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IFSMA NEWSLETTER

The Shipmasters' International Voice

Satellite to measure Earth's water levels

See page 22

IFSMA

International Federation of Shipmasters' Associations (IFSMA)

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Readers are reminded that the opinions expressed in the IFSMA Newsletter are those of the author and not necessarily in accord with IFSMA policy.

Secretary General's Report

I write as the northern hemisphere is in mid-winter and our friends below the equator are largely, but not exclusively, enjoying their summer variant.

Shortly before the end of year break we heard of one of our members taking part in a rescue in the western Mediterranean.

At 1311 on 21 December the Singapore-flagged LPG carrier *Coral Alameda** under the command of Captain Yevgen Getsevich was on passage to Sines, Portugal, when in position 36deg 29.0 N: 002deg: 06.8 W ship's staff observed a man sitting on an upturned boat, waving and shouting for help. The ship's general alarm was immediately sounded and all ships in the area informed by VHF. Communication was established with the nearest RCC and appropriate information transmitted.

In *Coral Alameda* man overboard manoeuvring and rescue procedures were put into practice with all crew in the muster list involved. Speed was reduced and as weather precluded launch of the vessel's rescue boat the port side pilot ladder was readied.

Manoeuvring was successful and the victim was able to board by the pilot ladder with the aid of a heaving line and crew assistance. Although the water temperature was +16deg, he had been in the water for some time and was weak yet managed to climb aboard and be taken to the ship's hospital where procedures were commenced as per *The Ship Captain's Medical Guide.* He was provided with a hot shower, dry clothing and food.

Ship's staff were not able to communicate with the man in English, he had no documents and could provide no information.

Coral Alameda was requested to proceed westwards towards Gibraltar by the RCC and shortly after 1400 the man was transferred to the Spanish rescue boat *Rio Nacimento M46*.

The Officer on Duty at Spain's Almeria MRCC sent a letter of appreciation to Captain Getsevich emphasising that efficient intervention by him and his crew had been decisive and avoided a likely prolonged and tough SAR operation.

On behalf of our worldwide membership we send congratulations to Captain Getsevich and his crew for their actions in saving life and in maintaining the highest traditions of the fellowship of the sea.

The Britannia P&I Club loss prevention team are to be thanked for their production of a new set of COLREGs posters, reiterating the principal parts of some of the rules in Part B of the COLREGs, Section II – *Conduct of vessels in sight of one another*.

The posters will illustrate scenarios in these rules and are aimed at navigational watchkeepers, setting out with

simple illustrations the required actions to be taken in order to comply with each COLREGs rule. Rules 13 Overtaking and 14 Head-On Situation are the first in the poster campaign.

Readers wishing to obtain hard copies of these excellent and most welcome posters, are invited to e-mail: britanniacommunications@tindallriley.com stating how many of each poster are required and to where they should be delivered.
It is understood that the posters are also available to download on the Britannia website here:
https://tinyurl.com/4j266afu

Finally, as we enter January, I repeat our festive message and wish you well for the year ahead.

That year of 2022 certainly delivered an unreasonable measure of turbulence and we strive to overcome whatever the Gods send us for that is our way. That is what we train for and how we learn to file the bad times with the good. Let it be said, on the law of averages, that there are more good times than bad.

With fair winds and a following sea,

Secretary General, Commodore Jim Scorer FNI RN

*Part of the Bernard Schulte Shipmanagement fleet

From the News Editor

Stowaway warning

Shortly before the close of the year we heard from our friends at The Company of Master Mariners of Canada of a story that was going the rounds of the news outlets concerning a report issued by Spain's Maritime Safety and Rescue Society, Salvamento Maritimo.

The accompanying illustration showed three men, stowaways, seen on the rudder of the Malta-flagged oil / chemical tanker *Alithini II* in the Las Palmas, Canary Islands, Spain. It was further stated that three stowaways had been rescued following the vessel's arrival from Lagos, Nigeria

Reports indicated that the stowaways showed symptoms of hypothermia and dehydration and that they had been transferred ashore for medical attention with two being released and one remaining in hospital.

It was further reported that the vessel's 1600 nautical mile passage had taken eleven days.

Without doubt the circumstances encountered by the stowaways were extremely dangerous although it is unclear whether they were on the rudder all the time the vessel was under way or if they had sheltered in the rudder trunking or perhaps in the tiller flat.

It is understood that this discovery is not the first time stowaways have been found risking their lives to reach the Canary Islands. One news report indicated that a 14-year-old Nigerian boy had surviving two weeks on a ship's rudder in severe weather and a heavy swell in 2020.

P&I Club Gard advice

The issue has been well commented on and valuable advice comes from the website of the P&I Club Gard here:

'*Prior to departure, the crew should conduct a thorough search of all compartments and the result should be recorded in the logbook…the rudder trunk is not an uncommon access point for stowaways and is often used as a hideout, especially when a ship is in ballast condition.*

An aft-ship design with an open rudder trunk can be found on many vessels and the following precautionary measures should be considered when such vessels are trading to ports with a high risk of stowaways:

- *Cover openings to the rudder compartment with grating or steel bars to prevent stowaways from gaining access to the area.*
- *Install an inspection hatch in the steering gear room that will enable inspection of the rudder trunk prior to departures.*
- *When in ballast condition, carry out an inspection of the rudder, e.g. by use of the vessel's rescue boat or pilot boat prior to departure.*

More is available here: https://tinyurl.com/ycxnmkup

According to the UN at least 29,000 migrants have died trying to reach Europe since 2014. Although most make the dangerous Atlantic crossing on crowded

boats after departing from the coast of NW Africa from Morocco, the Western Sahara, Mauritania and Senegal.

The IMO Digest

A summary of some of the news received with grateful thanks from the excellent IMO Media service in recent weeks.

Illustrations per www.imo.org ©

IMO and compliance with STCW

Independent evaluation

First regional workshop in Jeddah

Independent evaluation is an essential part of the STCW Convention[1] requirements, to ensure countries can be kept in the so called STCW White List.

A regional workshop on awareness and importance of the independent evaluation was held in Jeddah, Saudi Arabia from 4-8 December. This was for participants responsible for STCW Independent Evaluation reports from IMO Member States in North Africa and the Middle East (MENA) region.

IMO reported on 8 December that the workshop, the first of its kind, provided guidance on the preparation, reporting and review of Independent Evaluations, required under regulation I/8, and the steps usually taken to implement mandatory amendments to the STCW Convention.

A successful independent evaluation is a proof of compliance with the STCW Convention, so seafarers from the Member State can be employed and / or work onboard foreign-going ships.

This workshop was delivered by IMO, jointly with the Transport General Authority of the Kingdom of Saudi Arabia. It is envisaged that this workshop will be used as a template for similar IMO activities to be delivered in different regions around the globe under the umbrella of IMO's Integrated Technical Cooperation Programme (ITCP).

The workshop was attended by 23 participants from eight countries.

Regulation I/8 of the STCW Convention 1978, as amended, says that each Party shall ensure that an evaluation is periodically undertaken and that a report containing the results of the evaluation shall be communicated to the IMO Secretary-General.

[1] See here: https://tinyurl.com/y754d62v

Championing women in maritime

Senegal

The newest group set up with the support of IMO to champion the place of women in the maritime sector has held its first conference since being inaugurated in Dakar, Senegal. This was reported by the IMO media service on 9 December.

Women in Maritime of West and Central Africa (WIMOWCA) is part of IMO's Women in Maritime programme, WIMA. WIMOWCA is the eighth regional body to be formed in line with IMO's strategy of promoting the contribution of women as key maritime stakeholders.

Transitioning theme

The theme of the conference, held as a hybrid event over two days (6-7 December), was '*Transitioning to Decarbonized, Digitalized and Sustainable Shipping*.' Fourteen countries were represented: Cameroon, Congo, Cote D'Ivoire, Democratic Republic of the Congo, Equatorial Guinea, Gabon, Gambia, Ghana, Nigeria, Sao Tome and Principe, Senegal, Sierra Leone, and Togo.

Representing IMO were Mariana Noceti, Dallas Laryea and Edwige Ogoula.

Other organizations that took part were Women in Maritime Eastern and Southern Africa (WOMESA), Network of Professional Women in Maritime and Port Sectors of West and Central Africa (NPWMP-WCA), Women in Shipping and Trade Associations (WISTA), and Women in Maritime Africa (WIMAFRICA). Several Senegalese government agencies also attended.

Day One of the meeting focused on smart ports and policy changes for a sustainable maritime industry, as well as the decarbonisation of shipping. Day Two concentrated on managing diversity, women's leadership and empowerment in the maritime community and the UN's Sustainable Development Goals.

Ten resolutions were passed by delegates, including those on:

- The use of digital technology.
- The need for long-term national strategies in the region aligned with UN Conventions to promote economic growth whilst protecting the marine ecosystem.
- Access to leadership training for women.
- The development of policies to prevent marine litter.
- The fight against piracy.
- The need for political backing to support the decarbonisation of shipping.

Communiqué

Readers wishing to see the full communiqué adopted by the meeting are invited to see here: https://tinyurl.com/4kwtaua5

Women in Maritime

To learn more about IMO's Women in Maritime work readers are invited to see here: https://tinyurl.com/59dc6sw9

Maritime security legislation

Support for Angola

Training on IMO port security and safety legislation was held at a workshop in Luanda, Angola from 5-9 December.

More than 50 Participants from Angola's Ministry of Transport, Maritime Affairs Authority and other key agencies* were learning how international IMO instruments can be brought into national laws and regulations, with particular emphasis on the legislative drafting process. This was reported by the IMO news service on 9 December.

In the spotlight were IMO instruments including SOLAS Chapter XI-2 and the ISPS Code[1], with control and compliance measures and reference was made to MSC.1/Circ.1525 on development of national maritime security legislation.

This event, funded by the EU Port Security Project [2], featured a visit to the Port of Luanda to observe the physical security measures applied by the port in accord with the ISPS Code.

* Agencies including the Agência Marítima Nacional (AMN-sede), Ministério da Justiça e do Direitos Humanos, Ministério das Relações Exteriores (MIREX) and Capitania do Porto de Luanda and Lobito.

[1] https://tinyurl.com/266u8c9x

[2] https://tinyurl.com/2p8bk47n

Port security training in Lebanon

A Regional Training Course for Port Facility Security Auditors was held in Lebanon from 12-16 December. The event, in Beirut, was conducted in Arabic and designed to build capacity with IMO Member States.

Participants from the Designated Authority (DA) were provided with the knowledge and skills to have effective oversight of procedures in line with key IMO maritime security measures, including the relevant provisions of SOLAS Chapter XI-2 and the ISPS Code. These included assistance on how to conduct port facility security audits and the effective preparation of reporting and follow-up actions that these generate.

It is understood that thirteen participants from Egypt, Jordan, Lebanon and Libya attended the workshop which was funded by the UK Government's Department for Transport.

IMO Council 128

28 November-2 December 2022

Election of next Secretary-General

The Council approved the procedures for holding the election of the Secretary-General at the July 2023 session of the Council (C 129). Applications from candidates for the position of Secretary-General will be invited to reach IMO by 31 March 2023 at the latest.

Following the election in July 2023, the decision of the Council will be submitted to the 33rd session of the Assembly of IMO in late 2023, and the elected Secretary-General will take office on 1 January 2024.

Development of Strategic Plan for 2024 to 2029

The Council initiated the development of the Strategic Plan for the six-year period 2024 to 2029, which will be adopted at the Assembly's 33rd session (December 2023). A work plan was agreed to further develop the plan, including an inter-sessional working group.

The current strategic directions are:

SD 1 Improve implementation;
SD 2 Integrate new and advancing technologies in the regulatory framework;
SD 3 Respond to climate change;
SD 4 Engage in ocean governance;
SD 5 Enhance global facilitation and security of international trade;
SD 6 Address the human element;
SD 7 Ensure regulatory effectiveness;
SD 8 Ensure organizational effectiveness.

Trust Fund to assist States to attend IMO meetings

The Council approved the establishment of a Voluntary Multi-Donor Trust Fund to Facilitate the Participation of Developing Countries, Especially Small Island Developing States (SIDS) and Least Developed Countries (LDCs) in IMO Meetings.

The Fund aims to provide financial assistance to SIDS and LDCs IMO Member States to participate in GHG-related IMO meetings/negotiations.

Update on the Black Sea Grain Initiative

The Council was provided with an update on the Black Sea Grain Initiative.

The Council:

- Encouraged the Secretary-General to continue to work on humanitarian efforts to evacuate all stranded ships and seafarers in the conflict area, including efforts to expand the Black Sea Grain Initiative to other types of ships and additional ports;
- Thanked the Secretary-General and the Secretariat for the important contribution to the success of the Black Sea Grain Initiative, which has been achieved through an interagency "One UN approach" involving relevant UN bodies, other international agencies, NGOs and the Member States concerned; and
- Emphasized the important contribution that the Black Sea Grain Initiative, recognized by the UN Secretary-General as a landmark agreement to help vulnerable people in every corner of the world, is making to alleviate the global food supply shortages resulting from the ongoing conflict in Ukraine.

Reform - IMO Convention amendments regarding expansion of Council

IMO Member States were encouraged to ratify the 2021 amendments to the IMO Convention as soon as possible to enable implementation of the reforms agreed. During the Council week, two further acceptances were received, bringing the total-to-date to seven.

To learn more readers are invited to see here: https://tinyurl.com/3vmnbh5y

New IMO Gender Equality Award established

The Council agreed to establish an annual IMO Gender Equality Award. The Award will recognize persons, irrespective of their gender and rank, who work in the maritime sector, including governments, industry, intergovernmental and non-governmental organizations, and who have made a verifiable contribution to the empowerment of women in the maritime sector at the national, regional or international level.

The IMO Gender Equality Award would be presented by the Secretary-General at IMO Headquarters on the occasion of the annual commemoration of the International Day for Women in Maritime.

The International Day for Women in Maritime

The International Day for Women in Maritime is held on 18 May. The inaugural day was celebrated in 2022, and the first award will be made in 2024.

IMO progress on revised GHG strategy

Mediterranean Emission Control Area (ECA) adopted

At IMO the MEPC met from 12 to 16 December at IMO HQ in London.

The Marine Environment Protection Committee (MEPC 79) has made progress towards revising the Initial IMO GHG Strategy, working towards adopting a strengthened revised Strategy in mid-2023 at MEPC 80.

In the words of IMO Secretary-General Kitack Lim, at the close of the MEPC 79 session: '*I note and welcome the progress made on these matters. It cannot be stressed enough how crucial it is that we keep the momentum and deliver an ambitious and fair, revised IMO GHG Strategy at MEPC 80 next year*.

'*We cannot take our foot off the accelerator, at this moment in time, the cooperation and dialogue that is the trademark of IMO, and not least this Committee, will be more important than ever in delivering on what is expected of us to address climate change, but also biodiversity loss and marine pollution*.'

The work on revising the IMO GHG Strategy took place in an intersessional group, (ISWG-GHG 13), which met from 5 to 9 December, and in the Working Group on Reduction of GHG Emissions from Ships, which met during the MEPC 79 session.

The Committee reaffirmed its commitment to:

- Adopt a revised IMO GHG Strategy, in all its elements including with a strengthened level of ambition by MEPC 80.
- Continue its work on identifying the candidate GHG reduction measures to be developed in priority as part of a basket of measures consisting of both technical and economic elements by MEPC 80 in accordance with the Work plan.
- Undertake a comprehensive impact assessment of the basket of candidate measures ahead of their

adoption in accordance with the Work plan and the revised Procedure for assessing impacts on States.

MEPC 80 (3 to 7 July 2023) is expected to adopt the revised IMO Strategy for Reduction of GHG Emissions from Ships.

Revised resolutions on voluntary cooperation with ports and on national action plans

The MEPC adopted revised resolutions on voluntary cooperation with ports and on national action plans to reduce GHG emissions from shipping. The amendments (to resolution MEPC.323(74) and resolution MEPC.327(75)) include references to facilitating voluntary cooperation through the whole value chain to create favourable conditions to reduce GHG emissions from ships, including through cooperation with ports, shipping routes and maritime hubs.

The revised resolutions are:

- Invitation to Member States to encourage voluntary cooperation between the port and the shipping sectors to contribute to reducing GHG emissions from ships.
- Encouragement of Member States to develop and submit voluntary National Action Plans (NAPs) to address GHG emissions from ships.
- Mediterranean Sea Emission Control Area for Sulphur Oxides and particulate matter.

The MEPC session adopted amendments to designate the Mediterranean Sea, as a whole, as an Emission Control Area for Sulphur Oxides and Particulate Matter, under MARPOL Annex VI. In such an Emission Control Area, the limit for sulphur in fuel oil used on board ships is 0.10% mass by mass (m/m), while outside these areas the limit is 0.50% m/m. The amendment is expected to enter into force on 1 May 2024, with the new limit taking effect from 1 May 2025.

This move will ensure cleaner air for populations in the Mediterranean Sea area.

This is the fifth designated Emission Control Area for Sulphur Oxides and Particulate Matter worldwide, the others being: the Baltic Sea area; the North Sea area; the North American area (covering designated coastal areas off the United States and Canada); and the United States Caribbean Sea area (around Puerto Rico and the United States Virgin Islands).

Mandatory garbage record books for smaller ships

The MEPC adopted amendments to MARPOL Annex V to make the Garbage Record Book mandatory also for ships of 100 gross tonnage and above and less than 400 gross tonnage. This extends the requirement for mandatory garbage record books to smaller ships, which will be required to keep records of their garbage handling operations, namely discharges to a reception facility ashore or to other ships, garbage incineration, permitted discharges of garbage into the sea, and accidental or other exceptional discharged or loss of garbage into the sea.

The move supports implementation of IMO's Strategy and Action Plan to address marine plastic litter from ships.

Protecting seas in the Arctic - regional arrangements for port reception facilities

The MEPC adopted amendments to the MARPOL annexes to allow States with ports in the Arctic region to enter into regional arrangements for port reception facilities. The amendments relate to MARPOL Annexes I (oil), II (noxious liquid substances), IV (sewage), V (garbage) and VI (air pollution). The amendments are expected to enter into force on 1 May 2024. Related amendments to the 2012 Guidelines for the development of a regional reception facility plan (resolution MEPC.221(63)) were also agreed.

EEXI, CII and rating values

The MEPC adopted amendments to appendix IX of MARPOL Annex VI on the reporting of mandatory values related to the implementation of the IMO short-term GHG reduction measure, including attained EEXI, CII and rating values to the IMO Ship Fuel Oil Consumption Database (IMO DCS).

Fuel flashpoint in bunker delivery note

The MEPC adopted amendments to appendix V of MARPOL Annex VI, to include flashpoint of fuel oil or a statement that the flashpoint has been measured at or above 70ºC as mandatory information in the bunker delivery note (BDN). The amendments are expected to enter into force on 1 May 2024.

Particularly Sensitive Sea Area (PSSA) in the North-West Mediterranean Sea

The MEPC agreed in principle to the designation of the Particularly Sensitive Sea Area (PSSA) in the North-West Mediterranean Sea, which will be an important contribution to protecting cetaceans in these waters.

Ballast Water Management (BWM) Convention

The MEPC approved draft amendments to appendix II of the Annex to the Ballast Water Management (BWM) Convention, related to the Form of the Ballast Water Record Book.

A full summary of MEPC 79 is available here: https://tinyurl.com/43eu929u

Seafarer abandonment

Joint ILO-IMO meeting adopts guidelines

New measures to improve conditions for seafarers, including those who have been abandoned, have been adopted at a meeting involving governments and maritime workers and employers' organizations.

Guidelines on how to deal with seafarer abandonment were adopted by the first meeting of a joint ILO – IMO Tripartite Working Group.

These Guidelines seek to address the significant rise in cases of abandonment of crews reported to the ILO, which have risen from less than 20 cases per year between 2011 to 2016, to 40 in 2019, 85 in 2020, 95 in 2021 and 114 cases as of mid-December 2022.

Guidelines aim to improve coordination among countries, including flag States, port States, States in which seafarers are national or resident, and States in which recruitment and placement services operate, in order to resolve abandonment cases more quickly, including getting seafarers paid and repatriated home to their families.

MLC 2006

The new Guidelines draw on relevant ILO international labour standards, notably the Maritime Labour Convention, 2006, as amended (MLC, 2006), including its most recent amendments; an earlier joint ILO-IMO resolution adopted in 2001 (Resolution A.930(22)); relevant IMO international frameworks and agreements; and relevant trends and developments in regional and national law and practice.

Under the MLC, 2006, flag States – countries where ships are registered and/or whose flag the ships are flying – must ensure a financial security system is in place for ships under those flags.

Furthermore, the new Guidelines encourage flag States to verify, at least annually, the validity of this financial security. Port States are encouraged to pay particular attention to this financial security during their inspections of foreign ships that visit their ports. States where recruitment and placement services operate are also called upon to regularly verify that those services include a system to ensure the protection of the seafarers they recruit and place.

Procedures to be taken by States; Abandonment by definition

It was reported by IMO towards the end of December that the new Guidelines set out procedures to be taken by States if a shipowner fails to fulfil their obligations to arrange and cover the cost of repatriation of seafarers, outstanding wages and other contracted entitlements, and the provision of essential needs, including medical care.

In these circumstances seafarers are then considered abandoned. These procedures include developing, in cooperation with seafarers' and shipowners' organizations, national Standard Operating Procedures (SOPs) to explicitly define the liabilities and obligations of the competent authority and the roles to be played by the various national stakeholders. These stakeholders include the relevant national seafarers' welfare boards, shipping agencies, seafarers' and shipowners' organizations, seafarer welfare organizations, seafarer recruitment and placement services, and others.

The joint ILO – IMO database

The ILO–IMO meeting also discussed the importance of the joint ILO-IMO database relating to abandoned seafarers, and the need to update and improve it.

The Tripartite Working Group's first meeting brought together more than 250 representatives and observers from Governments and Shipowners' and Seafarers' representative organizations, to identify and address seafarer issues. The meeting was held in hybrid format in Geneva from 13–15 December. It is understood that outcomes of the meeting will be reported to the ILO Governing Body and IMO Legal Committee in 2023.

For more information

Readers are invited to learn more from the ILO Database on reported incidents of abandonment of seafarers to be found here:

https://tinyurl.com/4s3pymsb

Guidance governing safe working in enclosed spaces

InterManager has welcomed a commitment by the IMO to review guidance governing safe working in enclosed spaces onboard ships.

Heralding the move as a significant step forward in crew safety, the association says it will work with the IMO, Flag States, and other maritime partners to make sure lessons are learned from the many fatalities which have occurred in enclosed spaces and also ensure new legislation is workable and effective.

InterManager submitted a comment paper to the IMO's Maritime Safety Committee (MSC) 106 meeting, co-sponsored by a number of industry partners, in response to China's proposal to revise IMO Resolution A.1050(27) which sets out recommendations for entering enclosed spaces aboard ships. InterManager's paper highlighted additional information which it believes should be considered and provided high level information relating to enclosed space incidents.

The ship and crew management trade body InterManager has been collating statistics on deaths and accidents in enclosed spaces since 1999 and reports that during this period, enclosed spaces have claimed the lives of 122 seafarers and 45 shore workers. However, InterManager Secretary General, Captain Szymanski, fears these figures could be higher still and says he believes there is under-reporting by shipping authorities.

He said: '*This is an opportunity for the shipping industry, led by the IMO, to comprehensively assess the dangers posed by the range of enclosed space and oxygen-depleted areas onboard ships and to make meaningful recommendations which will remove or reduce risk, backed up by robust procedures that should aim to ensure no seafarer or shore worker dies while carrying out their jobs*.'

In its submission, InterManager and its co-sponsors recommend that the IMO Resolution A.1050(27) be considered by suitably competent sub-committees which should also consider emergency drills for enclosed spaces, the carriage of gas detection equipment on board ships, and MSC.1/Circ.1401 dealing with vessels inerted with nitrogen, plus the associated risks and hazards. It advises re-examination of previous submissions to address issues already raised, such as cargo hold gas monitoring, an appreciation of oxygen depleting cargoes, cargoes which are fumigated and cargoes which emit toxic gas.

The InterManager document states: '*The scope of the revision needs to be broad and comprehensive in order to take into account both the human element and ship design factors that have contributed to previous enclosed space incidents. This would undoubtedly mitigate against, and hopefully prevent, such incidents occurring in the future*.'

The submission highlights a need to consider design of access as a means of reducing the number of such incidents, pointing out the risks posed by areas such as hold access ladders, specifically the enclosed trunk ladder (occasionally referred to as the 'Australian Ladder').

InterManager points out that previous submissions on enclosed space risks have discussed '*the repetitive systemic nature of the enclosed space incidents*' and this is a matter that InterManager has campaigned about, urging the shipping industry to delve deeper into accident investigations to look at the 'why' as well as the 'how'.

The submission draws attention to industry-led investigations into enclosed space accidents, commenting: '*These reviews have resulted in the emergence of several distinct themes focussing on: design and construction, gas evolution, movement and entrapment within the ship structure, and the human element prevalent in many enclosed space incidents, such as the rush to rescue a single casualty resulting in the death of many, the disregard of procedures and local adaptation of unsafe practices. Likewise, it has been identified that in many cases ship and shore personnel are subject to time pressure which may result in them rushing or missing checks to meet artificial deadlines which often result in entry into spaces for which they are not fully prepared. These aspects have resulted in countless casualties where a known breach of procedure, (just a 'quick look inside!') in an enclosed space, has often ended in further loss of life*.'

The submission states: '*In order to reduce, indeed halt, such needless loss of life within the complexities and risks of the maritime world, the review of A.1050(27) needs to be comprehensive, in depth and as wide-ranging as possible in order to encapsulate the breadth of such studies. A new resolution on the recommendations for entry into enclosed spaces would go a long way towards avoiding the unnecessary deaths of seafarers and shore-workers*.'

IMO MSC106 agreed that the MSC107 meeting, scheduled for June 2023, will draw up a plan for the revision of IMO resolution A 1050/27 in relation to Enclosed Space Entry Procedures. Responsibility for the output will be spear-headed by the CCC Sub-Committee, which next meets in September 2023, in association with five other IMO Sub-Committees, as and when requested by CCC, with a target completion year of 2024.

USCG SART Safety Alert

At the end of November the US Coast Guard Inspections and Compliance Directorate in Washington DC issued Marine Safety Alert No 12-22. The purpose of this Safety Alert is to address issues that may reduce the effectiveness of a radar Search and Rescue Transponder (SART) during an emergency.

During a recent marine incident, a survivor was drifting in the water and holding an activated 9 GHz (X-band radar) SART, but the individual was not detected by some of the responding vessels, including Good Samaritans and Coast Guard vessels. The survivor saw four vessels pass close by as he held the SART above water and shouted for help, but none of the vessels' crews saw him. In spite of this and the tropical storm-like conditions, the survivor was finally rescued after remaining in the water for three hours.

After the incident, the National Transportation Safety Board (NTSB) tested the survivor's SART, in cooperation with the Coast Guard, the vessel's owner, and the SART manufacturer. The testing revealed that the SART was in good condition and was operating in accordance with the international and domestic requirements for a 9 GHz SART.

Why didn't the responders detect the SART?

Post-incident testing revealed the X-band radar settings that are optimal for navigation might actually prevent the SART signature from displaying on a vessel's radar screen. The gain, sea clutter, rain clutter, tuning, and

range on X-band radars are commonly operated in “Auto” mode, but this mode was found to drastically reduce, or completely eliminate, the ability of the receiving radar to display a SART’s dots or circular lines.

Additionally, the orientation of the SART antenna and the height of the SART above the water both affect the ability of an X-band radar to detect a SART. The SART is designed to free-float or to be mounted on a pole in a life raft or on a survival craft. The narrow end of a SART is the antenna, but the narrow end is also the only suitable location for a person in distress to firmly hold a SART. If a person in the water holds a SART by its antenna, the SART’s ability to transmit and receive signals from an X-band radar will be reduced. When a SART is used with a liferaft or lifeboat, there is an opportunity to mount the SART high in the survival craft on its pole or in a pocket. This height above the water will improve the device’s ability to transmit and receive signals, while also providing a much better target than a SART floating in the water.

The Coast Guard strongly recommends that vessel owners, operators, and crew members:

- Incorporate the above information into their SART training and testing, in order to better prepare to use or detect a SART during an emergency.
- Ensure that all safety equipment is maintained in accordance with the SART owner’s manual. As with all safety equipment onboard a vessel, the usefulness and the effectiveness of a SART is dependent on several factors, including proper maintenance, testing, training, and operating procedures. The primary source for maintenance, testing, and operating procedures is the SART owner’s manual.

The Safety Alert has been provided for informational purposes only and does not relieve any domestic or international safety, operational, or material requirement.

The USCG document was developed by Outer Continental Shelf National Center of Expertise and distributed by the Office of Investigations and Analysis.

It is understood that questions may be sent to HQS-SMB-CGINV@uscg.mil

Utmost dispatch

By Michael Grey, IFSMA Honorary Member

Everyone is in such a tearing hurry these days; impatience seemingly part of modern mankind’s DNA, as the roof is raised when the “just in time” delivery isn’t, or the car in front is a microsecond late getting away from the traffic lights. And in our maritime world, we live, as we always have, in the shadow of those two words “Utmost Dispatch”.

Once metaphorically underlined in charter parties or in the orders presented to shipmasters before they sailed, although possibly qualified with the shipowner’s get-out clause about “not prejudicing the safety of the ship”, Utmost Dispatch is an invitation to earn the employers’ esteem through haste and a measure of risk-taking. It will be accompanied by an unspoken and unwritten threat to the potentially over-cautious. You might suggest that it is an acknowledgement of the realities of economic pressures that are never absent from a maritime adventure.

One of my heroes, the late Captain Richard Cahill, taking both masters of the liners *Andrea Doria* and *Stockholm* to task, as he analysed their fatal notorious collision in his book *Collisions and their Causes*, noted that “economic pressures have long been recognised as conflicting with considerations of safety. He goes on to point out that “the term risk is one of the most significant in the mariner’s vocabulary”. From the master of the *Titanic*, speeding into the icefield, to the commander of the *Torrey Canyon* taking his fatal short cut, it was economics that was urging them onward. And for all the lip service that is paid to “safety first” policies today, nothing very much has changed, as navigational short cuts are taken and caution and prudence demoted in favour of risk taking that will meet with the employer’s approval, always supposing it comes off.

It might be thought that passage-making to “save the planet” through emission-saving slower speeds might see rather less rushing about. This would be a very false assumption to make, as slower speeds on the sea passage are already being compensated by ever more ferocious injunctions to hasten the ship through its time in port. You can see plenty of evidence that this is happening, with pilots in some ports being urged to get the ship alongside and off the berth faster, with the more cautious actually being penalised. The weapon of the unfair comparison with a laggard being told that “Captain X can get his ships alongside 20 minutes faster” is also employed. It might have something to do with the number of container cranes being clouted and other “dock damage”, as insurers like to term such accidents.

Stevedoring companies are also feeling the pressure to deliver faster turnarounds as sea passages are extended. It would be difficult to argue with the need for greater efficiencies, provided, of course, that the safety of ships and the personnel working in terminals is not compromised. In this respect, we might think of car carriers rushing out of port before the actual cargo plan has been finalised and the stability investigated, or lashing gangs being unable to complete their work before the ship is unmoored.

There was a memorable case recently reported by Australian investigators of a serious fire that had broken out in the hold of a project carrier, when the crew had been using a plasma torch to release the sea-fastenings of the cargo, much of which was subsequently destroyed. It transpired that this was the 10th fire reported by the same company in the past 14 years, and, believe it or not, the fourth of these which the Australian inspectorate had itself investigated. Burning and cutting is always hazardous and needs plenty of bodies to be on hand to keep an efficient fire watch, which in these cases were clearly not available. But one might ask, might the over-riding need to un-lash the cargo as fast as possible and get the ship back out to

sea have been a contributor to this series of clearly avoidable incidents? Rather less haste might just have produced a better outcome for all.

There are so many accidents which are caused by people taking short cuts, or doing things because of the pressure of time, or the lack of anyone around to help. A fair proportion of the tragic and utterly avoidable deaths in enclosed spaces is undoubtedly contributed to by people hurrying to get a job finished, diving down into a tank or trunkway without a second thought, or taking what turns out to be a fatal short cut. A pause in the pace of work, a proper consideration of the need for breathing apparatus, ventilation and oxygen monitors, all of which have been recommended this week by the excellent InterManager organisation, would have saved so much unnecessary grief. Last word to Captain Cahill, who wrote these seemingly evergreen words: "the pressure to place safety second to schedule is still a problem". Forty years on, it still is.

Editor's note

This item first appeared in *The Maritime Advocate Online*, Issue 818, of 2 December and appears her by kind permission of the publication's author and editor.

***Maritime Advocate Online* is a fortnightly digest of news and views on the maritime industries, with particular reference to legal issues and dispute resolution. It is published to over 20,000 individual subscribers each week and republished within firms and organisations all over the maritime world. It is the largest publication of its kind. It is estimated to despatched to in the region of 60,000 readers in over 120 countries**

Michael Grey is former editor of *Lloyd's List*.

Ever Forward grounding

US Coast Guard completes investigation

On 6 December from Baltimore the US Coast Guard Sector Maryland-National Capitol Region reported that it had completed its marine casualty investigation into the 13 March, 2022, grounding of the container ship *Ever Forward* in the Craighill Channel, off Maryland, East Coast of the United States. The 1,095ft loa *Ever Forward*, a Hong Kong-flagged vessel grounded while on passage with 4,964 containers aboard, from the Port of Baltimore to Norfolk, Virginia.

Causal factors

The Report of the Investigation determined the incident's causal factors to be the pilot's failure to maintain situational awareness and attention while navigating, and inadequate bridge resource management.

Immediately following the grounding, Coast Guard marine investigators began the investigation to determine the factors that led to the *Ever Forward* grounding and develop recommendations to prevent similar marine incidents from happening in the future.

Use of cell phones

Based on the finding of facts, the Coast Guard is recommending that marine operators develop and implement effective policies outlining when the use of cell phones and other portable electronic devices is appropriate or prohibited, and that vessel owners and operators ensure and promote crew awareness of policies regarding the duties and obligations of officers on watch for the safety of the ship, even when a pilot is embarked.

The USCG report into the grounding is to be found here: https://tinyurl.com/y9mxn496

The Coast Guard has published two Findings of Concern and has made them publicly available at the Coast Guard's Inspections and Compliance Findings of Concern webpage here: https://tinyurl.com/4djda2ux

The purpose of Findings of Concern is to share information related to unsafe conditions to the public, state, or local agencies.

The Coast Guard was the lead agency for all evidence collection activities involving the investigation. The Maryland Department of Labor, Division of Occupational and Professional Licensing, conducted an independent investigation, with access to evidence collected by the Coast Guard.

Under a Unified Command consisting of the US Coast Guard, Maryland Department of the Environment, and Evergreen Marine Corporation, a comprehensive salvage plan to free the ship was developed and implemented, including dredging and towing operations, which freed *Ever Forward* on 17April 2022.

Illustrations reproduced by kind provision of USCG Public Affairs©.

The EU TEN-T network

EU Transport Council further strengthens role of seaports

On 5 December, the EU Transport Council reached a provisional agreement on the review of the TEN-T guidelines of 2013.

The European Sea Ports Organisation (ESPO) welcomes the text of the Council General Approach, since it clearly backs the Commission's approach to lift the importance of the maritime dimension and strengthen the role of ports within the framework of Europe's TEN-T policy.

Ports as energy hubs

While the Commission proposal already recognizes the role of Europe's maritime ports as cross-border multimodal nodes which serve not only as transport hubs, but also as gateways for trade, industrial clusters and in particular energy hubs, the Council further strengthens this approach by introducing a new criterion to become a comprehensive TEN-T port.

Following the Council, on top of the current volume criterion (0.1% of the EU total volume of port cargo), a port can also be part of the comprehensive network if: '*its total annual cargo volume (bulk and non-bulk) exceeds 500.000 tonnes AND its contribution to the diversification of EU energy supplies and to the acceleration of the roll-out of renewable energies is one of the main activities of the port*.'

Considering the role of ports

In the words of ESPO's Secretary General Isabelle Ryckbost: '*Currently the importance of a port in TEN-T is measured on the basis of tonnes and TEU. We welcome the proposal of the Council to also consider the role ports are playing in energy diversification and the roll out of renewables.*

'*On average 40% of the commodities going through Europe's ports are sources of energy. Ports play an increasingly important role in ensuring both the supply of energy and the acceleration of the energy transition.*

'*This important role certain ports are playing cannot always be measured in tonnes or TEU. Yet it is essential to consider these ports in the TEN-T, being part of a critical and important supply chain*.'.

Looking at the many amendments tabled in the Transport Committee of the European Parliament supporting this more multidimensional and strategic role of ports, ESPO hopes that this criterion will also be integrated in the compromises of the Parliament and be part of the final text.

Improvements in port-rail links

With regard to the rail requirements agreed in the Council, ESPO believes that further steps can be made to ensure a better last mile connectivity to ports while respecting the specificity of port-rail systems. The complexity of rail infrastructure and heterogeneity of its governance inside European ports makes it necessary to adopt the roll-out of rail requirements accordingly.

Ryckbost added: '*We hope that the Parliament can play a role in finding a suitable compromise between the Commission proposal and the Council text agreed on Monday*.'

Pipelines essential

Finally, ESPO welcomes the reference made to pipelines both in the recitals of the agreed Council text as well as in multiple amendments tabled by the Parliament. For Europe's ports, pipelines will increasingly play an essential role in the implementation of Europe's decarbonisation agenda and will be a necessary mode of transport for new energies.

The Transport Committee of the European Parliament was due to be discussing the 1872 amendments on the Commission proposal on 8 December.

European ports remain committed to work with both the Commission, the Parliament and the Council in further explaining the role ports play and can play in TEN-T.

Council General Approach

The152-page text of the Council General Approach can be found here: https://tinyurl.com/bbncrvny

The full title of the document is: *Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on Union guidelines for the development of the trans-transport network, amending Regulation (EU) 2021/1153 and Regulation (EU) No 913/2010 and repealing Regulation (EU) 1315/2013 - General Approach*.

UK Government £45 million award

Maintaining UK Flagship scientific research vessels

On 10 December Industry and Maritime Minister Nusrat Ghani announces £45 million in funding to maintain the UK's fleet of research vessels.

The £45 million contract, awarded to Babcock International by the Natural Environment Research Council (NERC), is a key component of the government's National Shipbuilding Strategy, boosting investment in the prestigious UK shipbuilding industry.

Maintenance and upgrades will be carried out on RRS *Sir David Attenborough*, RRS *Discovery*, and RRS *James*

Cook, three ships which conduct innovative scientific research into our oceans and polar regions, and support scientists tackling global issues such as climate change and pollution.

Industry and Maritime Minister, Nusrat Ghani said: '*RRS Sir David Attenborough and its maiden voyage to Antarctica inspired the explorer in all of us, venturing into some of the world's most unforgiving climates, while conducting vital scientific research on pressing global issues like sea level rise and marine biodiversity.*

RRS Sir David Attenborough
Illustration per www.gov.uk.government/news

'*This research is invaluable, which is why we are committing the funding needed for the upkeep of these key research vessels, drawing on Rosyth Shipyard's proven track record of excellent work maintaining UK ships.*

The shipbuilding industry supports more than 40,000 jobs across the UK. This investment will secure highly skilled jobs and suppliers to maintain the UK's advanced fleet of research ships.

The initial three-year contract, with additional two-year option, will see the large oceanographic and polar research vessels dock at Babcock's advanced facilities in Rosyth, Scotland, for programmed maintenance and upgrade work.

Babcock Rosyth is a leading provider of maritime support, and where maintenance, repairs and upgrades are also carried out on the UK Royal Navy's aircraft carriers.

Defence Secretary and Shipbuilding Tsar, Ben Wallace, said: '*This is another fantastic example of the National Shipbuilding Strategy delivering for British industry and boosting investment in UK yards.*

'*A cornerstone of British shipbuilding, Rosyth is already home to a number of major build and maintenance contracts, bringing a wealth of expertise and experience to the British shipbuilding sector.*'

Professor Sir Duncan Wingham, Executive Chair of NERC, part of UK Research and Innovation, added: '*The UK's fleet of advanced research ships provides state-of-the-art facilities for scientists to conduct research of our oceans and polar regions, building our understanding of the ice, atmosphere, and seas.*

'*We look forward to working with Babcock Rosyth to maintain these ships and onboard facilities, which are a key part of the UK's scientific infrastructure.*'

RRS *Sir David Attenborough* is operated by the British Antarctic Survey (BAS) and is one of the world's most advanced polar research vessels, having departed the UK for its maiden voyage in November 2021. The vessel recently left its UK home port on November 20th, for a six-month expedition to Antarctica. In the coming expedition, *Sir David Attenborough* will be testing a new artificial intelligence system which will help chart the most environmentally-friendly route at any given time.

Measuring 129 metres loa and with a range of 19,000 nautical miles, it accommodates up to 90 crew, scientists, and support staff, and will enable research of the oceans, seafloor, ice and atmosphere.

RRS *Discovery* (2013) and RRS *James Cook* (2006) are operated by the National Oceanography Centre (NOC) and conduct oceanic exploration around the world, undertaking multi -disciplinary marine science to unlock the mysteries of the deep ocean.

Following the refit, RRS *Discovery* will be heading to the Arctic to explore nitrogen fixation with the University of Liverpool and NERC, whilst RRS *James Cook* will continue its research expeditions to some of Earth's most challenging environments, from tropical oceans to the edge of ice sheets.

All three research ships use the latest technologies such as autonomous underwater vehicles, including the famous NOC Autosub named *Boaty McBoatface*.

Boaty, and other NOC-developed technologies have the ability to travel under ice and to depths of 6,000m to investigate the process driving change in the Polar Regions. The marine robot fleet at NOC is one of the most capable in the world and support the ships' scientific research with environmentally-friendly marine observation.

IHO / UKHO and digital data services

Representatives of 26 countries sitting on the International Hydrographic Organization (IHO) Council gathered in Monaco for the sixth IHO Council meeting, held from 18 to 20 October, to discuss the maritime sector's transition to digital data services and the development and implementation of the new S-100 data standards. This was reported by the UK Hydrographic Office in mid-December.

Data standards

The IHO's S-100 data standards will greatly enhance understanding of the ocean and the portrayal of the maritime environment. S-100 will provide a coherent framework for high-fidelity maritime data applications, which are fundamental to the shift from Electronic

Navigational Charts (ENCs) to digital geo-information systems. Those systems, it is understood, will be capable of receiving and processing information on a wide range of applications, including imagery and gridded data, high-density bathymetry, dynamic tidal monitoring, and surface currents.

White Paper issued

As requested by the IHO, the UK's National Hydrographer, Rear Admiral Rhett Hatcher, presented a White Paper* on behalf of the UK Hydrographic Office (UKHO) that sets out the key drivers influencing the shipping industry: decarbonisation and digitalisation.

Reducing shipping's carbon emissions and increasing operational efficiency will require harnessing the latest innovation in navigational standards, such as the growing availability of high-speed internet at sea, integrated bridge systems, machine learning and artificial intelligence. Decarbonisation and digitalisation are shaping the future of maritime navigation, encouraging organisations to adapt and develop new solutions that meet the evolving needs of their customers.

Rapid growth and improvements

The digitalisation of onboard systems, the rapid growth of the Internet of Things and the improvements in broadband communications increase the potential for smarter navigation, and for the number of connected solutions that the industry adopts.

Decarbonisation has become a global imperative and a priority for governments, companies, and society at large which are now making commitments and increasing efforts to close the gap to net-zero emissions and create a sustainable maritime industry. A younger workforce at sea who are fully conversant with a digital world increasingly expect the sorts of connected services that they experience on land.

Four themes

The UKHO's White Paper sets out four themes for successfully meeting the evolving digital and sustainable needs of the mariner:

- Resilience to create assured, secure, and reliable services for mariners today and tomorrow.
- Sustainability ensuring the delivery of solutions that enable efficiencies in route planning, analytics and voyage optimisation.
- Data solutions which involves making the most of enhanced technology and connectivity between ship and shore to increase the speed at which data on the marine environment is gathered.
- Collaboration with industry partners and users to research and innovate to unlock the potential of S-100 data services.

These four recommendations were evident throughout the IHO Council 6 meeting.

ROK testbed

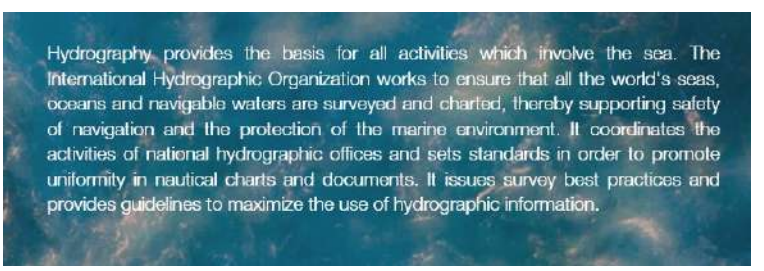
The Republic of Korea delivered the results of the S-100 Testbed, a project that it worked on with the US. Representatives from the Asian nation explained the four main benefits of S-100: increased safety of navigation, improved efficiency, optimised load capacity for ships, and paving the way for autonomous shipping.

Additionally, the Republic of Korea confirmed it had established the National S-100 committee with Canada. The National S-100 committee will share the minutes of its meetings with interested parties, to enable collaboration across the industry and a greater understanding of future digital navigation opportunities.

IHO

International Hydrographic Organization

Hydrography and its contribution to global initiatives, such as the Digital Twin of the Ocean, was also discussed. More than a simple model, the digital twin creates a virtual environment with near real-time data feeds, replicating the ocean environment to support the development and testing of new technology, and to model variations in the marine environment, such as those brought on by climate change or human activities. The Digital Twin of the Ocean could serve as a bridge between scientific knowledge and decision-making.



Following issue of the White Paper, the UKHO will identify the lessons learned from the study and provide input through the relevant working groups and committees of the IHO. The UKHO also looks forward to continuing the conversation of digitalisation and decarbonisation in the

maritime industry at the forthcoming IHO Assembly in Monaco in May 2023.

IHO will continue to play a leading role in the implementation of S-100 data standards, particularly those approved at the IMO's Maritime Safety Committee meeting. Revised performance standards for Electronic Chart Display and Information Systems (ECDIS) to include the next technical generation of ENCs (S-101 ENC) will apply to ECDIS equipment installed on or after 1 January 2029.

*The White Paper: *Understanding the Drivers, Solutions and Enablers within the Shipping Industry* is to be found here: https://tinyurl.com/4v2a72r2

USCGC *Polar Star*

On passage to Antarctica

On 15 December the United States' only operational heavy icebreaker, the. Coast Guard Cutter *Polar Star* (WAGB 10), made a scheduled port call at Chowder Bay, Australia.

Polar Star's Chowder Bay port call was part of the vessel's annual passage to Antarctica where they will support Operation Deep Freeze, a joint military service mission to resupply the United States Antarctic stations of the National Science Foundation, the lead agency for the United States Antarctic Program (USAP).

Twenty-six passages to Antarctica

This year (2022) marks *Polar Star*'s 26th voyage to Antarctica. Every year, a joint and total force team work together to complete a successful Operation Deep Freeze season. Military members from the US Air Force, Army, Coast Guard, and Navy work together through Joint Task Force-Support Forces Antarctica to continue the tradition of providing US military support. Operation Deep Freeze works closely with other Antarctic programs to include those of Australia, New Zealand, and Italy, as well as those Nations' respective defence forces.

Coast Guard Cutter Polar Star (WAGB 10) moored to a fuel pier in Sydney, 12 December. The icebreaker made a one-night logistics stop in Sydney to refuel before continuing on passage to Antarctica in support of Operation Deep Freeze.

US Coast Guard photo by Petty Officer 3rd Class Aidan Cooney. USCG ©

Captain Keith Ropella, *Polar Star*'s CO commented: '*It is an honour to carry out this historic and unique mission alongside the National Science Foundation and United States Antarctic Program, in conjunction with the Joint Task Force-Support Forces Antarctica.*

'*Our crew's hard work and sacrifice ensure the success of the Polar Star's contributions to the Operation Deep Freeze mission*.'

Polar Star provides heavy icebreaking capabilities to facilitate sealift, seaport access, bulk fuel supply, and port cargo handling for three US research stations in Antarctica with McMurdo Station being the largest.

Coast Guardsmen on the Coast Guard Cutter Polar Star (WAGB 10) work on the bridge while departing Pearl Harbor 29 November. Polar Star spent the Thanksgiving holiday in port at Joint Base Pearl Harbor-Hickam in Hawaii.

Coast Guard photo by Petty Officer 3rd Class Aidan Cooney. USCG ©.

Polar Star's ice breaking capabilities enable the safe delivery of critical supplies to sustain USAP's year-round operations and support international partnership in the harsh Antarctic environment. It's vitally important that the US maintains a maritime domain presence in Antarctica to protect uninhibited international access to the region. A Coast Guard heavy polar icebreaker has provided this capability for more than 30 years.

Operation Deep Freeze

Operation Deep Freeze is one of the more challenging US military peacetime missions due to the harsh environment in which it is conducted. Antarctica is the coldest, windiest, most inhospitable continent on the globe, and each trip requires careful planning and coordination. US military service members are trained and ready to support this vital mission despite the austere environment.

To quote Lieutenant Commander Benjamin Litts, *Polar Star*'s operations officer: '*The Polar Star's crew receives unique and specialized icebreaking training to ensure they are properly equipped to carry out this vital mission. The success of U S missions in the Polar Regions remains a top priority for the Coast Guard*.'

Polar Star is the United States' only asset capable of providing access to both Polar Regions. It is a 399ft loa heavy polar icebreaker commissioned in 1976, of 11,000 displacement tons, 84ft wide, with a 34 foot draft. The six diesel and three gas turbine engines produce up to 75,000 horsepower.

APL England

Loss of containers overboard 24 May 2020

ATSB Investigation Report

On 24 May 2020, *APL England* was making way down the east coast of New South Wales, with a cargo of containers, bound for Melbourne, Victoria. Early that morning, in adverse weather, the ship underwent a series of heavy rolls that resulted in the loss of 50 containers overboard and shutdown of the main engine.

What the ATSB found

The Australian Transport Safety Board (ATSB) found that *APL England*'s fixed container securing arrangements on deck were in a poor state of repair and the strength of many securing fixtures was severely reduced by corrosion. In the seas encountered, the fittings failed, and containers were lost overboard. The investigation also found that this condition would have taken several years of poor maintenance to develop. This showed that the ship had not received the scrutiny from crew members, shore management or other agencies that a ship of its age or condition required. This presented an increased risk to the continued safe operation of the vessel, security of the cargo carried, and safety of crew members working around the containers.

In addition, the investigation found that procedures for adverse weather were not followed. Had these procedures and associated assessment tools been used, navigational and operational decisions could have been made, which would have better prepared the ship for the conditions encountered.

What has been done as a result

In addition to the repairs conducted on *APL England*, the ATSB has been advised that the deck and container fittings in all other vessels in the APL fleet were inspected and repaired as required. The company also implemented improved vessel inspections and associated reporting requirements for both ship and shore staff. APL assessed the safe stowage and carriage of high cube containers and conducted an internal safety assessment of the practice. As a result, limits were placed on the numbers of high cube containers that could be loaded into bays fitted with cell guides, which limited the extent to which containers protruded above the cell guides. Cargo securing manuals were reviewed and updated to include the revised stowage arrangements for high cube containers.

Additionally, APL implemented additional safety action regarding passage planning and navigation in heavy weather. They also advised that the wider CMA CGM Group and subsidiary entity fleets were made aware of these issues and the safety actions taken in response to this investigation.

Finally, in July 2022 the classification society, DNV, updated Class Guideline DNV-CG-0182 to include a new section which provided requirements and guidance on the allowable wear and tear of container supporting structures and

container securing equipment.

Safety message

ATSB's investigation highlights the importance of regular maintenance of vessel fixtures to ensure the security and stability of the ship and its cargo, as well as crew safety.

Ships' officers and crew are also reminded of the importance of adhering to the cargo securing manual and of following specific procedures and guidance material to assist preparations for, and decision making during, adverse weather conditions.

The occurrence

Passage to Australia

On 11 May 2020, the 5,780 TEU fully-cellular container ship *APL England* departed Ningbo, China, bound for Sydney, New South Wales. The ship was loaded with 3,161 containers (5,048 TEU), with a forward draught of 11.44 m, an aft draught of 13.32 m, and a GM of 1.69 m. The Singapore-flagged ship was technically managed by the CMA CGM International Shipping Company Pte. Ltd (CCISC).

The vessel's load computer results based upon ship conditions on departure from Ningbo showed nine lashing force exceedances, from 102–107% of the maximum force. The master and chief mate accepted these values in the knowledge that changing ship conditions (ballast and fuel) would bring these forces within the acceptable range as the voyage progressed.

On 13 May the master was informed of a change in destination from Sydney to Melbourne, Victoria.

On 22 May, the master received weather advice from the CMA CGM group Fleet Navigation and Support Centre (FNSC) regarding a low pressure system and high swells (5–6 m) developing off the New South Wales coast. The master monitored the weather forecasts via updates from the commercial weather guidance provider ship performance optimization system (SPOS) service.

On 23 May, at 0800 Eastern Standard Time, the ship was 20 NM north-east of Port Macquarie, making good a speed of 14 knots, in north-westerly winds to force 5 (17–21 knots) with 2 m seas on a 2.5 m swell. Over the following hours, the weather deteriorated as the winds moved round to the south and the seas increased. The ship's pitching and rolling motion also increased. The master ordered the ship's speed reduced to about 7 knots as the ship was ahead of schedule into Melbourne, and advised the officer of the watch (OOW) to use hand steering as required to reduce the motion. The bridge log

recorded that all lashings were checked during the afternoon (log entry time 1630).

The master rested from 2030 to 2300 and then returned to the bridge. At midnight, the OOW recorded in the bridge log south-westerly winds to force 9 (41–47 knots), high seas (sea state 7, 6–9 m wave height) on a southerly 4.5 m swell. At about 0100, with intermittent use of hand steering, the master felt the rolling was acceptable and returned to the accommodation to sleep.

The duty engineer completed the evening inspection of the engine room and at 2130 responded to an engine room alarm. The alarm reset when accepted by the duty engineer, who then returned to the accommodation at about 2200 and went to sleep. At 2326, and again at 2347, the engineer responded to alarms sounding, silencing them on each occasion. The engineer found no faults and attributed the alarms to the motion of the ship.

At 0215 on 24 May, when about 40 NM east of Sydney, the ship underwent a series of heavy rolls. Crew members, including the master and the duty engineer were woken by the heavy rolling, and unsecured items moved and fell to the deck. The master went to the bridge where the OOW (second mate) had re−engaged hand steering in response to the significant movement.

Just after being woken, the duty engineer received a telephone request from the OOW to stand by in the engine room. At about that time, an engine room alarm sounded, and the engineer went to the engine room to attend to it. The alarm reset upon accepting.

The heavy rolling dissipated while the ship continued to pitch noticeably. At about 0230, the master changed course more southerly to 195°, and maintained a ship speed of about 7 knots in 40–45 knot winds from ahead (south-westerly). This reduced the ship's motion and the master retired again at about 0300. The duty engineer remained on standby in the engine room and kept watch from the engine control room.

At 0400, the third mate took the navigation watch (OOW), and at about 0420, the master again awoke and returned to the bridge. The ship's course was altered to 185°, and hand steering used as necessary. The master remained on the bridge, and the duty engineer remained in the engine room.

The incident

Just after 0600, the ship was on hand steering and maintaining its southerly course at about 7 knots. Conditions remained unchanged with the ship pitching and periodically rolling more noticeably in high seas and gale force winds.

At 0610, 46 NM south-east of Sydney, the ship underwent a series of very heavy rolls, to about 25° either side of upright. Again, many items moved and fell to the deck, including those which were previously secure, and personnel held on to maintain their footing.

The movement also resulted in activation of a steering system alarm, followed by an engine room alarm at 0610:28. The duty engineer was seated at the engine control console (near the alarm acknowledge push button) when the heavy roll and alarm occurred. The engineer had to hold on for security and answered the engine alarm 6 seconds after it sounded.

The ship continued to roll heavily. At 0610:53, twenty-five seconds after the initial alarm, the main engine shut down due to loss of engine lubricating oil pressure.

The OOW noted the loss of power and slowing of the ship. They alerted the master to the loss of propulsion and, following standard procedure, moved the engine telegraph to 'stop'.

At 0611:50, the duty engineer informed the OOW that, with the engine telegraph set to 'stop', the engine could be started again once the alarms had cleared and the main engine shutdown lockouts had reset. The main engine was subsequently restarted, dead slow ahead.

The events had woken the chief engineer and the chief mate who both went to the bridge. Upon seeing that the main engine had shut down the chief engineer went to the engine room, while the chief mate took control of navigation to recover the ship.

Incident recovery

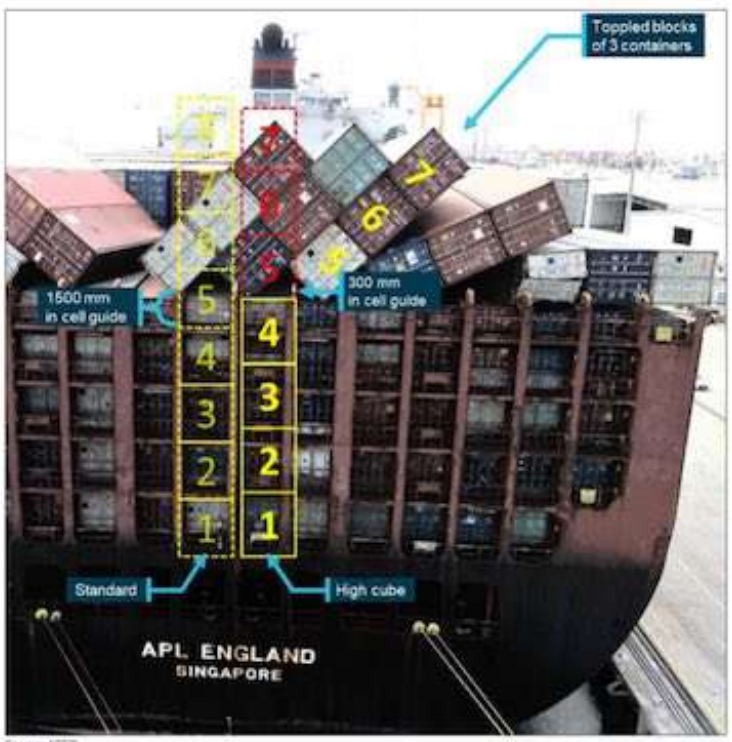
The ship was turned easterly and then southerly, into the weather. The response was slow and the main engine speed was increased to half ahead. The ship gathered speed and, by 0617, passed 2 knots and continued turning to starboard and south. At 0622 the ship's speed was 6 knots on a steady 165° heading. The master and chief mate discussed options. It was decided to head north, with the weather, while the situation was assessed further.

The turn to starboard was commenced at 0627 and the ship was steady on a northerly course (about 015°) and with a speed of about 12 knots at 0700. At this time, the ship was 44 NM south−east of Sydney. The chief mate contacted Sydney vessel traffic services (VTS) and was informed that the weather was not expected to improve and that Sydney and Port Botany were closed.

As the skies lightened (sunrise was at 0647), the chief mate noticed fallen stacks of containers aft, from bay 62. The master notified the company of the incident. Upon returning to the bridge about 10 minutes later, the master was further notified by the chief mate of the damage and loss of containers forward at bay 30.

On the northerly heading, though the weather remained unabated from the south-south-west, the ship's movement improved and no further loss of containers occurred. The winds eased to force 7 (28–33 knots) into the afternoon and, at 1600, the ship was passing Newcastle.

Figure 11: Bay 62 stack comparison between standard height and high cube containers



Source: ATSB

Due to the closure of Sydney and nearby ports due to the weather, the decision was made to continue passage to Brisbane, Queensland, the next closest, suitable place of refuge and about 400 NM further north. The weather eased as the ship travelled north. By noon on 25 May, off Byron Bay with 120 NM to travel, winds were force 5 (17–21 knots) from the south-west with sea state 5 (2.5–4 m waves) on a 3 m south-south-easterly swell.

Brisbane arrival

At about 2136 on 25 May, *APL England* anchored 7 NM off Point Cartwright and the entrance to the Port of Brisbane. Prior to being allowed entry into port, several inspections and assessments by surveyors and maritime authorities were carried out. Maritime Safety Queensland (MSQ) formulated a recovery plan and risk assessment for the operation. Additional piloting, towage, pollution prevention and on-water guidance measures were put in place.

Two days after arriving off the port, at 0600 on 27 May, *APL England* weighed anchor and proceeded into Brisbane. At 1342 the ship was all fast alongside.

Over the following days personnel representing several different stakeholders attended the ship, including investigators from the ATSB, the Australian Maritime Safety Authority (AMSA) and MSQ.

On 29 May, the first damaged container was removed from the ship. In all, 50 containers were lost (16 from bay 62 and 34 from bay 30), and 79 were damaged but remained on board. One container lost overboard contained hazardous goods in the form of dry powder fire extinguishers. AMSA identified a search area of about 1,000 km^2 stretching between the Illawarra and Sydney's southern suburbs in water depths of up to 200 m.

By 19 June all remaining containers had been discharged and AMSA released *APL England* to sail from Australia to Zhoushan, China, to undertake repairs. On 4 July, *APL England* arrived at the shipyard in Zhoushan.

Post-incident inspections identified that more than 550 single and double lashing plates required replacement, along with significant amounts of deck steelwork and structures. This included lashing plates and structures supporting and securing containers lost overboard. *APL England* underwent repairs and departed the shipyard on 2 August to continue operating. DNV GL placed a condition of class on the ship noting that numerous corroded or thinned bracket/stiffener plates on the exposed weather deck and cross decks remained to be repaired.

Soon thereafter the ship was sold and it changed name, owners, managers, operators, flag, classification society, Protection and Indemnity (P&I) insurers and area of operations.

The investigation report

The 46-page ATSB document: *Loss of containers overboard from APL England*

46 NM south-east of Sydney, New South Wales on 24 May 2020 is available here: https://tinyurl.com/59j45fd5

Editor's note

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ATSB ©.

A very preventable tragedy

By Michael Grey, IFSMA Honorary Member

There are some incidents which, for unknown reasons, lodge in the memory. It must have been thirty years ago when the Casualties columns in Lloyd's List reported the deaths of four crewmen aboard a bulk carrier northbound from the Plate with a cargo of soya. A couple of them had gone into the hold, for some quite legitimate reason, and while the cargo space was filled with cargo, there was a lack of oxygen in it. The two others dived in to rescue their shipmates and in turn, were similarly overcome. Twenty per cent of the ship's complement wiped out, just like that.

But what made that accident so memorable, to me, at least, was that just about five weeks earlier, the Casualty

columns had reported an almost identical tragedy, on a bulker bound to Europe from the Plate, with the same cargo. The only differences were the flag of the ships and their owners. Same circumstances exactly. Same number of unnecessary deaths, in a hold depleted of oxygen by the otherwise innocuous cargo.

The second incident should have brought home the sad fact that as an industry we were just not very good at transmitting valuable safety information, not just within the national fleet or within a shipping company, but around the whole at-risk population. But if there was a more effective safety alerting system, would pre-occupied or ignorant people actually take any notice?

There has been no end of alerts, advice, regulations and appeals since then about the risks of enclosed spaces, but as was perfectly explained by InterManager, which has taken the trouble to collate these accidents, it is still clear that the message is not getting across.

There is something particularly awful about deaths which are so very preventable. This is not the fury of the seas or the violence of fire or explosion, but an unnecessary risk taken, a moment's thoughtlessness, a short cut which led to only one destination. Other accidents stick in the mind because they were so stupid and … mundane. The AB who, with his chums had been working in a hold the previous day, but had carelessly left his broom at the bottom of the booby-hatch. He lifted the hatch and there was the blooming thing. It was the work of a short minute to shin down and retrieve it, lest he incur the wrath of the bosun. But the hatches had been on all night, sufficient for the cargo to reduce the level of oxygen to a non-breathable level.

There was the annoying clank in the chain locker of a supply boat which was keeping the crew awake. It was easily sorted, with a light line to bind the cables together; the only surprise was that the interior of the locker was lethal, as the corroding chain had "eaten" the oxygen and two who went in, never came out alive.

It underlined the fact that no enclosed space whatever should be treated in a cavalier fashion, and all had the potential to kill the unwary entrant, along with the unthinking shipmate(s) who rushed heroically to the rescue without getting hold of the breathing apparatus. Maybe we should think about those words "unwary" and "unthinking". A recent death reported by the excellent Marine Accident Investigation Branch Safety Digest was of an engineer on a trawler who had just popped into an empty refrigerated salt water tank to do some maintenance. What could possibly go wrong? He was found unconscious on the bottom some time later because freon refrigerant had leaked into the tank through a corroded pipe and when eventually brought out – after three fellow crew members had been similarly affected by the heavy gas when they had dived into help, the engineer could not be resuscitated.

A few years ago, there was a really excellent seminar on this miserable and recurring curse run by the UK Maritime & Coastguard Agency which gathered together so much of the information on the potential lethality of enclosed spaces and the need for real action on the problem. One of the "demos" was a glass bottle containing some rusty old bolts from which emerged a tube measuring the oxygen as the day progressed, gradually depleting to a level lower than that which would support life. The regulators preached the need for a disciplined approach to any entry into enclosed spaces and I'm sure it was taken on board by the shipping company representatives who were present.

But these tragedies are still happening. Dockers, seafarers, repairers, surveyors – there seems no particular category of person who cannot be struck down by this killer. A seafarer writes: "On the topic of enclosed spaces we reached a dead end sometime ago. Our renewed efforts at managing this problem only add to paperwork and nothing else".

Is the equipment on board ship designed to detect oxygen depletion fit for purpose? The Confidential Hazardous Incident Reporting Programme director maritime Adam Parnell recently posed the question of whether poor design might be a contributor to any accident and this may well be true with some enclosed space accidents. Our seafaring contributor points out that a "core issue" is "how to detect oxygen depletion in that remote corner", and how to refresh the space with 100% breathable air. The current tools for the job, he suggests, are not fit for purpose, offering the examples that the sampling pipe of the 4xgas detector cannot reach all the areas required while the ventilating fan supplied is a "piddling toy". A technologically innovative product, he suggests, is needed. It is beyond my pay grade to know whether this will make a difference, but seafarers should not be anywhere near spaces that cannot be made safe for them to enter.

Paperwork, tick boxes, procedures and regulations are the best we can do at present it seems. Is there more that can be done in training. You all know, from your first day at sea that you shouldn't step in a bight of rope, walk under a swinging load, or sit on the rail. But is it sufficiently ingrained into the seafarers' psyche that death lurks in any enclosed space? I only ask.

Michael Grey is former editor of Lloyd's List.

Editor's note

This item first appeared in The Maritime Advocate Online, Issue 819, of 16 December 2022 and appears her by kind permission of the publication's editor and the author.

New international medical app available

Gard and the Norwegian Centre for Maritime and Diving Medicine have launched an innovative international digital medical guide to improve medical treatment onboard and potentially save seafarers' lives.

The Mariners Medico Guide is a unique app designed and tailored for seafarers. It provides step-by-step guidance for treating crew onboard. Fully downloadable, it can be used without a signal mid-ocean and in remote parts of a ship. It is available free of charge to all seafarers. This was reported by Gard in mid-December.

Seafarers deserve investment to ensure they feel safe and get the best possible health care at sea. Developing a free digital medical guide to improve medical treatment onboard, and potentially save any seafarer's life, feels like a big step forward for healthcare onboard.

Medical professionals use symptom-led questioning to gather information to be able to diagnose and treat illness and injuries effectively. That is why the app is built around guiding the user through their symptoms as a navigation tool. It has been designed and written by doctors specialised in maritime medicine and working in Radio Medico. Guidance is set out in simple steps and language for users with limited medical experience. The app also aims to lower the threshold for seeking professional support from doctors ashore, guiding the user when to seek support from telemedical assistance services.

During launch week, several thousand downloaded the app with more than 10,000 visits to the Mariners Medico Guide, it was reported.

Users have been overwhelmingly positive about the app over 90% of those surveyed have said that they are satisfied and we publish here a selection of comments received by the parties concerned:

'*Very good that you have made this app. We just had last month a case with appendicitis onboard and planned how to get things better done. When something happens, we are all a bit shocked and somehow it ends up being difficult to always remember where to look for information. This app looks very nice and especially when you can download it on your phone it i easy to take with you when you meet the patient on location*.'

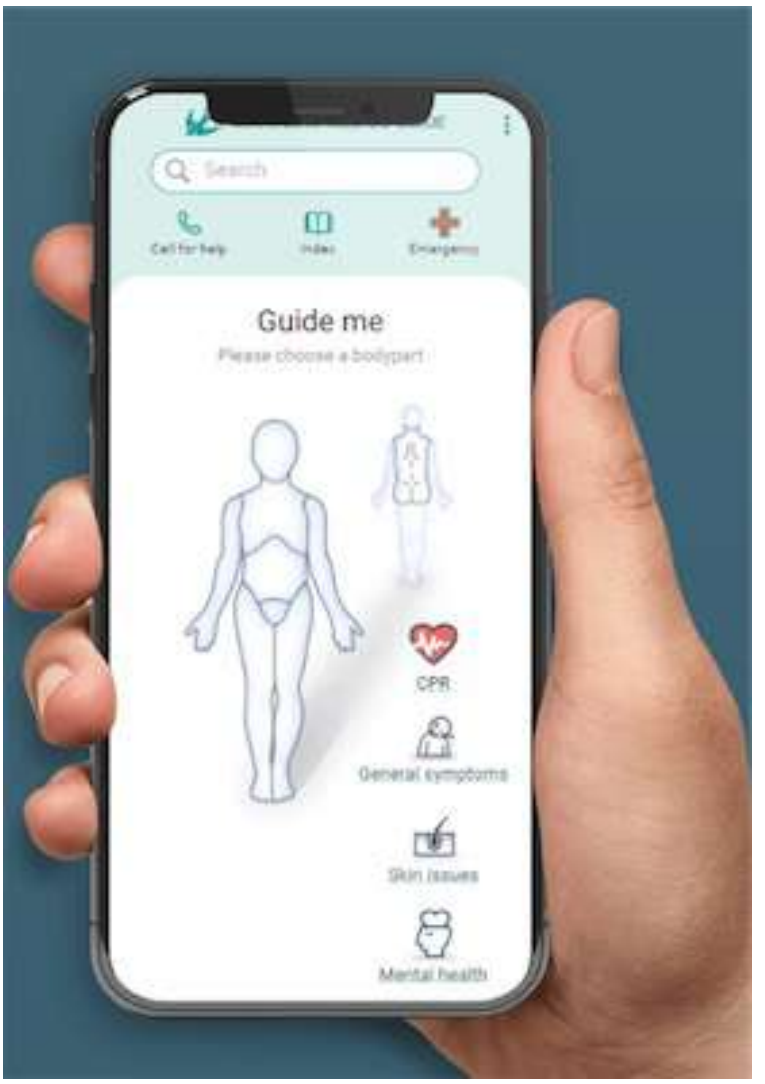
'*Thank you, the Mariners Medico Guide is fantastic, practically replaces the medical guidebook into your palm in a very nice and structured way, very good information included in the procedures and phone numbers*.'

'*It is much faster than looking for it in the medical book*.'

'*The App is very easy to locate a problem with any part of the body using "Guide me" and also through the body drawing, by just clicking the body part concerned. The app is perfect giving step by step details how to treat injury and how to give first aid*.'

Gard believes the app will improve medical treatment onboard as well as save lives. As the guide is digital, it is very easily updated, and seafarers should receive better medical attention faster, it is anticipated.

The app has already been endorsed by the Norwegian-flag state as satisfying the requirements for the provision of medical care and training on board ships. Gard has indicated that it is in discussions with other flag states who are expected to follow.



It is more important than ever to safeguard seafarers' health and wellbeing. During the height of the pandemic, seafarers were under enormous strain and pressure, which led to some worrying developments for Gard crew claims. In 2020, the number of mental disorder cases increased by 34% and as well as an increase in the number of deaths and suicides. During 2018 to 2021, the number of Gard claims relating to crew illness and death increased by almost 75%. An important feature of the Mariners Medico Guide is the increased inclusion of mental health symptoms and advice. It must not be overlooked that wellbeing includes both physical and mental components.

Gard hopes seafarers will find the app useful and the insurer welcomes feedback here:

support@medicoguide.no

The Mariners Medico Guide can be downloaded on both desktop and mobile devices. Readers are invited to visit www.medicoguide.no for more information.

Port of Aden: Inauguration of VTMIS New tractors; a port tug restored

VTMIS

In mid-November a new Vessel Traffic Services System (VTMIS) was inaugurated in the Port of Aden, in the presence of Mr Auke Lootsma from the United Nations Development Program (UNDP). In recent weeks training courses were held in the VTMIS for employees and specialized technicians in the Port of Aden. Tutorial sessions were held in the control building of the Maritime Department at Yemen Gulf of Aden Ports Corporation.

These training courses covered the method of operating the system and its maintenance in addition to the practical training of the system's supervisors to operate it and train staff in the future.

Aden's VTMIS is capable of real-time monitoring of port traffic and enhancing navigational safety and environmental protection by identifying, monitoring, planning and managing shipping.

United Nations Development Program has funded the purchase of the system to enable the port to exchange information with the crews of naval vessels that will help to increase the efficiency of maritime traffic activities.

The system consists of two radars, an AIS unit, a weather forecasting device, and five marine communications units. All sensors were integrated into a single control unit and the system has been successfully operated since October.

Tractors

Also in the middle of November fourteen new Italian Mavi tractors arrived to join the fleet of equipment purchased during the current year, which was preceded by the arrival of cranes dedicated to carrying full containers and empties. New forklifts were commissioned.

Aden Container Terminal is witnessing great advances in the modernization of equipment and machinery, in accordance with prepared plans represented in raising the efficiency of the container terminal and its operational and service capacity in line with the requirements of its customers from shipping lines and local merchants.

It is understood that the new land tractors and trailers are capable of carrying two containers in one move with a total weight of 75 tons. This will raise the pace of ship service. The Container Terminal witnessed during the current year a noticeable increase in the handling rates of ships. In turn this had an impact in the great reduction in dwell time of ships and the speed of procedures for the exit of containers to the Customs of the Free Zone, and then to the local market.

Tug *Wadi Hateeb*

With continuous follow-up from the Port Corporation's leadership, represented by the Executive Chairman of YGAPC, Dr Muhammad Alawi Amzrabah and his deputy, Eng Abdulrab Al-Khulaqi, and the specialized technical team, the port's tug *Wadi Hateeb* arrived on 23 November after completing its maintenance and repair work in the Republic of Djibouti.

This tug carries out its towage tasks with vessels entering and departing the port and the port's operational capacity has been enhanced.

It is noted that the Corporation's leadership has sought and is still seeking to raise the level of navigational activity, as it has paid great attention to developing and modernizing its marine and land machinery and other equipment to improve its production capacity.

Illustrations per www.portofaden.net ©

Satellite to measure Earth's water levels

A world-first

A UK-backed mission, which will observe huge swathes of ocean and surface water in unprecedented detail, has been launched into space. This was reported on 19 December by the UK's National Oceanography Centre (NOC) and it is understood that the international Surface Water and Ocean Topography (SWOT) satellite was launched from Vandenberg in California on 16 December.

SWOT will use a revolutionary radar instrument, named KaRIn, to survey at least 90% of the Earth's surface, measuring and monitoring changes in the ocean, lakes, reservoirs, rivers and wetlands, to produce data that will help improve understanding of climate change, as well as to predict and mitigate flood risks around the world.

SWOT is a satellite jointly developed by NASA and the French space agency, CNES, in partnership with the Canadian Space Agency (CSA) and the UK Space Agency.

The UK Space Agency has provided UK technology company Honeywell with £12.2 million to develop KaRIn's Ka Band duplexer, which routes vital radar signals around the satellite at a frequency never reached before.

Bristol Channel and Severn Estuary study

UK scientists are, it is understood, also supporting the international effort to assess and exploit SWOT data over areas with very high tidal ranges and fast currents. The UK Space Agency partnered with the Natural Environment Research Council (NERC), between them investing £375,000 in the SWOT-UK science research project that will focus on SWOT data covering the Bristol Channel and Severn Estuary area on England's West Coast.

The SWOT-UK project is led by the National Oceanography Centre (NOC) with the University of Bristol and Bangor University to evaluate the SWOT data over British waters. The Bristol Channel and Severn Estuary will be observed once a day during a three-month period in April to June 2023 to provide unprecedented information from space on water level changes in this dynamic coastal environment.

Professor Christine Gommenginger, Principal Scientist in Satellite Oceanography at NOC, has more than 20 years' experience in measuring sea level with altimetry and co-leads SWOT-UK. She commented: '*For the first time, SWOT will produce detailed images of water levels that will help understand the complex processes that connect water levels over the ocean and inland waters.*

'*One objective of SWOT-UK is to demonstrate how satellite Earth observation data can be used with in situ instruments and numerical models to answer important questions for science and society*.'

UK Space Agency CEO Dr Paul Bate added: '*SWOT will revolutionise our understanding of our planet's surface water and how its patterns are changing, giving us vital information to improve how we manage one of humanity's most precious resources.*

'*This is an important mission for the UK to be involved in, both in terms of building the radar instrument and in directly receiving and analysing Earth observation data for the UK.*

'*I look forward to seeing the data that the satellite returns on the Bristol Channel and Severn Estuary*.'

At Plymouth the Marine Laboratory will also work with the Ocean University of China to analyse the data returned and identify and track eddies, looking specifically at how the Mid Atlantic Ridge impacts their progression across the South Atlantic and how this affects the north-south transport of heat by the ocean.

Dr Graham Quartly, NCEO Remote Sensing Oceanographer at Plymouth Marine Laboratory, concluded by saying: '*The mission will give us valuable insight into the flow of warm salty water within the Atlantic and improve our understanding of factors affecting sea level rise. This will help us improve models of predicted future changes, so that society can be better prepared*.'

The UK recently committed £315 million to future Earth observation and climate missions and programmes, including TRUTHS and Aeolus-2, through the European Space Agency, and a further £65 million to national programmes that will strengthen skills and capabilities in this important area.

For video on SWOT readers are invited to see here: https://tinyurl.com/ysxxpna9

Bulk carrier safety: vessel structural limitations

P&I Club Gard advice issued

Not long ago, a vessel was detained at its loading port because the density of the solid bulk cargo being loaded exceeded the maximum allowable cargo density for that particular vessel.

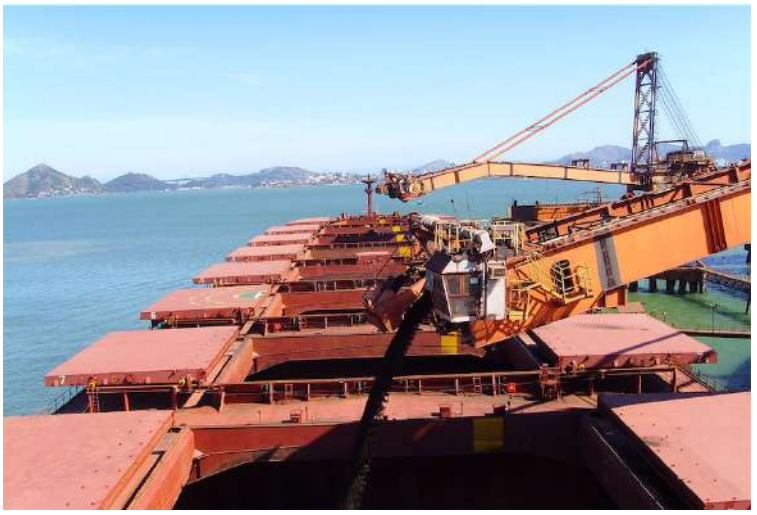
Recently Gard, the Norwegian marine insurer, informed that it was approached by one of its members as the master of a capsize bulk carrier had refused the

charterer's request for alternative hold loading due to serious concern about the ship's safety.

The above instances appear to have come about due to a lack of knowledge of the CSR-BC Class Notations, Gard said in its advice to its members.

CSR-BC Class Notations and IACS

According to the website of the International Association of Classification Societies*, on 14 December 2005 the Common Structural Rules for Double Hull Oil Tankers (CSR-OT) and Common Structural Rules for Bulk Carriers (CSR-BC) were unanimously adopted by the IACS Council for implementation on 1 April 2006. The Council was satisfied that these Rules were based on sound technical grounds, and achieved the goals of more robust and safer ships.

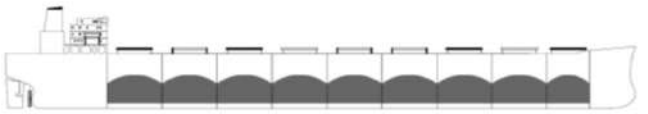


These two sets of Rules were developed independently and in order to remove variations and achieve consistency, IACS decided to harmonise these Rules. There is now a single set of Rules known as: *Common Structural Rules for Bulk Carriers and Oil Tankers" (CSR BC & OT)* comprising two parts: Part One gives requirements common to both Bulk Carriers and Double Hull Oil Tankers and Part Two pr ovides additional specialised requirements specific to either Bulk Carriers or Double Hull Oil Tankers.

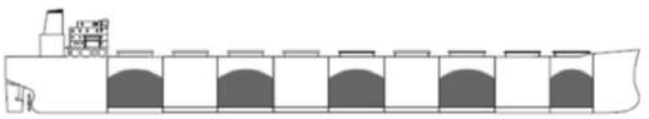
IACS implemented the CSR-OT and CSR-BC maintenance program via the IACS CSR Knowledge Centre (KC). All the agreed Q&As are published on the IACS web site in order to assist its Member Societies and Industry in implementing the CSR in a uniform and consistent manner.

A Knowledge Centre (KC) for the CSR BC & OT was also implemented by IACS as an online repository of questions, observations and feedback during the development of these Rules and it will continue to be used to facilitate the management and maintenance of the CSR BC & OT.

IACS's organisational structure and work process and procedures pertaining to maintenance, harmonisation and further development of IACS CSR BC & OT are detailed in IACS Procedure Volume 4.



Homogeneous Hold Loading Condition (Fully Loaded) extracted from the IACS document Rec46rev1



Alternative Hold Loading Condition (Fully Loaded) extracted from the IACS document Rec46rev1

For an article by Bruce Liu, Loss Prevention Executive in Hong Kong, readers are invited to see the Gard website here: https://tinyurl.com/mryd2ak2

* https://tinyurl.com/2suj7rdx

Illustrations per: https://tinyurl.com/mryd2ak2
GARD ©

Drones launched from vessels

Extreme caution needed

Seafarers detained in Egypt for carrying prohibited items

In 2016, Gard (www.gard.no) produced an article on the use of drones launched from vessels. This is useful background and the original document is to be found here: https://tinyurl.com/yervfcbh

In mid-December Gard reported an increase in cases where seafarers had been detained for carrying prohibited items, such as drones and other suspicious electronic devices, in their baggage when embarking or disembarking ships in Egypt.

Gard's local correspondent in Egypt reports that a seafarer was travelling from abroad to join his ship in Port Suez, Egypt when he was detained by the local coast guard for illegally carrying a drone in his luggage. The seafarer had no criminal intent. The drone was to be used for work-related tasks such as hull inspections as well as for taking private photos while at sea. The drone had not been, or had not intended to be, operated during his stay in Egypt, and Egypt was merely a coincidental port of embarkation. Nevertheless, the sole fact that he had in his possession a drone was considered a violation of Egyptian law when not having the necessary permits from the Egyptian authorities.

Egyptian law on drones

Egypt enforces a very stringent drone law that not only regulates the manufacture, trade and use of drones but also makes it illegal to import and possess drones without a permit issued by the relevant Egyptian Ministry of Defence (Law No.216 of 2017).

Furthermore, anyone who violates this law faces the risk of imprisonment of up to seven years as well as hefty monetary fines. Considering the potential for severe consequences, the seafarer in this case was eventually let off lightly with a US$ 300 fine after a court process. However, he also lost his drone, did not get onboard the ship in time, and despite being treated well by the Egyptian authorities, was subject to a rather stressful situation involving a thorough assessment by the National Security Authority. All things considered this was an experience the seafarer would absolutely have preferred to be without.

Ignorance of the law is no excuse

Many ship agents are good at warning ship operators of the local restrictions that apply to seafarers in transit when joining a ship or disembarking from a ship to fly home. Yet, each individual traveller, seafarer and others, is ultimately responsible for checking the international travel information pages for their destination to find out what is prohibited.

Nearly every country in the world has specific regulations for importing goods from abroad. While some items are more or less universally regulated, such as drugs, weapons, ammunition, explosives, and hazardous substances, the requirements will vary from country to country, and some are more peculiar than others.

For example, New Zealand is known for its strict rules on equipment and food that could carry unwanted pests or diseases into the country and requires even your used hiking boots to be declared as a risky item.

In Norway you need a special permit to bring potatoes into the country, regardless of quantity. In Egypt, as many have now learnt the hard way, a special drone law makes it illegal to import, possess or use drones without a permit from the authorities. Reference is also made to the Gard alert *Drones launched from vessels* of June 2016 mentioned at the top of this article.

Gard's Egyptian correspondent warned that local authorities are also suspicious of other types of electronic equipment that come across as unusual or where it is difficult to understand its nature, particularly if it seems to contain some type of radio transmitter. Even if the device in question is not prohibited by law, it may take the police some time (maybe hours) until they are sure that it is not of a prohibited nature. This delay may cause the seafarer to miss his/her ship or flight let alone spend anxious time waiting for release. It is also worth noting that the level of scrutiny upon entering the Suez Canal port areas is likely to be higher than at the Egyptian airport security desks due to the canal's importance to national security.

K Line new tonnage

MacGregor to supply RoRo equipment

- **Two Pure Car and Truck Carriers (PCTCs)**

  And
- **Fifteen PCTCs for China and ROK yards**

MacGregor, part of Cargotec, reported on 29 December that it had secured a large order to supply RoRo equipment for two 6,900 CEU Pure Car and Truck Carriers PCTC to be built at Shin Kurushima Toyohashi Shipbuilding Co.,Ltd. for K Line (Kawasaki Kisen Kaisha, Ltd) in Japan.

The order was booked into Cargotec's 2022 third quarter order intake. The first vessel is scheduled to be delivered to the owner in the first quarter of 2025 and the second in the second quarter of 2025.

Artist's impression / computer generated image of one of the proposed K Line PCTCs.

MacGregor's scope of supply consists of design, supply and installation assistance for a stern ramp, a side ramp, three sets of movable ramps, a ramp cover and a mobile deck lifter to each vessel.

A typical PCTC rampway door.

In the words of Magnus Sjöberg, Senior Vice President, Merchant Solutions, MacGregor: '*MacGregor has a long-lasting and good relationship with Shin Kurushima that we are very proud of. Our close cooperation will help smoothly advance the design work and eventually the on-time delivery of the equipment*.'

Fifteen more ordered

Earlier in December MacGregor reported that it had received two significant orders and one major order for comprehensive packages of RoRo equipment for a total of 15 Pure Car and Truck Carriers vessels to be built at three shipyards in China and the Republic of Korea for three ship owners.

These orders, with a total value of nearly €90 million, were booked into Cargotec's 2022 fourth quarter orders received. The vessels are scheduled to be delivered to the ship owners between the third quarter of 2024 and the third quarter of 2026.

MacGregor's scope of supply encompasses design, supply and installation support of RoRo and car deck equipment to all of the ordered vessels. This includes quarter ramps, side ramps, deck levels of liftable car deck panels, several internal ramps, pilot and bunker doors. Additionally, the order includes MacGregor deck machinery to some of the vessels.

Netherlands 760 MW offshore wind power

Hollandse Kust (west) VI

Shell and Eneco to develop

On 15 December Shell and Eneco reported that they had won the tender to build an offshore wind farm at Hollandse Kust (west) lot VI.

It is understood that this project will have an installed capacity of approximately 760 MW and will be located approximately 53 kilometres off the Dutch coast from the port city of IJmuiden.

The new wind farm will be delivered through a joint venture called Ecowende and is due to be operational in 2026. Shell and Eneco have already taken a final investment decision for the wind farm.

Wael Sawan, Director of Integrated Gas, Renewables and Energy Solutions at Shell, commented: '*With Ecowende, we will take a huge step in growing our offshore wind portfolio while making a positive contribution to biodiversity.*

'*Through this project we can profitably accelerate the large-scale roll-out of offshore wind in the Netherlands and beyond. This fits well with Shell's Powering Progress strategy to deliver more and cleaner energy to our customers, at home, on the road and at work*.'

Kees-Jan Rameau, Chief Strategic Growth Officer at Eneco, added: '*Together with Shell, we were at the forefront of the development of offshore wind in the Netherlands.*

'*We gained a lot of knowledge, also in the area of ecology, and reported on this. This has contributed to the further development of offshore wind in recent years. It is great that we are now moving into a new phase with Ecowende, with nature as the starting point. This is entirely in line with our ambition to live and act within the natural limits of the planet*.'

Ecowende aims to set a new ecological benchmark for the development and construction of wind farms in the North Sea and to enable offshore wind farms to have a net positive impact on nature in the future, it is reported.

It was further reported by the partners that design of the wind farm takes account of the natural environment through measures such as: placing wind turbines a greater distance apart to create a corridor for birds to fly through; using innovative foundation techniques that keep the impact on marine mammals and marine life to a minimum; and placing natural reef structures on the seabed to boost biodiversity.

More details on the investments, innovations and research programmes will be announced at a later stage.

Bridge Resource Management

Issues concerning helm execution

Reprinted from *CHIRP MARITIME FEEDBACK Issue 69 August 2022*

Initial report

A vessel was entering the harbour by day with a pilot on board. After settling on a course of 168°, the pilot asked for a new course of 170° to set up for a wide turn onto the next (160°) leg.

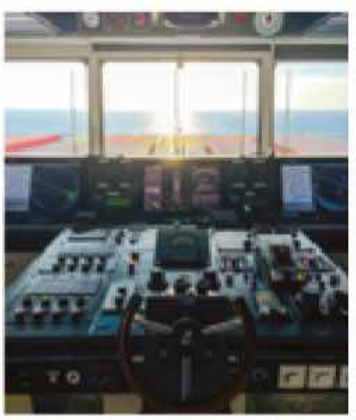
The helm correctly repeated back the 170° course to the pilot, who then looked down at their portable pilot unit (PPU). When they looked up, they saw that the ship had started to swing to port. The master and OOW challenged the error just as the pilot realised what was happening, and the swing was quickly stopped.

One possibility considered by the pilot was that the helm might have had the next (160°) course in mind, which was to port. Visually too, there was a shoal beacon fine on the starboard bow, and the helm might have intuitively turned to open the distance from that navigational hazard. The pilot put the incident down to being a human factor slip, which he felt reinforced the need to check the rudder indicator with all course changes

CHIRP Comment

The reporter (pilot) is commended for self-reporting, a sign of a strong safety culture at that port. Similarly, the use of closed-loop communication by the pilot and helmsperson and the swift challenges by the master and OOW indicate a strong safety culture among the crew.

Closed-loop communications are a good protocol for all safety-critical communications.



Several environmental stressors can affect how the helmsperson responds to helm orders. Creating the right communications environment with clear, concise communications will help the helmsman interpret the orders correctly. Providing advanced intentions of helm action at critical points in pilotage assists the bridge team in anticipating the pilot's action. In this instance, the clearest order would have been "Starboard wheel, steer 170°." Some pilots augment their spoken orders with non-verbal signals, such as raising an arm or pointing in the desired direction, to minimise the risk of confusion. This is a good practice that CHIRP encourages OOWs and other pilots to emulate.

Factors relating to this report

Communications – Ensuring that the spoken message has been received and understood and that the desired outcome is implemented is crucial during navigation manoeuvres.

Different pilots and different bridge teams will all do things slightly differently. Ensuring that there is closed-loop communication at all stages of pilotage for helm and engine orders creates consistency and will improve navigational safety.

Alerting – Keeping the bridge team informed of current and future intentions reduces the risk that others will anticipate or misinterpret orders. This is particularly useful in times of high or low workload.

Teamwork – The master and the OOW reacted swiftly to the error; this shows a commendably high level of teamwork. Pilots often have many jobs during the day that can result in them feeling tired and making the occasional slip, and it is at these moments that they need backup and support from the bridge team. When you are on the bridge of your next ship, consider how well you work as a team and what you can do to improve bridge teamwork. Does your bridge team ever conduct a post-arrival/departure debrief?

M2028 (submitted by ISWAN).

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EMSA Annual Overview of Marine Casualties and Incidents 2022

Now published

In December the European Maritime Safety Agency (EMSA https://emsa.europa.eu) announced in its Newsletter No 213 that it had published the Annual Overview of Marine Casualties and Incidents 2022 which presents statistical data on marine casualties and incidents for the 2014-2021 period, including accidents affecting the 27 European countries plus Iceland and Norway.

This is one of the key thematic publications produced by EMSA, attracting great interest from the maritime sector and public in general. The statistics presented are extracted from data uploaded to the European Marine Casualty Information Platform (EMCIP) by the maritime accident investigation bodies of the EU Member States.

For 2022 the publication has been significantly updated to be more accessible and user-friendly, to include dynamic capabilities to download data and to provide better quality control options.

General figures show a reduction of occurrences in 2021 compared with the occurrences before Covid-19 pandemic and a little increase of occurrences in 2021 compared with 2020. The total number of occurrences recorded in the EMCIP database over the 2014-2021 period stands at 21,173, representing an average of 2,647 marine casualties and incidents per year; and a total of 984 investigations launched during the same period.

Shipping industry, unions welcome action on key seafarer issues

Reforms to 'ambulance-chasing' claims

Industry urged to support seafarers

In mid-December global leaders from organisations representing seafarers, ship owners and other maritime employers, met with HE President Ferdinand 'Bongbong' Marcos Jr of the Philippines, as part of his foreign policy tour in Brussels.

President Marcos ordered the Department of Migrant Worker to create an advisory board be made up of employers, ship owners and unions, in conjunction with the Philippines government and the ILO.

The Philippines is one of the major suppliers of maritime labour globally and seafarers were also high on the agenda.

Reform urged of 'ambulance-chasing' system of predatory claims industry where ambulance chasing lawyers targeting seafarers.

Marcos pledges to stave off EMSA threat to 50,000 jobs

Top of the agenda was the immediate concern of employers and crew that as many as 50,000 seafarers faced being barred from crewing EU-flagged vessels over qualification issues.

IMEC CEO Francesco Gargiulo (left) at the meeting with President Marcos in Brussels this week last month.
Images sourced from PH government official presidential broadcaster, RTVMalacanang.

The threat is due to a warning from the bloc's maritime regulator that the Philippines needed to address unacceptable deficiencies in crews' education, training and certification. Failure to do so would push out Filipino seafarers, a labour source so critical that one delegate described as 'too big to fail'.

Delegates were reassured to hear Marcos' pledge that his administration will do "everything" to address these deficiencies identified by the European Commission's Maritime Safety Agency (EMSA) "*to prevent job losses among Filipino seafarers*," he said.

Employers, unions urge reform of predatory claims industry

Delegates also urged Marcos to defend Filipino jobs, by reforming the country's problematic seafarers' claims industry.

While intended to secure speedy resolution and compensation for injured and aggrieved crew, the injury claims industry system today sees seafarers' hardship and goodwill exploited by ambulance-chasing lawyers.

The victimisation of Filipino Seafarers by people or groups to make fraudulent and costly injury claims against their employers, has resulted in companies to look elsewhere for their seafarer workforce.

In 2000, Filipino crew made up 28.5% of the global seafarer population, however by 2020, that figure had dropped to just 14%. Any further decline would jeopardise the US$6.54billion in wages Filipino seafarers send home each year to their families – money critical to the Philippines' economy.

Seafarers' unions, including Philippines-based AMOSUP have supported employers' calls for a crackdown on the unethical practices of the claims industry, who, they say, '*capitalise on the hardships and even the demise of seafarers*.'

ITF, ICS and IMEC called upon to form Marcos' new maritime advisory committee

President Marcos also revealed to the delegates that he had ordered his Department of Migrant Workers minister, Secretary Susan 'Toots' Ople, to establish a maritime advisory committee to address the training issue and consider reforms to the broken seafarers' claims system.

The International Advisory Committee on Global Maritime Affairs (IACGMA) will draw on experts from both industry and the workforce to support the Philippines' government. IMEC, ICS, ITF and the International Labor Organization will all be invited to share their expertise.

The committee's advice could be key as the Philippines, like other global maritime leaders, looked to navigate its way through the challenges of the future, such as climate change.

A recent Maritime Just Transition report revealed that as many as 800,000 seafarers will need some form of training or familiarisation by the mid-2030s to handle the fuels, technology and vessels of the future. Understanding what was needed for the Philippines to make the most of the opportunity decarbonisation provides, would be critical to securing an equitable and sustainable future for its seafarers and the industry.

The meeting with the President in Belgium represents the first official engagement of IMEC, the ICS and ITF, with a national leader since the bodies recently signed an MOU with the aim of maximising the impact of their advocacy efforts on behalf of crew and industry.

IMEC Chief Executive Officer Francesco Gargiulo commented: '*It was refreshing to meet a leader that is so in tune with the needs of his citizens today. I was impressed with the President's grasp of the complex picture of the maritime industry in the Philippines and comforted by his stern determination to tackle our common challenges head on*.'

'*The creation of this advisory board is an inspired initiative which we are convinced will soon help steer the country towards calmer seas. We look forward to working with his team on current and future challenges to ensure the Philippines retain their key position at the table of global shipping*.'

ICS Secretary General Guy Platten said: '*Seafarers are at the very heart of our industry and cannot be forgotten as we look to the future. Every member of the delegation meeting with President Marcos Jr today recognises this and we ensured that our seafarers were not lost sight of. As a major seafaring nation, the Philippines is key to our industry and its future, and collaboration and cooperation with governments is vital*.

'*Our industry's importance cannot be underestimated and the collective representation within the maritime sector today shows the willingness to work together for a brighter future. As ever our industry strives to find solutions to the challenges ahead, ensuring safe shipping operations for the effective continuation of global trade. We look forward to working more closely with the Philippines*.'

The meeting followed another high-powered audience a few days before with Marcos' new Secretary of the Department of Migrant Workers (DWM), Susan "Toots" Ople. Seafarers' unions were keen at both meetings to emphasise to the leaders that major opportunities lay before the country – but that the right choices had to be made to secure them.

ITF General Secretary Stephen Cotton added: '*The Philippines is a crewing powerhouse. Filipino seafarers have contributed much to our global shipping industry over the decades*.'

'*But it is not without its issues. That's why it was encouraging for seafarers' unions to hear President Marcos acknowledge some of those issues in Brussels. Better yet, the president has already started to take action with the establishment of a new tripartite maritime advisory body*.

'*The ITF alongside our partners in IMEC and the ICS, stand willing and ready to offer our whole-of-industry insights so that the Philippines can deliver the good outcomes that we all agree Filipino crew deserve*.

'*We want to make sure the Philippines is well-positioned to make the most of the opportunities coming down the line. Chief among these is helping the world to meet the massive training challenge before us as the industry needs to upgrade seafarers to operate a decarbonised global fleet. We want the Philippines to be at the table, with a fair share. After all, we'll never get to a zero-carbon shipping sector without maritime leaders being engaged*.'

North P&I Club's 2030 Sustainability Strategy

Issued in mid-December the North Group Impact Report 2022 indicated a year of substantive progress as the P&I Club pushes forward with its North 2030 Sustainability Strategy.

North P&I Club has offered an insight into the changing face of P&I, in which it also benchmarks the global marine insurer's effectiveness in advancing towards the North 2030 Sustainability Strategy, launched in 2021.

Paul Jennings, Chief Executive, North commented: '*We have recognised that the need to deliver on our Strategy is more pressing than ever, with rising global temperatures, the war in Ukraine, supply chain issues and Covid-19 all testing the resilience of the shipping industry*.

'*In addition to improving our own performance, the P&I sector must respond as a whole to the challenges facing the maritime industry. As a club headquartered in the UK's North-East, one highlight included in the Impact Report 2022 is the agreement between all thirteen members of the International Group to share safety and loss prevention data with the National Innovation Centre for Data at Newcastle University. This heralds a real prospect of finding new and innovative ways to reduce risk at sea*.'

In the immediate term, the ongoing disruption to global trade caused by Russia's invasion of Ukraine has seen North prioritising helping its Members and clients navigate '*probably the most complex set of sanctions ever imposed*', added Jennings.

Mike Salthouse, Global Director (Claims), North added: '*There is no cover where the trade, or insurance of that trade, is unlawful. Where trade is lawful, protecting innocent third parties and minimising impacts on the environment remain critical*.'

Other direct responses to events in Ukraine which fell to North have included finding urgent healthcare alternatives when Ukrainian seafarers could not be repatriated.

North's new Impact Report also assesses progress towards longer standing targets, emphasising that merging North and the Standard Club from February 2023

will empower a new North Standard entity to exert greater influence in securing aims on sustainability.

In conclusion Mark Church, Director (FD&D) and Head of Sustainability, North commented: '*The impact of climate change will be felt in claims liabilities and types, and in underwriting risks as we as move to a carbon neutral environment and adopt new technologies.*

'*To monitor and address these developments, we have already incorporated climate related risks within our existing risk management framework*.'

In 2022 North introduced its first set of Sustainability Claims Reporting Guidelines, which have been developed so that the Club can measure and improve the impacts its day to day claims handling activities from the perspective of sustainability. North has intensified its programmes of advisory events covering sustainability issues, while the new report also offers insights into work trialling biofuels on an existing ship by North Member d'Amico.

The Impact Report cites Clarksons Research October 2022 figures which indicate that a record 59% of all newbuilding orders had been classed as alternative-fuel capable – up from 31.5% a year earlier. Jennings closed by reflecting: '*As our latest Impact Report makes clear, wherever and whenever we are needed, North will be there to aid and support transition*.'

To download North Group Impact Report 2022 readers are invited to see here: https://**www.nepia.com/sustainability/**

Hybrid Powered Vessel

Northern Lighthouse Board contract

The Northern Lighthouse Board (NLB), the General Lighthouse Authority for Scotland and the Isle of Man announced on 12 December the award of a £51.8 million contract to Spanish shipyard Astilleros Gondán SA, for the build of a state-of-the-art hybrid-powered ship to support its vital safety service to mariners.

Gondán is a well-established and highly respected family business with a track record of delivering quality vessels. The tender includes a commitment to place over £2 million of contracts with UK suppliers with a requirement for any contract over £25k to be advertised in the UK. As part of the deal Gondán will also create a special fully funded internship programme for up to 15 UK-based students who will benefit from a range of placements at the yard during the vessel's construction.

Use of new technology

Mike Bullock, NLB's Chief Executive commented: '*This is a really exciting time for us, and we are delighted we can now take forward our ambitious plans for the build of a hybrid powered aid to navigation tender to replace NLV Pole Star, which after 23 years of service is rapidly approaching the end of her economic life.*

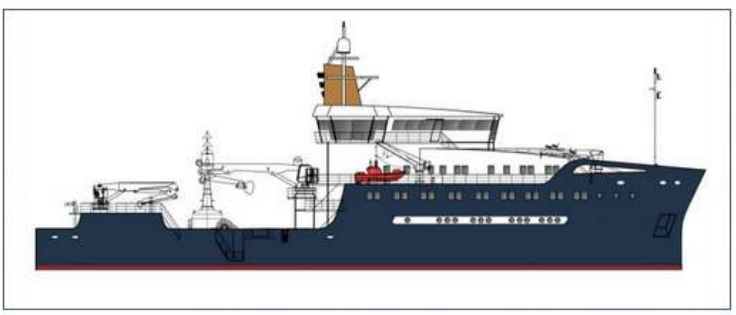
The new vessel, which will take the name Pole Star, will be a step change from what has gone before using new technology to minimise the impact on the environment and will bring additional capability to help deal with the effects of Climate Change. This will ensure that we can continue to protect mariners and our precious marine environment in Scottish and Manx waters into the 2050s.'

A thorough tender process

Alvaro Platero, CEO and owner of Astilleros Gondán added: '*We are thrilled to have been awarded this contract by the Northern Lighthouse Board, and we are honoured to have been chosen after a very thorough tender process. Our team worked tirelessly to submit a competitive bid, and we are grateful to NLB for recognizing our efforts.*

'*We take great pride in our reputation as a shipyard specialized in the delivery of tailored vessels that perform even on the most demanding conditions and we are committed to upholding that reputation with the construction of this modern and environmentally friendly vessel. We would like to thank NLB for entrusting us with this project, and we look forward to working with them to bring their vision to life*.'

UK Maritime Minister Baroness Vere said: '*This new vessel will deliver vital stores and supplies to lighthouses along the coastline and help to carry out important buoy work, providing a crucial service to the wider maritime sector and upholding world-class levels of safety in our waters.*



'*As we continue working to deliver Maritime 2050 and decarbonise, it is great to see the new Pole Star will also be much greener than its predecessor and make use of innovative technology to reduce emissions, while supporting jobs and skills in the UK*.'

The NLB fleet

NLB operates two ships NLV *Pharos* and NLV *Pole Star*. The ships carry out buoy work, deliver stores and supplies to lighthouses and inspect aids to navigation on oil and gas rigs in the Scottish sector. The new vessel which will follow a tradition started in 1892 by being the fifth NLB vessel to bear the name *Pole Star*, will be constructed to a detailed specification which ensures improved sea keeping, better and safer buoy servicing operations, towing and firefighting capability. There will also be improved crew accommodation and substantial environmental improvements over its predecessor.

It is understood the vessel will enter service in June 2025 and will meet the ambitious environmental targets set out in the UK Government Clean Maritime Plan, whilst future proofing NLB's ability to deliver its vital safety services over the next 25 years.