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IFSMA

NEWSLETTER

The Shipmasters' International Voice



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Cover: 'Monte Olivia' off Paranagua with 5,500 teu on board.
Illustration kindly provided by Hamburg-Süd ©

Secretary General's Report



After the summer break the Committee programme resumed again with the IMO Sub-Committee on Carriage of Cargoes and Containers which always has some interesting items for us.

You will recall that Paul and I have been quite vocal on your behalf at recent meetings and this has led to some interesting work being undertaken by the Global Bauxite Working Group.

We have kept you up to date on developments over the last year and the effects that moisture has on bauxite as a cargo. During the lunch-break on the first day, the Working Group gave a well-represented presentation on the liquefaction of bauxite. This was very technically detailed and similar to that given to IFSMA in our offices earlier in the year. It concluded that bauxite does not undergo liquefaction, but settlement/dynamic separation due to excess moisture in the cargo and movement of the vessel, allow the liquid to rise to the surface and develop a free surface slurry. If this happens in a number of holds, the ship can become unstable, causing the vessel to list and into an angle of loll. If this is not recognised early by the Master and crew and action taken to stop the rolling motion, the vessel may then become unstable which can be recognised as a significant wobble in the ship's atypical motion causing the ship to capsize. During the wobble, there is still sufficient time to stabilise the ship if the Shipmaster takes immediate and appropriate action to reduce ship motion and vibration. We have included in this edition of the *IFSMA Newsletter* an article written for us by the Chair of the Working Group, Dr Tim Evans, and also a report on the topic reported by IMO immediately after the meeting (see *New warning of hazards of carrying bauxite by ship*, page 4).

Additionally, Dr Evans has offered to come out to the AGA in Argentina, to brief us on his key findings and provide a practical demonstration using a model ship simulator. I think this will be very useful for all our Shipmasters carrying bauxite and other types of cargo with similar properties and I look forward to seeing many of you there.

As you will know, transiting the Mediterranean with the large numbers of migrants trying to get across into Europe has resulted in many rescues by merchant vessels. So far over 40,000 migrants have been rescued by you this year alone. I raised this issue at the IMO and I am pleased to say that I recently attended a meeting held by the NATO Maritime Headquarters looking at the impact of the issue on merchant ships and how they can ease the burden on

us. Later this month your President and I will be attending a half day seminar at the IMO to look at the impact on merchant ships and their crews as well as the shipowner and the movement of trade. I will let you know of any useful issues that come out of this.

Autonomous Ships as a subject is being discussed around the world on a regular basis as this technology is being pushed hard by industry. Next month I will be attending a two-day international conference hosted by the UK Maritime & Coastguard Agency and it should be very interesting to hear developments as we approach the start of the debate at the IMO Maritime Safety Committee early next year. I will hopefully have some useful snippets for the next Newsletter.

Finally, your Executive Council met at the beginning of September and agreed to the proposed dates for the 44th AGA in Argentina. These have been posted on the website.

Bauxite may become unstable when carried in bulk potentially causing a capsized.

A new warning that bauxite may become unstable when carried in bulk on a ship, potentially causing the vessel to capsize, has been issued by IMO.

Bauxite

Bauxite is a rock formed from the weathering of either silicate rocks (granite/basalt) or carbonate rocks (limestone/dolomite). Bauxite is found mainly in tropical and sub-tropical areas such as Africa, South America and Australia with some small deposits located in Europe.

A total of approximately 100 million tonnes (Mt) of bauxite is transported by sea annually. Brazil and Guinea dominate seaborne supply with over 30million tons per annum (Mtpa) each. Australia supplies over 20Mtpa and Malaysia accounts for about 10Mtpa. Small amounts are supplied from Sierra Leone, Guyana, Ghana and other shippers.

Bauxite is one of the world's major sources of aluminium with around 100 million tonnes transported annually by sea. In 2015, a bulk carrier sank while transporting bauxite, with the loss of 18 seafarers. Research presented in mid-September to an IMO Sub-Committee found that certain forms of bauxite with a large proportion of smaller particles could be subject to a newly-identified phenomenon of dynamic separation when there is excess moisture in the cargo.

In such conditions, a slurry of water and fine solids can form above the solid material, according to the report of an international Global Bauxite Working Group on Research into the Behaviour of Bauxite during Shipping. The resulting free surface effect of liquid sloshing about could significantly affect the vessel's stability, leading to the risk of capsizing.

IMO's Sub-Committee on Carriage of Cargoes and Containers (CCC 4, which met 11-15 September at IMO Headquarters), raised awareness on the potential risks posed by moisture and provided new guidance on carriage of bauxite, in the form of a circular aimed at shippers, terminal operators, shipowners, ship operators, charterers, shipmasters and all other entities concerned.

The circular requests that extreme care and appropriate action be taken regarding the provisions of relevant IMO instruments, when handling and carrying bauxite in bulk.

This circular takes immediate effect, ahead of the next scheduled adoption (in 2019) of the new test methods and relevant schedules for bauxite cargoes during the routine scheduled updating of the International Maritime Solid Bulk Cargoes (IMSBC) Code. The IMSBC Code is the industry rulebook on how to deal with bulk cargoes.

The CCC.1 circular updates a previous circular on carriage of bauxite and invites Governments to note that some bauxite cargoes (specifically those with a larger proportion of smaller particles) present a risk caused by moisture and should be treated as Group A cargoes. Excess moisture in such cargoes can lead to a free surface slurry. This can cause atypical motion of the ship (wobbling). The master should take appropriate action in the event of this possible sign of cargo instability.



Research presented to IMO found that certain forms of bauxite with a large proportion of smaller particles could be subject to a newly-identified phenomenon of dynamic separation when there is excess moisture in the cargo.

The circular includes the draft Test Procedure for Determining the transportable moisture limit (TML) for bauxite; the draft individual schedule for bauxite of Group A (Bulk Cargo Shipping Name BAUXITE FINES); and draft amendments to the existing individual schedule for bauxite of Group C (bauxite with a lower proportion of smaller particles and with a degree of saturation by moisture not liable to reach 70%).

Global Bauxite Working Group (GBWG)

There is a long history of safely shipping bauxites over many decades and problems and accidents resulting from carrying bauxite cargoes are extremely rare. However, after the loss of the bauxite carrying vessel the *Bulk Jupiter*

in early 2015, the global bauxite industry was requested by IMO to undertake research into the behaviour of bauxites during ocean transportation.

In response the global bauxite industry formed the Global Bauxite Working Group (GBWG) to conduct research on the behaviour and characteristics of seaborne traded bauxites to inform the IMO in relation to the safe shipping of bauxites.

The GBWG membership consists of a wide variety of key disciplines, including shippers (miners), transporters (ship owner/operators) and users (alumina refinery operators) as well as various consultants with backgrounds in geo-technical and hydraulic engineering, maritime science engineering and real world operations.

Understanding the behaviour of Bauxite during shipping

By Dr Tim Evans

Chairman of the Global Bauxite Working Group

Bauxite has been safely shipped for many decades without incident. However, in response to the *Bulk Jupiter* incident, in January 2015, an informal industry group, the Global Bauxite Working Group, or GBWG, was formed to conduct and co-ordinate research into the behaviour of bauxite during shipping for submission to the IMO.

Based on the GBWG research into the safe shipping of globally-traded seaborne bauxite, recommendations made were:

- Inclusion of the proposed draft schedule for BAUXITE FINES Group A in the IMSBC code;
- Inclusion of the proposed bauxite Proctor-Fagerberg Test methodology in Appendix 2 of the IMSBC code.
- Modification to the existing schedule for BAUXITE Group C

The GBWG also propose consideration be given to the classification category of Group A “liable to liquefy” cargoes as other cargo instabilities due to moisture also need to be considered. However, regardless of the type of cargo instability due to moisture, prevention is by limiting the amount of moisture in the cargo and this can be controlled by shipping below the transportable moisture limit (TML) which is standard for Group A cargoes.

Compliance to the IMSBC code and the details contained in the schedules ensures that cargoes can be safely carried. The research on bauxite behaviour during shipping conducted by the GBWG has identified insights into instabilities due to moisture occurring in Group A bauxite fines that offers potential safety benefits in cases where a cargo has been misdeclared. In this case, understanding the effect of a dense free slurry surface resulting from dynamic separation of the cargo on vessel stability is paramount.

The dense free slurry surface formed in the cargo holds

affects the form stability and hence GM of the vessel. This reduction in GM will have an effect of changing the vessel’s roll response as the vessel rolls in a less stiff manner.

Furthermore, the asynchronous or out of phase motion of the free slurry surfaces relative to the vessel rolling, results in a wobbling in the ship’s rolling motion. This wobbling motion is often expressed by survivors of incidents where liquefaction of the cargo was identified as the cause of loss.

The wobbling of the vessel is a telltale sign that the vessel’s response to sea conditions is being affected by the cargo. The understanding of this behaviour by seafarers is paramount to their safety in cases where the cargo has been mis-declared.

Masters and crew must be educated about this vessel behaviour, such that regardless of what cargo they may be carrying, if they experience this type of vessel roll response, they immediately understand what is occurring and can respond accordingly.

Furthermore, the industry needs to develop some actions and procedures for Masters to implement if they identify this behaviour.

Actions may include reducing rolling motions and forces experienced by changing heading and seeking a port of refuge.

Dynamic Separation

A phenomena explained

In October the Australian Maritime Safety Authority (AMSA) issued a notice regarding ship safety with particular regard to cargoes and dangerous goods.

An explanation was given of the dynamic separation phenomena in bulk cargoes and a video made available showing the effect on a vessel’s stability of a free slurry surface.

The Global Bauxite Working Group is introduced along with its work at IMO in the Sub-Committee on Carriage of Cargoes and Containers (CCC-4).

Notice of the AMSA warning was kindly provided by Dr Tim Evans, Principal Engineer of Rio Tinto Iron Ore who writes elsewhere in this edition of the *IFSMA Newsletter* on the hazards of bauxite carriage.

The document may be found on the AMSA Website at:

<https://youtu.be/zdyrQSypPBQ>



Dramatic Hours at Sea

HAPAG'S Captain Stephan Berger recalls incidents in a busy career

Stephan Berger's breath was taken away by what he could make out through the monsoon rain: A big cargo ship that had called for help wasn't just in distress – it was about to snap in two. The young officer then experienced some dramatic hours at sea.

When the ship whose distress call I had received started getting closer, I couldn't believe my eyes at first. "We're taking on water," I had heard on Channel 16, and we only had to slightly change course, as we were only a few nautical miles away on board the *Yantian Express*. We were on the Arabian Sea, at position 12° 30' North and 059° 58' East, about 430 nautical miles off the coast of Salalah, Oman. It was shortly before the end of my watch, and I was about to be replaced. But things turned out differently on this morning of June 17, 2013, and rest was not on the cards for me.



Captain Stephan Berger was born in the western German city of Bottrop in 1981. He sails for Hapag-Lloyd in the Asia service, and lives with his partner in Elsfleth, Lower Saxony. Even today, he regularly drives to the Alte Liebe pier in Cuxhaven to watch the ships sail by.

The monsoon was sweeping over the sea. It was raining hard and hazy, making visibility poor. The wind was blowing at 38 knots, and the waves were nearly six meters high. But there wasn't anything really unusual about that. What was unusual, though, was what I was seeing through the glass: it looked like a scene out of a disaster film, and one for which the special effects crew had taken things a bit too far.

The *MOL Comfort* which had made the distress call, had a crack. Yes, it's hard to believe, but the big cargo ship was in danger of snapping in two. The ship made odd move-

ments, and was sitting on the water strangely. The bow and stern were drooping down, and the middle of the ship was being pushed up.

Standing next to me on the bridge were the captain and my replacement. We looked on in disbelief as the tear in the ship grew larger. It seemed to be only a matter of time before the 316-meter-long *MOL Comfort* would break in two.

When studying at the technical university, you learn to prepare yourself for emergency situations. But theory doesn't get you very far in an emergency like this one. Just how dire the situation was, was clear to everyone on the bridge. Several containers had already gone overboard and were bobbing up and down in the waves. More and more were falling into the sea, and the situation was slipping out of control.

Less than 15 minutes later, the crew of the *MOL Comfort* abandoned ship and climbed into the rescue equipment. We took over the on-sea coordination on the bridge of the *Yantian Express*. I made a Mayday Relay, a distress call on behalf of another ship in distress. Various cargo ships and bulk carriers in the area rushed to provide assistance. We informed our headquarters in Hamburg, and we knew that the shipping company in Japan would also be alerted. Floating on the waves were 26 crew members: 14 Filipinos, 11 Russians and one Ukrainian. We learned these details from the crew list that came out of the fax machine. Unfortunately, the seafarers forgot to take along their emergency radio set when they climbed into the lifeboat. So we didn't know exactly where the shipwrecked seafarers were. Were they in the lifeboat that we could see? Or were they in one of the inflatable life rafts?

I was the chief mate on this voyage, a young officer. I had always wanted to go to sea. I grew up in Bottrop, a city in the industrial Ruhr region of western Germany. We weren't rich, so we'd usually spend our holidays with relatives in Cuxhaven. There's a pier in this North Sea city called Alte Liebe (Old Love), from which you can greet the ships entering the port or just sailing by. I would often stand at the railing there, waving at the cargo ships and imagining what the ports they came from might look like. I was particularly absorbed with imagining the Caribbean – which probably shouldn't be a surprise, seeing that I came from the Ruhr region. I also remember that, as a boy, I had a Happy Families card game with ships. While the other children would play with cars or trucks, I would play with cargo ships, sailboats and tankers.

After listening to a presentation of the German Shipowners' Association at the career information center, my mind was made up: I wanted to become a seaman. In 1999, when I was 17, I applied for an on-board internship at Hapag-Lloyd.

The voyage on the *Nürnberg Express* was from Bremerhaven to Mexico. I enjoyed every hour on board. After work, I would often stay on the bridge for hours to pepper the young officers with questions. Sailing by Nassau in the

Bahamas, seeing the lights of Miami at night, and calling at Houston – all of it seemed almost surreal to me. Five weeks of good weather on the Atlantic – it was like a voyage in an advertising brochure! I could hardly wait to get back on board a ship.

After eight semesters at the technical university in Elsfleth, I started working for Hapag-Lloyd as a third officer. One could say that I worked my way up from intern to captain, and I'm proud to work for this company. In seafarer circles, the shipping company enjoys a special reputation owing to its long tradition and its self-image. I also like the small things we pay attention to in this company, such as the fact that we are required to wear a uniform on the bridge. That hasn't been the standard everywhere for some time and, in some places, it's regarded as downright old-fashioned. But I find it proper.



Stephan Berger likes the small things Hapag-Lloyd pays attention to, such as the fact that the captains are required to wear a uniform on the bridge.

So, let's go back on board the *Yantian Express* on our voyage from the Suez Canal to Sri Lanka, to the buckling ship. There were 23 men on board our ship. All available crew members were posted as lookouts to warn us about the floating containers. The steel boxes were an issue of some concern to the captain, as we couldn't allow them to hit the screw no matter what. Our third officer was coordinating the three ships that had come to provide assistance, and he positioned them around the *MOL Comfort* as if at the corners of an imaginary square. I went down to the pilot door to supervise the efforts to rescue the shipwrecked seafarers. When I opened the door, I immediately smelled something acrid. The waters reeked of oil, an unpleasant experience. There was evidently already a leak in the tanks of the *MOL Comfort*.

When I saw the swell, I was reminded of the GDR television series *Zur See (At Sea)* (*HAPAG Insights* editor's note : The hugely successful nine-part series *At Sea* aired on East German TV between 1974 and 1976 and starred many of the most popular GDR actors of the time). I grew up deep in West Germany, but many seafarers are familiar with the series, which had cult characters on board. The pilot ladder won't help us much, I thought. From my own experience, I knew how hard it was to reach it precisely

out and to climb on board from it. So, instead, I decided to hand out a cargo net, which would give more men a chance to hold on to it.

Our cargo ship gave lee, and the lifeboat came up to us. The boat's door opened. I could see that all the men are wearing life jackets and helmets, which was already good. But then the shipwrecked seaman lost their cool. Instead of disembarking one after the next, they started climbing over each other. Everyone wanted to be the first one on the cargo net!

Unfortunately, there was no more leadership or coordination to speak of, which only made the situation worse. The boat started to list and was in danger of keeling over. Then there was yet another problem: Some of the men were exhausted and didn't have the energy to climb up onto the ropes. Luckily, our ship mechanic, Pascal, was a particularly strong guy. As soon as he got hold of one of the shipwrecked seamen, he pulled him on board with a powerful movement of his arm.

One man, the chief engineer of the *MOL Comfort*, slipped. He fell into the water and started drifting away. Thinking quickly, one of our crew members threw a life ring attached by a rope in his direction. Once again, it was the mighty Pascal who pulled the man on board and saved his life.

We counted the men: There were 26, just like it said on the crew list. We took another count, just to be 100% sure. No one was missing, and everyone started to feel relieved. The captain, a Russian in his mid-50s, I'd guess, was in shock. He confirmed that all crew members had climbed into this one lifeboat, and we relayed this news to the bridge via radio. It was a good idea to get away from the scene of the accident immediately.

The rescued seamen received fresh clothes. Each member of our crew donated underwear and T-shirts for the shipwrecked, which is a matter of honor. The question of who will be accommodated where was also answered quickly. Empty bunks were given sheets, and couches readied. We had enough food and supplies to reach the next port. Since a yellowish smoke was hanging over the water, our captain ordered that the air conditioner be turned off as a precaution. His workload increased a bit, as well, as all documents – passports and seaman's books – went down with the *MOL Comfort*. The ship's officers had to fill out a notification form for each seaman and collect identifying information about them.

We set a course for the Port of Colombo in Sri Lanka, which we reached a few days later. The rescued seamen went on shore, and they warmly thanked us once again for having rescued them and for the hospitality they were shown on board.

Soon thereafter, the *MOL Comfort* broke apart completely. Both parts continued to stay afloat, and were pulled on hooks by tugboats. But the salvage effort would fail. The stern section of the ship sank on June 27. The bow section caught on fire, was completely gutted by flames, and

now lies on the ocean floor at a depth of several thousand meters. Of the containers, 4,382 would be lost, at an estimated total value of more than \$300 million.

There has been speculation about the causes of the accident. The wreckage cannot be examined because it is so far down in the sea. The ship had been regularly inspected. Later, during the official investigation, the crew states that the ship had been hit by some big waves, and that some dents had then appeared amidships. These dents then turned into tears – and the accident ran its course from there.



He had always wanted to go to sea: While the other children would play with cars or trucks, Stephan Berger as a child would play with cargo ships, sailboats and tankers.

Our crew received praise from many sides for its rescue operation. In late 2013, we received a high honor from the German Maritime Search and Rescue Association (DGz-RS), the silver live-saving medal. We were naturally happy about that. But the most important thing was that not a single person lost his life during the catastrophe.

This article was first published in the August 2017 edition of HAPAG Lloyd Insights and appears here with the kind permission of HAPAG-Lloyd AG ©.

Maritime Law

By Captain Ashok Bansal, Individual Member (India)

Introduction and origins; UNCLOS

Law is what is imposed by a government, as against rules or practices which may be applicable to a trade, community or religion.

Each country is sovereign in its own right and laws of that country apply within its political boundaries.

Under international practices and agreements, the waters along the coast of each country are also considered sovereign territory of that country up to three to twelve miles seawards from its coast, depending upon its laws or understanding of law under UNCLOS 1982.

Laws of Coastal States apply within this sovereign territory of sea waters. On high seas, outside territorial waters of a country, law of the flag state of the ship applies subject to international laws, of which international maritime law is a part.

Seaborne transport, is one of earliest channels of international commerce and rules to resolve disputes involving maritime trade were developed early in recorded history. These include Rhodian law of which no primary written specimen has survived, but which is alluded to in other legal texts such as Roman and Byzantine legal codes, and those of the Hanseatic League.

In Italy, *Ordinamenta: consuetudo maris* (Ordnances and customs of the sea of 1063) at Trani, and Amalfian Laws were in effect from an early date.

Admiralty law is distinguished from Law of the Sea, which is a body of public international law dealing with navigational rights, mineral rights, jurisdiction over coastal waters and international law governing relationships between nations.

Maritime law deals with transport by sea, marine commerce, navigation, salvage, shipping and maritime questions and offences relating to seafarers. It governs maritime activities, and public relations between ship operators and those who deal with them in shipping matters and commercial activities. Though each legal jurisdiction usually has its own enacted legislation governing maritime matters, international maritime law has developed in recent decades, through many multilateral treaties.

By departing from previous Roman and Byzantine maritime laws in many ways, Islamic law also made major contributions to maritime law. In keeping with Islamic conventions in which contracts should specify “*a known fee for a known duration*,” these included Muslim sailors being paid a fixed wage “*in advance*” with an understanding that they would owe money in the event of desertion or malfeasance. In contrast, Roman and Byzantine sailors were “*stakeholders in a maritime venture, in as much as captain and crew, with few exceptions, were paid proportional divisions of a sea venture’s profit, allotted by rank, only after a voyage was successfully completed.*”

Muslim jurists also distinguished between “*coastal navigation, or cabotage*”, as against voyages on “*high seas*”, and made shippers “*liable for freight in most cases except seizure of both ship and her cargo*”.

Islamic law “*departed from Justinian’s Digest and Nomos Rhodion Nautikos in condemning slave jettison.*” Islamic Qirad was a precursor to European commenda, that is limited partnership. Islamic influence on development of international law of the sea can thus be discerned alongside Roman influence.

Admiralty law was introduced into England by Queen Eleanor of Aquitaine while she was regent for her son, King Richard the Lion hearted. She learned about it in the

eastern Mediterranean while on a Crusade with her first husband, King Louis VII of France. She had earlier established admiralty law on the island of Oléron where it was published as *Rolls of Oléron*.



Captain Ashoke Bansal

American interpretation

Admiralty courts handle all admiralty cases in England. These courts do not use common law of England, but are civil law courts largely based on Corpus Juris Civilis of Justinian. Admiralty courts were a prominent feature in prelude to the American Revolution. For example, a phrase in the Declaration of Independence "*For depriving us in many cases, of benefits of Trial by Jury*" refers to the practice of Parliament giving Admiralty Courts jurisdiction to enforce The Stamp Act in the American Colonies.

Because the Stamp Act was unpopular, a colonial jury was unlikely to convict a colonist of its violation. But because Admiralty courts did not and do not grant trial by jury, a colonist accused of violating the Stamp Act could be more easily convicted by the Crown. Admiralty law became part of the law of the USA as it was gradually introduced through Admiralty cases arising after adoption of the US Constitution in 1789.

Many American lawyers who were prominent in the American Revolution were Admiralty and maritime lawyers including Alexander Hamilton in New York and John Adams in Massachusetts. Adams represented John Hancock in an Admiralty case in colonial Boston involving seizure of one of Hancock's ships for violations of Customs regulations.

In a more modern era, Supreme Court Justice Oliver Wendell Holmes was an admiralty lawyer before ascending to the bench. In 1787 John Adams, who was then ambassador to France, wrote to James Madison proposing that the US Constitution, then under consideration, be amended to include "*trial by jury in all matters of fact triable by laws of the land as opposed to law of Admiralty*". This resulted in the Seventh Amendment to the US Constitution. Doctrine of maintenance and cure is rooted in Article

VI of the Rolls of Oleron promulgated in about AD1160. Obligation to "*cure*" requires a ship owner to provide medical care, free of charge, to a seaman injured in service of the ship, until the seaman has reached "*maximum medical cure*".

Obligation of "*maintenance*" requires the ship owner to provide a seaman with basic living expenses while he is convalescing. A seaman who sues a ship owner to recover maintenance and cure may also recover his attorney's fees. See *Vaughan v. Atkinson*, 369 US 527 (1962).

If a ship owner's breach of obligation to provide maintenance and cure is wilful and wanton, the ship owner may be subject to punitive damages. See *Atlantic Sounding Co. v. Townsend*, 557 US 404 (2009) (J Thomas). Ship owners owe a duty of reasonable care to passengers. Consequently, passengers who are injured aboard ships may file a suit as if they were injured ashore through negligence of a third party. The passenger bears the burden of proof that the ship owner was negligent. While the statute of limitations is generally three years, suits against cruise lines must usually be brought within one year because of limitations contained in the passenger ticket. Notice requirements in the ticket may require a formal notice to be brought within six months of the injury. Most US cruise line passenger tickets also have provisions requiring that a suit to be brought in either Miami or Seattle.

Banks which loan money to purchase ships, vendors who supply ships with necessities like fuel and stores, seamen who are due wages, and many others have a lien against the ship to guarantee payment. A ship must be arrested or seized to enforce the lien. In the USA, an action to enforce a lien against a US ship must be brought in federal court and not in a state court, except under reverse-Erie doctrine whereby state courts can apply federal law.

Salvage

When property is lost at sea and rescued by another, the rescuer is entitled to claim a salvage award on salvaged property. There is no "*life salvage*". All mariners have a duty to save the lives of others in peril without expectation of reward. Consequently, salvage law applies only to the saving of property.

There are two types of salvage, contract salvage and pure salvage, which is sometimes referred to as "*merit salvage*". In a contract of salvage, the owner of the property and the salvor enter into a salvage contract prior to commencement of salvage operations. The amount that the salvor is paid is determined by the contract.

A common salvage contract is usually named "*Lloyd's Open Form Salvage Contract*". In pure salvage, there is no contract between the owner of goods and the salvor. This relationship is implied by law. The salvor of property under pure salvage must bring his claim for salvage in a court which will award salvage based on "*merit*" of service rendered and value of salvaged property. Pure salvage claims are divided into "*high-order*" and "*low-order*" salvage. In high-order salvage, the salvor exposes himself

and his crew to risk of injury and loss or damage to his equipment to salvage the damaged ship.

Examples of high-order salvage are: boarding a sinking ship in heavy weather or when a ship is on fire; raising a ship or boat which has already sunk, or towing a ship which is in surf away from shore.

Low-order salvage occurs where the salvor is exposed to little or no personal risk. Examples include towing another vessel in calm seas, supplying a vessel with fuel, or pulling a vessel off a sand bar.

Salvors performing high-order salvage receive substantially greater salvage award than those performing low-order salvage. In both high-order and low-order salvage, the amount of the salvage award is based on value of property saved. If nothing is saved, or if additional damage is done, there will be no award.

Other factors to be considered are skills of the salvor, peril to which salvaged property was exposed, value of property which was risked in effecting salvage, amount of time and money expended in salvage operation and so forth. A pure or merit salvage award seldom exceeds 50% of value of property salvaged. The exception is treasure salvage. Because sunken treasure has generally been lost for hundreds of years, even though the original owner or insurer continues to have an interest in it, the salvor or finder generally gets the majority of value of the property. Sunken ships from old wars or German submarines from World War II which can hold valuable historical artefacts are commonly thought of as treasure salvage.

Due to refinements in side-scanning sonars, many ships which were previously missing are now being located and treasure salvage is a less risky endeavour today than it was in the past, though it is still highly speculative and expensive.

Conventions concerning maritime trade

Before the mid-1970s, most international conventions concerning maritime trade and commerce originated in the Comité Maritime International (CMI) founded in 1897. It drafted international conventions including Hague Rules and Hague Visby Rules, Salvage Convention and many others.

CMI continues to function in an advisory capacity, but many of its functions have been taken over by the IMO, established in 1958. It became effective in about 1974. Many international conventions of IMO concerning maritime safety include the International Convention for Safety of Life at Sea (SOLAS), Standards for Training, Certification, and Watchkeeping (STCW), International Regulations for Preventing Collisions at Sea (COLREGS), Maritime Pollution Regulations (MARPOL), International Aeronautical and Maritime Search and Rescue Convention (IAMSAR) and others.

The United Nations Convention on Law of the Sea (UNC-

LOS1982) defined a treaty regarding protection of the marine environment and various maritime boundaries. Once adopted, international conventions are enforced by individual nations which are signatories, either through their local Coast Guards, or through their courts.

Common law legal systems of USA and Britain are in contrast to civil law legal systems in continental Europe and can be traced back to old Roman codified law.

Even in England, Admiralty courts are separate from common law courts, and generally follow civil law principles.

The way it was and still is

Most common law countries including Pakistan, Singapore, India, and many other British Commonwealth countries follow English statutes and case law.

India still follows many Victorian-era British statutes such as the Admiralty Court Act, 1861. Pakistan has its own statute, the Admiralty Jurisdiction of High Courts Ordinance, 1980 which is partly modelled on old English Admiralty law, namely the Administration of Justice Act 1956.

Currently the statute dealing with Admiralty jurisdiction of England and Wales High Courts is the Supreme Court Act, 1981.

Other countries which do not follow English statute and case laws, such as Panama, have also established well-known maritime courts which decide international cases on a regular basis. Admiralty courts assume jurisdiction by virtue of presence of a vessel in territorial jurisdiction irrespective of whether the vessel is national or not and whether registered or not, and wherever residence or domicile of their owners may be. A vessel is usually arrested by the court to retain jurisdiction.

State-owned vessels are usually immune from arrest. Canadian jurisdiction on "*Navigation and Shipping*" is vested in the Canadian Parliament by the 1867 Constitution Act, originally consolidated in 1891, with subsequent expansions in 1934 and in 1971 with extension to "*dry*" matters.

Article III, Section 2 of US Constitution grants original jurisdiction to American courts over Admiralty and maritime matters. But that jurisdiction is not exclusive. Most maritime cases can be heard in either state or federal courts. But some cases such as Limitation of Shipowner's Liability, Vessel Arrests in Rem, Property arrests Quasi in Rem, Salvage cases, and Petitory and Possession Actions are only triable by federal courts. This is because such cases require jurisdiction over maritime property.

For example, if title of a vessel is in dispute, usually between co-owners, she will be put in possession of the court until title dispute can be resolved. In a Limitation Action the ship owner will post a bond reflecting value of the vessel and her pending freight. Aside from such cases, all other maritime cases, such as claims for personal injuries, cargo damage, collisions, maritime products liability, and

recreational boating accidents may be brought in either federal or state court. Tactically, it is important to consider that in federal courts in the USA there is generally no right to trial by jury in Admiralty cases, though the Jones Act grants jury trial to seamen suing employers.

Maritime law is governed by a uniform three-year statute of limitations for personal injury and wrongful death cases.

Cargo claims

Cargo cases must be filed within two years as per Rotterdam Rules. Most major cruise ship passenger tickets have a one-year statute of limitations. A state court hearing an Admiralty or maritime case is required to apply Admiralty and maritime law, even if it conflicts with law of the state. But state courts are allowed to apply state procedural law. Claims for damage to cargo shipped in international commerce are governed by the Carriage of Goods by Sea Act (COGSA), which is a US enactment of Hague Rules. A ship owner is liable for cargo damaged from “hook to hook”, meaning from loading to discharge, unless exonerated under one of 17 exceptions to liability, such as an “Act of God”, inherent nature of goods, errors in navigation, and / or management of the ship. If the carrier is to be liable as a common carrier, it must be established that goods were placed in the carrier’s possession and control for immediate carriage.

Injury to seafarers

Seamen injured aboard ship have three possible sources of compensation: principle of maintenance and cure, doctrine of unseaworthiness, and the Jones Act. The principle of maintenance and cure requires a ship owner to both pay for an injured seaman’s medical treatment until maximum medical recovery is obtained and also to provide basic living expenses until completion of the voyage, even if the seaman is no longer aboard ship.

Many universities worldwide offer maritime law programmes including Canada, France, Germany, Malaysia, Malta, Netherlands, Norway, Singapore, South Africa, Spain, Sweden, Thailand, UK and USA.

Trinity House and Climate Change

By Jon Price, former Deputy Secretary, Trinity House*, London

Trinity House as a General Lighthouse Authority is committed through its work to avoiding damage to the marine environment and to adhering to the International Environmental Management System Standard ISO 14001.

ISO 14001 is a quality system framework that organisations can follow to set up an effective environmental management system, minimising our operations’ negative effect on the environment, ensuring compliance with applicable laws, regulations and requirements and – importantly – continually identifying improvements to the above.



This document was produced to indicate progress in our defence against the threat of climate change.

Reducing our carbon footprint

Trinity House environmental activities are co-ordinated through an Environmental Working Group, which I chair. The Group toured a roadshow across its offices, buoy yards and vessels in 2016, the aim of which was to raise environmental awareness. One of the key topics was our various initiatives to reduce emissions of greenhouse gases such as carbon monoxide and carbon dioxide. These gases are known to be a major contributor to global warming and associated climate change. Within the United Nations Framework Convention on Climate Change through the Paris Agreement most countries have agreed to take measures to restrict the increase in the global average temperature to well below 2 °C above pre-industrial levels and to pursue efforts to limit this increase to 1.5 °C.

Trinity House is proud of its success in reducing its carbon footprint and continues to look at innovative ways to continue to make further reductions in our role as an aid to navigation provider. However, even if the objectives of the Paris agreement are met, global warming is a fact that is already resulting in the melting of polar ice and, as it continues, is predicted by many to lead to an increase in extreme weather events and a rise in sea levels of up to 0.5 metre by the end of this century, according to the fifth Assessment Report by the Intergovernmental Panel on Climate Change (IPCC-AR5)



Godrevy in heavy weather. Increase in storm activity could result in aid to navigation casualties.

Photo: NickChappell©.

So, what are the implications for Trinity House and what are we doing about it? This is a question we, as a GLA, together with certain other statutory undertakers were asked directly by Defra (Department for Environment, Food & Rural Affairs) some years ago; in response we produced our first Climate Change Adaptation Report in 2011, which identified four risk areas and our action plan for addressing those risks: (1) Sea Level Rise / Flooding, (2) Erosion (Cliff & Beach), (3) Increased level of storms and (4) Rising temperatures / Increased demand for summer cooling.

Sea level rise

The unpredictable nature of the sea and weather has been at the heart of what Trinity House does for over 500 years; the local effects of climate change may be seen as an acceleration of the forces we are already adept at working with. We develop long-term strategies and undertake regular risk assessments to mitigate these risks, and have identified a number of potential solutions, such as floating aids to navigation deployed on a temporary basis.



The world's shipowners have made great strides in reducing emissions of greenhouse gases known to contribute to global warming and associated climate change.

Photo: Ambrose Greenway©.

Most of the lighthouse estate is either built to withstand sea water and wave activity or is built on land sufficiently above sea level. As such, we are confident that the majority of our estate is fit for purpose even allowing for a one metre rise in sea levels. Boat landings by their nature are at sea level but can generally be adapted where necessary to respond to such increases. To ensure best value, when significant engineering works are planned for facilities that are vulnerable to rising sea level, future increased sea levels will need to be taken into account. Our pier at Harwich is perhaps the most vulnerable, being already over-washed when weather and tide combine forces and it may require major adaption at some point in the future.

Cliff and shore erosion

Cliff and shore erosion will accelerate as higher sea levels combine with increased storms. Some of Trinity House's lighthouse estate is known to be vulnerable to erosion and this needs ongoing monitoring; climate change is identified as a risk within Trinity House in the context of our lighthouse estate and is now factored into relevant plans for major engineering works. In each such case the future viability—factoring in climate change—of the facility



Orfordness Lighthouse, where beach erosion has rendered the station untenable.

Photo: Roger Barker©.

in question is considered. As with sea level rise, long-term strategies, regular risk assessment and flexible engineering solutions are in place to manage this risk.

Increased storm activity

It is thought likely that global warming will result in an increase in storm activity adding the potential for an increase in maritime wrecks that would certainly impact upon Trinity House's activity.

Storm activity also presents the increased risk of aids to navigation casualties; Trinity House, in response, has robust monitoring and back-up power systems in place, and technicians and helicopter access to many lighthouses on standby.

Rising temperatures

Rising temperatures may have other consequences for employers such as how they maintain a comfortable office environment; fortunately, roughly 90% of Trinity House's work force is located in coastal locations or on board ship where conditions are more temperate.

Rising temperatures may also enhance the British holiday season with consequences for the parts of the estate that are used as holiday cottages. Of course, this is not the full extent of the potential impacts from climate change. Other more global impacts such as shifting populations, shipping routes and so on may have far more significant knock-on effects on Trinity House and are reviewed regularly.

Having previously been asked how we were responding to the threat of climate change, we were more recently asked by Defra how we were getting along with adaptation. In response, Trinity House produced an adaptation progress report in 2016; we were pleased to show how climate change adaptation had become embedded in our processes and how this contributes to our continued success in achieving ISO 14001 certification.

We were proud to conclude that overall Trinity House re-

mains confident in its ability to adapt to climate change.

My thanks to Peter Hill, the Trinity House Estates & Property Manager, for his advice and support with this article.



Climate Change Harwich Pier

Our pier at Harwich is perhaps the most vulnerable, being already over-washed when weather and tide combine forces and it may require major adaptation at some point in the future.

*Trinity House has three core functions: it is the General Lighthouse Authority for England, Wales, the Channel Islands and Gibraltar, responsible for the provision and maintenance of aids to navigation. It is a deep sea pilotage licensing authority and it is also a maritime charity, dispersing funds for the welfare of retired seafarers, the training of youth and the promotion of safety at sea.

Editor's note:

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France to cease oil & gas exploration

Legislation is expected to be passed this autumn, which will see the ending of granting of licences for oil and gas exploration in France and in French overseas *départements*, it is understood.

Apparently this is to be part of a transition towards a totally environmentally-friendly energy policy being driven by Emmanuel Macron's government, in particular and Nicolas Hulot, his Minister of Ecological and Solidarity-based Transition. Hulot's portfolio includes climate, air pollution, energy and transport.

Macron wishes to create a carbon-neutral France by 2050 by curbing greenhouse gas emissions resulting from use of fossil fuels which will no longer be extracted and refined.

Apparently extension of current concessions will be gradu-

ally limited until they are phased out by 2040 by which year France intends to withdraw the sale of gasoline- and diesel-powered vehicles.

Experts consider the French decision largely symbolic as the country produces in the region of 6 million barrels of hydrocarbons a year, equal to approximately 1% of national consumption and France will continue the importation and refining of oil.

It is understood that France's Total has permits to explore in overseas territories such as offshore Guyane Maritime in French Guiana and at the time of writing (early September) had no comment on the threatening change in legislation.

New Tonnage: Stena

Stena Imperator and Stena Imprimis in double naming ceremony in Guangzhou

On 22 August, *Stena Imperator* side-by-side with her sister *Stena Imprimis* were named at the Chinese shipyard GSI (Guangzhou Shipbuilding International) in Guangzhou in southeast China.

These two vessels are nos. 11 and 12, in a series of 13 identical IMOIIIMAX tankers all ordered by Stena Bulk.



The 13th and last IMOIIIMAX tanker will be delivered in January 2018. Both the now named vessels are owned by Stena Bulk.

It was a hot summers day when the 100 or so guests from all over the world gathered on the quayside for the solemn double naming ceremony.

The two proud godmothers – for *Stena Imperator*, Ylva Syrén Carlsson and for *Stena Imprimis*, Denise Baum – as tradition dictates, wished the vessels, their Masters and ships' companies fortune and prosperity on the Seven Seas and swung the bottles of champagne against the tankers' bows.

In the words of Erik Hånell, President & CEO, Stena Bulk: *'It was a spectacular sight with the two sister tankers beside each other and the somewhat unusual situation made*

the naming ceremony a bit special and extra festive. We are now approaching the final delivery of our large order consisting of 13 IMOIMAX tankers. We are very proud of and satisfied with our fleet, which now consists of ten units in operation. Both the technical and the commercial concept have proved to be very successful.'



Master of *Stena Imperator* is Mikhail Kutuzov and Alexey Vaganov will command *Stena Imprimis*.

Both vessels were due to be delivered by November this year. On her maiden voyage, *Stena Imperator* will sail with a cargo of vegetable oil to Papua New Guinea and then to Rotterdam. The two tankers will be operated by Stena Bulk's Product and Chemical Operation and will sail in its global logistics system, which currently employs some 60 vessels.

Traditionally, the shipowner, in conjunction with the naming ceremony, makes a donation to the shipyard to be used in a suitable project. In this case, \$15,000 were donated to GSI's shipyard workers as well as \$15,000, half of which was donated to a nursing home and half to a kindergarten, both related to GSI.



The IMOIMAX concept

IMOIMAX is a further development of an already well-established concept and the innovative technical design was developed by Stena Teknik together with the Chinese shipyard GSI. It offers several advantages such as extra large cargo flexibility, a high level of safety and economical fuel consumption, said to be 10-20% lower than that of equivalent vessels when sailing at service speed.

These vessels are 183 metres loa with a beam of 32 metres and of 50,000 dwt.

About Stena Bulk

With offices in six countries, Stena Bulk is one of the world's leading tanker shipping companies. The company controls a combined fleet of around 100 vessels. Stena Bulk is part of the Stena Sphere, which has more than 20,000 employees and sales of SEK 60 billion (\$7.5 billion).

Shaping the Future of Shipping

ICS Launches New Brand

The International Chamber of Shipping (ICS) has used London International Shipping Week to launch a new brand identity, to better serve its important role as the global trade association for shipowners, representing national shipowners' associations from 37 countries and over 80% of the world merchant fleet.



International
Chamber of Shipping

Speaking from the British Library in London at the brand launch on 13 September, ICS Chairman, Esben Poulsen explained: *'Over the next 30 years, new technologies and environmental challenges will completely transform shipping: a vital industry that moves the essentials of life and around 90% of global trade.'*

'Together with our member national associations, we are working to help shape a vision for the future, in which shipping will become ever more efficient and environmentally sustainable. Our contemporary new brand seeks to reflect what we do with a refreshed and vibrant colour palette, appropriate to a modern global trade association that represents one of the world's most dynamic industries.'

He added: *'As the voice of the global shipping industry, ICS will continue to influence all maritime policy developments which affect the interests of shipowners. And we will continue to do what we always do best, helping governments and maritime policy makers understand the implications of their decisions, as we strive to shape the future of shipping.'*

To promote the new brand, ICS has produced a short film which can be seen at https://youtu.be/n5_RbPIkBNA

The refreshed ICS brand

Based on an update to the historic ICS logo, the refreshed brand pays homage to the iconic silhouette of a sailing ship that has been part of the ICS brand for nearly 100 years. Taking this heritage as a starting point, the symbol has been redrawn to be more contemporary in its style, combining the hull of a modern cargo vessel with the iconic sails of a traditional merchant ship.

The refreshed logo aims to speak of the larger shipping community with which ICS works on behalf of shipowners worldwide. The orientation has been rotated from profile to portrait making it stronger, prouder and more contemporary.

When combined with a refreshed vibrant colour palette that breaks from the commonly used blues of the industry, and a bold graphic style inspired by the language of shipping, the refreshed visual identity is one set to continue to shape the future of shipping for many years to come.

UK Guidance on Ship Security: Cyber Security Code of Practice

In mid-September the UK Government, through its Department for Transport issued information on implementing and maintaining good cyber security practices in shipping.

This document is titled Code of Practice: Cyber Security for Ships.

Here will be found material on:

- (a) developing a cyber security assessment and plan to manage risk
- (b) handling security breaches and incidents
- (c) highlighting national and international standards used, and
- (d) the relationship to existing regulation

It is understood that the code is to be used with organisations in their risk management systems and subsequent business planning.

This Code of Practice should be read by Board Members of organisations with one or more ships, insurers, ships' senior officers (for example, the Master, First Officer and Chief Engineer) and those responsible for the day-to-day operation of maritime information technology (IT) operational technology (OT) and communications systems.

In the Foreword to the document it is stated that the paper does not set out specific technical or construction standards for ship systems, but instead provides a management framework that can be used to reduce the risk of cyber incidents that could affect the safety or security of the ship, its crew, passengers or cargo.

The code was produced by the Institution of Engineering and Technology with the support of the Defence Science and Technology Laboratory (Dstl), funded by the (UK) Department for Transport.

Finally, the document may be downloaded at no charge here:

<https://www.gov.uk/government/news/safer-it-safer-ship-cyber-security-code-of-practice-for-ships>

or here: <http://tinyurl.com/yakzngny>

Port Security

Practising Drills

A security incident hits a passenger ship in Puerto Vallarta, Mexico – an important port receiving more than 140 passenger ships and hundreds of thousands of tourists each year. Procedures need to be followed and numerous national agencies need to be coordinated. This was the subject of one of the drills and exercises that took place during an IMO workshop in Puerto Vallarta, Mexico on 7 September involving more than 100 participants from different port facilities in the Americas region.

This workshop also included a table-top simulation describing the procedures contained in the APEC Manual of Maritime Security Drills and Exercises for Port Facilities.

More information about the live security exercise, conducted by the Mexican Navy (SEMAR), can be found (in Spanish only) at:

<https://www.gob.mx/semar/digecapam>

Regular maritime security drills and exercises are an important requirement under IMO's International Ship and Port Facility Security (ISPS) Code. This helps to ensure the effective implementation of the ship and port facility security plans and to verify that personnel involved are aware of the relevant procedures and can respond in a timely and effective manner.



The Puerto Vallarta event comes as part of IMO's focus on the 2017 World Maritime Day theme Connecting Ships, Ports and People to help IMO Member States to develop and implement maritime strategies to invest in an appropriate interagency approach to key issues.

This workshop was conducted as part of the XI International Forum on Maritime and Port Security held from 4-7 September in collaboration with the Inter-American Committee on Ports (CIP) of the Organization of the American States (OAS) and SEMAR.

IMO was represented by Javier Yasnikouski and a team of consultants.

Training in Nigeria

A workshop in Lagos, Nigeria has helped train Nigerian officials in the necessary skills and knowledge to plan, conduct and assess security drills and exercises in their port facilities.

This event held from 28 August-1 September focused on port security measures of the Organization's ISPS Code.



Participants included designated authority officials, port facilities security officials, ISPS auditors, national regulators and ISPS inspectors.

Led by an IMO team of consultants and organized with the Nigeria Maritime Administration and Safety Agency (NIMASA) – the workshop involved theoretical lessons, discussions, group work and hands-on practical exercises in planning, conducting and evaluating exercises in compliance with the ISPS Code.

The training event is the third of a three-phase technical assistance programme, designed by IMO following a 2016 needs-assessment mission, to help support NIMASA's maritime security programme.

Sanctions

In September the Australian Maritime Safety Authority (AMSA) issued a Marine Notice (No. 11/2017) on the above superseding Marine Notice 14 of 2014.

The purpose of the Notice is to remind persons who own, operate or are on board Australian ships about offences which arise under Australian Sanction Laws. These Laws may, among other things, prohibit the export or import of certain goods to or from certain countries, entities and individuals and the provision of related services including transport.

Ship Masters are reminded that offences arising under Australian Sanction Laws can result in huge punishments. For example, such offences are punishable by imprisonment for up to ten years or by a fine of the greater of three

times the value of the transaction/s or 2,500 penalty units (A\$525,000) as at 1 July 2017.

For bodies corporate these offences are punishable by a fine of the greater of three times the value of the transactions or 10,000 penalty units (A\$2.1 million).

The Marine Notice is a summary of relevant information only.

Ship Masters are reminded that sanctions regimes are amended regularly.

The Australian Government strongly recommends that those seeking to trade overseas of Australia consider obtaining legal advice in relation to Australian Sanctions Laws, as well as any other relevant Australian or Foreign Laws.

Current AMSA Marine Notices are available at: www.amsa.gov.au

Functional Definitions for A Vessel's Stay in Port

In mid-September the International Harbour Masters' Association (IHMA) issued a document encapsulating recent progress on the development of functional definitions for port information describing a vessel's stay in port.

It is understood that accurate and reliable port information will enhance the safety, efficiency and sustainability of ports and shipping across the world and benefit local, national and international economies.

It is the initiative priority to improve communications between ships and ports using clear and authoritative definitions for the various terms used in daily operations. These definitions have been sourced from existing standards within the shipping industry and, where none could be found, by way of the glossary in the United Kingdom Hydrographic Office's (UKHO) *Mariner's Handbook* otherwise known as NP100, the next edition of which will be published in August 2018.

Definitions include names given to areas within a port, terminology associated with restrictions that might be imposed by an authority on vessel operations related to vessel dimensions, external conditions, manoeuvring and berthing. Event information associated with arrival and departure times and nautical and vessel service times is also provided.

IHMA's President Captain Kevin Richardson commented: *'Harbour Masters recognise the huge value of agreeing and promulgating definitions that will make the ship's stay in port safer and more efficient. We applaud the efforts of all organisations that have worked cooperatively on this important project which will have long-term value for ports around the world.'*

IMO Publications: Ballast Water Management

According to the IMO Publications Newsletter of September Ballast Water Management: How to do it the 2017 edition is now available and IMO inform that the Ballast Water Management Convention came into force on 8 September 2017 and applies to all ships engaged in international trade.



There are two different standards, D-1 and D-2. New ships must meet the D-2 standard now while existing ships must initially meet the D-1 standard only and will need to meet the D-2 standard after 2017. For most ships this will involve installing special equipment.

To be found on the IMO Website: www.imo.org are a short film, an infographic and a web page for further information.

In addition two on-line subscription products, namely, MARPOL on the Web and SOLAS on the Web have been updated to incorporate the latest amendments.

EMSA Seafarers' Statistics in the EU

Masters and Officers - STCW Information System (STCW-IS)

On 5 September the European Maritime Safety Agency (EMSA) published *Seafarers' Statistics in the EU Statistical Review (2015 Data STCW-IS)*, a 57-page document as part of the EU mechanism for gathering information on certificates and endorsements issued to seafarers by EU Member States.

The statistical review presented in the report has been based on data extracted from certificates and endorsements registered by EU Member States until 31 December 2015 and recorded in the STCW Information system. The objective is to use the paper as a primary source of data for statistical analysis and for use by EU Member States and the European Commission in policy-making.

It is reported that this statistical review is based on data

extracted from certificates and endorsements registered by EU Member States until 31 December 2015 and recorded in the STCW Information System (STCW-IS).

In simple terms this represents a snapshot of the European labour market in terms of the number of seafarers holding valid certificates and endorsements in the year under review, 2015. It is understood that this is the second year in respect of which such data is available. As more data is collected in the coming years this will make possible trend analysis that should contribute to a better understanding of the maritime labour force in Europe.

Data included in the document reviewed here, 2015 STCW-IS, shows that 182,662 Masters and Officers held valid certificates of competency (CoCs) issued by EU Member States while another 102,861 Masters and Officers held original CoCs issued by non-EU countries with endorsements issued by EU Member States attesting their recognition (EaRs).

Overall, the end of 2015 saw slightly above a quarter of a million Masters and Officers as potential manpower to serve in EU Member States'-flagged vessels.

The five EU Member States that had more Masters than Officers holding CoCs issued by them in 2015 were:

United Kingdom	31,448
Poland	20,700
France	13,552
Croatia	13,350
Spain	11,697

In addition the five EU Member States that had more Masters than Officers holding EaRs were:

Malta	63,142
Cyprus	29,654
United Kingdom	15,779
The Netherlands	10,104
Luxembourg	6,761

Finally, the five non EU Countries which had more Masters than Officers holding their CoCs recognised by EU Member States were:

The Philippines	33,966
Ukraine	23,192
Russian Federation	16,381
India	7,626
Turkey	6,377

The EMSA document is available here: <http://emsa.europa.eu/implementation-tasks/visits-and-inspections/items.html?cid=127:maritime-education&id=3094>

or here: <http://tinyurl.com/y9zeqkyn>

* C.RO Ports SA operates ro-ro terminals in the UK, the Netherlands and Belgium.

A safety message from the IMB

The International Maritime Bureau with its Piracy Reporting Centre (PRC) in Kuala Lumpur, Malaysia, and an office in London, has sent the message below and requested its widest promulgation to all parties concerned and for it to be placed on public, main and general notice boards:

The IMB PRC dedicated Hotline for Seafarers, port workers, shipping agents, shipyard personnel, brokers, stevedores and all concerned parties enables them to report any information that they may have seen, heard, known of and so forth, relating to any maritime or other crimes including security threats.

All information received will be treated in strict confidence and will be passed on to the relevant authorities for their action.

Maritime crime and security concerns us all and with your help we can try to minimise the risks and help save lives and property.

The Maritime Security Hotline can be contacted 24 hours a day, every day at:

e-mail: imbsecurity@icc-ccs.org

Telephone: +603 2031 0014

Fax: +603 2078 5769

***Remember: Your information may save lives
Please circulate this notice within your crew.
The IMB wishes all Seafarers a safe and secure
voyage***

Galileo progress - The latest delivery

Europe's next two Galileo navigation satellites have been delivered to Europe's Spaceport in French Guiana ahead of the launch of a quartet by Ariane 5 at the end of this year.



Galileos 19 and 20 arriving at Cayenne – Félix Eboué Airport in French Guiana aboard a Boeing 747 cargo aircraft on 18 September 2017.

Photo: ©ESA-P Muller.

Galileos 19 and 20 left Luxembourg Airport in a Boeing 747 cargo jet on the morning of 18 September, arriving at Cayenne – Félix Eboué Airport in French Guiana that

evening.

Safely cocooned within protective air-conditioned containers, the pair were offloaded and driven to the cleanroom environment of the preparation building within the space centre.

This building will remain their home as preparations for their launch proceeds, with the next two Galileos due to join them later this month (October).

These satellites join the first elements of their customised Ariane 5 at the centre – including its cryogenic main stage and half-shell payload fairing – which were delivered by ship the week before.

Galileo is Europe's own satellite navigation system, providing an array of positioning, navigation and timing services to Europe and the world.

A further eight Galileo 'Batch 3' satellites were ordered last June, to supplement the 26 built so far.

With 18 satellites now in orbit, Galileo began initial services on 15 December 2016, the first step towards full operations.

Further launches will continue to build the constellation, which will gradually improve performance and availability worldwide.

About Galileo

Galileo is the EU's own global satellite navigation system, consisting of both the satellites in space and their associated ground infrastructure.



Europe's Galileo navigation satellites orbit 23 222 km above Earth to provide positioning, navigation and timing information all across the globe.

Photo: © GSA.

The definition, development and in-orbit validation phases were carried out by ESA, and co-funded by ESA and the European Commission. This phase created a mini constellation of four satellites and a reduced ground segment set up to validate the overall concept, ahead of further deployment.

Success led to the current Full Operational Capability phase, fully funded by the EU and managed by the Commission. The Commission and ESA have a delegation agreement by which ESA acts as design and procurement agent on behalf of the Commission.

ATSB Report: Grounding of Bow Singapore, Port Phillip Bay, Victoria

19 August 2016

On 19 August 2016 at 1458, a Port Phillip Sea Pilot boarded *Bow Singapore* outside Port Phillip, Victoria. The pilot was to conduct the ship through The Rip and the South Channel to an anchorage in the northern part of Port Phillip.

At 1614 on the same day, as the ship neared the eastern end of the South Channel, the rudder ceased responding to helm inputs and remained at 5° to port. The ship started swinging towards the edge of the channel. Steering was regained a short time later but, despite the efforts of the pilot, the ship grounded at 1617.

On 20 August at 0040, *Bow Singapore* was re-floated, with the assistance of the rising tide and a tug. The ship proceeded to anchor and, later, to the discharge berth in Geelong. After discharging cargo the hull was inspected by divers and no damage was found.



Photo: Source: Australian Transport Safety Bureau

The Australian Transport Safety Bureau (ATSB) found *Bow Singapore's* steering gear ceased working and the rudder remained at 5° to port. A telemotor solenoid, controlling the rudder's movement to starboard, had stopped responding to electrical signals. This initiated an uncontrolled turn towards the edge of the channel and shallow water.

The company's procedures for a steering gear failure required a change in operation from the bridge to local emergency operation from the steering gear room. However, the procedures did not include the steps to be taken on the bridge prior to that change, such as using non follow-up mode and changing to alternate telemotor and/or pump systems.

The planned maintenance system for the steering gear did not include or contain any schedules for any detailed inspections or scheduled parts' replacement. In addition, the hydraulic system port and starboard solenoids were painted green and red respectively, to match the side of the ship that each is on when mounted on the shuttle valve. However, this was opposite to the direction the rudder would move when they were operated.

Safety message

For equipment, particularly that which is critical to the safe operation of a ship, it is important that there is a well-formulated maintenance plan that includes inspection, testing and planned maintenance.

The Final Report: *Grounding of Bow Singapore, Port Phillip Bay, Victoria on 19 August 2016* which was made available by ATSB on 5 October 2017 is to be found here: <http://tinyurl.com/yavee9gh>

Advice from The Swedish Club: Don't overlook the risk of cargo fires

Cargo fires occur so infrequently that awareness of the risk can slip under the radar. Yet such an incident on board a vessel can have disastrous consequences including loss of life or catastrophic loss of the vessel involved. With the average cost of a cargo fire at several million USD, cargo fires are not a risk to be overlooked.

The Swedish Club, working in conjunction with Burgoyne's, experts specialising in the investigation of fires, explosions and other major incidents, has produced a handbook, *Fire! A guide to the causes and prevention of cargo fires*, which can be used alongside the regulations to assist seafarers in their daily loss prevention efforts.

Fire! offers loss prevention advice on a number of incidents – focusing specifically on self-heating cargoes, but also examining those vessel fires caused by other sources such as cargo hold lights, fumigation, movement of cargo and of course smoking and hot work. It also highlights how different vessel types fare when the frequency of cargo fires is compared.

Tanker figures are found to be relatively low, a testament to the tight regulation and safety culture that exists in this industry. On the other hand ro-ro figures are surprisingly high due to the non-homogeneous nature of the cargo they carry.

Lars A. Malm, The Swedish Club's Director Strategic Business Development & Client Relations, is clear about the importance of the guide when he comments: '*When a fire breaks out on board a vessel there is no fire service ready to assist in extinguishing it – that is up to the crew themselves. All those who have worked on board a vessel are aware of the difficulties involved with managing a fire and the crucial importance of fire prevention.*'

Burgoyne's Partner, Neil Sanders, explained further: '*Self-heating and related issues can affect a wide variety of cargoes including coal, iron in the form of direct reduced iron (DRI), metal turnings, charcoal, seed cake, biomass, fertilisers, solid chemicals and liquid chemicals. Whilst the full relevant International Maritime Solid Bulk Cargoes Code (IMSBC) or International Maritime Dangerous Goods Code (IMDG) requirements must always be understood and followed.*'

'Fire!' is aimed at supporting that understanding and providing valuable support to the seafarer.'

The publication can be downloaded from The Swedish Club website here: <http://tinyurl.com/y7e9dq9h>

London-HK Accord

Representatives of the British and Hong Kong maritime business sectors have agreed to forge a closer working relationship and on 12 September signed a Memorandum of Understanding in London during London International Shipping Week.

For this week of events IFSMA was a Supporting Organisation.

Under the terms of the agreement Maritime London and the Hong Kong Maritime & Port Board (HKMPB) will cooperate in a range of areas including promotional activity, training and sharing of best practice for maritime business services.

The agreement was signed by Chan Fan Frank, Secretary for Transport & Housing, Hong Kong Government and Maritime London Chairman, Lord Mountevans at the Foreign & Commonwealth Office.

Also present were leading representatives from the Hong Kong shipowning community and the UK Minister of State for Transport Legislation and Maritime, John Hayes.

Lord Mountevans commented: *'The Hong Kong and UK maritime business communities have a unique historical relationship and very strong ties. Nearly 10% of the world's ships are managed or owned in Hong Kong, it is home to one of the world's leading hub ports and an important gateway to mainland China. Both the UK and Hong Kong look beyond their borders and provide world beating maritime expertise to global shipowners, traders and charterers.'*



The agreement was signed by Chan Fan Frank, Secretary for Transport & Housing, Hong Kong Government and Maritime London Chairman, Lord Mountevans at the Foreign & Commonwealth Office on 12 September. Pictured, centre, is John Hayes, Shipping Minister.

'This agreement is designed to help both London and Hong Kong businesses collaborate and prosper with the support of their respective representative bodies.'

Secretary Chan reflected: *'By working together, London and Hong Kong can grow together. Both cities are key international shipping and trading hubs with a shared outward looking and entrepreneurial spirit. Both serve regions beyond their own borders and both have an exciting future. We are delighted by the prospect of a closer working relationship than ever before.'*

HKMPB was set up by the Government of Hong Kong Special Administrative Region in 2016 to foster the development of Hong Kong's maritime and port services.

Maritime London is a promotional body for UK-based companies providing professional services to the international shipping industry.

Trading and logistics are a major economic pillar for Hong Kong, accounting for 22% of its GDP and 20% of employment.

The UK maritime business services sector which includes shipbroking, financial, legal, education and insurance services contributes £3.5bn to the UK economy and supports 48,600 jobs.

Unmanned Cargo Ship Development Alliance launched in Shanghai

China Classification Society (CCS) leads reform of shipping industry

At the end of June the inaugural meeting of the Unmanned Cargo Ship Development Alliance and its 1st Council were held in Shanghai.

Leaders and industry experts attended from: HNA Technology & Logistics Group, CCS, ABS, China Ship Development and Design Center, Hudong-Zhonghua Shipbuilding (Group) Co Ltd, 708 Research Institute of China State Shipbuilding Corporation (CSSC), Rolls-Royce, 711 Research Institute of China Shipbuilding Industry Corporation (CSIC) and Wartsila.

China attended the meeting and witnessed the signing ceremony of the alliance charter.

The Council of the Alliance adopted the relevant proposals for the work plan of 2017. As the first domestic cooperation organization in the field of unmanned cargo ships, the establishment of the alliance marked the beginning of change in China's approach to unmanned marine cargo transport.

This alliance was driven by HNA Technology & Logistics Group and the China Classification Society, co-founded with five units at home and abroad, encouraging a number of the world's leading institutions to play a part.

It is understood that the alliance would take advantages of all the players and integrate advanced technology at home and abroad to develop unmanned cargo ships with independent navigational capability and to promote the development of intelligent shipping.

The alliance would not only promote changes in ship design and operation, but also facilitate the establishment of technology, regulation and standard systems embodied in unmanned cargo ships.



Combined with the accumulation of rules and standards as well as the field of the intelligent ship, CCS would further promote the development and innovation of intelligent technology in the industry through unmanned ship development.

CCS Vice President Mr. Sun Feng stated that CCS had initiated the relevant standard research work and would actively promote revision of regulations. The Society was willing to work with the industry to carry out unmanned cargo ship and related technology research, contributing to the capabilities of Chinese equipment.

On-board health care made easier through digitalization

The Danish advance

On 6 September the Danish Maritime Authority announced that it was making a digital version of the Radio Medical Record available on the authority's website.

This new feature is a small step on the road to digitalization. These days the Danish Maritime Authority is striving to digitalize as many work processes as possible in an effort to ease burdens imposed on seafarers and the industry.

The Danish Maritime Authority continues its work within the fields of digitalization and the utilization of technological solutions for the benefit of Blue Denmark.

Annemette Knagaard, Chief Ship Surveyor at the Danish Maritime Authority:

'The new solution has been requested by seafarers for quite some time so they will now no longer need to print, fill in by hand and scan documents when reporting information to Radio Medical about cases of illness on board ships.'

Facts

The Radio Medical Record is to be filled in by the medical practitioner on board the ship in case of illness/accident. The records contain forms to be filled in about the patient's condition. The Radio Medical Record is to be forwarded to Radio Medical Denmark so that the medical practitioner has the information needed to make as correct a diagnosis as possible and to start the treatment on this basis. Both the person in charge of medical care and the medical practitioner are obliged to keep a medical record.

Radio Medical Denmark is a tele-medical/maritime medical service body that is manned around the clock all year and which assists Danish ships with medical care of ill and injured persons on board.

More information is available here:

<http://tinyurl.com/y8mxhwq6>

Contact may be made with **RADIO MEDICAL DENMARK** as follows:

Telephone: +45 75 45 67 66

E-mail: RMD@rsyd.dk

SeafarerHelp

The Lifeline for Seafarers 2016 Annual Review

www.seafarerswelfare.org

In the face of tough shipping markets and dogged by mental and physical health concerns, worries about pay, careers and abandonment, more seafarers than ever before have been turning to SeafarerHelp for assistance and support.

According to the newly released 2016 annual review from the free, confidential, multilingual helpline for seafarers and their families, there are serious problems facing those at sea, and seafarers desperately need help.

The annual looks back on a tough year, as vessel over-capacity hit freight rates, bringing with it severe uncertainty across many markets. Once again, it was seafarers who bore the brunt of change, cuts and confusion.

The SeafarerHelp annual review 2016 shows how the industry was left wrestling with a number of problems, which delivered serious knock on effects for people working at sea.

Record numbers

The helpline, part of the International Seafarers' Welfare and Assistance Network (ISWAN*), saw a record number of contacts from seafarers, and in a year which saw major shipping companies fall bankrupt, crews, customers and the logistics chain were left in disarray. It was clear that seafarers needed somewhere to turn to for advice, guidance, support and a place to be heard.

SeafarerHelp is often the first port of call for seafarers when they need help, and as such the helpline is uniquely placed when it comes to gathering contemporary data and for spotting trends affecting seafarers. The latest report stresses that issues of social isolation and mental health continue to be key concerns, as do welfare issues and the problems of bullying, harassment and abuse.

According to Roger Harris, Executive Director of ISWAN: *'While reaching out to SeafarerHelp is the first port of call when crews face problems, they also turn to the service as a last resort, and in desperation. Working with partner organisations we do everything possible to help.'*

'SeafarerHelp is free to all seafarers and their families wherever they are in the world thanks to the continuing support of funders, The TK Foundation, the International Transport Workers' Federation (ITF) Seafarers' Trust, Seafarers UK, and Trinity House. We are incredibly grateful for this support, and we see the difference it makes to seafarers.'

An overview

In 2016 the SeafarerHelp team:

- Dealt with 3,073 new cases, involving 11,228 seafarers and their families.
- Received a further 4,548 successive contacts.
- Dealt with 4,073 different issues raised by seafarers.
- Helped seafarers of 99 different nationalities make contact with 122 countries.
- Provided assistance free of charge around the clock, 365 days per year, to seafarers and their families in their own language as required.

Caseload review

- Compared to 2015 there was a 37% increase in the number of new cases and an increase of 15% in the number of seafarers assisted.
- On average 8.4 new cases and 12.5 successive contacts for existing cases were handled by the SeafarerHelp team every day.
- The average number of seafarers involved in each case was 3.7.
- Female seafarers accounted for 3.8% of those who contacted SeafarerHelp, where gender was known.
- Most common reasons for seafarers contacting the charity were: (a) seeking employment, (b) wages not being paid, (c) requesting information, (d) problems over repatriation, (e) health problems and (f) contract problems.
- Contacts the charity received came from 122 countries, including 28 in the Commonwealth.

- Seafarers from 20 European Union countries contacted the team during the year.
- Of the 99 nationalities assisted, the largest numbers of seafarers were Filipinos, followed by Indians, Ukrainians and Russians.
- The charity was contacted by seafarers of 31 Commonwealth nationalities – the largest number were Indian, followed by British, Nigerian, Pakistani, Bangladeshi and Sri Lankan.
- Many cases received involved more than one issue and so had to be referred to more than one organisation. While the charity deals with most contacts in-house it also referred cases to recruitment organisations, ITF Coordinators / Inspectors, ITF Seafarer Support team, Apostleship of the Sea, the Philippines Overseas Employment Administration and the Mission to Seafarers.

In conclusion

Writing in his introduction to the review, Per Gullestrup, Chairman of ISWAN, commented: *'The ISWAN SeafarerHelp team played an important role in raising awareness about social isolation and mental health issues among seafarers. In 2016 we have continued in this vein and have seen our emotional support service develop and mature. A difficult year for the shipping industry means it was also a difficult year for many seafarers. The reality is that when the maritime industry needs to make cost savings, seafarers are often negatively affected.'*

The SeafarerHelp Annual Review 2016 can be found here: <http://tinyurl.com/ycq27aou>

* The International Seafarers' Welfare and Assistance Network (ISWAN) promotes seafarers welfare worldwide and directly serves seafarers by providing a 24 hour helpline.

ISWAN is the result of a merger between the International Committee on Seafarers' Welfare (ICSW) and the International Seafarers' Assistance Network (ISAN). ISWAN is a membership organisation with the International Chamber of Shipping, The International Transport Workers' Federation and the International Christian Maritime Association as the core members.

ISWAN publishes its annual accounts and report and is regulated by the UK Charity Commission.

Lessons from Marine Accident reports

(UK) Marine Accident Investigation Branch issues publication

In the UK the Marine Accident Investigation Branch (MAIB) examines and investigates all types of marine accidents to or on board UK vessels worldwide, and other vessels in UK territorial waters. Located in offices in Southampton, the MAIB is a separate, independent branch within the Department for Transport (DfT).

The head of the MAIB, the Chief Inspector of Marine Accidents, reports directly to the Secretary of State for Transport.

From time to time a Safety Digest is issued drawing the attention of the marine community to some of the lessons arising from investigations into recent accidents and incidents.

This document (the latest is N° 2/2017 issued in October) contains information which has been determined up to the time of issue. Such information is published to inform the shipping and fishing industries, the pleasure craft community and the public of the general circumstances of marine accidents and to draw out the lessons to be learned. The sole purpose of the Safety Digest is to prevent similar accidents happening again.

Content must necessarily be regarded as tentative and subject to alteration or correction if additional evidence becomes available. The articles do not assign fault or blame nor do they determine liability. The lessons often extend beyond the events of the incidents themselves to ensure the maximum value can be achieved.

In issue N° 2/2017 one case provides a reminder that fires can quite easily start in a similar way in a ship.

In one case a fire was caused when a travel fridge was placed on the carpeted area of the deck in a cabin; the lack of air circulation around the unit caused the fridge to overheat... fortunately the crew were able to extinguish the fire without too much damage being done.

Mobile phones, computers and other electrical devices have become an integral part of modern life but can be lethal if not used responsibly. The risk of fire from malfunctioning or misused portable electrical equipment can be substantially reduced or even eliminated if you ensure that portable equipment testing (PAT) becomes routine on your ship and that periodic examinations are made of personal electronic items to ensure they are being used sensibly.

MAIB Safety Digest: Lessons from Marine Accident Reports N° 2/2017 can be found here: <http://tinyurl.com/ycszh6ux>

EMSA exercises places of refuge

The third biennial table top exercise on places of refuge for ships in need of assistance took place on 28-29 September in Horten, Norway (*see illustration*). The European Maritime Safety Agency (EMSA) held the first such exercise in Rotterdam in 2013 and the second in Malta in 2015, always in cooperation with the European Commission and hosting member state.

Each edition of the event focuses on a set of specific objectives. In the case of this third event, the emphasis was on the continued testing of the Operational Guidelines on Places of Refuge, the tools available through EMSA to counteract pollution by hazardous substances, and the is-

sue of insurance and compensation claims arising from a place of refuge circumstance.



The event took place over one and a half days and was attended by representatives of 15 EU and EEA states, relevant industry sectors covering salvage, class, insurance and port operators, as well as the European Commission and EMSA.

Chemical/oil spill pollution exercise

At the same time, on 25-28 September, EMSA participated in an extensive chemical/oil spill pollution exercise in Norway in conjunction with the Norwegian Coastal Administration (NCA) and the European Commission. The at-sea exercise simulated a collision between an oil tanker and a chemical tanker.

EMSA participated — together with maritime and aerial units from Denmark, Germany, Norway and Sweden — with the involvement of the oil spill response vessel *Norden* and the North Sea Equipment Assistance Service.

The latest edition of *EMSA Newsletter* may be found here: <http://tinyurl.com/yba5ev9v>

The end of the paper chase

DNV GL rolls out electronic certificates across entire fleet

In a historic first for the ship classification industry, DNV GL has commenced the roll out of IMO compliant electronic class and statutory certificates across its entire fleet. The widespread use of electronic certificates will result in significant efficiency gains for ship owners, charterers, regulators and crew, cutting down administrative burdens, processing time and document handling costs. This was announced from Hamburg on 16 October.

For the past few years, DNV GL has been working on pilot projects with several owners and flag administrations to test and gain acceptance for the use of electronic certificates. This has resulted in almost 50 flag state administrations already having granted DNV GL the authority to issue electronic statutory certificates on their behalf, with more acceptances expected in the near future.

In the words of Morten Nygaard, Fleet Manager, Teekay Offshore, owners of one of the vessels used in the pilot projects: *'The electronic certificate regime offered by DNV GL has provided us with a unique advantage in the contemporary market, where leverage from digitalized high-end efficient work processes plays an integral role.'*

Teekay Offshore is also looking to move their fleet to electronic class and statutory certificates as soon as possible. Nygaard added: *'It is our intention to benefit from the new regime within the shortest possible time frames.'*

Certificates are published on DNV GL's customer portal immediately after an onboard survey is completed, so that all relevant parties can access the latest certificates from anywhere in the world. Electronic certificates are secured with a digital signature and a unique tracking number (UTN) which can be checked online, assuring validity and authenticity.



DNV GL has commenced the roll out of IMO compliant electronic class and statutory certificates across its entire fleet. (Copyright DNV GL).

Knut Ørbeck-Nilssen, CEO of DNV GL – Maritime concluded by saying: 'Over the last several years we have been leveraging digitalization to improve the experience of our classification customers. The roll out of electronic certificates is a significant step forward in our pathway towards modernizing classification. Electronic certificates will smooth our customer's interactions with class, allow stakeholders across the industry to capture value from digitalization, and give us a platform for future improvements.'

Customers can choose to share access to their certificates with stakeholders (charterers, ports, flag administrations, insurers) by using temporary access codes. With the temporary code the stakeholder can directly access the customer's secure certificate folder, bringing the administrative burden on the ship owner down to the absolute minimum.

Electronic certificates will be rapidly rolled out across the DNV GL fleet, with newbuilding vessels receiving certificates upon delivery, and existing vessels at their next scheduled survey or audit.

For more information readers are invited to visit the electronic certificate webpage available here: <http://tinyurl.com/yd3f8kyj>

DNV GL's Smart Survey Booking tool (SSB)

At the same time as electronic certificates will be deployed through DNV GL's production system, clients will also be able to take advantage of the new Smart Survey Booking tool (SSB). SSB uses smart algorithms and machine learning to help customers find the best time and place to book a survey.

Algorithms identify when the maximum number of survey items can be combined, by assessing the initiation and expiration dates for class surveys, audits and conditions. An estimation of the required time the ship needs to be available for the survey/audit, with the associated travel and costs is also generated. SSB will even recommend a port of call based on all of these factors. Finally, after a customer makes the booking, SSB provides a set of survey preparation documents for the crew of the vessel, enabling them to prepare more effectively.

More information on SSB can be found here: <http://tinyurl.com/y873mlf3>

MAIB Report on the investigation of the grounding of *Muros* Haisborough Sand, North Sea, 3 December 2016

See: <http://tinyurl.com/y7awldgc>

In the early hours of 3 December 2016, the bulk carrier *Muros* ran aground on Haisborough Sand, eight miles off the east coast of England (Norfolk) and the Master's attempts to manoeuvre the vessel clear were unsuccessful due to a falling tide. There were no injuries and no pollution, but damage to *Muros*'s rudder necessitated the vessel being towed to Rotterdam for repair.

When *Muros* grounded, the vessel was following a passage plan shown on its ECDIS. The plan had recently been revised on the ECDIS by the OOW who then used the system to monitor the vessel's position. The (UK) Marine Accident Investigation Branch (MAIB) in its investigation found that the revised passage plan was unsafe as the visual check of the revised route was not conducted on the ECDIS at an appropriate scale. It was found that the vessel's Master directed the OOW to revise the route but he did not see or approve it. Furthermore, ECDIS safeguards had been ignored, overlooked or disabled. Additionally, the OOW's performance was probably adversely affected by a low state of alertness. Finally, it was found that ECDIS use on board *Muros* was not as envisaged by regulators or equipment manufacturers.

Further studies

The MAIB has recently investigated several grounding incidents in which the way vessels' ECDIS was configured and utilised was contributory. There is increasing evidence to suggest that first generation ECDIS systems were designed primarily to comply with the performance standards required by the IMO, as these systems became a mandatory requirement on ships, with insufficient attention being given to the needs of the user.

MAIB reports that it is conducting a safety study, in collaboration with the Danish Maritime Accident Investigation Board, to more fully understand why operators are not using ECDIS as envisaged by regulators and system manufacturers.



mv Muros

Photo ©www.gov.uk/maib-reports / MAIB

Here the overarching objective will be to provide comprehensive data that can be used to improve the functionality of future ECDIS systems by encouraging the greater use of operator experience and human-centred design principles.

Guidelines on the Carriage of Charcoal in Containers Joint industry publication

New Guidelines for the carriage of charcoal and carbon in containers have been published jointly by CINS (the Cargo Incident Notification System) and the International Group of P&I Clubs. This was reported on 20 October.

Charcoal/carbon is a black residue, consisting of carbon and any remaining ash obtained by removing water and other volatile constituents from animal and vegetation substances.

Charcoal/carbon is considered to be a self-heating substance – that is to say, it is a substance which, in contact with air and without energy supply, is liable to self-heating. A self-heating reaction may result in extensive heat development and fire. There have been a number of reported fires in recent years involving the carriage of charcoal in containers.

With global production of wood charcoal and carbon amounting to over 50 million tonnes per year, the practices set out in these guidelines are intended both to improve safety during the carriage of these products, and to ensure that it is properly declared, packaged and carried.

Transport of charcoal and carbon must be in compliance with the requirements set out in the International Maritime Dangerous Goods Code (IMDG Code). The new guidelines include selected provisions from the IMDG Code, together with additional precautions to enhance its safe carriage.

The guidelines were prepared by a Work Group comprising CINS Members, including shipping lines, the International Group of P&I Clubs and the TT Club.

To download the guidelines readers are invited to see the pdf here: <http://tinyurl.com/ya93kawr>

From the IFSMA Office

We hope you enjoyed the last few issues of the IFSMA Newsletter. We are now able to include more graphics and photographs. We are also increasing the frequency to bimonthly, this will hopefully work well except at the time of the Annual General Assemblies (AGA) when we will replace one Newsletter issue with AGA publications.

Speaking of the AGA, as you know the next one will be held in Buenos Aires, Argentina at the invitation of our Argentine Association Member - Centro de Capitanes de Ultramar y Oficiales de la Marine Mercante.

The dates are now agreed, Thursday 26th and Friday 27th April 2018. We now await the hotel links and prices so you can plan your stay better.

I can recall our last visit to Buenos Aires for an AGA in 2004 and can recommend it as a destination for a break after the AGA with much to see and do.



Entrance to IFSMA Office complex at 202 Lambeth Road.

Those of you based in Europe may be aware of the new General Data Protection Regulations (GDPR) which come into force during May 2018. These regulations are intended to improve the protection of data kept on individuals anywhere in the EU. Even in the UK with Brexit, we cannot escape these new regulations as the UK is introducing its own regulations to match the EU regs which will remain in force when we leave the EU. We are now considering the implications of these regulations and may need to contact you later.

Paul Owen,
Assistant Secretary General