

the global

SEAFARER

Wherever you are, so are we

Volume 8 | Issue 3

A GOOD INFLUENCE(R)

Meet Scarlett Barnett-Smith, who has been spreading the word online about life and work at sea



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OPINION

Tough talking on sustainable transport



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nautilusfederation.org

Incorporating the Merchant Navy Journal and Ships' Telegraph.
ISSN 0040 2575

Nautilus International also administers the Nautilus Welfare Fund and the J W Slater Fund, which are registered charities.

Published by Nautilus International

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Front cover image credits:
Scarlett Barnett-Smith

The transition from heavy fuel oils to new energy sources is something that we will be discussing and working on across our campaigns and activities – calling for a Just Transition to be made and leaving no one behind.

I recently represented Nautilus at a workshop hosted by the International Transport Workers' Federation (ITF) to discuss climate finance in transport. With the ITF taking part in United Nations climate finance talks and preparing its participation for the COP29 climate summit later in the year, the organisation aims to put transport workers in a position to directly influence such topics.

The ITF proposes two specific areas to ensure that climate action moves on from the current approach that can appear piecemeal in its implementation.

1. SUSTAINABLE TRANSPORT ACTION MASTER PLANS (STAMPS)

These are missing in many national jurisdictions and should be introduced in order for entire transport systems and the supply chain to become environmentally sustainable. STAMPS must include just transition principles

around workers' rights, diversity and training, and be an integrated approach for all transport modes including passenger and freight.

2. CLIMATE FINANCE PLATFORMS (CFPS)

There is a huge gap in climate finance at present, with COP29 expecting to see a call for US\$1trillion (£800bn) per year necessary to reach climate goals. Public finance will of course be needed to reach such levels, but this finance should not be used to support private profit, particularly if workers' rights and Just Transition principles are not respected. Some elements of finance from the 'global north' will be necessary to support the 'global south' in international moves to protect the environment, but this cannot be in the form of further debt burdens for the global south.

It will be necessary for the Nautilus Federation to continue to monitor and support the work of the ITF in this area, ensuring that the voices of maritime professionals are represented throughout the supply chain's moves to greener transport.

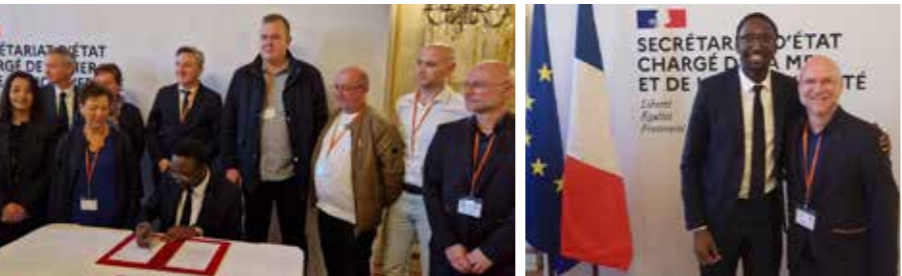
● If you would like to find out more, please contact me via dmcgowan@nautilusint.org

France institutes new minimum wage law to protect ferry crew

On Tuesday 19 March, the French government signed a decree bringing into effect legislation that forces cross-channel ferry operators to pay the French minimum wage of at least £9.95 per hour. The law also states that crew must not work for more than two weeks at a time without a day off.

It has been instituted in response to the actions of P&O Ferries two years ago, when the company replaced hundreds of seafarers with contract workers paid well under French and UK minimum wage.

Operators will have a three-month grace period to bring their practices into line with



the new requirements. After this, any found in violation will face a fine of £76,000 a day, to be split between UK and French authorities.

French maritime union CFDT – an affiliate union of the Nautilus Federation – was present for the signing of the decree.

Thierry Le Guével, general secretary of Union Federale Maritime, part of CFDT, said: 'The next challenges will be making the tools of the state available for enforcement of the law, and payment of paid leave. The UFM CFDT will bring an amendment to this effect before elected officials.'

Mr Fabien Decroq (right) represented CFDT at the signing. He is pictured with France's maritime minister Hervé Berville at the ceremony

CREDIT: CFDT



NAUTILUSTV: YOUR ULTIMATE MARITIME CHANNEL

Nautilus International is thrilled to announce the launch of a dedicated news programme for members on our YouTube channel, NautilusTV.

The programme has exclusive content featuring members, maritime professionals and prominent figures in the maritime industry. Dive into insightful interviews, engaging discussions and first-hand accounts from the maritime world.

• Subscribe now at www.youtube.com/@nautilusint



US unions call for Congress to support anti-harassment protections

Don Marcus, president of the International Organization of Masters, Mates & Pilots (MM&P), and Adam Vokac, president of the Marine Engineers' Beneficial Association (MEBA) – two Nautilus Federation affiliates – have joined other union leaders in calling on US congressional leaders to reject any attempt to weaken the protections afforded to merchant mariners under that country's Safer Seas Act.

The Act was promulgated in 2022 to address the problem of sexual assault and sexual harassment in the maritime

industry. It requires companies to inform the US Coast Guard if a harassment complaint is received. It also requires that companies maintain a video surveillance system with audio capability in parts of the ship. Critics of the law are now attempting to weaken it through amendments to the Coast Guard Reauthorization Act of 2024.

One proposal would eliminate the Coast Guard notification requirement, leaving harassment incidents and any possible corrective action solely to the company.

Unions urge nations to invest in seafarer security

Nautilus Federation director Mark Dickinson has called on western governments to re-energise their maritime industries and prioritise the safety of seafarers and seaborne trade.

Speaking at the US Masters, Mates & Pilots (MM&P) union's convention on 25 June – the International Day of the Seafarer – Mr Dickinson noted that the theme of this year's Day was 'safer maritime workplaces'.

Many would take this to mean that seafarers should avoid accidents onboard, he pointed out, but there are other ways they can come to harm in an increasingly unstable world.

'Do we think that all the personal safety tips in the world will prevent another drone attack from Houthi rebels?' he said. 'Should we not be thinking how we can avoid putting seafarers in danger just for going about their jobs?'

'The International Transport Workers' Federation is calling on



Mark Dickinson (right) with Don Marcus, president of the Nautilus Federation union MM&P

CREDIT: Nautilus International

governments to step up and coordinate their efforts to protect seafarers sailing in or through the Red Sea. Shipping companies must demonstrate their commitment to their seafarers by diverting their ships. flag states must instruct companies to divert their ships.'

Turning to the future, Mr Dickinson also argued that countries would need to invest in building up their domestic maritime industries – and provide appealing jobs for maritime professionals – if they are to ensure their security in the coming decades.

NATO warned against neglecting merchant marines

A number of unions affiliated to the Nautilus Federation have called for NATO member states to invest in the Merchant Navy.

In a statement to July's NATO summit in Washington DC, the unions said: 'We urge the

alliance and its members to recognise the vital role of merchant navies in national resilience, security and defence, especially in today's volatile geopolitical landscape.

'With rising geopolitical tensions threatening Europe with war in Ukraine,

escalating violence in the Middle East, and as we witness efforts by other nations to dominate the high seas, NATO must confront the alarming decline in the numbers of qualified merchant seafarers and national-flagged merchant vessels.

'Diminished merchant marines and a shortage of qualified officers and ratings impair our collective and individual ability to support military logistics and secure essential supply chains for energy, food, and medical supplies during conflicts and health emergencies.'

IMO CHIEF BOOSTS MARINE POLLUTION CAMPAIGN

On 20 June, the GreenSeas Trust charity saw one of its iconic BinForGreenSeas installed in the most meaningful spot yet – outside the International Maritime Organization (IMO) headquarters in London.

IMO secretary-general Arsenio Dominguez cut the ribbon in a ceremony hosted by GreenSeas Trust founder Fazilette Khan, saying that the bin would be a valuable daily reminder of the importance of the IMO's anti-pollution work.

Find out more about the BinForGreenSeas in our Nautilus TV interview with former seafarer Fazilette Khan. Just search for @nautilusint at www.youtube.com

18

coastal and river sites around the UK now have a BinForGreenSeas, raising awareness and keeping plastics out of the sea

4

of these are on the River Thames in London, including by Shakespeare's Globe Theatre

1 million

plastic bottles will soon have been collected in the 18 bins, and the scheme is now going international

www.greenseas.org



CREDIT: Nautilus International

Time out with a trailblazer

For the launch of series three of the Nautilus podcast Off course, **Helen Kelly** sat down with Scarlett Barnett-Smith – AKA **@captainscarlett** – to talk about her journey from Port of London Authority apprentice to Officer of the Watch Unlimited, and how she became a passionate supporter of female seafarers



CREDIT: Scarlett Barnett-Smith

Scarlett Barnett-Smith is no stranger to the challenges of life at sea. As a third officer with DFDS, she helms one of the busiest ferry routes in the world, navigating the treacherous English Channel up to 10 times a day. It's a role that demands unwavering focus, quick thinking, and a steady hand – qualities that Scarlett has honed through years of intensive training and a steadfast determination to succeed.

At just 25 years old, Scarlett's resumé already reads like that of a seasoned seafarer. After completing a rigorous three-year cadetship, she's worked aboard the prestigious Sir David Attenborough research vessel, as well as for Trinity House and the Port of London Authority. Now, she's making waves as a passionate advocate for female seafarers, earning recognition as a trailblazer in the industry.

'It's surreal, really,' Scarlett admits, her eyes sparkling.

'Crossing such a busy channel, going against the flow of traffic – it's intense, but it's also incredibly rewarding.'

Scarlett's days are a whirlwind of activity, from meticulously planning the loading and unloading of cargo to navigating the channel. As a third officer, she's responsible for managing the bridge operations, coordinating with the quartermaster to ensure safe passage and checking passengers and vehicles are loaded correctly. 'It's like a game of Tetris,' she explains, gesturing animatedly. 'I must carefully plan the placement of everything from cars and motorbikes to dangerous goods and refrigerated cargo. It's a constant juggling act.'

Scarlett's journey to this point has been anything but easy. She recalls the overwhelming sense of responsibility that came with her first solo watch, the weight of the ship and the lives of her crew and passengers resting squarely on her shoulders. 'The first time the captain handed me the con, I felt like my stomach was in knots,' she admits. 'But I knew I was prepared, that I had the training and the skills to handle it. It's still overwhelming at times, but I've gained so much confidence and experience.'

That confidence has been hard-won, forged through years of intensive study and hands-on experience. Scarlett's cadetship, which she describes as 'brilliant', laid the foundation for her success, allowing her to hone her navigation skills and learn the intricacies of bridge management under the watchful eye of seasoned officers.

'As a cadet, you're given a lot of responsibility, even though you're not technically qualified,' she explains. 'You're trained to handle emergency scenarios, to navigate any size of ship. It's that kind of preparation that really sets you up for success as a junior officer.'

Sky's the limit

Now, with her unlimited officer's licence in hand, Scarlett is poised to take on even greater challenges. Her ambitions stretch far beyond the confines of the English Channel, and whilst she's very happy to be working with DFDS, she's also eager to explore the diverse opportunities that her credential affords.

'This licence is truly unlimited,' she says, a hint of pride. 'I could go from working on a ferry to a tanker, a cruise ship, or even a research vessel, with some type specific training. The possibilities are endless, and that's what makes this job so exciting.'

But for all the thrill and adventure that comes with life at sea, Scarlett is quick to acknowledge the challenges that seafarers face. From the long hours and extended periods away from home to the lack of diversity and

Off course series 3 Pod turns vod!

You can now watch series 3 of the awards-nominated Nautilus pod via the NautilusTV YouTube channel: www.youtube.com/@nautilusint

Series 3 showcases maritime influencers. From tanker trailblazers to superyacht superstars, we've got them all.

Give us a like and a follow both on YouTube and on your favourite podcast platform to get the full interview with **@captainscarlett** and never miss another episode again!

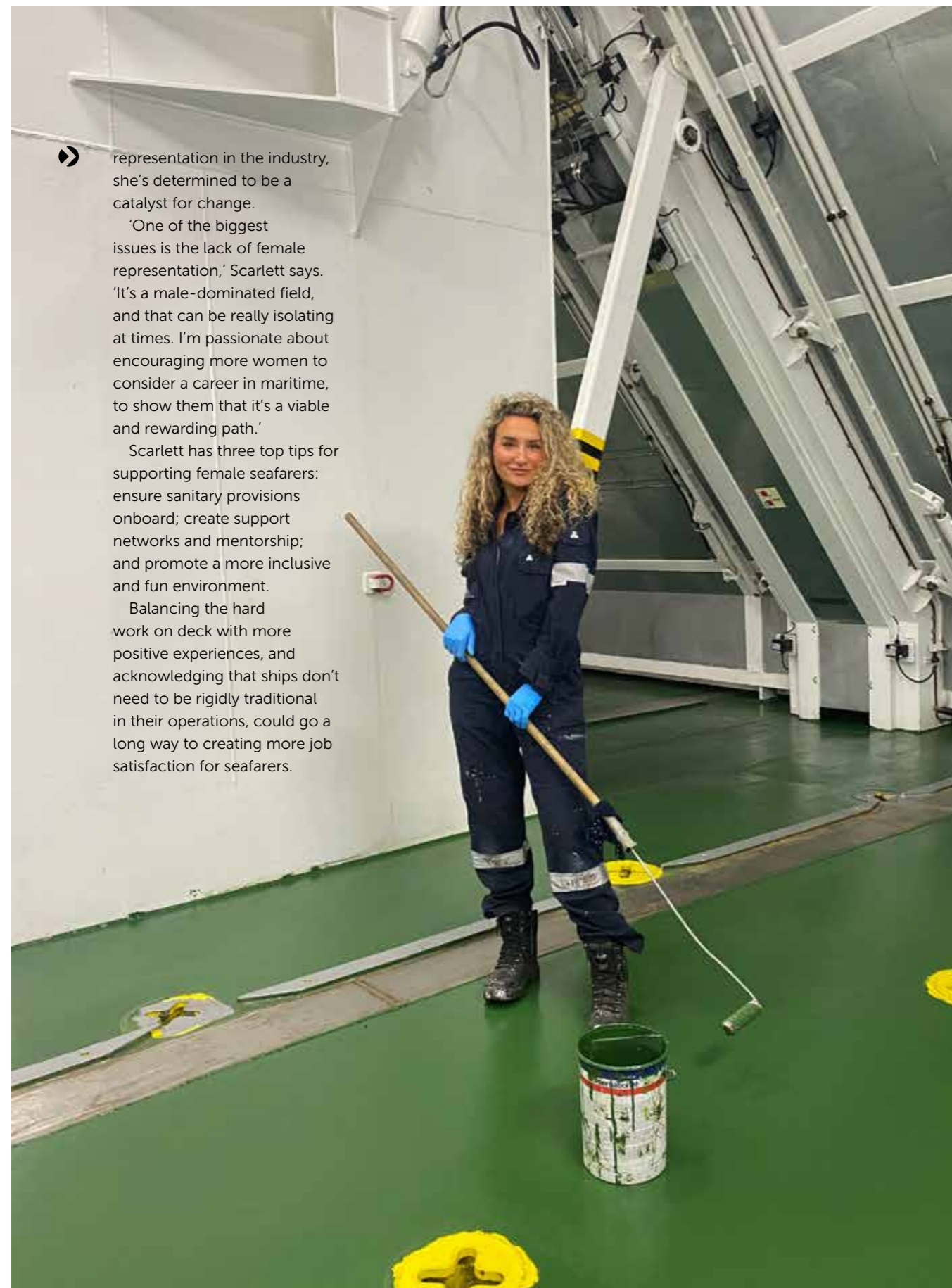
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www.instagram.com/captainscarlett



representation in the industry, she's determined to be a catalyst for change.

'One of the biggest issues is the lack of female representation,' Scarlett says. 'It's a male-dominated field, and that can be really isolating at times. I'm passionate about encouraging more women to consider a career in maritime, to show them that it's a viable and rewarding path.'

Scarlett has three top tips for supporting female seafarers: ensure sanitary provisions onboard; create support networks and mentorship; and promote a more inclusive and fun environment.

Balancing the hard work on deck with more positive experiences, and acknowledging that ships don't need to be rigidly traditional in their operations, could go a long way to creating more job satisfaction for seafarers.

The guided missile destroyer USS Mason taking part in Operation Prosperity Guardian in the Red Sea

Governments need to work harder to protect Red Sea crews



Nikolaos Koletsis is senior policy officer for maritime transport at the ETF

Joint working and renewed commitment is needed from the allies defending merchant vessels from Houthi attacks, says **Nikolaos Koletsis** of the European Transport Workers' Federation

Just a few days before the 6 March attack on the True Confidence, we had been saying at the ETF that it was only a matter of time before seafarers were killed or injured in the Red Sea, and very sadly, we were proved right.

We were calling on the industry to put aside commercial considerations and focus on the safety of seafarers by re-routing vessels away from the Red Sea. This call is now even more important after the recent developments in the area.

As of the middle of April, the number of ships going around the Cape of Good Hope has tripled, but still we see ships sailing through the Red Sea daily, putting the innocent lives of seafarers at risk from attack by

the Houthi rebels in Yemen.

After the attack on the True Confidence, the International Bargaining Forum has designated the Red Sea and Gulf of Aden 'warlike' areas, with effect from 19 March 2024.

The EU and US military operations Aspides and Prosperity Guardian continue to take place in the area. These operations are not expected to solve the issue in the short term. To address the emerging crisis, there is a need for a coordinated and integrated approach to security in the region for a solution to guarantee stability and the safety of shipping in the area in the long term.

Today, we are amidst a very complex geopolitical environment, and the risk of escalation in the

Middle East seems more possible than ever. The EU and its allies need to take initiatives to control the crisis, carefully assess the geopolitical situation and intensify dialogue with the Gulf countries. More concerted efforts are required to address the root causes of the crisis, including coordinated efforts and diplomatic initiatives, contributing to maintaining the freedom of navigation in the Red Sea.

Many months have passed since the Houthis seized the Galaxy Leader and its 25 crew members were seized by the Houthis in the Red Sea in November 2023. All efforts must be made by international organisations and states to secure the release of all seafarers – the innocent victims of the ongoing aggression in the Red Sea.

Viking Sky drifting towards rocks and shallows after the blackout



Power problems and alarm alert following **Viking Sky** near miss

An investigation into the near-grounding of a cruise ship, which experts warned 'had the potential to develop into one of the worst disasters at sea in modern times', has concluded that the vessel should not have been at sea because it was in breach of safe return to port requirements. **Andrew Linington** reports

In March 2019, the 47,842gt Viking Sky – which had 1,374 passengers and crew onboard – came within a ship's length of running aground after suffering a blackout and loss of propulsion and steering during a fierce storm off the coast of Norway.

A Norwegian Safety Investigation Authority (NSIA) report on the incident warns that shortfalls in emergency training resulted in a 'time consuming' process to recover power. Alarm overload is also highlighted, with engine control room crew members struggling to deal with up

to 1,000 alarms – many of them non-critical – within the first 10 seconds of the blackout.

Investigators found that recovery from a blackout without a standby generator had never been drilled onboard and engineers 'were therefore faced with a situation they could not readily recognise and were not practised in managing'.

It took 39 minutes from the blackout until both propulsion motors were operational and the ship had sufficient power available to maintain between 1 to 5 knots ahead. During this time Viking Sky

It took 39 minutes from the blackout until both propulsion motors were operational

came within a ship's length of running aground despite the attempt to arrest its drift by deploying both anchors.

DESIGN SHORTCOMINGS

The NSIA concluded that the blackout occurred when all three operational diesel generators were shut down by protective systems as a consequence of low lube oil pressure. Low levels of lube oil in the sump tank, combined with the effects of vessel motion in the stormy conditions, meant the lube oil suction pipe opening was exposed to air, leading to a loss of suction – something that was also a factor in the loss of the US-flagged containership El Faro in 2015.

The fourth diesel generator was out of action because of a defective turbocharger. Although repair work was scheduled, the report says passengers and crew had been exposed to an 'unacceptable risk' in the forecast weather conditions as the vessel did not have the redundancy required by the safe return to port regulations and 'it should not have departed Tromsø under the prevailing circumstances'.

The NSIA said shore-based management had failed to effectively bring the safe return to port rules into the scope of the safety management system and this meant there was a lack of adequate support for crew members making decisions onboard.

Investigators found that Viking Sky's lube oil sump tank design did not comply with SOLAS regulations or class rules. The Fincantieri shipyard's design process and Lloyd's Register plan approval process failed to effectively ensure the tanks met the requirement for safe operation under dynamic inclination.

The report notes that none of the five sisterships in the Viking Sky class had been provided with instructions on correct lube oil sump tank filling levels or alarm setpoints. Engineers' requests for information about recommended oil levels were not fully answered and no

guidance was given until the Viking Sky incident occurred.

'The remote lube oil sump tank level monitoring system was complex, and the resulting onboard measurements were inaccurate and unreliable,' it adds. 'The engineering crew onboard Viking Sky had gradually lost confidence in the remote monitoring system. Since the level alarms were generated by the remote readings, the crew did not take the level alarms as a true indication of the actual level.'

'The combination of economic considerations, underestimation of consumption, the lack of confidence in the remote tank monitoring system and the lack of instructions regarding the correct filling and alarm setpoints, probably resulted in the lube oil levels and alarm settings decreasing over time,' it points out. 'The safety issues related to lube oil level management observed onboard Viking Sky were likely the result of underlying organisational safety issues.'

The NSIA report makes 14 recommendations to improve safety, including action by the International Maritime Organization, owners, builders and class to improve compliance with SOLAS rules governing lube oil tanks, as well as procedures for lube oil level management.

ALARM OVERLOAD

The report calls for Norway to work with the IMO to develop an engine room alarm management performance standard and vividly describes the problems of alarm overload during the incident, as everything from swimming pool temperature alarms to highly critical alarms sounded as the blackout occurred, with no variations in sound, pitch, timing or colour to distinguish priority.

The 'almost constant' nature of alarms during routine operations leaves crew members with a 'reduced sensitivity' to them, it warns, and a lack of guidance on how to respond to them may lead to an increased risk of them being dealt with 'inappropriately'.

Lack of oversight

'Ineffective' navigation and failure to properly supervise watchkeeping officers have been blamed for a collision off the coast of India, writes **Andrew Linington**

Accident investigators have found that the crews of the 18,957dwt bulker Aviator and the 49,999dwt tanker Atlantic Grace failed to use all available means to assess the risk of collision and to take positive action to avoid it.

The two ships – both in ballast at the time – collided in the Gulf of Kutch, off the north west coast of India, in November 2021 even though one vessel had first spotted the other 8nm away and 20 minutes before the collision.

Although no one was injured, it took more than a week for salvage teams to separate the two ships and the bulker was later declared a total loss.

Investigators said both bridge teams were aware of the relative position of the other ship for at least a quarter of an hour before the accident but neither had used equipment such as ARPA to determine the risk of collision. The two ships had approached each other at a combined speed of 24 knots, with avoiding action being taken only one minute before the collision.

A report published by the Marshall Islands maritime administrator notes that both ships were operating in autopilot until a few minutes before the collision, even though Aviator's standing orders required hand steering when within 3nm of another ship and Atlantic Grace's safety management system required hand steering within 25nm of land.

It says the masters of both ships had

failed to properly supervise their watchkeeping officers, spending most of the time leading up to the collision doing chartwork behind the bridge curtains. The bulk carrier's officer of the watch (OOV) was on his first contract as a junior officer and the tanker's OOV had only two years' experience as a third officer and was on his first trip on an Anglo Eastern ship.

Investigators said the Hong Kong-flagged tanker's bridge team appeared to have been aware

of a VHF message from the Gulf of Kachchh vessel traffic services, 13 minutes before the accident, warning of the risk of collision.

The bulker's crew failed to hear it at all because they were monitoring a different VHF channel.

Neither vessel had used sound signals as they approached each other, as prescribed in the collision prevention regulations.

The tanker's OOV said he had passed a planned waypoint where he was meant to turn because

he wanted to avoid fishing nets that had been spotted off the ship's side and the report said he had appeared to prioritise this over assessing the risk of collision.

The investigation report recommends that the managers of both ships 'use the lessons learned from this very serious marine casualty' as the basis for reviewing with masters 'their expectations for providing oversight of and guidance for junior deck officers'.



Aviator and Atlantic Grace following the 2021 collision

CREDIT: Marshall Islands Maritime Administrator

FUEL TRAINING FOR A JUST TRANSITION

The days of highly-polluting heavy fuel oil and diesel are numbered, and several greener alternatives are now being developed. But how and where will seafarers learn to operate vessels powered by these new fuels?

In this special report, we consider how to support an environmentally sustainable shipping industry in a way that is fair and inclusive for our members. We also investigate the current state of play on developing training standards and course provision for seafarers working with new fuels

T.

Watch Nautilus head of professional and technical David Appleton talk about future fuels in this interview on NautilusTV: bit.ly/fuels_video

The cruise ship AIDAnova, claimed to be the world's first LNG-powered passenger vessel, was launched at a special music festival in Germany in 2018

» What do we mean by new fuels?

There are numerous options in the mix to replace heavy fuel oil and diesel, and opinion is divided on which of these new fuels – also known as ‘future fuels’ or ‘alternative fuels’ – will end up on top. **Lucy Chapman** explores the pros and cons of some of the main contenders

Ammonia

- ✓ Does not release greenhouse gases when burnt as fuel
- ✓ Green ammonia causes no greenhouse gases when burnt as fuel
- ✓ Easy to store and transport
- ✓ Low flammability
- ✗ Most ammonia is produced from natural gas – a fossil fuel
- ✗ Highly toxic – even small volumes in the air can be fatal
- ✗ Combustion can produce NOx emissions
- ✗ Highly corrosive

Methanol biofuel

- ✓ Low NOx, sulphur oxide (SOx) and particulate emissions
- ✓ High energy density requiring less storage space
- ✓ Compatible with most engine types
- ✓ Liquid, easier to handle
- ✗ Releases some greenhouse gas emissions when burnt as fuel
- ✗ Most methanol is produced from natural gas, a fossil fuel
- ✗ Lower energy density than traditional marine fuels
- ✗ Can be corrosive and toxic

Wind propulsion

- ✓ Beneficial for long crossings
- ✓ Can be combined with other renewable sources
- ✓ Zero emissions
- ✓ Sustainable
- ✗ Noise pollution
- ✗ Wind conditions can be variable and unpredictable
- ✗ Fitting vessels with wind propulsion systems can require significant investment upfront
- ✗ Occupies a lot of space

Liquefied petroleum gas (LPG)

- ✓ Easy storage
- ✓ Produces less SOx, NOx and CO2 than traditional marine fuels
- ✓ Widely available globally
- ✓ Efficient and reliable
- ✗ Not carbon free
- ✗ Flammable and potentially hazardous
- ✗ Fluctuating prices
- ✗ Lower energy density than traditional marine fuels

Liquefied natural gas (LNG)

- ✓ Reduces NOx emissions by up to 80% and virtually eliminates SOx particles compared with traditional marine fuels
- ✓ Non-toxic and non-corrosive
- ✓ LNG spills cause little marine environmental damage unless ignited before evaporation can occur
- ✓ Widely available globally
- ✗ Still a fossil fuel that emits CO2 and sometimes unburnt methane during combustion
- ✗ Lower energy density than traditional marine fuels
- ✗ Converts to flammable gas when in contact with air
- ✗ Stored at a very low temperature and complex to handle

Shore-charged batteries

- ✓ Zero emissions (if electricity for charging is produced through green technology)
- ✓ Practical for vessels that dock often
- ✓ Can be charged using electricity from renewable energy sources
- ✓ Reduced noise pollution
- ✗ Still not efficient – cannot store enough energy for their size and weight
- ✗ Emissions from charging power produced using fossil fuels
- ✗ Requires collaboration between ports, shipping companies and utility providers
- ✗ Impractical for vessels that do not dock often

Hydrogen

- ✓ Does not release greenhouse gases when burnt as fuel – only water vapour and oxygen
- ✓ Already a global hydrogen market
- ✓ Can be stored in large amounts for long periods of time
- ✓ Only releases water vapour and oxygen as by-products. Easy to fit existing ships with hydrogen fuel cells
- ✗ Highly explosive if not stored and handled correctly
- ✗ Combustion can lead to the thermal formation of nitrogen oxides (NOx)
- ✗ Low energy density increases storage needs
- ✗ Producing hydrogen from renewable sources is expensive

Screenshots from the Just Transition video



CREDIT: Maritime Just Transition Task Force



Overview of 10-Point Action Plan



Just Transition 10-point plan

The Maritime Just Transition Task Force has produced an explainer video for its 10-point plan.

Watch to find out how training is essential to achieving a Just Transition for seafarers: bit.ly/just_transition_video





February 2024. The HTW Sub-Committee is charged with developing STCW amendments, including those on new fuels training

What are regulators doing about new fuels training?

To ensure a Just Transition for the world's seafarers, national and international maritime authorities need to introduce regulations requiring new fuels training to be provided to experienced officers and cadets alike. **Sarah Robinson** gives an update on this standard-setting work

Almost everyone in maritime now agrees that shipping needs to cut its greenhouse gas (GHG) emissions, and the development of new maritime fuels to achieve this is coming on apace.

Less advanced is the development of international training standards for the seafarers who will be required to work with new fuels on their vessels. However, there has been some progress by the regulators, if only to recognise that seafarer training is an essential part of this big change to the industry.

WHAT IS THE IMO GREENHOUSE GAS STRATEGY?

In 2023, the International Maritime Organization (IMO) adopted its landmark Strategy on the

Reduction of Greenhouse Gas Emissions from Shipping. This was the first time that a major international agreement had acknowledged the need for a 'Just Transition' – the fair deal for seafarers which would include offering them training at no cost to themselves during the switchover to new fuels.

This was the historic wording in the 2023 GHG Strategy which provides the foundation for the mandatory development of new fuels training: *The mid-term GHG reduction measures should effectively promote the energy transition of shipping and provide the world fleet with a needed incentive while contributing to a level playing field and a just and equitable transition.*

For serving officers, new fuels training should

be provided as needed by the employer, and Nautilus will keep a close watch on shipowners to ensure they are fulfilling their training obligations under the Just Transition. However, cadets will initially learn about new fuels through their nautical colleges, and Nautilus also has an influence on the courses taught there.

WHY DO WE NEED AMENDMENTS TO STCW?

The Officer of the Watch training provided by nautical colleges around the world is based on international standards set by the IMO Standards of Training, Certification and Watchkeeping (STCW) Convention. STCW will need to be amended in order to include international training standards on new fuels – a process that will include input from Nautilus via the International Transport Workers' Federation and the International Federation of Shipmasters' Associations.

The STCW amendments will eventually feed into all Officer of the Watch training throughout the world, but this could take years, acknowledges Nautilus head of professional and technical David Appleton: 'We do have agreement that STCW amendments on new fuels training are needed sooner rather than later, which is why the IMO has agreed to consider guidance and regulations related to new fuels outside of the ongoing comprehensive review of STCW. Even then, these amendments will take several years to

enter into force. Administrations and colleges need to be looking at this proactively to ensure that the necessary courses are available in good time rather than waiting for mandatory amendments.'

WHAT IS THE ROLE OF NATIONAL TRAINING STANDARDS?

National standard-setting bodies also play a role in determining what officer cadets study in the UK and Netherlands. In the UK, the Maritime and Coastguard Agency and Merchant Navy Training Board will be looking at revisions to the nautical college curriculum in relation to new fuels training. In the Netherlands, this work will be done by the industry advisory boards associated with the country's nautical colleges.

Nautilus is represented on all these bodies in the UK and Netherlands, so will have a strong input into the curriculum changes related to new fuels – which will probably happen more quickly than the work at the IMO.

The Federation will be pressing for national governments to take a lead on this, says Mr Appleton: 'Countries that take a proactive approach to this will have a head start over those who don't. As is usually the case at the IMO, countries which have developed their own programmes ahead of mandatory requirements are well placed to ensure that the eventual STCW requirements will closely resemble their national programmes, giving their seafarers a head start in the jobs market.'



What is industry doing about new fuels training?

Shipping companies are moving to adopt new fuels before training standards can be set by the maritime authorities – which means that courses are being developed in response to demands from industry rather than regulators. **Sarah Robinson** looks at some examples of this

National and international anti-pollution regulations are driving radical changes to vessels. These changes are already being seen in sensitive areas such as the Norwegian fjords, and all of the world's merchant vessels will eventually have to adopt new fuels in order to cut their greenhouse gas emissions. However, traditional seafarer training does not necessarily equip crew members to operate new fuel technology.

Even junior officers fresh out of college may not be familiar with new tech, as the anticipated STCW syllabus updates will take years to percolate through to maritime colleges. It may also prove impossible to provide Officer of the Watch training that covers the full gamut of fuel tech options, and the industry will therefore have to accept a new world of ship-specific training, akin to what happens in aviation.

WHAT ARE EMPLOYERS DOING ABOUT NEW FUELS TRAINING?

A central principle of the Just Transition is that seafarer training in new fuels must be provided at no cost to the individual. Some employers are already aware that it is their responsibility to provide the training their employees need for new build and

retrofitted vessels, and there are some encouraging examples of good practice at companies where Nautilus members work.

'Stena Line have for the past number of years ensured that all their new builds use liquefied natural gas (LNG), and Caledonian MacBrayne's new ferries are also going to be LNG,' says Nautilus head of industrial Micky Smyth. 'The two companies have collaborated on a training scheme where CalMac officers can sail on Stena's LNG vessels so that they can attain the required skills whilst the vessels are at sea, and very importantly whilst the vessels are bunkering.'

WHAT ARE COLLEGES DOING ABOUT NEW FUELS TRAINING?

Many maritime colleges are also aiming to stay in the vanguard of new fuels training, responding to industry demand rather than waiting for the STCW updates.

South Shields Marine School (Tyne Coast College) is one such college. 'I am hoping to have our first future fuel courses available for delivery from September,' says marine engineering curriculum manager James Tagg. 'I am working with industry to identify requirements from which I will be developing future fuel courses. My main focus is LNG, but I am also developing material for hybrid and methanol vessels. We are also actively developing our cadet material to include information on future technologies.'

Another college developing new fuels training is STC in Rotterdam. 'We set up a development project on LNG with

the industry almost 10 years ago and developed a course and even an LNG cargo simulator,' says lecturer Alco Weeke. 'There have been many discussions with the industry about this project's learning goals and objectives, resulting in the two courses we currently run. We are also considering developing a course on methanol in response to industry demand.'

WHAT ARE INDUSTRY BODIES DOING ABOUT NEW FUELS TRAINING?

As part of its commitment to professional development, the industry body Nautical Institute is developing a generic industry familiarisation course on alternative fuels. The intention is to deliver the course online over a two-day period. The content will cover methanol, ammonia and hydrogen fuels, including specific properties, safety and health hazards.

The course is primarily aimed at those involved in the broader maritime industry who require to have knowledge of these novel fuels, rather than seafarers.

Meanwhile, the International Transport Workers' Federation is working with partners such as World Maritime University on a project to help nautical colleges create courses to ensure seafarers have

the skills to work in a safe environment with new technologies and fuels.

Announced in 2023 at the COP28 climate conference in Dubai, the project will start with a gap analysis to find where institutions are not currently offering the appropriate training. Based on this, a baseline training framework in decarbonisation will be created for seafarers and officers, and an instructor handbook for maritime training institutions. The timeline is to develop the training materials by mid-2025 so that they can be trialled to establish best practice before the training is rolled out elsewhere.

In Europe, the maritime education and training network MET-NET is teaming up with the European Transport Workers' Federation and European Community Shipowners' Associations to establish a European Maritime Skills Forum (E-MSF) on new fuels. E-MSF will discuss learning objectives and outcomes to give a steer on developing training to meet seafarers' needs. Establishing MET-NET and E-MSF were recommendations of the SkillSea project, which has previously been covered in detail by the Nautilus Telegraph.

CREDIT: Torghatten



Artist's impression of a new vessel powered by hydrogen fuel cells which has been commissioned by the Norwegian ferry operator Torghatten

Stena Line and CalMac have been collaborating on crew training for LNG-powered vessels

Toolkit launched to monitor seafarers' health

Seafarers Hospital Society (SHS) has launched a key performance indicator (KPI) toolkit to help maritime organisations track regulatory compliance and year-on-year impact on seafarer health and welfare.

SHS CEO Sandra Welch presented the toolkit at the society's Sustainability at Sea conference. It marks a new strategy by SHS which is promoting the integration of a 'culture of care' into the global maritime industry, as part of its efforts to improve crew health.

The toolkit evolved from the findings of a research study into seafarer health conducted by the Society with the Yale University Maritime Research Center. It provides various ways companies can measure and demonstrate their commitment to their seafarers' health, and psychological wellbeing, and to assure a job applicant that their health will be safeguarded.

While SHS provides the survey mechanism, the goal is not to track any of the information shared, or individually capture the process of data-gathering with each organisation, or judge the outcomes recorded. Instead, it has instituted an anonymised survey process.

While it will be up to individual maritime organisations to decide how best to use and share the results of this introspection,



SHS CEO Sandra Welch launches the toolkit during the Society's Sustainability at Sea Conference held at Trinity House in London in February 2024

CREDIT: Seafarers Hospital Society

SHS suggests that sharing could be with crew members and their trade union representatives, with insurers, or as part of negotiations on chartering or on crew agreements. They could also be published as a part of Corporate Social Responsibility (CSR) achievements or used as a badge of merit in the recruitment of crew.

ITF names and shames abusive employers

The International Transport Workers' Federation (ITF) has launched a new online index to tackle the exploitation and abuse of workers at sea. **Can you help populate the list by reporting bad maritime employers?**

The new Seafarers' Breach of Rights Index lists companies and individuals that deny and abuse seafarers' basic human and trade union rights.

It seeks to identify actions by shipowners, ship managers, flag states or other parties which violate seafarers' fundamental rights, either individually or collectively.

This includes:

- actual or threatened physical or sexual abuse
- non-payment of wages
- persistent violation of employment agreement or collective agreement provisions
- violation of health and safety standards
- sub-standard food and water
- sub-standard crew accommodation
- repeated abandonment
- persistent disregard of international standards relating to maritime safety, crew accommodation, and other relevant standards

Several companies have already been named and shamed by the index for issues including abandonment – a warning to seafarers about the treatment they may receive.

- You can now **search the database** at bit.ly/new_ITF_index to find a potential employer.
- Seafarers are also encouraged to **report companies that violate the rights of seafarers to Nautilus and/or the ITF.**



CREDIT: ITF/Vincent Dwight Rafil

'Seafarers not only combat the forces of nature on the world's oceans, they remain an unseen workforce, often spending many months away from loved ones in challenging living conditions.'

'We have zero tolerance for anyone who denies and abuses the rights of seafarers who work for them in any capacity. This index will name and shame companies, shipowners, ship managers, and others, who deliberately ignore and undermine seafarers' rights and international conventions that govern working and living conditions onboard.'

Steve Trowsdale, ITF inspectorate coordinator

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