work of the legitimate crewing agencies, some of which have been very supportive of the Society's work.);
- becoming an agency that encourage Canadian youth to consider a career at sea by taking part in Career Days at schools, trade shows, and becoming an information source on the subject;
- attempting to make the Society a national body, with sponsorship from other maritime groups, and endeavouring to obtain funds from national corporations, and provincial and federal governments.

This last option was discussed at the Advisory Council (CMAC) meeting held early in May in Ottawa.

The work of the Nautical Professional Education Society has shown that the future demands of the marine industry in Canada can be met, in large part, by Canadian seafarers if programs like the one it has been offering are available.

For further information, fax the Society at 604-929-xxxx.

Interestingly, on the next page there was the following announcement: -

PMTC Appointment: Captain R.C.E. (Bob) Kitching has been appointed Associate Dean of the Pacific Marine Training Campus of the B.C. Institute of Technology (BCIT).

Shortly afterwards the Cadet Program was instituted at the Marine Campus.

Liverpool Shipping Industry inspires next generation of Seafarers: Four aspiring seafarers have been drawn into Liverpool's maritime heritage after being accepted onto a three-year Officer Cadet training scheme with global carrier X-Press Feeders and Bibby Ship Management.



The scheme, which will be sponsored by X-Press Feeders and managed by Bibby Ship Management, will see the new recruits, Luke Jakes, Jonathan Jones, Conrad Dempsey and Claire Allan experience maritime activity both practically, at sea, and academically, at various nautical institutes around the UK.

The appointment of the Trainee Officers is demonstrable of X-Press Feeders' recent commitment to investing in Officer Cadet training, and subsequently contributing to the next generation of highly trained crew.

Welcoming the enrolment, X-Press Feeders North Europe Operations Manager Andrea Del Giudice said, "It's fantastic to see young people come to Liverpool to embark on a career in the shipping industry. Luke, Conrad, Claire and Jonathan will learn a great deal over the next three years and contribute to the growing pool of British Officers. I wish all four Trainee Officers the best in their roles and look forward to guiding them in their careers."

X-Press Feeders have always recruited into a management trainee scheme, as part of a policy to secure the right calibre of people for commercial and operational management roles within the company. With the mantra that seagoing experience is crucial to the development and progression of the industry, the business hopes that the current Trainee Officers will fill the pipeline from which future managers and directors can be drawn.

In Bibby Ship Management, X-Press Feeders have chosen an organisation with a rich maritime history and a very successful Trainee Officer programme that currently manages 82 Officers for a variety of sponsoring companies. Julie Arnold, Training and Cadet Manager for Bibby Ship Management, said: "X-Press Feeders will give these young Trainee Officers the right training and assistance, which will give them the grounding they need for a long and successful career in the industry."

"We are very excited to commence working on this scheme with X-Press Feeders and with these Trainee Officers, and all of us at Bibby Ship Management wish them well as they embark on their seagoing careers. 26 February 2016

<http://www.bibbyshipmanagement.com/news/press-releases/liverpool-shipping-industry-inspires-next-generation-of-seafarers/#.VtHqCgoeyc>



Captain's Column **Leopards on the loose:** At the outbreak of war, the risk of animals escaping from British zoos liable to damage by bombing was considered so great that many of them were put down. By 1946, with life returning to normal, the zoos set about the task of restocking.

At the time I was serving as a Cadet in the general cargo ship *Good Hope Castle*, a 10,000-ton vessel with a crew of 68. In February 1947, when the Mombasa cargo-booking list arrived, there was great excitement when we read '266 live animals in cages – weather deck stowage'. We were supplied with reels of cheap wire rope, clamps, shackles and bottle screws, and by the time we arrived in Mombasa everything was in readiness to secure the cages. With hatches battened down for sea we awaited the arrival of our guests.

The human ones came first: a small Scot from Glasgow zoo and an even smaller Englishman from a zoo in Manchester. Next morning we awoke to the sight of a long freight train loaded with cages – big ones, little ones, rectangular ones, square ones, high ones, flat ones. The leopards came first, followed by cheetahs, hyenas, servals, civets, bush babies, aardvarks and monkeys of all shapes and sizes. Later, cages with two giant sand rats and three zebras appeared on the back of a lorry. During the day other lorries arrived with a variety of other animals, including a baby hippo. Eventually, with every cage lashed and every animal fed and watered, we departed Mombasa bound for Suez, Genoa, Marseilles and Hull.

AT 0020 of the day we were due in Suez Bay, I answered the engine room phone to be told that the greaser had reported seeing 'animals loose on the foredeck'. With some apprehension I made my way aft and shone my very bright torch over the two after cargo hatches. All seemed to be in order. All was quiet as I worked my way forward. I passed the cheetahs and the monkeys and shone my torch at the hyenas' cage. It was empty. The three hyenas had gone and the door was swinging loose. I had seen enough and turned to retrace my steps. I shone my torch towards the ladder to the promenade deck and there, under the ladder, were two yellow eyes staring at me. Almost immediately I saw the two leopard cubs sheltering behind their mother.

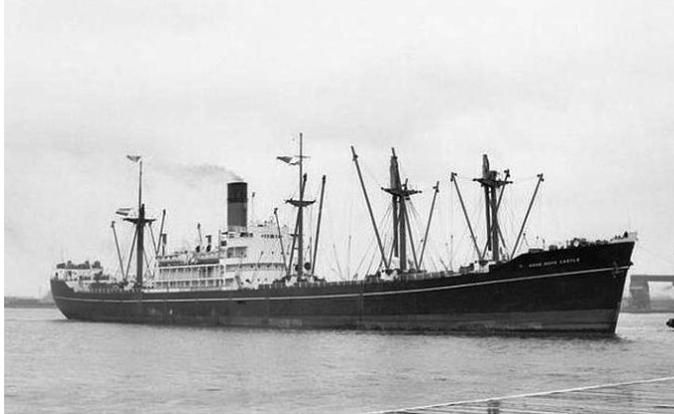
The Second Officer was sitting on the flag locker talking to the helmsman, and I recall with great clarity his response when I shouted, "There are leopards loose on the foredeck". It took ten seconds for him to realise that I was very sane and very scared before he said, "Call the Captain". I went down the chartroom stairs to the Captain's accommodation

“ Pulling aside the curtain on the Captain's cabin door, I shouted 'Sir, there is a leopard loose on the foredeck!' ”

and, pulling aside the curtain to his bedroom door, I switched on the light and shouted, "Sir, there is a leopard loose on the foredeck!"

In later years, when he was Commodore and I was his Staff Captain, he told the story to many a table of passengers, and it never varied. "When the Cadet told me there was a leopard loose, I said to him, "No, Kelso, there must be more than one – they are not in single cages". This version, the point of which was that even when rudely awakened, Captains have an immediate grasp of the crisis, contrasted sharply with my own reminiscence, and I still swear that I saw three feet of daylight between his bunk and bare bottom as I said "foredeck". Clad only in a towel, he made the bridge before I did.

The Chief Officer had also been called and a discussion took place. Was I absolutely certain? Was I sure I was certain? I was adamant that the female leopard and her cubs were hiding under the starboard companionway leading from the foredeck to the promenade deck.



The Chief Engineer appeared in his dressing gown, and, after a few minutes it was decided to stop the ship. Almost simultaneously everyone remembered that we had forgotten to call the zookeepers, and I was sent down to rouse them. They, too, reacted with alacrity. By this time the bridge was almost full of people. The Glaswegian zookeeper appeared on the scene and announced, "I cannot find my gun and ammunition, where is it?" It transpired that it was in No. 3 upper tween deck, and was accessible only by crossing territory currently under the control of three leopards. The purser reported that the 19 terrified passengers were huddled in the stifling lounge as a captive audience for the shipboard bore, whose latest gem of advice was 'Never turn your back on a wild animal', a view not universally shared aboard *Good Hope Castle*,

least of all by me.

Suddenly it struck me that only the Second Officer knew about the empty hyena cage. I waited for a brief respite in the discussion, and then said, "Oh, incidentally, I think there are some hyenas out as well, their cage is empty". You could have heard a pin drop.

My watch was drawing to an end, but sleep was out of the question. The standby man was adamant that he was not going along the afterdeck to call the 4-8, and the lookout emphatically said he was quite happy to stay where he was on top of the bridge. The Chief Engineer rang the engine room to be told that the 4-8 watches had not been called, nor would they be, and that the weather doors to the crew's quarters had been dogged down.

A scouting party was sent out, and I carried the battery for the Aldis signal lamp held by the Chief Officer. I pointed to the area under the ladder where I had seen the leopards, but it was empty. I had a feeling that nobody quite believed me. Then, quite suddenly, the lookout man shouted, "What's that by the masthouse?" and there they were, the mother facing the light with her yellow eyes clearly visible, and the two cubs pressed close to her body. We watched in silence as the leopards, still illuminated by the Aldis lamp, walked slowly and deliberately to the starboard entrance of the fo'c'sle space and disappeared inside.

Daylight came and with it a sinister sight – the dorsal fins of sharks clearly visible on both sides of the ship. It was agreed that the only course of action was to go forward and fit the weatherboards in the entrances to the fo'c'sle. The Chief Officer, the Bosun, an Ordinary Seaman and two zoo men made their way forward armed with boat axes and a long boathook and, after a brief check of the area, they dropped the boards in place.

The leopards had been contained, but how had they escaped? The zookeepers said that it was probable that the hyenas had used their powerful jaws to break out first, and then tried to break into the leopards' cage to get at the cubs. Leopards and hyenas are natural enemies, and there appeared to be teeth marks on the leopards' cage. But where were the hyenas?

Hyenas notwithstanding, the next problem was to get the leopards' cage forward to try to fit it hard against an entrance to the fo'c'sle head. If we could do that and then remove the slats, the animals might just seek the familiar surroundings of their cage. It took three hours to get the cage in position and it was heavy work in searing heat. The crew had been reassured about the leopards (we played down the hyena side) so they emerged and helped with rigging derricks. About 1000 all was in readiness. We lifted out the slats from the port entrance, fitted the cage door against it and waited. Nothing happened.



An hour passed and it was obvious that nothing was going to happen. Food and water had been placed near the cage door, but the zoo men felt that the animals were unlikely to emerge into daylight. It was decided that we would have to force them out using a hose. The Glaswegian zookeeper said he would direct the hose, supported by the Chief Officer and the Bosun. Jerry, the Ordinary Seaman, had the Aldis lamp and I still had the battery, wishing that the cable was a great deal longer! When all was in readiness we lifted out the slats from the starboard entrance and peered into the darkness. Jerry directed the light slowly along the shelves that usually housed the spare mooring ropes and there they were. The mother snarled silently in our direction when the hose burst into action and a strong jet of water hit her full on the chest. She let out an angry roar and retreated forward. The hose party followed gingerly and slowly drove the leopards to the port side.

Suddenly the mother leapt from the shelving and prostrated herself on the steel deck, snarling and tossing her head. She was very angry. The cubs seemed bewildered and they too were snarling. Now the hose party had to turn aft to drive them into the cage. As they did the hose kinked and the strong jet diminished to a trickle. The Bosun shouted and Jerry kicked the hose, but before the jet could be restored to full power the mother leopard lashed out and slashed the zookeeper's trouser leg to ribbons. The jet drove the mother back, and then, quite suddenly, all three leopards ran into the cage and the door was dropped. It was just after noon.

The hyenas were never seen again and it was decided that they probably jumped overboard very soon after the greaser had seen them on the afterdeck. We reached Hull some two weeks later. As the dockers were unloading a cage containing seven monkeys, they crushed it and the monkeys escaped. Despite dire warnings from the Bosun, "They'll never catch them b's", they did, three days later. But that is another story.

Captain C R Kelso MBE FNI. Seaways (The Journal of The Nautical Institute) March 2016.

GOOD HOPE CASTLE was built in 1945 by Caledon Ship Building & Engineering Co. in Dundee with a tonnage of 9905grt, a length of 497ft 6in, a beam of 64ft 5in and a service speed of 14.5 knots. She was delivered to the Ministry of War Transport on 5th April 1945 as the *Empire Life* with T & J Harrison as managers. She was acquired by Union-Castle in March of the same year and given the name *Good Hope Castle* and a black hull. On 14th July 1947 she became the first Union-Castle vessel to be transferred to South African registry.



Dangerous goods on board – Everyday items at home. Hapag-Lloyd has a lot of experience regarding the transport of dangerous goods. Read here which everyday items you wouldn't expect to belong to this category: The hazardous materials transported on every container ship these days need especially scrupulous examination if they are to pose no risks. Hapag-Lloyd has a great deal of experience in this field. What matters here is not only packing, but often also maintaining the correct temperature and always having the ideal placement on board. But those who only think of corrosive chemicals, explosives and the like when they hear "dangerous goods" might be surprised to learn that the

term also encompasses the following hazardous materials typically found on a container ship – many of which we use in our households and everyday lives. No matter what, if hazardous items are on board a ship, the container bears a dangerous-goods placard and, for safety reasons, the crew knows exactly what's inside and its stowage position.

Let's take a look at a theoretical "day in the life" with dangerous goods transported by ship. For example, your first encounter with them could come soon after you get out of bed and look at yourself in the bathroom mirror. Hair and deodorant sprays are classified as dangerous goods because most of them contain aerosols, which are flammable gases. Perfume, nail polish remover and aftershave, which also travel in containers to consumers across the world, are also classified in the international hazardous materials code as flammable liquids. Even hair dyes are classified as flammable (oxidizing) agents and therefore listed in Class 5.1 of the code. Being very oxygen-rich, they increase the danger and intensity of a fire.

After finishing your breakfast and getting into your car to head to work, you are once again surrounded by dangerous goods that were brought in containers to auto factories even before your car was built. Take airbag modules, for example. Since these devices contain small inflation systems that, when triggered, produce a powerful chemical reaction filling the bag with gas within just a fraction of a second, they can be categorized as a Class 1.4G (explosives) dangerous good. And then your car battery contains corrosive liquids, and even the fluid in your windshield wiper system is categorized during transport as a Class 3 (flammable liquids)



dangerous good. In fact, the entire car must be declared a Class 9 (miscellaneous dangerous goods) hazardous material during transport unless the fuel tank has been drained as much as possible (unless it is a diesel) and the battery has been disconnected and protected against short-circuiting. Likewise, some lubricants and fuels are transported across the oceans in barrels bearing labels that classify them as dangerous goods. For example, even the fuels used in Formula One races are often brought to competition venues in containers.

In the evening, when you arrive at the barbecue party after work, you are once again surrounded by dangerous goods that had previously been in shipping containers, often coming from places like China. If you have 60,000 to 70,000 lighters in a 40' container, you definitely want to make sure it has no leaks. For this reason, before they can be transported from Asia, Hapag-Lloyd would require a "gas-free check" to make sure that there is no combustible atmosphere within the container.



The charcoal glowing in the grill – much of which is exported from South America to the rest of the world, but oftentimes also from Poland – is even listed as a Class 4.2 "spontaneously combustible" material. "If it is still too damp, it can heat up and ignite," explains Ken Rohlmann, head of the Dangerous Goods department at Hapag-Lloyd. "It goes without saying that the igniter indispensable for a barbecue party also has to be declared a dangerous good." And later, if there are after-dinner drinks with high alcohol contents, such as whisky or cognac, you will be holding yet another dangerous good. These noble spirits are highly flammable and often transported in large tanks.

"As long as you diligently examine these materials before you transport them, you can calculate the risk. But, to do so, you have to know they're in a container," Rohlmann stresses. "For that reason, our Watchdog program, which was developed in-house, continuously scans all of our global booking data to identify goods that might have been declared incorrectly or not declared at all. This increases the level of safety in the entire transport chain. Otherwise, even everyday objects could become big dangers." **November 2015.** https://www.hapag-lloyd.com/en/press_and_media/insight_page_44259.html



"Searching for Franklin's Expedition" was the title of a presentation hosted by the BC Branch of The Nautical Institute, Friday, March 4, 2016 at the BCIT Marine Campus.

Before the presentation, Captain Philip McCarter, Associate Dean of the Marine Campus made a presentation to one of the Cadets who was then in his second year of the Nautical Science course at the school. Robert Mackin-Lang had been a member of the crew of the *CCGS Sir Wilfred Laurier* when the wreck of *HMS Erebus* was discovered. Everyone involved in that discovery received a medal and a certificate from the Royal Canadian Geographical Society. http://www.rcgs.org/awards/erebus_medal/default.asp



Robert Mackin-Lang was the recipient of the Society's BCIT Foundation Scholarship for the year 2014.
See *Seatimes*, November 2014, Page 5.

The Day to Celebrate Pi: The enigmatic number Pi (π) can never be calculated, yet it's essential for everything from keeping satellites in the air to packing beans into cans, not to mention simulating climate, optimizing TV signals, building stadiums, operating smartphones and enabling quantum mechanics. At its simplest, Pi is the ratio of a circle's circumference to its diameter, and it's exactly the same for circles of any size.

Monday, March 14th (the 3rd month, the 14th day and, if we round up, the 16th year of the new century) was Pi Day.

Many students are introduced to Pi in high school and know it as 3.14159, but mathematicians have calculated Pi to more than a trillion digits. Only 39 digits past the decimal are needed to accurately calculate the spherical volume of the universe.

"Pi is an irrational number, you can only ever calculate it approximately," Curtin University Head of Mathematics Professor Song Wang said in an interview from [ScienceNetworkWA](#).

"It's really a fascinating number and has attracted many mathematicians over the last 2,000 years," he says. "Theoretically we can calculate it up to infinite digits, some people have memorized up to 30,000 digits."

The Guinness World Record for memorizing Pi is 67,890 digits.

"In daily life, you cannot get away from essential geometry, and the only way you can work with geometry is through Pi," Wang says. "For example, if you're a cyclist, you can use Pi to work out how far you've cycled; if you're an engineer, you use Pi in designing car tyres, water flows, buildings..."

"For rocket science, you can calculate things like the trajectory of the Earth using Pi."

Wang works as a numerical analyst, and his own research into Fourier Transforms relies heavily on Pi to approximate otherwise-unsolvable equations. Fourier Transforms are essential to modern processing of data, including application in 4G networks, Wi-Fi and medical imaging <http://www.thefouriertransform.com/>.

Through the Fourier series, Pi appears in the mathematics that describes the circadian rhythms of sleep and wakefulness in people. Pi is intimately associated with waves and the ebb and flow of the ocean's tides.

Pi is used to calculate the distance between any two given latitude longitude points. As the Earth is a sphere, standard flat-grid calculations cannot be used to determine distance.

Pi appears in both the statement of Heisenberg's uncertainty principle and the Schrödinger wave equation, which capture the fundamental behaviour of atoms and subatomic particles. In the domain of cosmology, π appears in Einstein's field equation, a fundamental formula that forms the basis of the general theory of relativity and describes the fundamental interaction of gravitation as a result of space-time being curved by matter and energy.

Archimedes who calculated the value of pi by bounding the circle with segments, making the segments smaller and smaller, thus approximating the circle closer and closer. "As it is Archimedes from whom we get the theory that explains why ships float, even steel and concrete ones, I have to respect his approach to the problem," says Captain Joe Wubbold retired commander of six different U.S. Coast Guard cutters.

Archimedes' principle indicates that the upward buoyant force that is exerted on a body immersed in a fluid, whether fully or partially submerged, is equal to the weight of the fluid that the body displaces.

Another connection between Pi and the nautical is not so direct, says Wubbold. "Isaac Newton, holder of the Lucasian Chair in Physics at Cambridge, the same chair now held by Stephen Hawking, calculated the ratio of the circumference to the diameter out to many places, but not as many as has been done with a computer. It was he who also laid out the optical principles

that Augustin Fresnel used in the early 1800s in designing the Fresnel lens. A working example of a fifth order Fresnel is in the lighthouse on the Magical Isle of Vashon. Since 1823, Fresnel lenses have been guiding mariners to safe harbours," says Wubbold. <http://www.maritime-executive.com/article/monday-is-the-day-to-celebrate-pi>



A Message from the Chairman: Once again I must offer a big "Thank You" to David (Whitaker) for putting together this most informative and interesting publication. It is one I look forward to and enjoy reading from cover to cover.

We have had a very busy and fulfilling quarter complete with a very generous donation from The BC Supercargoes' Association enabling us to provide C\$4,000 in funding for annual bursaries. This year we shall be able to give out a total of 6 financial bursaries which will include 4 at \$1,000 each as a result this donation.



Our Board of Directors has also been busy reviewing our Constitution and By-Laws and bringing them up to date so that they provide an accurate reflection of our current activities. I must give a great deal of thanks to Stan Bowles for his efforts and hard work in this regard. He has worked tirelessly to revise and produce drafts for us all to review.

Thanks are also due to our Secretary/Treasurer, Joachim (Achim) Ruether who has also been busy. Being new to the job of Secretary/Treasurer and also having to hold down a demanding working schedule, he has provided us all with communications and meeting minutes enabling us to stay on task and on track.

On Saturday May 14th we shall hold our AGM for 2015 (yes another one) – we are doing this so that we can align this important meeting with the AGM of the BC Branch of The Nautical Institute and also to ensure that we are in compliance with the requirements of our By-Laws. I encourage everyone to attend this meeting which will be held at The Vancouver Maritime Museum starting at 11:00 hours. Full details can be found on our web-site at www.npesc.ca.

With respect to our web-site I would like to encourage you all to try and provide us with photographs and articles of interest that can be published either there or on our Facebook site at <http://facebook/npescanada/>

As the cruise ships return to Vancouver for the summer Alaskan schedules I am reminded of a few complaints that this industry regularly has to deal with from some of its customers:

— A husband on a two-week honeymoon cruise complained that the staff did not decorate the cabin in white, did not scatter rose petals everywhere each morning, and did not deliver champagne and strawberries via a private butler. The man requested no special service; he just expected cruise employees to “know.”

— A couple claimed the captain was “rude” because he did not wait two hours for them at a port, even though they had left him a note earlier that they had “too much to do.”

— A young woman had heard that British singer Gary Barlow once took the same cruise, so she demanded to know why he wasn’t on the same cruise again.

— A man on a cruise around Alaska requested compensation for the warmer clothes he had to buy after failing to “get an impressive tan” and being unable to “swim in the swimming pool each day.”

—A couple said the service was so excellent on a cruise that they spent a lot more on tips than they expected, and wanted their gratuities to be refunded.

— A first-time cruise passenger blamed the captain for not warning him that he could get seasick, and asked for a schedule of cruises in which he wouldn’t get seasick.

— A pair expressed disappointment that their ship didn’t look like the Titanic, and that its dissimilarity to the doomed ship should have been made.

For those of you involved in this industry I can only offer you my deepest sympathies...

Your Society. Do you wish to make a financial contribution to the Society? Is it time for you to renew your membership? The Annual Membership Fee remains at **\$40.00** but any amount that you can donate will be greatly appreciated.

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

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

Thank you.

Contributions to the NPESC are tax deductible. Charitable Registration # 1039049-20



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

