



MARITIMETRAINER

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Some of our new projects

LET'S TALK WEBINAR “SUPPORT STRUCTURES ”



We'd discussed the second Let's Talk Webinar "Support Structures" among the **MTR** family. The webinar has been moderated by our Mental Health Specialist and Psychologist Sinem Çerkez. We have more topics to discuss to increase awareness about #mentalhealth and how to sustain and improve it.



IMO SUPPORTS WOMEN IN PORTS MANAGEMENT CAPACITY BUILDING



Attendees usually undertake a study visit to gain first-hand knowledge of the day-to-day operations of an overseas port. This will allow them to look at implementing similar operating practices back in their respective countries.

This year's course was attended by participants from 11 French speaking countries: Algeria, Burkina Faso, Cameroon, Democratic Republic of Congo, Ivory Coast, Gabon, Lebanon, Madagascar, Senegal, Togo, Tunisia. A visit to the Port of Le Havre and the Port of Rouen (both of which fall under HAROPA Port) is being organized in the spring.

The WIPM course is organized under IMO's gender and capacity-building programme, in collaboration with IPER and HAROPA PORT and held at Le Havre (pictured). It is part of IMO's ongoing efforts to support the UN Sustainable Development Goal number five: achieve gender equality and empower all women and girls.

<https://www.imo.org/en/MediaCentre/Pages/WhatsNew-1671.aspx>



IMO is continuing its efforts to support the careers of women in the maritime sector through delivery of a two-week online course from 17 – 28 January 2022. The 'Women in Port Management' (WIPM) course, which has been running for 18 years in France, is open to women officials from maritime and/or port authorities of developing countries in Francophone Africa. It aims to help attendees improve their skills for management and operational efficiency at the ports they work in.

WIPM, held at Institut Portuaire d'Enseignement et de Recherche (IPER), includes lectures on port management, port security, port environment, facilitation of maritime traffic, the ship/port interface, concession contracts, as well as port marketing, tariffs and logistics. They also learned about IMO's Member State Audit scheme.

SINGAPORE, AUSTRALIA AND INDIA JOIN FORCES TO SOLVE MARINE POLLUTION

The Indian government jointly with the Governments of both Australia and Singapore, organized a workshop on combating marine pollution. The focus was on marine plastic debris. It was held on two days February 14 and 15.

The virtual workshop brought leading government policy-making officials, experts, scientists, and industry representatives from the innovation and informal domains. Its aim was to discuss research advancements made toward assessing and monitoring marine litter and possible next-gen solutions to address worldwide marine plastic pollution.

Panel discussions and interactive sessions were an integral part of the discussion. The target was to boost discussion amongst the participants, especially those belonging to East Asia Summit countries.



The East Asia Summit or the EAS is one of the premier forums that spearhead discussions on strategic issues, particularly those concerning the Indo-Pacific. Since it came into being in 2005, the EAS kept advocating for regional cooperation, peace, security, and prosperity of the Indian Ocean and the Asia-Pacific region. EAS countries recognize the marine and coastal plastic pollution challenges.

Prime Minister Modi announced the agenda of boosting maritime cooperation in the Indo-Pacific region at the 14th session of EAS conducted in Bangkok in 2019. India, Australia, and Singapore are committed to facilitating EAS decisions.

Dr. M Ravichandran, the Secretary of the Ministry of Earth Sciences, Indian Government, delivered the keynote address.

He recommended considering the deployment of technological tools such as artificial intelligence (AI), remote sensing, and machine learning or (ML) for mapping marine plastics distribution. He added that developing models to figure out the dynamics of plastics in our Indian ocean could help.

He emphasized that a tailor-made and well-designed management technique specialized in regional distinctiveness may bring down plastics in our environment.

<https://www.marineinsight.com/shipping-news/singapore-australia-and-india-join-forces-to-solve-marine-pollution/>

MEPC 75 MARPOL ANNEX VI AMENDMENTS ENTERING INTO FORCE ON 1ST APRIL

The 75th session of the IMO's Marine Environment Protection Committee (MEPC 75) took place remotely from 16 to 20 November 2020, and some of the amendments will enter into force on 1 April 2022.

According to the UK Club, the following amendments are to enter into force in April.

#1 Strengthening of the Energy Efficiency Design Index (EEDI) "phase 3" requirements

This amendment brought forward the entry into effect date of phase 3 from 2025 to 1 April 2022 for several ship types including gas carriers, general cargo ships and LNG carriers.

As such, ships built (with their keels laid) on or after 1 April 2022, must be significantly more energy efficient than the baseline.

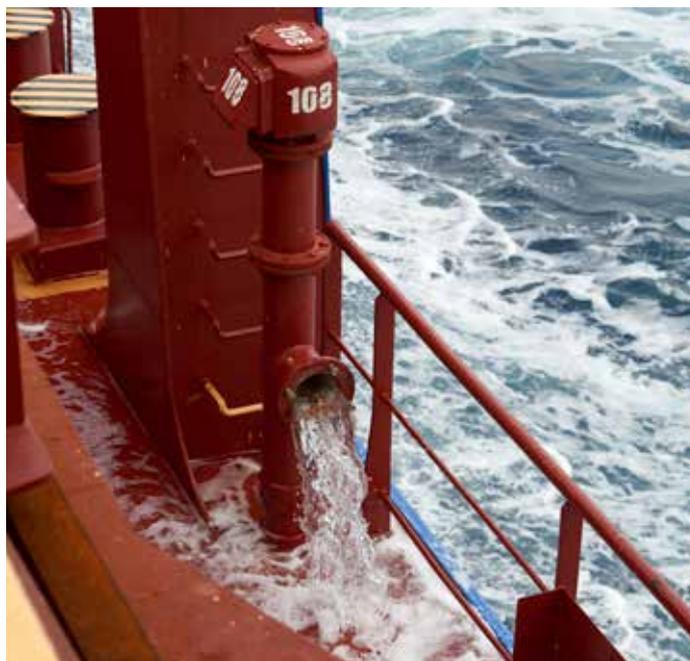
#2 New provisions for fuel oil sampling, testing and verification

Amendments to Regulation 14, 'Sulphur oxides (SOX) and particulate matter', to require one or more sampling points to be fitted or designated for the purpose of taking representative samples of fuel oil in use, were approved.

Ships built (with their keels laid) on or after 1 April 2022 must have fitted or designated sampling points for taking samples of fuel oil in use.

The 75th session of the IMO's Marine Environment Protection Committee (MEPC 75) took place remotely from 16 to 20 November. Among the key points were the approval of amendments to MARPOL Annex VI, with new requirements addressing GHG emissions and the approval of guidelines for onboard fuel sampling.





IMO MEPC 75 Highlights

- **GHG emissions** – The Fourth IMO GHG Study was approved together with the draft amendments to MARPOL Annex VI for the reduction of carbon intensity of existing ships.
- **Fuel oil sampling** – Adopted amendments to MARPOL Annex VI on fuel oil sampling and verification of sulphur content.
- **BWM** – Adopted amendments to the BWM Convention on commissioning testing of ballast water management systems (BWMS).
- **HFO in Arctic** – Approved amendments to MARPOL Annex I, with a prohibition on the use and carriage of HFO for use as fuel by ships in Arctic waters.
- **AFS** – Approved amendments to the Anti-Fouling System (AFS) Convention to include controls on cybutryne.

<https://safety4sea.com/mepc-75-marpol-annex-vi-amendments-entering-into-force-on-1st-april/>



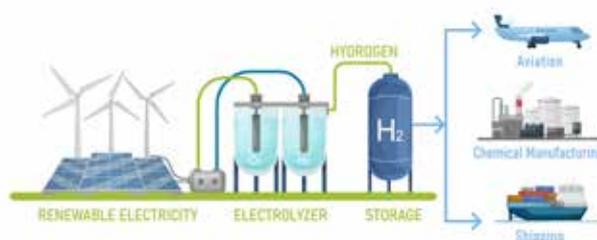
FRENCH 'ZERO-EMISSION HYDROGEN VESSEL' PROJECT CATCHES LIMELIGHT

A French project is introducing a cargo vessel that aspires to be the future of a sustainable sea freight sector by operating on hydrogen, permitting no greenhouse gas emission directly. The Energy Observer 2, unveiled at the UN-backed One Ocean Summit in western Brest on 10 February, Thursday, is the newly launched prototype that follows its relatively smaller sister vessel titled the Energy Observer launched back in 2017.

The latter is a catamaran covered in solar panels and was the first boat that deployed renewable energy and was capable of producing hydrogen from saltwater.

The goal is to have the first zero-emissions cargo vessel hit the seas by 2025. While the sister was merely an exploration boat, the Energy Observer 2 is geared to take on heavy loads and has the capacity to transport about 240 freight containers.

Victorien Erussard, the founder of Energy Observer, who says sea freight is responsible for about 3% of CO₂ emissions in the world, said that this boat can de-carbonize one-third of the existing fleet in the world.



The plan is for the cargo vessel to be operated by liquefied hydrogen that is produced on the land with carbon-neutral energy, Erussard aspires, like nuclear or any other sources of renewable energy.

The vessel boasts four sets of sails that appear similar to vertical wings that use wind propulsion to lower fuel consumption by about 40%. The ship has Liquid hydrogen tanks with capacity of 70 tonnes and a travelling range of up to 4,000 nm.

Air Liquide masters the production, distribution, storage, and even safety of liquid hydrogen and hones its expertise and capacity for further innovation.

<https://www.marineinsight.com/shipping-news/french-zero-emission-hydrogen-vessel-project-catches-limelight/>

SEAFARER WELLBEING IDENTIFIED AS A “CASUALTY OF THE PANDEMIC” ICS

The annual Shipping Industry Flag State Performance Table, from the International Chamber of Shipping, has identified reporting on seafarer wellbeing as a “casualty of the pandemic,” following its publication this week. The Table is intended to encourage ship-owners to maintain a dialogue with their Flag states, and help facilitate necessary improvements in the interests of safety, the environment and decent working conditions, among other issues.



The Flag State of a merchant ship is the jurisdiction under whose laws the ship is registered or licensed and is deemed the nationality of the vessel. This year’s Table highlights a drop in levels of reporting on the status of national ILO labour standards, including the 2006 Maritime Labour Convention (MLC), underscoring the severe administrative pressures of the pandemic and the ongoing ‘crew change crisis’ on seafarers, governments and the industry alike.

The Table’s criterion assessing flag states’ reporting on ILO labour standards, including the MLC, revealed a 6 percentage point decrease in the Flag States successfully meeting their obligations.

The ILO Committee of Experts on the Application of Conventions and Recommendations, which compiled the report used by the ICS Table, noted that “there was a sharp decrease in the number of reports received by the deadline of 1 October this year in relation to previous years.” In total, of the 2,004 reports on labour standards requested by the ILO from governments in 2021, only 42.9% of these requests were granted. This is in comparison to a 70.7% rate of reporting received by the ILO the previous year.



The findings were an outlier against a generally strong performance across the board from most Flag States, on criteria such as Port State Control (PSC) records and ratification of international conventions. ICS noted that while this trend can be partly explained by administrative pressures brought about by COVID-19, it also serves as a reminder that the hardships suffered by the global workforce throughout this pandemic may not be at the forefront of national administrations' minds.

Guy Platten, ICS Secretary General, commented: "The pandemic has been a challenge for us all and one that Flag States have also had to weather. However, the drop off in reporting against ILO Labour Standards, including the MLC, is further evidence that seafarer wellbeing has been an unintended casualty of the pandemic.

"Hundreds of thousands of seafarers have been trapped on ships for many months beyond their scheduled tours of duty throughout the last two years. This report is a reminder that the Flag States must keep seafarer wellbeing as a top priority."

Amongst the 10 largest ships registers (by deadweight tonnage), covering more than 75% of the world fleet, none have more than two indicators of potentially negative performance, and five have no negative indicators at all.

The findings also suggest that distinctions between 'traditional' flags and open registers are no longer meaningful, with many open registers amongst the very top performers, alongside several European registers.

<https://www.marineinsight.com/shipping-news/seafarer-wellbeing-identified-as-a-casualty-of-the-pandemic-ics/>

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Flag States must keep seafarer wellbeing as a top priority.



COLLISION WITH A FISHING VESSEL IN A RESTRICTED WATERWAY

A loaded tanker was inbound under pilotage, making 11 knots in a restricted waterway. Visibility was initially low at about 0.5 nm, but the pilot told the Master that visibility was clear in the harbour and had been clearing for the last few hours. They agreed to continue the inbound transit. The pilot set up two portable pilot units (PPU) and informed the Master that he would hail outbound vessels to arrange port-to-port passages. A crew member was sent to the bow as lookout/anchor standby. The fog horn was sounding from the forward mast.

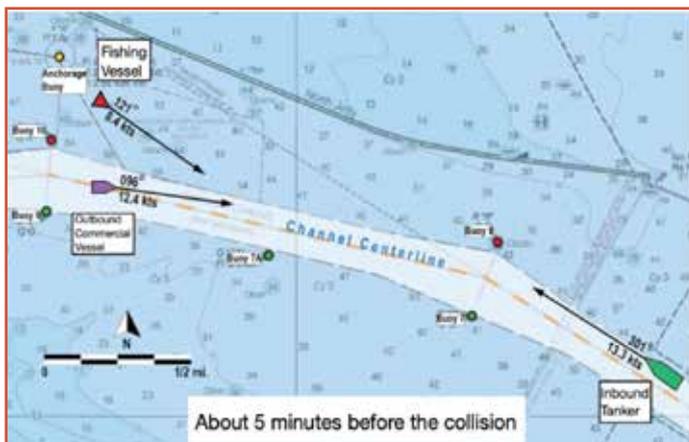
Meanwhile, an outbound fishing vessel ahead had turned to starboard and was heading towards the channel at an angle of intersection of about 30°. On the tanker at this time, the pilot planned to meet an outbound commercial vessel by moving to the extreme right side of the channel, giving the centre channel to the outbound ship.

At 1535, the tanker's pilot hailed the fishing vessel twice on VHF radio. Although the operator of the fishing vessel did not respond, electronic data shows that, shortly after the first attempted hail, the fishing vessel came 19 degrees to port. The predicted vector from the new heading, just north and slightly parallel to the outskirts of the channel boundary, indicated that the fish-



ing vessel would continue to enter the channel at a very shallow angle, crossing ahead of the inbound tanker at about 8.4 knots. About one minute after the failed VHF communication with the fishing vessel's operator, the tanker's pilot sounded five short blasts. Electronic data shows the fishing vessel maintained its heading nonetheless.

About 90 seconds after the first danger signal and some 10 seconds after a second danger signal, the tanker collided with the fishing vessel, which capsized almost immediately. One crew member from the fishing vessel was rescued from the water alive. Another crew member was recovered from the water and pronounced deceased. The bodies of two other crew members were found within the wreck.



The subsequent official investigation could not determine why the fishing vessel's operator did not slow or take substantial action to avoid transiting into the channel directly in front of the tanker, or what the captain of the fishing vessel was doing in the minutes leading up to the collision. It is possible the captain was away from the conn, was distracted, fell asleep, was unsure of what action to take, or was otherwise unable to respond to the developing situation. The captain's failure to slow his vessel, act on his ARPA's information or respond to the tanker pilot's communications may have been due to a medical event.



<https://www.nautinst.org/resources-page/202206-collision-with-a-fishing-vessel-in-a-restricted-waterway.html>

Lessons Learned

- Much as in the previous MARS report, early communication can be an effective measure in averting close quarters situations. The use of VHF radio can help to dispel assumptions and provide operators with the information needed to better assess each vessel's intentions.
- Never assume the actions of another vessel will be coherent or logical. Many jurisdictions still do not require small vessel operators to pass competency requirements. Small boats should be watched carefully by professional mariners.
- In near zero visibility, slow down. The resultant approach speed of the tanker and the fishing vessel was nearly 22 knots.error.

COLLISION WITH A **FISHING** **VESSEL** IN A TSS

A general cargo vessel was sailing in a Traffic Separation Scheme (TSS) at night in calm seas and good visibility. The vessel was under autopilot, on a course of 249 degrees at approximately 10.5 knots. The Officer of the Watch (OOW) noticed four fishing vessels on the radar that were crossing the TSS and appeared to be sailing as a group. The fishing vessels were approximately 10.5 nm away and approaching on the port side, showing Closest Point of Approach (CPAs) of between 0.1 and 0.6 nm. The Time to Closest Point of Approach (TCPA) was approximately 50 minutes.

Some time later, the OOW set the radar to a 6 nm range. The radar indicated three CPA/TCPA limit alarms from the group of four fishing vessels. One of the fishing vessels altered course approximately 30° to port in order to cross ahead of the cargo vessel with a CPA of 0.4 nm.

Two of the other fishing boats, A and B, kept a course of approximately 006 degrees. At one point, fishing boat B altered course slowly towards 011 degrees to pass astern of the cargo vessel, but fishing vessel A did not follow this move. Its CPA to the cargo vessel was approximately .05 nm. In the following minutes, the OOW of the cargo vessel noticed that the CPA of fishing boat A had decreased to zero.

By this time another officer had arrived on the bridge of the cargo vessel for the change of watch. Before the handover could be accomplished the OOW on duty realised that fishing vessel A was not taking avoiding action. The OOW sounded the horn to warn fishing vessel A and then put the rudder hard to starboard. About 40 seconds after sounding the horn, the two vessels collided. Fishing vessel A ran into the port side of the cargo vessel amidships and then slid aft. Both vessels sustained structural damage but there were no injuries.

It was discovered during the investigation that the lone watchkeeper on board fishing vessel A did not realise the cargo vessel was there until it was too late. The investigation also found that the 'apparent intentions' of the four fishing vessels contributed to the accident. Some of the fishing vessels did take action to avoid the cargo vessel but in the end, one did not. The OOW on the cargo vessel assumed all the fishing vessel crews had observed his ship, but he was wrong.

<https://www.nautinst.org/resources-page/202205-collision-with-a-fishing-vessel-in-a-tss.html>



Lessons Learned

- When in doubt and always when a very small CPA is detected, establish early communications with the other vessel and ensure everyone knows what actions are to be taken.
- Sound navigation practices and a good lookout would have avoided this accident as the Master of the fishing boat would have realised there was a stand-on cargo boat on his course with a zero CPA.

WHAT IS SEASONAL AFFECTIVE DISORDER AND HOW TO ADDRESS IT

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Natural sunlight is an important element in any healthy lifestyle, being an invaluable source of vitamin D.



As the UK Club explains, with the dark nights of winter and the colder days upon us, many people start to feel more lethargic, less motivated and experience lower moods than usual. Others may suffer these general symptoms, with some describing a need for more sleep, while others experience less enjoyment in hobbies and activities.

In addition, while many people experience low moods during the winter months, others may suffer from a more severe form known as Seasonal Affective Disorder (SAD), which can have a significant impact on a person's daily life, impeding their ability to work or to socialise.

“A crew member's ability to perform in their role is crucial to stay safe and prevent injury to themselves and others”

Seafarers can be affected by SAD just like the rest of the world, and together with the daily stresses of the job, it can be easy to feel overwhelmed, both mentally and physically.

What causes Seasonal Affective Disorder (SAD)?

The conditions of the winter season, like shorter days, colder temperatures and lack of natural sunlight, can have an impact on a person's ener-

gy levels and overall mental and physical health, with the distinct lack of sunlight being a crucial factor.

In fact, natural sunlight is an important element in any healthy lifestyle, being an invaluable source of vitamin D, as well as affecting a person's serotonin levels and internal body clock.

Vitamin D

The human body uses sunlight to generate vitamin D, which is crucial for absorbing calcium and maintaining healthy bones, teeth and muscles.

Serotonin

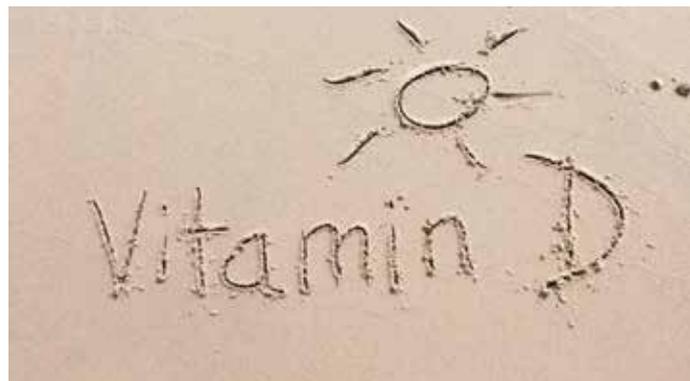
This is the hormone that affects mood, decision making, social behavior and other cognitive functions.

Internal body clock

A person's exposure to sunlight can affect their internal body clock, resulting in fatigue.

What to look out for

- Greater need for sleep
- Agitation or anxiety
- A loss of pleasure or interest in normal everyday activities
- Persistent low mood



- Less energy / fatigue
- Trouble concentrating
- Increased appetite / weight gain
- Becoming less sociable

Minimising the effects of SAD

There are many changes that can be made to address the effects of SAD during winter, these include:

- Try to get as much sunlight as possible during the day. If this is not possible, a 'light box' that emits light similar to that of the sun can be beneficial.
- Include more vitamin D in your diet by eating vitamin rich foods, such as fish, oranges and eggs.
- Try to exercise for 30 minutes a day.
- Where possible, try to avoid stressful situations, and take steps to manage your stress levels.

<https://safety4sea.com/what-is-seasonal-affective-disorder-and-how-to-address-it/>

USCG PUBLISHES TECHNICAL, ORGANIZATIONAL, AND CONFORMING AMENDMENTS

The US Coast Guard issued a final rule to make technical and editorial corrections to the Code of Federal Regulations (CFR).

This final rule, which became effective on January 21, 2022, makes non-substantive technical, organizational, and conforming amendments to existing Coast Guard regulations.



“These changes are necessary to update authority citations, correct errors, update contact information, and make other non-substantive amendments that improve the clarity of the CFR. This rule does not create or change any substantive requirements” said USCG.

In one of the amendment, the rule revises the definition of “major marine casualty” to apply to property damage initially estimated at \$2,000,000 or more, rather than \$500,000 as provided in the current regulations.

It also corrects an error introduced in the 2013 Implementation of the Amendments to the International Convention on Standards of Training, Certification, and Watchkeeping for Seafarers,

1978, and Changes to National Endorsements final rule to limiting an officer’s endorsement obtained with an orally assisted examination to vessels of 200 gross register tonnage (GRT), rather than 500 GRT.

Furthermore, the rule replaces references to required pilot experience on vessels of 1,600 GRT or 3,000 “gross tonnage” (GT) with reference to 1,600 “gross register tonnage” (GRT) only.

In the STCW final rule, the Coast Guard adopted the convention that it would use GRT when discussing national endorsements and GT when discussing Standards of Training, Certification, and Watchkeeping for Seafarers endorsements.

In the Correcting Amendments to the STCW final rule, the Coast Guard decided to revert to the prior text of the 2013 rule, but omitted the convention of solely using GRT for national endorsements and reverted to the prior text without editing the tonnage to 1,600 GRT. As a result, the requirement for GRT remained, causing confusion in the industry.

In addition, the rule amends the definition of “issuing officer” by adding qualified civilians to the list of Coast Guard personnel who may issue a notice of violation (NOV). Previously, the definition only provided that Coast Guard commissioned, warrant, or petty officers could issue NOVs.

These officers do investigate potential violations, however an increasing number of investigating officers are civilian employees of the Coast Guard.

<https://safety4sea.com/uscg-publishes-technical-organizational-and-conforming-amendments/>

SOME OF OUR NEW PROJECTS



LET - Hazard and Risk

Almost all operations on the ship are dangerous and they all have their own procedures and precautions. Upmost care must be given to Risk Assessments and Tool Box Talks to identify Hazards and Risks in advance.

CBT - Security Awareness Training for Seafarers with Designated Security Duties

Every seafarer with designated security duties to perform, including anti-piracy and anti-armed-robbery-related activities, shall be required to demonstrate competence to undertake the tasks, duties and responsibilities listed in A-VI/6-2 of STCW Convention.





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