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 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/

Watchkeeper – Intelligent Ship: As the International Association of Classification Societies (IACS) reviews its work programme it is significant the member societies will be paying some attention to what has become known as "complex on board systems", Watchkeeper writes.

Increasingly, ships are becoming dependent on these complex systems, which are now permeating every department, with a good deal of interlinking and integration and very often involving significant safety impacts.

Propulsion systems, power systems, navigation and ship handling systems – all are becoming more sophisticated and need, it is suggested, a new type of officer who can fully understand them and who can intelligently intervene when things go wrong.

In the design and operational departments, is everyone capable of grasping the implications of the equipment and components, the software and systems that are being incorporated into a ship?

Often the solution of one problem will merely uncover another, if there is not a proper comprehension of what is happening.

It is the way of the future, of course, but it is important that these complex systems are sufficiently robust in every part, for their life aboard ship in a demanding marine environment.

So it is encouraging that there is to be an IACS approach to this issue, which hopefully will lead to a more holistic approach to such systems, so that there is less risk of problems being magnified into emergency systems, according to Watchkeeper.

Many modern mariners will recognise some of the problems that arise. A passenger ship experiences an electrical problem that disables the vessel's propulsion system and, perhaps as important, renders the air conditioning and refrigeration systems inoperable, causing considerable discomfort for the several thousand people on board.

A software problem on a semi-submersible causes the ballast systems to become uncontrollable, almost causing the loss of the rig.

Systems linking the bridge control system with the steering and propeller pitch are made unreliable because of a software glitch in barely associated equipment.

The integration of a whole range of navigation and collision avoidance functions are available for the watchkeeper, but without any "default" system which maintains a degree of functionality if the more sophisticated system "goes down".

Possibly, one of the most important areas in this is the role of the human being, and a trained ability to recognise that something is going wrong, to analyse the situation and intervene accordingly.

Will the system facilitate adequate human oversight? Will the human intervention be possible? Or will the complexity of the systems aboard defeat the humans? **Watchkeeper, BIMCO, July 9th, 2014; Image: Admiralty**
http://worldmaritimenews.com/archives/130015/watchkeeper-intelligent-ship/

Weird reason missing cargo ship *STELLAR DAISY* may have sunk: The giant freighter that mysteriously vanished in the South Atlantic may have capsized without warning because of a physical change in its cargo.

The 266,000 tonne South Korean bulk carrier *Stellar Daisy* disappeared off the coast of Uruguay en route from Brazil to China, hours after issuing a distress signal on Friday.
The ship was carrying 24 people, including 14 Filipinos and eight South Koreans. Two Filipino crewmembers found floating on life rafts were rescued on Saturday and the search continues for the other 22.
An oil slick detected 3700km off the coast indicated that the 322-metre vessel had probably sunk, according to a statement issued by the Uruguayan Navy.
The *Stellar Daisy* was reportedly transporting a cargo of iron ore from the Ilha Guaba terminal in Rio de Janeiro to China, where the demand for ore has exploded as the economy grows.
The Marshall Islands-flagged ship is thought to gone down some 2000 nautical miles off the port city of Montevideo.
On March 31, a crewmember sent a text message to the shipping company's Seoul office stating the vessel was taking on water and was sinking. Then the company tried to contact the vessel, but all attempts failed. **April 5th 2017**
Read more at: http://www.news.com.au/technology/science/weird-reason-missing-cargo-ship-stellar-daisy-may-have-sunk/news-story/d5dacfb39d38c79d99de33eb83187675.
The weird reason referred to above is not weird at all. It is liquefaction. To read about liquefaction see: -
http://www.maritime-executive.com/article/london-pi-issues-warning-on-cargo-liquefaction **and for more see: -**
https://www.londonpandi.com/_common/updateable/downloads/documents/bv_bulkcargoliquefaction_11x16_1703-page.pdf

---

CMMC to hold One Day Seminar on September 29 2017: In conjunction with the **50th Anniversary of THE COMPANY OF MASTER MARINERS OF CANADA** a number of activities are planned including a one-day seminar on September 29, 2017. As is shown on the following notices, this will take place in Vancouver. The actual venue will be the Marine Campus of the British Columbia Institute of Technology (BCIT) in North Vancouver.
A Committee chaired by Capt. Dr. Jim Parsons, the Chair of the CMMC Foundation, is organizing the Seminar, the subject being **"MITIGATING RISK IN MARINE TRANSPORTATION – Are Moratoriums Necessary in the 21st Century?"** Members of the Committee are Company members responsible for the Strategic Plan and Communications, Capt. Chris Hall; Views & Positions Chair, Capt. John McCann (Ambassador to IMO nominated by IFSMA); Treasurer Capt. Jack Gallagher; and the Vice-President from the host division for 2017, Capt. Don Rose.

What happens if pirates attack a cruise ship? After the first successful hijacking of a commercial ship by Somali pirates in five years, John Honeywell explains why cruise ships continue to visit the region - and how they protect themselves.

For most, mention of the word "pirate" conjures visions of Treasure Island's Long John Silver or Johnny Depp's portrayal of Captain Jack Sparrow. Yo ho ho and a bottle of rum, pieces of eight and either a wooden leg or a hairstyle modelled on the Stones' Keith Richards.

Yes, there was all that fuss about Somali pirates a few years ago, and the Tom Hanks film Captain Phillips told the story of the hijack of the container ship *Maersk Alabama*.

But that problem has disappeared now, hasn't it? Well, not quite.

Passengers on board P&O cruise ship *Aurora,* travelling on its annual world cruise earlier this year, were summoned to a briefing from the Captain to be told what to do in case of a pirate attack.

For five nights, while the ship was passing the Horn of Africa and through the Gulf of Aden, the outdoor Promenade Deck was closed from dusk until dawn. During the hours of darkness, only essential open deck lights remained on; passengers were asked to switch off their balcony lights and to keep cabin curtains closed.

In the event of a suspected attack, guests were advised that "following relevant announcements" they should return quickly but calmly to their rooms. Those occupying ocean view and balcony cabins were told to remain in the corridor, and to avoid sitting "directly behind the cabin door." Those with inside cabins were to "go inside and remain there."

The briefing concluded with this message from the Captain: "I recognise that some of the measures being implemented may impact on your enjoyment but I must stress that the safety and security of every individual on this ship is my highest priority. While the risk to the cruise industry is considered to be extremely low, we still need to remain vigilant and prepared."

It reminded me of a journey through the same Pirate Alley in 2009 on *Spirit of Adventure*, during a fascinating cruise that had taken me to rarely visited ports in Eritrea and Sudan.

A much smaller vessel – carrying 350 passengers compared with *Aurora's* 1,900 – its lower decks were festooned with razor wire and the buffet restaurant was closed for the passage so that the tables and chairs could be stacked up against its sliding glass doors.

I waited in vain for a pirate sighting, but two years later the ship did come under attack when an inflatable speedboat drew alongside while it was sailing towards Zanzibar. A formal night dinner was interrupted and passengers in black tie and ball gowns sat on the dining room floor for almost an hour until the ship had outrun the assailants.
Oceania's *Nautica* came under fire from two small boats in 2008, and in 2009 passengers threw tables and deckchairs to deter Somali pirates who attempted to board the *MSC Melody.*
The fact remains that while yachts have been kidnapped and cargo vessels have been hijacked for ransom, there has never been a successful pirate attack on a cruise ship.
In the open seas, the high-risk area is defined by latitudes 15˚ N in the Red Sea and 22K N in the Gulf of Oman; longitude 65˚ E, and a line drawn due east from the African coast along latitude 5˚ S in the Indian Ocean.
A European Union task force drawn from international navies patrols busy shipping routes.
The laws regarding armed guards on cruise ships have been relaxed in recent years but remain complex, depending on the ship's flag state and other international legislation. The International Maritime Organisation now accepts that "the deployment of armed security personnel has become an accepted practice."
Security consultant Graeme Brooks, a former Principal Warfare Officer with the Royal Navy and now chief executive officer of Portsmouth-based Dryad Maritime, described some of the problems faced by commercial shipping in the region.
"There are millions of square miles of water and you can only see vessels on the horizon up to 10 miles away. It's like looking for a mouse on a rugby pitch.
"And it's impossible to know whether a small craft is a threat or just fishermen. You can't tell the difference between a weapon and a baguette at anything more than 200 yards.
"If there are armed guards on the ship, by the time you can make a case to open fire you've already got your head in the lion's mouth."

In such asymmetric conflict situations where a big ship is under threat from a small boat, the best method of defence, says Brooks, is to disrupt the targeting process by separating target and attacker in time or space.
Most cruise ships are capable of outrunning the small skiffs used by pirates. Although these craft – often deployed from larger "mother ships" – might theoretically be faster, their speed advantage is lost in choppy seas.
Larger cruise ships have a high freeboard – the distance between the waterline and open decks – that makes boarding difficult for pirates using grappling hooks to climb from a moving boat.
So-called ship-hardening techniques make the pirates' task more difficult. The protective measures are described in the innocuously titled document BMP4: "Best Management Practices for Protection Against Somalia-Based Piracy."
As well as providing extra lookouts around the clock, operators are advised to deploy razor wire and electrified barriers, and to fit grills over windows and portholes.
Fire hoses and foam, sometimes with added slippery or smelly qualities, can be an effective deterrent. Water cannon serve a dual purpose in drenching the assailants and potentially sinking their small boats.
The ship's bridge is often the first focus of a pirate attack. Crew are advised to wear bulletproof vests and helmets, and to protect open bridge wings with steel plates or sandbags.
Other visible measures are less effective. Regular cruise passengers might be familiar with LRADs or Long Range Acoustic Devices. Looking rather like an overgrown satellite TV dish, they are often misguidedly described as sonic cannons, giving the impression that they could transmit such a powerful beam of sound that they would deliver a knock-out blow to a potential pirate, who would be left with bleeding ears.
According to Brooks, the devices are useful only in transmitting a targeted "Keep Away" message to non-threatening boats and would be ignored with impunity by any serious assailant.
The fact that their presence reassures passengers is no doubt encouraged by cruise lines, who are otherwise reluctant to discuss the piracy threat or the protective measures they take.
Although a signatory to BMP4, the Cruise Lines International Association (CLIA) would say only: "For security reasons, we cannot provide specifics regarding the cruise industry's practices with regard to security. We can say that the security of passengers and crew are always the top priority, and that cruise lines are in contact with national and international security authorities to share and receive important information." **John Honeywell. March 15th 2017**
http://www.telegraph.co.uk/travel/cruises/articles/what-happens-if-a-cruise-ship-is-attacked-by-pirates/
Also see http://www.mschoa.org/docs/public-documents/bmp4-low-res_sept_5_2011.pdf?sfvrsn=0

70th Anniversary of first type-approved Maritime Radar: Kelvin Hughes is celebrating 70 years of radar in 2017. In 1947 the first Type 1 radar was produced and installed on a new fishing trawler, the Type 1 then went on to be the first type approved radar, gaining its type approval certificate on 11th August 1948, the first radar to do so.

Kelvin Hughes has a long and proud history stretching back over 250 years. Over the course of that period, the company has been responsible for a number of significant technology 'firsts', including the first navigation radar for commercial ships to be type-approved.

This was the Kelvin Hughes Type 1 radar and its introduction was a significant milestone in maritime history. Since then, radar for commercial ships, fishing vessels, coastguard patrol vessels, and warships has come a long way and Kelvin Hughes has been a key player in the developments that have taken place.

In 2006, the company launched the first commercially available, solid-state maritime navigation radar. By removing the need for a magnetron, SharpEye™ has increased radar reliability, reduced the total cost of ownership and enhanced the user's situational awareness all at the same time. In 2010, Kelvin Hughes brought SharpEye™ to Vessel Traffic Service (VTS) and coastal surveillance applications, the first time that solid-state technology had been available to these markets. 2013 saw the launch of the world's first upmast multipurpose navigation radar to be located in a carbon composite housing with stealth (low radar cross section) characteristics. In the same year, the company also launched the SharpEye™ SxV, the first 360° X-Band, pulse Doppler radar for both ground surveillance and marine security applications. 06 Feb 2017

Russell Gould, Chief Executive of Kelvin Hughes, commented: *"To celebrate our 70 years of developing and manufacturing type-approved radar, we will be producing a series of articles, imagery, events and celebratory souvenirs throughout the course of 2017. We hope you will follow us on our ongoing journey."*

https://www.kelvinhughes.com/news/268-70th-anniversary-of-radar
https://www.kelvinhughes.com/about/history

The Master Under Attack: "It is better to be a maritime lawyer than a shipmaster!" This was the concluding thought of Lord Clarke, former Master of the Rolls and one of the UK's most distinguished lawyers. Before an audience drawn from the maritime and legal community, he had been summing up the 2016 Cadwallader Debate, which had been considering "the authority and responsibility of the Master in an age of instant access".

"The Master under Attack" was the stark message advertising this event, held by the London Shipping Law Centre and usefully attended by Law Lords, QCs and some of the most prominent maritime lawyers. Moderated by InterManager's Captain Kuba Szymanski, four speakers gave their views on the issue, which it was agreed was both topical and serious, the perception being that masters bear an ever-increasing burden and as the person "on the spot", tend to have their authority questioned by people who have no problem blaming the master when things are not to their liking.

The West of England's Michael Kelleher agreed that priorities were changing and the burden on both owners and Masters were increasing, but that the clubs could be regarded as the Master's friend. They could, all things being equal, provide defence costs for a Master involved in civil or even criminal actions, although this cover was not certain, especially in pollution cases. Support for both Master and owner was more general in a collision case. He also pointed out that the Master was a suitable target for the media to home in on, with the detention of a Master after a casualty becoming a more common occurrence.

Michael G Chalos, partner in the US law firm K&L Gates had successfully defended Captain Hazelwood, late of the *Exxon Valdez* after that vessel's notorious grounding in Alaskan waters. He was in no doubt that in recent years he had witnessed the erosion of the Master's authority. In the US, a criminal investigation was now the norm, after a casualty involving either death or pollution. The position of the shipmaster, he suggested, was being undermined by international crews, the rich rewards to "whistleblowers" in the US, technology and the power of the social media. In a blame culture, it was not unusual for government, politicians, press and publicity machinery to combine against a shipmaster involved in

a high profile incident. He believed that the practices that emerged after the *Exxon Valdez* event had become the norm in subsequent accidents.

The US Coast Guard's director for commercial regulations and standards Jeff Lantz agreed that the regulatory burden from international conventions bore most heavily upon the Master although since the advent of the ISM Code this was now shared to a certain extent with shore management. He emphasised that the legal regime in the US recognises this shared responsibility and shore side management, who have been judged to benefit from their failure to comply have been successfully prosecuted. But he also noted that in a single year, after the USCG had boarded 57,000 ships for inspection, there were just 92 prosecutions and in only two of these was the Master found to be guilty.

Former Master and partner at Ince & Co Faz Peermohamed suggested that the perception of the over-burdened master was no illusion. He saw masters faced with unrealistic charterer demands, caused by the pressures of market forces, bullying and harassment, corrupt practices, the "micromanaging" of ship operations from ashore and a huge increase in inspections, and often pointless documentation. Additionally, in some parts Masters had to deal with refugees and piracy, while fatigue went with the Master's role. There seemed to be a dearth of "fairness".

Points raised during the evening included the need for flag states to support Masters more, not least when seafarers were detained for many months awaiting proceedings. It was also acknowledged that the weight of these various burdens might be dissuading younger officers from command ambitions.

Sadly the debate was abbreviated and could have been the subject for a far more thorough investigation. But this issue got a good airing and this, IFSMA members might consider, was important.

Michael Grey, IFSMA Hon. Member. (Extract from IFSMA Newsletter. January 2017)

Global turbulence shakes the skills sector. The Cadet training business is facing upheaval not of its own making; one established training institution is prepared to meet the turmoil head on: An economic depression, the downturn in oil price, increased protectionism, and renewed talk of trade tariffs – it's a murky world out there, especially for Cadet looking to start or further their career at sea. These issues combined have substantially limited the budgets that shipping companies are making available for recruitment, education and training today.

Alan Cartwright, commercial manager at UK-based Southampton Solent University's Warsash Maritime Academy (WMA) explains to *The Sea* that these issues threaten to fundamentally challenge the UK maritime skills sector going forward.

"Despite the very real shortages of skills in forthcoming years – to ensure the success and prosperity of the UK's seagoing and shore maritime sectors – these global economic influences can affect opportunities available through a UK Cadetship," he says.

And if the global economic and trade picture is grey, local issues are at play in the UK that threaten to further sap enthusiasm. Mr. Cartwright believes the impact of Britain's decision to leave the European Union, or Brexit as it is commonly referred to, could be challenging for the UK maritime sector.

"The economic situation is beyond even the UK Government's power to influence; however, determined lobbying by Maritime UK and like-minded supporters of our maritime business and heritage will help to influence and ensure the success and prosperity of the UK's seagoing and shore maritime sectors. The crucial test for the immediate and medium-term future for Britain's maritime prosperity will be how the Government's determination upon a 'hard Brexit' turns towards reality. A priority must be to maintain integrity of UK-based maritime businesses in order to minimise a move overseas".

That could lead to a drop in demand for British officers ashore. If UK companies move offshore, the need for Officer Cadetships could also diminish, and – along with that – opportunities for seagoing careers among the UK's young people. It would help if the industry could raise national awareness of the UK's reliance upon overseas trade and the ships and men and women who serve in that trade. This lack of appreciation can increasingly be seen in the almost total 'sea blindness' that affects school and college teachers and careers staff who have little or no understanding of career opportunities for officers.

Officer shortage concerns. That there is a looming shortage of quailed officers to serve the growing global fleet is undisputed. What shipping companies are doing to address that gap is not so clear-cut. "Whether shipping companies around the world will be willing to invest in relatively more expensive European Officers – rather than cheaper labour from China, the Philippines and elsewhere – will be a good test of the reality of this shortage," says Mr. Cartwright.

This shortfall has worrying implications for onshore recruitment as well. "It is certainly the case that the UK's maritime business sectors (including London's key markets) will, 12-15 years, be short of Officers 'coming ashore' to work in broking, finance, law, operations and other key disciplines of the UK's maritime business," warns Mr. Cartwright.

"Across the UK, we need a determined and well-funded campaign in schools and colleges to highlight the importance of the Merchant Navy, the UK maritime sector and our seafarers, and to highlight the great opportunities and rewards of a seagoing career," says Mr. Cartwright.

Warsash Maritime Academy is held in high regard around the world for the quality of Cadets that exit its doors at the end of one of its courses. The majority of its Officer Cadets receive sea appointments from their sponsoring companies on completion of their qualifications. Those Cadets who are sponsored by maritime charities that cannot place qualified Cadets in Officer's appointments, are supported by Warsash and the charities' training management companies in seeking sea appointments, with a high degree of success.

And some good news for 2016, the Warsash Superyacht Academy, in collaboration with Trinity House and Chiltern Maritime http://www.chilternmaritime.com, welcomed the first cohort for its Unrestricted Deck Officer Cadetship for Superyacht candidates.
This is the first Officer Cadetship programme to lead to the issue of a fully-fledged UK MCA Officer of the Watch (Unlimited) CoC tailored to the superyacht industry. Work is underway to develop this further and to encourage a greater intake in 2017 with sponsorship from other areas of the superyacht sector.

Carly Fields. the**Sea. Jan/Feb 2017.** www.missiontoseafarers.org

---

Great Lakes Quiz: Are You Smarter than a Fourth Grader?

On TV, there's a game show called "Are You Smarter than a 5th Grader?" But what about fourth graders? When it comes to science literacy, the Great Lakes Education Program has been helping teach these youngsters about unique features of the lakes for 27 years.

The program includes a combination of classroom learning and hands-on experiences, and is designed to help students understand their role in protecting freshwater resources. They learn about geography, history, biology and physical sciences, and concepts such as the aquatic food web and water cycle, the roles of oxygen and carbon dioxide, and the effects of invasive species. The international nature of the Lakes also is discussed along Lake St. Clair, the Detroit River and upper Lake Erie.

How well would you do in the program? The quiz below is on some of the same subjects taught to students.

The Great Lakes Education Program is a project of Michigan Sea Grant and Michigan State University Extension, in partnership with the Huron-Clinton Metropolitan Authority. Support comes from the US National Oceanic and Atmospheric Administration, US Environmental Protection Agency, Great Lakes Restoration Initiative, Michigan Department of Natural Resources and Macomb and Wayne counties. More than 110,000 students, teachers and adult chaperones have participated since the program's inception. Now take the quiz:

1. The Welland Ship Canal connects which two Great Lakes?
A) Superior and Huron
B) Huron and Michigan
C) Huron and Erie
D) Erie and Ontario

2. The St. Marys Falls Ship Canal connects which two Great Lakes?
A) Superior and Huron
B) Huron and Michigan
C) Huron and Erie
D) Erie and Ontario

3. Which river connects Lake Erie and Lake Ontario?
A) St. Marys River
B) St. Clair River
C) Niagara River
D) St. Lawrence River

4. Which river connects Lake Superior and Lake Huron?
A) St. Marys River
B) St. Clair River
C) Niagara River
D) St. Lawrence River

5. Which of the following is NOT a function of Great Lakes wetlands?
A) Provide habitat for aquatic animals
B) Build beaches
C) Act as a pollution filter
D) Provide for groundwater recharge

6. Which of the following is NOT a type of Great Lakes wetland?
A) Marsh
B) Mangrove swamp
C) Bog
D) Vernal pool

7. Which of the following non-indigenous species was intentionally introduced into the Great Lakes?
A) Zebra mussel
B) Sea lamprey
C) Coho salmon
D) Alewife

8. Which of the following is NOT a carnivore in the Lake St. Clair food web?
A) Phytoplankton
B) Walleye
C) Bass
D) Water snakes

9. Which of the following is NOT a step in the process of drinking water purification?
A) Filter the water
B) Allow sediment to settle
C) Add disinfectant
D) Add flavouring

10. Zooplankton in the Great Lakes can eat
A) Phytoplankton
B) Other zooplankton
C) Fish
D) A and B

Answers: **1.** d) Erie and Ontario, **2.** a) Superior and Huron, **3.** c) Niagara River, **4.** a) St Marys River, **5.** b) Build beaches, **6.** b) Mangrove swamp, **7.** c) Coho salmon, **8.** a) Phytoplankton, **9.** d) Add flavouring, **10.** d) A and B

Michigan Sea Grant Extension Educator Steve Stewart shows students images from an underwater camera. Credit: Michigan Sea Grant

Students learn about weather from MSU Extension instructor Mark Crowley aboard the GLEP schoolship. Credit: Michigan Sea Grant

For more information about the program, see the Michigan Sea Grant website.

This article, by R.H. King, from "Sea Breezes, July 1976", describes the sequence of events after the arrival of a vessel at this Ships' Graveyard. http://www.seabreezes.co.im

The ***Empire Star*** had reached the end of the road. She had been laid down near the end of the war as the *Empire Mercia*, a solid 12,000-ton standard model refrigerated carrier reputedly based on a Shaw Saville design. Twin double-acting B&W engines provided 17,500 s.h.p. The Blue Star Line bought her on the stocks at Harland and Wolff, Belfast, and she was launched in 1946 as the *Empire Star.* Now, with identical sisters she was offered for sale. The *Imperial Star* accompanied our ship to the breakers at Taiwan and the third of the trio was sold to Greek owners for further trading.

Fairly reliable sources put the price at US$400,000, delivered at Kaohsiung. It seems strange to me that it should be more profitable to send ships halfway round the world when there are plenty of scrapyards in Europe.

We arrived on November 17th 1971 and went straight in. Dense housing crowded around the harbour and right out to the two capes. There was nothing above a couple of hundred feet over sea level except rough hills and military installations. Taiwan was very much an island under siege and gun nozzles could clearly be seen pointing skyward here and there.

Contrary to usual practice we did not immediately leave the ship and go home, but lived on board for eight days and then in a hotel for six more. All this because of a dispute between our owners and the woman who had bought the ship. So we stayed there, ready to take the old girl away if they couldn't agree. Being a standard design vessel, her deadweight would be well known when she was launched and no doubt the lady bought her on this understanding.

But in the course of the old ship's working life some alterations had been made and somehow the purchaser reached the conclusion that she had been "done" for 500 tons. All this caused great consternation among our crew who were "runners" i.e. employed at a fixed fee for the run out to Taiwan and be immediately repatriated by air.

Approximately eight ships were in process of disintegration, with 10 or 12 standing by waiting their turn. We moored outside a "*Victory*" ship on which the masts were just being cut down, and by the time we left they were down to the double bottoms. An American, the *Ruth Lykes*, lay astern of us.

Then the *Texas Bahrein*, a jumboized T2 tanker, which had been completely burned out. She had been so hot that the remains of the lifeboats, still hanging in the davits, were big lumps of aluminium. Nearby, the ***Kampala*** awaited her fate, still showing signs of her former elegance as B.I passenger liner.

Removing derricks, samson posts, masts and funnels was quite simple – just run a gas cutter around the base and let them fall over. Don't bother about calling "Timber-r-r" or anything: only watch it doesn't fall on yourself. Pick up the fallen bits with a derrick and hoist them ashore on to a motor truck, regardless of length. It was heart breaking to an engineer to see the cold-blooded manner in which the "Victory's" turbines were being hacked up.

Shipbreaking operations were conducted with the minimum of fuss or equipment. The foreshore was hard earth in which samson posts from long dead ships had been sunk. The attached derricks were rigged with old ships' ropes driven by winches whose power was transmitted by flat belts from ancient motor truck engines.

Oils storage was also basic. Two 35' diameter holes in the ground received bunker oil pumped from ships' double bottoms. From there it was pumped into tank trucks and taken away, to be refined I hope, if they were going to sell it to anyone.

Harbour pollution control was another object lesson. Flat-bottomed boats, about 15' long, drifted around with a man or woman squatting at either end. Using a tray like their conical hats, they skimmed oil from the water surface. The boats appeared to be divided into sections like a grease trap and the mixture was poured in at each end. Oil overflowed into the "clean oil" compartment and water rose in the other, whence it was baled over the side again.

At any time you could see 6 to 12 "houseboats" – sampans on which families lived, sculling around outside the ships. Although there was at least ¼ inch of oil on the water, their crews dived over to clamber on to the hulks to pilfer. They went for copper and brass parts but anything saleable could be "lifted". The yard employed armed guards who regarded the sampan people as their natural enemies and were always threatening to shoot them.

When our clearance came, a horde of workmen descended on the ship and took ashore everything moveable – bedding, furniture, cutlery and so on. Then another, larger gang came and ripped out the hold insulation. There seemed to be no attempt to salvage the material, although it was taken away in bags. Main aim of its removal was to allow clear access for the gas cutters to the hull plating.

(You can read about this at http://iht.nstm.gov.tw/English/tour/index-1.asp?m=13&m1=11&m2=64&gp=46&gp1=&id=20

Real demolition now commenced. Gas cutters went around approximately 15' cubes, derrick wires attached and pull applied. It made your blood run cold to hear the resulting scraping, grinding noise. But no quarter was given and the jagged hunk of steel, festooned with all sorts of things, some of which you could recognise, was unceremoniously dumped on a decrepit motor truck.

I did not go to see the furnace, which belched smoke half a mile away along a road heavily used by these trucks. It must have been extremely hazardous to pedestrians but yard workers streamed along at times.

We were told it would take about nine days to completely wipe our ship – the extended time being due to having to remove the insulation. In the double bottoms of some ships nearly down to water level children could be seen using oxy cutters. If they weren't children they were mighty small men. They were in these confined spaces, squatting in oil residue, often with other men cutting overhead. Quite often a ship would go on fire when all hands would hop out and play hoses on the flames until they went out.

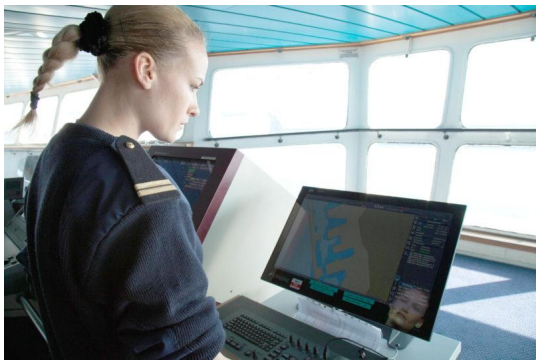
Pieces of ship with salvageable parts adhering, such as copper pipes, pressure gauges and non-ferrous valves were swung on to a rough paddock behind the derricks. Here women toiled, chopping off the bits and throwing them on to segregated heaps. Then the steel main pieces were dumped on a truck for the furnace and the separated "other" metals sent away, presumably to be melted down elsewhere.

The ship is rapidly cut down to water level and then the stern is hauled on to the "beach" – a sort of dirt ramp. Removal of propeller and shaft brings that end of the hull out of the water. The winch pulls until about 12' is high and dry when it can be cut off in three sections athwartships. They keep on doing this with the pitiful ship becoming 12' shorter each time. Finally the derrick lifts the "sharp end" of the forepeak from the water.

END OF SHIP

Why Gender Diversity Matters Aboard Ships. **17.3.17** **GCaptain Editorial**

The United Nation's declared the month of March as International Women's Month so it seemed right to review the subject of women in marine transportation for this column.



The IMO estimates there are about 1.2 million seafarers crewing vessels on the ocean trades. Arguably one of the world's most culturally diverse occupations with people from most nations and walks of life working side by side, a remarkable fact. Equally remarkable is how few women make up that culturally diverse workforce.

According to the likes of the "Australian Journal of Maritime & Ocean Affairs" consensus seems to be about 24,000 or 2% of the 1.2 million seafarers are women. A large portion (20%) of the 24,000 is sailing on cruise ships to which the cruise industry deserves credit. The American oil majors should also be acknowledged for gender diversity efforts on US Flag tank ships for women. Gender Diversity has not occurred in significant numbers at the senior officer level.

Although gender diversity has long been championed to some measurable degree, in the maritime education community (Academy's, Nautical Schools, etc.) it has not occurred in significant numbers at the senior officer level in marine transportation. Unfortunately, that is telling and most certainly disheartening to women in the maritime industry.

For much more see http://gcaptain.com/gender-diversity-matters/

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

NPES CANADA
Nautical Professional Education Society of Canada
Founded by The Nautical Institute of BC

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
British Columbia Branch