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IFSMA NEWSLETTER

The Shipmasters' International Voice

See page 15 for Kongsberg news item

IFSMA

International Federation of Shipmasters' Associations (IFSMA)
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Secretary General's Report

As I write this from a wet and miserable day in the UK I continue to receive news of the latest variant of Covid and the impact it is having around the world.

While some nations have battened down the hatches again, there are a significant number who are still allowing crew changes to happen and my thanks go out to the shipping and management companies that are finding innovative ways to enable this to take place, often at considerable additional expense. The latest data we have is that the numbers at sea over their contract dates has now reduced to about 6% of the total number of seafarers around the world. This is only slightly above the norm of 4.8% noted before the start of the pandemic. Here, therefore is testament to the amazing amount of work put in by the Secretariats of United Nations agencies and all the key IGOs and NGOs, led by ICS, ITF and IMEC to persuade governments worldwide to allow crew changes to continue as well as to ensure you are able to receive your vaccinations.

Much work is continuing with the World Health Organization (WHO) to introduce a globally acceptable vaccination passport This will indicate those vaccinations that are to be recognised internationally by the WHO and will avoid you receiving unnecessary vaccinations. As this work continues, I will keep you informed.

I hope many of you were able to spend some time at home over this festive season and enjoy some normal life with your families and friends.

As we welcome in 2022, I wish you all a very happy New Year and I hope that we will continue to get back to a more normal world as more and more people are vaccinated against Covid and that our pharmaceutical industries continue to evolve and improve those important treatments that will become essential for us all in the future.

This pandemic has shown us how much is wrong with our world, but we must look at and improve on the positives we have seen from our maritime industry leaders.

For those of you afloat, in port or on the ocean, keeping our vital trade moving, I thank you from all of us at IFSMA and wish you fair winds and a following sea.

As ever,

Jim Scorer.

From the News Editor

CHIRP Maritime

https://www.chirpmaritime.org/

CHIRP currently receives confidential incident reports from professional and amateur participants in the maritime sector, both from within the UK and overseas and across all disciplines.

The means of submitting a report is to be found here: https://tinyurl.com/cefs4yu8

On receipt reports are validated as far as is possible and reviewed with the objective of making the information as widely available as possible while maintaining the confidentiality of the source. Anonymous reports are not normally acted upon as they cannot be validated. When appropriate, report information is discussed with relevant agencies with the aim of finding a resolution. Only unidentified data is used in discussions with third party organisations and the confidentiality of the reporter is assured in any contact with an external organisation.

A newsletter *FEEDBACK*, covering current topics from dis-identified reports and including new report forms, is produced four times a year and distributed widely, currently with a hard copy circulation of around 38,000. Some reports are dis-identified further (for example with time and place, company, reporter's gender) before being published in *FEEDBACK*, or making any data available to other agencies. *FEEDBACK* maintains an awareness of Human Factors issues within the sector and provides a forum for discussion.

Facebook is used to comment on current maritime safety issues, particularly those in which confidential reporting of hazardous incidents could contribute to improvement.

The November issue of *CHIRP Maritime FEEDBACK* is available here: https://tinyurl.com/2mkch4mt

A set of instructional videos with important messages for maritime safety is available here: https://www.chirpmaritime.org/videos/

The CHIRP Annual Digest for 2020 and previous years is available here: https://www.chirpmaritime.org/digest/

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 Marine Environment Protection Committee

22-26 November

The MEPC meeting virtually for its 77th session adopted a resolution on voluntary use of cleaner fuels in the Arctic, to reduce black carbon emissions.

In other work, the MEPC adopted a strategy to address marine plastic litter from ships; adopted revised guidelines for exhaust gas cleaning systems (EGCS) and agreed the scope of work on discharge water of EGCS; and considered matters related to the Ballast Water Management Convention.

Tackling climate change – cutting GHG emissions from ships

The MEPC agreed to initiate the revision of the Initial IMO Strategy on Reduction of GHG emissions from ships, recognizing the need to strengthen the ambition during the revision process. The move comes in the wake of the UN Climate Change Conference (COP 26), held in Glasgow from 1-12 November and in view of the urgency for all sectors to accelerate their efforts to reduce GHG emissions.

A final draft Revised IMO GHG Strategy would be considered by MEPC 80 (scheduled to meet in spring 2023), with a view to adoption.

The Initial IMO Strategy on Reduction of GHG Emissions from Shipping was adopted in 2018.

For more information please see here: https://tinyurl.com/mr2ne2bm

The Committee invited interested Member States and international organizations to work together and to submit concrete proposals for a revised IMO GHG Strategy to MEPC 78 (June 2022) for consideration.

Closing the session, IMO Secretary-General Kitack Lim said: '*Strengthening the ambition of the Initial IMO GHG Strategy during its revision will be crucial. Our collective actions must show our dedication to contribute towards the global issue, climate change*.'

Discussion of proposals to further reduce GHG emissions from shipping

A number of proposals for further mid-term GHG reduction measures, including market-based measures, to address GHG emissions from shipping, as well as a proposal to establish an International Maritime Research and Development Board, were discussed during the session. This followed presentation of a number of proposals in the Intersessional Working Group on Reduction of GHG Emissions from Ships (ISWG GHG 10).

Following a constructive discussion, the Committee referred the proposals and relevant documents, including associated impact assessments, to the next sessions ISWG-GHG for further assessment in accordance with Phase I of the Organization's Work plan on the development of mid-term measures.

Impact assessment of GHG measures

The Initial IMO GHG strategy recognizes that the impacts on States of proposed measures that should be assessed and taken into account as appropriate, with particular attention paid to the needs of developing countries, especially small island developing States (SIDS) and least developed countries (LDCs).

The Committee agreed to establish an Ad-hoc Expert Workshop on Impact Assessments to consider concrete proposals for improving the impact assessment procedure and provide recommendations as part of the lessons-learned exercise, the outcome of which will be submitted to ISWG-GHG 11. The workshop is set to be held on 8 and 9 March 2022.

GHG TC Trust Fund

New pledges were made by Governments to support the work of the IMO in supporting the implementation of the Initial GHG Strategy in developing countries, in particular SIDS and LDCs, through technical cooperation and capacity building through the IMO GHG TC Trust Fund. These pledges will enhance the Organization's work on energy efficiency technology cooperation and demonstration ensuring nobody is left behind in implementing the Initial Strategy.

Correspondence Group on Carbon Intensity Reduction

A Correspondence Group on Carbon Intensity Reduction was established, to finalize and update guidelines. These relate, in particular, to the short-term measures adopted in 2021, consisting of technical (EEXI) and operational (CII and its rating) measures. These mandatory rules are expected to enter into force in November 2022, aiming at 40% reduction of carbon intensity by 2030.

Meanwhile, the MEPC approved the MEPC circular on 2021 Guidance on treatment of innovative energy efficiency technologies for calculation and verification of the attained EEDI and EEXI, particularly accommodating the use of wind propulsion as an alternative (complimentary) source of propulsion.

Black Carbon in the Arctic – resolution adopted

The MEPC adopted a resolution which urges Member States and ship operators to voluntarily use distillate or other cleaner alternative fuels or methods of propulsion that are safe for ships and could contribute to the reduction of Black Carbon emissions from ships when operating in or near the Arctic.

The resolution encourages Member States to commence addressing the threat to the Arctic from Black Carbon emissions, and report on measures and best practices to reduce Black Carbon emissions from shipping

The Committee further agreed the terms of reference for the Pollution Prevention and Response (PPR) Sub-Committee's future work on reduction of the impact on the Arctic of Black Carbon emissions from international shipping.

Revised Guidelines for exhaust gas cleaning systems adopted

The MEPC adopted 2021 Guidelines for exhaust gas cleaning systems, to update the last version adopted in 2015.

The Committee approved an MEPC circular with updated guidance on indication of ongoing compliance in the case of the failure of a single monitoring instrument, and recommended actions to take if the exhaust gas cleaning system (EGCS) fails to meet the provisions of the EGCS Guidelines.

Evaluation and harmonization of rules and guidance on the discharge of discharge water from EGCS

The Committee agreed the scope of work for the PPR Sub-Committee relating to evaluation and harmonization of rules and guidance on EGCS discharge water into the aquatic environment, including the conditions and areas for discharge. The work will cover: risk assessment; impact assessment; delivery of EGCS residues; regulatory matters; and developing a database of substances identified in EGCS discharge water.

The PPR Sub-Committee is set to meet for its 9th session in April 2022.

Strategy to address marine plastic litter from ships adopted

The MEPC, in order to enhance implementation of IMO's mandatory international regulations, adopted the Strategy to address marine plastic litter from ships, which sets out the ambitions to reduce marine plastic litter generated from, and retrieved by, fishing vessels; reduce shipping's contribution to marine plastic litter; and improve the effectiveness of port reception and facilities and treatment in reducing marine plastic litter.

The Strategy also aims to achieve further outcomes, including: enhanced public awareness, education and seafarer training; improved understanding of the contribution of ships to marine plastic litter; improved understanding of the regulatory framework associated with marine plastic litter from ships; strengthened international cooperation; and targeted technical cooperation and capacity-building.

The adoption of the Strategy follows the adoption, in 2018, of the IMO Action Plan to address marine litter.

To learn more readers are invited to see here: https://tinyurl.com/2p888apk

IMO, in cooperation with the Food and Agriculture Organization of the UN (FAO), is implementing the GloLitter Partnerships Project which aims to help shipping and fisheries move to a low-plastics future.

More information is available here: https://tinyurl.com/2k77kcnd

Garbage Record Book

The MEPC considered a proposal to extend the requirement for a Garbage Record Book to ships less than 400 GT and equal to or greater than 100 GT. It agreed to instruct the PPR Sub-Committee to prepare draft amendments to MARPOL Annex V.

Plastic pollution by plastic pellets

A document submitted by Sri Lanka, reporting on the May 2021 mv *X-Press Pearl* incident, during which 11,000 tonnes of plastic pellets were spilled off the shore of Colombo, Sri Lanka, was referred by the Committee to the PPR Sub-committee for further discussion.

Harmful aquatic organisms in ballast water

The MEPC was updated on the experience-building phase associated with the Ballast Water Management Convention (BWM), which has been in force since 2017 and aims to prevent the spread of invasive aquatic species in ballast water. The Committee was informed that there is now available data from 35 Member States and seven other stakeholders corresponding to approximately 15,000 ships. This is currently being analysed by the World Maritime University (WMU) and a full data analysis report will be submitted to MEPC 78.

The MEPC approved a unified interpretation of the Date to be used for determining the implementation of mandatory commissioning testing of individual ballast water management systems in accordance with resolution MEPC.325(75). The MEPC also established fundamental elements to be taken into account for the further development of guidance on measures that may be taken when ballast water management systems encounter challenging water quality on uptake.

Annex II draft amendments on categorization of noxious liquid substances approved

The MEPC approved draft amendments to appendix I (Guidelines for the categorization of noxious liquid substances) to MARPOL Annex II that are consequential to the revised GESAMP Hazard Evaluation Procedure, which was approved by GESAMP as part of the GESAMP Hazard Evaluation Procedure for Chemicals Carried by Ships, 2019 (GESAMP Reports and Studies No.102). The draft amendments will be circulated, with a view to adoption at MEPC 78.

Next MEPC sessions

MEPC 78 has been tentatively scheduled to take place from 6 to 10 June 2022 and MEPC 79 from 12 to 16 December 2022.

Election of chair

Mr Hideaki Saito (Japan) was re-elected as chair for 2022. Mr Harry Conway (Liberia) was also re-elected as the Vice-Chair.

IMO and the Central and Eastern Mediterranean

Pollution preparedness workshops

A series of three workshops to help prepare countries in the Central and Eastern Mediterranean to respond to pollution incidents has been completed, with a final online workshop held on 23 November. These activities were reported by the excellent IMO media service in the first week of December.

It is understood that participants from eleven countries attended the final workshop, which followed an initial online workshop held on 7-8 September. and a series of practical country-specific sessions.

These sessions were on the use of the ARPEL Readiness Evaluation Tool for Oil Spills[1] and the Sea Alarm Self-Assessment Tool (SAT)[2] for Oiled Wildlife Response (between September and November). They were organized in Albania, Bosnia and Herzegovina, Croatia, Cyprus, Greece, Israel, Libya, Monaco, Montenegro, Slovenia, and Turkey. Participants from Egypt and Lebanon also attended the final online event.

This series of activities was organized with the support of Sea Alarm[3], ITOPF[4], ARPEL[5], and Polaris[6] Applied Sciences. Principal players were the Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC)[7], under the auspices of IMO's Integrated Technical Cooperation Programme (ITCP)[8],

The trilogy of activities enabled each country to acquire practical and focused experience on the use of both tools.

Participants agreed conclusions and recommendations, notably to urge all contracting parties to use these tools, to improve preparedness and response across the region and to capitalise the outcome of countries' assessments to implement improvement processes at sub-regional level.

Finally, the workshop recognised the instrumental role of REMPEC in coordinating multi-institutional processes and strengthening cooperation in the Mediterranean region.

It is understood that follow-up activities have been included under IMO's ITCP in 2022 to support Central and Eastern Mediterranean States in the development and implementation of their respective national oil spill preparedness and response programmes.

[1] See here: https://tinyurl.com/3mnnbky2

[2] See here: https://tinyurl.com/2a93j7kt

[3] See here: https://tinyurl.com/2a93j7kt

[4] See here: https://www.itopf.org/

[5] See here: https://arpel.org/

[6] See here: https://tinyurl.com/2p8pr34j

[7] See here: https://www.rempec.org/en

[8] See here: https://tinyurl.com/5n8acu9w

IMO celebrates bravery at sea

A search and rescue officer from Viet Nam, who repeatedly risked his own life to save twelve others in a daring three-day long sea rescue, has received the 2021 IMO Award for Exceptional Bravery at Sea.

Mr Tran Van Khoi was honoured during the annual IMO Awards ceremony on 6 December. Mr Khoi, a Search and Rescue Officer of the Regional Maritime Search and Rescue Coordination Center No.II, Viet Nam Maritime Administration, was nominated for the award by Viet Nam.

During the IMO Awards event, recipients of letters and certificates of commendation were recognized, as well as seafarers who have been impacted by the pandemic; and merchant vessels involved in the rescue of migrants at sea. A video film showed the recipients of certificates and the main award, since they were not able to attend in person.

Mrs To Minh Thu, Deputy Chief of Mission and Counsellor at the Embassy of Viet Nam in the United Kingdom, was at the event to receive the medal and certificate on behalf of Mr. Khoi.

IMO Secretary-General Kitack Lim highlighted Mr Khoi's '*incredible act of determination and bravery that saved lives*.'

Heroic search and rescue effort

Mr Khoi was recognized for his actions over a three-day period (8-10 October 2020), when he repeatedly risked his life to rescue twelve crew members and some fishers trapped on board the sunken cargo vessel *Vietship 01*. The ship had been swept away as it was docking at the Cua Viet Port, due to widespread flooding and wind gusts of 74 km/h caused by typhoon Linfa. Mr Khoi repeatedly swam through strong waves to perform the rescues. The judges were very impressed by his courageous actions and tireless rescue attempts which demonstrated truly exceptional bravery and determination.

'*I am very honoured and moved to be nominated for the noble IMO award for act of exceptional bravery. I hope that with such recognition I can radiate the courage and bravery of the Vietnamese people, so that there will be more examples in the future for those striving to develop the country's maritime industry*,' said Mr Khoi, in his acceptance video.

Mrs To Minh Thu, Deputy Chief of Mission and Counsellor at the Embassy of Viet Nam in the United Kingdom, was at the event to receive the medal and certificate on behalf of Mr. Khoi.

Letters of Commendation

Letters of commendation have been sent to:

- The master and crew of the emergency rescue and response vessel *Esvagt Cantana*.
- The crews of the fishing vessels *Takaei-maru*, *Hisaei-maru*, *Eiko-maru* and *Tomomaru*.
- Ensign José Luis Sandoval Estrada, Chief of the Speedboat Squadron, of with the Naval Force of the Nicaraguan Army's Puerto Cabezas Naval Base, Naval Force of the Nicaraguan Army.
- Captain Bogdan Rusu, Master of mv *Cosco Malaysia*.
- The master and crew of the oil tanker *BW Rhine*.
- Aviation Survival Technician Second Class Christopher A Fisher, from the United States Coast Guard Air Station Elizabeth City, United States Coast Guard.

Certificates of Commendation

The following certificates of commendation were issued:

- Captain Ritesh Madhusudan Bhamaria, a marine pilot on board the mt *Godam*, Torres Pilots, for rescuing two fishers who had been clinging to a wooden plank in treacherous sea conditions for more than 15 hours.
- The members of the diving rescue team of the Guangzhou Rescue Base, Nan Hai Rescue Bureau: Captain Huiguang Ye, Mr Tianci Lan, Mr. Mingzhong Deng, Mr Zhiwei You, Mr Haile Zeng and Mr Yuhui Zhong. They were nominated for the underwater search and rescue operation of nine crew members of the capsized, 129-metre-long bulk cargo carrier *Hongxiang 819*.
- Members of the Azovo Chernomorsky Branch of the Marine Rescue Service: Mr Anton Muradyants, Mr Gambik Asaturyan, Mr Denis Nikolenko, Mr Kirill Vikulov and Mr Konstantin Kendigilyan. They were nominated for preventing the sinking of the mv *April* by identifying the source of water ingress and efficiently performing emergency works on a ship loaded with hazardous cargoes.
- The members of the DEGAK-20 diving safety, security, search and rescue team, from the Turkish Coast Guard Command: Mr Doruk Durmuş Yildiz, Mr Atakan Ömer Yenilmez, Mr Erkan Baytekin and Mr Olcay İbrahim Temeloğlu. They were nominated for the rescue of the crew of the capsized fishing boat *Kumsal-55*.
- Aviation Survival Technician First Class Joshua K Mayfield of the United States Coast Guard Air Station Elizabeth City for the challenging rescue of two mariners from a sailing vessel which had lost power in bad weather.
- Petty Officer First Class Wallace Qual, Coast Guard Station Yaquina Bay, United States Coast Guard, nominated by the United States, for the rescue operation of the master of the sinking fishing vessel Legend after multiple rescue operations had to be abandoned.
- Lieutenant Justin Neal, Lieutenant Jonathan Orthman, Avionics Electrical Technician Second Class James Schwader and Aviation Survival Technician Second Class Grant Roberts, of the United States Coast Guard Air Station Sitka, for the search and rescue of the sole survivor of the sinking fv *Irony* in complete darkness, storm force winds and 12-foot waves.
- The teams from India and Sri Lanka involved in the rescue operation for the mt *New Diamond*, which caught fire and was drifting towards the coast of Sri Lanka, laden with dangerous cargo. Indian nominees were rescue team members of the Indian Navy (Commander Raj Kishore, Lieutenant Commander AV Tomar, Chief Petty Officer P Bhagwan, Petty Officer Sahil, Seaman First Class Sarvashakti); members of the Indian Coast Guard (Mr Pradhan Adhikari S Satish, Commandant (JG) B Bhatt, Navik (RP) Abhishek Tomar, Navik (RP) Kaushik Nautiyal), Captain Mandjiny Malayalathan and crew of the tugboat *Ocean Bliss*. Sri Lankan nominees were crew members of the Sri Lanka Navy patrol boat SLNS *Ranarisi* (Commander KRGRS Rantenna, Lieutenant KGASM Wijerathne, Leading Engineering Mechanic DLK Mudiyanse and Able Seaman WGGU Senarathna).

Additional details of the incidents for which the 2021 recipients were nominated can be found here: https://tinyurl.com/2p8wz98r

Recognizing seafarers impacted by the pandemic

IMO recognized the efforts of the many seafarers who have been impacted by the Covid-19 pandemic. IMO Secretary-General Kitack Lim said: '*Seafarers are fundamental for the global supply chain and the post-Covid recovery. Their rights to safe and decent work conditions must be recognized, respected and protected. IMO will continue working towards a wider designation of seafarers as key workers, access to vaccination and assistance of distressed seafarers through its dedicated Seafarer Crisis Action Team*.'

Saving migrant lives

Special recognition to merchant vessels and their crew involved in the rescue of mixed migrants at sea was highlighted during the Awards event.

IMO Secretary-General Lim cited figures from the International Organization for Migration (IOM) that show over 140,000 sea arrivals or attempted crossings in the Mediterranean alone so far this year, with more than 1,570 people dead or missing to date.

He added: '*We should recognize that coast guards, navies, search and rescue agencies and merchant vessels continue to rescue persons in distress at sea, acting in the best tradition of seafaring and ensuring the death toll is not even higher*.'

Two special certificates have been awarded to:

- Captain Zhang Hui and the crew of the mv *Ocean Ang* for the crucial role everyone on board played in rescuing and assisting 41 migrants from a sinking boat in the Aegean Sea.

- Captain Volodymyr Yeroshkin and the crew of the oil tanker *Maersk Etienne* for their vital role in rescuing and assisting 27 persons from a sinking boat in the Mediterranean.

Watch the Awards ceremony here on You Tube: https://tinyurl.com/4x9aw5kx

About the IMO Award for Exceptional Bravery at Sea

This annual award was established by IMO to provide international recognition for those who, at the risk of losing their own life, perform acts of exceptional bravery, displaying outstanding courage in attempting to save life at sea or in attempting to prevent or mitigate damage to the marine environment. Such acts of bravery may also involve extraordinary skills in very difficult conditions or any other display of outstanding courage.

Mr Tran Van Khoi from Viet Namwas honoured during the annual IMO Awards ceremony on 6 December.

This year, a total of 37 nominations were submitted by 23 Member States and four non-governmental organizations in consultative status with IMO. The nominations were examined by an Assessment Panel, which includes representatives of the International Chamber of Shipping (ICS), the International Maritime Pilots' Association (IMPA), the International Federation of Shipmasters' Associations (IFSMA), the International Salvage Union (ISU), the International Maritime Rescue Federation (IMRF) and the International Transport Workers' Federation (ITF).

The Assessment Panel submitted its recommendations to a Panel of Judges, consisting of the Chairs of the Council and Committees of IMO, which met on 21 June 2021 to select the recipients of the Awards. The IMO Council, at its 125th session (28 June – 2 July), endorsed the recommendations.

Photo Exhibition

The IMO is currently hosting a special exhibition of portraits of seafarers, by seafarers, sponsored by the International Transport Workers' Federation Seafarers' Trust. More information is available here: https://tinyurl.com/2p8kbp75

The IMO Assembly and seafarers' challenges in the pandemic

At the 32nd session of the IMO Assembly (A 32) from 6-15 December 2021, the Assembly adopted a resolution on comprehensive action to address seafarers' challenges during the Covid-19 pandemic, consolidating issues related to crew change, access to medical care, key worker designation and seafarers' prioritization for Covid-19 vaccination.

The resolution urges Member States to:

- Designate seafarers as key workers in order to facilitate shore leave and safe and unhindered movement across borders, and recognize their relevant documentation for this purpose.

- Consider the implementation of the Industry recommended framework of protocols for ensuring safe ship crew changes and travel during the Coronavirus (Covid-19) pandemic.

- Prioritize vaccination of seafarers, as far as practicable, in their national Covid-19 vaccination programmes.

- Consider exempting seafarers from any national policy requiring proof of Covid-19 vaccination as a condition for entry, taking into account that seafarers should be designated as key workers and that they travel across borders frequently.

- Provide seafarers with immediate access to medical care and facilitate medical evacuation of seafarers in need of urgent medical attention when the required medical care cannot be provided either on board or in the port of call.

The Assembly also adopted the work programme and budget of the Organization, elected the IMO Council for 2022-2023 and adopted a number of important resolutions, including those covering prevention and

suppression of piracy in the Gulf of Guinea, capacity building, fishing vessel safety and prevention of fraudulent registries and other fraudulent acts.

Prevention and suppression of piracy and armed robbery against ships and illicit activity in the Gulf of Guinea

The Assembly adopted an updated resolution on prevention and suppression of piracy and armed robbery against ships and illicit activity in the Gulf of Guinea (to update IMO Assembly resolution A.1069 (28)).

The resolution acknowledges the serious safety and security concerns of the industry and the seafaring community as a result of the attacks against ships sailing in the Gulf of Guinea and the grave danger to life and serious risks to navigational safety and the environment that attacks by pirates, armed robbers and other criminals may cause.

Acknowledging the efforts made by countries in the region as well as other entities, the resolution urges Governments to cooperate with and assist States in the Gulf of Guinea to:

- Develop their national and regional capabilities.
- Improve maritime governance in waters under their jurisdiction.
- Prevent piracy, armed robbery against ships and other illicit maritime activities in accordance with international law, in particular UNCLOS.

Governments are urged to assist States to build capacity to interdict and bring to justice those who commit crimes. Such assistance might include strengthening of the legal frameworks, including anti-piracy laws and enforcement regulations; the training of national maritime law enforcement agencies; promoting anti-piracy and law enforcement coordination and cooperation procedures between and among States, regions, organizations and industry; and the sharing of information

Entry into force and implementation of the 2012 Cape Town Agreement on fishing vessel safety

The adopted resolution urges Governments that have not yet become parties to the 2012 Cape Town Agreement on fishing vessel safety to consider doing so by 11 October 2022, the tenth anniversary of the Agreement's adoption.

The date reflects the commitment by States which signed a declaration at the 2019 Torremolinos Conference.

The resolution recognizes the efforts and contributions made by Member States, FAO, ILO and The Pew Charitable Trusts to support the regional and national seminars and webinars, which have been held in all regions of the globe since 2014, on the implementation and ratification of the Agreement, including webinars held during 2020-2021.

The capacity-building decade 2021-2030

The Assembly adopted a resolution setting out the Organization's aims and ambitions related to capacity building during the current decade, adopting the Capacity-Building Decade 2021-2030 Strategy. The strategy aims to support Member States in the adoption, implementation and enhancement of compliance with IMO instruments.

The strategy will address the needs of Member States including issues identified through the IMO Member State Audit Scheme (IMSAS); and achieve the maritime aspects of the 2030 Agenda and Sustainable Development Goals (SDGs), through a focus on supporting the development and implementation of robust national maritime policies and strategies predicated on harnessing the full potential of the maritime economies.

The strategy includes: mission statement; vision statement; overarching principles for the Capacity-Building Decade 2021-2030 Strategy; and four work streams setting out the areas of particular strategic focus for the period 2021 to 2030:

1. To reform and streamline IMO's internal organization for delivery of technical assistance;
2. Support Member States in maritime development;
3. Enhance the Regional Presence Office (RPO) Scheme; and
4. Strengthen the global training and development network.

Prevention and suppression of fraudulent registration and fraudulent registries and other fraudulent acts in the maritime sector

The adopted resolution encourages Governments to review the provisions in their national law relating to the prevention and suppression of all forms of maritime fraud and to make such additions or improvements, regarding, inter alia, the exercise of due diligence, as may be necessary for the prevention and suppression of such acts and practices, and for safeguarding the interests of all stakeholders concerned.

Governments are urged to take all possible measures of cooperation with each other and with relevant intergovernmental organizations and maritime stakeholders in order to maintain and develop coordinated actions in all relevant areas to combat maritime fraud, including the exchange of information and reporting the names of ships and registries involved in fraudulent acts.

The resolution urges Governments, the IMO Secretary-General, port State control authorities, vessel owners and operators, non-governmental organizations, the private sector including the maritime insurance industry, ship brokers and other relevant maritime stakeholders to

develop workshops that will focus on enhancing capabilities and due diligence practices for the prevention, detection and reporting of fraudulent registration documentation.

Strategic plan updated to include human element strategic direction

The Assembly updated the 2018-2023 Strategic Plan for the Organization, to include a new strategic direction (SD) on the human element.

The strategic plan now includes eight strategic directions:

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 Ensure regulatory effectiveness;

SD 7 Ensure organizational effectiveness;

SD 8 Human element.

The strategic direction on the human element says: '*In its role as the global regulator of shipping, IMO will build on work already completed to address the human element and will take the human element into account in the review, development and implementation of new and existing requirements. This includes the provision of machinery for cooperation among governments on practices concerning the human element in the maritime sector. To address human element-related issues, the Organization will develop or amend provisions, including but not limited to: training, certification and watch keeping, including consideration of new technologies; human-centred design; safe manning; drills and exercises; fatigue management; operational safety, security, and environmental protection; and fair treatment of seafarers; taking into account the important role of gender equality*.'

The inclusion of the human element as a specific strategic direction recognizes its significance, particularly during the COVID-19 pandemic when the human element has been a focus for joint work with UN sister organizations, in particular ILO, ICAO and WHO, industry associations and social partners.

International Day for Women in Maritime

The Assembly adopted a resolution proclaiming an International Day for Women in Maritime, to be observed on 18 May every year.

The observance will celebrate women in the industry and is intended to promote the recruitment, retention and sustained employment of women in the maritime sector, raise the profile of women in maritime, strengthen IMO's commitment to the United Nations Sustainable Development Goal 5 (gender equality) and support work to address the current gender imbalance in maritime.

The resolution invites IMO Member States, the maritime industry, and all others in the maritime endeavour to promote and celebrate the International Day for Women in Maritime in an appropriate and meaningful manner.

Budget and work programme

The Assembly adopted the Organization's budget and work programme for 2022 and 2023.

The IMO Council has already approved a regular budget outline for the 2022-2023 biennium of £75,671,000, comprising an appropriation of £37,350,000 for 2022 and an appropriation of £38,321,000 for 2023.

Election of Council IMO Council elected for 2022-2023

The Assembly elected the 40 Members of its Council for the 2022-2023 biennium.

The newly-elected IMO Council met for its 126th session on 16 December. It elected Víctor Jiménez of Spain as Chair, and Amane Fathallah of Morocco as Vice-Chair.

See also page 12, Election of Council

Adoption of amendments to the IMO Convention - expansion of Council

The Assembly adopted amendments to the IMO Convention to expand the size of the Council to 52 Member States, from 40, and extend the term of its Members. Until the amendments enter into force, the current structure will remain unchanged.

The amendments require acceptance by two thirds of the IMO Membership, or 117 Member States (based on the current membership of 175 Member States for entry into force. (For more information readers are invited to see here: https://tinyurl.com/2p8trtek)

The Assembly adopted a resolution urging the Members of the Organization to accept the amendments as soon as

possible, with the goal of entry into force of these amendments by 2025.

Guidance on Article 17 of the IMO Convention

The Assembly adopted guidance on consistent application of Article 17 of the IMO Convention. Article 17 covers the election of Members of the Council, specifically that election under category (c) should ensure a wide geographic representation.

The guidance aims to facilitate compliance with the criteria in Article 17 of the IMO Convention, in particular the special interests in maritime transport or navigation; and to better reflect geographical distribution and representation, including small island developing States (SIDS) and least developed countries (LDCs).

Full list of Assembly resolutions adopted

A.1148(32) Results-based budget for the 2022-2023 biennium

A.1149(32) Revised strategic plan for the Organization for the six-year period 2018 to 2023

A.1150(32) Arrears of contribution

A.1151(32) Presentation of audited financial statements and report of the external auditors

A.1152(32) Amendments to the Convention on the International Maritime Organization

A.1153(32) Guidance on consistent application of Article 17 of the IMO Convention [item 9(b)]]

A.1154(32) Revised Rules of Procedure of the Assembly

A.1155(32) Procedures for Port State Control, 2021

A.1156(32) Survey guidelines under the Harmonized System of Survey and Certification (HSSC), 2021

A.1157(32) 2021 Non-exhaustive list of obligations under instruments relevant to the IMO Instruments Implementation Code (III CODE)

A.1158(32) Guidelines for Vessel Traffic Services

A.1159(32) Prevention and suppression of piracy, armed robbery against ships and illicit maritime activity in the Gulf of Guinea

A.1160(32) Comprehensive action to address seafarers' challenges during the COVID-19 pandemic

A.1161(32) Entry into force and implementation of the 2012 Cape Town Agreement

A.1162(32) Encouragement of Member States and all relevant stakeholders to promote actions for the prevention and suppression of fraudulent registration and fraudulent registries and other fraudulent acts in the maritime sector

A.1163(32) Interpretation of Article 4 of the Convention on Limitation of Liability for Maritime Claims, 1976, adopted by the States Parties to the Convention on Limitation of Liability for Maritime Claims, 1976, present at the Thirty-Second session of the Assembly of the International Maritime Organization

A.1164(32) Interpretation of Article 4 of the Convention on Limitation of Liability for Maritime Claims, 1976, adopted by the States Parties to the Protocol of 1996 to amend the Convention on Limitation of Liability for Maritime Claims, 1976, present at the Thirty-Second session of the Assembly of the International Maritime Organization

A.1165(32) Interpretation of Article 6 of the Protocol of 1992 to amend the International Convention on Civil Liability for Oil Pollution Damage, 1969 amending Article v(2) of the International Convention on Civil Liability for Oil Pollution Damage,, 1969, adopted by the States Parties to the Protocol of 1992 to amend the International Convention on Civil Liability for Oil Pollution Damage,, 1969, present at the Thirty-Second session of the Assembly of the International Maritime Organization

A.1166(32) The capacity-building decade 2021-2030 strategy

A.1167(32) Revised financing and partnership arrangements for an effective and sustainable Integrated Technical Cooperation Programme

A.1168(32) Relations with Intergovernmental Organizations

A.1169(32) Relations with Non-Governmental Organizations

A.1170(32) International Day for Women in Maritime

A.1171(32) Revision of the Organization's financial regulations

A.1172(32) Urging Member States to accept the Amendments to the IMO Convention

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IMO Assembly

The IMO Assembly met for its 32nd session (A 32) from 6-15 December 2021, in remote session. More than 1,300 delegates registered to attend. A limited number of delegates attended the online meeting at the IMO Headquarters.

The Assembly is open to all 175 IMO Member States and three Associate Members. Observers from intergovernmental and non-governmental organizations also attend.

The Assembly is the highest Governing Body of the Organization. It consists of all Member States and meets once every two years in regular sessions, but may also meet in an extraordinary session, if necessary. The Assembly is responsible for approving the work programme, the budget and determining the financial arrangements of the Organization. The Assembly also elects the Members of the Council. In addition, the Assembly adopts certain resolutions emanating from the five IMO Committees and endorses actions of the Council with respect to the admission of new intergovernmental and non-governmental organizations as observers. The Assembly also adopts amendments to certain treaties, if a Committee is unable to do so.

Officers of the Assembly

The Assembly elected the following officers:

Assembly President

HE Mr Antonio Manuel R Lagdameo, Ambassador Extraordinary and Plenipotentiary and Permanent Representative of the Philippines to IMO.

Vice-Presidents

1st Vice-President: HE Ms Linda Scott, High Commissioner and Permanent Representative of Namibia to IMO.

2nd Vice-President: HE Mr Raffaele Trombetta, Ambassador Extraordinary and Plenipotentiary and Permanent Representative of Italy to IMO.

Chair of Committee 1, HE Mr Laurent Parenté, Ambassador and Permanent Representative of Vanuatu to IMO, and Chair of TCC.

Chair of Committee 2, Ms Marina Angsell, Head of Section for International Liaison, Department of Civil Aviation and Maritime Affairs, Swedish Transport Agency, and Chair of FAL.

Chair of the Credentials Committee, Ms Małgorzata Buszyńska of Poland.

IMO Assembly elects new 40-Member Council

IMO Assembly

The 32nd Assembly of IMO met in London at IMO Headquarters from 6 to 15 December 2021.

All 175 Member States and three Associate Members were entitled to attend the Assembly, which is IMO's highest governing body. The intergovernmental organizations with which agreements of co-operation have been concluded and international non-governmental organizations in consultative status with IMO are also invited to attend.

The Assembly normally meets once every two years in regular session. It is responsible for approving the work programme, voting the budget and determining the financial arrangements of the Organization. It also elects the Organization's 40-Member Council.

IMO reported on 10 December that the Assembly had elected the Members of its Council for the 2022-2023 biennium.

The Council is the executive organ of IMO and is responsible, under the Assembly, for supervising the work of the Organization. Between sessions of the Assembly, the Council performs the functions of the Assembly, except that of making recommendations to Governments on maritime safety and pollution prevention.

The Assembly of the International Maritime Organization has elected the following States to be Members of its Council for the 2022-2023 biennium:

Category (a): 10 States with the largest interest in providing international shipping services (listed in alphabetical order): China, Greece, Italy, Japan, Norway, Panama, the Republic of Korea, the Russian Federation, the United Kingdom and the United States

Category (b): 10 States with the largest interest in international seaborne trade:

Australia, Brazil, Canada, France, Germany, India, the Netherlands, Spain, Sweden and the United Arab Emirates

Category (c): 20 States not elected under (a) or (b) above, which have special interests in maritime transport or navigation and whose election to the Council will ensure the representation of all major geographic areas of the world:

Bahamas, Belgium, Chile, Cyprus, Denmark, Egypt, Indonesia, Jamaica, Kenya, Malaysia, Malta, Mexico, Morocco, the Philippines, Qatar, Saudi Arabia, Singapore, Thailand, Turkey and Vanuatu.

Chairmanship elections

The newly elected Council met following the conclusion of the 32nd Assembly, for its 126th session on 15 December to elect its Chair and Vice-Chair for the next biennium.

By secret ballot, in accordance with the Rules of Procedure of the Council, Mr Victor Jiménez (Spain) was elected as the Chair of the Council.

Mrs Amane Fethallah (Morocco) was elected as Vice-Chair of the Council by acclamation.

To close, the Council expressed its deep appreciation to the outgoing Acting Chair, Admiral Edmundo Deville Del Campo of Peru, for his leadership and achievements during the past biennium, to include his work as the Chair of the Working Group on Council Reform.

IMO International Maritime Prize awarded to Mr Paul Sadler

Mr Paul Sadler, former representative of the International Association of Classification Societies (IACS), and prior to that representative of the UK Government to IMO, has received the prestigious International Maritime Prize for 2020. This was announced by IMO early in December.

The prize was presented at the annual IMO Awards Ceremony held on 6 December in London and streamed online. The event also honoured exceptional bravery at sea. IACS and the Government of the United Kingdom of Great Britain and Northern Ireland nominated Mr. Sadler for the prize, which is awarded annually to the individual or organization judged to have made a significant contribution to the work and objectives of IMO.

IMO Secretary-General Kitack Lim said: '*The International Maritime Prize was first presented in 1981 and, since then, we have seen a succession of highly distinguished people receive the award, from across the world.*

'*The recipient of the 2020 International Maritime Prize is someone who has spent many days here in the IMO corridors and has dedicated his entire career to shipping safety and the maritime industry. Mr Sadler, Paul, you are truly a worthy recipient of the International Maritime Prize*.'

Paul Sadler has had an illustrious maritime career, during which he served as a surveyor for the UK Maritime and Coastguard Agency, represented the United Kingdom, then later IACS at IMO meetings and acted as a Governor of the World Maritime University (WMU). During this time, he built a reputation as an individual dedicated to ship safety.

He voluntarily delivered academic lectures to students and maritime industry organisations in the UK and overseas on the IMO and the roles of classification societies and recognized organizations. Paul Sadler's work at IMO and his advocacy for robust, pragmatic, and effective maritime regulation was recognized with a Distinguished Public Service Award, awarded by the United States Coast Guard in 2017.

Accepting his award, Mr. Sadler said: '*I firmly believe I am only receiving this award because of all the talented, inspiring, and dedicated people I had the good fortune of working with; not just in the UK's Maritime and Coastguard Agency and IACS, but also here at the IMO*.'

Addressing the audience, which included representatives from Member States, he added: '*I believe it is not just that the IMO is needed to facilitate global trade that spurs you, year after year, to prepare carefully for and actively participate in IMO meetings. It is also that, when you go home to your loved ones after an IMO meeting, you know you have played a vital role in getting all those who "go down to the sea in ships" safely home to their loved ones*.'

Paul Sadler was presented with his award that takes the form of a dolphin sculpture.

SEA-KIT uncrewed surface vessel trials

Inmarsat offers remote control connectivity

Inmarsat announced at the end of November that it had installed a new connectivity capability using virtualised networks that will establish higher standards for over-the-horizon uncrewed vessel control.

The installation connects the SEA-KIT International uncrewed surface vessel (USV) *Maxlimer* to the best available network at all times by switching as necessary between Fleet LTE, Global Xpress (GX) and FleetBroadband satellite services when out of range. It is understood that the combination will set new standards in continuous connectivity to serve a broader range of USV situations and support the next phase of SEA-KIT technology trials, which started in September off the coast of Plymouth, (UK, South West).

The project requires installation of a GX antenna to join an existing FleetBroadband antenna that together will deliver full Fleet Xpress capabilities, plus Fleet LTE hardware for seamless switching between networks on board the 12 metre loa autonomous vessel.

UK-based company SEA-KIT has emerged as a pioneer in USV technology, running and remotely controlling a series of demonstrations for maritime defence, security and commercial stakeholders from its base in Tollesbury, Essex (East coast). In inaccessible areas, USVs can complete tasks faster, more efficiently and with reduced risk to personnel than conventional crewed vessels.

ESA funded project

Last year (2020), SEA-KIT took part in a transatlantic survey project co-funded by the European Space Agency to demonstrate the capabilities of current technologies in deep ocean surveying. In July 2021, the company secured the first Unmanned Marine Systems (UMS) certificate from Lloyd's Register.

In the words of Ashley Skett, Operations Director, SEA-KIT International: *'SEA-KIT is delighted to trial seamless switching and to work with Inmarsat to increase data capabilities in developing over-the-horizon control capability, once again pushing the boundaries of our USV design. We would also like to acknowledge the contributions being made to these trials by our partners NORBIT Subsea, iXblue and Genasys Inc*.'

SEA-KIT International Uncrewed Surface Vessel(USV) Maxlimer.

Scott Middleton, Sales Director EMEA, AsiaPac Offshore Energy, Inmarsat Maritime, added: '*The new trial will be a significant stepping stone for separated networks solutions that ensure reliability, cyber resilience and high data traffic, while selecting bandwidth for the most cost effective USV operations at all times.*

'*This is a fantastic opportunity to demonstrate a new phase in technological development to support the over-the-horizon operation, endurance and ocean-going ability of USVs*.'

The seamless integration of multiple technologies into one cohesive solution is based on the same concept as Inmarsat's recently-announced communications network of the future ORCHESTRA. This will bring together Inmarsat's existing geosynchronous (GEO) satellites with low earth orbit satellites (LEO) and terrestrial 5G into an integrated, high-performance solution. The resulting dynamic mesh network will deliver high-performance connectivity everywhere, including to communications hot spots such as busy ports, while comprehensive autonomous vessel navigation is a key development area.

Government strategy

The British Government's Maritime 2050 Strategy includes autonomous ship technology as a significant growth opportunity, with ambitions recently expressed in the foundation of the Maritime and Coastguard Agency's new Maritime Future Technology team.

In May 2021, the Royal Navy signed a Memorandum of Understanding backing the creation of a National Centre for Operational Excellence in Marine Robotics, in Southampton.

In addition, the UK Harbour Masters' Association recently published voluntary guidance for autonomous ship operations in UK waters and their implications for recreational sailors.

Omicron

ITF and transport leaders warn of governments' knee-jerk reaction

Supply chain at greater risk

It was reported by ITF on 3 December that world leaders' knee-jerk reactions to the Omicron variant are putting transport workers and the global supply chain at greater risk of collapse.

This was the subject of a warning by international transport organisations and unions representing road, air and sea transport. These bodies are: IATA, ICS, IRU and ITF. They represent more than US$ 20 trillion of world trade annually and 65 million global transport workers and more than 3.5 million road freight and airline companies and more than 80% of the world merchant shipping fleet.

Cross-border transport workers including seafarers, air crew and drivers must be able to continue to do their jobs, and cross borders without overly restrictive travel rules, to keep already ailing supply chains moving.

IATA, the International Air Transport Association, ICS, the International Chamber of Shipping, IRU, the International Road Transport Union, and ITF, the International Transport Workers' Federation, have jointly called for

governments to not re-impose border restrictions that further limit the freedom of movement of international transport workers and learn from the lessons of the last two years.

Variant of concern

One week since the World Health Organization (WHO) designated the new Omicron strain of Covid-19 as a '*variant of concern*', at least 56 countries have re-imposed varying degrees of travel restrictions.

These transport bodies are calling for an end to the rushed and fragmented approach to travel rules by governments. ITF in its statement says now is the time for heads of state to listen to industry leaders and workers, by taking decisive and coordinated action together to ease strain on the supply chain, and support an exhausted global transport workforce during the busy holiday season.

Frustration

In their announcement on 3 December the transport bodies also expressed frustration that governments were reneging on clear steps issued to world leaders in September to:

1. Guarantee the free and safe movement of transport workers.
2. Prioritise transport workers to receive WHO-recognised vaccines.
3. Adopt lasting travel and health protocols developed by industry for seafarers, drivers and air crew, as endorsed by WHO, ILO, IMO and ICAO.
4. Create globally harmonised, digital, mutually-recognised vaccination certificates and processes for demonstrating health credentials (including vaccination status and COVID-19 test results), which are paramount to ensure transport workers can cross international borders.
5. Increase global vaccine supply by all means at our disposal in order to expedite the recovery of our industries.

WHO / ILO meeting due

A crisis meeting with the World Health Organization (WHO) and the International Labour Organization (ILO) to discuss the recommendations, and the impact that travel bans and other restrictions in response to the Omicron variant will have on transport workers and the global supply chain is scheduled for 6 December.

ITF and ICS comment

Stephen Cotton, General Secretary, ITF, reflected: '*The same governments that have blocked global vaccine access are now the first to lock down their borders to keep the Omicron variant out. Instead of pursuing a global solution to this pandemic, their decisions further risk supply chain collapse. It is not only morally reprehensible, it is economic self-destruction. We need universal access to vaccines now. It is imperative for all of us to tell governments to stop bowing down to big pharma and pave the way so that every country can produce the vaccines needed to end this pandemic.*'

Of the present situation Guy Platten, Secretary General, International Chamber of Shipping commented: '*This feels like groundhog day for our transport sectors. There is a real and legitimate fear that unless coordinated action is taken by world leaders we will see a return to the peak of the crew change crisis in 2020 where more than 400,000 seafarers were impacted by unnecessarily harsh travel restrictions. Our transport workers have worked tirelessly for the past two years throughout the pandemic to keep the global supply chain moving, and they are at breaking point. December is traditionally a busy time for seafarers returning home to their families and governments owe them the chance to spend that time with their loved ones.*'

World's first full-scale hydrogen-based propulsion system

Kongsberg launch

Kongsberg announced on 2 December that it had celebrated a world first by testing and verifying a full-scale, full-size, zero-emissions drivetrain powered by hydrogen fuel cells designed for ships and ferries.

It is understood that the project demonstrates that the technology is now mature for using hydrogen (H_2) as an energy source.

In the words of Geir Håøy, CEO of Kongsberg: '*With a verified and tested hydrogen-based propulsion system, we take the next step in zero-emission solutions at sea. This project is another example of our world-leading Norwegian maritime cluster succeeding when we face the most demanding technological challenges.*'

The programme is the third and final part of the EU-funded project known as HySeas which has been running since

2013 to prepare and demonstrate a scalable hydrogen system for ships and ferries. Kongsberg has been the technical lead of the project, which has involved participants from England, Denmark, France, Germany, Scotland and Sweden.

In this final stage, Kongsberg has built a full-scale electric propulsion system based on hydrogen-powered fuel cells at Ågotnes outside Bergen.

The system will now undertake a four-month testing programme for validation purposes with the aim of verifying the final design for an H_2-powered RoPax ferry. The drivetrain testing is intended to demonstrate the ease with which H_2 fuel cells can be successfully integrated with a proven marine hybrid electric drive system.

Konsberg propeller development

Minister of Trade and Industry Jan Christian Vestre added: *'The world looks to Norway for green and sustainable solutions at sea. What Kongsberg and its partners have succeeded in achieving with this project is yet another proof of the internationally leading competence in the Norwegian maritime cluster. Now we have both taken the next step for solutions in Norway, and the next step for the Norwegian maritime industry to succeed in exporting hydrogen-based technology and solutions internationally*.'

According to a report from Kongsberg, this testing mirrors the operational loads which would be experienced by a vessel on a route between Kirkwall and Shapinsay in Orkney. It will confirm safe operation and power and fuel capacity requirements, together with other valuable information to feed back to the vessel design team at Caledonian Maritime Assets Ltd (CMAL) in Scotland. CMAL plans to complete the design in March 2022. Hydrogen fuel will be generated through wind power at the ferry port.

In conclusion Egil Haugsdal, President of Kongsberg Maritime said: '*If we are to succeed with hydrogen investment in Norway, both to reduce national emissions and create new, green and sustainable jobs, we are dependent on being able to show complete pilots on a full scale. This means that the next step will be to show the technology in operation, and then quickly put in place the surrounding infrastructure. Orkney will be the first practical usage of this technology while the Norwegian maritime cluster has the opportunity develop our own pilots and projects here in Norway*.'

The full scale HySeas III test was launched at the Kongsberg facility in Ågotnes, Norway on 1 December 2021.

Other Kongsberg products

On the cover of this edition we show a VTS installation of Kongsberg Maritime, one of the many aspects of the company which extends to aviation, defence, digital, space and other sectors.

Propulsion

KM has supplied an engine and thruster package for the cruise vessel *Havila Capella* on the new Havila Kystruten service between the Norwegian ports of Bergen and Kirkenes.

Screw design

The movement of water is complex and has challenged physicists and mathematicians for centuries. It is precisely this scientific approach that defines propulsion systems by Kongsberg Maritime in Kristinehamn. Here is shown a testing facility described as a wind tunnel with water flowing through rather than wind.

Rotors

At the end of November Kongsberg Maritime (KM) signed a Memorandum of Understanding with auxiliary wind propulsion systems provider, Norsepower Oy Ltd. This collaboration will facilitate the addition of wind propulsion to KM's integrated power and propulsion systems.

For more on Kongsberg products and services readers are invited to see here:
https://www.kongsberg.com/ and particularly the journal here: https://www.kongsberg.com/kmagazine/

Illustrations per www.kongsberg.com ©

Zero-emissions target

The maritime industry will struggle to reach

Training with new and alternative fuels and systems offered

Shipping companies under pressure to cut emissions by 50% by 2050 will struggle to find alternative energy sources that completely reduce their carbon footprint.

World leaders at the recent COP26 Summit in Glasgow, Scotland, have called on industries including maritime, which accounts for about 3% of global greenhouse gas emissions, to help tackle climate change.

The task is huge, with alternative energy sources such as hydrogen still leaving a carbon footprint because of how

they are produced, according to Tony In't Hout, Director of Stream Marine Training (SMT). However, the global maritime training provider is playing its part by educating companies about the shipping fuels' revolution.

In't Hout commented: '*The maritime industry plays a vital role in addressing the global climate change crisis, by supporting movement of world trade in the most environmentally friendly way possible.*' He is a specialist consultant to many shipping companies that plan to adopt alternative, greener fuels.

He added: '*Making companies around the globe aware of how to handle new power sources and cargoes safely and effectively requires a new generation of highly skilled seafarers, which is where we come in. As experts in new fuels, such as liquefied natural gas (LNG), hydrogen and ammonia, battery-powered technologies and everything from engineering to cargo handling of these products, we are the first port of call for any shipping company*.

Shipping companies need to cut emissions by 50% by 2050

'*SMT plays a leading role, having been the first company to run courses on LNG and hydrogen awareness for shipping majors across all sectors including cruise, ferry, cargo, ship builders and salvage*.'

Many seafarers working in the new fuels technology industry have been trained by SMT, according to Martin White, the company's Chief Executive. He reflected: '*This gives them the knowledge and expertise to work safely on vessels carrying or powered by greener energy sources that will help shipping meet the mammoth goal of achieving zero emissions by 2025*.'

In recent months, SMT has launched the Training and Competency for Alternative Fuels and Systems course to educate maritime workers and management. Candidates are taught what it means to leave a carbon footprint and about the safety precautions for working with new energy sources such as hydrogen.

In conclusion In't Hout said: '*Another thing we teach is the dangers of using hydrogen. It has two molecules of water that will burn if the temperature goes above 2,400 degrees. When that happens, you get pure hydrogen which is highly flammable – a real threat to crew on a vessel if a fire breaks out. The reason being that a hydrogen fire will keep fuelling itself, making it extremely difficult to put out*.'

While reducing greenhouse gas emissions by 50% by 2050 is a huge task, SMT contributes greatly to the cause by teaching maritime professionals about new and alternative fuels and systems.

For more information on SMT and its courses readers are invited to visit the website here:
https://streammarinetraining.com/

USCG in the Pacific

Coast Guard Cutter *Juniper* completes aids to navigation mission across the Hawaiian Islands

It was reported from Honolulu early in December that the crew of the Coast Guard Cutter *Juniper* (WLB 201) had concluded a successful week-long aids to navigation maintenance and discrepancy response operation throughout the Hawaiian Islands.

USCG ©.

During the 848-nautical mile patrol, the crew of the 225-foot seagoing buoy tender completed 21 buoy evolutions, recovered two sinking buoys, and hauled a beached buoy from the shores of Kahului with assistance from a Coast Guard Station Maui boat crew.

Coast Guard Regional Dive Locker Pacific and Coast Guard Station Honolulu also played an integral role during the patrol.

In the words of Lieutenant (JG) Ryan Burk, the operations officer in *Juniper*: '*Our partnerships with Coast Guard units, other government agencies, and community partners in our area of responsibility are an essential component of our aids to navigation mission. We regularly face unique obstacles when dealing with discrepancies and environmentally sensitive areas, which require the specialized capabilities of our partners*.'

With the combined efforts displayed, 19 buoys were serviced in Pearl Harbor's Entrance, North Channels, and

in the harbours of Kahului, Honokahau, Kawaihae, and Hilo.

USCG ©.

This aids to navigation mission provided the needed infrastructure to ensure a maritime transportation system that promotes economic prosperity and an uninterrupted flow of maritime commerce throughout the Pacific.

Picture credits:
Illustrations by Petty Officer 3rd Class David Graham and Petty Officer 2nd Class Matthew West, US Coast Guard District 14 Hawaii Pacific.

ClassNK and Guidelines for Remote Surveys (Ver. 3.0)

General update to enable efficient on board preparation for remote surveys

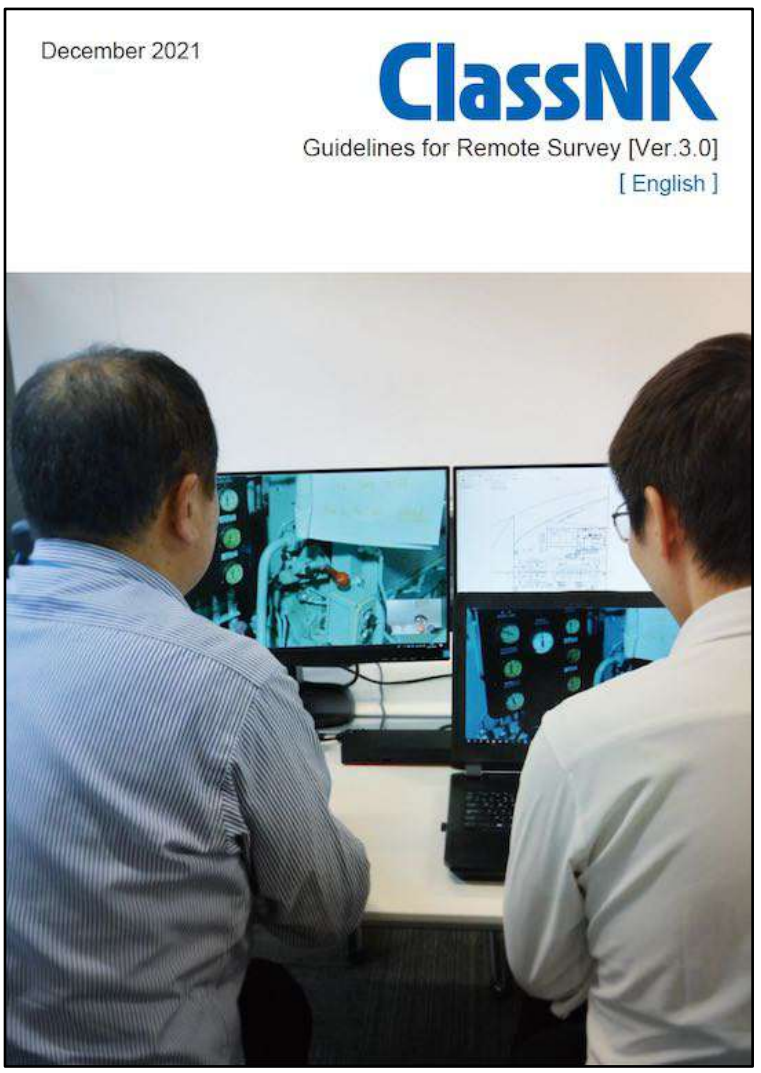
It was announced from Tokyo early in December that ClassNK had released its *Guidelines for Remote Surveys (Ver. 3.0)*. Based on the expertise gained from carrying out many remote surveys, the guidelines have been updated to provide clarification of applicable remote survey items and procedures.

The Guidelines for Remote Surveys stipulate applicable survey items and requirements for the use of information and communications technology (ICT) to ensure reliability equivalent to conventional witness surveys with transparency in the application of remote surveys.

To prevent delays in maritime transport arising from the impact of Covid-19, the class society has conducted its remote surveys in close cooperation with ship managers and relevant authorities to ensure both safety and smooth ship operation. Currently, it is understood that over 400 remote surveys are applied monthly to ships in service.

Making use of the findings obtained through such work, ClassNK has made a general update of the guidelines and published these as Ver. 3.0. In addition to defining in detail the survey items to which remote surveys can be applied, the information required for each survey item, such as live video, recorded video, still image, and so forth, is clarified to improve the efficiency of preparation on board for remote surveys.

It is reported that the guidelines are available to download free of charge via ClassNK's website www.classnk.com for those who have registered for the ClassNK "My Page" service.



To register for the "My Page" service free of charge, readers are invited to the ClassNK website www.classnk.com and to click on the "My Page Login" button.

Furthermore, the point of contact for inquiries about remote surveys is the ClassNK Survey Department (svd@classnk.or.jp or Telephone: +81-3-5226-2027).

Jamaica's re-election to the IMO Council

Commitment to protect the marine environment

Jamaica has affirmed its commitment to the marine environment and blue economy as it was re-elected to Category C of the Council of the IMO.

Declaring, through a pre-recorded statement by The Hon. Robert Montague, Minister of Transport and Mining played at the opening of the IMO's 32nd Assembly, that: '*Jamaica stands ready to partner with the IMO. Jamaica remains mindful of the vulnerabilities of our location but also our responsibilities to join with the international maritime community to preserve and protect the marine environment and the blue economy. With the impacts of climate change, Jamaica remains ready to assist our Caribbean partners. We continue to show leadership in the region in partnering with the IMO to find viable solutions to reduce emissions*.'

Minister Montague outlined: '*Jamaica's long-term objectives fully recognise shipping as a major plank of our own Vision 2030 Development Plan. The maritime sector is a major contributor to the growth of Jamaica's economy, enabled by substantial investments in world class cruise and trans-shipment port facilities; global distribution through the logistics hub; and a dynamic university which continues to develop social capital to serve the region and beyond. Jamaica's maritime administration continues to execute its mandate, with a focus on: safety and security; the prevention of marine pollution; and the recognition, in law, of our valued seafarers as essential workers*.'

MARITIME AUTHORITY OF JAMAICA

During the 32nd session of the IMO Assembly, held virtually on 10 December, Jamaica, was re-elected to serve another two-year term until 2023. The Council approves the work of the various Committees, proposes the budget, appoints the Secretary General for the Assembly's approval and makes policy recommendations including the IMO's strategic plan.

Jamaica is committed to serving the global maritime industry. It currently Chairs the IMO's Implementation of IMO Instruments Sub-Committee, and is the Vice Chair of the Board of Governors of World Maritime University. Jamaica has also been selected as Lead Partner Country on a number, of IMO Projects and regularly hosts regional capacity-building activities in collaboration with the IMO.

Pledging to continue to support the IMO in all aspects of its work, including efforts to reduce and eliminate ships' greenhouse gas (GHG) emissions and address climate change, Minister Montague added: '*The people and Government of Jamaica continue to observe the highest standards for our flag ships, valued seafarers and port facilities. We will continue to cooperate and provide technical assistance to our Regional Partners, Small Island Developing States and Least Developed Countries in the true spirit of IMO cooperation*.'

Introducing the MAJ

The Maritime Authority of Jamaica (MAJ) is responsible for the development of shipping in Jamaica and to regulate matters related to merchant shipping and seafarers. MAJ is also responsible for discharging Jamaica's Treaty obligations in relation to the IMO and the regulation of safety, security and marine environment protection.

The Maritime Authority of Jamaica is committed to the operation of a quality registry and to providing client-focused services to the Jamaican and international maritime industry.

More information about the MAJ is available here: https://maritimejamaica.com/

Creating New HORIZONS

Boskalis launches new magazine edition

It was reported from Papendrecht, in the Netherlands on 13 December that Boskalis has published a new edition of its online magazine *Creating New Horizons* (www.boskalis.com/magazine). This publication offers fresh perspectives from experts and showcases projects and approaches that stretch operational and technological boundaries.

In this new edition staff return to the Suez Canal in late March 2021 where the huge container vessel *Ever Given* ran aground and take a look behind the scenes of what *The New York Times* described as: '*one of the largest and most intense salvage operations in modern history*'. In cooperation with the Suez Canal Authority and with help from a spring tide, a large number of Boskalis specialists were able to free the giant vessel and unblock the canal.

Since the previous edition of the Boskalis magazine the world has continued to face various restrictions due to the pandemic. For a global maritime company with crews and project personnel working in shift patterns, this presents numerous operational challenges. Members of Boskalis' Travel Emergency Team explain how they tackle these issues.

Despite the Covid constraints many interesting new developments and projects are taking place across the company, including projects that address some of the world's major challenges for a sustainable future.

A striking example is the construction of floating wind farms in offshore locations where the water is too deep for traditional fixed foundation turbines. Boskalis recently installed the world's largest floating wind farm off the coast of Scotland. Another promising innovation is the use of artificial reefs as part of coastal protection solutions. With the Artificial Reefs Program the company is testing various types of artificial reefs in Europe, Africa and Central America.

The journal also recommends readers to see further articles and videos on some of their innovative projects, including the installation of segments of the world's longest suspension bridge, the float-over installation of a platform topside with surgical precision, the decommissioning of offshore platforms in the North Sea and the construction of a large sand causeway in Bahrain.

As a spokesman at Royal Boskalis Westminster NV put it: '*Let us create new horizons together!*'

About Royal Boskalis Westminster NV

This is a leading global services provider operating in the dredging, maritime infrastructure and maritime services sectors. The company provides creative and innovative all-round solutions to infrastructural challenges in the maritime, coastal and delta regions of the world. With core activities such as coastal defence, riverbank protection and land reclamation Boskalis is able to provide adaptive and mitigating solutions to combat the effects of climate change, such as extreme weather conditions and rising sea levels, as well as delivering solutions for the increasing need for space in coastal and delta regions across the world.

The company facilitates the development of offshore energy infrastructure, including renewable wind energy. Boskalis is furthermore active in the construction and maintenance of ports, waterways, access channels and civil infrastructure, thus helping to facilitate trade flows and regional socio-economic development.

In addition, Boskalis is a global marine salvage expert and has a number of strategic partnerships in harbour towage and terminal services (Keppel Smit Towage and Smit Lamnalco). The company has a versatile fleet of more than 650 vessels and floating equipment and 9,900 employees, including associates.

WHO and ILO form Action Group

Global transport bodies to protect workers' rights

To ease supply chain congestion

It was announced from Geneva on 13 December that the World Health Organization and the International Labour Organization had agreed to form an Action Group to ensure implementation of Covid-19 protocols for transport workers. This was reported simultaneously in London and New York.

World Health Organisation Director-General Dr Tedros Ghebreyesus and ILO Director-General Guy Ryder have confirmed their organisations will form an Action Group '*as a matter of urgency*' with major transport bodies to ensure freedom of movement for international transport workers.

Commitment

This commitment came after organisations and unions representing road, air and shipping companies and workers met Dr Tedros and Mr Ryder the previous week. They warned of the impact of new travel restrictions on transport workers and the already fragile global supply chain in the wake of the Omicron variant.

The International Air Transport Association (IATA), the International Chamber of Shipping (ICS), the International Road Transport Union (IRU), and the International Transport Workers' Federation (ITF), have made urgent pleas for governments' health departments to coordinate measures and avoid restricting the movement of transport workers.

Immediate action

Dr Tedros said during the meeting that work on the Action Group would begin directly and regular meetings will be held with IATA, ICS, ITF and IRU going forward. He noted other areas of focus will include amending the Yellow Card, a medical passport issued by WHO, to be used by transport workers as proof of vaccination.

The Action Group will ensure the implementation of existing travel protocols developed by industry to protect the rights of transport workers. The WHO and the ILO also confirmed that the UN Secretary General's Executive Committee in January 2022 will discuss further solutions to issues raised by the transport organisations.

Involving 65 million global transport workers

The transport bodies, which represent more than $20 trillion of world trade annually and 65 million global transport workers across the supply chain, had previously shared fears that 'knee-jerk' decisions made by governments to re-impose travel restrictions for transport workers in response to the emergence of the Omicron variant could shatter supply chains and delay global economic recovery.

Frustration

Since Omicron was noted as a 'variant of concern' by WHO, some 56 nations have updated Covid-tightened travel restrictions in response. The transport bodies expressed frustration that governments were reneging on clear steps issued to world leaders in September to guarantee the free and safe movement of transport workers. With Omicron's emergence making it even more important to ensure priority vaccination for transport workers, the organisations said, the WHO should encourage countries to adopt the tried and tested travel and health protocols for seafarers and drivers which the WHO has itself endorsed.

Stephen Cotton, general secretary of ITF, said: *As we enter peak season for transport workers over Christmas, it is critical that we work collectively to alleviate the strain on our global supply chain. What we cannot have are governments, like we are seeing in Australia, blaming transport workers for disruptions stemming from a global health crisis. This is about leadership, not protectionism or politicking.*

'*We thank the WHO and ILO for their commitment to work with us, and urge all governments to prioritise vaccinations for transport workers and allow their free and safe movement. If we are serious about breaking the cycle of*

lockdowns and travel bans, then governments must also immediately stop blocking the TRIPS waiver and other barriers to the universal vaccine production needed to end this crisis.'

World Health Organisation Director-General Dr Tedros Ghebreyesu.

Photo: ITF / WHO ©

Guy Platten, secretary general of ICS, added: '*We need governments to urgently protect the health and safety of cross-border workers if they want a holiday season that is anywhere near normal. It is really worrying to see last year's* (2020's) *draconian travel restrictions starting to reappear in many countries, especially as millions of transport workers have been making enormous sacrifices for scant recognition for nearly two years.*

'*It is very promising to see the WHO and ILO take leadership on protecting international transport workers' rights and we look forward to working closely with them in the weeks and months ahead*.'

The organisations present at the crisis talks of 13 December also demanded that transport workers be given access to emergency healthcare and prioritisation for Covid-19 vaccinations on the approved WHO list. They called for harmonised protocols internationally that affect cross-border workers, for example demonstrating vaccination status and/or Covid-19 test results. They stressed that governments must increase global vaccine supply by all means at their disposal to expedite the recovery of their transport industries.

Man overboard!

Two lives saved: the Brotherhood of the Sea in action

Information provided by Captain Yevgen Getsevich, Member of Ukrainian IFSMA Association since 2007.

On 18 October 2021, at 1627 Local Time, the Chief Officer keeping navigational watch in the gas tanker *Gas Gloria*, sighted a small wooden raft on the starboard quarter with two people on board, desperately waving distress signals and shouting for help, this in a position south of Cay Sal Bank in the Caribbean twenty nautical miles north of Cuba.

The VLGC *Gas Gloria* (50,000 dwt) and flying the Liberian flag was under the command of Ukrainian, Captain Getsevich Yevgen and under way from dry dock in Tuzla, Turkey to Houston, Texas for loading a cargo of 44,000 tonnes of liquified propane bound for Mexico.

Immediately the Man Overboard alarm was sounded to alert all the crew to stand by and the vessel commenced manoeuvring with a Williamson Turn at the same time as the main engine was slowed.

Thanks to the highly professional skills of the crew of *Gas Gloria*, two distressed Cuban fishermen had been found, the vessel manoeuvred alongside their raft and they were on board the gas tanker by 1710 Local Time.

The crew took good care of the rescued fishermen, gave them food, water, juices and a separate cabin to take rest as well as providing them with new boiler suits and safety shoes after their dangerous adventure. On being interviewed it was learnt that the two fishermen had been on the small wooden raft for about a week and as there had been no rain they had had no fresh water for two days. Luckily they had a piece of old canvas which they used for collecting rain water and as a sail.

Fortunately, at the time of the rescue the weather was good although it deteriorated in a few hours with high winds and a heavy swell.

The Master of *Gas Gloria* contacted the US Coast Guard who requested that the two rescued fishermen be transhipped at a rendezvous with USCG cutter *William Trump* near Cape Key West, Florida.

After midnight on 19 October in a moderate sea and with favourable wind the Coast Guard cutter approached the lee side of the gas carrier and after several attempts managed to take on board the two rescued fishermen following which *Gas Gloria* proceeded to her port of destination, Houston.

The charterers of the vessel, the Turkish company Bayegan, sent a message of gratitude to Master and crew of *Gas Gloria* and it is understood that the company agreed to accept all costs in connection with the rescue.

As Captain Getsevich commented: '*It is definitely not every day that someone gets a chance to save the life of two people, but when it does happen, it will stay in the hearts and the memory for a lifetime of those who were able to do so and of the survivors.*'

A signal was later received by Captain Getsevich from Captain Adam Abraham Chamie at USCG Sector Key West expressing appreciation for the crew of *Gas Gloria* for their noteworthy actions.

Photos provided by Captain Yevgen Getsevich

Barcelona's BEST leads the green port revolution in the Med

Commitment to sustainability

It was reported in mid-December that Hutchison Ports BEST* container terminal has signed an agreement with Endesa (see: www.endesa.com) for the contracting of 100% renewable sources energy, enabling them to reduce their CO_2 emissions by more than half and to consolidate their position as a benchmark in the use of renewable energy.

Similarly, we learn that the terminal is increasing its number of solar panels and providing 40 charging points for electric cars.

Guillermo Belcastro, CEO of Hutchison Ports BEST, commented: '*From 2022 onwards, 100% of BEST's electricity will come from renewable sources. In this way, we are at the forefront of sustainability in the port sector, becoming the greenest container terminal in the Mediterranean*.'

With this measure, the terminal eliminates annually the emission of 8,300 tonnes of CO_2 into the atmosphere.

BEST is also expanding the number of solar panels for self-consumption with a total surface area of 4,763 m^2, which will help to reduce CO_2 emissions by 250 tonnes. They are also providing 40 charging points for electric vehicles to contribute to the energy transition.

Automation of BEST terminal, with cranes powered mainly by electricity means that the commitment to renewables translates into a significant reduction in emissions compared to other conventional terminals. This has a direct impact on the environmental friendliness of the logistics chain that chooses BEST as its alternative in the Port of Barcelona.

More sustainable logistics chain

It is understood that BEST's plan makes the logistics chain more sustainable and offers an environmentally committed alternative to ship owners and end customers who are sensitive to the impact of their activity on the fight against climate change.

In this sense, BEST's commitment is firm, global and complete, it is claimed. In addition to the electrification of automated means and the green origin of their energy, BEST has implemented other initiatives based on sustainability such as the installation of solar panels, electric recharging points for vehicles, the commitment to railway (with local traffic quotas close to 20%) and the digitalisation of a large part of the processes that allow for the reduction of waiting times and emissions.

It is reported that together with the Port Authority of Barcelona and leading manufacturers of handling equipment, BEST researches and invests in sustainable technological innovation projects.

*BEST = Barcelona Europe South Terminal.

Fire aboard Roll-on/Roll-off Vehicle Carrier *Höegh Xiamen*

NTSB report: https://tinyurl.com/2p894jk3

Investigation Details

On 4 June 2020, at about 1530 Eastern Daylight Time, the crew of the 600 ft loa, Norwegian-flagged roll-on/roll-off vehicle carrier *Höegh Xiamen* were preparing to depart the Blount Island Horizon Terminal in Jacksonville, Florida, en route to Baltimore, Maryland, when they saw smoke coming from a ventilation housing for one of the exhaust trunks that ran from deck 12 (the weather deck) to one of the cargo decks.

Crew members discovered a fire on deck 8, which had been loaded with used vehicles. The crew attempted to fight the fire but were repelled by heavy smoke. Shoreside fire department teams from the Jacksonville Fire and Rescue Department arrived at 1603 and relieved the crew. The captain, after consulting with and receiving concurrence from the fire department, had carbon dioxide from the vessel's fixed fire-extinguishing system released into decks 7 and 8, and the crew then evacuated from the *Höegh Xiamen*.

The fire continued to spread to the higher cargo decks and the accommodation. Shoreside firefighters entered cargo decks with fire hoses, and nine firefighters were subsequently injured, five of them seriously, in an explosion. Responders subsequently adopted a defensive

strategy, cooling external exposed surfaces. The fire was extinguished over a week later on 12 June.

Höegh Xiamen and its cargo of 2,420 used vehicles were declared a total loss valued at $40 million, and in August 2020, the vessel was towed to Turkey to be recycled.

Findings, Cause and Recommendations

Findings

In the Findings part of the report by the National Transportation Safety Board it was made clear that none of the following were safety issues for the accident: (i) weather and waterway conditions; or (ii) crew impairment due to alcohol or other drugs.

It was found that the fire aboard *Höegh Xiamen* began in the aft portion of deck 8 and spread to cargo decks 7, 9, 10 and 11. The fire likely was caused by an electrical arc or an electrical component fault in one of the vehicles that did not have a properly disconnected and secured battery.

SSA stevedores supervising the preparing and loading of vehicles onto the *Höegh Xiamen* did not ensure that longshoremen followed Grimaldi's established vehicle loading and battery securement procedures, thereby increasing the risk of electrical arcing at battery terminals and component faults if batteries were left connected.

Grimaldi's oversight of battery securement during loading operations was insufficient and ineffective. The chief mate was informed of vehicles that had incomplete battery disconnections, but he took no further action and missed the opportunity to address the hazard of incomplete battery securement on multiple decks, including cargo deck 8, where the fire originated.

Höegh's *Vehicle Lashing Inspection Procedure* identified but did not provide a process to ensure that all the vehicles loaded on board *Höegh Xiamen* had disconnected batteries. Transport of used vehicle cargoes excepted from the Hazardous Materials Regulations presents an elevated risk of fire on board vehicle carriers.

Eliminating the exceptions for used and damaged flammable-liquid-powered vehicles in the Hazardous Materials Regulations would reduce the risk of fire posed by transporting this type of cargo on vehicle carriers by providing for greater inspection and mitigation of the hazards related to transportation of such vehicles.

Because the crew did not immediately reactivate the fire detection system after completing the loading, the detection of the fire was delayed.

Höegh Xiamen's master did not effectively use the communication methods available to contact emergency response authorities and provide location information, which delayed the fire department's response to the accident site.

Dampers for decks 7/8 (the fire's area of origin) were ineffective or not adequately secured, thereby giving the fire continued access to oxygen and allowing the fire to continue to grow.

By the time the master decided to release the CO_2 fixed fire-extinguishing system, the fire had already spread to other zones beyond deck 7/8, and, therefore, the CO_2 was ineffective in suppressing the fire.

Höegh Xiamen experienced an overpressurization event when shoreside firefighters on deck 12 opened the exhaust vent for deck 9.

Probable Cause

The National Transportation Safety Board (www.ntsb.gov) determined that the probable cause of the fire aboard the vehicle carrier *Höegh Xiamen* was Grimaldi's and SSA Atlantic's ineffective oversight of longshoremen, which did not identify that Grimaldi's vehicle battery securement procedures were not being followed, resulting in an electrical fault from an improperly disconnected battery in a used vehicle on cargo deck 8.

Contributing to the delay in the detection of the fire was the crew not immediately reactivating the vessel's fire detection system after the completion of loading. Contributing to the extent of the fire was the master's decision to delay the release of the carbon dioxide fixed fire-extinguishing system.

Recommendations

As a result of this investigation, the National Transportation Safety Board has made the following new safety recommendations:

To the Pipeline and Hazardous Materials Safety Administration: Eliminate the exceptions provided in Title 49 Code of Federal Regulations 176.905(i) for used and damage flammable-liquid-powered vehicles transported by roll-on/roll-off vehicle carriers.

To the US Coast Guard:

Propose to the IMO to eliminate International Maritime Dangerous Goods Code special provision 961 for used and damaged flammable-liquid-powered vehicles transported by roll-on/roll-off vehicle carriers.

To the National Maritime Safety Association:

Inform members of the circumstances of the *Höegh Xiamen* accident and encourage them to establish battery securement procedures as well as a means to ensure that the procedures are followed through adequate oversight of vehicle loading and battery securement.

To Grimaldi Deep Sea:

Develop a training programme for any vehicle preparation personnel tasked with supervising and conducting vehicle battery securement to ensure greater fire safety aboard vehicle carriers. Revise your written procedures to improve oversight of vehicle loading and battery securement, using such methods as requiring additional inspectors, pre-job briefings, hands-on demonstrations, or independent follow-up inspections.

To Höegh Technical Management:

Revise its Vehicle Lashing Inspection Procedure to include a process to ensure all vehicle batteries are disconnected before departure and provide training to all crew on the revised procedure.

Editor's note

The text here is based on the NTSB Report MAR 21/04 *Fire aboard Roll-on/Roll-off Vehicle Carrier Höegh Xiamen* kindly made available at: www.ntsb.gov

Isle of Innisfree joins Irish Ferries' Dover-Calais service

In mid-December Irish Ferries, a subsidiary of Irish Continental Group plc (ICG), added further capacity to their existing Short Straits service.

Since joining the Port of Dover in June 2021, significant additional capacity has been added by Irish Ferries, indicating a high level of confidence in the Short Straits. This investment in the Dover-Calais crossing is evidence of the resilience, value and dependability of the route and bolsters Dover's offering of an inbound ferry every 25 minutes.

In adding *Isle of Innisfree* to their schedule of sailings Irish Ferries have already doubled their frequency on the Dover-Calais route since June. Moreover, with a third ship due to join the fleet in January, Irish Ferries will offer up to 30 sailings each day on the route, with sailings in each direction approximately every 90 minutes.

Commenting on the new service, Doug Bannister, Chief Executive Officer at the Port of Dover, said: '*The capacity added by Irish Ferries on the Dover-Calais route today is testament to the ongoing confidence in the Short Straits. The market continues to choose the high pace, frequency and capacity offered by Dover, and in turn, the Port offers customers more choice, moving from two to three operators in 2021.*

'*Together with all our dedicated ferry operators, the Port of Dover is driving resilient supply chains, further enhancing our joint offering to customers. Dover is continuing to serve the market as the busiest and most efficient UK port – keeping people and goods flowing via the shortest and most efficient sea crossing between the UK and mainland Europe*.'

The Port of Dover is the UK's busiest international ferry port, handling more lorries than all other UK ports put together through an unrivalled and fluid operation capable of facilitating 120 ferry movements and more than 10,000 trucks each day. £144bn worth of UK trade and 33% of all trade with the EU is handled by the Port of Dover.

World's largest B100 biofuel tests

CSL successfully completes

In late November 2021, Canadian Steamship Lines (CSL) successfully completed the world's longest-running trials of B100 biodiesel on marine engines, accumulating nearly 30,000 running hours. Conducted on half of CSL's Canadian fleet, the tests resulted in a 23% total fleet life cycle reduction of CO2 as compared to marine gas oil (MGO).

During the trials, conducted in partnership with Canada Clean Fuels and with the collaboration of Sterling Fuels, 100% bio-content second-generation biofuel, requiring no modification to existing ship equipment, was substituted for 14,000 tonnes of MGO, a fossil fuel.

Louis Martel, CSL's President and CEO commented: '*Reducing the carbon footprint of our fleet is a strategic imperative at CSL and these trials clearly demonstrate the viability of biodiesel as a practical and effective option to drastically reduce our GHG emissions*.

'*Our test results confirm the potential of biodiesel as a realistic and immediate alternative to fossil fuel that holds great potential to support the decarbonisation of the marine transportation sector in Canada and throughout the world.*

'*We encourage the International Marine Organization, the Government of Canada and governments around the world to recognize the credible impact of biofuels as an interim solution in reducing emissions, and to support and implement a cost-competitive framework that promotes its use and secures supply*.'

Photo per: www.cslships.com CSL ©

CSL's biofuel trials were conducted on eight ships over a period of six months under a Transport Canada testing protocol. The B100 biodiesel was tested on main and

auxiliary engines and required no modification to existing equipment. Sourced in North America, the biofuel used was produced entirely from waste plant material. Emissions reductions were calculated through the Canadian government life cycle emission tool GHGenius.

Martel added: '*Biofuel is one of many decarbonisation strategies we are exploring at CSL. As we closely monitor the development of alternative fuels and continue to invest in R&D and innovative digital solutions, we are confident the use of biodiesel can speed up decarbonisation in the marine transportation sector by offering immediate and significant carbon reductions*.

ISWAN for Seafarers app

The Croydon, South London-based International Seafarers' Welfare and Assistance Network (ISWAN) is a Registered Charity in England and Wales.

It was reported towards the end of last month that ISWAN had joined forces with The Shipowners' Club (*see below*) to launch *ISWAN for Seafarers*, a new mobile app which offers offline access to ISWAN's 24-hour helplines and resources for seafarers. It is understood that no internet connection is needed.

Apparently the app does not use data when open and seafarers can access support and resources at any time while at sea or ashore. Instant access is available to 24-hour help and support.

With the touch of a button in the app, seafarers can contact one of ISWAN's free, confidential, international helplines such as: SeafarerHelp (for all seafarers and their families) and Yacht Crew Help (for professional yacht crew).

Useful information and resources specifically for seafarers includes ISWAN's self-help health materials, access to ISWAN's Seafarer Centre Directory, and guidance on topics such as contract issues, abandonment, and bullying and harassment.

With regard to the latest news and articles the app features a blog containing recent articles on seafarers' welfare-related news and topics, which can be refreshed when an internet connection is available.

Good reports

ISWAN reported that staff contacted a small group of seafarers who tested the *ISWAN for Seafarers* app while it was in the final stages of development. Positive feedback from seafarers is reported and seafarers who have used the *ISWAN for Seafarers* app have commented:

'*…all of the necessary information readily available in one app! If I ever need help again, I'll go straight to this app* '

'*…any seafarer can now seek assistance without involving anyone on the ship* '

'*very user friendly*'

'*I liked everything about the app and I would definitely recommend it to others*'

The *ISWAN for Seafarers* app can be downloaded by way of Google Play here: https://tinyurl.com/mvb4u66x

or via the App Store here: https://tinyurl.com/ynt47cn9

What do you think of this app?

ISWAN have asked if there is anything they could improve upon with the App, or maybe users have spotted something that is not working properly? They invite feedback to be sent here: iswan@iswan.org.uk

About the Shipowners' Club

The Shipowners' Club (https://www.shipownersclub.com/) has in-depth knowledge of the risks and liabilities faced when operating a fleet, borne from over 160 years of experience in providing Protection and Indemnity (P&I) cover, Legal Costs Cover and associated insurances. As market leader, the Club insures over 33,000 small and specialist vessels across the globe.

The Club has a wide spread of Members across a range of vessel types, operating sectors and geographical areas. This diversification delivers stability, allowing the Club to enjoy a strong balance sheet and an 'A' rating from Standard & Poor's.

The Shipowners' Club is one of the thirteen P&I Clubs which make up the International Group, collectively insuring over 90% of the world's ocean-going tonnage. For more information on the International Group readers are invited to see here: https://www.igpandi.org/

DNV and partners launch CETO joint industry project (JIP)

To develop low pressure solutions for CO_2 ship transport

It was reported from Oslo towards the end of December that Equinor, Shell, TotalEnergies, Gassco and classification society DNV would launch a new JIP to develop low-pressure systems for the transport of CO_2 by ships.

We understand that the CETO (CO_2 Efficient Transport via Ocean) JIP will carry out the technology qualification of a low-pressure ship design and identify methods to scale CO_2 transport volume, while reducing the associated risks, to support the development of opportunities in CCS.

CETO is funded by the project partners and GASSNOVA through the CLIMIT programme (see here: https://climit.no/en/) and is expected to be completed in 2023.

Key technology

Carbon capture and storage (CCS) will be a key technology if the world is to meet the goals of the Paris and Glasgow agreements. Although the technologies and the industry are very much still emerging, a possible challenge is connecting capture sources to facilities for use or storage sites, especially where pipelines are not an option. As a result, CO_2 ship carrying technology will be needed if large quantities are to be safely transported at costs that are commercially viable.

Equinor, Shell, TotalEnergies, Gassco and DNV launched the CETO (CO_2 Efficient Transport via Ocean) Joint Industry Project to develop low-pressure solutions for the transport of CO_2 by ships. Illustrated is what is understood to be a CO_2 production plant.

Photo: DNV ©.

Today, most transport of CO_2 by ship takes place on a small scale and at medium pressure (15 bar at -28ºC), limiting the possibilities of scaling up to meet future growth in CCS.

DNV in its announcement indicated that to transport CO_2 safely and efficiently on an industrial scale by ship, low pressure transport systems (approximately 7 bar at -49ºC) are a potential solution, as this enables much larger tank volumes, cargo capacities and therefore reduced transport costs. However, the industry currently has little practical experience with the transport of liquid CO_2 (LCO2) under these conditions, it was pointed out.

The JIP looks to build experience in low pressure transport and to fill a vital knowledge gap, by examining the fundamentals of a low-pressure CO_2 transport chain which would include:

- An LCO2 ship design, with a low pressure tank and cargo handling system.
- Material choice and testing.
- Medium scale testing and simulation of cargo handling.
- Conditioning and liquefaction.
- Testing LCO2 behaviour at low pressure.

Comment by DNV…

Johan Petter Tutturen, Vice President, Special Projects – Gas at DNV, commented: '*As an important part of tackling the climate crisis, reducing costs across the whole CCS value chain is essential. Low pressure CO_2 ship designs are a potentially important piece of the chain, but they need to be reliable and meet accepted safety standards. That is why we are very pleased to be working together with this strong consortium of CCS stakeholders to identify the technical risks and challenges to enable safe and economical operations going forward*.'

…by Shell…

Syrie Crouch, Vice President Carbon Capture Utilisation and Storage at Shell, added: '*As we build a wider global CCUS (carbon capture, utilisation and storage) network that connects CO_2 emitters with sinks, it is critical that we are able to ship CO_2 safely, economically and at scale. Ensuring these CO_2 transport vessels and their associated loading/unloading facilities are standardised to enable interconnectivity between capture and storage facilities will be key to success. Shell looks forward to working with the JIP on the next generation of CO_2 ships to deliver this vision*.

…by Equinor…

Elisabeth Birkeland, Vice President for Carbon capture and storage solutions in Equinor, reflected: '*Equinor believes that low pressure ship transport is an interesting way to scale up CO_2 transport solutions, but we need to make sure the technical risks are reduced to an acceptable level. That is why this project is important*"

…and by TotalEnergies

In conclusion Bruno Pahlawan, Vice President R&D Line Sustainability, TotalEnergies, said: '*We are very pleased to be part of this initiative, alongside our partners, to develop low pressure CO_2 ship carriers. This future technology will open the door to the large-scale transport of CO_2, which is an essential element for the upscaling of the CCS industry. It is fully in line with TotalEnergies' ambition to get to net-zero emissions by 2050 together with society, for its global business across its production and energy products used by its customers*.'

On a classical note

The CETO JIP is named after Ceto, who was a primordial sea goddess in Greek mythology. The programme builds on an earlier project carried out by the partners that investigated the technology gaps and identified qualification activities to demonstrate that the technologies offer the required levels of operational safety and reliability.

Enclosed space deaths research

Initial survey results

There is no doubt that enclosed space deaths continue to be one of the biggest occupational hazards aboard ship.

Several years ago, InterManager (https://www.intermanager.org/) launched a survey on enclosed space deaths, to which 5000 seafarers responded. A number of issues were raised in particular:

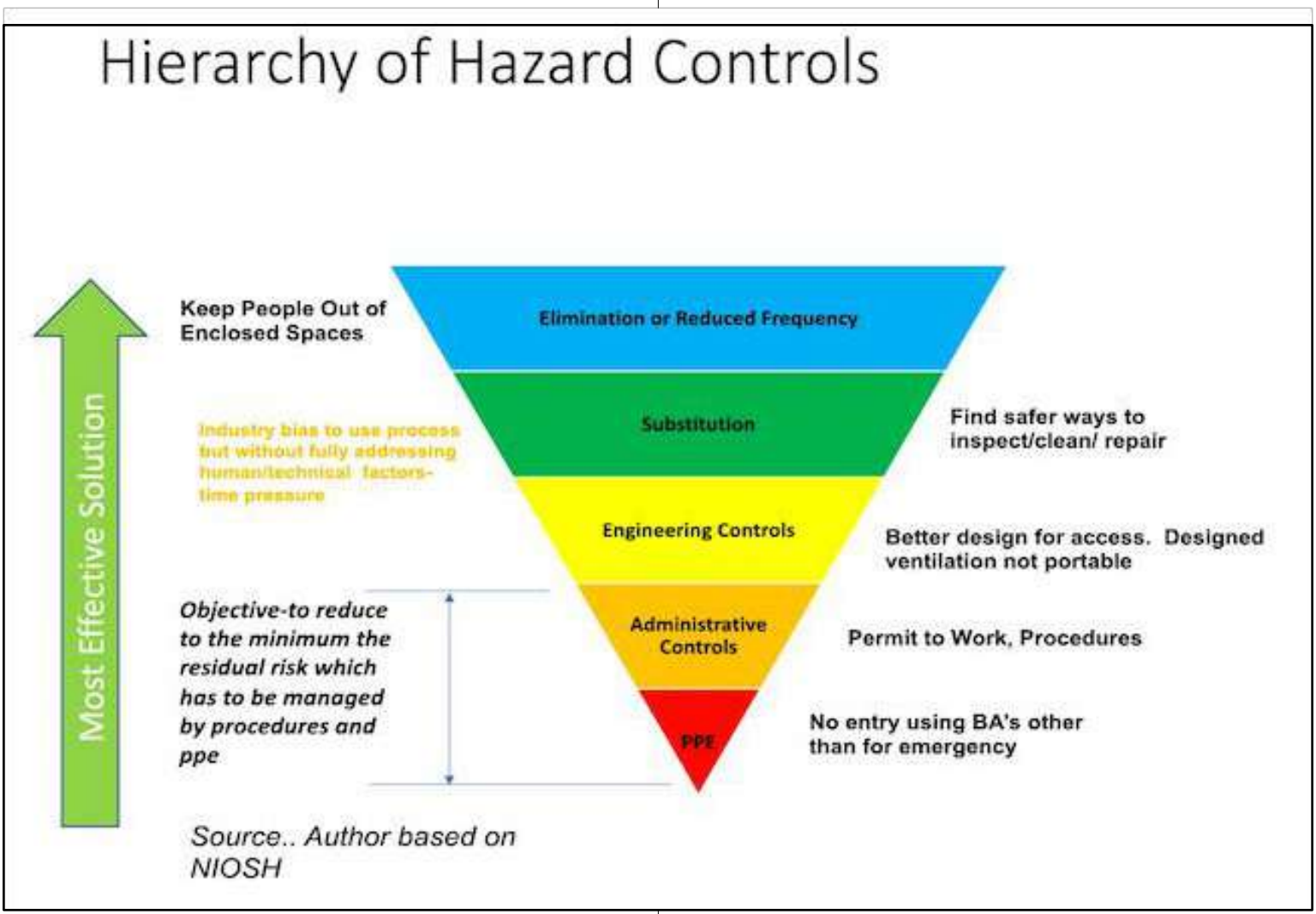
- Procedures often seem to seafarers, difficult to understand, confusing, and do not take account of the resources, equipment and time available aboard the vessel.
- Investigations of fatalities point to failures in the victims and in particular their failure to follow procedures.
- Commercial/time pressure is a significant factor and was described as 'verging on abuse'.
- Design and equipment added to the problems by creating hazards.
- Training was seen as being limited to tanker trades.

In response to these findings, eighteen months ago the Human Element Industry Group (HEIG) set up the enclosed space project. The project involves the HEIG members and some 50-100 maritime sector individuals examining a number of areas with a view to influencing changes in regulations, industry practice, and training, as well as improving awareness of the problems faced by seafarers. Most of the analysis is complete and it is appropriate to share some of this as HEIG moves into rolling out its action programme to deal with the problem.

The problems identified include:

I. Excessive reliance is placed on procedures for managing enclosed space entries.
II. Enclosed space procedures are complex, labour- and time-intensive, and require active management.
III. They may require specialist equipment and trained rescue teams.

In addition, regulation is built around IMO 1050(27) '*Revised Recommendations for Entering Enclosed Spaces Aboard Ships* which was last updated in 2011. There are some significant issues with this document and HEIG is preparing a submission to IMO, in conjunction with Flag States, to address some of these concerns. The UK's Code of Safe Working Practices (COSWP) has recently been revised with the participation of HEIG members and ISGOTT 6th Edition[1] was revised in 2020 jointly published by OCIMF, ICS and IAPH which included guidelines and recommendations for enclosed spaces. Further changes to industry practices are being considered.



Accident investigation study

In conjunction with MAIIF (Marine Accident Investigators International Forum: https://maiif.org/) the group looked at accident investigations and data which reinforced the views expressed above. MAIIF has written guidance on investigating enclosed space incidents that will widen the

scope of the investigation beyond the immediate incident and will emphasise organisational factors, equipment and its availability, as well as the time available for the entry.

The research identified that there is an excessive reliance placed on procedures. The technical solutions workstream has looked at the problem using the 'hierarchy of hazard control' model. The figure on previous page shows this model, which is based on the premise that eliminating a hazard is better than accepting it and relying on procedural controls to manage a hazardous situation. The work stream has identified a number of generic changes to the design of ships and equipment that can be made to improve safety in the industry, as well as to address some specific hazards. The group will also propose a means by which enclosed spaces can be classified for design and operational purposes. The group is also considering the design of equipment used for entering enclosed spaces aboard ship.

Time pressures

The 'time pressure work stream' has looked at the issue which has been a concern in some sectors of the industry for a long period of time and pressures on the global supply chain suggest this is not likely to get better soon. The workstream created a model for how excessive time pressure affects safety and identified the various sources of time pressure – which may include the charterer, ports and

terminals, owners, and on board ship.

In the course of this review, it became obvious that the time-pressure issue related to more than just enclosed space deaths but also to navigation, collision, grounding, capsizes, container stack collapses and other occupational hazards such as injuries during container lashing. The group will put forward some proposals to change regulation and industry practice to reduce excessive time pressure.

The group also looked how on board management of enclosed space entry can be improved as well as encouraging the use of STOP-WORK processes.

About the HEIG

The Human Element Industry Group (HEIG) is a group of NGOs with an interest in the human element (personnel or seafarers) and includes The Nautical Institute, IMarEST, InterManager, INTERCARGO, ITF, the International Chamber of Shipping, IFSMA, BIMCO, IMPA, Nautilus and IACS.

The group works closely with the IMO. The enclosed space project also included other organisations such as MAIIF and the Royal Navy.

IFSMA is a founding member of HEIG and provided the chair before handing it on to Captain John Lloyd at the Nautical Institute.

[1]International Safety Guide for Oil Tankers and Terminals.

The Neptune Declaration

A look back

Covid-19 has impacted the daily lives and wellbeing of seafarers in unprecedented ways, causing a humanitarian crisis at sea.

Hundreds of thousands of seafarers have been stranded working aboard ships beyond the expiry of their contracts. As the frontline workers of the maritime industry carrying 90% of global trade, seafarers play a vital role in ensuring the global flow of goods upon which the world depends.

Signing the Neptune Declaration

Recognizing that they have a shared responsibility to resolve the crew change crisis, more than 850 companies and organizations have signed the ***Neptune Declaration on Seafarer Wellbeing and Crew Change.***

The Neptune Declaration urges the implementation of four main actions to address the crisis:

1. Recognise seafarers as key workers and give them priority access to Covid-19 vaccines.
2. Establish and implement gold standard health protocols based on existing best practice.
3. Increase collaboration between ship operators and charterers to facilitate crew changes.
4. Ensure air connectivity between key maritime hubs for seafarers.

Crew Change Taskforce

At the end of the year the Maritime Industry Crew Change Taskforce sent a message to the international maritime community signed by Graham Westgarth of V Group and Jeremy Nixon of ONE-Line and we have much pleasure in reproducing it here:

'Dear Signatory to the Neptune Declaration,

'The crew-change crisis has been ongoing for almost two years and it has now been a year since the Neptune Declaration was initially launched. While the situation ebbed and flowed over the course of two years, the hope of coming out of the pandemic is now being overshadowed by fears posed by the omicron-variant.

Image credit: Joseph Furness, Project Still at Sea

'*Throughout the crisis, we have seen the incredible resilience of seafarers in keeping global supply chains operating as well as the ability of the maritime value chain to come together to facilitate crew-changes. However, on the negative side, it has also revealed the fragility of maritime supply-chains, it has taken away basic rights from seafarers and despite collaborative and individual company and government action, progress has been frustratingly slow. These challenges are here to remain, and we will continue the work to move from crisis-response to more long-term crisis management.*

'*As signatory you know how we – a group of maritime industry stakeholders – came together and established a taskforce to respond to the crisis and draft the Neptune Declaration, which more than 850 companies and organizations have now signed. We feel now is the time to look back to take stock of what has been achieved during this first year, and which challenges still remain – which we have included in the attached slides.*

'*As we move into the next stage of the crisis, ICS will be leading the push for the necessary changes, together with ITF and IMEC. Likewise, Global Maritime Forum will continue to publish the monthly Neptune Indicator, based on the data collected from ship managers to keep track on progress and development. The main focus of the taskforce members will be to support this ongoing work in any way possible.*

'*Thank you for all your good efforts and continuous support!*'

For more information

To learn more and to see the full list of signatories (of which IFSMA was one) in the Neptune Declaration readers are invited to see here:
https://tinyurl.com/3mruv762

To learn how to become a signatory, readers are invited to contact Bianca Garvin at bg@globalmaritimeforum.org

mv*Pride of Hull* – Marine Safety Investigation Report

https://tinyurl.com/3ece2msm

Summary

On 20 October 2020, the ro-ro passenger ferry *Pride of Hull* (built 2001; 59,925gt; 215.45m loa; Bahamas-flag.) was outbound in the Humber Estuary, (UK East Coast), when a fire was detected in the vicinity of the thermal oil circulation pumps, part of the vessel's heat reclamation and transfer system. Shortly afterwards, the vessel lost electrical power and propulsion but used remaining headway to anchor safely.

The vessel's Hi-Fog fire suppression system activated automatically but did not operate as anticipated and could not control the fire, which was extinguished using the vessel's fixed CO_2 system. The vessel returned to port, under its own power, the next day.

No one was hurt, damage was limited and there was no pollution.

The cause

Examination of the thermal oil circulation pump identified that progressive bearing resulted in extreme frictional heating, generating temperatures in the order of 1,200°C, far in excess of the auto-ignition temperature of the thermal oil used in the system. Assessment of the fire suppression system identified that the system's effectiveness was compromised by pump output when multiple zones were activated and its dependence on a domestic fresh water pump to maintain supply for longer than two minutes. Additionally, the system's pumps were not connected to the emergency switchboard and therefore stopped when the vessel lost electrical power. These limitations were compliant with requirements but were not reflected in emergency response guidance.

Recommendations

The Bahamas Maritime Authority is recommended to:

- Consider conducting a safety campaign to ensure all Bahamas registered vessels fitted with a fire suppression system installed under MSC.1/Circ.981 are aware of the findings of this report. Further, to verify that systems are operable as intended and any limitations understood by all persons involved and documented within relevant safety management system to ensure future learning.
- The Bahamas should consider, together with other interested States, proposing to the IMO an amendment to MSC.1/Circ.1387 requiring the

provision of emergency power for local protection systems.

- The (UK) Maritime and Coastguard Agency is recommended to: Consider sharing the findings of this report with operators, managers and surveyors to assist in the verification of system operating parameters in accordance with the revised guidelines contained within MSC.1/Circ.1387.

Editor's note:

The accident report was published by the Bahamas Maritime Authority on 30 November 2021 and in turn published by the UK Marine Accident Investigation Branch (MAIB) on 16 December 2021. Our text here is based on the Bahamas Maritime Authority document with grateful thanks ©.

MAIB Report into grounding of mv *Key Bora*

Kyleakin, Isle of Skye, Scotland

https://tinyurl.com/yn3phv3a

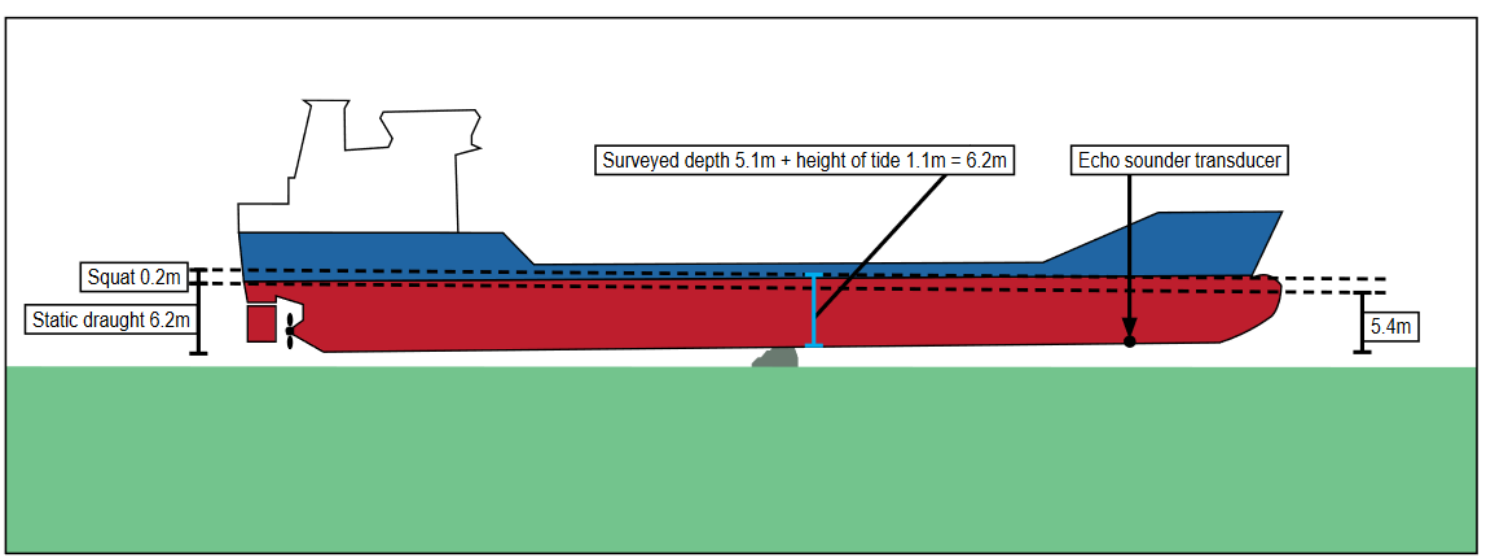


Figure 15: Illustration of *Key Bora* aground

At 1505 on 28 March 2020, the chemical tanker *Key Bora* (built 2006; 2,627gt; 92.86m loa; Gibraltar-flag) ran aground at Kyleakin pier, Isle of Skye, Scotland. *Key Bora*'s hull was holed by the grounding and floodwater entered empty ballast tanks; there was no injury or pollution. *Key Bora* was approaching Kyleakin pier, and the master was conning from the starboard bridge wing console. This was the first time that the vessel and the master had arrived at this pier and the berthing had been planned to coincide with low water, when slack tidal stream was expected. When *Key Bora* was very close to the pier, it ran aground on a charted 4.9m obstruction. After 12 minutes aground, *Key Bora* floated free and was berthed using its own power.

Key Bora ran aground because its passage plan had been based on inaccurate

information, including a dredge survey that did not show the charted hazard where the vessel grounded, and misleading tidal stream information. Additionally, the vessel's electronic chart display and information system had not been used effectively by the crew to warn of danger ahead.

The investigation also identified significant weaknesses in the safety management of the Kyleakin pier, owned and operated by the aquaculture company Mowi Scotland Limited. This included that the site was not being operated in accordance with the Port Marine Safety Code, and there was no marine safety management system. Mowi Scotland Limited had cited both items as risk mitigation measures in its application to Marine Scotland to build the pier; however, these measures had not been implemented before operations commenced. This happened because there was no process in place to ensure that risk mitigation measures, described in the licence application, were in place before operations commenced.

Since the accident, Marine Scotland has added a standard condition to all marine licences requiring licensees to carry out the licensable activity in accordance with the licence, the application, and all plans and programmes submitted as part of the application.

The MAIB report makes a recommendation to Mowi Scotland Limited to ensure that marine operations at Kyleakin follow the guidance in the Port Marine Safety Code, and to consider upgrading the facility to a statutory harbour authority.

Editor's note:

The accident report was published by the UK Marine Accident Investigation Branch (MAIB) on 16 December 2021. Our text here is based on an extract from the report and appears here with grateful thanks.

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