SEAVIEWS

New Zealand Company of Master Mariners: Tauranga Branch

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Cruise & Maritime name Columbus at Tilbury Cruise Port

Cruise & Maritime Voyages christened the latest addition to its fleet, Columbus, at a ceremony on board the ship at her year-round home port of Tilbury on 8 June 2017. The company introduced the vessel as 'a new cruise ship…

Branch News

Unfortunately there has been very little input in the last few months, consequently there are very few items to relate.

Jill Dennison: recuperating well after her surgery at Waikato Hospital slipped in the bedroom and split her left kneecap wide open and spent 12 days in Tauranga Hospital having it repaired. She is now under the care of yours truly again and is having great fun with the 6-8 week leg brace, not. We wish her a good recovery.

Believe it or not we have a new member, Captain Peter Brown has applied for membership and his membership has now been accepted.

Welcome Peter, wem look forward to meeting you on June 20th.

On ANZAC day alone figure laid our wreath, Jack Barbour, just out of hospital, was unable to attend. The event was not without a bit of drama. Our representative marched in with Merchant Navy team and due to a small turnout we were placed in front behind the flag bearers and band. I thought, at the time, what a good picture the Merchant Navy leading the procession! Once assembled, in the hot sun, one of the MN guys started to wobble a bit and St John brought him a chair and after looking at me they brought another one. At the end of the ceremonies the MN leader came to see how his mate was and promptly collapsed and was tended by St.John. The rest of us marched off and I lateer met him at the RSA. He was in fine fettle!! I was joined by Rae and daughter of Bob Wild and Sue Hodkinson. A great pity that none of our members showed up. It is hoped that next year somebody will represent us it being possible that I will no longer be available.

I searched all the news media and I could not find a single picture of our entry. If anybody has a picture it would be welcomed.

Maritime Not so Brief

Why are Lifeboats Killing Seafarers?

During my life at sea, I was always anxious during lifeboat drills. One of my relatives was employed on a MSC container carrier as an Engineer Watchkeeper, and during his routine inspection inside the free-fall lifeboat, the craft suddenly released and fell into the water while a ship was underway.

He was lucky enough to survive and suffered only severe injury to his knee, and since the vessel was close to the shore so he was evacuated by the helicopter. In the hospital, he had a surgery and then spent another year recovering.

When I was working for Maersk Line, one of our ships reported that a rescue boat accident resulted in one crewmember being killed instantly. Another crewmember was seriously injured. Unfortunately, there is no comprehensive statistics on lifeboat accidents, but there is an ample amount of research showing a scary outcome. To name a few studies, from 1992-2004, marine insurer "Gard"recorded 32 cases of accidental release of lifeboats. Five cases were without injury to people (there are certainly much more, but these five have been reported because they involved P&I claims), the others caused 12 deaths and injury to 74 people. Among the people injured there were several very serious cases of head and spine injury, some causing paralysis or possibly leading to death at a later stage. There were also a few cases where members' vessels have picked up drifting lifeboats at sea – boats which had obviously fallen from the ships they belonged to."

In 2001, the Marine Accident Investigation Branch (MAIB) published a review of a lifeboat and launching systems accidents covering a 10-year period from 1991, where seven people were killed and 10 injured.

Some of the recent cases of lifeboat accidents:

1. Thomson Majesty Accident – Five Crew Killed During Lifeboat Drill on Cruise Ship
2. Lifeboat Drill Accident: One Killed, Four Injured in Fall Aboard Harmony of the Seas
3. Rescue Boat Accident on Norwegian Breakaway Injures Four.
4. Lifeboat Accident on NCL's Pride of America Sends Two Crew Members to Hospital
5. MTM Westport: Fourth Seafarer/ Lifeboat Death in Two Months
6. Sailor Killed, Two Others Injured in Apparent Lifeboat Accident Off Germany
7. Lifeboat Failure Leads to Fatalities Aboard Ensco Rig

As the most of the accidents occurred during routine drills and maintenance activities, the main causes are design failure, lack of maintenance, and lack of proper training. "The equipment failure was reported to be the most common cause of accidents, within which quick release mechanism failure was identified as the most frequent cause," according to a report by the Nautical Institute.

In response to the growing number of lifeboat accidents, the IMO has released new SOLAS Regulation III/1.5 and the amendments to Chapter IV of the LSA Code concern on-load release mechanisms fitted to new and existing cargo and passengers vessels. SOLAS Regulation III/1.5 also specifies other important dates:

"For ships constructed on or after 1 July 2014, on-load release and retrieval systems shall comply with the LSA Code, as amended by Resolution MSC.320(89); and

Member Governments are encouraged to ensure that ships constructed on or after 20 May 2011 but before 1 July 2014, on-load release and retrieval systems shall comply with the LSA Code, as amended by Resolution MSC.320 (89)."

For vessels constructed prior to 20 May 2011, any on-load release systems that do not comply with paragraphs 4.4.7.6.4 to 4.4.7.6.6 of the revised LSA Code must be replaced at the first scheduled drydocking after 1 July 2014, but no later than 1 July 2019.

For the ships which are awaiting for the modification or fitting of the new design on-load release mechanism, the IMO has issued the "Guidelines for Evaluation and Replacement of Lifeboat Release and Retrieval Systems" and advise that Fall Preventer Devices (FPDs) are to be used with each existing RRS, in accordance with MSC.1/ Circ.1327 "Guidelines for the Fitting and Use of Fall Preventer Devices (FPDs)".Some of the current requirements for the lifeboat/rescue boat inspections and maintenance are:

Davit-launched lifeboats weekly moved from stowed position (SOLAS III/20.6.3)

Rescue boats other than a lifeboats launching (SOLAS III/19.3.3.6)

Quarterly launching lifeboats & rescue boats (SOLAS III/19.3.4.3 & .6, MSC/ Circ. 1206)

Six monthly free-fall lifeboat drill (SOLAS III/19.3.4.4, MSC/Circ. 1206)

Considering all the accidents, do you

think it is viable to break the boats from its stowed position every week? Or even worse to launch them with the crew inside every 3 months?
The Marine Accident Investigation Branch (MAIB) went even further and recommended that the IMO undertake a study on the present value, need and desirability of lifeboats.
While I'm not ready to argue the present value of the lifeboats, I'm confident that only a change in on-load hooks design is not good enough. Many accidents occurred due to the failed winch operation, damaged wire or some minor imperfection such as remote wire control. I believe more radical changes are required, for example:
Reduce requirement for the davit-launched lifeboats to be moved from stowed position from weekly to monthly or even quarterly.
Reduce the launching of the lifeboats & rescue boats from quarterly and monthly respectively to annually. Or even more radically, test the off-load and on-load release mechanism by shore contractor only while the boat in stowed position, of course with the additional securing arrangements.
Therefore completely removing the requirements to launch the boat with the crew inside.
The crew has been trained how to use the survival craft during their STCW courses which are compulsory. During the external inspections the inspector, such as port state control can test the knowledge by asking relative questions. I'm very confident that in a case of emergency the crew would be able to lower the boat, start the engine, let go the hooks and steer away from the vessel.

By Nick Yatsenko, Master Mariner

Middle East's Biggest Ports Shun Qatar as Saudis Tighten Isolation

June 6, 2017 by Bloomberg

DP World Jebel Ali. Photo courtesy DP World

By Anthony Di Paola and Deena Kamel Yousef (Bloomberg) — The biggest Middle East oil and container ports banned all vessels sailing to and from Qatar from using their facilities amid a diplomatic crisis gripping the world's main energy-exporting region.
Saudi Arabian and Bahraini authorities closed off all of their ports to Qatari-flagged vessels or ships traveling to or coming from the Persian Gulf state, according to a notice posted on the website of Inchcape Shipping Services Tuesday. Container and oil terminals in the United Arab Emirates also closed off traffic to any ships touching Qatar, according to separate statements from three port operators.
The three Persian Gulf countries and Egypt severed ties with Qatar Monday citing its support for regional rival Iran and for extremist groups. The dispute pits two of OPEC's largest oil producers — Saudi Arabia and the U.A.E. — against the world's biggest exporter of liquefied natural gas and further disrupts stability in the region. The shipping restrictions risk hurting shipments of oil and refined products from the world's biggest energy exporting region.
Saudi Arabia's eastern coast is home to the port of Ras Tanura, which state-owned Saudi Arabian Oil Co. says is the biggest crude terminal in the world. Jebel Ali port, the region's biggest container terminal, will be restricted from Tuesday until further notice, its operator Dubai's DP World Ltd. said in an emailed statement. In the U.A.E., DP World operates Jebel Ali along with Dubai's Mina Rashid and Mina Al Hamriya ports, according to its website.
Government-owned Abu Dhabi National Oil Co. closed its crude and refined-product ports to any vessels to or from Qatar, according to a notice obtained by Bloomberg News. The port at Fujairah, a main oil transit and refined product hub, said Monday it was closed to Qatar-linked traffic.
"It's more of a logistical issue that you can get around," Jonathan Lee, chief executive officer of shipping pool operator Tankers International, said of the inability of Qatari ships to fill their tanks at Fujairah. "It's not the end of the world."
Shipping at Egyptian ports was operating normally as of Tuesday, according to Inchcape. The company also said the Suez Canal Authority has advised that there aren't restrictions on vessels in the waterway since it is an international route.

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Japanese shipping companies are working with shipbuilders to develop self-piloting cargo ships.

The "smart ships" will use artificial intelligence to plot the safest, shortest, most fuel-efficient routes, and could be in service by 2025.

The AI will also be used to predict malfunctions and other problems, which could help reduce the number of maritime incidents.

The companies plan to build about 250 self-navigating ships.

Sharing data

Developing the technology is expected to cost tens of billions of yen (hundreds of millions of dollars). Shipping firms Mitsui OSLines and Nippon Yusen are working with shipbuilders including Japan Marine United to share both costs

and expertise, according to the Nikkei Asian Review.

Nippon Yusen has already been working on technology to enable ships to use data to assess collision risks. It is also working with Norwegian maritime company DNV GL to collect and analyse data on vessel condition and performance.

Japan Marine has been developing a similar data analysis system with the aim of diagnosing breakdowns before they happen.

'Remote-controlled'

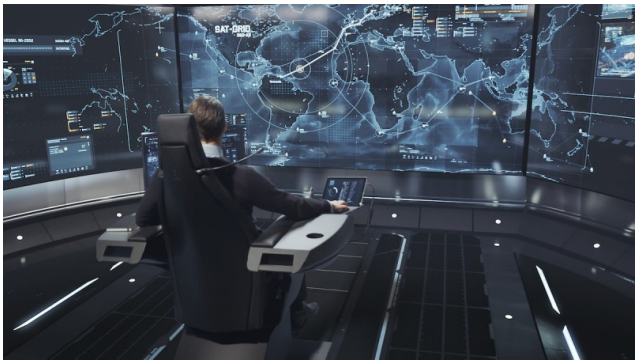
The first ships will retain a small crew to oversee certain operations, but there are plans to develop completely autonomous vessels in the future. In 2016, Rolls-Royce announced plans to develop unmanned cargo ships, starting with remote-controlled vessels that could be operational as soon as 2020. "This is happening. It's not if, it's when," Rolls-Royce vice president of marine innovation Oskar Levander said at the time.

"We will see a remote-controlled ship in commercial use by the end of the decade."
Navigation and basic operations will be automated, while a human "captain" based on shore will continue to look after "critical decision-making".

Control System Insight

Rolls-Royce on Tuesday offered another glimpse into the future of unmanned shipping, revealing for the first time its vision for a land-based control center for the operation of autonomous 'drone' cargo ships.

In photos and film released Tuesday, Rolls-Royce offers a vision in which a small crew of 7 to 14 people monitor and control the operation of a fleet of vessels across the world using interactive smart screens, voice recognition systems, holograms and surveillance drones to monitor what is happening both on board and around the ship.



Iiro Lindborg, General Manager, Remote & Autonomous Operations, Ship Intelligence, Rolls-Royce, said: "We're living in an ever-changing world where unmanned and remote-controlled transportation systems will become a common feature of human life. They offer unprecedented flexibility and operational efficiency. Our research aims to understand the human factors involved in monitoring and operating ships remotely. It identifies ways crews ashore can use tools to get a realistic feel for what is happening at sea."
Rolls-Royce says the film, which we have provided at the bottom of the article, marks the final stage of

research that will inform the design and construction of a remote operations test center before the end of this decade.

"The autonomous ship does not mean removing human beings entirely from the picture, as is sometimes stated," says Eija Kaasinen, Principal Scientist at VTT Technical Research Centre of Finland, a partner in the research. "Unmanned ships need to be monitored and controlled and this will require entirely new kinds of work roles, tasks, tools and environments. The future shore control centre concept has been designed by emphasizing the user experience of the human operators. By focusing on the operators' point of view, it is possible to introduce meaningful, pleasurable and engaging new roles for the ships' shore control centre professionals."

The research was undertaken by VTT and University of Tampere

research centre TAUCHI in collaboration with Rolls-Royce, with the aim to explore the lessons learned from other industries such as aviation, energy, defence, and space exploration, where remote operation is more widely used.
Rolls-Royce's autonomous, un-

manned vision of future shipping, known as the 'oX' operator experience concept, was first introduced by the company 2014. Previous studies have looked at the user experience of future command bridges on Platform Supply Vessels, container ships and tugs set to reveal separate research findings, which the company believes will set the direction for the development of remote and autonomous shipping.

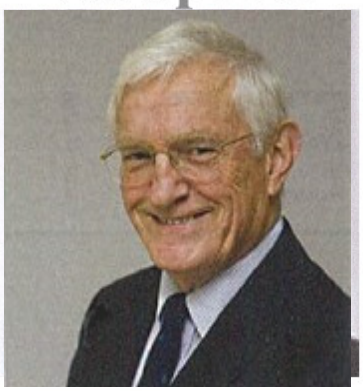
Gcaptain

Happy criminals to get in on the act in the absence of that wonderful bureaucratic solution to all the-world's ills "regeulation".

It doesn't seem to occur to the disapproving officials that the industry doesn't want to have arms aboard merchant ships and pay a lot of money for private protection. But it is forced into this strategy of self-help largely because the international "community" of governments is failing to do its job and ensure that piracy is consigned to the history books.

The UN and indeed any of its member governments have no moral right whatsoever to criticise the industry's security arrangements while the situation in Somalia is surrounded by members of the Security Council sitting on their hands resulting in a policy vacuum. No UN report can burble on about "competence"

Viewpoint



Michael Grey

when there is not much of this component being shown in addressing the root causes of piracy in this failed state.

Sure, there might be some cut-price gunslingers riding on merchant ships, just as there are some cut-price ship operators loose in the world. But if the UN was doing what it was supposed to be doing, rather than writing reports, the internal problems of Somalia would be addressed, the shipping industry would not be driven down the road of "self-help".

Seafarers and ship operators have a right to safe navigation, and if governments can't provide the necessary level of security, it is necessary to buy protection in the market. Said Murray Hammick of defence contractor Chenega Federal UK when launching the Open Ocean maritime security programme in London recently : "….it is about stepping back and taking a long-term and strategic view of what it is that individual shipowners and operators need in order to allow them to carry on their business without interference by unlawful gangs at sea". Of course he is right. But maybe it is the UN and member governments which should be "stepping back and taking a long-term and strategic view" of the situation in Somalia, rather than criticising others for their reaction to its maritime consequences.

This article originally appeared on Clay Maitland's On a Quest for Quality in Shipping blog and is re-published here with permission–

Satcom Global Partnership

The speaker line-up at the next annual Transas Global Conference confirms that the innovative digital solutions company is catching the mood at the cutting edge of vessel operations by suggesting that, properly harnessed, operations and technology can transform maritime safety as well as efficacy.Transas believes that digital technology holds the potential to benefit safety and enhance competitive advantages simultaneously, and this is the principle that lies at the heart of its THESIS concept, launched in 2016. THESIS weaves together the strands of vessel monitoring and traffic control, innovative vessel handling technology and connectivity, vessel performance optimisation and training into a unified solution that combines best of breed technology, expertise andcontent.

Confirming the forward-looking agenda being set by Transas, the keynote speakers at the Transas Global Conference 2017 (6-8 March in Malta) was David Rowan, Editor of Wired UK – the magazine which focuses on the ideas in science, culture and business that are reshaping the world, and David Christie, Senior Vice President Corporate Maritime Quality Assurance, Carnival Corporation. Mr. Christie will be highlighting the cruise organisation's approach to operations at the highest technical and safety standards. From developing next-generation training capabilities to the establishment of a fleet operations centre, the presentation looks at how this was put in to practice and the resulting achievements.

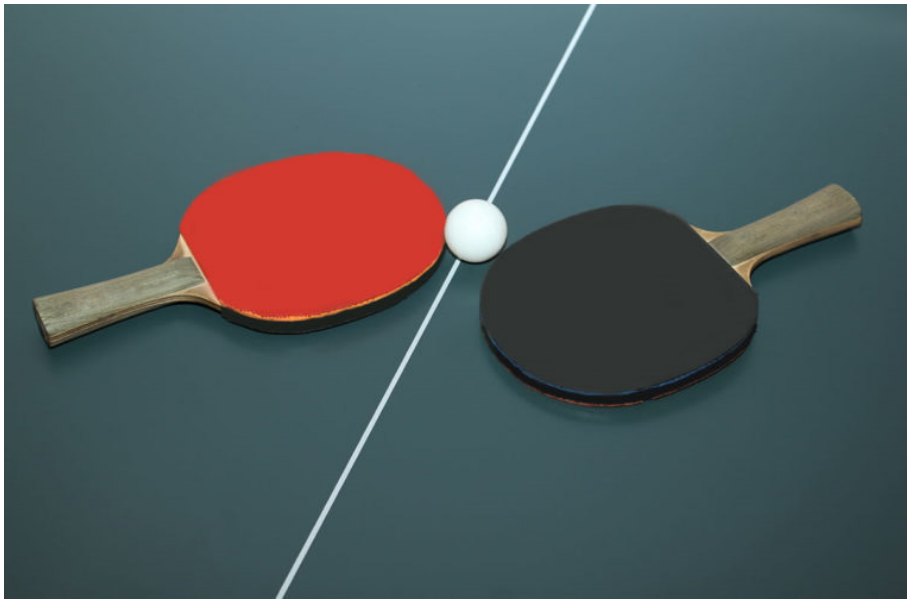
Additionally, Capt. Pradeep Chawla, Managing Director QHSE & Training, Anglo-Eastern Ship Management Ltd will share insights from the front line of merchant ship operations and training.

Meanwhile, Monica Lundh, Head of Division of Maritime Human Factors and Navigation, Chalmers University, will offer updates on the progressive study and analysis of the behaviours which inspire better training in a maritime setting. In addition, Transas has sought insights on 'lessons learned' from experts with related experience from outside the maritime sector, and has secured participation from Harry Nelson, Executive Operational Advisor to Product Safety, Airbus.

Regulation has helped to reduce some of the risks and dangers of working at sea, but it is not the complete solution. While insurers have recorded the number of incidents falling by nearly one half over the last decade, it is still the case that over 1,000 seafarers lose their lives every year. "Tough financial conditions are only likely to exacerbate risks, as added pressure to balance the books can prompt the short-cuts that compromise safe operation," Coles observes.

Shipinsight

How emissions of CO2 should be regulated is currently something like a ping pong game with the ball being bounced back and forth.



This week, IMO Secretary-General Kitack Lim has written to senior European officials expressing his concern that including shipping in the European Union's Emission Trading System (EU-ETS) could undermine efforts to reduce greenhouse gas (GHG) emissions from shipping on a

global basis.

In a letter to Martin Schulz (President of the European Parliament), Jean-Claude Juncker (President of the European Commission) and Donald Tusk (President of the European Council), Lim acknowledged that the EU had an ambitious policy for addressing emissions and recognised that Member States might wish to enhance the progress made to date. However, he cautioned against extending the EU-ETS to include ships saying it would undermine efforts on a global level.

The letter follows an agreement on 16 December 2016 by the European Parliament's Environment Committee that emissions from ships should be included in the (EU-ETS) from 2023, if IMO does not deliver a further global measure to reduce GHG emissions for international shipping by 2021.

Predictably green lobby groups have entered the fray and have criticised Lim's comments warning the EU against taking

unilateral action.

"The challenge of meeting the objective of the Paris Agreement is so great that it will require action at all levels. There is nothing that says action can only take place at IMO and indeed it would be counterproductive to concentrate only on the development of IMO measures, when processes there are often subject to delay," John Maggs, CSC president and shipping advisor to Seas at Risk, said.
December's European Parliament decision would see shipping included into the EU ETS from 2023 if IMO does not deliver a further global measure to reduce GHG emissions for international shipping by 2021.What is not being addressed by either side is that the situation today is very different from 1997 when the IMO began talking about CO2 controls or from 2008 when the EU released its Climate and Energy Packet or indeed from the coming into force of the EEDI in 2011. Far from growing at the rapid pace predicted, shipping has suffered its own recession and while some are talking about modest increases this year, others are still calling for wholesale scrapping of ships to restore some profitability.
There is also no cognisance of the fact that protectionist measures were already increasing before the election of President Trump who has yet to take office. Through to now, the EU and the US have been considered as the two parties most in favour of emissions trading. There is every likelihood that the US will now change its stance and could even become opposed to any controls on CO2 emissions from whatever source. As for the EU, it would be a brave man that would gamble on that body being in a position to progress with many of its policies beyond this year let alone in 2023 given the tensions within the remaining 27 states after Brexit.

MacGregor, part of Cargotec, is one of several leading global companies that have teamed up for the advanced co-creation ecosystem, One Sea.

Founded in 2016, the goal for the ecosystem's partners is to jointly-develop the world's first system of autonomous ships. The partner's shared vision is to enable fully remote-controlled vessels in the Baltic Sea in three years and to achieve autonomous commercial maritime traffic by 2025.
Leading the One Sea ecosystem is DIMECC (Digital, Internet, Materials & Engineering Co-Creation). The association of Finnish Marine Industries also supports its work and the Finnish funding agency TEKES has invested in the project.
MacGregor believes that in today's world, co-creation and collaboration are efficient and sustainable ways to innovate and develop systems and solutions for more technologically-advanced and safer operations, ultimately enabling autonomous traffic at sea. "The benefits of co-creation are obvious, software experts, together with systems and equipment experts, can improve efficiency and safety throughout the whole value chain," says Alexander Nürnberg, Senior Vice President, R&D and Technology, MacGregor.
"We in MacGregor started the transformation journey several years ago and are proceeding step-by-step to-

wards autonomous equipment operations and eventually autonomous vessels," continues Mr Nürnberg. "The steps we have already taken on this journey include the ability to have greater connectivity to equipment. This means that we can undertake performance monitoring and further enable condition-based monitoring and predictive maintenance. About ten years ago, MacGregor introduced its On Watch service for offshore crane customers, which included round-the-clock remote access and troubleshooting. This service is now being further enhanced by a 'Scout' function that performs predictive maintenance and condition-monitoring."

"We understand that transformation and shaping the industry are best done in close cooperation with customers and other stakeholders," notes Pasi Lehtonen, Senior Vice President, Marketing, Business Development and Strategy, MacGregor. "MacGregor has a role in developing the shipping industry and we take our role seriously, therefore we have called for an industry renewal discussion under the theme, So much potential – let's not waste it. Productivity developments will be driven by advances in connectivity and digitalisation, along with new business models and capabilities. Autonomous maritime transportation is a perfect example of such a new capability."

The One Sea ecosystem is the latest in a series of collaborative initiatives by MacGregor and is one of many projects designed to create products and develop software and solutions to enable autonomous vessel traffic. MacGregor is collaborating with Rolls-Royce on research and development in autonomy for cargo ship navigation and cargo systems on board container ships.

Gcaptain

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First steel cut for Australian Antarctic Supply Research Vessel

On 31st May 2017, marking the Commencement of construction of the Damen Antarctic Supply Research Vessel (ASRV), a steel cutting ceremony has been held at Damen Shipyards Galati, Romania.

Damen is constructing the ASRV for Serco Defence, a wholly-owned subsidiary of Serco Australia who, in turn, signed a contract with the Australian Government last year for the delivery, operation and maintenance of the vessel.

"Cutting the first steel for any vessel is always significant. However, the fact that the ASRV is such a ground-breaker makes this a very exciting moment," says Damen Project Director Joop Noordijk. "The whole team are looking forward to building what is actually an icebreaker, survey vessel and resupply vessel all rolled into one."

The 160m ASRV will perform numerous tasks for the Australian Antarctic Division (AAD). "The new vessel is a multi-mission ship designed to sustain our geographically dispersed stations, support helicopter operations, sustain shore parties on remote islands, map the seafloor and undertake a variety of scientific activities across the Southern Ocean," says AAD Modernisation Program Manager Rob Bryson.

To fulfil these diverse roles, the ASRV boasts considerable cargo capacity: up to 96 TEU below decks and 14 TEU and six 10-foot containers on the aft deck, as well as more above the helicopter hanger and in front of the helideck. This represents a substantial increase in container carrying capacity from the AAD's current vessel, the *Aurora Australis*, which can transport a total 19 containers. In practical terms, this means that the ice-breaking ASRV will be able to resupply two stations in one voyage.

Research potential

In addition to supplying Australia's three permanent research stations on the Antarctic continent as well as its research station on the sub-Antarctic Macquarie Island with cargo, equipment and personnel, the ASRV will be able to carry out comprehensive scientific research activities. To this end, the vessel will be equipped with a 500 m^2 onboard laboratory that will serve as workspace for up to 116 AAD scientific staff.

In terms of research possibilities, the ASRV will serve as a valuable asset towards the advance of scientific knowledge and understanding of the Southern Ocean. The vessel will feature a 13-metre deep wide moon-pool for deployment of conductivity, temperature, acoustic and depth measurements.

The ASRV design also incorporates a 'wet well' sampling space, a scientifically pioneering installation that consists of a watertight room below the water line that can be used for biological sampling. Further activities such as seismic mapping, AUV operation and net deployment can be performed on the sizeable aft deck.

Ships Monthly

Industry Insight. A fresh perspective: This article appeared in the April 2017 edition of BC Shipping
Rhianna Henderson AMNI was the recipient of a CMMC Baugh Fund Scholarship in 2015 and a NI-BC BranchIV-ancouver Transportation Foundation Scholarship in 2016.

"Industry Insight" is a regular feature of the BC Shipping News.

While this space is usually reserved for senior executives from a variety of sectors within the shipping industry, we realized that we were missing an important perspective - that of the future generation of leaders. Meet Rhianna Henderson, a 23 year-old Cadet in her third year of a four-year Nautical Sciences Program at the British Columbia Institute of Technology (BCIT) Marine Campus.
Given BCIT's strong reputation for producing high-calibre officers for the cruise industry - indeed, you'll remember our interview two years ago with BC IT grad Wendy Williams, Staff Captain of Royal Caribbean Cruise Line's *Anthem of the Seas* - we are pleased to correct this oversight and provide a unique view of the challenges, opportunities and experiences of someone at the beginning of their career. And from alii gather of Henderson, she's in for quite a career.

BCSN: *Tell* me *about the Nautical Sciences Program and the courses you've taken to date to prepare for work at sea.*

RH: I'm in my third year of a four-year co-op program. We go to school for six months of the year, then go to sea for the remainder of the year to gain sea time for our Watchkeeping Unlimited Certificate. The way the program is set up is that every year we complete on average 16 courses, which are levels of each course. The course in order to continually advance and maintain our academic skills.

All of the courses are directly relevant to what we will learn and do of board the ships. I have taken Ship Stability, Ship Cargo, Ship Construction, Chartwork, Terrestrial Navigation, Celestial Navigation, Physics, Math, Engineering Knowledge, SEN 1 & 2, Meteorology, Regulations Navigation Safety, Oil Tanker Familiarization, Ship Security Officer, Seamanship and all safety training, including Basic Safety, Marine Advanced First Aid, Survival Craft and Fire Fighting.

BCSN: *Which ships have you sailed with* so *far?*

RH: In my first year as a Cadet, I was employed by BC Ferries sailing on board the *Northern Expedition* and the *Northern Adventure,* serving the Northern Routes of British Columbia. The *Northern Expedition* is a Ro-ro-passenger vessel measuring 150 metres in length, and the *Northern Adventure* is a passenger vessel measuring 117 metres long. We sailed between Port Hardy and Prince Rupert, and Prince Rupert and Haida Gwaii. I was on board for five and a half months.

My second sea phase this past year was with Royal Caribbean on board the *Oasis of the Seas.* She is 362 metres in length and weighs 225,000 tons, one of the largest cruise ships in the world, carrying 8,800 people (crew and passengers combined). I spent seven months sailing the Eastern and Western Caribbean routes.

BCSN: *What was your role on the ship and what kind of tasks and duties were expected of you?*

RH: As a Cadet, it's my job to learn and participate in as much as possible in the time on board. On the cruise ship I spent my first two months working on deck with the deckhands under the command of the Chief Officer. We were responsible for the maintenance of the ship, including chipping and painting, replacing flooring, entering tanks for cleaning, painting & inspection purposes and small maintenance projects that were assigned.

There were some very hard, long and hot days in the Caribbean sun but every Cadet needs to learn about the tasks of crewmembers who will one day be under our charge, to appreciate their job and gain their respect.

After a couple of months I was assigned to the bridge, mostly working with the 1st Officer Navigation, where I was trained on the bridge equipment, helped with paperwork and passage planning, and all the duties involved in being a Bridge Officer

on a cruise ship.

I worked with the 1st Officer Lifesaving learning about the lifesaving equipment on board and the maintenance that is required to ensure the survival crafts are to standard. I worked with the Fire Fighting Officers as

well, checking fire-fighting equipment on a monthly basis; and I was also tasked with being on the bridge for every arrival and departure throughout my time on board, including attendance at the arrival and departure briefings, and sometimes even preparing the brief and presenting it to the other bridge Officers and Captain. After the briefing I would either fill out the logbook as we departed, or would go down to the bow or stern mooring decks, shadowing the Officer and doing the communication for the Bridge in sending mooring lines and securing or letting go the lines and proceeding to sea.

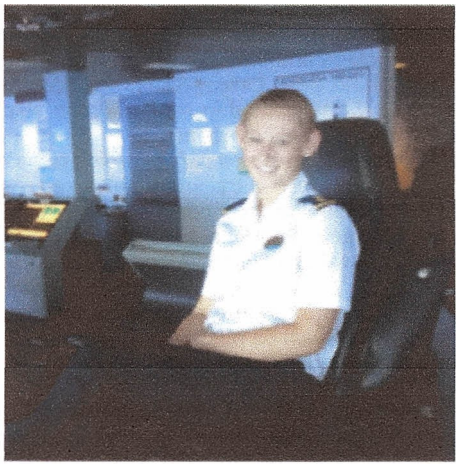
In addition to these tasks I spent two weeks in the engine room working with the engineers to become familiar with the machinery. While there I got the unique opportunity to help pull apart one of the diesel engines that was to have its crank shaft replaced later in the year. Learning the machinery and how the engineers work is crucial for a well-rounded understanding of what it takes to run the ship and how the action of Bridge Officers can affect the machinery throughout the voyage.

Every crewmember on board was assigned a duty for emergency drills. I was assigned to the Rapid Response Team, which was a small team of eight crewmembers who are the first to respond to a fire or other emergency. We are the ones who try to fight the fire initially while also setting all the fire hoses and preparing the forward control point for the fire teams. Once the fire teams are on the scene, we make sure all of their fire equipment is properly in place and they are ready to fight the fire safely. I think I learned the most in this position - I had an up-close view of the Chief Officer Safety's actions to prepare and then fight a fire as well as what it takes to run a successful drill. I participated in every drill the ship carried out, including fire, damage control, man overboard, security threat and navigational emergencies.

BCSN: *I'd like to hear about your personal experiences what were some of the challenges or most rewarding tasks?*
RH: As a whole, working on a cruise ship was the best experience I could have had while in training. It exposed me to the type of career I want to pursue and I was able to travel to new places on one of the most beautiful ships in the world. I met some really talented Officers, people who became my mentors and friends throughout the seven months as well as an amazing group of friends who worked in different departments. I now have lifelong friends around the world, which was not something I expected to gain.

I was able to refine my navigation skills and learn about the way passenger ships are run in a safe and supportive environment. Being a Cadet allows for the opportunity to learn and participate in as much as possible - it's almost as if I needed to clone myself to be able to see everything happening around the hip on a daily basis.

The greatest challenge of being on board a ship for that length of



time is maintaining sanity and enthusiasm. Working seven days a week, 10 hours a day for seven months can take its toll. And being a woman in a male-dominated industry presents some challenges, as it would in any industry. It sometimes felt like I wasn't being taken seriously in my position. I was the first female Cadet the ship had ever had so it was a learning curve for everyone and they really tried to be as supportive as they could. As a Cadet you are constantly trying to prove yourself - it's almost one long, continuous job interview for a future position with the company. Not putting too much pressure on myself and enjoying the experience was a constant battle, but one I survived.

I would have to say the most rewarding task for me was being singled out by the Coast Guard during a Port State Inspection as a member of the Rapid Response Team that did exceptionally well. I caught a few mis-

takes that could have affected the outcome of the fire drill. As a Cadet, you work so hard, keeping your head down and

expecting no recognition and then to have that hard work acknowledged was unexpected and almost overwhelming.

Another rewarding task was being part of the team that prepared the vessel for a helicopter evacuation in a medical emergency involving a child. To see a helicopter approach the ship and watch the child and his family be lifted up and taken to the hospital was something I will never forget.

BCSN: *Was the experience what you thought it would be before you started?*

RH: The luxury and brilliance of the cruise ship is something I don't think anyone can prepare for when you first join a ship. It's as if you have walked into a different world. Work wise, I expected it to be as tough as it was but didn't expect to find it as rewarding as it I did. was also surprised at the amount of people and how friendly every crewmember was to each other. For a ship with 6,500 passengers and 2,300 crew there were lots of opportunities to meet new people and have life outside of work. I think that is something that makes working on cruise ships so fantastic

BCSN: *Which courses helped you the most in preparing for work on the ship?*

RH: The program at BCIT focuses more on the shipping industry as a whole cargo vessels, tankers and container ships so some courses aren't relevant for a cruise ship, but every course has something that is applicable to any type of ship, especially the stability and navigation equipment courses. All of the emergency duty training we go through is definitely useful as are the leadership courses.
BCSN: *Do you have any advice for other students?*

RH: I think the most important thing every Cadet needs is an open mind. And don't be afraid of making mistakes. After all, being Cadet is the time to make these mistakes when there are multiple Officers watching over you and teaching you the right way to do something. You need to be able to put aside your pride, accept the criticism as constructive and not personal. Use every moment of being a Cadet to learn every inch of the ship and everything it takes to be an Officer because once you're certified you won't have that chance. Joining the Cadet program was the best thing I could have done. There are highs and lows and times that you wonder why you signed up to be away from your family but the pros of the career will always outweigh the cons. I love my job and I don't think many 23-year-olds can say that these days.

BCSN: *What are your future goals?*

RH: I have completed all of the seatime required and can now sit my Watchkeeping Oral Exam in the summer. Once I finish my third-year academic portion at the beginning of July, **I** will sit my oral exam and become a certified Watchkeeping Officer. **I** plan on returning to Royal Caribbean as an Officer in the near future and working through the ranks. **I** will be returning to school in Spring 2018 for my final term of school, which will give me the schooling **I** need to sit my Chief Officer's Exam after gaining another year of seatime. Long term, I hope to return to BC Ferries in order to continue to work on ships while also having a family I can see more often.

BC Shipping News. April 2017

From the BC Shipping News, May 2017: Letter in praise of the future generation.

I recently read the article on Rhianna Henderson, a third-year Cadet in the BCIT Nautical Sciences Program, and found it very interesting and reassuring. I can relate to her situation somewhat having graduated from the Canadian Coast Guard College 40 years ago as a young Engineering Officer, but the marine industry has changed significantly since those of our vintage graduated from their respective colleges. Ms. Henderson seems to understand and embrace the fact that a successful ship requires all departments to work closely together and she is determined to understand the interrelationship between all departments and the entire crew roles and responsibilities. I think our industry is in very good hands if future officers like Ms. Henderson are at the helm and in the control room, we just need many more of them.
Regards, Ed Gerrow, Nanoose Queen's Harbour Master, Esquimalt.

FBT Canada

Two Azimuth tractor drive tugs delivered in Australia

Mackenzie Marine & Towage of Esperance, Western Australia, has purchased two twin-fin Azimuth Tractor Drive (ATD) Tugs 2412 for operations in Bunbury Port, on the south-west coast of Western Australia.

The two vessels, named *Cape Naturaliste* and *Cape Leeuwin* after local landmarks, arrived and were officially inaugurated on 5 April 2017. These compact heavy duty tugs have a bollard pull of over 70 tonnes.

That, combined with a top speed of over 12 knots both ahead and astern and a powerful aft winch, makes them ideal for continuous and effective harbour towage activities.

Mackenzie Marine & Towage (MMT) is a fourth-generation, family-owned company and has been the harbour towage operator in the nearby port of Esperance since the 1970s. The company bought its first Damen tug, the ASD 2411 *Shoal Cape*, in 2006 and a second of the same class in 2013, named the *Hellfire Bay*.

In 2014 the merger of the Esperance Port Authority, the Albany Port Authority, and the Bunbury Port Authority led to the establishment of the Southern Ports Authority. In 2016 it put out a tender for towage operations in the ports of Esperance and Bunbury.

With MMT already well established in Esperance with the two ASD Tugs 2411 it consulted with users of Bunbury Port regarding their needs. The feedback was that tractor tugs would be preferred and so, by offering two, state-of-the-art ATD 2412 Twin Fin tugs, MMT was able to secure the combined licence for Esperance and Bunbury.

GCaptain

Naviera Armas

Australian shipbuilder Incat has been awarded a significant contract for the design and construction of a large new vehicle-passenger ferry for a major European operator.

The new vessel for Naviera Armas is the second vessel in Incat's new generation 109m high speed wave piercing catamaran range and will operate in Spanish waters when delivered in early 2019.

Born out of the extensive in-service experience of the Incat 112m, the concept was redesigned from the keel up by Incat's in-house naval architects and engineers at Revolution Design Pty Ltd.

The result is the 109m catamaran which offers similar passenger and vehicle capacity as the 112 metre but with substantial performance improvements, including vastly improved speed, lower fuel consumption and enhanced directional stability.

This latest refinement of Incat's well proven wave piercing hullform, a design favoured by high speed craft operators around the globe, was first introduced in Mols Linjen's 109 metre wave piercing catamaran *Express 3*, delivered in April. During sea trials *Express 3* achieved an impressive speed of 43 knots at 600 tonnes deadweight.

Seeking to present a new concept of fast ferry service in Spain, Naviera Armas is actively investing in high speed craft. This new vessel will be the third Incat craft to join the Naviera Armas fleet in as many years, following *Volcán de Tirajana* (Incat Hull 062, 98m) purchased in 2015 and *Volcán de Teno* (Incat Hull 056, 96m) acquired last year.

SHIPS Monthly

U.S. Navy Takes Delivery of First Next-Generation Aircraft Carrier, Gerald R. Ford

June 2, 2017 by gCaptain

Huntington Ingalls Industries delivered the first-in-class aircraft carrier Gerald R. Ford (CVN 78) to the U.S. Navy on May 31, 2017. Photo by Matt Hildreth/HII

The U.S. Navy has accepted delivery of its first next generation aircraft carrier, the future USS Gerald R. Ford (CVN 78), from Huntington Ingalls Industries' Newport News Shipbuilding.

Delivery on Wednesday followed the ship's successful completion of acceptance trials May 26.

Ford is the lead ship of its class and the first new-design aircraft carrier delivered to the Navy since USS Nimitz (CVN 68) in 1975. It is also the first aircraft carrier to join the fleet since USS George H. W. Bush (CVN 77) delivered in 2009.

The Gerald R. Ford class, designed to replace Nimitz-class aircraft carriers, delivers greater flexibility than its predecessors due to its larger flight deck, the ability to host more aircraft, additional weapons and aviation fuel storage, and a new electromagnetic aircraft launch and advanced arresting system. The Ford class also features a new nuclear power plant and a redesigned island, and will be able to increase sortie rates by one-third when compared to the Nimitz class. Further, the Navy's newest aircraft carrier generates three times the amount of electricity as previous classes and is designed to rapidly add capabilities as new systems become available over the course of its projected 50-year service life.

Each Ford-class ship will also operate with a smaller crew than a Nimitz-class carrier and will provide $4 billion in total ownership cost savings for the Navy, according to Newport News Shipbuilding.

The aircraft carrier Pre-Commissioning Unit (PCU) Gerald R. Ford (CVN 78) pulls into Naval Station Norfolk for the first time following several days of builder's sea trials, April 17, 2017. U.S. Navy Photo

"Congratulations to everyone who

has helped bring CVN 78 to this historic milestone," said Rear Adm. Brian Antonio, program executive officer for aircraft carriers. "Over the last several years, thousands of people have had a hand in delivering Ford to the Navy — designing, building and testing the Navy's newest, most capable, most advanced warship. Without a doubt, we would not be here without the hard work and dedication of those from the program office, our engineering teams and those who performed and oversaw construction of this incredible warship. It is because of them that Ford performed so well during acceptance trials, as noted by the Navy's Board of Inspection and Survey."

"Well done to our shipbuilding partners, Ford's crew and everyone who supported them," said Vice Adm. Tom Moore, commander, Naval Sea Systems Command, who also embarked for acceptance trials.

The future USS Gerald R. Ford honors the 38th president of the United States and pays tribute to his lifetime of service to the nation in the Navy and in the U.S. government.

Ford will be commissioned into the Navy fleet this summer, formally placing the ship into active service. Afterwards, there will be a "shakedown" period where the ship will conduct several at-sea events to provide longer underway periods for the ship's crew to operate and train on ship's systems. In addition, planned deferred work will be performed, and any deficiencies identified during trials will be addressed during in-port periods.
Ford is expected to be operational in 2020 following achievement of initial operational capability.

"Today is a historic day for Newport News Shipbuilding and one that is personally rewarding for me," said Newport News Shipbuilding President Matt Mulherin. "I've had the pleasure of watching our shipbuilders bring this great warship to life. From her first cut of steel to her final round of testing, Ford is proof of our shipbuilders' exceptional skills and talents. I am proud of their innovation, perseverance and unwavering commitment that has built the most advanced aircraft carrier in the world. We are honored to deliver Gerald R. Ford to the Navy, and we do so with full confidence in her unmatched power and ability to sail the seas in protection of our freedom for the next half century.

GCaptain

Editorial

Members,

I must apologise for the June edition being late but looking after Jill takes quite a bit of time and leaves little for normal activities.

Once again I am completely flabbergasted by the governments totally ignoring the use of our Blue Road using our own coastal shipping vessels to alleviate the on-going enormous cost of roading. Their complete solution to our transport woes continues to be trucks, trucks and more trucks. The umpteen billions to be spent on roading is a bottomless pit. In the case of Highway 1 from Picton to Kaikoura it will only take one small shake and it will have to be cleared all over again, that is if they manage to reopen it at all. They have given away our right to carry our own cargo to overseas interests which operate with crews that are not subject to our labour requirements, in other words there is no level playing field and our coastal shipping is consequently priced out of the market. However, do these container ships provide as good a service as our ships used to do, I doubt it. For instance, a small shipper in Auckland, has to send his goods to a container consolidator and then wait for transport to Dunedin along with others for example. His customers have then has to fetch their goods from the terminal consolidator In Union Company days he would have had 2 deliveries a week, in sea freighters, which would have provided him with an excellent service.

Do we have any information on this wonderful big boat service as touted by our transport minister. I am advised by our secretary that in conversation with our local MPs, they did indicate, that due to the damage to roading, coastal shipping could be a possibility. Obviously our finance minister has no intention of that. His 2017 budget clearly indicated that roading and a little bit of rail was all he could think of.

My apologies for boring all and sundry with this problem but as a matter of common sense I will never understand how they side lined our Merchant Navy. Looks as if all seafarers will soon be redundant anyway.

Guy Ed

Lloyd's Register Announces New Code to Certify Unmanned Ships

June 14, 2017 by gCaptain

International classification society Lloyd's Register has launched a new code to meet the growing demand for regulatory support for unmanned ships in the marine industry. Lloyd's Register describes its Unmanned Marine Systems Code as a goal-based code that takes a structured approach to the assessment of unmanned marine systems (UMS) against a set of safety and operational … With current and expected developments in autonomous and remote systems, LR envisages that, within the near future, unmanned systems will enter into widespread use through many sectors of the maritime industry.

"The LR Unmanned Marine Systems Code provides an assurance process in order to certify the safe design, build and maintenance of UMS against an established framework that minimizes the effort required by an owner or operator to achieve certification and which is acceptable to Flag States, local regulators and other parties. Whilst initially targeted at small non-convention sized UMS, including naval systems, it is scalable and is capable of application to larger, more complex vessels as technology and regulation develops," Lloyd's Register said in a press release announcing the new code.

The Code has been written to support the growing innovation in the field of unmanned systems by establishing requirements for which compliance can be demonstrated using a tailored combination of standards, or where standards do

Coming Events

Branch AGM Tuesday 20th June

Mount RSA at 1100 Lunch at 1200

Please advise Secretay of attendance or non-attendance

Surname	First Name	Partner	Address	Location	Home Phone
Armstrong	Ian G.	(Vikki)	Willoughby Rd.	Katikati 3178	07-549-1515
Barbour	John A.		204b Ohauiti Rd.,	Tauranga. 3112	07-544-3361
Brown	Peter		171 Saphire Drive Hairini	Tauranga 3112	07-544-5910
Camp	Kenneth	(Joy)	8 Finlowe Way, Otumoertai	Tauranga 3110	07-576-5151
Culleton	Richard	(Anke)	Athenree RD 1	Katikati 3177	07=683-5103
Dennison	Gavin L.	(Jill)	77 Te Hono Street	Tauranga 3112	07-544 4196
D'Mello	Gus	(Pamela)	19 Aranui Drive	Papamoa 3118	07-574-6565
Fowler	Geoffrey	(Gaye)	115 Freeburn Road, Pyes Pa	Tauranga 3110	07-543-3609
Gilchrist	Tom R.	(Lyn)	20 Pacific View,	Papamoa 3118	07-575-7633
Johnson	Peter F.	(Hilary)	137 Lunds Road	Katikati 3063	07-549-3340
Likos	Bill	(Madelaine)	173 Te Hono St	Tauranga.3112	07-544-3900
McMaster	James R.	(Betty)	23 Bay St.	Tauranga.3110	07-576-7258
Magazinovic	Carl	(Christine)	27 Matahiwi Road	RD 4 Tauranga 3174	07-552-6729
Read	Gordon M.	(Leela)	185b Marsden Point Road	Ruakaka 0116	09 423 7534
Rechenberg	Gerhard	(Maria)	C/o Swire Group, 300 Beach Rd,	Singapore 199555	64-6309-3600
Roberts	Jennifer	(Ken)	P O Box 5295 Mt.Maunganui	Mt Maunganui 3116	07-575-5898
Rutherford	Gordon	(Heather)	61A Pitau Road	Mt.Maunganui.3116	07-575-7422
Sayle	Derek E.	(Marjorie)	2/ 27 Berwick Place	Mt.Maunganui.3116	07-575-5480
Spencer	Clive	(Sharon)	16 Stableford Drive, Pyes Pa	Tauranga 3112	07-543-2140
Watson	Tony		17 Fishermans Cove, Army Bay	Hibiscus Coast 9032	09-424-4288
Weston	John		27 Waratah street,	Tauranga.3110	07-576-3352
Williams	Dave	(Helen)	511 Esdaile Rd RD 8 3180	3180	07-548-1517

not exist, the application of risk-based assessment techniques. "The benefits of using the goal-based structure is that it defines an ultimate safety objective whilst allowing for the consideration of alternative designs and solutions that meet the safety objective; thereby supporting innovation in an area that is developing rapidly," LR describes.

The Code, which has been validated against several existing UMS designs, has been developed against a hazard analysis of UMS design and operation and benchmarked against existing commercial and naval regulatory requirements, including SOLAS and the Naval Ship Code.

Tim Kent, LR's Marine & Offshore Technical Director, said: "The Code provides a unique and valuable method of providing an assurance process for the safe design of unmanned marine systems in what is a rapidly developing area of the industry. It allows for the certification of novel and emerging technologies against a structured framework and is scalable according to the risk profile and autonomy of the systems, from the very small or simple to the very large or complex. It complements our existing work on cyber-enabled ships and is also intended to support any future regulatory development by the IMO or national bodies.

Gcaptain