

Number 23, January 2019

# IF SMA

## NEWSLETTER

The Shipmasters' International Voice



Futuristic VTS radar dome at the end of the former Hong Kong, Kai Tak Airport (See red pin on inset map). The runway has now been transformed into a modern Cruise Ship Terminal.



---

## Contents

---

Secretary General's report, Page 2.

From the Editor, Page 3.

Multipurpose container vessels *Kokopo Chief*, fire. Page 3.

ICS Chairman calls for STCW Training Regime Review, Page 4.

InterManager urges crew to help identify solutions, Page 5.

The world's largest battery ferries, Page 5.

Delivery of 14,000 TEU containership *ONE Columbia*, Page 6.

Casualty from overboard valves, Page 7

Hapag-Lloyd and a container shipping association, Page 8.

High pressure fire-fighting systems, Page 9.

Danish International Register & Offshore Shipping, Page 10.

Iranian Trade post-November 2018, Page 11.

Visions of the future, Page 11.

The 2020 Global Sulphur Limit (Diagram), Page 12.

A guide to Maritime Labour Convention 2006, (UK), Page 13.

Industry publishes improved cyber guidelines, Page 14.

Maersk sets net zero CO<sub>2</sub> emission target, Page 15.

A book of ships and trades, Page 16.

Samskip's UK investments and Brexit disruptions, Page 17.

Matsons vessels *Daniel K Inouye* arrives in Honolulu, Page 18.

IMO Awards 6 December 2018, Page 18.

(Exceptional Bravery at Sea Award 2018), Page 19.

Improving ship-to-shore relationships, Page 21

MAIB report - *SMN Explorer*, Page 22.

The IMO Maritime Safety Committee (MSC), Page 22.

IRClass technical seminar in Mumbai, Page 26.

Pre-loading cargo information for livestock vessels, Page 27.

A reminder on Stowaways, Page 27.

Missing Seafarers & Fishers Reporting Programme, Page 28.

Human Rights at Sea (HRAS), a footnote ..., Page 28.

Exhaust Gas Cleaning Systems, Page 29.

Container fire on the *Yantin Express*, Page 29

From the IFSMA Office, Page 29

---

## Secretary General's Report

---

Here we are and another year has drawn to a close – I have no idea where the time goes – and as always we have achieved some good results with raising our profile at IMO and making a difference on your behalf. There is always still much to do. This year has seen the expansion of the Human Element Industry Group which I set up just over a year ago. We are in the final stages of drawing up a Strategic Plan and a way ahead of how we are going to get the issue of mariners discussed in more committees and get more change to the benefit of mariners. We meet early in 2019, so I will keep you informed of our progress, but the good news is that the Secretary General of the IMO is very supportive of us and wants to make a real difference for mariners particularly as he has now been re-elected for another 4 four-year term.

The other area where IFSMA has made an impact this year is that of Maritime Anti-Corruption. Along with the International Chamber of Shipping and the International Transport Federation we have been working hard to raise the awareness of Maritime Corruption around the world. As part of the Cross Industry Working Group on Maritime Anti-Corruption we have now managed to get a number of IMO National Delegations interested in our work, including the USA, and will be tabling a paper to get this issue placed on the Agenda of the Facilitation Committee at the IMO in April 2019. This is a major breakthrough and again I will keep you informed as to the progress we make. This is another sign that we can and do make a difference on your behalf.

The Secretariat and your elected Council are excited for the future of IFSMA as we hope that the revised Membership Fees and increasing Membership numbers will enable us get the Secretariat working on a Full Time basis instead of the current Part Time. This will allow us to become more and more active across the industry and become much more visible. We also hope to take this forward with the first International Shipmasters' Congress (ISC 19) taking place in New Delhi, India, in September this year. It is being organised by your Deputy President, Captain Willi Wittig, in conjunction with the Company of Master Mariners of India (CMMI). It is an enormous undertaking and there is still much to do, but with your help and support I am sure it will be a huge success. I would like to personally and publicly thank Captain Philip Matthews, President of CMMI, and his hard working team for all the effort they are putting in to make this a success on your behalf. Please look at all the details on our website and register your interest in attending. This is another way in which we can make an impact for mariners around the world.

Thank you for your support this year. I look forward to continuing to drive forward our Strategic Plan at the IMO where we make a real difference for you on the international stage. For those of you out at sea, keep a weather eye open and keep safe and please write and tell us what is happening on the Front Line.

---

## From the Editor

---

With regard to the 2020 Sulphur Cap welcome news has been received that the International Chamber of Shipping (ICS) with the support of the Asian Shipowners' Association (ASA) and the European Community Shipowners' Associations (ECSA), has produced some valuable guidance on implementation planning, to help ensure compliance across the industry with this regulatory change.

This free ICS document has been prepared for the vast majority of ships that will comply after 1 January 2020 using fuel oils with a sulphur content of 0.50% m/m or less.

By way of explanation ICS Secretary General, Guy Platten, commented: *'Shipping companies may need to start ordering compliant fuels from as early as the middle of 2019, and they are strongly recommended to commence developing implementation plans as soon as possible.'*

Apart from the significant additional cost of compliant fuel, ICS says that implementation of the global cap will be far more complex than for the previous introduction of Emission Control Areas.

*Provisional Guidance to Shipping Companies and Crews on Preparing for Compliance with the 2020 Global Sulphur Cap* can be found on the ICS website here:

<http://tinyurl.com/y8qdpbew>

---

## Multipurpose container vessel *Kokopo Chief* cargo hold fire

---

23 September 2017

### New Zealand Transport Accident Investigation Commission (TAIC) report

On 23 September 2017, the multipurpose/container vessel *Kokopo Chief* was loading a cargo of containers and general cargo at the Port of Tauranga.

Number 4 cargo hold was completed with tiers of packaged timber, after which the hatch lid was closed and containers loaded on top. Cargo operations were completed by about 2230 and the crew stood down to rest before the vessel's departure, which was scheduled for early the next morning.

Shortly before midnight the ship's smoke-detection system alarmed, alerting the crew to a fire that had broken out in number 4 cargo hold. The crew response to the fire included activating the ship's fixed carbon dioxide (CO<sub>2</sub>) fire-extinguishing system, which involved sealing the cargo hold and releasing liquid CO<sub>2</sub> into the cargo hold.

The master alerted harbour control, which called the local fire service, responded and combined with the ship's crew to form a joint fire command team and a fire control team. The fire control team monitored the temperatures of the steel surfaces around the cargo hold, which indicated that

the fire was being suppressed by the CO<sub>2</sub> gas in the hold.

A decision was made to unload the containers on top of the hatch and partially open one of the lids. However, smoke was emitted from under the hatch lid, so it was replaced and any remaining bottles of liquid CO<sub>2</sub> were released into the cargo hold.

After several hours the temperatures had decreased, so the hatch lid was removed. There were no obvious signs of fire, so the timber packs were unloaded and any remaining hot spots attended to.

The TAIC found that the fire was caused by heat radiating from an incandescent reflector lamp that set fire to packs of timber that had been stowed close to the lamp. The cargo hold lights had not been switched off on completion of loading.

The Commission also found that the ship's fixed CO<sub>2</sub> fire-extinguishing system was effective, but that the fire could have been extinguished sooner if the hatch had not been opened earlier.



*Kokopo Chief* at the port of Tauranga.

Photo: MaritimeNZ ©

The Commission also found that the response to the fire was well co-ordinated, but identified the following safety issues:

- the operator's safety management system had not fully mitigated the risk of fire caused by cargo hold lighting, in spite of an earlier incident involving similar circumstances
- the responsibilities of the various authorities involved in responding to the fire were not clearly documented and understood by all parties
- the Fire and Emergency New Zealand training standards did not fully cover the special considerations for responding to shipboard fires.

The operator took a number of safety actions to address the first safety issue. The Commission made two recommendations to Fire and Emergency New Zealand to address the other safety issues. The Commission also made recommendations to the International Association of Classification Societies (IACS) and the International Group of

P&I Clubs (IGPANDI) to disseminate the lessons learned from this accident to the global shipping fleet.

Key lessons arising from this inquiry included:

- safety procedures such as switching off cargo hold lights should be documented and include systems for checking that they have been carried out
- some lamp types generate a substantial amount of heat that can be a fire hazard. Ship owners and operators should consider using other types of lamp that do not generate high heat in locations where the risk of fire is present
- the required firefighting systems on board ships are unique to the special design and construction of the ships. When possible, they should be fully utilised in accordance with the operating instructions.

Related Safety Recommendation:

see: <https://taic.org.nz/recommendation/02318>

see: <https://taic.org.nz/recommendation/02418>

see: <https://taic.org.nz/recommendation/02518>

see: <https://taic.org.nz/recommendation/02618>

For the full TAIC investigation Report readers are invited to see here: <http://tinyurl.com/ydb8fgek>

---

## ICS Chairman calls for Comprehensive Revision of STCW Seafarer Training Regime

---

Speaking in Manila\*, the Chairman of the International Chamber of Shipping (ICS), Esben Poulsson, has called for a comprehensive revision of the IMO STCW Convention which governs global standards for the training and certification of around two million merchant seafarers.

STCW was reviewed in 2010 with the adoption of the Manila amendments but the previous major overhaul of the STCW regime was last undertaken by IMO Member States over 25 years ago.

Mr Poulsson said: *'It's now commonplace for employers to routinely provide additional training and assessments prior to the deployment of many officers holding STCW certification which raises questions as to whether the Convention as currently drafted is still fit for purpose in the 21<sup>st</sup> century.'*

*'A fully revised STCW regime would allow the industry to adapt much more effectively to technological developments including increased automation. It should provide a structure of sufficient flexibility to hit the moving target of a changing world fleet, and may need to develop a more modular approach to competency accumulation and certification. The arrival of new technology is already chang-*

*ing the functions that seafarers perform on board and the skills and training they require.'*

Poulsson added: *'A revised STCW should seek to improve transparency and the robustness of implementation oversight. The so called STCW whitelist of nations that have communicated information to IMO about compliance now serves little real purpose as it includes virtually everyone. ICS would not wish to tear up the whitelist without a suitable replacement but there has to be a more transparent and robust monitoring system of national implementation to ensure that STCW continues to deliver competent and quality seafarers.'*



ICS Chairman Esben Poulsson speaking at the Crew Connect Conference in Manila on 6 November.

The ICS Chairman explained that the International Chamber increasingly views the STCW 2010 amendments as an interim revision which had added some new training and certification provisions without making the structural changes needed to accommodate new developments in training or the competences that would be required to operate ships in the future.

He recalled that during the early 1990s, IMO had responded positively to industry requests to address serious concerns about training standards in many of the newly emerging seafarer supply countries, many of which now had world class training institutions. He concluded by saying: *'With the involvement of all industry stakeholders, we think the time is now right to consider the next comprehensive revision of STCW akin to that completed by IMO Member States back in 1995.'*

\*At the Crew Connect Conference on 6 November.

## InterManager urges crew to help identify enclosed space solutions

InterManager, the international trade association for the ship management sector, has launched a campaign to encourage seafarers to think about safety issues when working in enclosed spaces and to identify measures which they believe would reduce risks.

Announcing the campaign during the Crew Connect event in Manila, Philippines on 9 November, Captain Kuba Szymanski (illustrated), InterManager Secretary General, said: *'The shipping industry has produced a wealth of rules, procedures, guidelines, leaflets etc., concerned with the risks of working in enclosed spaces aboard vessels and yet seafarers are still dying while engaged in these activities.'*



Captain Kuba Szymanski, InterManager Secretary General

*'We want to hear from the seafarers themselves to find out why fatal mistakes are still being made. Are we missing a trick here? Is there something we haven't taken into consideration?'*

InterManager aims to eradicate or minimise unnecessary risks to life by seeking opinions from the people working in enclosed spaces. Captain Szymanski explained: *'Often seafarers are considered to be part of the problem. We are encouraging them to be part of the solution by sharing their experiences and points of view. We want to know what approach those facing these risks think should be taken. Please tell us what you think is the best solution. Is there a simple, user friendly procedure, change or technology gadget which would be universally beneficial for colleagues working in enclosed spaces?'*

InterManager has established a committee to consider seafarers' responses with a view to producing industry guidelines and sharing best practice. Committee members

include numerous shipping industry professionals with experience in dealing with Health, Safety, Environment, & Quality (HSEQ) matters.

Captain Kuba Szymanski continued by saying: *'This campaign puts seafarers in the driving seat and allows them to take charge of this risk to their lives.'*

Encouraging seafarers to share their views, he added: *'We want to know what you believe is the best response to take when working in enclosed spaces – the approach you feel will make a real difference.'*

Requesting ship operators to encourage their crew members to take part, he concluded by saying: *'Please ask your team for their ideas, comments or suggestions. It is important for us that as many crew members as possible participate. So maybe float this idea during onboard safety meetings or during one of the smokos.'*

In return for their assistance, seafarers could earn a MacBook Air as a prize for the best response and \$2,000 for their vessel's welfare fund. Responses should be received by 1 January 2019.



## The world's largest battery ferries

### ForSea (formerly HH Ferries Group) completes conversion

The two largest emission-free ferries in the world, *Tycho Brahe* and *Aurora*, have been officially welcomed into service after guests boarded *Tycho Brahe* in Helsingborg, Sweden and Helsingør, Denmark on 9 November for an inauguration ceremony marking completion of an all-electric conversion.

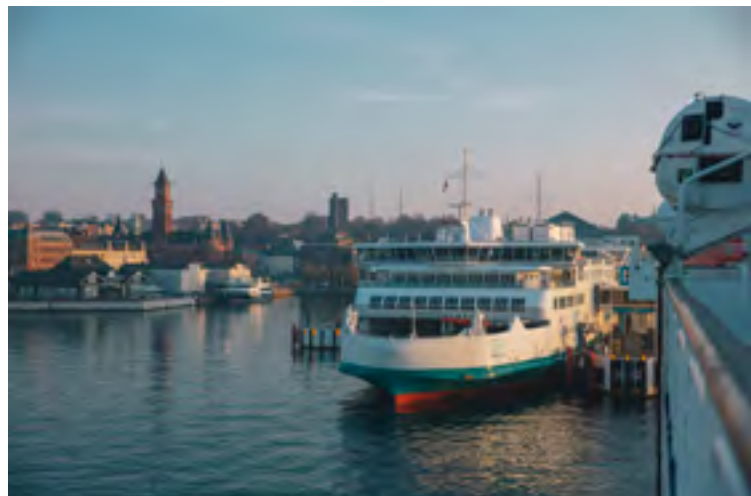
*Tycho Brahe* and *Aurora* were converted from conventional diesel-engine operations to battery power at Öresund Dry Docks, as part of ForSea's strategy to reduce the environmental footprint along the short sea route between Sweden and Denmark. The vessels operate on a high intensity ferry route that transfers over 7.4 million passengers and 1.9 million vehicles between urban port terminals in Denmark and Sweden.

Conversion of these over 100-metre ferries, both built in 1991, required installation of a 4160 kWh battery on each vessel, as well as battery racks, energy storage control systems and ABB's award-winning Onboard DC Grid™ power distribution technology.

Additionally, ABB supplied automated shore-side charging stations using an industrial robot to optimize the connection time and maximize the charging period, leveraging 3D laser scanning and wireless communication between ship and shore.

In the words of Johan Röstin, CEO, ForSea: *'We are delighted that the entire system is in place to support the emissions-free operations we envisaged from the outset. This is a truly ground breaking project and the work we have done with ABB will offer invaluable lessons for those following our lead. In shipping, innovation takes time and patience, and we always kept sight of the environmental benefits at stake.'*

Added Marcus Höglom, Head of Passenger, Dry Cargo and Ice Segment, ABB Marine & Ports: *'This project signals a profound shift for the maritime industry, and shows a path towards zero-emission operations, aligned with the IMO's goals for decarbonisation. We congratulate ForSea on the inauguration of these vessels, and we are proud to have worked closely with them to deliver this pioneering solution.'*



*Aurora electric ferry.*

*Image courtesy of ForSea ©*



*Aurora electric ferry in open water.*

*Image courtesy of ForSea ©*



*Battery power on board Tycho Brache.*

*Image courtesy of ForSea ©*



*Shore-charging station.*

*Image courtesy of ForSea ©*

## **Delivery of 14,000 TEU containership *ONE Columba***

Ocean Network Express Pte Ltd., otherwise known as ONE\* reported on 16 November from Kure in Hiroshima that it had successfully taken delivery of the 14,000TEU *ONE Columba* from the shipbuilder Japan Marine United Corporation. The vessel's sublet owner is Nippon Yusen Kaisha, flag is Panama.

This is ONE's fourth newly built 14,000TEU magenta-hulled containership delivered this year, after *ONE Stork* (delivered on 12 June 2018), *ONE Minato* (26 July 2018), and *ONE Aquila* (7 September 2018). Currently, three more vessels in ONE's order book are under construction with expected delivery in 2019.

*ONE Columba*, sister ship of *ONE Stork* and *ONE Aquila*, employs a hull form that optimises cargo-loading efficiency, achieved by minimising engine-room space. The vessel is also equipped with dual-system application in its main engine, capable of adopting either high- or low-output ranges, allowing operational flexibility and improved fuel-consumption, resulting in significant reduction of CO<sub>2</sub> emissions.

The navigation bridge adopts the Integrated Navigation System (INS) which consolidates functions of vessel systems to save operators workload effectively, it is understood. Furthermore, a safety feature has been the provision of deep windows on the bridge wings to assist with berthing and unberthing.

*ONE Columba* will be phased into THE Alliance's Asia to Europe, Far East Europe 5 (FE5) service, with the port rotation: Leam Chabang, Cai Mep, Singapore, Colombo, Suez Canal, Rotterdam, Hamburg, Antwerp, Southampton, Suez Canal, Jeddah, Colombo, Singapore and Laem Chabang. This is said to be the largest containership to ever call at Leam Chabang to meet the demand of economic growth at Thailand.

#### **Vessel Specification:**

LOA 364.15m  
Beam 50.6m  
Depth 29.5m  
Full Draft 15.8m  
Tonnage 138,611 dwt  
145,647 nrt  
Container capacity 14,052 TEU

#### **Port call Laem Chabang**

On 26 November a welcome event was held to celebrate the maiden call of *ONE Columba* at the Thai port of Laem Chabang. This was a significant milestone for the maritime trade of Thailand as it marked the arrival of the largest container vessel ever to call upon the Land of Smiles.



*ONE Columba on sea trials*

*Photo: Ocean Network Express Pte.Ltd ©.*

This event was graced by key dignitaries and trade representatives from Japan and Thailand including: HE Shiro Sadoshima (Ambassador of Japan to Thailand), Police Sub-Lieutenant Montree Lergechumniel (Managing Director of Laem Chabang Port, Acting Director General Port Authority of Thailand), Mr Yutthana Poolpipat (Director of Laem Chabang Custom Bureau), and Dr Verapong Chaiperm.

Likewise, on the day before the event, other notable representatives: Dr Pailin Chuchottaworn (Deputy Minister of Transport), Dr Siri Jirapongpan (Minister of Energy) and

Mr Somsak Hommuang (Director General of Marine Department, Chairman of the Board of Port Authority of Thailand) also visited Laem Chabang for a private tour and inspection of the newly built 14,000 TEU container vessel.

In a statement from One Network Express (ONE), arrival of *ONE Columba* has reaffirmed commitment of ONE in augmenting the overall maritime trade between Thailand and the major trade lanes around the world.

Particularly, the arrival has demonstrated ONE's support of the Thai government's initiative to transform Laem Chabang into a major marine hub of Southeast Asia, as well as to improve its trade connectivity with the region via the Eastern Seaboard of Thailand.

In his opening speech, this is emphasized by Mr Kiyoshi Tokonami (Managing Director of ONE Thailand) who quoted the event as '*a historical turning point and a sign of ONE's strong decision to support for the Thai government's policies for economic growth through initiatives such as the Eastern Economic Corridor (EEC) Project.*'

\*Ocean Network Express was established on 7 July 2017 by the integration of 'K' Line, MOL and NYK. HQ is in Singapore.

---

## **Casualty from overboard valves**

---

### **Learning from a recent event**

A leaking overboard discharge valve for cooling water contributed to a critical situation: water entered the vessel's engine room and caused a blackout while it was operating in rough seas. Easy and regular maintenance routines by crew could have prevented the incident. This news, taken from an advice notice published by DNV GL focuses on consequences of casualties of overboard valves and what measures may prevent similar incidents.



### **Course of events**

A leaking overboard non-return discharge valve resulted in seawater entering the engine room of a vessel operating in rough seas. The cooling water caused a blackout and the engine room began to flood, leading to a critical situation for the vessel and the crew. As a temporary measure, the leaking overboard valve was isolated and the vessel towed to port for repairs. During the damage survey, the bottom of the valve was found to be heavily corroded and holed.

The top of the valve, however, appeared normal. Leaking over-board valves can lead to water entering the engine room. In severe cases, where the valve completely gives way, seawater can directly enter the engine room, causing rapid flooding.

### Lessons learned and recommendations

Inspection of the valve seating, by partly opening of the valve, would not reveal the wastage in the bottom without fully dismantling the valve. However, inspection of the bottom part of the valve by using a hammer and visual inspection, e.g. a mirror, could have revealed deterioration of the valve body without being dismantled.

All sea valves, including scuppers and sanitary discharges, are to be thoroughly examined and fully opened at the time of class survey involving bottom surveys in dry dock. It is strongly recommended that the sea valves are overhauled at the same time.

The condition of the valve body can be difficult to assess, but there are some easy regular inspection checks, when implemented in the maintenance plan on board, that help evaluate the condition of the valves:

- In addition to a visual inspection of the body, a hammer test can be performed to evaluate thinning and corrosion. (Note: Non-destructive testing (NDT) of valve bodies are usually not a good option since the bodies are cast and usually have minor internal flaws even in a new condition.)
- Always check the bottom of the valve.
- If rubber lining has been provided in the valves, check that the lining is intact. If lining is partly peeled off, concentrated local corrosion may occur.
- Examine the fastening of the valves to the hull.
- If the body cannot be fully visual surveyed in situ, this is also an indication that the valve should be fully dismantled, since most likely no one is looking at it in service. All the more reason for a stringent examination at 5-year intervals.
- Please note there may be external corrosion as well as internal pitting / erosion at the same spot. A mirror or camera may be helpful tools.
- Systems in which heated seawater is passing may corrode more rapidly.

The costs of the proper examination/overhaul/replacement of a valve are minor compared to the cost for replacing a broken valve in service with unscheduled repairs and disrupted service. Upon reassembly, the valves should be tested to confirm satisfactory operation of the valves and their actuating mechanism, full closing of the valve and tightness of the valve when fully seated (ref. IACS Rec.144).

### References

See also *DNV GL Rules for Classification: RU-SHIP-Pt.7 Ch.1 Sec.5 1.1.2. Bottom survey*

## Hapag-Lloyd and others plan to establish a container shipping association

AP Moller-Maersk, CMA CGM, Hapag-Lloyd, MSC and Ocean Network Express (ONE) announced on 15 November a plan to establish a container shipping association with the purpose of paving the way for digitalization, standardization and interoperability in the container shipping industry.

IT executives from these companies have been discussing the creation of common information technology standards which shall be openly available and free of charge for all stakeholders of the wider container shipping industry.

According to André Simha, CIO of MSC and spokesperson of the group: *'It is in the customers' and all stakeholders' best interest, if container shipping companies operate with a common set of information technology standards. We are striving for less red tape and better transparency. The timing is right, as emerging technologies create new customer friendly opportunities. Together, we gain traction in delivering technological breakthroughs and services to our customers compared to working in our own closed silos.'*

### A need for a neutral and non-profit association

While the shipping industry already has multiple organizations and associations, the members of the group identified a need for a neutral and non-profit body for ocean carriers that is driven by delivering benefits for the industry and its stakeholders.



Ocean Network Express (ONE) vessel One Stork on delivery voyage.

Photo: [www.one-line.com](http://www.one-line.com) © .

Simha concluded: *'That is why we will also welcome new members with open arms to join the association.'*

**It is understood that this association has no intention of developing or operating any digital platform, but aims to ensure interoperability through standardization. Similarly, the association will not discuss any commercial or operational matters.**



## Participants of the discussions

- ❖ AP Moller-Maersk: Adam Banks, Chief Technology & Information Officer.
- ❖ CMA CGM: Madhana Kumar, Vice President, Transformation, Data & Digital.
- ❖ Hapag-Lloyd: Martin Gnass, Managing Director Information Technology.
- ❖ MSC Group: André Simha, Chief Information Officer.
- ❖ Ocean Network Express (ONE): Noriaki Yamaga, Managing Director, Corporate & Innovation.

## About the plans, in summary

- To establish a neutral and non-profit association.
- To pave the way for digitalization and standardization in the industry.
- All ocean carriers are invited to join the association once it is established
- AP Moller-Maersk, CMA CGM, Hapag-Lloyd, MSC and ONE intend to become members.
- Operating as from early 2019 (Subject to any applicable regulatory requirements)
- The association will comply with all legal and regulatory requirements.



A fully-laden Antwerpen Express (13,167 TEU) of Hapag-Lloyd.

Photo: [www.hapag.lloyd.com/en/press](http://www.hapag.lloyd.com/en/press) ©

## Statements from the container shipping companies

**Adam Banks, Chief Technology & Information Officer, A P Moller-Maersk:** *'Digital is key for AP Moller-Maersk in delivering on our strategy to become an integrated container logistics company that offers simple, end-to-end services with seamless customer experience. A joint set of technical standards will ensure interoperability and enable all parties to concentrate on value adding differentiation as we move the container shipping industry towards further digitalization. Ultimately this will benefit all parties in our customers' supply chains.'*

**Rajesh Krishnamurthy, Executive Vice President IT & Transformations: CMA CGM:** *'CMA CGM is always looking for best practices and standards to support the innovation and digital strategy of the company. Being a founding member will enable us to work together on setting the standards for digitization of the entire industry.'*

**Martin Gnass, Managing Director Information Technology, Hapag-Lloyd:** *'Hapag-Lloyd welcomes the creation of this association as we firmly believe that the challenges of the future can only be tackled with a common approach.'*

**Andre Simha, Chief Information Officer, MSC:** *'MSC believes that we have reached the point in the carrier world where we need something that is common, open and done in the framework of a neutral and non-profit association. By collaborating on standardized solutions, we think that's the best way to respond to shippers' demands for technology and innovation, thus shaping the future of the shipping industry.'*

**Noriaki Yamaga, Managing Director, Corporate & Innovation, Ocean Network Express (ONE):** *'Ocean Network Express sees a wave of innovation technology development in shipping and logistics industry over the recent years which can bring good opportunity to the whole industry for digital transformation. But, at the same time, we are a little bit cautious about adopting new technology by an individual company since there is no common standard in the market which may be ending up with re-integrating work among all stakeholders in the supply chain. With this mind, we feel it would be necessary to have some discussions and collaboration on the area of new technology and innovation to establish common IT standard and governance for the industry to streamline and digitize shipping process in a modern way. In the end, we believe this style of collaboration can bring value and opportunity to our customers as well as logistics companies, leading shipping and logistics industry to new ecosystem of digital supply chain.'*

---

## High pressure fire-fighting systems

---

### Design safeguards against personal injury

The Australian Maritime Safety Authority (AMSA) has issued a new marine notice. This is **available on the AMSA website at:** <http://tinyurl.com/y7yw66jq>

### Purpose

The purpose of the marine notice is to inform all shipowners, operators, masters, and crew of the hazards when working with high-pressure fire-fighting systems and the safeguards that may be implemented to prevent injury.

### Serious incident

A seafarer suffered serious injury while conducting routine maintenance work on part of a 13 bar high-pressure

fire-fighting system on a fire-fighting tug. Prior to the incident, maintenance on the manifold on the other side of the vessel had been completed without incident. As a result, it was assumed that the systems were not pressurised.



*The hydrant in question is closest to the camera.*

*Photo: See: <http://tinyurl.com/y7yw66jq>*

The seafarer was attempting to remove the brass blanking cap from a hydrant valve on a manifold of four valves fitted in parallel. The other three valves had been satisfactorily checked ten minutes earlier. The seafarer could not release the locking pawl by hand and, assuming that it was seized, utilised multigrips to free it. The line was under pressure and when the 600 gram blanking cap came free it was expelled under pressure and struck the seafarer in the face causing severe facial injuries.

### **Contributing factors to the incident**

An investigation into the incident concluded that the following factors may have contributed:

- Inadequate safe work procedures for working on high pressure systems.
- Incomplete closure of both the butterfly isolating valve to the manifold and the hydrant valve allowed air to pass the valve seat and become trapped under pressure in the hydrant chamber.
- Lack of 3mm pressure relief holes in the hydrant blanking cap as specified in AS 2419.2-200.
- Use of heavy brass hydrant blanking caps rather than lightweight alternatives.
- Turning directions for opening and closing of hydrant isolating valve were non-standard and opposite to that shown on the valve control.
- Isolating valve indicator was unclear and positioned out of operator's line of sight.

This incident could have been prevented through effective controls, however, the provision of pressure relief and se-

curing arrangements for the cap would have protected the seafarer where those controls were ineffective.

### **Recommendations**

AMSA notes that SOLAS does not require pressure relief holes in blanking caps. However, AMSA strongly recommends that the requirement for 3mm pressure relief holes in hydrant blanking caps, as specified in AS 2419.2-2009—fire hydrant installations, be complied with.

Blanking caps are also available in a lightweight plastic composite material, which would significantly reduce impact forces should all other controls fail. AMSA supports the use of lightweight alternatives where appropriate.

AMSA also recommends the fitting of securing chains or wires to blanking caps as specified in AS 2419.2-2009—fire hydrant installations. This is designed to prevent the loss of the cap.

### **Conclusion**

Even where pressure relief arrangements are in place shipowners, operators, masters, and crew are reminded to exercise care when operating with, and working on, any fire-fighting systems. Perform the necessary checks described in the vessel's safety management system to ensure that no part of the system is pressurised before working on it.

---

## **The Danish International Register and Offshore Shipping**

---

On 20 November the Danish Maritime Authority (DMA) reported that the Danish Parliament had approved new regulations following extension of the rules on tax free net wages for seafarers to also include certain specialized vessels.

It is understood that last spring, the Danish parliament adopted an extension of the seafarer tax scheme, making it apply to the crew on certain specialized vessels in the offshore sector.

This new Act of Parliament allows for shipowners and Danish trade unions to enter into agreements that cover all seafarers on vessels primarily engaged in offshore activities in Danish waters regardless of the seafarer's place of residence.

Finally, the DMA advised that the amendments quoted here are expected to enter into force in 2019. ([www.dma.dk](http://www.dma.dk))



*Photo: [www.dma.dk](http://www.dma.dk) ©*

### P&I Clubs advice

Earlier in the year P&I Clubs issued circulars outlining the potential repercussions for shipowners and insurers arising from the US Administration's decision to withdraw from the Joint Comprehensive Plan of Action (JCPOA) Agreement signed by China, France, Germany, Russia, the United Kingdom, the United States, the European Union (EU) and Iran.

As has been widely reported the US has now re-imposed sanctions on Iran that had been lifted or waived under the JCPOA with the second and final wind down period coming to an end on 4 November 2018.

At this stage the US made it clear that it expected all non-US persons to comply with the secondary sanctions that have been re-imposed. The US and the EU now take divergent approaches with the EU seeking to maintain the sanctions relief provided for by the JCPOA by, amongst other things, amending the annex to Council Regulation (EC) No 2271/96 (see: <http://tinyurl.com/yb95s8bj>) otherwise known as the Blocking Regulation (see further: *European Union Regulation 2271/96 (Blocking Regulation) – Iran update Circular*).

According to advice from P&I Clubs there have been reports that eight countries – China, India, Italy, Greece, Japan, Republic of Korea, Taiwan, and Turkey – have or will be granted waivers from the US so that they may continue to be permitted to import limited amounts of Iranian crude oil. **Importantly, these waivers do not extend to any other commodities.**

Limited guidance in relation to these waivers, or Significant Reduction Exemptions (SREs), is provided by OFAC FAQ 642. It is further understood that countries holding SREs are being advised by the US Administration to import Iranian crude only on NITC<sup>1</sup> or IRISL<sup>2</sup> vessels, or on vessels registered in the country holding the SRE and only where those vessels are insured under a sovereign guarantee issued by the Government holding the SRE.

Following the end of the wind down period it has been advised that there may still be some limited trade with Iran that is possible for non-US persons to undertake without a significant risk of violating US secondary sanctions (for example, the carriage of certain agricultural commodities, consumer goods and foodstuffs, see OFAC FAQ 637).

Members of P&I Clubs have been advised that they should be aware, however, that even if the trade does not appear to violate US sanctions, practical difficulties mean that it is extremely unlikely that International P&I Group Clubs will be in a position to make or receive payments, provide security or respond to any claims in the usual manner.

Furthermore, members of the P&I Clubs have also been reminded that most International Group of P&I Club Mem-

bers have provisions in their rules excluding from cover any claims that arise from unlawful, improper or imprudent trading.

Finally, the advice has been that if a Member of a P&I Club does conduct Iranian trade, they are consequently advised to do so with great caution, carrying out appropriate due diligence before entering into contracts and be aware of the challenges faced by insurers in providing cover and supporting their Members in these trades. Practical difficulties encountered by insurers are also likely to be faced by Members when it comes to, for example, making or receiving payments in relation to Iranian trade in view of the inability or unwillingness of banks to handle monetary transactions with even a remote connection with Iran.

<sup>1</sup>National Iranian Tanker Company

<sup>2</sup>Islamic Republic of Iran Shipping Lines

## Visions of the future

### Maritime Safety Committee 100<sup>th</sup> session

Evolution not revolution. Autonomous and remote-controlled ships are being trialled but seafarers, for now, remain indispensable to safe shipping. These were key messages apparent from a special session held on 3 December of IMO's Maritime Safety Committee, which is celebrating its 100<sup>th</sup> session. This was reported on 6 December by IMO which kindly provided illustrations.

Delegates were first treated to a song commemorating IMO's 70th anniversary since the Convention establishing IMO was adopted in 1948) as well as the MSC 100 session.

See here: <http://tinyurl.com/ycqw7hsy>

Then a specially-commissioned IMO video reminded representatives of IMO Member States, IGOs, NGOs and invited guests of the wide spectrum of work the Committee has done over six decades to enhance safety and security at sea, including navigation, cargoes, ship construction, seafarer training, search and rescue and communications and more.

See here: <http://tinyurl.com/yc3emqom>

IMO Secretary-General Kitack Lim outlined the history of the Committee, since it first met in 1959, when it comprised just 14 Member States. Today the Committee consists of all IMO Member States. He reflected: '*Thanks to the unwavering commitment to reduce the number of marine casualties and incidents, not least demonstrated by the efforts of this Committee throughout the years, and with the unique IMO spirit of cooperation that is perhaps particularly true for the work of this Committee, we have come a long way in ensuring the safe and secure operation of international shipping.*'

He added: '*As we look towards the future of the MSC, a number of key issues are on the table before us. They will*

require our combined continuous efforts to reach sound, balanced and timely decisions, in order to continue the long and impressive record of this Committee's work over the past 100 sessions.'

Kevin Daffey, Director Ship Intelligence and Engineering & Technology, Commercial Marine, Rolls-Royce plc, introduced a vision of the future with videos showing the trial of a fully autonomous ferry on a voyage between Parainen and Nauvo, Finland. This ferry navigated in fully autonomous mode and under remote control operation. Plenty of ships will continue to have people on board, he said, but marine engineers are opening the design envelope to make these ships more effective and more efficient, it has been report.

Timo Koponen, Vice President, Processing Solutions, Wärtsilä Marine Business, showcased the remote control operation of an offshore vessel in August 2017. The OSV, sailing off the coast of Aberdeen, Scotland, was controlled remotely from San Diego, 8,000 km away, using standard bandwidth. And more recently, in 2018, the Norwegian hybrid-powered car ferry *Folgefonn* underwent successful auto-docking/undocking/dock-to-dock tests. Automation, intelligent routeing, voyage optimization and just-in-time operation had the potential to provide significant fuel savings and contribute to improved environmental performance.

In Koponen's words: 'Are seafarers indispensable?' This was the key question posed by Branko Berlan, Accredited Representative of the International Transport Workers Federation (ITF) to IMO.

His message was that seafarers are still key to safe and secure ship operation. The accident/incident rate for international merchant ships is less than 5% of all ships per year, he pointed out. Seafarers are prepared for new technologies and automation, he added. 'It is happening: it is not revolution, it will not come tomorrow or next week; it is evolution.' Seafarers are ready to accept technologies, if they are proved to be safer than what we have now.


In the debate that followed, delegates raised questions about search and rescue operations which might involve autonomous or remotely controlled ships and how Collision Regulations would be complied with. Most believed that remote controlled or autonomous vessels would initially operate close to shore.


It is understood that the MSC is carrying out a regulatory scoping exercise to look at how the safe, secure and environmentally sound operation of Maritime Autonomous Surface Ships (MASS) may be introduced in IMO instruments.

Closing the special session, former MSC chair Tom Allan reminded delegates of their responsibility as the people involved in: '...probably the most important safety committee in the world,' when it comes to safety of life at sea. 'Not only this session, but the next 100.'

(For a more comprehensive report on IMO MSC 100 please see page 22/).


## THE 2020 GLOBAL SULPHUR LIMIT





**▶ WHAT'S HAPPENING?**


The global sulphur limits outside of Emission Control Areas (ECAs) for vessel emissions will reduce from 3.50% to 0.50% particulate matter by mass (m/m).



---

**▶ WHY IS THE GLOBAL SULPHUR CAP BEING REDUCED?**


To reduce the amount of sulphur oxide (SO<sub>x</sub>) emitted into the atmosphere. This should have major health and environmental benefits for the world, particularly for communities living close to ports and coasts.



---

**▶ WHERE IS THIS HAPPENING?**


Outside of the established ECAs. From 1 January 2015, ships trading in ECAs had to use fuel oil on board with a sulphur content of no more than 0.10%. ECAs established under MARPOL Annex VI for SO<sub>x</sub> are: the Baltic Sea area, the North Sea area, the North American area (covering designated coastal areas of the United States and Canada) and the United States Caribbean Sea area (around Puerto Rico and the US Virgin Islands).



---

**▶ WHEN WILL THIS HAPPEN?**


From 1 January 2020, the new requirement will be in force and an amendment to MARPOL Annex VI Regulation 14 will be made.



---

**▶ WHO WILL BE AFFECTED?**

The sulphur limit cap applies to all vessels regardless of size or trading area, whose Flag State are a signatory to MARPOL Annex VI. Additionally, all ships of 400 GT or more, fixed or floating platforms, floating craft and submersibles are required to have an International Air Pollution Prevention (IAPP) Certificate. Exemptions are provided for situations involving the safety of the vessel, saving life at sea, if a vessel or its equipment is damaged and vessels to conduct trials for the development of vessel emission reduction (this would require special permission from the vessel's Flag State).




---

**▶ WHAT CAN MEMBERS DO TO ENSURE THEIR VESSELS MEET THE NEW LOWER SULPHUR EMISSION STANDARD?**

Members should make an [assessment](#) of the possible options that may be suitable for their vessels and operations. The following solutions may be considered when making your assessment:


- Use high sulphur content fuel in combination with exhaust gas cleaning systems or 'scrubbers' to reduce the output of SO<sub>x</sub> in order to meet the requirement.
- Transition to or use of low sulphur content fuels.
- Switch to using distillate fuel such as marine gas oil with a sulphur content of 0.1%. Some vessels are already using low sulphur fuel oil to meet the requirement of 0.1% m/m when trading inside the ECA zones. These fuel oil blends will also meet the 0.5% m/m limit in place outside of the ECAs in 2020.
- The use of alternative fuels such as natural gas and/or methanol

Bunker suppliers will be required to verify whether the fuel oil sulphur content is above 0.5% m/m on Bunker Delivery Notes, from 1 January 2019. Members should ensure that crew are aware of this change.




---

The IMO have produced an [FAQ document](#) on the impending new requirements.



---

www.shipownersclub.com @ShipownersClub The Shipowners' Club



IFSMA Newsletter 023

12

## **A guide to Maritime Labour Convention, 2006: UK and REG Implementation**

**A new book by Charles Boyle.**

Since the International Labour Organisation's Maritime Labour Convention, 2006 (MLC) came into force internationally on 20 August 2013, it has already been amended, and a further two sets of amendments have been agreed and are expected to come into force in 2019 and 2020.

*Maritime Labour Convention, 2006 – UK and REG Implementation* sets out in detail how the UK, Bermuda, Cayman Islands, Gibraltar and the Isle of Man (being the members of the Red Ensign Group (REG) which are subject to the MLC) have implemented the Convention. Specific references are given to the laws, merchant shipping notices and guidance, as well as identifying the areas where implementation is permitted by way of collective agreements.

As the MLC sits in the context of the wider international regulatory regime, it expressly endorses the application of other international instruments and standards, particularly those of the IMO. Furthermore, many of the MLC's mandatory provisions have been incorporated into EU Directives, which are relevant to the UK and Gibraltar. These international and regional provisions are also referenced.

Chapter 1 sets out an introduction to the ILO and the MLC. Chapter 2 describes the general approach of how the UK applies its legislation to UK ships and, while they are in UK waters, non-UK ships without MLC documentation, and non-UK ships with MLC documentation. Chapters 3-22 describe the UK provisions in more detail as the other REG members' laws are influenced by those to a significant extent.

Specific provisions for Bermuda, the Cayman Islands, Gibraltar and the Isle of Man have been set out, with detailed references to the appropriate regulatory sources in Chapters 23-26.

Due to the central role of the MLC's Title 5 on compliance and enforcement, this is set out in full (in Part VIII, Appendix 1), annotated with references to the relevant sections of the ILO's guidelines on flag state control and port state control. The full text of the amendments to the MLC have been set out in Part VIII, Appendix 2.

### **Contents**

**The book is in eight parts comprising 26 chapters and three Appendixes**

- PART I – INTRODUCTION
- PART II - TITLE 1: MINIMUM REQUIREMENTS TO WORK ON A SHIP
- PART III - TITLE 2: CONDITIONS OF EMPLOYMENT
- PART IV - TITLE 3: ACCOMMODATION, RECREATIONAL FACILITIES, FOOD AND CATERING

- PART V- TITLE 4: HEALTH PROTECTION, MEDICAL CARE, WELFARE AND SOCIAL SECURITY PROTECTION
- PART VI - TITLE 5: COMPLIANCE AND ENFORCEMENT
- PART VII - IMPLEMENTATION OF TITLES 1 TO 5 IN THE FOUR REG MEMBERS
- PART VIII – APPENDICES

### **About the Author**

Charles Boyle has been the Director of Legal Services at (IFSMA Member Association,) Nautilus International (previously Nautilus UK) since 2007. During that period, he has advised on employment law, as it applies in a maritime context.

He has worked extensively on MLC-related matters, which include: representing Nautilus International on the UK's MLC tripartite working group; attending ILO meetings as an adviser to the International Transport Workers' Federation, where he has served on drafting committees concerned with amendments to the MLC; and supporting the European Transport Workers' Federation in lobbying and drafting issues in connection with implementing the MLC provisions on flag state control and port state control, and the 2014 MLC amendments, into EU law .



***Maritime Labour Convention, 2006 – UK and REG Implementation***

**Hardback**

**ISBN 978 1 5265 0537 8**

**624 pages**

**Published by Bloomsbury Professional**

**([www.bloomsburyprofessional.co.uk](http://www.bloomsburyprofessional.co.uk))**

**Price £110.00**

## Industry publishes improved cyber guidelines

On 7 December BIMCO reported that the third edition of the industry cyber risk management guidelines, *Guidelines on Cyber Security Onboard Ships*, had been published. This addresses the requirement to incorporate cyber risks in the ship's Safety Management System (SMS). It also reflects a deeper experience with risk assessments of Operational Technology (OT) – such as navigational systems and engine controls – and provides more guidance for dealing with the cyber risks to the ship arising from parties in the supply chain.

In the words of Dirk Fry, chair of BIMCO's cyber security working group and Director of Columbia Ship Management Ltd: *'The industry will soon be under the obligation to incorporate measures to deal with cyber risks in the ship's safety management system. This had not been tackled in the previous versions.'*

*'The third edition provides additional information which should help shipping companies carry out proper risk assessments and include measures in their safety management systems to protect ships from cyber-incidents. A new dedicated annex provides measures that all companies should consider implementing to address cyber risk management in an approved SMS.'*

*'This is much easier said than done.'*

Fry went on to note that criminals trying to exploit companies or breach their security are getting more inventive by the minute.

These new guidelines are the third edition in as many years, which reflects the constantly evolving nature of the risks and challenges.

### OT risks differ

A second key expansion in the guidelines is around operational technology. Ships have more and more Operational Technology (OT) which is integrated with Information Technology (IT) and which can be connected to the internet, but the risks associated with OT are different from IT systems.

For example, malfunctioning IT may cause significant delay of a ship's unloading or clearance, but with malfunctioning or inoperative OT there can be a real risk of harm to people, the ship or the marine environment.

Fry continued: *'On a ship, the job may be less focused on protecting data while protecting operational systems working in the real world has direct safety implications. If the ECDIS system or software controlling an engine are hit with malware, or if it breaks down due to lack of compatibility after an update of software, it can lead to dangerous situations.'*

Another new element in the guidelines is a number of ex-



amples of actual incidents to demonstrate some of the situations shipowners and operators face. The examples have been anonymized.

According to the Cyber Security Survey by BIMCO, Fairplay and ABS Advanced Solutions, the joint Industry Guidelines on Cyber Security Onboard Ships, are widely used across the industry. The survey also showed industry is more aware of the issue and has increased cyber risk management training, but there remains room for improvement.

### Supply chain risks

A third new focus area is the risk of malware infecting the ship's systems via the many parties associated with the operation of a ship and its systems.

To conclude Fry indicated: *'The ships are not just sitting there in the middle of the ocean. More and more ships are also closely connected to security systems in the companies' offices and shippers' offices and agents' offices.'*

Advice includes evaluating the security of service providers, defining a minimum set of requirements to manage supply chain or third-party risks and making sure that agreements on cyber risks are formal and written.

These guidelines also underline the need for ships to be able to disconnect quickly and effectively from shore-based networks, where required.

## Contributors to the third edition

The following organisations were involved in producing this edition: BIMCO, InterManager, International Association of Dry Cargo Shipowners (INTERCARGO), International Association of Independent Tanker Owners (INTERTANKO), International Chamber of Shipping (ICS), International Union of Marine Insurance (IUMI), Oil Companies International Marine Forum (OCIMF) and World Shipping Council (WSC).

The work was supported by Anglo Eastern, Colombia Ship Management, Maersk Line, Moran Shipping Agencies as well as the cyber security experts NCC, SOFTImpact, Templar Executives and Cyber Keel.

## About BIMCO

BIMCO is the world's largest international shipping association, with around 2,000 members in more than 120 countries. Its global membership includes shipowners, operators, managers, brokers and agents.

The organisation takes an active role on behalf of shipowners during discussions and decisions with global and regional regulators and has consultative status at the IMO

## Publications

**For details of BIMCO's *Guidelines on Cyber Security Onboard Ships* and other publications readers are invited to see here:**

<https://www.bimco.org/products/shop>

## Maersk sets net zero CO<sub>2</sub> emission target by 2050

Aimed at accelerating the transition to carbon neutral shipping, Maersk announced on 4 December its goal to reach carbon neutrality by 2050. To achieve this goal, carbon neutral vessels must be commercially viable by 2030, and an acceleration in new innovations and adaption of new technology is required.



Climate is one of the most important issues in the world, and carrying around 80% of global trade, the shipping industry is vital to finding solutions. By now, Maersk's relative CO<sub>2</sub> emissions have been reduced by 46% (baseline 2007), that is approximately 9% more than the industry average.

As world trade and thereby shipping volumes will continue to grow, efficiency improvements on the current fossil-based technology can only keep shipping emissions at current levels but not reduce them significantly or eliminate them.

To quote Søren Toft, Chief Operating Officer at AP Moller - Maersk: *'The only possible way to achieve the so-much-needed decarbonisation in our industry is by fully transforming to new carbon neutral fuels and supply chains.'*

Maersk has announced that it is putting its efforts towards solving problems specific to maritime transport, as it calls for different solutions than automotive, rail and aviation. The yet to come electric truck is expected to be able to carry a maximum of two TEU and is projected to run 800km per charging. In comparison, a container vessel carrying thousands of TEU sailing from Panama to Rotterdam steams 8,800 km. With short battery durability and no charging points along the route, innovative developments are imperative.

It is Maersk's belief that given the 20-25-year life time of a vessel, it is now time to join forces and start developing the new type of vessels that will be crossing the seas in 2050.

Toft added: *'The next five to ten years are going to be crucial. We will invest significant resources for innovation and fleet technology to improve the technical and financial viability of decarbonised solutions. Over the last four years, we have invested around US\$ 1billion and engaged more than 50 engineers each year in developing and deploying energy efficient solutions. Going forward we cannot do this alone.'*

Research & Development is key to take the industry away from today's fossil-based technology and by setting this ambitious target, Maersk hopes to generate a pull towards researchers, technology developers, investors, cargo owners and legislators that will activate strong industry involvement, co-development, and sponsorship of sustainable solutions that we are yet to see in the maritime industry.

In 2019, Maersk is planning to initiate open and collaborative dialogue with all possible parties to tackle together one of the most important issues in the world: the climate change.



Søren Toft, Chief Operating Officer at AP Moller – Maersk.  
Photo: A.P. Moller – Maersk ©.

## A book on ships and trades:

### Tramp Ships: An Illustrated History

By Roy Fenton

Published by Seaforth Publishing

(To order see: <http://tinyurl.com/ybxnzoa5> )

Hardback; 176 pages; price £30.00

ISBN: 978 1 84832 158 8

As a cargo ship the tramp was not confined to any particular route but carried cargo anywhere that was convenient and profitable. There were no regular schedules, it steamed everywhere, loading and discharging cargoes, often bulk cargoes such as coal, grain, timber, china clay and oil.

Published in 2013 and still available from the publisher's catalogue **Tramp Ships: An Illustrated History** is a valuable compendium devoted to a significant class of cargo ship that has been the mainstay of many a mercantile marine for more than three generations and trading in every ocean. Generally the type was an ocean-going, steam- or diesel-powered dry cargo ship of up to 10,000 tons gross and of from 270ft to 550 ft loa with an adequate cruising speed of ten knots.

Over 13 chapters in this volume by the well-known shipping author Roy Fenton, the tramp ship's evolution is described over the course of more than 100 years, from the 1860s, when the steam tramp ship developed from the screw collier, until it was largely replaced by the specialist bulk carrier in the 1980s.

Here an introduction looks at the design and building of tramps. Then follows a description of vessel's machinery, from simple triple-expansion turbines to diesel engines. Regarding steam, it has been recorded that a reheated triple-expansion engine fitted in a 10,000 ton tramp ship was capable of moving each ton of cargo one mile on the energy developed by burning half an ounce of coal.

Tramp ship operation and management and the life of the officers and crews are also covered here along with the ships' design features being highlighted and notes on machinery included.

The meat of the book is to be found in the 300 wonderfully evocative photographs of individual ships which illustrate the development of the tramp and its trades through the last years of the 19<sup>th</sup> century, the two World Wars, and the post war years with Liberty ship and other replacements against losses. All are supported by a lengthy index of ship-names.

Each picture caption provides the reader with the dimensions of the vessel, the owners and the builder and then goes on to outline the ship's career, with notes on trades and how they changed over a ship's lifetime. Lives, varied, ended nearly always sadly: by collision, grounding, foundering, by enemy action or with demolition and scrap. Has a typical tramp been preserved, anywhere?

To close there is an important bibliography with close on a hundred titles for further research into this fascinating subject.

Archibald (later Sir Archibald) Hurd, writing in *The Sea Traders*<sup>1</sup>, informed that Allied victory in the First World War would have been impossible without '*... the comparatively small, comparatively slow, and quite inconspicuous vessels – "the tramps" – that made the chief contribution to this triumph.*' He went on: '*It was not the luxurious passenger liner, steaming at high speed, it was not even the big cargo liner; it was, above all, the tramp, buffeting her patient way over the world's seas, that was the chief maritime instrument of victory, apart from the Grand Fleet.*' He continued: '*The tramp was the lineal successor of those earlier individual vessels owned by single enterprising sea traders who laid the foundations of our prosperity...*' In his book, written only three years after the Armistice in 1918, Hurd pointed out that of the British (and Empire) steam tonnage in pre-war days more than 50% was provided by the tramp fleet.

However, it was the older and slower vessels that tended to find their way into this trade, hence the tag 'tramp' although new tramps were built, often with the owner's eye on chartering to the liner companies.



Shanghai, 2006. The vessel beneath the Nikon advert is believed to be an A&P SD 14, of 14,000 tonnes, built as a no frills modern tramp ship from 1967. Some of the class may still be afloat.

But the tramp was not peculiar to the British and Empire Registers for vessels for this type of trading were designed, financed, built and operated by businesses in Scandinavia, Germany, Belgium, The Netherlands and France and there are plenty of examples shown in these pages. Fenton importantly includes hulls built for the COMECON states dominated by Russia (or the USSR as we knew it).

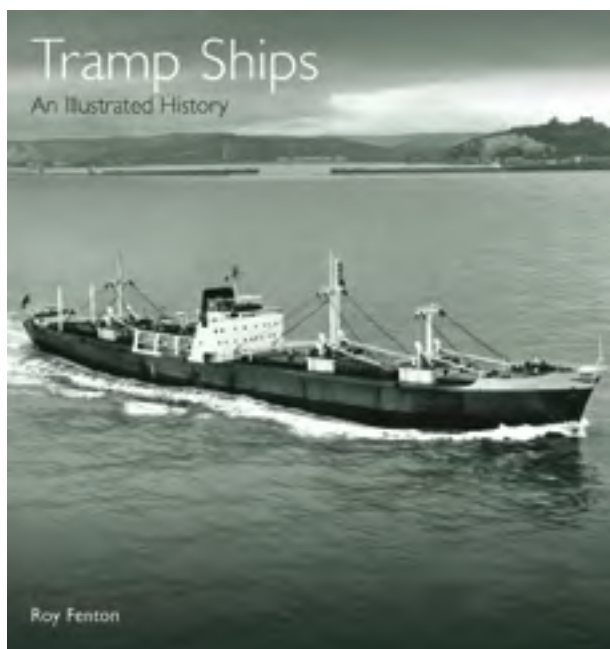
The penultimate chapter introduces what might have been the tramps' replacements, the A&P SD 14 being one example. She was designed by Austin & Pickersgill, with (SD) shelter deck and with a capacity of 14,000 dwt. Some examples are believed still afloat

Without doubt this volume will become a classic work, to inspire all merchant ship enthusiasts and historians and once again we are able to appreciate the ships in which our forefathers sailed and earned a living.



Roy Fenton is a full-time researcher and writer and the author of some 25 books on shipping history. His specialism is coastal trade in the steam era, and in 2005 he was awarded a PhD for a thesis on the transition from sail to steam in the coastal bulk trades. He is a former council member of the World Ship Society, ([www.worldshipsociety.org](http://www.worldshipsociety.org)) and is still active in the organisation.

<sup>1</sup> Cassel and Company, 1921.



This book is obtainable from Seaforth Publishing.  
(To order see: <http://tinyurl.com/ybxnzoa5>)

## Samskip's UK investments secure supply chain against Brexit disruption

Two years' pre-Brexit investment in North Sea container shipping services (*illustrated*) is proving decisive in winning shippers away from cross-Channel ferry routes at a critical time for UK-EU relations, according to leading multimodal operator Samskip which issued the news on 5 November.

With many questions remaining over the exact nature of the future EU-UK trading relationship, Samskip says that regular, reliable and cost competitive container services are a key element in planning for the future.

In the words of Andy Foulds, Samskip UK Sales Director: *'The months ahead will see uncertainty for companies trading goods between the UK and the EU and businesses are looking to secure their supply chains. Samskip is moving cargo for blue chip customers now which have never done business with us before and which seek containerised transportation solutions to ensure the availability of their products on the shelves.'*

The company recently scaled up sailings between Hull and Benelux ports to eleven per week, adding to its existing three calls per week into Tilbury and a weekly call into Grangemouth. Container volumes are growing quickly to

fill the extra capacity.

Foulds added: *'Under normal circumstances, offering to run "business as usual" is not news, but the impending Brexit makes it the freight industry news that business is crying out for.'*

Samskip's Brexit preparations began in early 2017, with the introduction of larger tonnage on its Rotterdam-UK routes. Preparation accelerated in 2018 to include the launch of a new three-times a week Amsterdam-Hull service and a separate twice weekly link between Antwerp and Hull to offer an additional UK-destined containerised solution to the markets of Belgium and Northern France.

This enhanced containerised shortsea capability integrates with the largest multimodal network in Europe, connecting into Norway, Iberia and the Baltic, to inland barge services, and rail connections throughout the EU and beyond.

Samskip recently supplemented its six times weekly rail service between Rotterdam and Melzo (Milan) by launching new regular rail connections between Italy and Amsterdam, opening up new routes, new connectivity and further strengthening containerised links between the Continent and the UK.

Furthermore Foulds stated: *'Three continental ports and three UK East coast ports, plus Samskip's separate dedicated Irish services, linked to deep reaching rail and barge services into Europe offer a diversity of routes to defray current and future transportation risks.'*



He also contrasted Samskip's strategic approach with post-Brexit risks associated with ferry-based trucking: *'Lack of space at UK ferry ports introduces the prospect of delays and trucking queues returning as goods are customs cleared. This influences where drivers want to work at a time when there is already a Europe-wide shortage of drivers. It's a real concern to our customers.'*

Samskip has verified that its UK port operations have ample capacity to cope with longer clearance processes.

Fould concluded by saying: 'The viable reach of trailers is already shrinking and Brexit has accelerated the process on routes between the UK and Sweden, Italy and the Czech Republic. A round trip between the Czech Republic and a UK destination occupies a driver for a week; a driver picking up in Hull could make six to seven deliveries to Manchester per week. Samskip's three-port strategy in the UK also minimises truck miles and reduces carbon emissions.'

Brexit is sharpening the focus on Samskip's traditional advantages of scale and security, a feature underpinned by its established status as an Authorised Economic Operator (AEO). However, to meet growing demand, Samskip is reported to be broadening its logistics offering, with cross-docking services in Amsterdam able to consolidate part-loads inside the port, bringing more flexibility to the multimodal option.

---

## Matson vessel *Daniel K Inouye* arrives in Honolulu

---

### Largest containership built in the US

#### The first of four new ships

On 28 November Matson, Inc, a leading US carrier in the Pacific, welcomed the first of four new ships of the Aloha Class being built for Matson that will be introduced in its Hawaii service over the next two years.



Our illustration (© Matson) shows *Daniel K Inouye* on 28 November making its first approach to Honolulu on its maiden voyage.

Named in honour of Hawaii's late senior US Senator, *Daniel K Inouye* is the largest containership ever built in the United States. At 850feet loa this 3,600 TEU vessel is Matson's largest ship and also its fastest, with a top speed in excess of 23 knots.

Arrival of *Daniel K Inouye* also marks the beginning of a nearly \$1 billion investment by Matson in its Hawaii service over the next few years, with the four new ships completing a renewal of its Hawaii fleet, and a terminal expansion and modernization project at its Sand Island facility in Honolulu.

All four new vessels have been designed by Matson specifically for its Hawaii service and incorporate a number of green ship technology features that will help protect the environment, including a more fuel efficient hull design, dual fuel engines that can be adapted to use liquefied natural gas (LNG), environmentally safe double hull fuel tanks and fresh water ballast systems.

Said Matt Cox, Chairman and Chief Executive Officer of Matson: 'These new ships are the future for Hawaii shipping and will bring a new level of efficiency and reliability to our service. The substantial investment in new technology underscores Matson's long-term commitment to Hawaii and our desire to serve the Islands in the most advanced, environmentally friendly way for years to come.'

In November 2013 Matson signed a contract with Aker Philadelphia Shipyard for construction of the new Aloha Class containerships.

### About Matson

Founded in 1882, Matson is a leading provider of ocean transport and logistics services. Matson provides a vital lifeline to the domestic non-contiguous economies of Hawaii, Alaska, and Guam, and to other island economies in Micronesia. Matson also operates a premium, expedited service from China to Southern California and provides services to Okinawa, Japan and various islands in the South Pacific. The Company's fleet of owned and chartered vessels includes containerships, combination container and roll-on/roll-off ships and custom-designed barges.

Matson Logistics, established in 1987, extends the geographic reach of Matson's transportation network throughout the continental US. Its integrated, asset-light logistics services include rail intermodal, highway brokerage, warehousing, freight consolidation, Asia supply chain services, and forwarding to Alaska.

See also: [www.matson.com](http://www.matson.com)

---

## IMO Awards 6 December 2018

---

**The 2017 International Maritime Prize  
Special certificates for individuals/organizations  
2018 IMO Award for Exceptional Bravery at Sea  
Certificates of Commendation  
Letters of Commendation**

### The 2017 International Maritime Prize

The prestigious International Maritime Prize for 2017 was presented to Mrs Birgit Sølling Olsen, former Deputy Director-General of the Danish Maritime Authority. She had earlier been nominated for the International Maritime Prize by Denmark as well as by the International Chamber of Shipping and the International Group of Protection and Indemnity Associations (P & I Clubs).

IMO Secretary-General Kitack Lim presented the prize

on 6 December at the annual IMO Awards ceremony. He said: *'Mrs. Olsen has had a distinguished career in the maritime field and made an outstanding contribution to the objectives of IMO. Her comprehensive knowledge of maritime law is combined with a deep understanding of the business aspects and growth potential of the maritime industry.'*



*On 6 December IMO Secretary-General Kitack Lim presented the International Maritime Prize to Mrs Birgit Sølling Olsen of Denmark.*

Accepting the prize with gratitude, Mrs Olsen reflected on the changes that IMO has undergone during her career. *'In 1996 a delegate could only be reached by fax or by a message left at the IMO switchboard. Today delegates are multitasking responding to a number of e-mails, while attending the meetings. The IMO spirit of cooperation is still the same, but the adoption process is much faster. This gives IMO a better chance to respond to the need of its constituents.'*

*'Sustainable results can only be achieved by respect and trust. Respecting that all views have to be heard and facts need to be put on the table before acting and that the solutions need to be workable. Trust that we are aiming at the right goal, using the right tools and that we all in. The results are not just beautiful words on paper, but results that lead to real improvements for safety and the environment.'*

*'They illustrate that we together can achieve results which by far exceed what an individual State can do. This is perhaps the reason why so many of us, including myself, continue to be here.'*

In their nomination, the Kingdom of Denmark highlighted Mrs Sølling Olsen's distinguished career in the maritime field and acknowledged her significant contribution to the objectives of IMO. Her comprehensive knowledge of maritime law was combined with an understanding of the business aspects and growth potential of the maritime industry.

Denmark emphasized Mrs Sølling Olsen's focus on international solutions as a member of the Danish delegation during deliberations at IMO, in particular during negotiations related to the International Oil Pollution Compen-

sation (IOPC) Funds; the development of international guidelines to combat piracy; and the development and adoption of the Nairobi Wreck Removal Convention, 2007. Mrs Sølling Olsen also worked tirelessly to ensure seafarer issues were addressed, both at IMO and at the International Labour Organization, including seafarer training and education, working conditions and personal safety.

A law graduate with a Masters in Law from the University of Copenhagen, Mrs. Sølling Olsen started her maritime career as a legal adviser to the Danish Register of Shipping. She moved to the Danish Ministry of Industry (which then included maritime affairs in its responsibilities) in 1988, becoming Director of International Shipping Policy and Maritime Law Merchant Law at the Ministry of Industry in 1995. In 1996, Mrs Sølling Olsen became Director for Shipping Policy at the Danish Maritime Authority and from 2003 until her retirement in 2017, she held the post of Deputy Director-General of the Danish Maritime Authority.

The International Maritime Prize is awarded annually by IMO to the individual or organization judged to have made the most significant contribution to the work and objectives of the Organization. It consists of a sculpture in the form of a dolphin and includes a financial award, upon submission of an academic paper written on a subject relevant to IMO.

### Special certificates

During the Awards ceremony, IMO Secretary-General Lim also presented two special certificates for individuals/organizations who have contributed greatly to the work of the Organization.

Special certificates were presented to: Mr Richard Schiferli, former Secretary-General at the Secretariat of the Paris MoU on Port State Control. He was nominated by the Government of Ireland.

The International Tanker Owners Pollution Federation Ltd. (ITOPF), nominated by the Government of New Zealand, the Oil Companies International Marine Forum, the International Salvage Union and IPIECA Limited.

### The 2018 IMO Award for Exceptional Bravery at Sea

Mr Zhong Haifeng, senior diver and deputy of the Engineering Team of Guangzhou Salvage was recognized for his tireless efforts under highly dangerous circumstances, repeatedly diving into the dark and submerged cargo hold of a ship to bring out survivors. He was nominated for the award by the Government of China.

Mr. Zhong said (speaking through an interpreter) it was an honour to be conferred the award, as a confirmation of China's efforts in search and rescue and a huge encouragement to his team and to himself: *'In China in our business we have a motto. Prompt a hope of living unto others. And save the risks of death to ourselves. It is this motto that spurs our divers. To dive again and again, over and over, into the waters, to save those in danger from the brink of death. Every time, I saw the people who are*

saved. We looked into their eyes. We saw despair change into hope. We witnessed them breaking into tears. It is in that moment that our heart was filled with all type of emotions.'

'I love my job. I love diving, because, at the critical moment, we can save people's lives. The pride is mine. The glory is mine. I think I will carry on. I would like to share my experience and my zest with more colleagues. Therefore our salvation teams can become stronger and stronger. Yes of course, I most sincerely wish more and more people could pay more attention to safety, protect themselves and protect their lives. Last but not least, I would like to sincerely express my appreciation to you.'



Mr Zhong Haifeng, senior diver and deputy of the Engineering Team of Guangzhou Salvage, received the 2018 IMO Award for Exceptional Bravery at Sea.

The incident occurred in November 2017. Following a collision with another ship, in Guangzhou Port, China, the bulk carrier mv *Jin Ze Lun* sank. Of the 14 crew on board, two were immediately rescued by local maritime authorities but 12 remained missing. The bulk carrier was lying on the seabed, in the main channel into the port, and a strong current made the underwater search and rescue operation

extremely difficult.

Mr Zhong was put in charge of the desperate search for survivors. After 36 hours of repeated dives, six survivors were located, trapped in the cargo hold. Mr. Zhong instructed his team to replenish oxygen to the cabin and talk to the trapped survivors, to calm them.

Mr Zhong then dived down to the cargo hold alongside a team mate, bringing scuba diving equipment for those trapped underneath. In the afternoon of 28 November, Mr Zhong dived down six times. He taught survivors how to put on and use scuba diving equipment and personally rescued three of them in the space of one hour, despite becoming extremely exhausted.

### Certificates of Commendation

During the award ceremony, three certificates of commendation were also presented to:

The Master and crew of the bitumen tanker *Seapower*, the Master and crew of the petroleum/chemical tanker *MTM Tortola* and the pilot and crew of the HMS *Monmouth's* Wildcat helicopter Black Jack (815 Naval Air Squadron, Royal Navy), jointly nominated by Malta, Singapore and the UK for the exemplary international effort, courage and tenacity displayed in the coordinated operation to rescue 13 crew members of the sunken tanker *Rama 2*, off Oman, in very adverse weather and seas. Determined and tireless efforts by merchant vessels in the vicinity, coupled with the skills and persistence of a professional search and rescue winching team, enabled the successful rescue of the 13 crew members from rough seas and extreme peril.

Certificates were received during the Awards ceremony by Captain Levan Mamaladze (Georgia) of the *Seapower*; Captain Anubhav Srivastava (India) of *MTM Tortola*; and Lieutenant-Commander Ash Morgan (United Kingdom), Flight Commander of the Black Jack helicopter.

The crews of the rescue helicopters Helimer 202 and Helimer 207 of the Spanish Maritime Safety Agency, nominated by Spain for their courage and professionalism while risking their own lives to rescue 23 crew members from the general cargo ship *Cheshire*, which was laden with over 40,000 tonnes of fertilizer, on fire and adrift at sea. With dense toxic smoke filling the air, the helicopter crews navigated very hazardous flying conditions to make several successful attempts at rescuing all crew members, following which a huge explosion occurred on the vessel, highlighting the immense danger under which this rescue operation was carried out.

The certificates were received by Pilot Alfonso Gómez de las Heras, Co-pilot Raúl Nevado, and Rescuer Gregorio Jimmy Rodríguez, from the Helimer 207; and Winch Operator Albert Lara of the Helimer 202.

Captain Gaetano Gigliotti, on behalf of the officers and crew of the passenger ship *Carnival Elation*, nominated by the Cruise Lines International Association (CLIA) for their

courage, skill and determination demonstrated in the rescue of a survivor found in a life raft, whose fishing vessel, the *Captain Eddie*, had flooded and sunk in storm force winds and seas. Three days before the rescue, with Hurricane Irma gathering in strength nearby, Captain Gigliotti had navigated *Carnival Elation* out of a Bahamas dry dock, with still incomplete repair work, in order to look for shelter ahead of the hurricane's predicted passage. On 10 September 2017, following the flooding and sinking of the *Captain Eddie*, and amidst 15-20 feet seas and 40-60 knot winds, Captain Gigliotti carefully manoeuvred the 70,000 tonne, 260 metre long cruise ship towards the small life raft spotted on the horizon, in complete darkness. Captain Gigliotti reacted decisively to the unfolding situation by turning the ship to the wind – despite the risk of flooding and danger to the crew – and by adjusting ballast to mitigate the heavy seas. The leadership and skill displayed by Captain Gigliotti in such conditions, combined with the courage and determination of the crew, ensured the survival of the fisherman and a successful rescue and displayed the very best of seafaring spirit.

Captain Gigliotti was at the ceremony to receive the certificate. He was also reunited with Mr Edward Potter, the rescued fisherman.

## Letters of Commendation

Letters of commendation have been sent to:

Mr Xu Junlin, Mr Xu Zhentao, Mr Lu Ping and Mr Feng Yajun, members of the Sanchi Explosion Emergency Dispatch Squad of the Shanghai Salvage Bureau. They were nominated by China, for their tremendous bravery and determination while attempting to locate survivors on board the burning *Sanchi*, facing great danger from toxic smoke and the constant threat of explosions.

Captain Guo Tianxin, Master of the rescue tugboat *Nan Hai Jiu 116* of the Nan Hai Rescue Bureau. He was nominated by China for his extraordinary courage, expertise and determination in rescuing 77 crew members from four stranded ships and preventing damage to an oil depot during the severe Typhoon Hato.

Captain KE Ashok Kumar and the crew of mv *Kodithala*, nominated by India, for the professionalism and exceptional skills they displayed in the rescue of seven crew members of the *MSV Al Noor*, in the midst of Cyclone Okchi.

Captain Mahmoud Baghestani, Master of the oil tanker *Stream*. He was nominated by the Islamic Republic of Iran, for the great resolve and persistence displayed while rescuing all five crew of a capsized, and sinking fishing vessel, in bad weather.

Captain Sumant Varma and the crew of mv *Dubai Knight*. They were nominated by Panama, for outstanding professionalism and determination displayed during the successful rescue of 22 fishermen from two vessels, during Tropical Storm Mora.

Captain Roman Rudenko, Master of the firefighting small craft *Chasovoy* of the Northern Branch of the FSBI (Marine Rescue Service). He was nominated by the Russian Federation, for his leadership and courage while extinguishing a fire on board the docked vessel *Odyssey-1*.

Captain Fredrik Krysén and the crew of the mv *Undine*. They were nominated by Sweden, and separately by the International Transport Workers' Federation (ITF), for the great professionalism, determination and ship-handling expertise displayed during the successful rescue of 13 crew of the sinking mv *Avatar*, who were drifting in a life-raft and on top of floating containers, in dangerous seas and bad weather.

Captain Maxim Kireev and Chief Officer Anatoliy Yarovoy of the general cargo ship *BBC Asia*. They were nominated by the International Transport Workers' Federation (ITF) for their courage and great determination in rescuing all four crew of the yacht *Spica*, by executing a highly dangerous, 15-hour towing operation, in severe weather and gale force winds.

*Illustrations reproduced by kind permission of IMO ©*

---

## Improving ship-to-shore relationships

---

### SIRC Research

The Seafarers International Research Centre at Cardiff University announced early in November that it had developed a free training resource which has been designed to improve relationships between those working on ships and staff working ashore.

Research in 2016 (funded by Lloyd's Register Foundation and The TK Foundation) indicated that there are very many issues which cause tensions in relationships between sea-staff and shore-based personnel.

Many of these relate to interactions between seafarers and port personnel/officials. However, a small number relate to intra-organisational relationships. With regard to these, seafarers felt that some shore-staff who have never worked on board a vessel find it hard to appreciate the shipboard environment and the stresses that are associated with working and living at sea. They also indicated that awareness of time zones, seafarers' fatigue and stress was insufficient amongst some office-based staff. They indicated that, as a result, they were frequently disturbed by non-urgent phone calls in the middle of the night and were also troubled by repeated requests for the same information.

In an attempt to raise awareness of these issues SIRC has made an animated film accompanied by a written training guide available to all ship operators as a free resource. These aids to information have been produced with funding support from Lloyd's Register Foundation\*.

Professor Sampson launched the animation at the Crew-

Connect Global conference in Manila on 6 November.

Readers are invited to preview the animation by visiting the SIRC website to be found at:

<http://tinyurl.com/yaharefu>

In addition a free copy of the animation and training guide can be obtained on completion of the request form available from the Cardiff University website here:

<http://tinyurl.com/ya62fbhu>

The document may be returned to Louise Deeley at [Deeleyl@cf.ac.uk](mailto:Deeleyl@cf.ac.uk)

This aid to information is seen as a means of making seafarers aware of some relatively resolvable issues which will make a positive impact on the lives and work of seafarers.

\*Lloyd's Register Foundation helps to protect life and property by supporting engineering-related education, public engagement and the application of research.

---

## MAIB report - *SMN Explorer*

---

### Death from uncontrolled closure of hatch cover

**Alexandra Dock, King's Lynn, 1 February 2018**

On 13 December 2018 the (UK) Marine Accident Investigation Branch (MAIB) issued report No 21/2018 of this very serious marine casualty.

A crewman from the Liberian-registered general cargo vessel, *SMN Explorer*, died when he was crushed by a falling hatch cover. The crewman was part of a working party stowing cargo slings used for the discharge of the ship's cargo. The accident occurred when the crewman climbed up the inside of the open hatch cover after its locking pins had been removed.



The accident was the result of procedural inadequacies and a lapse of supervision. The investigation identified that the vessel's safety management system was immature and the safety culture on board the vessel was weak. Risk assessments had not been conducted for routine

tasks and a safe system of work had not been developed for opening and closing the fo'c's'le stowage space hatch cover.

### Safety issues

- The crewman walked under, and climbed up an unsecured hatch cover.
- The accident occurred because the routine deck operation was not adequately planned or supervised.
- The vessel's safety management system was immature; some routine deck operations had not been risk assessed and safe systems of work had not been developed.
- The vessel's lifting appliances had not been properly maintained a weak safety culture was evident on board *SMN Explorer*.

### Recommendations

MAIB Recommendations (Nos 2018/134, 2018/135 and 2018/136) have been made to the vessel's managers to improve the system of work for closing *SMN Explorer's* foredeck hatch; and, across its managed fleet, to take steps both to improve the safety culture on board and, specifically, to improve the maintenance management of lifting appliances.

### Report

The 12 page report is available in pdf form here:

<http://tinyurl.com/y9klcag3>

*Illustration reproduced by kind courtesy of Marine Accident Investigation Branch ©*

---

## The IMO Maritime Safety Committee (MSC)

---

**100<sup>th</sup> session 3-7 December 2018**

**(Based on a Media Briefing kindly provided by IMO staff)**

On 7 December IMO's Maritime Safety Committee (MSC) completed its landmark 100<sup>th</sup> session with progress on a number of topics.

These are: (i) the regulatory scoping exercise on maritime autonomous surface ships; (ii) approval of revised guidelines on fatigue and further updates on work on goal-based standards, (iii) polar shipping and (iv) safety issues relating to low-sulphur fuel.

In a special session with invited speakers future technologies and the continued role of the seafarer were discussed. A new IMO safety video was launched, highlighting the wide spectrum of work the MSC has undertaken over 60 years to enhance safety and security at sea, including as-

pects of navigation, cargoes, ship construction, seafarer training, search and rescue and communications, to name a few examples.



### Regulatory scoping exercise on Maritime Autonomous Surface Ships (MASS)

During the 100<sup>th</sup> session of the MSC the process of assessing IMO instruments to see how they may apply to ships with varying degrees of autonomy continued.

Following testing of the strategy by a correspondence group, the MSC approved the framework and methodology for the regulatory scoping exercise on MASS.

It is understood that for each IMO instrument related to maritime safety and security, and for each degree of autonomy, provisions will be identified which:

- apply to MASS and prevent MASS operations; or
- apply to MASS and do not prevent MASS operations and require no actions; or
- apply to MASS and do not prevent MASS operations but may need to be amended or clarified, and/or may contain gaps; or
- have no application to MASS operations.

The degrees of autonomy identified for the purpose of the scoping exercise are:

- **Degree one**

**Ship with automated processes and decision support:** Seafarers are on board to operate and control shipboard systems and functions. Some operations may be automated and at times be unsupervised but with seafarers on board ready to take control.

- **Degree two**

**Remotely controlled ship with seafarers on board:** The ship is controlled and operated from another loca-

tion. Seafarers are available on board to take control and to operate the shipboard systems and functions.

- **Degree three**

**Remotely controlled ship without seafarers on board:** The ship is controlled and operated from another location. There are no seafarers on board.

- **Degree four**

**Fully autonomous ship:** The operating system of the ship is able to make

decisions and determine actions by itself.

Once the first step is completed, a second step will be conducted to analyse and determine the most appropriate way of addressing MASS operations, taking into account, *inter alia*, human element, technology and operational factors. The analysis will identify the need for:

- Equivalences as provided for by the instruments or developing interpretations; and/or
- Amending existing instruments; and/or
- Developing new instruments; or
- None of the above as a result of the analysis.

The initial review of instruments under the purview of the MSC will be conducted during the first half of 2019 by a number of volunteering Member States, with the support of interested international organizations.

An intersessional MSC working group is expected to meet in September 2019 to move forward with the process with the aim of completing the regulatory scoping exercise in 2020.

The list of instruments to be covered in the MSC's scoping exercise for MASS includes those covering safety (SOLAS); collision regulations (COLREG); loading and stability (Load Lines); training of seafarers and fishers (STCW, STCW-F); search and rescue (SAR); tonnage measurement (Tonnage Convention); Safe Containers (CSC); and special trade passenger ship instruments (SPACE STP, STP).

### Development of guidelines on MASS trials

The MSC noted provisional principles for the development of guidelines on MASS trials, discussed by a working group. The principles include ensuring that such guidelines should be generic and goal-based, and taking a precautionary approach to ensuring the safe, secure and environmentally sound operation of MASS. Interested parties were invited to submit proposals to the next session of the Committee, taking into account these principles.

### Goal-based standards and safety level approach

Following the adoption of Goal-based ship construction standards for bulkers and oil tankers (GBS) and the successful initial verification of twelve Recognized Organizations (ROs) by IMO GBS audit teams at previous sessions, the MSC confirmed that the information submitted concerning the maintenance of verification by those twelve ROs demonstrated continued conformance with the Standards (this covered all IACS member recognized organizations, except for DNV-GL, a classification society formed as the result of a merger between DNV and GL, which would be subject to a re-verification audit of its rules.)

The Committee, having considered the initial verification audit report of a further recognized organization, Türk Loydu, confirmed that the information provided by Türk Loydu had demonstrated that its ship construction rules conform to the Goal-based Standards.

The experience gained in conducting GBS audits has highlighted the need to update the procedural requirements guiding the audits. The MSC therefore adopted Revised guidelines for verification of conformity with goal-based ship construction standards for bulk carriers and oil tankers, to come into effect one year after adoption (1 January 2020).



The Committee also approved Interim Guidelines for development and application of the IMO goal-based standards safety level approach.

The Committee considered a request from the Sub-Committee on Ship Systems and Equipment (SSE) for advice from the Committee in respect to difficulties encountered in drafting goal-based regulations for onboard lifting appliances and anchor handling winches (OLAW). Following consideration of the request, the MSC agreed to amend the Generic guidelines for developing IMO goal-based standards (MSC.1/Circ.1394/Rev.1) so as to aid their application by the bodies of the Organization. The MSC invited Member States and international organizations to submit proposals in this respect to MSC 101 (5-14 June 2019).

### **Revised guidelines on fatigue approved**

The MSC approved revised Guidelines on fatigue, which provide comprehensive information on the causes and consequences of fatigue, and the risks it poses to the

safety and health of seafarers, operational safety, security and protection of the marine environment. The aim is to assist all stakeholders to contribute to the mitigation and management of fatigue.

IMO has considered the issue of fatigue for several decades, adopting Assembly resolution A.772(18) on Fatigue factors in manning and safety, in 1993. This was followed by the development of comprehensive Guidance on fatigue mitigation and management (MSC/Circ.1014), which was issued in 2001. The guidelines have been thoroughly reviewed and updated by the Sub-Committee on Human Element, Training and Watchkeeping (HTW 5), taking into account the latest research studies.

### **Safety of ships in polar waters**

The Committee discussed how to advance with developing possible mandatory and/or recommendatory measures for ships operating in polar waters which are not currently covered by the Polar Code. A plan was agreed which could see revisions to SOLAS and/or the Polar Code considered for adoption in 2022.

MSC 99 had already instructed the Sub-Committee on Ship Design and Construction (SDC) to consider recommendatory safety measures for fishing vessels of 24 m in length and over, with a view to alignment with the 2012 Cape Town Agreement; and pleasure yachts above 300 gross tonnage not engaged in trade (in both cases, for those operating in Polar waters). At this session, the Committee considered the wider application of Polar Code chapters 9 (Safety of navigation), 10 (Communication) and 11 (Voyage planning).

Preliminary draft text which would extend the application of the Polar Code to all ships to which SOLAS chapter V (Safety of navigation) applies was agreed, for further consideration. Member States and international organizations were invited to submit information to MSC 101 that will assist to determine the feasibility and consequences of applying the requirements in chapters 9 (safety of navigation) and 11 (voyage planning) of the Polar Code to non-SOLAS ships, in order to progress the work at the next session.

The Committee also agreed that, in the meantime, a resolution could be developed as an interim measure and invited relevant proposals to the next session (MSC 101).

The Polar Code is mandatory for certain categories of ships under the SOLAS and MARPOL Conventions. SOLAS chapter V (safety of navigation) in principle applies to all ships on all voyages (with some specific exceptions) while the applicability of SOLAS chapter IV (radiocommunications) also extends to cargo ships of 300 gross tonnage and upwards, as opposed to the general SOLAS application to ships of 500 GT and above. SOLAS does not apply to some specific categories of ships, including cargo ships of less than 500 grt; pleasure yachts not engaged in trade; ships of war and fishing vessels (sometimes termed non-SOLAS ships).



## Sulphur 2020 limit – safety issues

The Committee agreed to include in its agenda for MSC 101 a new item on 'Development of further measures to enhance the safety of ships relating to the use of fuel oil'. This followed the consideration of submissions concerning the potential need for guidance and advice concerning possible safety issues related to the implementation of the 0.50% limit of the sulphur content of fuel oil (outside emission control areas). At the same time, the Committee endorsed the view that, while fuel safety was a longstanding existing concern which needed to be carefully addressed, this should not affect Member States' commitment to implementing the 2020 sulphur limit from the date of application (1 January 2020).

Member States and international organizations were invited to submit concrete proposals to MSC 101 under the new output. The scope of work was agreed as follows: 'Based on the review of existing safety provisions for fuel oil and information concerning the safety implications associated with the use of fuel oil, develop further measures to enhance the safety of ships relating to the use of fuel oil'. The target completion date is 2021.

The new 0.50% limit (reduced from 3.50% currently) on the sulphur content of ships' fuel oil, which will enter into force on 1 January 2020 under IMO's MARPOL treaty, will greatly benefit the environment and human health. The Marine Environment Protection Committee (MEPC 73) in October invited the MSC to consider relevant safety issues associated with the use of low-sulphur fuel oil, following the Intersessional Meeting on Consistent implementation of regulation 14.1.3 of MARPOL Annex VI (ISWG-AP 1).

The MSC agreed that a joint-MSC-MEPC circular on ensuring fuel suppliers deliver compliant fuels should be developed by the Sub-Committee on Pollution Prevention and Response (PPR 6), with a view to approval by MEPC 74 and MSC 101.

The MSC also noted the initiative of industry organizations to develop guidance to address potential safety and operational issues related to the supply and use of 0.50% sulphur fuels. This guidance is expected to be submitted to the sixth session of the Sub-Committee on Pollution Prevention and Response (PPR6) to be held from 18-22 February 2019 for consideration.

### Amendments adopted

The MSC adopted:

Amendments to the Code of Safety for Special Purpose Ships (SPS Code), including a revised chapter 8 on life-saving appliances; a requirement for special purpose ships to comply with the provisions of chapter IV of SOLAS; and a revised Form of Safety Certificate for Special Purpose Ships and Record of Equipment for Special Purpose Ship Safety Certificate (Form SPS).

Amendments to sections B-V/a, B-V/b, B-V/c, B-V/d, B

V/e, B V/f and B-V/g of the STCW Code, which relate to consequential amendments following earlier amendments to the STCW Convention and Code relating to the Polar Code.

Draft amendments to the 2011 ESP Code forwarded to MSC 101

The Committee decided to hold in abeyance the adoption of amendments to update the International Code on the Enhanced Programme of Inspections during Surveys of Bulk Carriers and Oil Tankers, 2011 (2011 ESP Code) pending further work by the Sub-Committee on Ship Design and Construction (SDC 6), for adoption at MSC 101, taking into account the development of a consolidated draft of the Code for adoption by the IMO Assembly at its 31st session..

### Approval of draft amendments, guidance and guidelines

The MSC:

- Approved draft amendments to the International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk (IBC Code), with a view to subsequent adoption. The draft amendments include draft revised chapters 17 (Summary of minimum requirements), 18 (List of products to which the Code does not apply), 19 (Index of products carried in bulk) and 21 (Criteria for assigning carriage requirements for products subject to the IBC Code), as well as draft new paragraph 15.15 (Hydrogen sulphide (H<sub>2</sub>S) detection equipment for bulk liquids). Further amendments are consequential to draft amendments to MARPOL Annex II. Associated amendments to the BCH Code were approved for adoption in conjunction with the adoption of the above IBC Code amendments.
- Approved draft amendments to forms C, E and P of the appendix to the International Convention for the Safety of Life at Sea (SOLAS), 1974, for consistency throughout the forms contained in the appendix.
- Approved draft amendments to the International Life-Saving Appliance (LSA) Code regarding manual launching of a rescue boat (paragraph 6.1.1.3) having a mass not more than 700 kg in fully equipped condition and which is not one of the ship's survival craft, allowing manual hoisting from the stowed position and turning out to the embarkation position by one person so that persons can be safely embarked.
- Approved draft amendments to the LSA Code regarding a lifeboat with two independent propulsion systems (paragraph 4.4.8.1) providing a flexibility for the requirement of sufficient buoyant oars and their related items to make headway in calm seas.
- Approved draft amendments to paragraph 2.2 of chapter 15 of the FSS Code, aiming to provide a unified understanding of arrangements for inert gas lines and

related indicators and alarms for monitoring the pressure of the inert gas mains.

- Approved MSC.1/Circ.1430/Rev.1 on the Revised guidelines for the approval of fixed water-based fire-fighting systems for ro-ro spaces and special category spaces (to update the guidelines in MSC.1/Circ.1430). The revision relates in particular to the position of sprinklers or nozzles, to ensure adequate performance, and to reliable control of fixed water-based fire-fighting systems.
- Instructed relevant sub-committees to consider relevant parts of the draft interim guidelines for the safety of ships using methyl/ethyl alcohol as fuel prepared by CCC 5. The detailed interim guidelines provide requirements for the arrangement, installation, control and monitoring of machinery, equipment and systems using methyl/ethyl alcohol as fuel to minimize the risk to the ship, its crew and the environment, taking into account to the nature of the fuels involved.
- Approved draft amendments to the International Code of Safety for Ships using Gases or other Low-flash-point Fuels (IGF Code).
- Approved interim guidelines on the application of high manganese austenitic steel for cryogenic service. (Editorial note: *that is at extremely low temperatures*). The interim guidelines are aimed at ensuring the safety of ships carrying or fuelled by LNG, by specifying the requirements for the utilization of high manganese austenitic steel in the design and fabrication of cargo and fuel tanks complying with the International Gas Carrier (IGC) and IGF Codes.
- Approved Interim guidance for conducting the refined MHB (CR) corrosivity test related to draft amendments to section 9.2.3.7.3 of the IMSBC Code concerning test for metals.
- Approved new Global Counter Piracy Guidance, updated Gulf of Guinea Guidance, and version 5 of the Best Management Practices (BMP 5), and issued the suite of guidance as a new MSC circular on Revised Industry Counter Piracy Guidance. **(ENDS)**

## IRClass technical seminar in Mumbai

On 13 April Indian Register of Shipping (IRClass), a leading international classification society, conducted a technical seminar in Mumbai which was well received by industry participants (*see illustration of delegates*).

The Seminar covered a wide variety of topics including: Cyber Risk Management with respect to ISM code; IMO Data Collection System and new services of IRClass such as Vessel Performance Monitoring System (VPMS) and OptiTrim which will help owners and managers to improve operational efficiency and optimise fuel usage.

VPMS is designed to help owners and managers in as-

sessing the health of critical machinery and systems, diagnostic and preventive maintenance. OptiTrim is a voyage planning tool by which optimum trim for a particular loading condition can be selected at different drafts and speeds.



The seminar included a presentation on approval, installation, testing and commissioning of Ballast Water Treatment (BWT) units and scrubbers. This was deliberated by IRClass and a guest speaker from Aries Marine, Dubai who shared their experience and learning based on installation of over 300 Ballast Water Treatment Systems and more than 100 scrubber installations.

Furthermore, the seminar was highly appreciated by the audience which included leading shipowners as well as managers. The event saw engaging and interactive Q&A sessions for each presentation.



Mr K Bhardwaj, Head, Operations, (*illustrated here*) said: 'IRClass as a knowledge-based organisation is happy to share its perspectives and solutions to help the maritime industry to comply with the latest regulations. We intend to conduct more such events in India and rest of the world throughout 2019'.

---

## Pre-loading cargo information for livestock vessels

---

The Australian Maritime Safety Authority has issued a new marine notice regarding the above. This can be seen on the AMSA website to be found at: <http://tinyurl.com/y8u2vqq6>

### Purpose

This marine notice is to remind livestock shippers, vessel owners and operators, and the masters of livestock vessels of their obligations to provide and use accurate information in the calculation of vessel stability.

Recent events have clearly identified the serious risk when stability of a vessel is inadequately calculated, in particular the potential for a loss of stability and subsequent risk of capsizing.

### Discussion

Section 11(1) of Marine Order 43 (Cargo and cargo handling—livestock) 2018 (Marine Order 43\*) requires the master of a livestock vessel to ensure the vessel complies with the Intact Stability Code and the criteria in Schedule 1 of this Order at all stages of the voyage and during loading of the vessel.

To ensure the master is provided with the appropriate information to calculate the stability of the vessel, Section 13(2) of Marine Order 43 requires the person (the shipper) provide accurate details of the number, weight, and kind of livestock to be loaded on to a vessel. Failure to do so is an offence.

Furthermore, Regulation 2 of Chapter VI of the Safety of Life at Sea Convention (SOLAS) requires a shipper to provide the master with 'appropriate information on the cargo, sufficiently in advance of loading, to enable precautions which may be necessary for proper stowage and safe carriage of the cargo to be put into effect'.

These requirements are adopted through Marine Order 42 (Carriage, stowage and securing of cargoes and containers) and compliance means the 'proper precautions' that a master must take includes the development of a detailed load plan for the vessel.

A shipper must not provide average livestock weights across the entire load, as this does not provide the master with sufficient information to appropriately calculate the vessel's stability.

The information provided by the shipper must be sufficient to allow the master to create a detailed deck-by-deck load plan addressing animal type, weight, and number in order to assess compliance with Part A of the Intact Stability Code and Schedule 1 of Marine Order 43.

### AMSA Pre-load inspections

During pre-load inspections, AMSA inspectors will confirm

that the information provided to the master prior to loading enables the master to produce:

- a detailed deck-by-deck load plan addressing animal type, weight, and number of animals, and
- a stability calculation that shows that the vessel will comply with the relevant stability requirements throughout the entire voyage.

These measures are necessary to accurately calculate the vessel's stability and to comply with Section 11(1) of Marine Order 43.

If such information has not been provided—and/or the master cannot produce the plan or calculations—loading of livestock will be prohibited under Section 17 of Marine Order 43 until the requirements are met.

**It should be noted that a person may be liable to a civil penalty if the person contravenes Sections 11(1) or 13(2) of the Order.**

\*See here the Marine Order 43: <http://tinyurl.com/y7vevmj5>

---

## A reminder on Stowaways

---

Shortly before the end of 2018 four stowaways were found in a cargo ship en-route from Lagos, Nigeria to Tilbury in the Thames. An operation was mounted with UK security forces, the men detained and the vessel made secure. It is understood that the miscreants had demanded that the vessel steam close to the coast so they could go overboard and swim ashore.

It is timely therefore for a reminder to be issued of some of the available documentation on the topic of stowaways.

The Convention on Facilitation of International Maritime Traffic, 1965, as amended, (known as the FAL Convention), defines stowaway as: *'A person who is secreted on a ship, or in cargo which is subsequently loaded on the ship, without the consent of the shipowner or the Master or any other responsible person and who is detected on board the ship after it has departed from a port, or in the cargo while unloading it in the port of arrival, and is reported as a stowaway by the master to the appropriate authorities.'*

The topic is introduced in IMO documents and can be found here: <http://tinyurl.com/ya7zgxth>

In 2017 IMO issued a circular *Information of Stowaway Incidents* on the subject of Stowaways and this included the provision of a reporting form. This is available here: <http://tinyurl.com/y8hgh3rv>

A further document running to 13 pages is: *Revised Guidelines on the Prevention of access by Stowaways and the allocation of responsibilities to seek the successful resolution of Stowaway cases* is included as Annex 1 to

IMO Resolution FAL. 13(42) adopted on 8 June 2018 and available here:

<http://tinyurl.com/yadcczdi>

The presence of stowaways on board ships may bring serious consequences for ships and, by extension, to the shipping industry as a whole; the ship could be delayed in port; the repatriation of stowaways can be a very complex and costly procedure involving masters, shipowners, port authorities and agents; and the life of stowaways could be endangered as they may spend several days hidden, with the risk of suffocation and without any water / provisions.

---

## Missing Seafarers & Fishers Reporting Programme updated

---

It was reported from London on 11 November that the flagship programme for the Human Rights at Sea (HRAS) charity, the Missing Seafarers and Fishers Reporting Programme (MSFRP), has been updated and the website refreshed to ensure easier and more efficient use.



This charity has been running the programme since 2015, during which time individual cases have been submitted by families and details uploaded from publicly available information highlighting losses of seafarers and fishermen at sea.

Most recently, the database has had its Intellectual Property and Copyrights status legally reviewed in order to protect the work being undertaken and the concept behind it.

The database continues to develop and grow with private donor support.

For further details readers are invited visit the site here: [www.missingseafarers.org](http://www.missingseafarers.org)

An introductory video is available here: <https://www.missingseafarers.org/aboutus>

Donors to the charity include Seafarers UK, The Fishermen's Mission, The Sailors' Society and the law firm Mishcon de Reya.

---

## Human Rights at Sea (HRAS), a footnote...

---

### Migrants crossing the English Channel & port strategies

The recent increase in migrant crossings from France to England across one of the world's busiest shipping lanes, the English Channel, has prompted calls within the UK to increase sea patrols and prevent crossings. This was re-

ported by Human Rights at Sea on 28 December.

Nonetheless, the issue should not be unexpected for the UK Border Force as the inevitability of exploitation of those fleeing war-torn countries by criminal gangs and human traffickers is not exclusive to North African and southern European States. The position taken by the Italian authorities whereby the alleged presence of vessels capable of rescue being viewed as an attraction to migrants is now a fear apparently being expressed by UK authorities.

A question that has to be asked is: Are UK authorities ready to receive increasing numbers of migrants making the crossing, and have they taken all necessary precautions to protect the rights of those rescued at sea?

Earlier in 2018 Felicity Landon reported in *Port Strategy* on the issue of migrants afloat in an article titled: *A Safe Haven Without Exception* relating to the preparedness of ports for the reception of migrants.

Her article may be read here: <http://tinyurl.com/yd6eg-mvr>

David Hammond, founder and trustee of Human Rights at Sea, commented at the time: *'The obligation for ports is to uphold human rights at every stage and ensure the safety of all people in the port, including port workers and passengers passing through.'*

*'This issue cuts across fundamental human rights. People who are rescued at sea are entitled to all the same human rights protection as those who rescue them and those who run the port. They are not second or third-class citizens.'*

A Rescue at Sea guide produced by the IMO, the ICS and the UNHCR in 2015 focuses on the principles and practice relating to refugees and migrants.

It states: *'Governments have to co-ordinate and co-operate to ensure that masters of ships providing assistance by embarking persons in distress at sea are released from their obligations with minimum further deviation from the ship's intended voyage, and have to arrange disembarkation as soon as reasonably practicable.'*

A copy may be seen here: <http://tinyurl.com/ybkbw8tz>



## Exhaust Gas Cleaning Systems

### Hapag-Lloyd retrofits ten vessels - LNG trial

Hapag-Lloyd has ordered ten Hybrid Ready Exhaust Gas Cleaning Systems (EGCS), which will be gradually installed in ten of Hapag-Lloyd's Hamburg class vessels (13,000 TEU) during 2019 and 2020. This will allow the company to comply with the forthcoming IMO2020 low sulphur regulation.

The retrofits will start in March 2019 when the first EGCS will be installed in Hamburg Express at Qingdao Beihai shipyard in China.



Hapag-Lloyd is estimating all the installations will be completed by the end of 2020. This decision to fit was made as a part of Hapag-Lloyd's response to IMO's future low sulphur regulation: the so called IMO2020 regulation limits the sulphur emissions caused by marine fuels to 0.5% as of 1 January 2020.

To quote Anthony Firmin, COO of Hapag-Lloyd: 'Using compliant low sulphur fuels is the key solution for Hapag-Lloyd. However, we want to make sure we test and make use of all relevant solutions, which is why we decided to also retrofit our Hamburg Class vessels with EGCS.'

### LNG

Hapag-Lloyd also has 17 new vessels in its fleet, which can be converted to use Liquefied Natural Gas (LNG). The company will retrofit one 15,000 vessel during 2019 – and will then test whether LNG is a suitable alternative to low sulphur fuel, it is understood.



Hamburg Express (13,169 TEU). Photo: Hapag-Lloyd ©.

## Container fire on the *Yantian Express*

### Crew successfully evacuated

On 3 January, a fire broke out in one container on the deck of the *Yantian Express* and spread to additional containers. Due to bad weather, the fire was not successfully contained and significantly increased in intensity in spite of continuing firefighting support from the salvage tug *Smit Nicobar*.

A decision was made to evacuate the crew. The complete crew was unharmed and was safely transferred to *Smit Nicobar* on 5 and 6 January. Further developments of the situation on the *Yantian Express* were monitored closely, and firefighting efforts with the salvage tug continued.

The 7,510 TEU ship, which is 320 metres loa and sails under German flag in the East Coast Loop 5 (EC5) service, was built in 2002 and was on passage from Colombo to Halifax via the Suez Canal. At present, the ship is approximately 800 nautical miles off the coast of Canada (Nova Scotia). This was reported by HAPAG-Lloyd late on 6 January.

As at 0700 GMT on 7 January it was not possible to make a precise estimate of damage to *Yantian Express* or its cargo. Hapag-Lloyd was in close cooperation with all relevant authorities.



*Yantian Express* at the CTA in Hamburg

Photo: HAPAG-Lloyd ©.

## From the IFSMA Office

We are busy sending out the annual subscription invoices with the new subscription rates. If you do not receive yours by end of January, please contact the office.

Also on the agenda is our first Executive Council meeting for 2019 being held in our London HQ during the first week in February.

We hope you all had a pleasant holiday break, and for those at sea a calm one, and we wish you all a happy and prosperous new year.