

the global

SEAFARER

Wherever you are, so are we

Volume 6 | Issue 3

Sick and tired

Maritime keyworkers on the brink after keeping world trade moving during pandemic



16 **INTERNATIONAL**
Global research for greener seas

9 **HEALTH & SAFETY**
The dangers posed by sleep inertia

12 **EDUCATION**
Training on Inland Waterways

3 **SUPPORT**
Nautilus 24/7 supporting Federation members



Published by
Nautilus International
on behalf of



Nautilus Federation Director
Mark Dickinson MSc (Econ)

**Nautilus Federation
Coordinator**
Danny McGowan

Editor:
Helen Kelly
Communications manager:
Rob Coston
Senior journalist:
Sarah Robinson
Production editor:
June Cattini-Walker
Web editor:
Deborah McPherson



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

Nautilus 24/7 provides support in times of global crisis

618

new cases helped
from **1 January to
31 December 2021**

26%

increase in information
enquiries in 2021
15.5% in 2020

5.6%

complaints about
lack of repatriation
6.6% in 2020

6.6%

complaints about
unfair dismissal
7.2% in 2020

4.7%

complaints about
unpaid wages
8.2% in 2020

Nautilus 24/7, the emergency helpline continued to provide members with much needed urgent support in 2021, highlighting the high cost on health for seafarers carrying out their global keyworker role during the Covid-19 pandemic.

From 1 January to 31 December 2021, the helpline supported 618 new cases, with a total of 639 seafarers involved and made 712 successive follow-up contacts.

These figures represent a fall compared with 2020, when the early days of the pandemic led to staff dealing with 774 new cases, 865 successive follow-up contacts and with a total of 2,084 seafarers.

While the total number of new cases received was lower than in 2020, it was still double the figure for the pre-pandemic year 2019.

Most contacts are from individual seafarers, although a few can be from a group of seafarers – such as one seafarer who is speaking on behalf of a group of colleagues, normally onboard the same ship or under the same management.

In 2021 there was a welcome decrease in complaints about lack of repatriation (5.6% in 2021 compared to 6.6% in 2020), unfair dismissal (6.6% in 2021 compared to 7.2% in 2020), and unpaid wages (4.7% in 2021 compared to 8.2% in 2020).



On the other hand, there was a 26% increase in information enquiries on the 15.5% in 2020. Such enquiries can range from requests for travel information or information about quarantine and Covid vaccinations, to general queries about how Nautilus can assist seafarers.

So far in 2022, the emergency service has not received calls for help from seafarers directly involved in the Ukraine-Russia conflict, but has been dealing with enquiries regarding employment- and contract-related issues due to actions taken against Russian-flagged vessels or Russian-owned yachts; seafarers seeking information should they not want to continue working for a company transporting Russian goods; and difficulties withdrawing money in Russia due to sanctions.

Advice and assistance

- 20 INTERNATIONAL TRANSPORT WORKERS' FEDERATION**
Warning to seafarers: Abandonment on the rise at a record high, with seafarers reporting more instances of being owed two or more months' wages
Join the fight on behalf of tug workers as ITF launch the campaign Sound the Siren
- 24 PROFESSIONAL AND TECHNICAL**
Nautilus head of protech gives his opinion on the long-awaited win at the IMO

Cover image: Severe Stress – Maritime keyworkers face mental health challenges during the coronavirus crisis
Credit: Danny Cornelissen

Special report

- 16 INTERNATIONAL INFLUENCE**
World Maritime University prioritising decarbonisation research

In focus

- 7 SLEEP INERTIA WARNING**
Dangers posed by 'sleep inertia', plus disturbing new evidence about the risks of parametric rolling affecting containerships
- 12 A VESSEL DESIGNED BY STUDENTS, FOR STUDENTS**
Dutch educational institution STC Group is building a new ship called Ab Initio to lead the way in the modernisation of education and to ensure training for inland waterway navigation
- 14 SEVERE STRESS AT SEA**
A new study indicates that seafarers have faced serious mental health challenges on a par with frontline healthcare workers during the coronavirus crisis.
- 30 MENTAL HEALTH IN MARITIME**
Research reveals that seafarers suffered pandemic stress equivalent to frontline health workers

Industry info

- 3 NAUTILUS 24/7 SUPPORT**
Helpline continues to provide members with much needed support in 2021
- 4 FEDERATION NEWS**
Nautilus Federation affiliate representing American master, mates and pilots has endorsed a successful resolution in support of the Jones Act
Tug crews in Sydney, Australia, hailed as heroes to assist bulk ship Portland Bay, after a loss of power
US Navy name new MSC replenishment oiler after Supreme Court Justice Ruth Bader Ginsburg
Seafarers' Union of Croatia (SUC) re-elected
GS welcomes young maritime professionals

Nautilus Federation affiliate endorses 'essential pillars' of US Jones Act in supporting jobs for maritime professionals

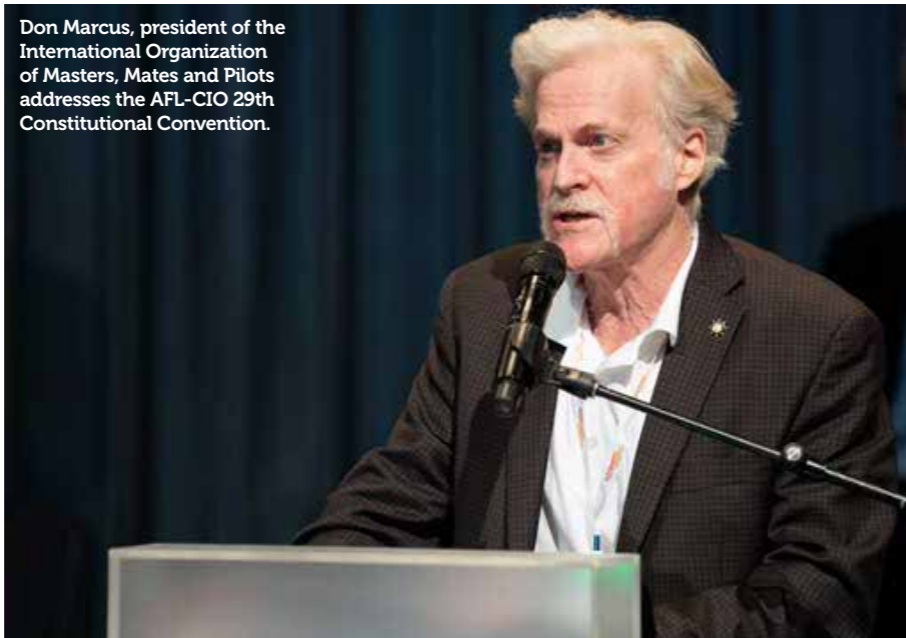
A Nautilus Federation affiliate representing American masters, mates and pilots has endorsed a successful resolution in support of the US Merchant Marine law known as the Jones Act which has been adopted by a federation of trade unions in the US.

The resolution – passed at the AFL-CIO 29th Constitutional Convention – noted the economic and jobs importance of the US federal statute, particularly the fact that it provides 'a pool of well-trained, reliable U.S. citizen mariners available to sail aboard US-flagged military support vessels in times of crisis.'

The resolution was submitted to the convention by the AFL-CIO Maritime Trades Department and supported by the International Organization of Masters, Mates and Pilots (MM&P). MM&P is affiliated to the Nautilus Federation.

MM&P president Don Marcus called the Jones Act: 'the essential pillar of the US maritime industry.' He noted the contributions made by the tens of thousands of essential maritime industry workers who kept the supply lines open through the challenges of the past two years of the Covid-19 pandemic.

'This law supports America's mariners and shipyard workers along with other shoreside personnel,' the resolution states. 'It has proven its value to the economy and national security for more than a century.'



Don Marcus, president of the International Organization of Masters, Mates and Pilots addresses the AFL-CIO 29th Constitutional Convention.

CREDIT: AFL-CIO/MM&P

The AFL-CIO convention also heard about the importance of young people to the future of trade unions, and recognised the achievements of 'those who have come before', such as merchant veterans of global conflict.

Mr Marcus said: 'It is no different in the maritime industry: we must recruit young people into the labour movement and ensure that their workplaces aboard ship are free from gender-based harassment or discrimination of any kind.'

'Let us also take a moment to remember the old timers, the women and men who built what we have today under circumstances that have never been easy and have often been impossible for us to imagine.'

'One group of union workers was just recognised last month in the US Capitol: the merchant marine veterans of World War II. Some 250,000 merchant seamen served in World War II, carrying the supplies that defeated fascism.'

He said: 'This sacrifice was made by card-carrying union labour – a service rendered that was swiftly forgotten and unrewarded. There was no GI Bill for these seafarers until finally, almost 80 years later, a Congressional Gold medal was minted for the 1500 veterans who are still alive.'

US President Joe Biden also addressed the AFL-CIO congress – saluting union members for fighting to transform the economy.

Sydney tug crews rescue ship following loss of power

Tug crews in Sydney, Australia, have been hailed as heroes as they proceeded beyond port limits and into gale force winds and rough seas to assist bulk ship Portland Bay, which lost main engine power after departing Port Kembla on 3 July.

Australian tug engineers are represented by Nautilus Federation affiliates Australian Institute of Marine and Power Engineers (AIMPE) and tug masters by the Australian Maritime Officers Union (AMOU).

Australian Maritime Safety Authority Search & Rescue unit co-ordinated the emergency response. Early attempts to winch some of the crew off the ship via helicopter were abandoned because the ship was pitching and tossing severely.

Tug SL Diamantina from Port Botany was the first to respond, and within hours Port Jackson tugs SL Martinique and Svitzer's Bullara arrived at the scene. In dangerous conditions the three tugs were able to assist in preventing the ship from being smashed onto the rocks of the National Park south of Sydney.

The lives of the 21 crew on board and the environmental impact of 1,000 tonnes of fuel oil were major concerns.

New South Wales Premier Dominic

Perrottet praised the 'heroic' efforts of tug boat crews who braved dangerous conditions to move the ship away from rocks. The Sydney Morning Herald also ran the story on its front page.

The ship was towed north where it anchored off Cronulla Beach so that if the worst did happen, the likelihood of the crew drowning or the ship breaking up would be minimised.

On 6 July Svitzer Glenrock towed the Portland Bay into Port Botany. AMSA detained the ship after it was secured in Port Botany to enable ship surveyors to carry out an inspection on the vessel and to ensure that repairs are carried out.

'There are relatively few skilled personnel around Australia who can carry out these emergency response operations. It is not uncommon to break towlines in such conditions,' AIMPE Federal Secretary Martin Byrne told ABC Radio.

There will be reviews of the incident by both AMSA and the Australian Transport Safety Bureau. They will look to shed light on how and why the ship lost all propulsion shortly after departing Port Kembla.



Portland Bay being towed back into harbour following the vessel's abandonment and rescue.

CREDIT: Australian Institute of Marine and Power Engineers (AIMPE)



The first of the John Lewis class of vessels – USNS John Lewis – named after a civil rights leader and politician of the same name.

CREDIT: International Organization of Masters, Mates & Pilots

US Navy to name new MSC replenishment oiler after Supreme Court Justice Ruth Bader Ginsburg

The US Navy will name one of its new John Lewis-class fleet replenishment oilers in memory of history-making former Supreme Court Justice Ruth Bader Ginsburg.

The new vessel will be the eighth ship in the series.

'As we close out women's history month, it is my absolute honour to name the next T-AO after the Honorable Ruth Bader Ginsburg,' said US Navy Secretary Carlos Del Toro in an April 2022 statement.

Ginsburg made history as the second woman to serve on the US Supreme Court when she was nominated by President Bill Clinton and confirmed in 1993. She died at the age of 87 in September 2020.

Del Toro called her 'instrumental to why we now have women of all backgrounds, experiences and talents serving within our ranks, side by side with their male sailor and marine counterparts.'

The John Lewis-class replenishment oilers are all named after civil and human rights leaders and activists. They are crewed by civil service mariners, including licensed deck officers who belong to the MM&P Federal Employees Membership Group. MM&P is an affiliate of the Nautilus Federation.

Nautilus previously reported on the launching of a vessel named after gay rights leader Harvey Milk.

Re-elected general secretary of Seafarers' Union of Croatia (SUC) welcomes influx of young maritime professionals

Nautilus Federation affiliate the Seafarers' Union of Croatia (SUC) has re-elected its general secretary Neven Melvan for a second term. The SUC works closely with Nautilus at the International Transport Workers' Federation (ITF) and has provided welcome solidarity during recent protests in London against the sacking of nearly 800 maritime workers at P&O Ferries.

SUC colleagues interviewed Mr Melvan in the run up to their 5th Congress, which was held in Dubrovnik from 27-29 April 2022.

What are your thoughts on your first term as SUC general secretary over the past five years?

This congressional period has shown the importance of being prepared for unforeseen circumstances. All the work plans which were presented and adopted at the previous Congress suddenly had to change when we were confronted with the Covid-19 pandemic – clearly this had to be a priority for us.

In particular, during the pandemic we were successful in changing the Croatian Maritime Code to recognise seafarers as key workers. We have also contributed to improved access to education and employment, alongside increased sick leave benefits.

What were the biggest problems facing SUC members and other seafarers during the pandemic?

The most dramatic issue was the crew change crisis. Parallel to this were the financial and administrative problems faced by Croatian seafarers – they were unable to reach the number of required sailing days to benefit from the tax arrangements in place for them. We were able to get the government to change this, and the modified scheme is still in force today. We also achieved priority testing and vaccination of seafarers.

The pandemic certainly proved the crucial role of the ITF inspectorate, especially those ITF inspectors working in Croatia who coordinated a large number of group and individual repatriations from ports along our coast.

Some of these repatriations were organised in cooperation with companies and intermediaries but sadly some companies used the opportunity to save on the number of

difficulties as a result of being unable to reach their vessels to begin their contracts.

The Fund also financed the procurement of personal protective equipment such as gloves and masks, when faced with severe global shortages.

Without a doubt the increased level of public attention yielded positive shifts and particularly drew public attention to the issues faced by

SUC actively takes part in the work of the ITF, ETF and the Nautilus Federation, benefitting our members directly but also seafarers as a whole

The Seafarers' Union of Croatia general secretary Neven Melvan

seafarers' repatriations. Cooperating with seafarers, we have also successfully dealt with such situations. I am especially proud of the quality and scope of work that the SUC team achieved, despite being faced with something that none of us have ever had to deal with before.

What other assistance have you provided to seafarers?

The SUC Solidarity Fund, in addition to financial support from the ITF Seafarers' Trust, assisted members who found themselves in financial

seafarers during a pandemic.

That increased attention helped SUC to influence our government to establish Croatia as one of the first countries to provide free Covid-19 vaccinations to seafarers of all nations alongside being able to provide proof of any necessary vaccination documentation.

How did the extraordinary circumstances of the pandemic affect the normal operation of the Union?

Not only did we have to respond to

Re-elected: The Seafarers' Union of Croatia general secretary Neven Melvan.



Credit: Sindikat Pomoraca Hrvatske

the pandemic, but we also had to continue our regular work. I'm pleased to say that none of our ordinary work was neglected.

We adapted the way of working for our SUC colleagues, when lockdowns prevented gathering, to enable a greater deal of virtual working online wherever necessary.

What will stay with you the most from the previous five years?

The disappearance of sailors from the Bourbon Rhode vessel was the most stressful, emotional and demanding episode. Despite putting every possible effort into prolonging the search and rescue operation for the missing seafarers – working with international institutions and organisations such as EMSA, ITF, ETF, and the Nautilus Federation – they were not located.

The ability to conduct international affairs virtually brought with it certain financial and organisational relief. However, it is important to emphasise that online meetings cannot and must not replace the human, personal contact that we missed in part of that period.

Leading the strengthening of trade unions in the western Balkans, at the request and with the support of

the ITF and ETF, has been a pleasure. We have already seen great levels of interest in unions wanting to take part in ITF/ETF activities and new affiliates joining – exceeding our expectations. We hope to see additional growth in the region.

SUC also leads on the 'Sea of Convenience' project, seeking to establish European conditions in the Mediterranean basin. This project has slowed down as a result of the pandemic, but we are sure it will be back on track soon with international support.

The Seafarers' Union of Croatia is a member of many international bodies. How active you are on the international union scene?

We actively take part in the work of the ITF, ETF and the Nautilus Federation, benefitting our members directly but also seafarers as a whole.

The expertise of SUC colleagues and the strength of our unions is recognised through the number of positions held by our team. We have positions in the ITF including the Executive Board, Seafarers' Section, Fair Practices Committee Steering Group, Fair Practices Committee, Resolutions Committee, Maritime

Safety Committee and Cruise Ship Task Force. In the ETF we also hold positions on the Management Committee, Executive Committee and Maritime Transport Section. SUC colleagues also take part in numerous IMO, ILO and EMSA forums.

How has dealing with the impact of war in Ukraine affected SUC?

Sadly, it is inevitable that there will be a large impact on seafarers from both Ukraine and Russia.

We have little influence over these tragedies, but we can work to help affected trade unions continue their services to reduce the impact on seafarers, their families and on the maritime sector as a whole.

In that regard, we have offered the Maritime Transport Workers Trade Union of Ukraine (MTWTU) space in our head office in Rijeka, should the need arise for them to evacuate their Odesa office. We have also offered to assist with the relocation of MTWTU colleagues' families.

Croatia was faced with a similar ordeal in the 1990s, which many of my colleagues remember all too well. Our support for MTWTU colleagues is without question and we are ready to take whatever steps we can to help them.

What are the plans for your new term of office? Do you have a message for seafarers?

The work we have done in the last congress period is thanks to the dedication of colleagues with whom it has been a pleasure to work. I am committed to maintaining and improving our professionalism for the benefit of SUC members.

I have been happy to see growing numbers of young members taking a more active part in union activity. I am confident that their activity and their work will guarantee the future of the Seafarers' Union of Croatia.



Fruitful global collaborations

Mark Dickinson, general secretary of Nautilus International and director of the Nautilus Federation, addressed the opening ceremony of the SUC Congress:

'There have been several challenges facing the maritime industry in the past few years not least the global pandemic. The leadership of maritime trade unions under the auspices of the ITF and ETF alongside that of the International Chamber of Shipping and the International Maritime Employers' Council has delivered solutions to problems faced by our members, and we now must continue to develop the partnership that we built. This will be to the benefit of the industry but must also see seafarers gain better wages, conditions, training, and career prospects.'

'Neven must be congratulated for his role internationally and for leading such a strong union through difficult global conditions. His leadership of the Seafarers' Union of Croatia has seen the organisation develop and grow, making the ETF, ITF and Nautilus Federation stronger as a result.'

Steve Cotton, ITF general secretary, said: 'There are lots of lessons to be learned from Covid-19. One of these was our ability to collaborate. Collaboration between unions - ITF and ETF affiliates - has become much more sophisticated and seeing such a great number of maritime trade unions from across the globe here is testament to the SUC's contribution to our successes.'

Danny McGowan, international organiser at Nautilus and coordinator of the Nautilus Federation, provided some practical advice to a young members meeting at the Congress:

'It is important from an early stage in your career to know that in our global industry, there are organisations that can help you globally. The Seafarers' Union of Croatia is an affiliate of the Nautilus Federation, which operates the Nautilus 24/7 helpline and the Joint Assistance and Support Network (JASON).'

'The JASON scheme ensures that reciprocal advice and support can be provided to union members if they are involved in an incident within a port, territory, territorial waters or onboard a vessel flagged in one of the countries covered by the agreement.'

'Hopefully you never need to use it, but it is important to know that it is there should you or a fellow union member be faced with such a situation.'



Nautilus general secretary
Mark Dickinson

The towing vessel Ava Claire, whose captain was suffering from 'sleep inertia' during an accident last year



CREDIT: General Marine Services/NTSB

SLEEP INERTIA WARNING

Andrew Linington reports on the dangers posed by 'sleep inertia', plus disturbing new evidence about the risks of parametric rolling affecting containerships

Safety experts have warned seafarers about the risks of taking over a watch and carrying out critical duties soon after they wake up.

The alert follows an investigation into an accident which caused damage estimated at US\$2.5m, when a towing vessel pushing two tank barges fully loaded with a cargo of naphtha struck a lock gate in the Gulf Intracoastal Waterway in Louisiana in March 2021.

The US National Transportation Safety Board (NTSB) said the pre-dawn incident highlighted the dangers of sleep inertia – 'the temporary feeling of grogginess felt immediately upon awakening'.

The bow of the lead barge in the tow struck the local gate at 05.22hrs, less than 30 minutes after the captain woke up and took over the watch following 4.5 hours of sleep, the NTSB noted.

At the time of the accident, the investigation report states, the captain was probably experiencing the effects of sleep inertia – a condition which 'negatively affects an operator's performance, vigilance, alertness, and decision-making for 30 minutes or more after waking, especially in demanding situations that require high levels of attention and cognitive demand'.





Safety concerns raised following draft marking seafarer fatalities

Nautilus has added its voice to industry concerns after two separate seafarer fatalities, which occurred while officers carried out draft marking on vessels.

In unrelated incidents, two Turkish officers lost their lives in February within a week of each other while trying to read draft marks, according to industry reports.

The first fatality occurred at the Chinese port of Tianjin while a bulker chief officer carried out draft reading on the stern. He slipped and died after falling onto a concrete pier from a pilot ladder rigged-up on a rail, because China's stiff Covid-19 restrictions forbade him from going down the gangway onto the pier – the preferred method.

In the next incident, a second mate reportedly fell overboard and died of hypothermia during a storm, also while trying to determine draft marks after loading in port on the Russian Taman Peninsula in the Black Sea. Efforts by a shipmate and search and rescue to save him were unsuccessful.

The issue was highlighted at a meeting of the International Maritime Organization (IMO)'s human element, training and watchkeeping sub-committee, by IFSMA general secretary Jim Scorer. By requesting for his statement to be added to the report, Mr Scorer opened the door for further discussion at the IMO maritime safety committee in May 2022. Nautilus will be monitoring the outcome.

The effects of sleep inertia can be exacerbated by waking during a 'circadian low' and by partial sleep deprivation, it adds. 'The captain's sleep inertia, coupled with the challenges presented by the operating environment, would have negatively impacted his ability to safely navigate through the lock.'

The captain had declined the offer of the pilot onboard to take the tow through the lock, and took the helm about five minutes before the manoeuvre began, the report says. As the vessel entered the lock it suffered the loss of the GPS feed to its electronic chart system, which denied the captain

his primary source of speed indication.

'Judging the speed by eye alone, the captain may have been affected by poor depth perception, which is common during night-time operations,' the report points out.

His ability to judge the speed and distance was also hampered by problems with radio communications between the wheelhouse and the deckhand stationed on the bow of the lead barge. This meant the captain did not receive reports from the deckhand on the closing distance to the lock gates until the head of the tow was just 250ft from the lock gate, while moving at 3 mph. The challenges facing

the captain may also have been increased by a tidal current pushing the tow from astern and adding speed as it approached the lock.

Investigators said the captain should have been familiar with the vessel operating policies and procedures and should not have taken the watch during a critical move. However, his decision to do so may have also been the result of impairment caused by sleep inertia.

'Mariners should allow time to fully recover from sleep inertia before taking a watch and performing critical duties,' the NTSB said.



ROLLING RISK: new predictive tools needed

Following an incident in the Pacific last year, the Danish Maritime Accident Investigation Board (DMAIB) has urged maritime companies and authorities to work together to secure more reliable onboard tools to alert seafarers to the threat of parametric resonance.

A total of 689 containers were lost overboard and 258 damaged when the 13,600TEU Maersk Essen rolled heavily some 450nm off Hawaii while en route from China to the US in January 2021.

The ship – which had already changed its route following advice from a weather service – underwent two episodes of heavy rolling within the space of 15 minutes. The inclinometer and subsequent analysis showed that Maersk Essen reached angles of between 26° to 30° – well above its simulated maximum roll angle and the pre-set operational limit for the lashing condition on the voyage, with the operational threshold for the lashing system set at 19.18° roll.

Conditions at the time of the incident were described as normal for the ship and the area, and included a force 6 wind and a swell estimated at 5m. Maersk Essen had encountered similar or worse weather and sea conditions earlier in the voyage without experiencing heavy rolling, the report notes.

However, subsequent analysis showed that the ship had been sailing in conditions with the potential to cause pure loss of stability on a wave crest and parametric roll resonance.

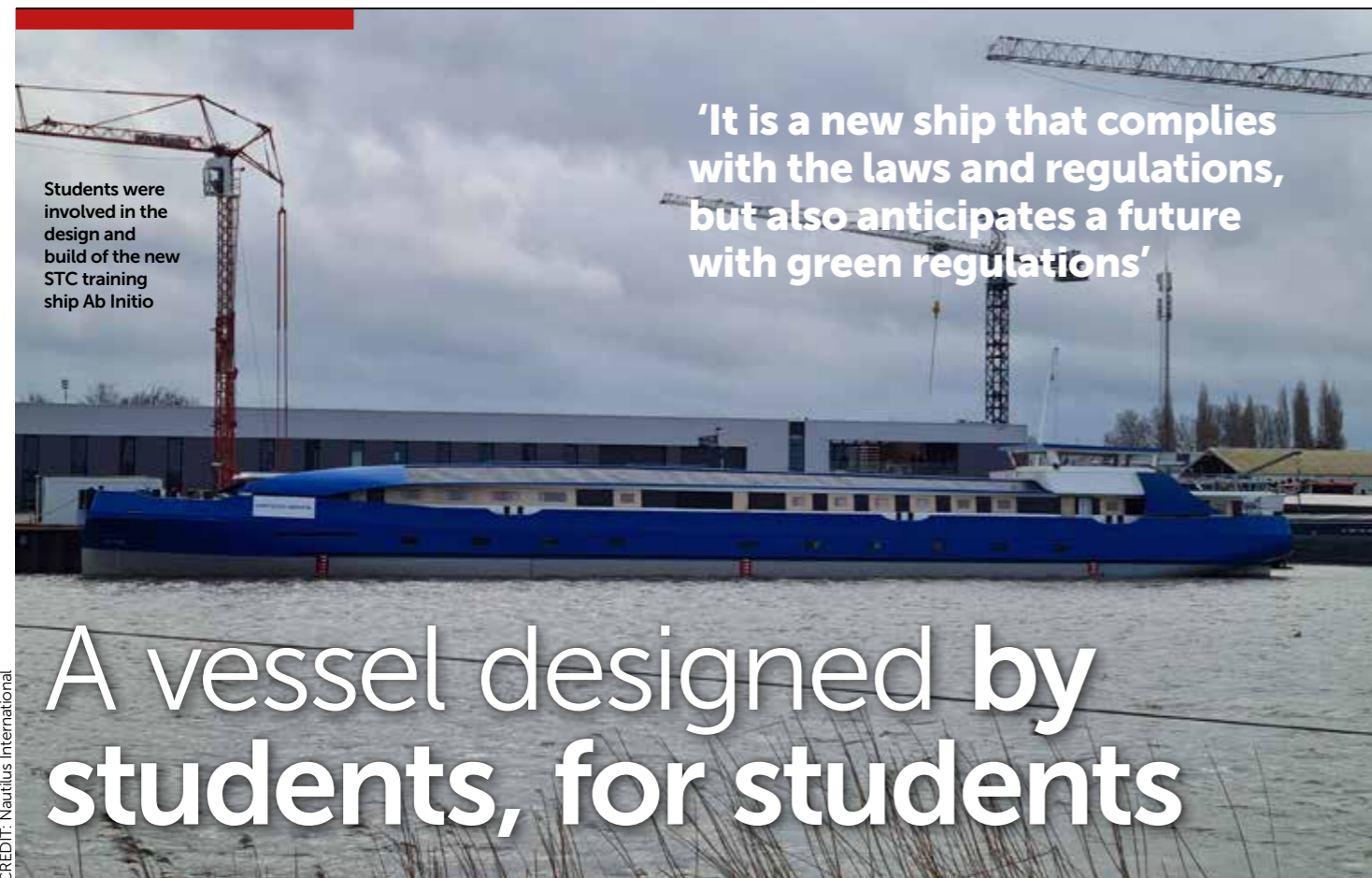
DMAIB has found that parametric resonance effect is often considered a rare phenomenon by navigational officers,' the report states. 'This is most likely a false assumption, as the triggering conditions are common.'

While the ship's officers told investigators they knew how to react to stop the heavy rolling caused by parametric resonance, the DMAIB said

the seafarers had no reliable information or tools readily available onboard to calculate and monitor the risk, and that variations in forecast data sources and calculation models used for predictions can give 'misleading indications' of risk.

The report highlights a 'critical dimension' to the way in which the rolling risks faced by Maersk Essen had developed without the crew's awareness – pointing out that some were just minutes away from entering the cargo deck to check the lashings when the heavy rolling began. 'If the crew had been on deck, the collapsing container stacks could have resulted in fatalities,' it points out.

Calling for work to develop tools to predict resonance effects based on actual conditions rather than forecasts, the DMAIB warns that 'accidents are likely to occur again unless effective efforts to avoid the triggering conditions are implemented'.



Students were involved in the design and build of the new STC training ship Ab Initio

'It is a new ship that complies with the laws and regulations, but also anticipates a future with green regulations'

A vessel designed by students, for students

Dutch educational institution STC Group is building a new ship called Ab Initio to lead the way in the modernisation of education and to ensure training for inland waterway navigation keeps pace with practice. **Linde de Visser** visited the Concordia Damen yard in Werkendam, where the outfitting is taking place

Inland shipping is innovating at a rapid pace. The future – as currently envisioned – consists of semi-manned ships, green sailing and, of course, ultramodern equipment.

'The ship will replace our old princesses,' says inland navigation lecturer Richard van der Straaten, referring to the current training ships which are more than 60 years old. Mr Van der Straaten himself had lessons on these ships, which at the time were named after Dutch princesses.

The new STC Group training vessel whose build he is overseeing will have space for 30 passengers. Students aged 12-16 years and middle level vocational students will take practical lessons onboard Ab Initio from September 2022. Higher vocational students will mainly use the vessel when conducting research in the innovative field lab onboard.

BIGGER BEDS

However, it isn't time to begin yet. The first test sail will be in June and the ship will enter service in September. Students who are now in their third year will not be taught on Ab Initio, but they have enjoyed some very special study years involved in the construction of the ship since the start of the tender.

When their input was sought, students argued in favour of larger beds, because people are getting taller and the beds in the old ships were too short. As a result, larger beds will be placed on Ab Initio.

STC students such as maritime technology student Tom van Esch are also involved in the actual construction of the ship. Tom is enrolled as an internship at Concordia Damen and is often present on the vessel. While Nautilus was being shown around, he joined the tour and demonstrated his

knowledge, telling us all about what we were looking at – where the electric motor will be, the bow thruster and the cabins. He proudly talked about the hydrogen cell and the generator. 'Participating in the realisation of Ab Initio has been a great opportunity for me to apply the theory in practice,' he said. 'During training I've learned a lot about shipbuilding, but it only really comes to life when you walk on the ship.'

HULL BUILT IN SERBIA

Students were also involved in the building of the ship's hull in Serbia, but due to the pandemic, there was less time on offer for this than intended. However, Tom has been to Serbia and is now helping with the outfitting of the ship, learning a lot along the way. The thought that his fellow students will be able to use the ship for years to come is an exciting prospect for him. 'The fact that the ship is ultimately built for fellow students is the icing on the cake,' he says.

SOLAR PANELS AND HYDROGEN PROPULSION

With the ship almost ready, the next phase is for students to learn to operate it. On Ab Initio they will work with solar panels and hydrogen propulsion – electric technology that is not yet widely used on commercial vessels.

'It is a new ship that complies with the laws and regulations, but also anticipates a future with green regulations,' says Mr Van der Straaten. The vessel – which is now ahead of current practice – also has a 'normal' diesel-electric engine to provide extra power needed to manoeuvre quickly in an emergency. It also ensures that students learn current practice. After all, the electric drive is in the near future, and will be encountered more and more often.

NEW LEARNING FACILITIES

To use the ship as optimally as possible for educational purposes, other learning facilities have also been built. For example, there will be an innovative field lab in front of the



Student Tom van Esch aboard Ab Initio

rear engine room. Students can view machines through a fireproof window and, by means of all kinds of sensors, constantly keep track of what exactly is happening. This way, all kinds of research questions related to the operation of the ship and its modern machines can be answered.

'We hope this will also enable us to answer questions from the business community,' says Esther Ouwens Nagell, senior communications advisor at STC Group.

Ab Initio is also prepared for the future. The ship has a modular construction, which means that engines, propeller, and other equipment can easily be replaced individually. This way the ship will be able to keep up with the times.

SEVERE STRESS AT SEA

A new study indicates that seafarers have faced serious mental health challenges on a par with frontline healthcare workers during the coronavirus crisis.

Andrew Linington reports

37.3%

of seafarers in the study had **at least one of three key PTSD symptoms**

11.8%

showed **all three PTSD symptoms**

12.4%

of seafarers were found to **exhibit symptoms of anxiety**

14.1%

showed **depressive symptoms**

Shocking levels of anxiety, depression and post-traumatic stress disorder (PTSD) among seafarers have been revealed in an international study of the mental health impact of the Covid-19 pandemic.

The research, by experts in the UK, Denmark, Germany and Iran, warns of 'a high prevalence of mental health problems among seafarers' during the pandemic and calls for more studies into the 'psychosocial health issues for this vulnerable occupation'.

The findings – published in the **BMC Public Health journal** – are based on the assessment of the mental health of 439 multinational seafarers working onboard the ocean-going ships of two international shipping companies. The researchers say they hope the results will contribute to work to identify and mitigate risk factors for seafarers' health and wellbeing.

The report points out that, even under normal conditions, seafarers' health is affected by factors such as the inability to leave the workplace, living and working in the same environment, and restricted contact with family members.

However, the extended timespans at sea, prolonged periods of social isolation and port restrictions arising from Covid-19 have probably acted together to exacerbate the mental health pressures for seafarers.

Researchers found that 37.3% of seafarers in the study had at least one of three key PTSD symptoms, and 11.8% showed all three symptoms, intrusion, avoidance and hypervigilance.

Overall, 12.4% of the seafarers were found to exhibit symptoms of anxiety and 14.1% showed depressive symptoms.

The report says the findings for seafarers can be compared with a study of frontline healthcare workers during the coronavirus crisis which showed 29% with anxiety symptoms, 26.3% with depressive symptoms and 20.7% with PTSD.

The researchers also found that the prevalence of depressive symptoms was significantly greater among officers, married seafarers, and those who had served the longest time onboard the current vessel during the pandemic.

Factors such as long periods of separation from loved ones and concern about their health, pressure from family members to get home, limited medical facilities, and less access to medical care ashore might also have adverse effects on the psychological status of seafarers.

The study calls for further research into the reasons why extended periods at sea were linked with higher rates of depressive symptoms. It also highlights evidence suggesting that seafarers may be trying to reduce PTSD symptoms of hyper-vigilance and avoidance by working even longer hours every week.

It also warns that even before the Covid crisis there was a lack of agreed data on the mental health of seafarers, and it calls for other researchers to do more to examine all aspects of their psychological health during Covid-19, to ensure that all stakeholders in the maritime industry have the necessary information to tackle the problems faced by those at sea.

- The full academic paper **Post-traumatic stress disorder and mental health assessment of seafarers working on ocean-going vessels during the COVID-19 pandemic** is available at bit.ly/seafarer_PTSD



GLOBAL RESEARCH FOR GREENER SEAS

World Maritime University is encouraging seafarers looking to contribute to environmental research to expand their skills with postgraduate courses

CREDIT: Getty Images

International policy-making depends on good research, and in the shipping industry much of this work is carried out by the World Maritime University – often with the participation of Nautilus members. With the university currently prioritising the need for decarbonisation, **Sarah Robinson** looks at its teaching and research

There have been so many dramatic events in the news recently that it would be easy to forget the climate crisis, but the World Maritime University (WMU) recognises this as the biggest challenge facing the world today, and has committed substantial resources to helping the shipping industry to decarbonise.

Based in Malmö, Sweden, WMU was established within the framework of the International Maritime Organization (IMO) in 1983 to address a global shortage of well-qualified maritime experts needed for informed decision-making.

WMU is not a nautical training college, but instead offers postgraduate degrees and diplomas for maritime professionals seeking to develop their careers in new directions or take their knowledge to a higher level. The university's academics also carry out vital research to inform maritime decision-making at company, national and international level.

DECARBONISATION COURSES AT WMU

Maritime professionals who want to be part of the industry's drive to decarbonise have several options to further their knowledge with WMU.

For example, the university's MSc and PhD programmes in Maritime Affairs offer opportunities to focus on maritime energy management. 'The initiative for

this maritime energy focus arose from the direct and urgent need to address decarbonisation through the reduction of greenhouse gas emissions as well as the development of sustainable forms of energy in the maritime and ocean fields,' says WMU president Dr Cleopatra Doumbia-Henry.

There is also a Maritime Energy Postgraduate Diploma with particular relevance to Nautilus members. According to WMU, this programme 'equips maritime professionals with technical and socio-economic-environmental knowledge related to IMO regulations on air pollution and potential mitigation measures to achieve a low carbon and energy efficient maritime future'. It is designed for people with a technical profile (e.g. naval architects, deck officers, ship surveyors) as well as professionals with backgrounds such as ship operators and superintendents.

The admissions board will consider applicants who have a minimum of five years' work experience, a bachelor's degree in a relevant discipline and/or have the highest-grade certificate of competency for unrestricted service as master mariner or chief engineer. Students enrolling in the postgraduate diploma programme are usually self-funded or sponsored either by their companies or their maritime administration. In 2022, the maritime consultancy Cetena is offering two 50% tuition bursaries.



WMU president
Dr Cleopatra Doumbia-Henry

▶ The postgraduate diploma is taught by distance learning, but for those wishing to study something similar in Malmö, WMU is this year launching a one week Summer Institute on 'The role of green technologies and capacity-building in maritime decarbonisation'.

In addition, WMU offers short executive and professional development courses on environmental issues which can be tailored to the needs of individual companies.

ENVIRONMENTAL RESEARCH AT WMU

WMU academics have been working on a number of maritime energy management research projects. They include: a collaboration with the CHEK consortium on decarbonising long distance shipping;

an EU Horizon 2020 project investigating the use of decarbonisation tech including hydrogen and wind propulsion; another Horizon project looking at decarbonising ports; a Nordic Energy research project on ammonia and hydrogen as marine fuels; and a Swedish-funded project on the EU Emission Trading System and the impact of including maritime transport.

'A holistic perspective is essential in order to understand and overcome the decarbonisation challenge,' says Professor Aykut Ölcer, head of maritime energy management. 'WMU's approach is therefore multi-faceted, ranging from technology to human element to regulation to economics.'

NAUTILUS AND WMU

Nautilus has a long history of collaborative working with WMU, whether that means formal partnership in research projects, disseminating research findings in the Nautilus Telegraph or inviting Union members to take part in studies.

A notable recent collaboration was when the findings of the WMU **Culture of Adjustment** report were the focus of a Nautilus International webinar that took place on 5 March 2021. ▶



CREDIT: Getty Images

▶ Released in November 2020, the WMU research underlines systemic failures in the implementation of the regulatory regime for seafarers' hours of work and rest.

The Nautilus webinar brought together high-level speakers – including Dr Doumbia-Henry – to address the inconsistencies in implementation of rest/work hours regulations.

Nautilus has also helped to recruit participants for and publicise the findings of recent research projects involving WMU, such as the multi-university study **Seafarers' Experiences During the Covid-19 Pandemic**.

Opportunities for input from Nautilus members include the work WMU is doing in support of UN Sustainable Development Goal No 8 (Decent Work and Economic Growth). For example, Phase II of the university's Future of Work research recently surveyed maritime professionals to explore issues related to automation and technology. An annual opportunity for participation is the MarTID survey on global maritime training practices.

This is a valuable route for individual Nautilus members to have an influence on international policy-making, so when links become available for members to take part in WMU research surveys, please look out for these in the Nautilus Telegraph and on the Union website.

THE FAIR WAY TO GO GREEN

Nautilus International is part of the shipping industry's Maritime Just Transition Task Force, a body created at COP26 in Glasgow last year.

The Task Force's founding members include the ITF, IMO, ILO, and the ICS. Its purpose is to ensure that workers' rights and developing economies' access to zero-emission vessels and zero-carbon fuels remain at the centre of policy decisions.

The Task Force has announced that it will launch

a report at COP27 in November on the skills needed for a just and equitable green transition in maritime. This report will quantify the number of seafarers who need to be trained or reskilled to handle the green fuels of the future, and the findings will feed into the creation of policy and provide clear steps for the shipping industry to take.

Nautilus Federation coordinator Danny McGowan is part of the Task Force's Industry Peer Learning Group, which contains national governments, crewing

agents, major shipping lines, and international organisations such as the World Bank and Global Maritime Forum.

'In this Task Force I will stress the importance of social dialogue in the just transition process, and the need for retraining and reskilling,' Mr McGowan says.

'Nautilus is committed to ensuring that skilled and highly experienced maritime workers aren't thrown on the scrapheap or left alone to make the transition to new technologies themselves.'



NAUTILUS FEDERATION

What is the Nautilus Federation?

The Nautilus Federation is a group of 22 likeminded trade unions in shipping and inland waterways transport who have come together to improve and expand the services they offer to their members. Nautilus International is a key member of the Federation, with Mark Dickinson as its director and Danny McGowan as coordinator.

Why it is important?

It is important to work together with likeminded unions in order to amplify each other's voices when working on international policies. This serves to strengthen the work of the ETF and ITF to the benefit of all seafarers. In addition, Federation affiliates are always keen to support each other when a fellow affiliate faces problems in their own jurisdiction.

Why it is a good thing for our members?

With the Nautilus Federation working across so many different regions, we know we can count on other unions and their members to keep in mind global impacts of domestic decisions. The Nautilus Federation flagship service is the Joint Assistance and Support Network (JASON), which is supported by the Nautilus 24/7 helpline. Through JASON, the Nautilus Federation facilitates mutual assistance and support for seafarers who are members of a Federation union – especially when legal support is needed after a maritime incident.

Warning to seafarers: Abandonment on the rise

Steve Trowsdale
ITF inspectorate co-ordinator



Abandonment cases are at a record high, with seafarers reporting more instances of being owed two or more months' wages and more companies going under because of the pandemic. The International Transport Workers' Federation (ITF) and its unions can only help abandoned seafarers if you ask for their assistance, says inspectorate coordinator **Steve Trowsdale**

When things got tough financially in 2020, an increasing number of shipowners chose to cut their losses and disregard their obligations to seafarers under the Maritime Labour Convention (MLC), often folding their business with crew still onboard and thousands of dollars out of pocket. Some seafarers were trapped onboard for two or more years and in appalling conditions.

Flag states that have ratified the MLC have responsibilities towards seafarers. They have a central role in ensuring that abandoned crew are provided with provisions, unpaid entitlements, and a way home. When seafarers have not been paid, the ITF often asks the flag authority to encourage or compel a shipowner to pay the outstanding entitlements. Yet, in many cases, the flag authorities took ineffective or insufficient action or refused to act at all.

We strongly recommend that seafarers check all the available

information they can about a vessel before signing a contract. There are plenty of websites that show the position and destination details of vessels, and the IMO/ILO joint database lists all abandoned vessels.

The non-payment of wages for weeks, then months, is a typical sign that an employer may be about to abandon the vessel and crew

Once you're on board, the non-payment of wages for weeks, then months, is a typical sign that an employer may be about to abandon the vessel and crew. They keep promising to pay the outstanding wages and get you home if your contracts are over. Then suddenly, they stop responding to your messages. The MLC requires that

seafarers are paid at least monthly. If you go more than a month without being paid in full, this is a breach of the MLC.

Seafarers tell us how difficult it is to argue with their employer over wages because of the potential consequences if they raise concerns. They may be threatened just for contacting the ITF. They could be blacklisted by a shipowner or recruitment agent, which would mean no more contracts, and because under the MLC employers must pay for the cost of getting seafarers to and from ships an angry shipowner has the power to defer or deny repatriation.

It's easy to see why many seafarers choose not to rock the boat until they are desperate. But the ITF needs you to take the first step and ask for assistance before we can provide help and support. If you fear you may be abandoned, you must make your complaint and contact the insurer as soon as possible to avoid losing out financially.

Harrowing messages from abandoned crew

Most cases of abandonment happen in the Arab world. Mohamed Arrachedi, the ITF's network coordinator in the region, highlights two examples

Viet Tin 01 crew home but still waiting for wages

Twelve seafarers were stranded off the Malaysian coast without food, water or fuel when the Viet Tin 01 was abandoned by its Vietnamese owner. The ITF's Asia Pacific network coordinator and Hong Kong-based inspector, Jason Lam, has praised union efforts to assist them.

When this case came to the ITF's attention in June 2020 our affiliate, the National Union of Seafarers Peninsular Malaysia (NUSPM), began providing food and fresh water, alongside assistance from the Vietnamese embassy in Kuala Lumpur.

'The lack of fuel left the crew without cooling in the soaring daytime heat, and without critical navigational lights during the nights,' said NUSPM executive secretary Ikmal Azam Thanaraj Abdullah.

'The crew were in a terrible state. They were thirsty, hungry, and in great risk of being hurt or drowned if another vessel collided with them while they slept due to the lack of lighting onboard. This was an accident waiting to happen.'

NUSPM worked with the Malaysia Maritime Department and the relevant agent for permission to bring the crew onshore. The ITF put the seafarers up in a hotel and covered their meal and accommodation costs while trying to get them paid and repatriated.

After an anxious two months, the Vietnamese crew finally arrived home. They are hoping that their owed wages will be paid from the sale of the vessel.

Reggae crew pushed to the brink

'We are abandoned seafarers. We have not been paid our wages. We haven't had meal from yesterday evening.'

We received this text from a crew member on the cargoship Reggae. It was first abandoned in Tunisia in 2019 before it moved to Turkey. The crew had written to the shipowner in March 2020 requesting repatriation, citing mental health concerns and five months' unpaid wages. They were ignored. They were without food and water and desperately needed help.

The ITF repeatedly called for the flag state, Comoros, to intervene. There was no response. For months the ship sailed from Tunisia to Greece and Turkey and back to Greece.

The Turkish seafarers could take no more. They disembarked in their home port on 1 April, with part of their wages owing. But the five Indian crew remained onboard until 28 July, when they flew home to their families with all \$52,850 in wages in hand.

WHAT TO DO IF YOU ARE AT RISK

If you think you are at risk of abandonment, haven't been paid for two months or more or been supplied with food and other necessities and want to be repatriated, act quickly. Make a complaint and directly contact the insurer or ask the ITF to apply on your behalf. Otherwise, you could lose out financially.

● If you need help or advice, email seafsupport@itf.org.uk or visit the ITF Seafarers Support Facebook page

● IMO/ILO database: bit.ly/abandoned_crews

Join the fight on behalf of tug workers

A more consolidated shipping industry has driven down towage rates. In turn, operators have tried to save money by driving down the conditions of their workers



CREDIT: ITF

THE ITF FOUR PILLARS OF A SAFE AND SECURE TUG SECTOR



REGULATION

Clear, publicly available regulations that are effective in achieving the highest safety outcomes and prevent companies from cutting corners.



ENFORCEMENT

Thorough Port State Control, port authority and inland waterway policing of existing regulations, including immediate follow-up when tug workers and their unions raise safety concerns.



ACCOUNTABILITY

Scrutiny of the supply chain – including contractors, subsidiaries or otherwise – to ensure fair rates and require tug operators to adhere to safe and fair conditions of employment.



REPRESENTATION

Worker representation at all levels of the tug supply chain, including explicit support for collective bargaining and freedom of association for tug workers to form, join and participate in independent trade unions.

Tug workers need your solidarity. The International Transport Workers' Federation (ITF) is launching its Sound the Siren campaign to support those in the tug and towage sector as attacks on their terms and conditions are causing safety issues that could affect seafarers worldwide

Facing dangerous working conditions and the undermining of pay rates, these key maritime workers who kept the world moving during the pandemic are being placed in an impossible position – putting lives and global supply chains at risk.

A report published by the ITF shows that more consolidated, powerful shipping lines have been able to drive down tug and towage rates to unsafe and unsustainable levels – even as enormous new vessels are increasingly dependent on tugs.

Operators have sought new ways to reduce labour costs and exploit labour laws. This includes attacks on wages, conditions, crewing levels and safety standards globally, from Australia and New Zealand to Bahrain, Belgium, Panama and Morocco.

● Read the ITF's full campaign document and find out how you can support its demands: bit.ly/itf_tug_report

CAMPAIGN VIDEO: DANGEROUS WORK MADE DEADLY

A video launched by the ITF highlights the story of **Captain Troy Pearson** and **Charley Cragg**, who were killed while servicing a Rio Tinto power station in rough, icy waters after being pressured to work despite unsafe weather.

● Watch: bit.ly/tug_campaign_video



SIGN THE PETITION

Support the campaign by signing the ITF petition calling on Svitzer and AP Moller-Maersk to cease undermining Australian, Dutch and UK tug workers' rights, pay and conditions: bit.ly/itf_svitzer_petition

'We demand that companies take responsibility for the safety and security of tugboat workers and that shipping alliances are held accountable'

*ITF seafarers and inland navigation coordinator
Fabrizio Barcellona*

A CALL FOR CHANGE

When the Ever Given delayed \$9.6 billion of goods each day during its unfortunate blockage of the Suez Canal, the hard work of tug and salvage workers eventually saw the waterway reopen. 'Imagine the cost if we push tug workers past breaking point,' says ITF general secretary Stephen Cotton.

'We urgently call on the shipping container lines, their clients, tug and towage operators, and the regulators to sit down with the ITF and our affiliates and collectively agree to rates and conditions of employment that are fair, safe and financially sustainable.'



ITF general secretary
Stephen Cotton

OPINION

A long-awaited win at the IMO



David Appleton
Head of professional
and technical
protech@nautilusint.org

Nautilus attended a busy session of the International Maritime Organization's Human Element Training and Watchkeeping Sub-Committee (HTW) which was held online at the beginning of February 2022. This eighth session of the HTW sub-committee managed to make good progress on a number of outstanding issues following an almost two-year period where the IMO's work had all but ground to a halt in many areas due to the difficulties caused by the pandemic.

The vast majority of organisations have managed to adapt successfully to the new working practices made necessary by pandemic-related restrictions, but the IMO is not an ordinary organisation. In normal times, the meetings of its committees and sub-committees will typically last anywhere between five and eight full days

and consist of a main plenary session and various drafting and working groups that often work long into the night.

The meetings are attended by representatives of 175 member states, 66 intergovernmental organisations and 85 non-governmental organisations, with in-person attendance of up to 1,000 people during the course of a meeting not unheard of.

When the meetings of the IMO resumed after a six-month hiatus in October 2020, they were limited to three hours of online meeting time per day, and progress on several workstreams has been delayed for two years.

One such workstream was the proposal co-sponsored by a number of industry and seafarer representative organisations to review the IMO's Human Element Checklist and associated guidance.

The proposal had originally been submitted to the sixth session of the HTW sub-committee in April 2019 following research carried out by the Human Element Industry Group (HEIG) which found that the human element checklist had become a tick-box exercise rather than a genuine effort to avoid harm to seafarers in new or revised regulations.

After all the Covid delays, the proposed amended document finally received approval at HTW 8. This means that the checklist will now be fully integrated into the IMO's process for managing outputs, meaning that those drafting regulations will have to demonstrate that they have considered human element issues such as workload, training requirements, living and working conditions.

The acceptance of this proposal is a huge success for the organisations which worked on its development, and is testament to what can be achieved when like-minded organisations work together to further the interests of those at the sharp end in our industry.

As pandemic-related restrictions continue to be eased around the world, we are looking forward to the resumption of physical meetings at the IMO so we can continue to push for positive change for our members at the necessary pace.



Headquarters of the IMO

CREDIT: IMO

the global SEAFARER



Tel: +44 (0)20 8989 6677

www.nautilusfederation.org