

IFSMA

NEWSLETTER

The Shipmasters' International Voice



SOUTH CHINA SEA (May 1, 2024) Sailors aboard the Arleigh Burke-class guided-missile destroyer USS Russell (DDG 59) handle supply pallets during a replenishment-at-sea with the Henry J. Kaiser-class fleet replenishment oiler USNS John Ericsson (T-AO 194) in the South China Sea, May 1, 2024. U.S. Indo-Pacific Command forces perform operations in and around critical sea passages and trade thoroughfares to deter threats that create regional instability and impinge on the free flow of goods, people, and ideas. (U.S. Navy photo by Mass Communication Specialist 3rd Class John A. Miller)

Contents

Secretary General's Message	2
From the News Editor: Remembering the ocean liners	2
The IMO Digest	4
IMO biofouling project	4
The hazardous and noxious substances liability treaty	4
Bangladesh: Safe, sustainable ship recycling	5
Latin America: tackling marine plastic litter	6
Sailing together: Striving for a future-proof IMO MASS Code	7
Red Sea attacks and resurging piracy	8
First Sea Lord's Sea Power Conference 2024	8
Madagascar	10
Somali maritime security training	10
IMO shares expertise on oil spill response	11
IMO MSC 108	12
Taking the weight. Michael Grey	14
US and Philippines Maritime Safety	14
NATO Operation Sea Guardian	15
Matson news	16
The maritime recruitment crisis	16
North Sea surveillance	17
Shipping and the environment: ICS guide	18
An Australian Strategic Fleet	19
A matter of priorities. Michael Grey	19
Assessing port infrastructure risks	20
Countering drone threats to shipping	20
The ITF Photography prize 2024	22
Autonomous shipping	22
Transforming vessels	24
NOAA predicts above-normal 2024 Atlantic hurricane season	24
In hot water: exploring marine heatwaves	26
USCG training with the Brazilian Navy	27

Readers are reminded that the opinions expressed in the IFSMA Newsletter are those of the various authors and providers of news and are not necessarily in accord with IFSMA policy.

Secretary General's Message

Well, as predicted, it has been a very busy month at the IMO in the run up to and during the Maritime Safety Committee (MSC 108). At the very front of discussions was the continuing security situation in both the Red Sea and the Black Sea. IFSMA was very much involved with the industry in proposing an IMO Resolution on the issue in the Red Sea condemning the Houthis rebels for their continued attack on shipping and also the action of the Iranians. We have demanded this ceases and all crew of mv *Galaxy Leader* and mv *Aries* and the ships be released. I attend weekly meetings on security issues and if there is any further news I will let you know and meanwhile 60% of the trade that used to go through the Suez is now re-routeing via the Cape.

IFSMA had a very successful meeting on the Working Group on the drafting of the MASS Code where we were represented by David Appleton (Nautilus International) and were very much the lead NGO on seafarer issues, in particular on the role of the shipmaster both onboard when manned and ashore in the Remote Operations Centre and we achieved considerable success in our endeavours. This is important work fighting for the safe future of the industry and for seafarers and we continue to take this forward with the completion date of this work to be mid-2025.

I had hoped there would be some discussion on the Comprehensive Review of the STCW Convention, but this was not to be as the proposal for all the subjects to be reviewed by the HTW sub-committee was agreed without comment and sent back to the sub-committee to continue their work. We will be actively involved in this and once again I will keep you informed of any progress.

I hope you enjoy the articles Paul Owen and Paul Ridgway put together for your interest and please do send in any proposals which you might have as we look forward to hearing your views.

Take care out at sea and I wish you fair winds and following seas.

Jim Scorer
Secretary General

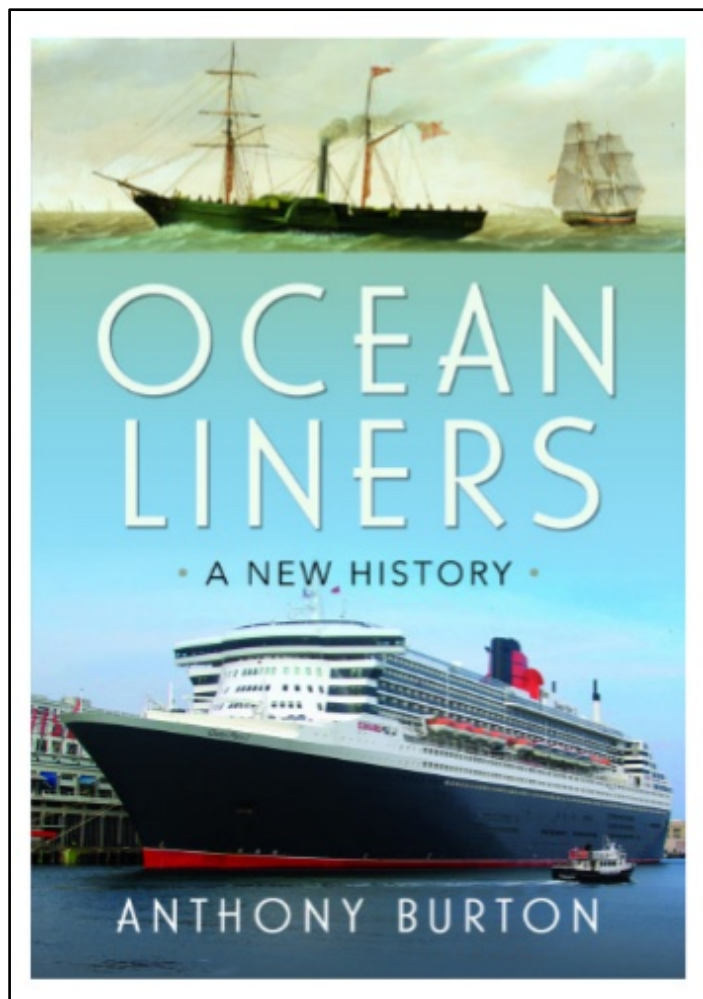
From the News Editor

Remembering the ocean liners

From Pen & Sword Transport (www.pen-and-sword.co.uk) has come *Ocean Liners: A New History* (hardback) by Anthony Burton at 184 pages with 100 mono illustrations. ISBN 978 1 39904 979 5, price £22.50.

There has always been a romance around ocean liners and this book looks into the reality of travelling the oceans of the world with cargo and passengers on scheduled services.

In his introduction Burton asks what distinguishes the ocean liner from any other ship? In his view the criteria it must meet to qualify for his book are simple. Firstly, the vessel must cross an ocean, not just steam to, say, the near Continent. Secondly, although it might carry small amounts of cargo, the main concentration must be on passengers. Thirdly, it must offer a regular service between principal ports, without offering special arrangements for excursions, to distinguish it from cruise ships. It makes no difference whether its propulsion is sail, steam or motor.

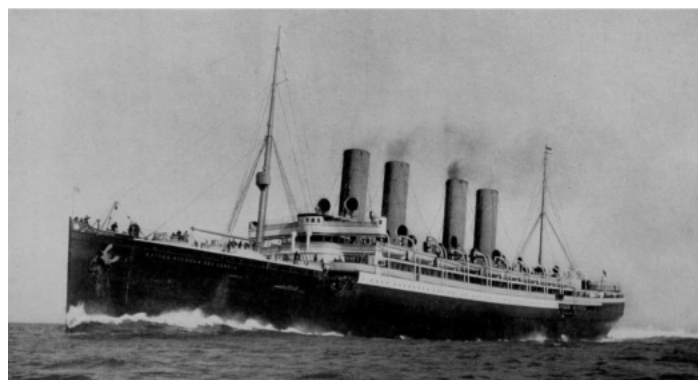


After this introduction fourteen chapters deal with the introduction and meaning of a scheduled service leading to the commencement of the steam age. What follows is the challenge by American competition and much on the building of ships, their fitting out and extensive design and furnishing. Crew are considered along with the passengers' lot.

Other chapters introduce the Blue Riband of the Atlantic, business east of Suez, safety at sea, ocean liners in war from the Crimea to the Falklands, social history of liner travel and the loss of business to the airlines. It is important to note that the ocean liner played a huge part in servicing the British Empire by moving its staff and baggage around the globe through the 19th century to independence the 1960s.

To close there is a valuable Appendix which lists holders of the Blue Riband of the Atlantic, an award given for the fastest average speed for crossings between Europe and North America. There is a list of

the ships that won the title for the westbound passage. Several beat their own times more than once.



The German liner Wilhelm de Grosse of Norddeutsche Lloyd. In 1898 she crossed the Atlantic at an average speed of 22.29 knots.

A further list is of publications for further reading, acknowledgements by the author and the helpful index showing amongst other listings lines, ships and yards.



Normandie of Compagnie-Générale Transatlantique (otherwise known as French Line) held the Blue Riband in 1935 and 1937 achieving 30.58 knots.

It is not always realised by the landsman that a great liner might have almost as many crew as passengers. The author considers all those who kept the ships running, from the Black Gang in the engine room to the Master on the bridge and the catering (or hotel) departments and more, a huge muster. The result is a rounded view of what it meant to travel on some of the greatest ships of the era.



French Line's France, launched in 1960, served to 1974, laid up and sold on, renamed Norway, then Blue Lady. Scrapped in 2008.

In all this is a valuable social history embracing industry, trade, society and the approach of owners

who engaged naval architects and shipbuilders to provide what the seagoing public came to expect. At the same time it demonstrates that the owners took on the competition and earned revenue as companies were consumed by amalgamation and the cruise industry went on to thrive as it does today.

Anthony Burton is a professional author who specialises in the history of transport and technology. He has written several books on canal and maritime history and wrote and presented the BBC TV series *The Past Afloat*, looking at historic vessels. He has also written a history of British shipbuilding.

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 biofouling project

Biodiversity threat extended

IMO's TEST Biofouling* project has received the greenlight to continue its work to tackle the transfer of invasive species via ships' hulls for another year.

A no-cost extension signed between IMO and the Norwegian Agency for Development Cooperation (Norad)** on 10 April 2024 will extend the TEST Biofouling project until 31 December 2026, beyond its original implementation period of 2022 to 2025.

This will ensure support is given to complete longer-term plans of countries participating in the project, including the deployment of demonstration activities.

The TEST Biofouling project pilots innovative technologies and showcases sustainable methods to manage ship's biofouling in a range of developing countries. Biofouling refers to the build-up of aquatic organisms on ships' hulls, which can multiply when introduced into new environments and out-compete native species. It has been identified as one of the greatest threats to marine biodiversity and to the industries that depend on it, such as tourism and fisheries.

The project supports the implementation of the 2023 IMO Biofouling Guidelines¹, and complements actions undertaken by the GEF-UNDP-IMO GloFouling Partnerships project².

New website launched to share information

A newly-launched website for TEST Biofouling highlights the pilot projects, in addition to providing valuable resources including a technology portal, training packages, a video library and various publications has been launched here: <https://testbiofouling.im.org/>

Biofouling training delivered in Latin America

As part of the capacity-building element of TEST Biofouling, a training course on biofouling management was delivered in the Latin America region from 8-11 April 2024 by MTCC Caribbean.

The course, titled *Introduction to Marine Biofouling: Impacts and Management of Risks*, provided a detailed introduction to biofouling, along with management solutions and technologies available to tackle it. (Available on IMO e-learning)

Participants from Argentina, Chile and Panama included representatives from transportation and fisheries ministries, maritime administrations and port authorities, women in maritime organizations, climate and environment agencies, and training institutions.

The course was developed by the GEF-UNDP-IMO GloFouling Partnerships project.

*<https://testbiofouling.imo.org/>

**<https://www.norad.no/en/front/>

¹At 64-pages: <https://tinyurl.com/2u37p327>

² <https://www.glofouling.imo.org/>

The hazardous and noxious substances liability treaty

The final piece of the puzzle in the liability and compensation treaty regime for shipping will fall into place when the 2010 Convention on Liability for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea (HNS)* enters into force.



A workshop held 1 & 2 May jointly hosted by the International Oil Pollution Compensation Funds (IOPC Funds) and the IMO focused on the practical elements of implementation, specifically on HNS cargo reporting. It was attended by representatives from 57 States and a wide range of participants from industry and interested organizations.

Polluter pays principle

The HNS Convention establishes the 'polluter pays' principle, by ensuring that the shipping and HNS industries provide compensation for those who have suffered loss or damage resulting from an HNS incident. Reporting of HNS cargo is essential since the HNS Convention will establish a two-tier system for compensation to be paid in the event of accidents at sea, involving hazardous and noxious substances such as chemicals.

Tiers One and Two

Tier One will be covered by compulsory insurance taken out by shipowners, who would be able to limit their liability. In those cases where the insurance does not cover an incident, or is insufficient to satisfy the claim, a second tier of compensation will be paid from a fund, made up of contributions from the receivers of HNS. Contributions will be calculated according to the amount of HNS received in each Party in the preceding calendar year.

Diplomatic Conference of 2010

Opening the workshop, Mrs Dorota Lost-Sieminska, Director of the Legal Affairs and External Relations Division of IMO, recalled the 2010 Diplomatic Conference that had adopted the HNS Protocol and said that after fourteen years the treaty was nearing entry into force. The 2010 HNS Convention enters into force after twelve States (including four States with more than two million units of gross tonnage) with a total of 40 million of contributing HNS cargo have ratified the 2010 HNS Protocol.

IOPC Funds' Director, Mr Gaute Sivertsen, reaffirmed that sentiment in his opening remarks, stressing that the aim of the workshop was to assist States in the development of an efficient reporting system for HNS cargo.

A manageable task

Mr Sivertsen, further referenced the IOPC Funds experience in managing the Funds, established by IMO treaties, which provide compensation for oil pollution damage resulting from spills of persistent oil from tankers. whilst the reporting of HNS would be more complex, it was certainly manageable with the right systems and processes in place from the start, he said.

Mr Jan Engel De Boer, Senior Legal Officer at IMO, said there were, at present, eight Contracting States to the Protocol, five of which have more than two million units of gross tonnage. The eight Contracting States received, in 2022, a total quantity of 17,527,853 tonnes of cargo contributing to the general account (which amounts currently to 43.8% of the requirement).

Commitment

Given that several countries have expressed their commitment to ratifying the treaty in the near future, he noted that there is a good chance that the entry into

force provisions will be triggered in 2025 so that the convention will enter into force in 2027.

Panel sessions and presentations covered the current status of the 2010 HNS Convention. It also considered the tools available to assist States with various aspects of implementation and reporting. These included the HNS Finder, which provides information on HNS classification criteria and verifies whether a substance qualifies as contributing cargo.

During a panel session, a number of States which have ratified the 2010 HNS Protocol shared implementation experiences and highlighted the need to consult stakeholders and to adopt legislative and regulatory frameworks as part of the process.

Compulsory insurance certificates on board

It was highlighted that it is important for flag States to become States Parties to the Convention, so that their ships have the required compulsory insurance certificates on board. IMO will work to moving to electronic certificates for the underlying compulsory shipowner insurance

Further presentations covered the different reporting options available under the Convention.

For more information

Presentations delivered during the workshop will be published on the HNS convention website: <https://tinyurl.com/5h7e4hy6>

Once the conditions for entry into force of the 2010 HNS Protocol are fulfilled, the Secretary-General of IMO will, in accordance with article 43 of the 2010 HNS Convention, convene the first Assembly of the HNS Fund.

* <https://tinyurl.com/yts48zap>

Bangladesh: Safe, sustainable ship recycling

IMO promotion

It was reported by IMO on 10 May that a series of workshops held in Dhaka and Chattogram (formerly Chittagong) in Bangladesh had equipped up to 300 key stakeholders with essential knowledge about how to recycle ships in a safe and environmentally-sound manner.

Four workshops were held over two weeks (in Dhaka on 24-25 April and 8-9 May; in Chattogram on 28-29 April and 5-6 May), targeting shipyard managers, national and local government officials and other stakeholders.

Funded by Norway

The training sessions were organised under IMO's SENSREC ¹, funded by the Norwegian Embassy in Dhaka and implemented by IMO and Bangladesh's Ministry of Industries where SENSREC = Safe and Environmentally Sound Recycling of Ships.

The Hong Kong Convention

The project aims to boost national capacities for sustainable ship recycling, while supporting the country's progress towards implementation of the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships. The Hong Kong ² establishes global standards for the recycling of ships.



This workshop series allowed participants to share experiences, best practices and strategies for implementing the Hong Kong Convention, as well as managing hazardous waste from the ship recycling industry.

Hazardous waste management is a critical issue for Bangladesh, where the ship recycling industry has historically struggled with the improper handling and disposal of toxic substances, leading to significant environmental and health impacts. Over the past few years, substantial progress has been achieved by a few ship recycling facilities in Chattogram, raising the bar for environmental standards and practices for the rest of the industry.

The main workshop was opened by Mrs Zakia Sultana, Senior Secretary of the Ministry of Industries of Bangladesh and Mr Espen Ritker-Svendsen, Ambassador of Norway to Bangladesh.

ILO-led discussions

Sessions were delivered by national experts and development agencies. The International Labour Organization (ILO) led discussions on operational safety and health, while the Japanese International Cooperation Agency (JICA) and German Development Cooperation (GIZ) shared information about future planning for building a facility for treatment, storage and disposal of hazardous waste in Chattogram, as well as updated national regulations on hazardous waste management and disposal.

Improving standards

SENSREC was launched in 2015 and is currently in its third phase. SENSREC Phase III ³ focuses on improving ship recycling standards in compliance with

the Hong Kong Convention and enhancing capacity building for the Government of Bangladesh in legislation and knowledge management. Specific assistance is also provided for the establishment of a facility for treatment, storage and disposal of hazardous waste.

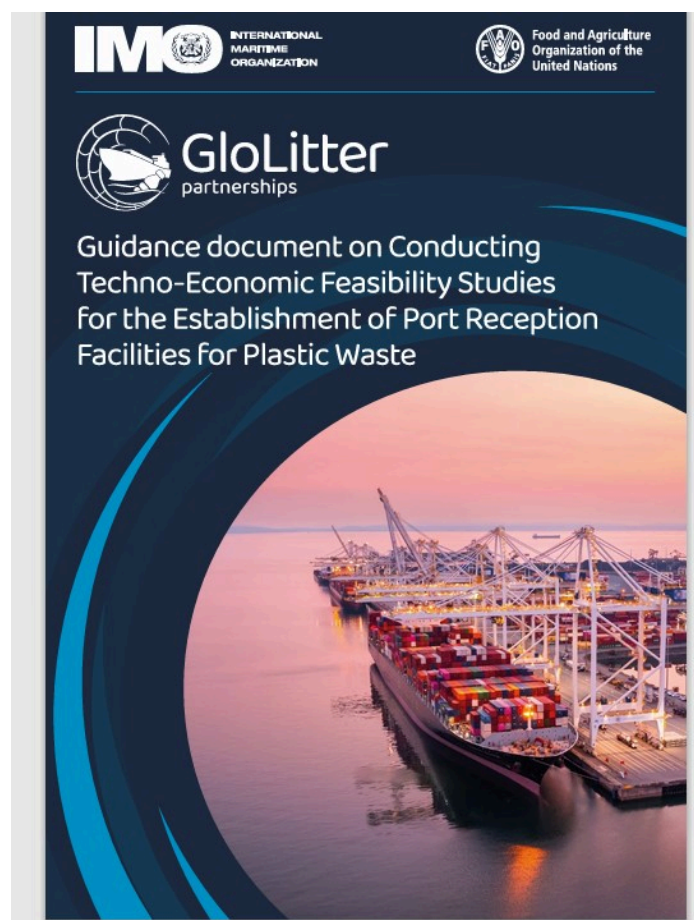
The Hong Kong Convention will enter into force on 26 June 2025.

The IMO SENSREC corporate video is to be found here: <https://tinyurl.com/3z6eakfh>

1. <https://tinyurl.com/3z6eakfh>
2. <https://tinyurl.com/59xcm6m3>
3. <https://tinyurl.com/mryf7zjn>

Latin American: tackling marine plastic litter

Ensuring litter does not reach the sea from shipping and fisheries in both the Atlantic and Pacific oceans is a key ambition for countries in Latin America.



According to IMO seven countries in the region set out their priorities for regional action, during a meeting in Brasilia held from 8-12 April: the Latin America Regional Task Force Meeting and Workshop, held under the GloLitter Partnerships Project. This was reported by IMO in early May.

Joint IMO / FAO project; Norwegian funding

The GloLitter project is jointly implemented by IMO and the Food and Agriculture Organization of the

United Nations (FAO), with funding from the Government of Norway through the Norwegian Agency for Cooperation Development (Norad).

It is understood that this project aims to support countries to take action to tackle marine plastic litter from sea-based sources, through national action plans and legal and policy reform, including implementation of IMO treaties which regulate the discharge of waste at sea.

Raising awareness

Furthermore, the project helps to raise awareness around port waste management, the problems posed by Abandoned, Lost or Otherwise Discarded Fishing Gear (ALDFG) and the adoption of the FAO Voluntary Guidelines on the Marking of Fishing Gear (VGMFG).

Broad participation

The regional event brought together representatives from maritime and fisheries authorities of GloLitter Lead Partner Country Brazil, from Partner Countries Argentina, Colombia, Ecuador, and Peru; and from Chile and Uruguay (participation of the latter countries was co-financed by the Technical Cooperation and Implementation Division of IMO).



Countries shared best practices and heard from experts and then identified shared priorities based on location: Atlantic waters (Brazil, Argentina and Uruguay) and the waters of the Pacific Ocean (Colombia, Ecuador, Peru and Chile).

Atlantic group

In the Atlantic, the countries identified the need for regional workshops, one on sharing best practices towards development of national action plans on addressing marine plastic litter; and one on the marking of fishing gear, particularly for gillnet fleets.

Pacific group

The Pacific waters group proposed three regional activities: establishing a digital catalogue of national activities and experiences relating to marine plastic waste management; identifying a port and a model

fishery in terms of treatment and reception of ship waste, to serve as a reference, for replication in the Southeast Pacific region; and a programme to identify the level of understanding and awareness on marine litter (known as 'marine litter literacy') in artisanal fisheries.

The proposals are now under development with the countries and the GloLitter team.

The Latin America Regional Task Force meeting was the fifth regional activity under the GloLitter project, following similar workshops in the Asia, Central America and Caribbean, and Africa regions.

Readers wishing to learn more about the GloLitter Partnerships Project are invited to see here: <https://qlolitter.imo.org/>

Sailing together: Striving for a future-proof IMO MASS Code

In recent weeks IMO held a symposium with the title: *Sailing together: Striving for a future-proof IMO MASS Code*. The event was co-sponsored by IMO and the Republic of Korea

At the opening on 14 May IMO Secretary-General Arsenio Dominguez delivered an address and we are privileged to publish highlights here below.

'Your Excellency, Ambassador of the Republic of Korea to the United Kingdom, Mr. Yeo-cheol Yoon

'Excellencies, ladies and gentlemen,

'Welcome to the Symposium Sailing together: Striving for a future-proof IMO MASS Code, which will address one of the current challenges facing the maritime industry – the development of a comprehensive instrument for the safety of Maritime Autonomous Surface Ships (MASS).

'I wish to extend my heartfelt gratitude to the Republic of Korea for co-sponsoring this Symposium and for their unwavering commitment to advancing safety and sustainability in maritime transportation.

'The emergence of MASS presents fascinating opportunities to enhance efficiency, reduce emissions and improve safety at sea. However, with these opportunities come unique challenges that must be addressed with foresight and diligence.

'Today's agenda is comprehensive, spanning discussions on ongoing various MASS projects, technological advancements, challenges for harmonious technology development, and the development of the non-mandatory MASS Code. Each session of this Symposium is designed to share expertise and chart a collective path forward, towards a manageable future-proof regulatory framework.

'From exploring the evolving path of MASS technology, hearing from experts on ongoing projects in Norway, the development of verification procedures, and the demonstration of autonomous

ship technologies; you will delve into the challenges for harmonious technology development, addressing topics such as: the production of autonomous navigation systems; assurance frameworks for MASS operations; and the impacts of commercialization on maritime operations.

'Finally, the focus on the development of the MASS Code and operational aspects, including, cyber risk management; policy considerations; and the imperative for greener, safer, and smarter logistics are in line with conversations to be held during the upcoming Maritime Safety Committee, ensuring that the MASS Code is comprehensive, adaptive, and aligned with the evolving needs of the maritime industry.'

'Let us seize this opportunity to ensure that MASS technology will accommodate the seafarers and the human element; serve maritime safety; protect the environment; and provide for greener shipping for generations to come.'

Red Sea attacks and resurging piracy

IMO S-G spotlights seafarer safety

IMO Secretary-General Arsenio Dominguez has underscored the plight of seafarers on the frontlines of maritime security threats, in light of ongoing attacks on shipping in the Red Sea as well as rising cases of piracy off the coast of Somalia.

Opening the 108th session of the Maritime Safety Committee (MSC 108), which met in London from 15 to 24 May to discuss maritime security and safety issues, he stated: *'The safety and well-being of seafarers remain of utmost importance, especially considering the ongoing challenges highlighted by recent distressing events in the Red Sea and off the coast of Somalia.'*



'Seafarers affected by these incidents must not be forgotten and it is incumbent upon us to pursue every available avenue to secure their safe return to their loved ones and their livelihoods.'

He reiterated his call for the immediate release of the *Galaxy Leader* and its crew, who remain hijacked since November 2023.

Possible action

The Committee, which deals with all matters related to maritime safety and maritime security under the scope of IMO, discussed possible actions to address the critical situation facing shipping in the Red Sea. The issue continues to impact the global economy and freedom of navigation, while endangering the marine environment. It has already cost the lives of innocent seafarers.

Growing number of cases

The Committee went on to discuss growing cases of piracy and armed robbery against ships, which have increased by approximately 15% between 2022 (131 incidents) and 2023 (150 incidents).

S-G Dominguez added: *'I am deeply concerned over the first increase in the number of incidents for several years, and worry that growing global instability is a contributory factor... I urge this Committee and all stakeholders to take every action possible to address this alarming trend.'*

Remembering the Djibouti and Yaoundé Codes of Conduct

He commended regional and international efforts to implement the Djibouti and Yaoundé Codes of Conduct. These regional initiatives bring together countries in the region to cooperate on joint actions to address maritime security issues, particularly piracy and armed robbery. These include capacity-building initiatives for national authorities, coordinating activities, sharing experiences and expertise and developing relevant regional strategies.

Other key issues discussed at MSC 108 included developing a code to regulate Maritime Autonomous Surface Ships (MASS), developing a safety regulatory framework to support the reduction of GHG emissions from ships using new technologies and alternative fuels, and addressing violence and harassment in the maritime sector.

First Sea Lord's Sea Power Conference 2024

Future Navy: Maritime in the 2040s

In Britain the Chief of Naval Staff is known as the First Sea Lord and this year the Council on Geostrategy (of King's College London) with a consortium of British universities organised and hosted the First Sea Lord's Sea Power Conference.

This event was held on 14 and 15 May at Lancaster House in the Mall, not far from Trafalgar Square. This year's event was the second the Council on Geostrategy has been chosen to deliver the annual flagship conference of the Royal Navy.

The conference focused on a particularly important and long-term topic – the future of the Royal Navy, specifically its vision for 2040. The conference aimed not only to articulate, but also to deliver this vision by fostering a dialogue between the private and public sectors and by bringing together officers, officials, parliamentarians, industry, media and academia.

At this prestigious gathering IMO Secretary-General Arsenio Dominguez delivered the keynote address to the Conference on 14 May.

In it he said: *Excellencies, distinguished participants, ladies, and gentlemen,*

'It is a great pleasure to be here today. I wish to extend my deep gratitude to the First Sea Lord, the Royal Navy and the Council of Geostrategy for hosting this event and inviting me to speak.



*Admiral Sir Ben Key KCB CBE ADC
First Sea Lord and Chief of the Naval Staff, Royal Navy.
Photo: Ministry of Defence, Crown Copyright 2024. ©.*

'Today, we are here to contemplate the future of Shipping, but first, I would like to take a moment to discuss the past.

'For centuries, our industry has been the primary means by which nations and people exchange not only goods, but also ideas, traditions, and cultures. The economically and culturally interconnected world we live in today owes much to the maritime industry and the dedicated seafarers who form its backbone.

'Across generations of resiliency and innovation, our sector has been refined into a beacon of efficiency. Consequently, maritime trade dominates global commerce.

'Despite the critical impact our industry has on people's livelihoods, it is only recently that international events, like COVID-19 and geopolitical situation, have brought seafarers and maritime issues into the public spotlight.

'I firmly believe that we possess the resources and skills to tackle the challenges that we are being presented with. More than that, it is past time that the seafarers of the world get the recognition they deserve for their critical role in transporting, from one part of the world to the other, everything from lifesaving food and medicine to computers and smart phones.

'At the International Maritime Organization (IMO), we often say: No Seafarers, No shipping.

'And in light of recent geopolitical events, I want to stress:

'Without seafarers, there is no shipping, and without shipping there is no international trade.

'It is both a moral imperative and strategic necessity for our industry that we unite to ensure the safety and security of those who serve at sea.

'All Member States have to work together and coordinate with the industry to ensure the security of navigation while respecting the principles of international law on the freedom of navigation.

'I would like to take this moment to condemn the attacks once again against merchant vessels and their crew in the Red Sea. These attacks are categorically unacceptable, and we need to work together to protect seafarers in the region.

'International shipping must not be targeted and used as a mean of exerting pressure in geopolitical crises.

'Tomorrow, I will open the Maritime Safety Committee meeting at IMO, where this and issues such as piracy, will be discussed at length. Through discussions with all Member States, we can identify appropriate solutions.

'Supporting the coastal states of these regions in implementing the IMO's instruments is important. The IMO remains committed to providing capacity building assistance to Member State in the implementation of maritime security measures, such as through the IMO's Global Maritime Security Integrated Technical Co-Operation Programme.

'We are on a pathway to decarbonize the sector; enhance safety and security and be truly sustainable.

'I wish to emphasize that the safety and well-being of seafarers remains of the utmost importance to us. The IMO, in coordination with our Member States, will

continue to work diligently to ensure the safety of those who serve at sea.

'I wish to reiterate my sincere appreciation to the organizers of this Conference, and for their unwavering commitment to safeguarding seafarers and upholding international law.'

'I look forward to our continued efforts to overcome existing, new, and future challenges and opportunities that will be presented to the shipping industry. Let us ensure the maritime industry's continued stability and resilience for decades to come.'

'Thank you.'

Historian Dan Snow, a speaker at the conference, appears in a YouTube presentation setting the maritime scene, the importance of waterborne trade and its naval protection. This can be seen here: <https://tinyurl.com/bdh8kf7t>

Madagascar

Ballast Water Management and Anti-fouling Systems Workshop

A national workshop in Antananarivo, Madagascar, held from 14-17 May underscored the importance of IMO's Ballast Water Management (BWM) and Anti-fouling Systems (AFS) Conventions for the protection of the marine environment and biodiversity.



The BWM Convention, which entered into force in 2017, aims to prevent the spread of harmful aquatic organisms in ships' ballast water from one region to another. It does so by requiring all ships in international traffic to manage their ballast water and sediments to a certain standard, according to a ship-specific management plan. All ships must also carry a ballast water record book and an international ballast water management certificate.

The AFS Convention entered into force in 2008, setting out controls on certain harmful substances in anti-fouling systems, including organotin compounds (TBTs) and, from 2023, cybutryne. It also provides a mechanism for introducing controls on additional substances in the future.

Implementation at a national level exercised

Through presentations, group discussions and role-play exercises, twenty-seven government officials covered the actions to take at a national level to implement and enforce the conventions.

Broad range of subjects

Subjects covered included:

- An overview of ballast water management and anti-fouling systems.
- An overview of the BWM and AFS Conventions and related Guidelines.
- Understanding the obligations of Parties under the BWM and AFS Convention.
- Compliance monitoring and enforcement for port State control.
- Risk mitigation.
- Other technical and regulatory aspects.

IMO and national and regional workshops

Since the adoption of these Conventions, IMO has run national and regional workshops to encourage and assist countries in their ratification, effective implementation and enforcement. This has contributed to a steady growth in the ratification status of these conventions – contributing to improving protection of the marine environment.

Madagascar host

The workshop was organized by IMO and hosted by Madagascar's Agence Portuaire Maritime et Fluviale (APMF) and delivered through IMO's Integrated Technical Cooperation Programme.

Somali maritime security training

Whole-of-government approach

Somali officials have strengthened their skills in decision-making and policy development through an IMO-led workshop focusing on a 'whole-of-government' approach to maritime security.

The workshop, delivered on 15 and 16 May in Mogadishu, brought together twenty participants from a range of Somali government departments, along with observers from international development partners.

This gathering was the latest in a series of maritime security workshops run by IMO under the EU-funded Regional Programme for Maritime Security in the Red Sea Area (Red Sea Project)*.

Need for cooperation

Using IMO's model for a whole-of-government approach to maritime security, the seminar demonstrated the need for cooperation amongst different government departments and agencies. Participants examined a range of scenarios, determining their respective roles and responsibilities as well as processes and procedures. They explored

how these may develop, whether for routine business or during an incident.

Agencies working together

Participants discussed how their different agencies could work together towards the establishment of Somalia's National Maritime Security Committee (NMSC) and development of the National Maritime Security Strategy (NMSS). Discussions highlighted the importance of multi-agency collaboration and the active engagement of all stakeholders for the effective application of maritime security measures.



The event was opened by the State Minister of Ports and Marine Transport of Somalia, HE Mohamed Abdulkadir Mohamed and Advisor, Office of National Security, Mr Abdimalik Abdullahi.

Broad representation

Sessions benefited from the participation of the United Nations Assistance Mission in Somalia (UNSOM) and the European Union Capacity Building Mission in Somalia (EUCAP), which have extensive experience in enhancing safety and security of navigation in the region, including coordinated efforts with other EU-funded programmes such as CRIMARIO II and EUNAVFOR ATALANTA.

On the Red Sea Project

The Red Sea Project, funded by the European Union, is delivered by IMO, the United Nations Office on Drugs and Crime (UNODC), INTERPOL and the Intergovernmental Authority on Development (IGAD). The programme aims to assist participating countries in the Southern Red Sea and Gulf of Aden, to enhance maritime security and safety in the Red Sea Area, in line with the 2050 Africa's Integrated Maritime Strategy**.

* <https://tinyurl.com/yt2e2m78>

** <https://tinyurl.com/ybp9fvt4>

IMO shares expertise on oil spill response

Prevent, Prepare, Respond, Restore

IMO outlined key insights for tackling marine pollution incidents at the International Oil Spill Conference (IOSC 2024: <https://www.iosc.org/>) held in New Orleans from 13 to 16 May.

Under the theme *Prevent, Prepare, Respond, Restore*, hundreds of professionals from the international spill response community, private sector, government, and non-governmental organizations came together to discuss challenges, innovation and share spill preparedness and response expertise from around the world.

Topics covered included:

- Alternative fuels as a pathway to decarbonisation of the maritime transport sector.
- Discussions on maintaining preparedness in a continuously evolving pollution risk landscape.
- Innovation in surveillance, monitoring and visualization.
- Oiled wildlife.

Importance of regional and international cooperation

IMO's Patricia Charlebois, Deputy Director, Subdivision for Implementation, Marine Environment Division, delivered a session highlighting the importance of regional and international cooperation in emergency response and preparedness and a case study on a floating storage and offloading unit FSO *Safer** located off the coast of Yemen.

IMO has played a key supporting role in the UN-coordinated initiative aimed at preventing an oil spill from the FSO *Safer*, which is moored off the coast of Yemen. The ship-to-ship transfer of more than 1.1 million barrels of oil from the decaying floating storage and offloading unit *Safer* to a replacement tanker, the Yemen (formerly known as the *Nautica*) was completed 11 August 2023.

Broad participation

IMO's Integrated Technical Cooperation Programme (ITCP) funded the participation of eight delegates from Argentina, Chile, Colombia, Guyana, Peru, Saint Kitts and Nevis, Saint Lucia, and Trinidad and Tobago to attend the conference.

Delegates were able to undertake a number of short courses on basic oil spill forecasting and modelling, oil spill response in river environments, shoreline clean-up assessment techniques, and fundamentals of oil spill response.

The IMO's e-Learning course *An Introduction to Oil Pollution Preparedness, Response and Cooperation* was promoted at the conference. This self-enrolled course, which is available in English, French and Spanish, provides individuals new to the oil spill response community with a comprehensive overview

of the essential elements of oil spill preparedness and response. This course, as well as future remote courses are part of the IMO e-Learning portal**, created to increase the capacity of Member States to effectively implement IMO instruments.

IMO is a regular contributor and sponsor of the triennial oil pollution prevention, preparedness and response Conference Series, composed respectively of the three international conferences thus:

1. The Americas (IOSC)¹.
2. Europe (INTERSPILL)².
3. Asia (SPILLCON)³.

The baton was passed to INTERSPILL, the next in the triennial conference series, to be held in London in 2025. This will see IMO as co-sponsor through the Integrated Technical Cooperation programme⁴.

* <https://tinyurl.com/5n9xpcyr>

** <https://lms.imo.org/moodle310/>

¹ <https://www.iosc.org/>

² <https://www.interspill.org/2025/>

³ <https://spillcon.com/>

⁴ <https://tinyurl.com/4zaaduyb>

IMO MSC 108

15-25 May 2024

The Maritime Safety Committee of the IMO met for its 108th session at IMO HQ in London (in-person with hybrid participation) from 15 to 24 May 2024.

The Committee deals with all matters related to maritime safety and maritime security which fall within the scope of IMO, covering both passenger ships and all kinds of cargo ships.

The meeting was chaired by Mrs Mayte Medina of the United States, supported by Vice-Chair, Capt. Theofilos Mozas of Greece.

The following items were considered:

Resolution on maritime security in the Red Sea

The Committee adopted a Resolution on the security situation in the Red Sea and Gulf of Aden resulting from Houthi attacks on commercial ships and seafarers.

Since the hijacking of mv *Galaxy Leader* in November 2023, which remains detained along with its crew, around 50 dangerous and destabilizing maritime attacks have been carried out in the area. Several seafarers have lost their lives while others have suffered life-changing injuries.

The resolution deplores and condemns in the strongest possible terms the illegal and unjustifiable attacks, which threaten the safety and welfare of seafarers and the marine environment. It demands that the Houthis immediately cease attacking

commercial ships and calls for the immediate and unconditional release of *Galaxy Leader* and its crew.

The resolution emphasizes that all Member States should adhere to their obligations under the targeted UN arms embargo and take the necessary measures to prevent the direct or indirect supply of arms and related materiel of all types to the Houthis, as called for in United Nations Security Council resolution 2216.

It urges Member States and observer organizations to provide maximum assistance to seafarers affected by attacks. Calling for peaceful dialogue and diplomacy, it urged any party that may have influence with the Houthis to use that influence to seek an end to these attacks.

The resolution encouraged ship operators and vessels to carefully assess the nature and unpredictability of recent events, as well as potential for continued attacks in the area, when considering transit plans, based on vessel profile, business need and risk tolerance.

Revised roadmap for the development of a code for autonomous ships

The Committee continued to advance its work to develop a Code to regulate Maritime Autonomous Surface Ships (MASS) to ensure these autonomous ships operate safely and in coexistence with conventional ships.

The Committee approved the report of the third session of the Joint MSC-LEG-FAL Working Group on MASS (MASS-JWG 3).

The Committee noted the significant progress made to date to develop the draft MASS Code, including the restructuring of chapters and refining the draft provisions.

It was clear that more work would be required to finalize the Code and the Committee therefore agreed to revise the Road Map for the development of a MASS Code, as follows:

- May 2025 - finalize and adopt non-mandatory MASS Code
- First half of 2026 - develop framework for an experience-building phase (EPB)
- 2028 - commence development of the mandatory MASS Code, based on the non-mandatory Code, and consider amendments to SOLAS (new chapter) for the Code's adoption
- By 1 July 2030 - adoption of the mandatory Code, for entry into force on 1 Jan 2032

The Committee agreed to re-establish the MSC/MASS-Intersessional Working Group to meet from 9 to 13 September 2024.

The Committee also agreed to re-establish the intersessional MASS Correspondence Group to continue its work, and report back to MSC 109 (2-6 December 2024).

Revision of the Guidelines on maritime cyber risk management

The Committee approved the revised Guidelines on maritime cyber risk management (MSC-FAL.1/Circ.3/Rev.3) and forwarded them to the Facilitation Committee for its concurrent approval.

The guidelines cover standards and best practices for cyber risk management. The revision includes updates related to key definitions, background information and application, functional elements of cyber-risk management (including how to establish a risk management strategy; identify risks; protect computer-based systems; detect, respond to and recover from incidents) and other relevant international and industry standards and best practices.

Development of a safety regulatory framework to support the reduction of GHG emissions from ships using new technologies and alternative fuels

IMO's goal of achieving net zero shipping will require the uptake of zero or near-zero GHG emission technologies, fuels and/or energy sources. Suitable provisions will be needed to ensure the safe operation of these new technologies and alternative fuels on ships.

The Committee noted the report of the Correspondence Group on the Development of a Safety Regulatory Framework to Support the Reduction of GHG Emissions from Ships Using New Technologies and Alternative Fuels, which was established at MSC 107.

The report outlined a summary list of fuels and technologies that could support the reduction of GHG emissions from ships, as well as an assessment of technical aspects, hazards, and risks to ship/shoreside for each of these listed fuels and technologies. Safety obstacles and gaps in existing regulations were also assessed.

The Committee invited delegations and international organizations to submit further information and proposals to enhance the list and its annexes.

The Committee re-established the Correspondence Group and instructed it to develop recommendations to address each of the identified barriers and gaps in current IMO instruments that impede the safe use of an alternative fuel or new technology, and report back to MSC 109 and MSC 110.

The Committee endorsed the agreement by the HTW Sub-Committee to proceed with the development of training provisions for seafarers on ships using alternative fuels.

Addressing violence and harassment in the maritime sector – amendments to the STCW Code adopted

The Committee adopted draft amendments to the Seafarers' Training, Certification and Watchkeeping Code (STCW Code), which aim to prevent and respond to violence and harassment in the maritime

sector, including sexual harassment, bullying and sexual assault. The draft amendments had been approved by MSC 107 and reviewed by the joint ILO/IMO Tripartite Working Group to Identify and Address Seafarers' Issues and the Human Element (JTWG), which met in February 2024.

The draft amendments are included in table A-VI/1-4 (Specification of minimum standard of competence in personal safety and social responsibilities) of the STCW Code. They outline new mandatory minimum requirements for basic training and instruction for all seafarers. These aim to equip seafarers with knowledge and understanding of violence and harassment, including sexual harassment, bullying and sexual assault, and information on how to prevent and respond to incidents. The amendments to the STCW Code are expected to enter into force on 1 January 2026.

The Committee approved other recommendations from the JTWG, including the launch of awareness campaigns and other further measures to address violence and harassment, including sexual harassment, bullying and sexual assault, applicable to Administrations, shipping companies, social partners and UN agencies.

Piracy and armed robbery

The Committee heard an update from the Secretariat on piracy reports for 2023.

According to information received and made available in IMO's GISIS module, 150 incidents of piracy and armed robbery against ships were reported to IMO as having occurred or been attempted in 2023. In 2022, 131 incidents were reported, indicating a 15% increase from 2022 to 2023.

The areas most affected by acts of piracy and armed robbery against ships in 2023 were the Straits of Malacca and Singapore (85), West Africa (22), South China Sea (14) and South America (Pacific) (14), followed by Indian Ocean (5), South America (Caribbean) (4), Arabian Sea (2), East Africa (2), South America (Atlantic) (1) and Mediterranean Sea (1).

Further details will be provided in the Secretariat's Reports on acts of piracy and armed robbery against ships (including Annual Report for 2023).

The Committee noted IMO's work to address piracy and armed robbery at the regional level. This includes initiatives such as the Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (ReCAAP-ISC), the Djibouti Code of Conduct (with Jeddah Amendment), covering the Western Indian Ocean and Gulf of Aden, and the Yaoundé Code of

Conduct, covering the Gulf of Guinea.

It encouraged Member States to continue to support the Djibouti Code of Conduct Trust Fund, assist Yaoundé Code of Conduct implementation efforts in the Gulf of Guinea, and consider making financial contributions to the West and Central Africa Trust Fund.

Taking the weight

By Michael Grey. IFSMA Honorary Member

P&I club Gard came up with some disturbing figures the other day, in a thought provoking note on mooring operations. Using statistics garnered from the International Group of P&I clubs, they report that between 2016 and 2021, there were 858 injuries and 31 fatalities which were attributable to mooring operations going badly wrong. The sheer numbers of human casualties ought to shock people into considering how this very routine business of tying a ship up, and letting her go again, remains so very hazardous.

You might suggest that it is all a matter of seamanship, and that the use of flexible lines with enormous weights is always going to be inherently dangerous, but surely in the 21st century we might be modernising the way we go about these tasks. We have all been brought up to the importance of not standing in a bight of rope, staying well clear of the drum and elementary seamanship. But we still largely use unguarded machinery revolving at speed, and ropes and wires are under immense strain and can devastate those vulnerable people on the ship or quayside if they break.

We have diligently painted supposedly safe areas on the deck, but most sensible seafarers are very sceptical about their effectiveness in the case of broken ropes and wires flying about. And because mooring decks are not “revenue earning” parts of the ship, they tend to be squeezed and are often very badly designed by naval architects and shipyards who have only a rudimentary idea of the forces involved, and have more important things to think about.

It is not just the problems of mooring and unmooring which Gard is concerned with as they analyse their claims. Ships get blown off their berths for a variety of reasons, possibly because the mooring arrangements are inadequate or particularly vulnerable to wind and weather. There is a very spectacular video of a cruise ship being blown off its berth in a New Zealand port some time ago, drifting across the harbour and crunching up against another vessel, to their mutual discomfort. There are ships, such as cruise vessels, vehicle carriers and big container ships, which offer so much windage, one wonders how on earth you can find enough bollards and moorings to keep them safe if it comes on to blow. There is interaction with other ships passing close and threatening mooring safety. And the climate change litany is being recited regularly by the resident fanatics to explain every incident when things do give way.

Then there are the moorings themselves, with ropes being made of astonishing strength and very different characteristics, but one might ask whether those using the moorings are fully conversant with exactly what the owners have bought. It is a very long time ago, but I remember a first experience with a synthetic mooring rope that the company thought it would try. It looked and felt just like our tried and trusted manila, but the only advice we were given is to “keep it out of the sun.” And then, in an alarming incident when a tug got into

trouble in a lock, it ran around the bits under pressure, shrank to half its diameter, the friction setting fire to the paintwork on the bits. We should have run for our lives, had we known a bit more about its characteristics. There is much more complexity today, even though there are SOLAS regulations about the need for regular close inspection of worn or damaged mooring ropes and the careful documentation of their age and usage. Are we all sure how you “rigorously inspect” each sort of rope, and what we are looking for, even though it is all written up in a ship’s Safety Management System? Ropes and modern cordage are arguably the business of specialists, not simple seafarers.

But the issue of injuries and deaths remain the most pressing matter. As if to underline this, the excellent MAIB Safety Digest’s latest issue reports no fewer than three incidents involving mooring operations. In one a barge hand was badly injured when a tension winch handle whipped around, in one a seafarer was dragged into a mooring winch and was badly injured, while there was one case when questionable design led to somebody falling overboard when passing a heaving line.

While clever design has produced some ingenious ideas for the mooring of regular traders like ferries, there seems to be no real alternatives to the mooring question for “ordinary ships.” Perhaps more remotely controlled equipment, better designed mooring equipment and even robotics might eventually make a difference. Here’s hoping.

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Michael Grey is former editor of *Lloyd’s List*

US and Philippines Maritime Safety

As the May edition of *Newsletter* was being prepared for press it was learnt that a few weeks previously the US Trade and Development Agency (USTDA) had signed a grant agreement with the Philippines’ Department of Transportation (DOTr) for a feasibility study to assess the viability of developing an expanded vessel traffic management system (VTMS) in the Philippines.

New and improved VTMS capabilities will help the Philippine Coast Guard (PCG) prevent and respond to vessel collisions, environmental incidents, and other emergencies by expanding the PCG’s capabilities to monitor maritime traffic. The system will also make port access more efficient by reducing ship waiting times and voyage costs.

In the words of Enoch T Ebong, USTDA’s Director: *‘VTMS technology will improve trade, protect the environment, and save lives in the Philippines. USTDA is pleased to partner with DOTr to expand opportunities for high-quality US infrastructure solutions to benefit the Philippines’ overall maritime safety.’*

VTMS provides active monitoring and navigational information for vessels, particularly in congested ports and waterways. As a nation comprising more than 7,000 islands, more than 800 commercial ports, and growing vessel traffic activity, the Philippines seeks to expand its VTMS infrastructure to cover major ports and navigational paths. USTDA's study will evaluate the performance of the PCG's existing VTMS in the Cebu Strait, assess potential implementation of the system at up to ten additional locations across the country, and create detailed implementation plans.

Jaime J Bautista, Philippines Secretary of Transportation commented: *'VTMS will promote efficient movement of people and goods through the Philippines' islands' water corridors.'*

'It will be a key step that will empower the Philippine Coast Guard to level up their maritime security and marine environment protection capabilities. We look forward to continuing our partnerships with the US Trade and Development Agency and the US Embassy as we see the full potential of this system.'



US Ambassador to the Philippines MaryKay Carlson shaking hands with Philippines Secretary of Transportation Jaime J Bautista, following the signing.

Photo: United States Trade and Development Agency. USTDA ©.

'The USTDA grant will provide the DOTr and PCG with the necessary technical expertise and cutting-edge US solutions to implement the project,' US Ambassador to the Philippines MaryKay Carlson said at the ceremonial grant agreement signing held at the DOTr Central Office in Mandaluyong City. She added: 'This project will help protect marine ecosystems while improving maritime trade and commerce—two equally important and mutually reinforcing lines of effort to help improve Philippine lives and livelihoods.'

This study advances the goals of the Biden-Harris Administration's Indo-Pacific Strategy by promoting maritime cooperation with a key US ally in the Indo-Pacific region.

The US Trade and Development Agency helps companies create US jobs through the export of US goods and services for priority infrastructure projects in emerging economies. USTDA links US businesses to export opportunities by funding project preparation and partnership building activities that develop

sustainable infrastructure and foster economic growth in partner countries.

NATO Operation Sea Guardian

Concludes in W Mediterranean

At the end of April the Public Affairs Office at NATO Maritime Command (MARCOM) at Northwood, NW London, reported that Operation Sea Guardian (OSG) Task Group, commanded by Commander Álvaro Huelin Gan of the Spanish Navy, in the flagship *ESPS Navarra*, had successfully concluded its three-week deployment in the Western Mediterranean.

NATO maritime security Operation Sea Guardian has been instrumental in safeguarding the Mediterranean region by establishing and maintaining Maritime Security Awareness in the area. Through constant vigilance and surveillance, Sea Guardian has enhanced the region's understanding of maritime activities, ensuring a safer environment for maritime trade and transit.



In a statement MARCOM provided this quote: *'A key aspect of Operation Sea Guardian's success lies in its ability to detect and identify vessels exhibiting suspect behaviour, by employing advanced monitoring techniques and leveraging sophisticated technology, Sea Guardian forces can swiftly identify potential threats, thereby mitigating risks and ensuring the security of maritime routes.'*

ESPS Navarra conducted eleven Maritime Situational Awareness Approaches, friendly visits of its crew on invitation by the Masters of vessels sailing the area, to inform them about NATO's and Operation Sea Guardian's mission and exchange information about the situation at sea.

Patrols have effectively benefited from the excellent coordination between surface units and air support provided by Spanish and Portuguese maritime patrol aircraft, along with NATO Intelligence, Surveillance, and Reconnaissance Force (NISRF). Air support not only enhances the operational capabilities of Sea Guardian but also fosters increased interoperability between participating assets, ensuring a more coordinated and effective response to maritime security challenges.

OSG operates as a collaborative, year-round maritime security initiative aimed at upholding Maritime Situational Awareness (MSA), countering terrorist activities, and bolstering capacity and interoperability among NATO Allies and Partners. Beyond its routine MSA efforts, OSG conducts targeted patrols in strategic areas across the Mediterranean. These focused patrols allow OSG to swiftly respond to emerging threats, safeguard critical maritime routes, and foster a more secure maritime environment in the region.



Illustrations per NATO MARCOM ©.

Matson news

Kongsberg Maritime hybrid technology to optimise energy use and cut emissions for Matson Navigation Company's new LNG-powered container ships

Kongsberg Maritime announced at the end of April that it is to supply a comprehensive range of integrated technologies to optimise energy use and reduce emissions for three new 3600 TEU LNG-powered container ships being built at Philly Shipyard for Matson Navigation Company. They are the largest Jones Act containerships ever built, at 260 metres loa, and represent a new era in container shipping.



To support Matson's drive to decarbonise its operations, Kongsberg Maritime will supply hybrid electrical systems, controlled and operated by the company's Energy Management System.

The new ships are being built to operate Matson's China-Long Beach Express (CLX) service. The Aloha Class vessels are the largest containerships ever built in the US and are designed to operate at speeds in excess of 23 knots in support of Matson's service hallmark – timely delivery of goods.

The maritime recruitment crisis

ISWAN's action plan published

In the action plan from its annual seminar, the International Seafarers' Welfare and Assistance Network (ISWAN) stresses the importance of listening directly to seafarers if the maritime sector is to develop effective solutions to the recruitment and retention crisis. This was published early last month, May.

Addressing the maritime recruitment crisis:

Actions and recommendations from ISWAN's 2023 Seminar

16 November 2023

Hosted by the
Finnish Seamen's Service

At the ISWAN 2023 Seminar last November, ISWAN brought together representatives from across the maritime sector to take a solutions-focused approach to the increasingly acute recruitment and retention crisis that it faces. The seminar was framed in the context of the rapid changes that the maritime sector is undergoing and the implications that this has for seafarers and for the seafaring profession.

Reimagining seafaring

Taking as its starting point the technological revolution that maritime has already begun to negotiate, ISWAN's seminar sought to cast light on how the sector can reimagine the vocation of seafaring in a digital age. What changes will be needed for maritime employers to successfully recruit and retain the highly skilled seafarers who will be needed to power the decarbonised, increasingly automated vessels of the future?

Expert panels from industry, academia, trade unions, welfare organisations and, crucially, active seafarers explored different facets of the problem and worked

together to develop potential solutions. The resultant action plan builds on the solutions identified over the course of the day with the aim of providing a springboard for continued collaborative action across the industry.

Action call

The plan calls for action in three key areas if the maritime sector is to recruit and retain seafarers more effectively. The section on **Fair Work** focuses on practical steps that the maritime sector can take to bridge the gap between current working conditions and seafarers' aspirations. What does fair work mean for seafarers of today and how can companies reinvent their offer to current and prospective crew? ISWAN highlights that the maritime sector must be willing to invest more in seafarers' working conditions and wellbeing in order to make the sector sustainable in the long term.

Going further

Taking steps to build more diverse, equitable and inclusive cultures at sea is often seen as key to addressing the recruitment gap. The **Inclusive Culture** section of ISWAN's action plan calls on the maritime sector to commit to going further than minimum regulatory standards in order to address the barriers that prevent it from benefiting from a more diverse range of talents and backgrounds.

Noting technological transformation

Making technology work for seafarers is a further pillar of the action plan. The maritime sector is undergoing technological transformation as a result of onboard connectivity, automation and the journey towards decarbonisation. Action points under the theme of **Changing technologies – Impact on wellbeing** reflect the challenges to seafarers' wellbeing of such a rapid pace of change, as well as the scope for technology to help to reinvent seafaring and restore its attractiveness in the digital age.

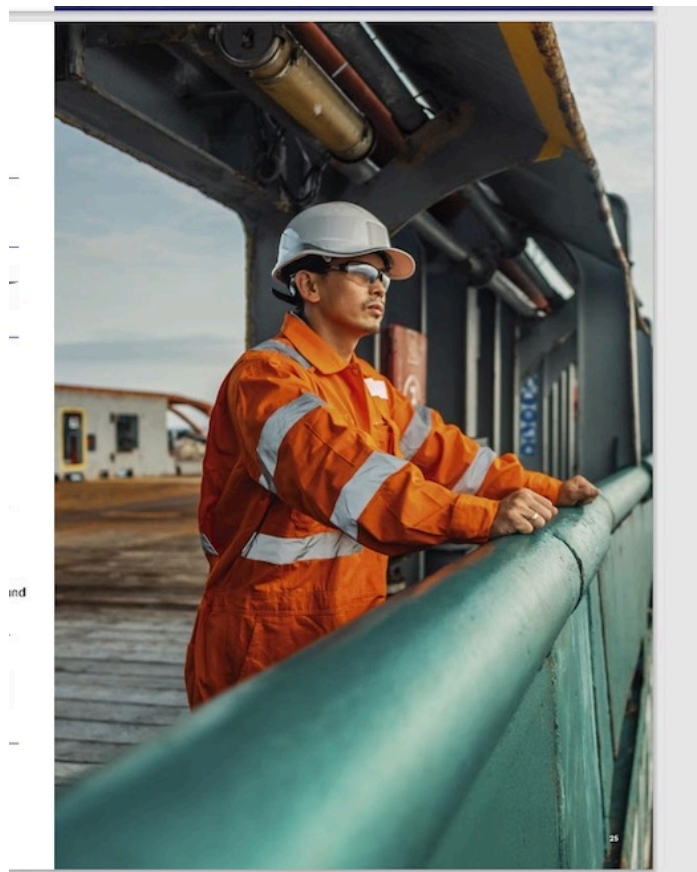
Listening to seafarers

The overriding theme and action point that emerged from ISWAN's seminar is that the maritime sector must listen much more closely to what seafarers have to say about the challenges of living and working at sea and, crucially, to turn their insights into practical actions.

Simon Grainge, Chief Executive of ISWAN, commented: *'The maritime industry is at a juncture in terms of being able to attract and retain the skilled seafarers that it will need to make a successful transition to zero carbon. Seafaring can be a unique and rewarding vocation, but concerted, collaborative action is needed to make maritime careers genuinely safe, sustainable and inclusive.'*

'Before increasing efforts to raise the profile of the varied career paths it offers, the maritime sector must take committed action to ensure that it can provide fair working conditions and psychologically safe environments for the seafarers that it seeks to attract.'

'We look forward to working with stakeholders across the maritime sector to take forward some of the initiatives identified in our action plan.'



ISWAN's seminar was held in Helsinki on 16 November 2023 and hosted by the Finnish Seamen's Service (FSS), a long-standing ISWAN member, as part of FSS's 50th anniversary celebrations.

The document *Addressing the maritime recruitment crisis: Actions and recommendations from ISWAN's 2023 Seminar* can be downloaded here: <https://tinyurl.com/yc4szmj5>

This paper aims to build on the solutions identified during the ISWAN 2023 Seminar to provide a springboard for continued collaborative action amongst stakeholders to build a safer, more sustainable and more resilient maritime sector.

North Sea surveillance

Remotely piloted aircraft

Early in May the European Maritime Safety Agency (EMSA) began a four-month remotely piloted aircraft system (RPAS) service in the North Sea, supporting the Royal Danish Navy and Danish Customs.

It is understood that the service uses a new Hybrid Quadcopter with fixed wing and vertical take-off and landing capabilities; the first time this model has been deployed in an EMSA RPAS operation.

The RPAS service is delivered by EMSA through the contractor Nordic Unmanned AS, operating an Aerosonde Hybrid Quadcopter that has both fixed

wing, enabling it to cover long distances, and four propellers, providing it with Vertical Take-off and Landing (VTOL) capabilities. During its deployment, the RPAS will carry out maritime surveillance tasks in the busy waters around the north coast of Denmark.



Environmental monitoring is a key aspect of this service. The RPAS can provide information on potential oil spills and discharges at sea, complementing the CleanSeaNet satellite-based oil spill and vessel detection service provided by EMSA.

This RPAS model can take off and land vertically, like a helicopter, but has the same range as the fixed wing version. With more than seven hours of endurance and a radio range of 140km along the coastline, based on a ground relay station, it can carry out extensive maritime surveillance to support the Royal Danish Navy. The RPAS has infrared and optical cameras and is also equipped with an embedded automatic maritime scanning sensor.

Shipping and the Environment:

A Guide to Environmental Compliance

ICS's third edition published

International Chamber of Shipping (ICS) Publications announces the launch of the fifth edition of *Shipping and the Environment: A Guide to Environmental Compliance*. This latest edition offers comprehensive updates and expanded insights into the intricate relationship between shipping operations and environmental protection.

It is reported that the fifth edition is a definitive guide, providing a comprehensive introduction to companies and crew members navigating this complex subject matter. Recognising the need for accessibility, this edition is designed to be a user-friendly resource for individuals with varying levels of familiarity with MARPOL regulations and the environmental impact of day-to-day shipping.

Existing resources on shipping and the environment are often either overly complex, such as regulatory documents, or overly simplistic, such as generalist online sources. Additionally, pertinent information is

scattered across niche publications, making it challenging for stakeholders to access comprehensive guidance in one consolidated source.

Serves a pressing need

In the words of John Stawpert, Senior Manager (Environment and Trade) at the International Chamber of Shipping: *'We identified a pressing need for a single, authoritative resource that addresses the key environmental issues facing the shipping industry. With this new edition, we aimed to bridge this gap by providing a comprehensive yet accessible guide that addresses the dynamic regulatory environment.'*



Emmanuele Grimaldi, Chairman of the International Chamber of Shipping, commented: *'As a shipowner I have heavily invested in energy efficiency practices, as well as new green technologies, to move forward in reaching the International Maritime Organization's net zero carbon emissions target by or around 2050. This new overarching guide by the ICS provides the industry with practical guidance and peace of mind in an ever-evolving regulatory landscape.'*

Future reviews planned

In response to the dynamic nature of environmental regulations, ICS plans to review and produce updated editions of *'Shipping and the Environment: A Guide to Environmental Compliance'* every two to three years. This commitment reflects the organisation's dedication to ensuring that stakeholders remain informed and empowered to adopt sustainable

practices, recognising the evolving regulatory framework and environmental best-practices.

An invaluable resource

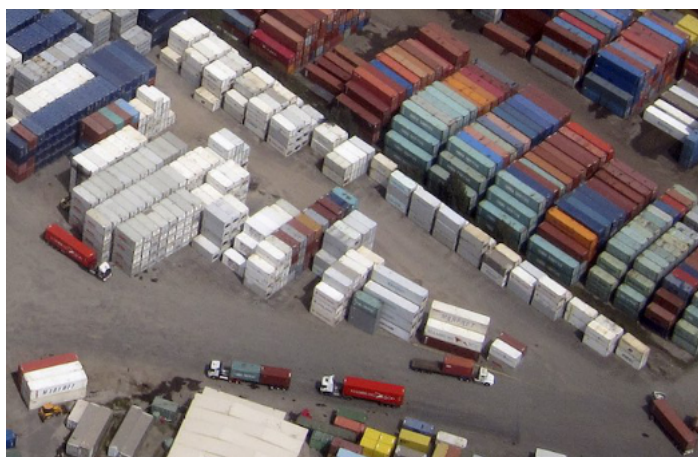
The fifth edition promises to be an invaluable resource for companies, crew members, training institutions, administrations, and policymakers alike. By consolidating key environmental requirements and factors into one authoritative publication, ICS aims to foster greater awareness, understanding, and action towards sustainable shipping practices.

For more information about the fifth edition of *Shipping and the Environment: A Guide to Environmental Compliance* and to order copies readers are invited to see here: <https://tinyurl.com/4ptz42nj>

An Australian Strategic Fleet

It was reported in mid-May that the Australian Government's recently issued budget would provide funding for an Australian Strategic Fleet. This was the Albanese Government's third budget whereas the Australian Strategic Fleet was a key election commitment during the 2022 Australian Federal Election and underscores the importance of shipping and freight for a major island economy such as Australia's.

Apparently A\$21.7 million will be invested over 2024–2025 to support the establishment of a Strategic Fleet, which will be established through an initial pilot programme with three vessels which would be available to government for requisitioning in times of need.



It is understood that applications to participate in the pilot scheme will open later this year with the first vessels expected to be operational soon thereafter.

According to ITF General Secretary Stephen Cotton: *'The commitment now being delivered on by Prime Minister Albanese demonstrates the Australian Government's understanding of the importance of global supply chain resilience, national sovereignty and defence capacity, as well as the economic and social importance of cabotage for nations like Australia which depend on global sea freight.'*

Government's Strategic Fleet Taskforce

The Australian Government's Strategic Fleet Taskforce paper of November 2023 with sixteen recommendations and the Government's response is available here: <https://tinyurl.com/5ax3twd4>

A matter of priorities

By Michael Grey, IFSMA Honorary Member

There is a great deal of absolutism around any discussions about climate and common sense, you sometimes feel, rarely gets a look-in. I was reading about all these extra tonne-miles being racked up by the ships whose owners are responsible enough to avoid a passage through the Red Sea and avoid the risk of a Houthi drone or missile hitting the ship.

It ought to be a decent, uncontroversial decision, to keep a ship and its crew safe from danger of death and several days of real fear, in a situation where there is limited ability to tackle the situation at source. And the Houthi rebels, egged on by their Iranian paymasters, are not going anywhere soon, threatening to extend their area of outrage into the Indian Ocean, where the Somali pirates have re-activated their war on shipping.

But now there is all sort of angst from the climate NGOs and their tame activists about the additional emissions from all these ships on their extended voyages around the Cape, which threatens their march to the Nirvana of net zero. Even more appalling is the fact that many of the ships, carrying cargo whose owners hope to receive it sooner rather than later, have cracked open the throttles and speeded up. Think of all those horrible additional emissions!

You cannot argue with people who believe that science can ever be settled and appear to have priorities skewed by a single objective, driven on by their convictions that it is more important to "stop oil" and end the role of the internal combustion engine, whatever it may cost. The safety of seafarers and the need to keep their ships out of harm's way probably fail to enter their stream of intensely focussed consciousness.

Ah... those priorities again. The arguments take me back to a meeting several years ago, when the idea of arbitrarily restricting a ship's power, for environmental reasons, was being debated. All the speakers seemed to think it was a very acceptable means of reducing harmful emissions – a "low-hanging fruit" that could easily be plucked, before tackling more problematical matters like alternative fuels or new means of motive power.

But then there was a forceful interjection from a very senior shipmaster, who pointed out that power was not something idly supplied by ambitious engine manufacturers, but its availability could be a matter of life or death to a ship and those aboard her. He recounted an incident, when he had been master of a fully laden and damaged Capesize, when in a storm, he had needed every ounce of power to prevent being

blown to leeward. If he had less power, and the coast had been rather closer, the ship, he said, would probably have been lost. His was not a lone voice and in the enthusiasm for lower power, or for de-rating machinery, it was acknowledged that there were balances to be struck over the need for power to be available in extremis. And this balance in our priorities surely resonates today.

That took place several years ago, but the relentless drive to lower emissions has continued, so maybe there is little surprise among mariners that there has been an upsurge in complaints about the various methods used to limit shaft power in existing ships. It is not just storms where reliable and powerful machinery systems matter; it can mean the difference between safety and very expensive accidents in restricted waters, when power is needed in a hurry if something unexpected happens. But, in the relentless pursuit of the green agenda, does this get sufficient emphasis among the regulators? And after the Baltimore bridge calamity, and plenty of evidence of power losses in embarrassing places, for a variety of reasons, some of which might be connected indirectly to the search for more sustainable shipping, there is a new urgency about these problems.

None of this is designed to identify me as a “denier” and enrage those of more feverish climate enthusiasms. Rather, it is a suggestion that we should examine priorities, at a time when in some parts of the world, the essential shipping upon which we all depend, is in a war situation and safety of seafarers today surely ought to take priority over cleaner air tomorrow.

Michael Grey is former editor of *Lloyd's List* This item first appeared in *Maritime Advocate Online* No 856 of 15 May 2024 and is published here by kind permission of the editor and the author.

Assessing port infrastructure risks

USCG convenes Safety Board of Inquiry

On 17 May from Washington the US Coast Guard reported that it had convened a Ports and Waterways Safety Board of Inquiry two days before to evaluate the risks to critical port infrastructure posed by larger commercial vessels and increased traffic density.

A comprehensive assessment of critical port infrastructure

The Board, authorized under Title 46 of the US Code and chaired by Rear Admiral Wayne R Arguin, Assistant Commandant for Prevention Policy, is comprised of a team of senior Coast Guard officers and experts who will work closely with federal, state, local agencies and port stakeholders to conduct a comprehensive assessment of critical port infrastructure.

To ensure navigational safety

Specifically, the Board will examine the implications of larger, more complex vessels and evolving maritime

traffic patterns on port infrastructure, including bridges, cargo terminals, pipelines, railways and power plants and recommend risk mitigation strategies and best practices to ensure navigational safety.

A review of the historical use and effectiveness of the Coast Guard's existing waterways risk assessment tools will also be conducted.

Admiral Arguin said: *'The safety of our ports and waterways is paramount, and this Board will ensure that we have the necessary measures in place to address the challenges posed by increased maritime traffic and larger vessels.'*

The Board of Inquiry is tasked with identifying ten domestic ports or port complexes to examine within thirty days of the convening order and producing a comprehensive final report by 31 May 2025.

It is understood that the Board will work closely with federal, state and local stakeholders, including the US Committee on the Marine Transportation System, the Army Corps of Engineers, the Federal Highway Administration and the National Oceanic and Atmospheric Administration to develop and implement effective risk assessment tools and procedures.

Arguin added: *'Working closely with key government and industry stakeholders is the top priority for this Board and that close coordination will be critical to expeditiously completing this unprecedented assessment of our vital ports.'*

Highest level of assessment

A Ports and Waterways Safety Board of Inquiry is the highest-level assessment conducted by the US Coast Guard to address risks to port and waterway infrastructure following concerns from maritime incidents. This Board is a necessary step to bolster the US economic prosperity through safe, secure and efficient flow of commerce on US waterways.

Additional information can be found at the Ports and Waterways Safety Board of Inquiry website to be found here: <https://tinyurl.com/5afbbcm7>

Countering drone threats to shipping

UK DfT guidance

Overview

Aerial drones, often called uncrewed aerial systems (UAS), are a rapidly increasing aviation technology with widespread global use in multiple domains. Aerial drones are manufactured in a range of different sizes from small toys to hobbyist units, to specialised commercial units and large military drones. Each drone type provides varied capabilities, which are developing at pace, supporting their use for both civilian and military purposes. Benefits of their use include providing safer and more cost-effective ways of carrying out activities while having a lower environmental impact than traditional solutions.

Aerial drones offer many use cases for the civilian maritime industry, including but not limited to:

- Inspection and surveying assets – for example, inspecting the hull or mast of a ship, or port infrastructure, as part of an asset maintenance programme, reducing the need for people to access hazardous areas.
- Cleaning difficult to reach areas of a vessel.
- Capturing images and recording videos of a vessel for media advertising purposes.
- Monitoring emissions and taking air quality readings in busy shipping lanes and near ports.
- Supporting search and rescue missions in maritime emergency situations.
- Delivery of cargo such as critical spares or medical supplies as part of logistics for shipping operations.

However, their accidental or deliberate misuse can present threats to commercial maritime vessels. Aerial drones have been used maliciously in events that have led to disruption and harm. An extreme example of this is using military grade or weaponised commercial drones, as seen in the attacks on mv *Mercer Street* and the *Pacific Zircon* vessels.

While aerial drones can be used to present threats to commercial shipping, there are a range of mitigations available. However, these need to be proportionate to the anticipated threat and should be fully assessed to determine if they will provide a net positive benefit to a maritime organisation, as each mitigation option carries strengths and weaknesses.

Scope

This guidance is intended to help the maritime industry to understand aerial drone technologies, the potential threat to maritime vessels and options to mitigate the threat. It focuses on aerial drone threats and associated response options.

Aerial drones considered in this guidance include systems of a commercial nature such as ‘small’ commercially available drones that are less than 20kg in weight as defined by the UK Civil Aviation Authority (CAA), or weaponised drones (sometimes referred to as loitering munitions) such as the Shahed 136 loitering munition.

Threats and response options for other types of drone, such as amphibious drones, surface or subsurface remotely controlled autonomous vehicles, swarms of aerial drones (for example, two or more drones flying in a coordinated manner by a single operator), and large scale, military aerial drones such as the Thales Watchkeeper WK450, Baykar Bayraktar TB2 and General Atomics MQ-9 Reaper, are out of scope for this guidance. Threats from, and response to, military anti-ship missile systems are also out of scope.

Introduction to drone technologies

Drone systems in the context of this guidance are remotely controlled or autonomous aircraft without any human pilot, crew or passengers onboard.

Aerial drones, interchangeably called Uncrewed or Unmanned or Unpiloted, Aircraft or Air or Aerial, Systems (UAS) or Remotely Piloted Aircraft System (RPAS), can be used not only for a wide range of civilian but also several military use cases including reconnaissance and weapons deployment.

Typical components of a UAS as defined by the National Protective Security Agency (NPSA)

Drone or uncrewed aerial vehicle (UAV)

A flying aerial vehicle, typically with multi-rotor or fixed wing configurations, which can carry a payload (such as a camera). Typically used to either capture data (such as images, videos, survey data) or to carry and deploy a payload (such as medical supplies, weapons, herbicides for crop spraying).

Command and control signals

Signals transmitted and received by the drone and its controller, to direct flight activity and in some cases, transmit data such as live video feeds and flight data back to the pilot.

Smaller drones are typically controlled by radio frequency (RF) systems using wifi or Industrial Scientific Medical (ISM) frequencies. Control using 4G or 5G telecommunications networks is becoming more common, to increase the range of connectivity between the drone and its operator, resulting in increased drone operational ranges, including when flying at sea and away from coastlines.

Larger, more expensive drones may use satellite links and more sophisticated control systems.

The frequencies and signal strengths used will be dictated by local regulations and vary around the world.

Controller or ground control station

The system transmits control signals to the drone to allow a pilot to control and direct the drone’s activity and to receive data from the drone itself, such as live video feeds.

Additional elements typically involved in a drone flight include the following:

Pilot(s)

The person responsible for controlling the drone, from take-off and flight to landing. Typically, in the UK the pilot requires a CAA licence and registration, depending on the type of drone used and drone operations planned.

Geographical information system (GIS)

A system used to process data transmitted from the drone, to help the pilot and end user make informed decisions. For example, for flight planning, monitoring video feeds from the drone, monitoring ‘near real time’ GPS location tracks of the drone’s flight path or post

processing scans of an area of land to form a 3-D model.

Current aerial drone technologies

Aerial drone systems can be found in many shapes and sizes, from small toys to commercial products to military platforms. Typically, the larger the drone, the more advanced its capabilities. There are many different standards and classification systems for drones, including those from the European Union Aviation Safety Agency (EASA).

The complete UK DfT report at 40 pages / 14000 words is available to download here: <https://tinyurl.com/2p9vrcfd>

Contents

1. Overview
2. Introduction to drone technologies
3. Current aerial drone technologies
4. Future drone technologies
5. Drone threats to commercial maritime vessels
6. Mitigating drone threats to maritime vessels
7. Introduction to counter drone technologies
8. Counter drone technologies
9. Evaluating counter drone technology for use in the maritime domain
10. Selecting counter drone technology
11. Further guidance
12. Terms of use

The ITF Photography prize 2024

Do you have a story to tell? Are you a truck driver, seafarer, docker, pilot, bus driver, ticket seller or the backbone of any other part of the transport world?

The ITF is looking for captivating and compelling photos that provide a real and authentic glimpse into the daily lives and experiences of transport workers.



In the words of the competition's announcement: *'We want to see your daily grind, your triumphs, and the often unseen challenges you tackle every day.'*

'The competition is open to workers from all regions, all transport sectors – including aviation, maritime, railways, road and public transport – and to women and young workers.'

'Your photos play a crucial role in shedding light on the importance of transport workers and help will help us fight for better rights for all transport workers.'

'In an exciting addition this year, we introduce the 'People's Choice' award where shortlisted entries will go head-to-head, and you get to vote for the winner.'

'Enter the ITF Photo Prize 2024 today and show us how you move the world forward!'

Prizes

First prize	£2,000
Second prize	£1,000
Third prize	£500
Highly commended	£200
People's Choice Award	£1,500

The announcement of all winners will take place during ITF's Congress in Marrakesh, Morocco, on 17 October 2024.

ITF will exhibit the photographs of all finalists at the Congress to showcase and acknowledge your exceptional contributions.

Timeline

1	May 2024	Entries open.
12	August 2024	Entries close.
1	September 2024	Peoples' Vote opens.
16	October 2024	Peoples' Vote closes.
17	October 2024	Winners announced.

How to enter

For competition guidelines and an entry form, readers are invited to see the link here:

<https://tinyurl.com/3my9kunm>

Autonomous shipping

Orca AI Raises \$23 Million to progress

It was reported towards the end of May that Orca AI, provider of AI-based operational platform for ships, had raised \$23 million in new funding, led by OCV Partners and Mizmaa Ventures* taking its total raised to nearly \$40 million.

Orca AI's solution is the first step in introducing autonomous features to vessels already on the water. In 2022, it powered the world's first autonomous commercial ship voyage with NYK and is now working on the second phase of fully autonomous ship technology to be rolled out in 2025.

Founded by naval technology experts, Yarden Gross and Dor Raviv, Orca AI's platform maximizes voyage safety, operational efficiency, and sustainability for ships and fleets. It features a fully automated watchkeeper that processes multiple sources of visual information during navigation at sea, mimicking and enhancing human watchkeeping at the most complex marine traffic situations in real-time.

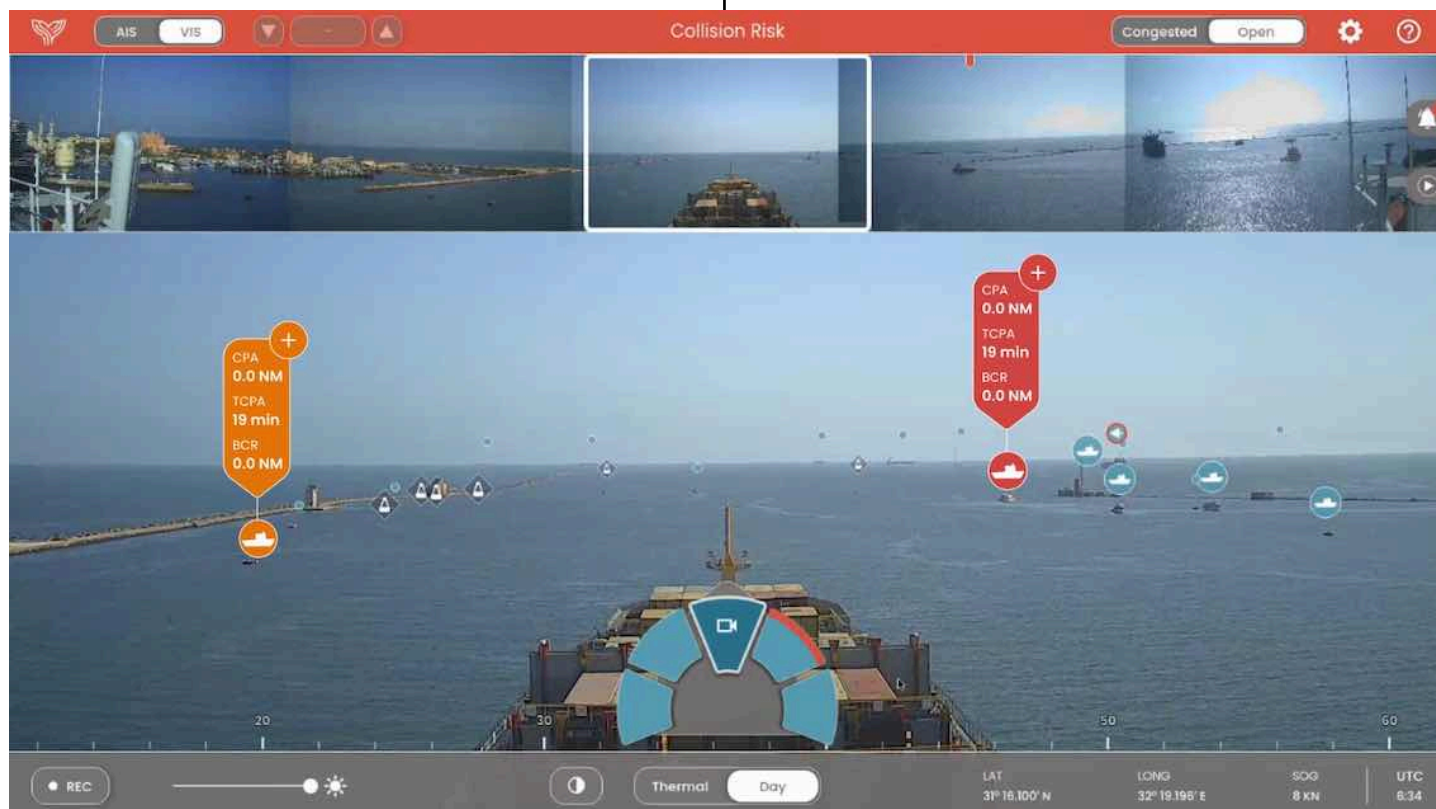
It is reported that in 2023 there were over 2,500 significant marine incidents. In the same period, working with the biggest global shipping companies including MSC, NYK, Maersk, and Seaspan. Orca AI reduced close encounters by 33% and crossing events by 40% across 15 million nautical miles steamed.

By detecting and alerting crew to high-risk marine targets, Orca AI is said to optimize operations to avoid unnecessary manoeuvres and reductions in speed, reducing fuel burn and emissions. Improved navigational decisions enabled by Orca AI resulted in an average \$100 – 300k saving in fuel per vessel per year (3-5%) and 172,716 tonnes of carbon dioxide reduction last year.

'It's a welcomed pivotal moment, as despite the majority of global cargo transported by sea, the maritime industry has lagged behind industries such as aviation when it comes to keeping up with technological innovations.'

'Ships deal with increasingly congested waterways, severe weather, and low-visibility creating difficult navigation experiences with often expensive cargo.'

'We've recently proven forward-thinking companies that adopt our technology have seen huge operational improvements from year to year, in creating a safer and more efficient shipping industry. These improvements are crucial for shipping companies in meeting corporate sustainability targets, but



Orca AI it reported to enable proactive threat mitigation from diverse threats such as drone attacks and piracy by empowering ship's staff to anticipate and counteract such risks, bolstering vessel security and protecting crews and sensitive cargo.

It is reported that orders for the platform will soon surpass more than 1,000 vessels.

By raising this capital, \$23 million, Orca AI will be able to invest in technology, expand internationally, and grow. All of which will contribute to reducing maritime carbon emissions and improving efficiency and safety of navigation.

On the raising of capital Yarden Gross, CEO, and Co-founder said: *'Innovations in high-speed, low cost, global connectivity, such as with Elon Musk's Starlink have opened the door for advanced technologies such as AI on board vessels to improve operational efficiency and safety.'*

importantly the benefits are far-reaching beyond just the customers.'

Hemi Zucker, Managing Partner, from OCV, added: *'Maritime transport is the lifeblood of international trade and the global economy. Over 80% of the volume of international trade in goods is carried by sea, a two trillion-dollar market by some estimates.'*

'While planes, trains, and automobiles have seen tremendous progress and investment in regard to autopilot and collision prevention, we believe that the shipping industry is still up for grabs and there is a category-defining opportunity in autonomous ships – ships that captain themselves.'

Catherine Leung, Co-Founder & Partner at MizMaa Ventures, further commented: *'It's clear that AI has a crucial role in advancing the maritime sector and I'm excited to see Orca AI pushing the boundaries of what's possible in shipping. Making smarter navigation choices not only boosts safety but also cuts down on fuel use and CO2 emissions. That's what*

makes the Orca AI platform stand out and be trusted by the leading shipping companies in the world.'

***The fundraising was led by OCV Partners and Mizmaa Ventures, with participation by Ankona Capital Partners and Santa Barbara Venture Partners, Playfair Capital and strategic investors.**

Transforming vessels

Floating offices; remote homes

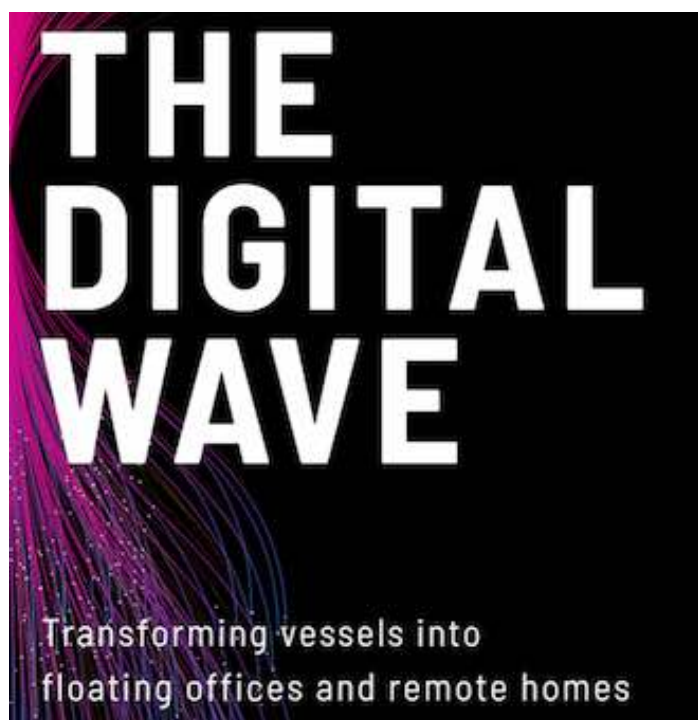
Recent progress in connectivity and digital technologies has profoundly impacted all areas of modern life. Noticeably, the maritime industry is also experiencing transformative changes on a global scale with significant implications for the future.

As the global shift to digitalisation accelerates, ships increasingly function as floating offices and remote homes.

Many ship owners and operators have already embraced satellite communications as a vital link between ship and shore, propelling a surge of smart technologies that can enhance the safety, cost-efficiency and environmental performance of today's vessels.

Reliance on digital technology

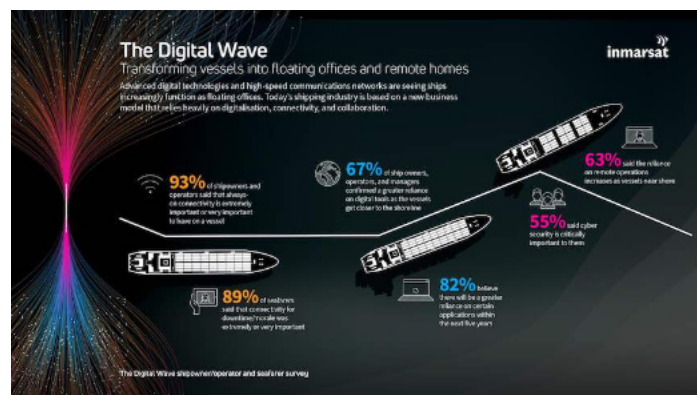
'Always-on' and collaborative software is becoming increasingly critical for operations and seafarer welfare as the reliance on digital technologies increases.



A clear trend observed during the research is that the use of digital tools and applications is changing as ships get closer to shore. 66% of survey respondents said their reliance on tools changes as they sail nearer to shore, while 63% said remote operations increase.

From Inmarsat Maritime has come the latest report, *The Digital Wave*, conducted in partnership with Thetius, to guide the inquirer through today's shipping business models, which rely heavily on digitalisation, connectivity, and collaboration.

Using a combination of interviews and survey data, Inmarsat examined why a cohesive approach to data management is vital for shipping today.



Inmarsat Maritime ©.

The INMARSAT Report produced with Thetius, edited by Fiona Macdonald, entitled *The Digital Wave: Transforming vessels into floating offices and remote homes* is available to download here: <https://tinyurl.com/5cdpyd24>

This 50-page document examines emerging technology trends, that are enabling ships to become floating offices.

The document explores the growing need for collaborative software and the consequences of sudden loss of connectivity.

It provides insight into how crews and shore-based teams currently utilise digital tools.

NOAA predicts above-normal 2024 Atlantic hurricane season

La Niña and warmer-than-average ocean temperatures are major drivers of tropical activity

In the US the National Oceanic and Atmospheric Administration (NOAA) National Weather Service forecasters at the Climate Prediction Center predict above-normal hurricane activity in the Atlantic basin this year, 2024. This was reported by NOAA on 23 May.

Prediction

NOAA's outlook for the 2024 Atlantic hurricane season, which spans from 1 June to 30 November, predicts an 85% chance of an above-normal season, a 10% chance of a near-normal season and a 5% chance of a below-normal season.

Forecast

NOAA is forecasting a range of 17 to 25 total named storms (winds of 39 mph or higher). Of those, 8 to 13 are forecast to become hurricanes (winds of 74 mph

or higher), including 4 to 7 major hurricanes (category 3, 4 or 5; with winds of 111 mph or higher).

Forecasters have a 70% confidence in these ranges.

Above-normal activity expected

The forthcoming Atlantic hurricane season is expected to have above-normal activity due to a confluence of factors, including near-record warm ocean temperatures in the Atlantic Ocean, development of La Niña conditions in the Pacific, reduced Atlantic trade winds and less wind shear, all of which tend to favour tropical storm formation.



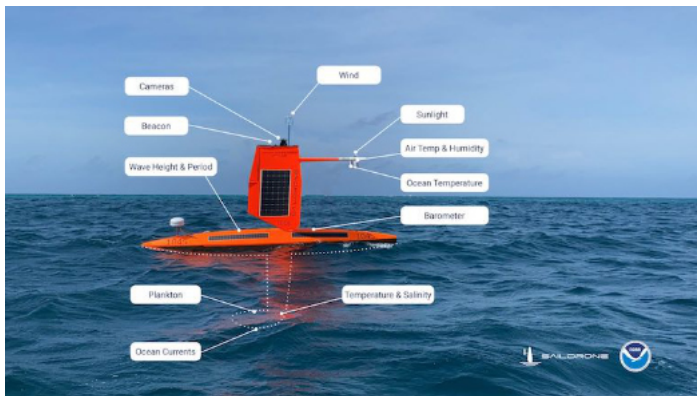
NOAA's GOES-16 satellite captured Hurricane Idalia approaching the western coast of Florida while Hurricane Franklin churned in the Atlantic Ocean at 1701 EDT on 29 August, 2023.

NOAA ©.

In the words of NOAA Administrator Dr Rick Spinrad: *'With another active hurricane season approaching, NOAA's commitment to keeping every American informed with life-saving information is unwavering.'*

'AI-enabled language translations and a new depiction of inland wind threats in the forecast cone are just two examples of the proactive steps our agency is taking to meet our mission of saving lives and protecting property.'

FEMA Deputy Administrator Erik A Hooks added: *'Severe weather and emergencies can happen at any moment, which is why individuals and communities need to be prepared today.'*



This photo illustration depicts the variety and location of sensors mounted on saildrones equipped to study tropical storms and hurricanes.

Credit: NOAA and Saildrone Inc ©.

'Already, we are seeing storms move across the country that can bring additional hazards like tornadoes, flooding and hail. Taking a proactive approach to our increasingly challenging climate landscape today can make a difference in how people can recover tomorrow.'

As one of the strongest El Niños ever observed nears its end, NOAA scientists predict a quick transition to La Niña conditions, which are conducive to Atlantic hurricane activity because La Niña tends to lessen wind shear in the tropics. At the same time, abundant oceanic heat content in the tropical Atlantic Ocean and Caribbean Sea creates more energy to fuel storm development.

W African monsoon

This hurricane season also features the potential for an above-normal west African monsoon, which can produce African easterly waves that seed some of the strongest and longer-lived Atlantic storms.

Finally, light trade winds allow hurricanes to grow in strength without the disruption of strong wind shear, and also minimize ocean cooling.

Human-caused climate change is warming our ocean globally and in the Atlantic basin, and melting ice on land, leading to sea level rise, which increases the risk of storm surge. Sea level rise represents a clear human influence on the damage potential from a given hurricane.

Enhanced communications in store for 2024 season

NOAA will implement improvements to its forecast communications, decision support and storm recovery efforts this season. These include:

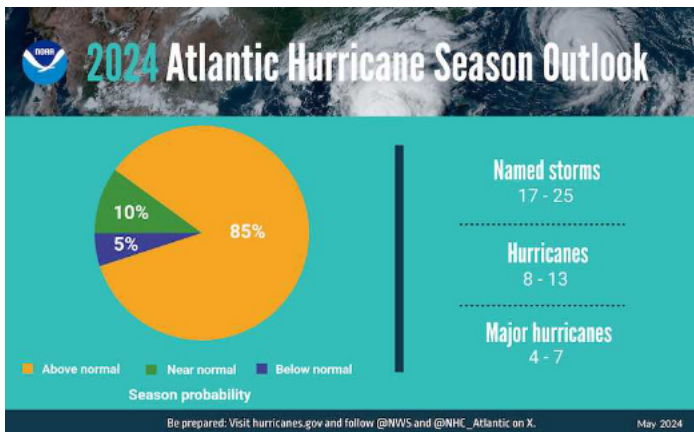
- The National Hurricane Center (NHC) will expand its offering of Spanish-language text products to include all Public Advisories, the Tropical Cyclone Discussion, the Tropical Cyclone Update and Key Messages in the Atlantic basin.
- Beginning on or around 15 August NHC will start to issue an experimental version of the forecast cone graphic that includes a depiction of inland tropical storm and hurricane watches and warnings in effect for the continental US. Research indicates that the addition of inland watches and warnings to the cone graphic will help communicate inland hazards during tropical cyclone events without overcomplicating the current version of the graphic.
- This season, the NHC will be able to issue US tropical cyclone watches and warnings with regular or intermediate public advisories. This means that if updates to watches and warnings for storm surge or winds are needed, the NHC will be able to notify the public in an intermediate advisory instead of having to wait for the next full advisory issued every six hours.

New tools for hurricane analysis and forecasting this year

- Two new forecast models developed by NOAA

researchers will go into operation this season: The Modular Ocean Model or MOM6 will be added to the Hurricane Analysis and Forecast System to improve the representation of the key role the ocean plays in driving hurricane intensity. Another model, SDCON, will predict the probability of tropical cyclone rapid intensification.

- NOAA's new generation of Flood Inundation Mapping, made possible through President Biden's Bipartisan Infrastructure Law, will provide information to emergency and water managers to prepare and respond to potential flooding and help local officials better prepare to protect people and infrastructure.
- NOAA's Weather Prediction Center, in partnership with the NHC, will issue an experimental rainfall graphic for the Caribbean and Central America during the 2024 hurricane season. This graphic provides forecast rainfall totals associated with a tropical cyclone or disturbance for a specified time period.



A summary infographic showing hurricane season probability and numbers of named storms predicted from NOAA's 2024 Atlantic Hurricane Season Outlook. (Spanish version)

Image credit: NOAA ©.

System upgrades in operation

NOAA will upgrade its observing systems critical in understanding and forecasting hurricanes. These projects will provide more observations of the ocean and atmosphere in the Caribbean, the Gulf of Mexico, on the US East Coast and in the tropical Atlantic.

- NOAA's National Data Buoy Center recently upgraded many coastal weather buoys in the tropical western Atlantic and Caribbean to include time of occurrence and measurements of one-minute wind speed and direction, five-second peak wind gust and direction and lowest one-minute barometric pressure to support tropical cyclone forecasting.
- New this year, NOAA will gather additional observations using Directional Wave Spectra Drifters (DWSDs), deployed from the NOAA P-3 hurricane-hunter aircraft and in the vicinity of Saildrones, uncrewed surface vehicles which will be deployed at the start of the hurricane season, providing one-minute data in real time. Up to twelve Saildrones are planned for deployment in 2024.

- Starting in June, dozens of observational underwater gliders are planned to deploy in waters off the Caribbean, Gulf of Mexico and the eastern US coast. Additionally, a new lightweight dropsonde called Streamsonde will be deployed into developing tropical storms, collecting multiple real-time observations to collect valuable wind data.
- The CHAOS (Coordinated Hurricane Atmosphere-Ocean Sampling) research experiment aims to improve the understanding of air-sea interactions, providing sustained monitoring of key ocean features.

About NOAA seasonal outlooks

NOAA's outlook is for overall seasonal activity and is not a landfall forecast. In addition to the Atlantic seasonal outlook, NOAA also issues seasonal hurricane outlooks for the eastern Pacific, central Pacific and western north Pacific hurricane basins.

Readers wishing to learn more are invited to see here: www.noaa.gov

NOAA's Climate Prediction Center will update the 2024 Atlantic seasonal outlook in early August, prior to the historical peak of the season.

NOAA's mission statement

Climate, weather, and water affect all life on our ocean planet. NOAA's mission is to understand and predict our changing environment, from the deep sea to outer space, and to manage and conserve America's coastal and marine resources.

In hot water: exploring marine heatwaves

Around the world, from the surface waters to the seafloor, the oceans are warming, and society is beginning to adapt to and prepare for this change in climate.

Marine heatwaves occur when sea surface temperatures exceed 90% of typical regional temperatures, factoring in seasonal fluctuations. Scientists compare present conditions to a baseline average from 1991 to 2020, accounting for global warming trends.

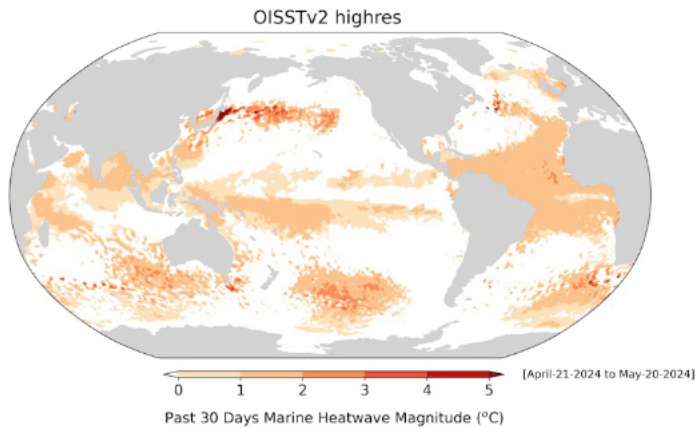
Marine heatwaves can endure for varying periods, from days to years, affecting not only surface waters but also the bottom of the ocean. This research was reported from NOAA on 22 May.

Impacts of marine heatwaves

Extreme warm ocean temperatures can have profound effects on marine ecosystems, weather patterns, and economic activities.

Marine heatwaves stress marine life, leading to mass die-offs of fish, marine mammals, and seabirds, and coral bleaching. They can also trigger harmful algal blooms and intensified hurricanes. The severity of

these impacts varies by region and depends on factors such as the duration, timing, and depth of temperature anomalies.



A map that depicts current marine heatwave conditions for April and May 2024. The magnitude represents the 30-day mean of the daily sea surface temperature anomaly compared to the period of 1991-2020.

Credit: NOAA [Physical Sciences Laboratory](#) ©.

A valuable introduction to this condition with a case study: *The Blob* (2013-2016) and relative results is available to read here: <https://tinyurl.com/3ss4mkz7>

USCG training with the Brazilian Navy

On 4 June it was announced that US Coast Guard Cutter *James* had arrived in the port of Fortaleza, Brazil, for a scheduled visit the previous day.



James' port visit is the cutter's fourth during its multi-mission deployment in the South Atlantic Ocean, exhibiting the US Coast Guard's partnership with Brazil and strengthening the interoperability of the two nations' maritime forces to counter illicit maritime activity and promote maritime sovereignty throughout the region.

Naval officer exchange program

James embarked Brazilian Navy Lieutenant Klinger Freitas as part of a naval officer exchange program between the US and Brazil. This program allows for members to live onboard partner countries' vessels and provides a unique opportunity to train, learn and grow international relations.

In the words of US Coast Guard Captain Donald Terkanian, *James*' CO: 'The Coast Guard and Brazilian Navy has been able to demonstrate how two countries can train to meet multi-mission objectives.'



'James has had the opportunity to develop a relationship with Brazil and pave a foundation for future cooperation and partnering opportunities.'

Shared maritime security

The US Coast Guard, as a trusted maritime partner, is committed to working with Brazil in support of bilateral and multilateral activities concerning our shared maritime security, safety of life at sea and environmental stewardship in the Atlantic Ocean.



James is a 418-foot, Legend-class national security cutter that is homeported in North Charleston, South Carolina. The cutter, staffed by 150 men and women, is one of the largest and most technologically advanced ships in the Coast Guard's fleet.

From the Rockies to the Arabian Gulf

James is under the command of US Coast Guard Atlantic Area. Based in Portsmouth, Virginia, US Coast Guard Atlantic Area oversees all Coast Guard operations east of the Rocky Mountains to the Arabian Gulf. In addition to surge operations, they also allocate ships to work with partner commands and deploy to the Caribbean and Eastern Pacific to combat transnational organized crime and illicit maritime activity.

Illustrations per US Coast Guard Atlantic Area Public Affairs.
USCG ©.