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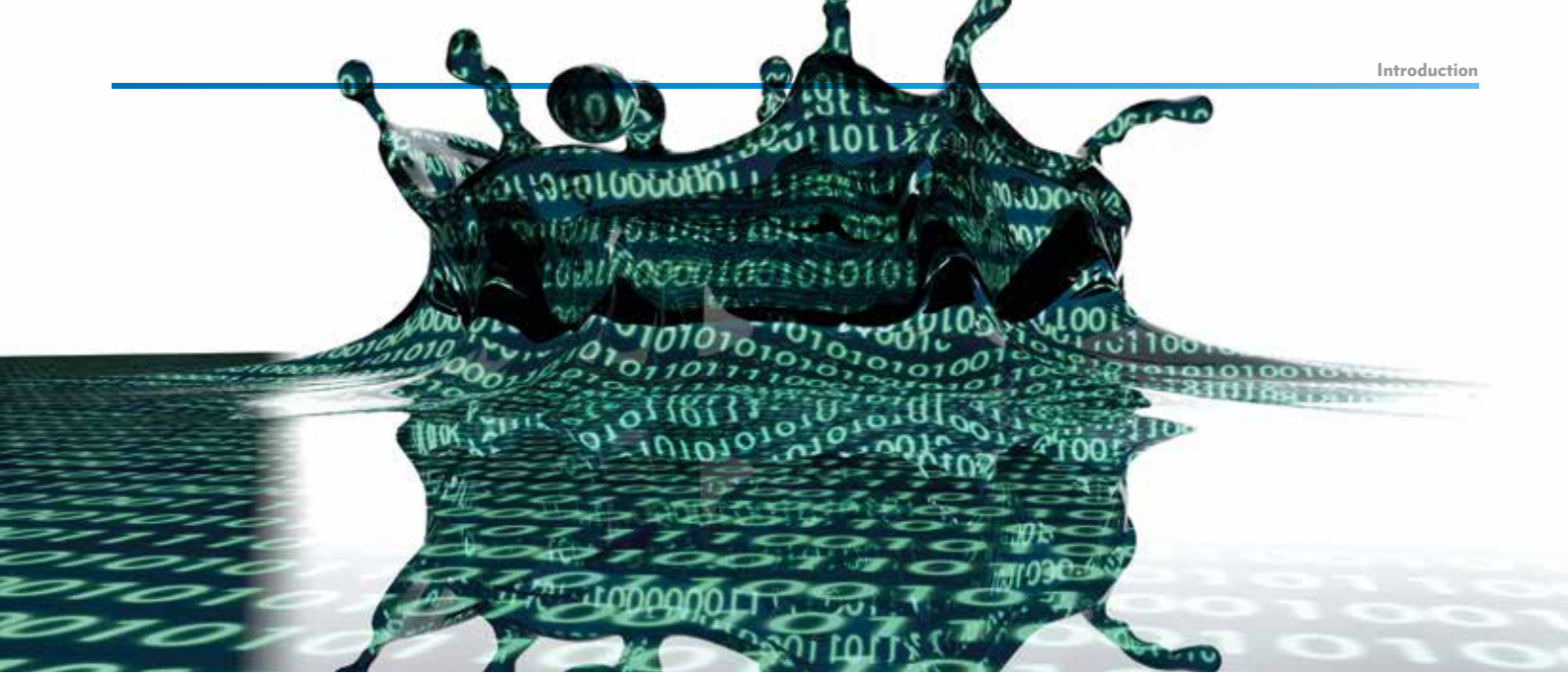

Beware data, not oil, spills

Leif Ollivierre asks us to consider the cost of cleaning up after a data spill in shipping

Leif Ollivierre

According to *The Economist* in 2017, the world's most valuable resource was no longer oil, but data. What does this mean for the shipping industry? Well, shipping is entering a brave new world, as the technology revolution 4.0 cranks into full throttle. Data and information will power the next generation of shipping organisations, not bunkers. This is led by tech-economics reshaping how shipping organisations globally operate, communicate and market themselves. The mass adoption of digitalisation, Artificial Intelligence, Internet of Things (IoT) devices, and automation is leading the way.

The vision of shipping's future is not limited to autonomous ships, trucks, cranes or smart ports but a whole new automated global supply chain. This creates a new frontier for companies to innovate, compete using unique new business models, reshaping and creating entirely new shipping businesses. Consequently, intangible assets such as databases, operational technology, IoT networks, information and communications technology will soon provide new significant value added to most shipping organisations.

But with new opportunities comes new risk, most importantly, cybersecurity. Shipping companies whether ship side or shore side will be exposed to cyber risk on a weekly, daily, hourly and even on a transactional basis. Over the last five years, the level of sophistication and complexity of cyber-attacks has exponentially increased. Attacks are aimed at inflicting damage to property and operations by taking over industrial control systems. Recent high-profile incidents have seen cyber-attacks on major ports, shipping and shipbroking companies.

In 2017 the cost of the successful NotPetya cyberattack on AP Møller-Maersk was over $300 million in lost revenue as the ransomware attack prevented employees and customers from accessing their systems. In five weeks Maersk had to rebuild its core IT capability, this included over 60,000 laptop builds, upgrading Windows 10 globally, server infrastructure reconstruction, implementing a world-class security monitoring system and restarting the world's most automated terminal in nine days. Cleaning up this cyber breach was almost as expensive as the cost of cleaning up the *Hebei Spirit* oil spill in 2007.

Protection essential

With the increasing level of cyber risk present, the shipping industry needs to fundamentally rethink its approach to cybersecurity. The myth is that cybersecurity is just a problem for the IT department. This is not true. It is a matter of concern for the entire organisation. The reality is that, cybersecurity will become a critical success factor for the survival and growth of most shipping organisations. Therefore, organisations need to adopt a strategy of layered cybersecurity controls, with each layer supporting the others and designed to contribute to a balanced combination of physical, technical and organisational approaches. Comprehensive advice on combating cybersecurity attacks in now provided by the International Maritime Organisation, BIMCO, classification societies, P&I clubs and ISO/IEC 27001. The IMO MSC.428(98) gives shipowners until January 1, 2021 to incorporate cyber risk management into a vessel's SMS code safety management. Vessels in default may be detained. Interestingly, many insurance policies specifically exclude losses or liabilities arising as a result of cyber risks using the Institute Cyber Attack Exclusion Clause (CL 380), but at present The International Group poolable club provides cover.

Additionally, in Europe, data breaches can incur large fines. The General Data Protection Regulation sets a maximum fine of €20 million (about £17.5 million) or 4% of annual global turnover, whichever is greater, for infringements. This will only add salt to the wounds of shipping companies already devasted by a successful cyber-attack. At the end of the day, data and digital assets are becoming significantly more valuable and vulnerable. Hence, cybersecurity is everyone's concern. Ignoring it can be costly. The cost of cleaning up a cyber-attack or data spill can be as large as that of an oil spill, plus large fines. Well, that is fitting: as data becomes the new oil powering the engines of the next generation of shipping organisations, we need to protect it. All aboard shipping 4.0. **SN**

Leif Ollivierre FICS is a lecturer and examiner for the Institute and is CEO of Naxxar Technology.

A tech-propelled journey

This *Shipping Network* arrives with you at one of the strangest times we have collectively faced. What makes this time of pandemic all the more unusual is that we are all facing exceptional Covid-19 related strains on our work and personal life, no matter where in the world we call home.

This period has demonstrated the importance of technology to support business continuity as well as facilitating non-physical contact with friends and family. This is particularly true for the shipping sector, which, prior to the pandemic, had been painfully slow in taking up the digital mantle. Now we are seeing growing evidence of a surge in digital progression.

This tech-focused issue of *SN* highlights the increasing importance of technology to shipping and how it will shape our industry in a post-Covid-19 world.

The Institute has also risen to the call and fast-tracked its planned Online Academy so that students can still access learning resources and expert knowledge even in lockdown. Our Branches have been proactive too, beefing up webinar programmes to ensure that members are able to maintain their continuous professional development through this pandemic.

I urge you to take advantage of these learning opportunities, facilitated by tech take up. And when we emerge from this pandemic, don't stop your technology-fuelled learning journey; you'll need it to keep pace with shipping as it finally gets serious with digital. ***SN***

Carly Fields, FICS
Editor

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"Technology by and large has immensely changed the way shipping and maritime activities are conducted."
Elijah Mbaru, operations manager at Pacific International Lines (PIL)

Credit: Wilhelmsen/Airbus

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Time for tech to shine

Technology is transforming the way we approach efficiency, health, safety and security. Felicity Landon reports

Felicity Landon

In our brave new digital and new-tech world, drones can deliver spare parts to ships or carry out inspections in hazardous areas; sensors can tell us about fuel consumption or alert us early to a fire; interconnected IT systems can enable users to track the progress of their cargo or track mis-declared cargoes; and, in the current pandemic, technology is enabling digital services to step up and millions to work from home in order to slow the transmission of Covid-19.

Topic: Technology

Key words: Step-change, Growth, Covid-19

Background info: The pandemic has forced an overdue reassessment of clunky manual processes in shipping

"Technology by and large has immensely changed the way shipping and maritime activities are conducted," says Elijah Mbaru, operations manager at Pacific International Lines (PIL) and the Institute's East Africa Branch secretary. "With modernisation taking shape, all ship owners and other practitioners require top-notch technology. For example, instances of cybercrime and hacking into systems, as far as cargo documentation is concerned, have been stopped by technology. Take the example of blockchain technology that is tamper proof – this a living example of how technology has halted cybercrime."

The number of stowaways has been and will be further reduced by technology, adds Mr Mbaru, given that information can be easily passed on and personnel onboard can be trained in the technology to curb this problem. "The various regulations regarding stowaways can be attained online and the master and crew are better informed on how to handle such incidents."

Similarly, he says, terrorism has been halted or mitigated, now that most shippers, ship owners and seafarers are technologically trained to detect and handle incidents. And, thanks to technology, at the click of a button it is very easy to communicate on disease outbreaks and to get online information on treatment.

Varied take-up

But is the ports and shipping industry making the most of these opportunities? Or, indeed, is the industry taking enough interest? The short answer is yes, but only in some areas.

Mr Mbaru notes that the maritime industry has leveraged technical advancement in digitalising transactions between seagoing and shore-based operations and staff. These are improving day by day.

"The ports and terminal plus shipping fraternity are fully taking advantage of technological advancement not only by easing cargo operations and documentation but also in cargo

Shipping company AAL managed to avoid disruption to its business during Covid-19 thanks to harmonised cloud technology systems

Credit: AAL

Shipping finally ready for SafePort

Madrid-based consultant Siport21, which specialises in the installation and implementation of ship manoeuvring models and simulators, is drawing on years of historical data and information to set up SafePort, a 'Smart System for the Evaluation and Control of Maritime Safety in Port Access and Operation'.

Designed to provide terminal and port operators or authorities with decision-making tools to support safety, efficiency and emergency response for ship operations, SafePort combines simulation and modelling, integration of different digital methodologies, data collection and analysis, and prediction through machine learning algorithms.

José Iribarren

José Iribarren, managing director of Siport21, says the system is a big step towards the digital twin of a port or terminal which will change the view of port authorities and operators.

Siport21 has been involved in hundreds of projects developing new port infrastructure around the world. The technical studies involved produced far more detailed and operational information than was needed for the specific design and construction of the facilities, says Mr Iribarren.

"We have enormous experience in more than 1,000 technical studies related to operations and navigation in very diverse port environments, across a huge variety of tidal influences, climate conditions, traffic, ship types and port configurations, so we have a very wide knowhow and huge amount of data from 21 years," he says.

Credit: Siport21

Siport21's SafePort system is a move towards creating digital twins of ports and terminals

"We can take advantage of this relevant information and provide operators with detailed and precise criteria for the operation of ships in ports – loading, unloading, emergency response – all of this is the basis for developing SafePort."

He says Siport21 first looked at developing this type of system about 15 years ago but the market wasn't ready for the concept – port authorities were not particularly responsive – and the IT tools required to analyse the data were not so easily available or affordable as they are today.

With more sophisticated and less expensive IT instruments now easily available, and ports overwhelmingly seeking to improve and optimise their operations and safety, SafePort appears to have come into its own. Earlier this year, SafePort was granted funding from the EU's Horizon 2020 research and innovation framework programme. **SN**

"The digital agenda is now at the forefront of everyone's mind,"
Richard Morton, IPCSA secretary general

tracking. For example, in Kenya all transit units, i.e. those that are meant for our neighbouring landlocked countries, are fitted with gadgets for monitoring purposes, to prevent diversion to local markets."

At the Port of Mombasa, the Kenyan Revenue Authority has installed scanners at strategic gates in order to curb misdeclaration, contraband and other illicit goods. "Records show this has reduced misdeclaration and smuggling by 90% and above, which is an absolutely commendable job well done."

In addition, Kenya Ports Authority now requires all port users to register under its biometric system. "Only those authorised personnel with passes can access the port – this has greatly reduced theft inside the port," says Mr Mbaru.

Alongside this, Kenya's coastguard has boosted its fleet with state-of-the-art patrol boats. These have the technology to identify suspicious or rogue boats and other undesired activities off the Kenyan coast, says Mr Mbaru, "saving our indigenous fishermen and reducing threats to our coast".

PIL, meanwhile, has introduced a liner management system to meet customer demand and improve employees' workflow, while also curbing cybercrime.

But there are still challenges to overcome and education is a one of the greatest. Mr Mbaru would like to see shippers and terminal operators, plus those working in shipping companies and freight forwarding, with a grasp of how the logistics chain and supply works. "We know that all the links are interdependent – if one is slacking, the chain is broken. It's vital therefore for all those undertaking the cargo movement, from ex-works to the time the cargo or commodity is on the shelves, to critically understand their role. For this to happen, they must learn what technology comes up with, and accept change."

Tech accelerator

The spread of Covid-19 has prompted dramatic changes in the way we work, and, in some cases, it has acted as an accelerator in what had been viewed as slow moves towards digital solutions.

Members of the International Port Community

Finding a fix for fires

One of the main causes of engine room fires is lube oil or fuel oil mist spraying on to hot surfaces and then igniting. Fike Corporation has developed a solution which combines shipboard camera networks with its own video analytics to provide early detection of oil mist, smoke, flame and also reflected flame.

The system, which can be monitored by shipboard personnel and linked to automation and safety management systems, allows critical time to take action before disaster occurs, says Rick Jeffress, Fike's business development director.

Fike's video analytics software, installed in onboard servers that are connected to the CCTV camera network, was developed with artificial intelligence and machine learning algorithms; it monitors the light level, colour changes and other signatures across all pixels in the field of view of the cameras.

The video is analysed at a rate of 15 frames per second by the software for signatures of smoke and oil mist, flame and reflected flame. If a detection is confirmed, a signal is sent to the monitoring equipment, triggering an alarm. Live video from the relevant camera is displayed on a computer monitor or large screen, and this includes analytics overlay as well as an indication of the type of event, location and time at the bottom of the screen, says Mr Jeffress.

Fike's system has been installed on cruise ships, naval vessels, bulk carriers, oil and gas platforms and others. The corporation is also a partner in LASH FIRE, an EU-funded project for early detection of fires on the enclosed vehicle decks of ro-ro ferries. Managed by the Research Institute of Sweden (RISE), the project is evaluating smoke detection and video alarm technologies for these vessels. *SN*

Wilhelmsen was one of the first to introduce drone deliveries to ships

Credit: Wilhelmsen/Airbus

Systems Association have been exchanging their Covid-19 experiences during a weekly 'e-coffee' Zoom meeting. "The digital agenda is now at the forefront of everyone's mind," says secretary general Richard Morton. "Digitalisation has, first and foremost, given people the ability to work from home."

Jerome Besancenot, chief information officer at the Port of Le Havre, adds: "Working at home is something very new and we are making a lot of progress digitally. I think when the crisis is behind us, we will identify what were the opportunities regarding improving business processes." This will inevitably lead to new ways of working in ports and elsewhere, he says.

Gadi Ben-Moshe, chief information officer at Israel Ports Company, says his company reaped the benefits of having a digital company. "If it wasn't, then we couldn't work from home," he says. "However, many people suddenly learning to work from home is another thing. I am CIO, so responsible for PCs but also for the support of all the other employees in the company. We found that we needed more people in place than we had planned for, for the support of remote workers."

Israel Ports Company, which develops and operates the Israeli Ports Community System, recently launched a pilot project which uses blockchain technology for transferring bills of lading. This new approach is expected to deliver significant savings in time and money to all participants in the maritime supply chain, says Mr Ben-Moshe, while maintaining a high level of information security and preventing forgeries. "Blockchain technology enables the distribution of information among the process participants, greatly limiting the possibility of the information being penetrated and changed – thus maintaining the high level of information security required by the bill of lading holders," he says.

Digital mix

In the Philippines, the advance of digitalisation has been slower and many processes are still very much manual. As Penny Estrada, chief commercial officer at All Systems Logistics, says that before the crisis Customs clearance was still being done at the port with a person queueing for signatures. But the Covid-19 has "certainly expedited the need to go online".

At Singapore-based AAL Shipping, meanwhile, commercial director Christophe Grammare says: "Thanks to the harmonised cloud technology systems we implemented long before the virus outbreak and the speed of reaction from all of our people worldwide to emergency health and safety initiatives and new remote working protocols, we are pleased to say that all our departments are communicating effectively with each other, systems are working seamlessly and external partners are experiencing no interruption in our services."

Among innovative solutions that have come into their own is The Swedish Club's 'Trade Enabling Loss Prevention' (TELP) tool, which has been officially launched after a successful trial last year.

The P&I club is using AIS technology to track members' vessels and automatically identify any that are moving towards an area known to have particular risks – these 'hotspots' have been identified by analysing many years of the club's own claims statistics and information.

Whether it's a port known for difficulties with pilotage, towage or tricky Customs/Port State Control authorities, notorious for unfounded claims or dubious charges, or known for its navigational issues, challenging weather/tidal conditions or a high number of groundings or collisions, all of this information has been gathered within the TELP system. The system then automatically generates tailored advice relevant to the hotspot and sends it out about five days before the vessel's arrival.

Uptake of digital solutions is transforming the shipping industry

Credit: HPA

"The whole idea is it should be very specific and relevant to the particular ship in the particular destination," says senior technical adviser Peter Stålberg. "We have the information, from the club's meticulous record-keeping over years, for every cargo claim – what was involved and where and why it occurred. Our sophisticated document management system enables us to source all of the relevant information for a destination."

Such is the detail, the club has even been able to benchmark the speed of vessels entering a port – any correlation between speed and incident can be identified so that ships can be advised to take things slower if appropriate.

An initial 30 hotspots have been identified, but this will be continually re-evaluated, says Mr Stålberg. Day-to-day information provided by the club's local correspondents is integrated into TELP – so that advice on anything from a stevedores' strike to a missing buoy can also be passed on. In the current situation, this also includes guidance from correspondents regarding Covid-19 restrictions and working practices at specific ports.

TELP was piloted in 2019 and is now available free to all the club's members. The loss prevention team will be following its progress closely, to check its effectiveness, to establish whether crews actually respond to the advice (if, for example, there was still an incident), and to see whether claims are reduced in identified hotspots. *SN*

From lead lines to LIDAR

For centuries, hydrographic work was based on lowering a rope or line over the side of a vessel to establish the depth of water and the painstaking drawing up of paper charts. Today, those measuring water depth in ports and channels have access to a massive range of tech, and the industry is moving rapidly towards using only digital charts – which can, of course, be updated in real time as any changes occur.

The Port of London Authority's hydrographic department is responsible for measuring and predicting water depths, tidal heights and tidal flows along a 95-mile stretch of the River Thames.

The team has access to an increasingly high-tech choice of equipment, to provide geophysical, geotechnical and high-resolution echo sounder (MBES) surveying, side-scan sonar and LIDAR surveying, 3DChirp imaging, high-resolution photography and underwater photography and video. Gradiometer technology picks up magnetic fluctuations which help detect metal ordnance on the riverbed. Drones and ASVs (autonomous surface vessels) are used too.

For the past two years, the PLA has also been running ultra-high resolution seismic (UHRS) surveys for clients; these provide detail of the ground structure down to 100 metres below the river bed, allowing analysis of the geology in order to support feasibility studies and designs for marine structures, river crossings or other projects.

Digital flexibility also helps the PLA's pilots – when they board ships, they carry tablets on which they can see real-time tides and updated electronic charts. *SN*

Credit: PLA

PLA pilots are supported by digital tools

Virtual view

Hamburg Port Authority is using virtual and augmented reality (VR and AR) in its planning and development – to 'see' a project before it is built, understand how it will fit into its surroundings, assess how it will impact on traffic flows, and plan for future maintenance.

Dr Phanthian Zuesongdham

"Visualising a proposed project or new infrastructure in 3D is extremely valuable for cost and time planning," says Dr Phanthian Zuesongdham, head of HPA's smartPORT programme. "This enables us to 'view' construction options, including the metadata, characteristics and components, in order to deliver the most efficient solution.

"You can build a digital twin so that, through VR and AR, people can really imagine a project that has not been built and see how it will fit into its geographical location and the current scenery."

Spinview, a US-based specialist in immersive media, is leading on VR technology which can enable key personnel from different locations to carry out a virtual inspection as a team, of a hazardous or difficult to access location. Each person's avatar drops into the virtual space, where they are able to communicate and work together.

In another dimension

ABS surveyors have switched from 2D drawings to 3D digital models for class surveys, in a successful pilot project run with ship designer and builder NASSCO.

The 3D digital models used for the simulation of new construction surveys on several steel blocks can be viewed by surveyors in ABS software remotely and in real-time.

This approach can save up to 25% in design time by allowing the designer or a shipyard to eliminate 2D drawings, and also reduce the time required to train shipyard craftsmen, says ABS, which has announced it is now able to fully support 3D model integration into engineering and survey.

Tim Glinatsis, NASSCO vice president of engineering and chief information officer, describes elimination of 2D drawings from the design and construction process as "very appealing".

Winners experiment most, fastest and cheapest

Klaveness Digital's Tim Polson maps out the company's digital journey

Tim Polson

We at Klaveness are pioneers and have challenged the status quo in shipping from our inception. Early innovations include being the first to carry cement in bulk in 1961 and pioneering shipping pools in 1963. A drive for innovation is part of our DNA: most recently, we established software company Klaveness Digital and combination carrier operator Klaveness Combination Carriers (KCC) in 2018.

Topic: Digitisation

Key words: Software, Cost-saving, Collaboration

Background info: Digital pioneers look for solutions to shipping's problems and encourage others to do the same

The creation of 'K-Lab' in 2015 marked the first step of our digital journey, an initiative aimed at providing the most useful and intuitive digital services in shipping. From this grew Klaveness Digital, now a separate company offering software as a service solutions such as CargoValue. CargoValue is an intelligent logistics platform designed for industrial companies sourcing and shipping raw materials at sea. It helps them reduce the costs, risks and CO2 emissions related to shipping and logistics through real-time, actionable data. Common questions from maritime professionals are: 'do we spend a fortune on digitising for the sake of digitising?' and 'what are the benefits?'.

Credit: CargoValue

Klaveness Digital developed CargoValue for industrial companies sourcing and shipping raw materials at sea

Both are very good questions, especially considering alternative uses for the time and financial outlay required to digitise. We believe that digitisation is dynamic; there is no 'big bang', rather a series of many small 'bangs'.

Identify the quick wins

Our journey began with mapping the organisation's processes, identifying low hanging fruit (problems that can be solved with existing solutions) and gaining small but regular wins. Valuable lessons were learned from initiatives that did not result in a win. Sharing these lessons and other knowledge has been key to a successful digital evolution. Klaveness' technological initiatives all stem from team members recognising something internal or external to the organisation that could be improved, and the organisation working together to find a solution.

An example of this is the recent collaboration with DNV GL and Arundo Analytics on implementing the Veracity data platform on board Klaveness vessels. This platform provides a crucial link between data generated by sensors on board vessels and shore-based teams who are charged with managing these vessels efficiently and effectively. Operations teams ashore can use these insights to make more effective decisions on items such as when to drydock vessels, when to order mechanical parts and which suppliers' materials are performing best. Shipboard team members can also use these insights to operate the vessel more effectively and communicate requirements more clearly with shore-based functions. An example could be the ship's crew justifying the need to dry-dock earlier than planned, based on data-driven insights showing hull growth being higher than expected due to unforeseen time anchored in tropical waters.

These digital optimisation initiatives save considerable costs both for Klaveness and our customers. However, achieving cost-saving is only the beginning of the digital transformation journey. The most significant benefit of digitisation is increased capabilities to serve our customers' needs. This strategy is not a new concept in shipping: the master of a 17th century East Indiaman galleon had little opportunity to make his vessel perform mechanically better than the hundreds of other similar vessels, but he could study weather and tide, learn from others' mistakes, set his rig according to performance indicators and navigate his course better than others. The reward is reaping the highest price for delivering the freshest produce of the season first. Klaveness aims to identify challenges, democratise the data related to those challenges so that the data tells a story about the challenge, then go about solving it and thereby challenging status quo.

Understanding pain-points

Looking ahead, Klaveness Digital represents a refreshed strategic direction for the group where the next objective in the digitisation journey is sharing knowledge with the wider industry. Klaveness studied bulk material producers' and receivers' supply chains over several years to develop its supply chain solution CargoValue. A key finding was that many of these companies use spreadsheets, antiquated enterprise resource planning systems and manual processes to co-ordinate high-value, time-sensitive shipments. Most rely on email and phone calls to

Klaveness Digital during a design sprint in January 2020

transmit shipment-critical information, meaning staff and management are overloaded with transactional tasks and potentially hundreds of different versions or variations of a single piece of information. Take a simple estimated time of arrival (ETA) update: a port agent provides an ETA update to a bulk receiving company's port operations team (eight people) who forwards it to the chartering team (four people), local transport co-ordination (six people), local sales team (seven people) and local accounts payable team (three people). That is one piece of information multiplied 28 times, which is a benign piece of data that will be out of date as soon as a new ETA update comes, maybe a few hours later. It is hardly surprising that when changes occur, for example a normal 24 hour delay due to weather, the organisation struggles to respond quickly enough to avoid unnecessary costs. The bullwhip or ripple effect from a 24-hour delay not being quickly and accurately transmitted can cost tens of thousands of dollars, and this may happen several times a month. CargoValue is a platform for all stakeholders in this equation to have real-time information available all the time, be able to manipulate that information and make intelligent, proactive decisions, thus avoiding unnecessary waste.

Debunking myths

Klaveness' research has also debunked a common misconception that intermediaries are a source of waste in bulk commodity supply chains. Quite the opposite, given the right digital tools an intermediary is more valuable than ever in a maritime supply chain. Many brokers are CargoValue subscribers, one of whom recently said in a customer review session: "CargoValue lets us provide better service to customers, it has helped us onboard new customers and receive more bookings from existing customers."

> "The most significant benefit of digitisation is increased capabilities to serve our customers' needs"

One of their counterparties, also a CargoValue user said: "We were assessing multi-million dollar infrastructure upgrades and system-implementations to solve supply chain problems … but so many of these challenges were solved by simply collaborating more effectively with our broker. CargoValue has been the enabler for this." This is in line with the Klaveness mantra of mapping a scenario, identifying problem areas and developing digital solutions to address those problems. There is no sense in building a whole new berth to avoid demurrage when the real problem is lack of information transparency, solved for a fraction of the cost.

To maritime enterprises yet to begin their digital transformation journey, we encourage them to do so with haste, starting with small but regular improvements. To those whose journey is already underway, we implore digital initiatives to be prioritised higher on the agenda. Performance gains from democratising and manipulating data are real and measurable. When employees are armed with improved visibility into their company's operations, they can identify more areas for improvement and opportunities to adapt, and so the benefits from digital transformation snowball. ***SN***

Members interested in the full details of Klaveness' digital journey can find out more here: www.klaveness.com. Tim Polson MICS is business development manager in Klaveness Digital and can be contacted on tim@klavenessdigital.com.

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Time to put an end to the paper trail

Bolero's Jacco de Jong explains why Covid-19 could prove to be the tipping point for acceptance of e-bills

Jacco de Jong

The Covid-19 pandemic has made everyone in shipping, both import and export, think again about the need to digitise key documents required for global trade. In response to the disruption caused by the pandemic, a variety of ad hoc tactics have been employed in different corners of the world, as authorities seek to ensure trade continues. In some, vessels are being cleared remotely and important documents exchanged by email, with little regard to security or risk of fraud. In others, some terminals are under lockdown and others have waived the normal rules in order to speed up turnarounds.

Topic: eBills

Key words: Electronic transfer, Digital, Security

Background info: The Great Lockdown should prompt a re-think on shipping's archaic dependence on paper documentation

"Electronic bills of lading require a tenth of the time it takes to process their paper ancestors"

Major adverse events almost always have complex consequences for international trade. But Covid-19 has exposed how vulnerable trade is through its continued reliance on paper versions of the documents essential to export and import.

Consequently, the pandemic will most certainly trigger a wave of investment in digital trade technologies, including the adoption of platforms for the electronic transfer of critical documents such as bills of lading, letters of credit, and letters of indemnity. Banks, carriers and corporates will grasp how digitisation eliminates so many of the problems that go with paper documentation.

The main problem with paper in times of crisis is that when nations impose sudden restrictions on the physical movement of goods and people it means that couriers cannot move - nor can the documents they carry. Similarly, if office staff (at either end) are absent for prolonged periods through illness or quarantine, all the creation, checking and dispatching of these documents grinds to a halt.

In a digitised workflow, however, automation takes care of the data uploading, while transfer between parties is at the click of a mouse across secure digital networks. Compliance checking, too, can be automated, and if an advanced digital platform is in use, it will ensure documents remain visible, unlike paper versions which disappear from view in transit. Encryption and audit trails built into such platforms also reduce the many opportunities for fraud and forgery offered by paper documents.

eBill importance

All of these attributes are hugely beneficial at any time, but especially when global trade is under stress. Take the bill of lading, for example, which is such a pivotal document. Bills of lading are documents of title and confer ownership of cargo.

When the bill of lading or, where necessary, a letter of indemnity, is unavailable, shipowners may be unwilling to release the relevant cargo. This situation should never arise when electronic versions are transferred at the speed of the internet. But with paper documentation processes, it too often does.

Also, even if the electronic chain 'breaks' in an e-bill of lading scenario, the efficiency and risk-reduction gains are still evident. This is because the breakage often only happens at the country of destination, where it's easy to reconvert back to a paper bill of lading, right then and there. It means that a paper bill of lading can still be quickly surrendered and the transaction completed without delay.

Even in normal times, cargoes often sit in port awaiting the arrival of paper documentation, heightening the potential for demurrage penalties. This is especially true on shorter routes. Research, however, has revealed that electronic bills of lading require a tenth of the time it takes to process their paper ancestors.

The use of rapidly transferred electronic bills of lading, letters of credit, documents, guarantees and letters of indemnity, also reduces the incentives to flout legal requirements in favour of quick turnarounds.

In addition, digitisation turbocharges the financial supply chain, connecting exporters, carriers and importers. When bank branches suspend operations to reduce the spread of infection, for example, letters of credit may not be issued in time to meet the payment requirements for goods.

We now appear to be an era of more powerful storms, increased trade friction and virus outbreaks, all of which should stimulate corporates, banks and carriers to think much harder about digitising trade finance documentation.

The outbreak has prompted the adoption of remote working solutions around the world. Global trade should undergo a similar digital transformation and end its age-old dependence on paper, which only serves to increase risk and delay.

The digitisation of trade finance documents cannot eradicate all the problems caused by epidemics or regional disputes, but it will make trade far more secure, much smarter and faster at any time. **SN**

Jacco de Jong is global head of sales at Bolero International, pioneers of secure, end-to-end, cloud-based services acrossthe entire global supply chain. Find out more at www.bolero.net.

The ultimate risk management tool

Consortium Maritime's Philippe van der Abeele explains the simplicity of hedging for shipowners

Credit: tradewinds

Philippe van der Abeele

The introduction of freight derivatives products in the mid-1980s was meant to provide a safe financial mechanism for companies exposed to the volatility of freight prices and associated price risks of running physical books. The market started on the Baltic Exchange floor in May 1985 and the financial performance of these futures contracts were guaranteed by a clearing house, a financial institution that made sure that everybody paid their bills and monitored the financial exposure of every market participant on a daily basis. These were the archaic but rather pioneering days of the Baltic International Freight Futures Exchange (BIFFEX), where counterparty risk was virtually eliminated by the London Clearing House (LCH).

In the early 1990s the marketplace evolved from a small cleared market into an over-the-counter swap market with counterparty/credit risk attached to every transaction. This is where freight derivatives trading started to grow massively, but also where the seeds of potential defaults and bankruptcies were planted. As we switched from a cleared broad based index with many different routes and varying ship sizes to a small number of specific contracts linked specifically to large volume physical trades like US Gulf/Japan 54,000 tons of heavy grains, soya beans and sorghums (HSS), risk management took a wrong turn. The large commodity trading houses had no desire to be faced with clearing house margin calls and strongly defended the freedom of trading without a safety net. Even if a safety net was in place, sometimes they were not worth the paper they were written on.

Topic: Weather

Key words: Storms, Strikes, Safety

Background info: Machine learning could help avoid the dramatic and sometimes fatal damage to ships and port infrastructure from lightning

There is a knowledge gap between shipowners and their major clients on the usefulness of derivatives

The introduction in the late 1980s of time charter indices for capesizes, panamaxes and supramaxes were the next catalysts of expansion and worldwide acceptance of freight derivatives.

From the mid-1990s up to the financial crisis in 2008 the forward freight agreement (FFA) market in dry bulk just kept on growing - without any major involvement of a clearing mechanism. When 2008 hit the world, close to 90% of all FFA transactions had a credit risk attached to them and no clear mechanism or trade registration process to assess the overall exposure of the market place. All hell broke loose in November of that year after the dry bulk market had dropped more than 80% from its high in May, and counterparts defaulted on their FFA contracts one after another. By the end of 2008, a large number of shipping entities had gone bust and more than $750 million had vanished from balance sheets.

Shifting risk

Since then, the world has changed quite radically. Clearing has been introduced across the vast majority of freight derivatives products as the risk shifted from individual entities to central clearing systems controlled by some of the major financial institutions and ultimately backed up by central banks.

The issue today is more about the comparative knowledge gap between shipowners and their major clients, the buyers of freight capacity like grain and commodity trading houses. Grain houses have for the last 30 years used financial products to hedge the majority of their supply chain risks, therefore adding freight to the gambit of products already used was an easy step and one they have exploited well over the years. Shipowners on the other hand have taken much longer to integrate the concept of derivatives hedging in a meaningful and professional way. This ultimately puts them at a considerable commercial disadvantage – as if life wasn't challenging enough these days with IMO2020, AIS manipulation, increasing regulations, pirates and so on.

In order to illustrate my point of view I have created a simple example that was presented and partially applied by a shipowner in 2019. The numbers I have used are relevant to today's prices but rounded up to make it easier to follow.

Let's assume the Baltic's spot capesize 5TC index stands at $6,000 per day. The fleet we are looking after consists of 20 modern capesizes aged between two and seven years; 20 vessels with average deadweight of 180,000 tons, so pretty close to the Baltic's standard capesize description. The period to potentially hedge is Q3 and Q4 of 2020 and calendar 2021. This equates to 540 days. Times that by the 20 vessels and that gives a risk/exposure of 10,800 days at sea.

Now let's assume for the sake of simplicity that the whole fleet

FFAs can help ship owners improve their cash flow position

trades on the spot market. The operating and capital costs will be as follows:

• Fleet operational expenditure is $7,000 per day with required operational expenditure cash flow: 10,800 days x $7,000= $75.60 million

• Financing costs are $6,000 per day with required financing cash flow: 10,800 days x $6,000 = $64.80 million

Therefore fleet operational expenditure plus financing costs CFR = $140.4 million. A spot market at $6,000 per day is obviously not going to give the shipowner sufficient cash flow to produce a positive number. The income will be $6,000 X 10,800 days, so equal to $64.80 million. Take this from the operational expenditure and financing costs above and you get a shortfall of $75.6 million per year.

Power of forwards

Now let's look at the financial power of the FFA forward price curve, as the forward timecharter prices offer a professional risk management tool for dry bulk shipowners. These are the parameters:

- Q3 2020 = $14,000
- Q4 2020 = $14,500
- Calendar 2021 = $13,000

Therefore the average for the next 18 months evenly spread is $13,417 per day. To find out the potential cash flow improvement we take the timecharter spot rate from the FF forward curve: $13,417-$6,000 = $7,472 per day. Multiply this by the number of days (10,800) and the total cash flow improvement is $80.70 million. Finally, we can find the net cash flow hedge from 1/7/20 to 31/12/21 but subtracting the cash flow shortfall from the cash flow improvement: $80.7 million-$75.6 million = $5.12 million of positive cash flow.

You could question whether the ship operator needs to hedge 100% of the risk. The custom of the trade is that depending on the quality of the hedge, that is to say the amount of positive cover related to the overall cost of running your ships, you hedge more or less. If the forward curve is historically high compared with the average of the last 10 years then you should hedge up to 50% of your risk. If, on the contrary, the forward curve is still in contango (when the spot price is lower than the forward price) but below that average I would not recommend hedging more than 25%.

By using the FFA forward curve correctly the shipowner in this fictitious, but based on a real case, example has vastly improved his cash flow position compared with just trading the vessels on the spot market. The reality lies somewhere in the middle of my example as shipowners do take cover on the physical market by fixing out some of their tonnage on longer term time charters with the added twist of FFA linked performance contracts. But the quality of their counterparty remains of the essence as they expose themselves to credit risk. **SN**

Philippe van den Abeele is chief investment officer at Consortium Maritime Trading Limited, a virtual shipping trading platform that trades in the maritime freight derivatives arena. Find out more at www.consortiummaritime.co.uk.

Doubling down on investigative scrutiny

The International Maritime Bureau's David Cuckney discusses the challenges of modern-day shipping fraud investigations

David Cuckney

The ever-changing modus operandi of fraud creates a unique challenge for any investigator. Fraud investigations are often complex and can span numerous jurisdictions; perpetrators, victims and those investigating are seldom in the same place. New, increasingly complex, financial instruments and payment mechanisms can trouble even the most experienced financial investigators.

Topic: Fraud

Key words: Fakes, Forgeries, Investigation

Background info: Shipping's international 'fraud fighter' sees challenges ahead as a recession looms

The primary aim of any investigation will always be to recover losses but following the money across national borders is notoriously difficult. It is equally important to identify who has illegally profited, how they have done so and prevent it happening again. Technology and data analysis play a significant part in modern fraud investigations but ultimately information is king. Large amounts of relevant data can now be accumulated, creating a bigger information pool for the investigator to analyse. It is worth stating here that investigators must always remember to adhere to relevant data and privacy laws in all their actions to ensure the evidence gathered has been legally obtained.

There is an increasing amount of personal and commercial information available from the public domain, social media posts, corporate LinkedIn accounts and even press releases often contain a wealth of data that assist in the creation of this data pool. Social media network analysis is now commonly used to establish links between people and companies and is an important tool for both customer due diligence checks and investigators alike.

Ultimately, an investigator's reports may need to be presented to courts which are increasingly relying on digital documents projected on screens in the courtroom during a trial. In any case, fraud cases today may have thousands of documents in evidence. It would be difficult to understand the detail and scale of the fraud if it were to be presented only in a hard copy documentary format. It is therefore important that investigators are familiar with modern digital documentary archiving techniques which can more easily be incorporated into evidence bundles used in the trial.

Believable fakes

While open source intelligence can be valuable to the investigator, one must remember that this information is also

Information is 'king' in shipping fraud investigations

"The IMB regularly detects a number of false documents being presented to banks which would not be detected through superficial checks into the movement of vessels"

available to fraudsters who can use it to better create an illusion of legitimacy. There are countless examples, ranging from using personal data to impersonate banks to convince victims to reveal PIN numbers or transfer money to other accounts to unscrupulous trading companies who use fake documents, using publicly available information, to obtain trade finance from banks.

The International Maritime Bureau (IMB) specialises in identifying the latter scenario, which today poses a unique challenge to the bank's compliance departments as vessel movements and details of cargo operations are increasingly available online, enabling the creation of fraudulent documents that appear very genuine. These fake shipping documents can, and do, pass many of the bank's basic due diligence checks. This is even more relevant in the current climate where companies may have to relax their information security policies to enable employees to work remotely.

A recent investigation conducted by the IMB concerned a large shipment of bitumen allegedly shipped from Malaysia to Bangladesh. Inquiries found the named vessel did indeed sail from Malaysia, bound for Bangladesh, on the date the bill of

lading was issued. Further checks identified the cargo was shipped from Iran on a different vessel entirely thus breaching sanctions regulations. The vessel name on the bill of lading had been misrepresented and, using publicly available vessel movements, a suitable replacement was found whose movements would disguise the fact the cargo was exported from Iran.

An unfortunate consequence of the 2008 financial crisis was that many banks closed their commodity trading desks. A number of those previously employed found work in commodity trading companies or in some cases started their own. While the majority of these are legitimately run, an intimate knowledge of banks' compliance procedures would certainly have benefited the more unscrupulous of these traders.

A major part of the IMB's daily work concerns the authentication of shipping documents such as bills of lading and air waybills that have been presented to banks. The IMB regularly detects a number of false documents being presented to banks which would not be detected through superficial checks into the movement of vessels.

Another recent IMB investigation centred on a respected Singaporean palm oil trader. It was quickly established that the trader was in financial difficulty and in the process of reorganising the business. Further inquiries quickly found multiple sets of 'original' bills of lading had been presented to several banks by this unscrupulous trader for financing. The bills were seemingly identical to the originals, including the signatures and endorsements on the back. The shipowners confirmed that while the bills appeared identical to the originals, the cargoes had already been discharged and the genuine original bills of lading had been surrendered to them. In some cases, it was confirmed the unscrupulous trader had no role whatsoever in the genuine transaction, further raising questions as to how this trader managed to produce multiple sets of false bills of lading, which on their face, looked genuine.

Due diligence importance

Times of financial uncertainty regularly lead to a rise in fraud and already there are predictions that Covid-19 will likely lead to another global recession. In these challenging times, even well established, highly regarded counterparties can be tempted to move into greyer areas to continue trading and meet their obligations. In these cases, the use of trend analysis is vital to provide an early warning that all may not be well. A trading house moving into new or unrelated commodities or seeking to change their current financial arrangements should be a red flag to any bank. Likewise, any counterparty requesting a significant change to the status quo may also be cause for concern (although this should be analysed on a case by case basis when considering the Covid-19 pandemic).

In these scenarios customer due diligence becomes even more important. It is only by knowing exactly what to expect from your clients and their counterparties that you can then identify unusual behaviour. All information on the shipping documentation referred to the IMB is recorded in our secure, confidential database and is a vital trend analysis tool available to our members. This enables the IMB to provide deeper insight into past and present trading activities and operational performance of hundreds of thousands of organisations, vessel owners, charterers, carriers, importers, exporters and agents.

The nature of fraud has changed over the last ten years. Cases of buyers and sellers defrauding each other have largely been replaced by those involved working together to defraud a bigger target, usually a financial institution. This collusion is an ever-increasing feature in the investigations conducted by the IMB. What often appears to be an arms-length transaction may be a planned collaboration to obtain finance through misrepresentation. Several recent investigations have centred on trading houses shipping cargoes according to the documents presented, back and forth to related, but undeclared, subsidiaries. In some cases, the containers were not even opened prior to being shipped back. For each shipment, financing was sought from various trade banks. Offshore companies can be set up in a matter of hours and corporate bank accounts available in a few days and, despite regulatory changes, the use of shelf companies is still common. Before entering into any new venture, ownership records, financial statements and trading histories should be obtained and independently verified.

These cases present a unique challenge to the investigator who, when seeking the facts, must ensure the impartiality and genuineness of all information obtained. Information exchange with the parties genuinely involved in the transaction is vital to identifying the bad actors; in this respect the IMB rely on, and are grateful for, the co-operation of the wider shipping industry. **SN**

David Cuckney is assistant director at the International Maritime Bureau, ICC Commercial Crime Services. The International Maritime Bureau is a specialised non-profit making membership organisation of the International Chamber of Commerce, the world business organisation. The IMB was set up in 1981 to act as a focal point for the international trading community in the fight against international trade fraud and malpractice.

Technology and data analysis play a significant part in modern fraud investigations

A charged force on shipping infrastructure

Technology could help seafarers to strike lightning off their threat list, explains Vittorio Lippay

Vittorio Lippay

The maritime community has often reported that lightnings, the quickest of perils, seem to be much stronger over sea than over land. Amitabh Nag, associate professor of aerospace, physics and space sciences at Florida Institute of Technology (FIT), and Kristin Cummings, postgrad student at the US Department of Atmospheric and Oceanic Science, investigated the matter at FIT by timing the negative stepper leader or the electric channel from the ground of the surging lightning. As a proxy for the charges involved, shorter channel times characterise higher charges. The research supported the idea of higher stroke currents over the sea: cloud to ground (CG) first strike lightnings with 50,000 Ampere currents are two times more probable over the ocean.

Topic: Weather

Key words: Storms, Strikes, Safety

Background info: Machine learning could help avoid the dramatic and sometimes fatal damage to ships and port infrastructure from lightning

The shipping community faces lightning dangers on two fronts: because of the facilitating elevations of buildings on land, CG lightnings discharge more frequently there, ships, however, are the only elevated target for many miles on the oceans. Ports and other shipping facilities located on coasts are targets for the severe thunderstorms that formed over the seas, as they move landwards.

In just two examples of the effects of lightning strikes on port facilities, on a July Sunday in 1981, a CG flash struck the Japanese crude carrier Hakuyo Maru, which was ballasting at the Genoa Moltedo terminal. The accident caused five fatalities, a total loss, and significant pollution. In 2012, during a thunderstorm, a lightning bolt struck the 38,000 tonnes chemical tanker Bunga Alpinia that was loading methanol in the port of Labuan, Indonesia. The tanker exploded with three fatalities, two missing, presumed dead. Then in November last year, in the waters of Pini Island, North Sumatra, the trawler Restu Bundo sank as consequence of a lightning bolt, claiming the lives of four and one missing.

A 2017 research published by the American Geophysical Union, evidenced a further connection of increased lightning strikes to shipping. Joel A Thornton of the Washington University in Seattle and his co-workers examined ten years of data from the World Wide Lightning Location Network. They found that during the convective seasons the traffic over major shipping lanes between the Indian Ocean and the South China Sea enhanced lightning frequency by a factor of two. Thornton and co-workers hypothesised that aerosol particles from ship exhausts catalyse the aggregation of more water droplets to be lifted up by convection, thus leading to an electrification enhancement which causes more thunderstorms.

This phenomenon implies that vessels at sea are more in danger where they navigate frequently. Even milder events may cause damage to costly navigation electronics, communication or steering systems leading to fatalities and ship loss.

Nowcasting of lightnings

Lightning risks have historically been addressed with passive protection, but there is an evident advantage in knowing when and where lightning bolts will strike beforehand.

In a recent approach, Michael Tippett, chief data scientist at Columbia University, and his co-workers addressed the

convective potential energy and the precipitation rates of different zones to estimate the lightning number and locations in the US with a lead time of 15 days. In the US, the National Oceanic and Atmospheric Administration provides a thunder prediction map for up to four hours in advance for the US territory and adjacent American waters.

More interesting to shipping operations, however, is the development of nowcasting systems, which provide predictions and early warnings for lightning activity for between zero and up to one hour before the event.

In 2012, Gregory Seroka – at the time undertaking his PhD at Rutgers University, Richard Orville, professor of atmospheric sciences, and Courtney Schumacher, undertaking a E D Brockett professorship in geosciences, of Texas A&M University, used the radar reflectivity of ice summed within the heights at temperatures between -10 to -40 C (7 to 10 km of altitude) to provide lightning nowcastings over the Kennedy Space Center.

In the UK, GANDOLF (Generating Advanced Nowcasts for the Deployment in Operational Land-based Flood Forecasts) identifies convective cells via multibeam radar reflectivity and satellite imaging to predict storm precipitation dynamics with a lead time of between zero and three hours. The MetOffice, meanwhile, recently upgraded its weather radars to Doppler and dual polarisation capability: in a group directed by Dr Thorwald Stein, lecturer in clouds at the University of Reading, research scientist Ben Courtier showed in 2019 that 3D radar composite images may help determine when and where a storm reaches its discharging point.

In the East, between 2008 and 2017 the Chinese Academy of Meteorological Sciences perfected a Lightning and Warning System, known as CAMS_LWNS, which integrates data from different sensing systems including radars, satellites, ground electric field instrumentation plus a numerical simulation of an electrification and discharge model. LWNS provides warnings on a 24-hour basis with nowcasting capability over selected areas within China with lead time from zero to 1 hour. At a resolution of 5 kilometres, nowcasting accuracy is about 60%.

Machine learning hindcasts

More recently, in a new approach of interest to shipping operators, Knowledge Discovery in Databases (KDD) has been applied to discover meaningful patterns in large amounts of data. Machine learning using KDD can be applied to train a computer to recognise patterns in a past collections of data and use them to learn and draw meaningful conclusions from a new set of similar data, thus making predictions.

A Swiss team composed of PhD student Amirhossein Mostajabi and Professor Farhad Rachidi, head of the EMC Group of the Swiss Federal Institute of Technology, with Dr Declan Finney, a post-doctoral researcher within the Institute for Climate and Atmospheric Science (ICAS) at the University of Leeds, applied machine learning to test if four weather parameters commonly available to a weather station would provide enough information for artificial intelligence to formulate lightning nowcasts with a lead time of 30 minutes. The chosen parameters were those accessible using any modern personal weather station: air pressure at station level, air temperature, relative humidity, and wind speed. Experimental forecasts made on past situations for 12 locations in Switzerland yielded relatively accurate warnings with a short lead time for an area of 30 kilometres around the observation point: 76% of the long-range past lightnings threats were correctly predicted by the machine learning model up to 30 minutes in advance.

More importantly, predictions were made correctly without relying on pre-warnings of other detections in nearby territories or by other means, for example satellites.

In an interview with Shipping Network, Professor Rachidi gave one problem connected with the possibility of applying this technique to shipping: due to a fewer number of stations over the oceans, data used for training the model would be less accurate and so would affect performance negatively.

Besides, work is continuing to bring the spatial resolution down from 30 kilometres to 3 kilometres around the observing station while still maintaining a high level of accuracy.

Shipping benefits

A significant advantage of this scheme is that it can be used where there are no radars in operation, where forecasting and nowcasting resources are limited or where communications are interrupted. Therefore, this new machine learning system may be useful in minor ports or ports of low income countries in Asia, South America, and Africa. Independent, localised nowcasting of lightning could add flexibility to loading and discharging operations in port, to lightering at sea, to wind turbine facilities, and to oil platforms.

The training and testing phase of this scheme only needs online access to meteorological data and data from lightning location systems. A standard PC is sufficient to undertake the analysis: "Once the training is over, getting the predictions for new samples would be fast and can be done with a regular PC," says Professor Rachidi. "This puts this method ahead of nowcasting techniques, since these are mainly based on the tracking of existing storms and rely on radar and/or satellites data and communication links that can be expensive and not always available."

Machine learning looks set to be an invaluable instrument in improving the prediction of lightning strikes – an advancement that ships and ports should be thankful for. **SN**

Vittorio Lippay MICS is a member of the Institute of Physics.

"Lightning risks have historically been addressed with passive protection, but there is an evident advantage in knowing when and where lightning bolts will strike beforehand."

Basic human needs still need to be met

The Mission to Seafarers' Andrew Wright on the challenge of supporting seafarers under social distancing

Andrew Wright

As I write this article, I have just been sent a very nice piece of old television. It comes from the early days of mobile technology and features a man who comes into a shop to complain about his 'blackberry' purchase. On the shop desk he places not a phone but a piece of fruit – a single blackberry. He complains that it is frozen! Frankly there was a time not long ago when that was pretty much my level of technological knowledge. It is not much better now but it is certainly advancing rapidly in these Covid-19 times.

Topic: Insurance

Key words: Data, Machine Learning, Risks

Background info: Marine insurers can now plumb new data depths to create bespoke, dynamic and automated policies

The Mission to Seafarers, along with so many others, moved its entire office in London to full home-based working within two days at the start of the virus crisis. Technology has made this possible and it seems to be working well. It has enabled us to sustain 'Business as Usual', even in these dramatically changed days. Fortunately, we were able to build on the experience we already had of flexible working. I am certainly enjoying the experience of not having to spend four hours of every day commuting by train and bicycle! Working at home can mean less chance of constant interruption and a touch more sleep, although the plans I had for some additional reading and thinking time have proved ill-founded. The current circumstances have brought a never-ending stream, rather a torrent, of emails, calls, challenges and demands of all kinds. I might need to go back to the office for a break!

There are downsides to all this. Some domestic environments and circumstances are simply not suited to office work. Perhaps they lack appropriate space or are too busy and noisy with flatmates or children. It can be more difficult to discipline yourself to certain hours. Many miss the community side of office work – conversation, building sustaining friendships and so on. Nevertheless, in these special circumstances it is working for us at the Mission. However, I have commented to others that I think I am suffering from a new disease, no not Covid-19 but CCO-20 (Conference Call Overload!). I am finding that non-stop conference calling, for all its many strengths, can begin to damage your mental health if not applied carefully. Such are the strengths and weaknesses of technology.

Welfare challenges

What about our work at the front line? Maritime welfare work is certainly suffering at present. We are subject to rapidly changing rules at government and at local port levels. Even more important, we are observing best practice, determined that we should not spread the virus to crew. Most seafarer centres have had to shut, together with transport services. Some ship visiting, where it is allowed, is continuing, but only in limited ways. Usually this means meeting seafarers at the gangway, maintaining a two-metre distance, often wearing appropriate personal protection equipment. Where we are delivering supplies, sim cards for example, these must be wiped and disinfected – and we seek to maintain rigid hygiene discipline at all times. Of course, in many cases seafarers are not allowed off the ship anyway and any form of meeting is impossible. In one

case seafarers used advanced technology to obtain their purchase requests: they lowered a bucket to the chaplain with the money and he placed the goods in the bucket. Sometimes it is necessary to resort to older technologies.

All this comes at a time when seafarers are facing multiple challenges. As I write, transit arrangements remain very difficult. Strict border controls and limited flight availability are making it difficult for crew to end contracts or take up new ones. This is leading to hardship and anxiety. That has hit morale, especially when so many are already so worried about their families. Shore leave for many has been cancelled, normal welfare provision in ports is much less available, medical help can be hard to obtain and access to local shops and facilities usually impossible. Some media has picked up on this and it is my hope that something of the heroism of seafarers will be perceived by many, perhaps for the first time. After all, without them our sustaining supply lines, including of food and medical goods, would soon break down. I am glad that some of the lobbying, in which so many of us are engaged, is beginning to make a difference. By the time you are reading this article I hope that will have been very evident, although I suspect the crisis may not be over for some months yet.

Chat to a chaplain

Inevitably we have looked to technological solutions to resolve our difficulty in accessing seafarers at this time of great need. Already many of our chaplains and front-line teams use social media in connecting with seafarers. Many continue relationships with seafarers in ports online, through Facebook or similar. Seafarers can ask questions, discuss problems, share joys and request help in this way. Some order sim cards to be ready for them on arrival in port. Over a two-week period, however, colleagues at The Mission to Seafarers, working closely with the International Christian Maritime Association, have developed an entirely new way of connecting, one of high quality. It looks very impressive and will be rolled out in the coming days. Through our website, and those of others, this facility, which has been called 'Chat to a Chaplain' can immediately connect a seafarer with one of 25 chaplains ready to take calls and offer friendship, support, pastoral care and welfare advice. With those chaplains based all around the world, some offering diverse languages, we are able to ensure 24-hour coverage. It is important to say that this model is not designed to compete with any other. It is not a helpline in the traditional sense, looking to respond specifically to issues. Rather, it is exactly what it says on the tin – an opportunity for seafarers to chat informally, to share problems, to establish friendship, to take advantage of a listening ear. Some may wish for quiet advice, request a prayer or some form of spiritual sustenance. Not only does this enable us to continue our work through this difficult period but we also believe that we are building something valuable for the future – an additional tool in caring for seafarers. Indeed, it may well connect us with many who we have not traditionally met with in ports. Its launch will be backed by a social media campaign, utilising another vital tool in our technological armoury.

> "Strict border controls and limited flight availability are making it difficult for crew to end contracts or take up new ones. This is leading to hardship and anxiety"

At The Mission to Seafarers we are acutely aware that technology can be both a blessing and a curse. Seafarer access to ever increasing wi-fi provision brings so many benefits in connecting them to those they love. It can also bring stress and tension. Constant access to difficult news from home, over which there is often no power to respond, can be very difficult. A row with a partner at home while far out at sea can be deeply upsetting, debilitating even. Such technologies can help with good mental health – or detract from it. That is why the Mission has developed its WeCare programme, much of which is focused on better equipping seafarers and their families to use the internet and social media with wisdom and discretion.

However, the fragilities of the Covid-19 crisis have left us few other avenues to sustain our work. We are grateful for the opportunities that technology has gifted us, and we hope to use this time to build digital opportunities which will last into the future. **SN**

The Rev Canon Andrew Wright is the secretary general for The Mission to Seafarers. Find out more about the Mission's work at: www.missiontoseafarers.org.

The Mission has embraced technology to help maintain contact with seafarers feeling increasingly cut off from the outside world

Connected and dynamic insurance policies

Concirrus' Nick Roscoe explains how vast datasets and artificial intelligence can support insurers

Nick Roscoe

Market pressures are causing a shift in the way we approach the insurance business, specifically our use of data and adoption of technology. A more accurate method of assessing risk is now required to improve portfolio health and profitability. Leveraging a greater amount of data will allow us to draw new insight that can improve our judgement on both current and potential business.

Topic: Insurance

Key words: Data, Machine Learning, Risks

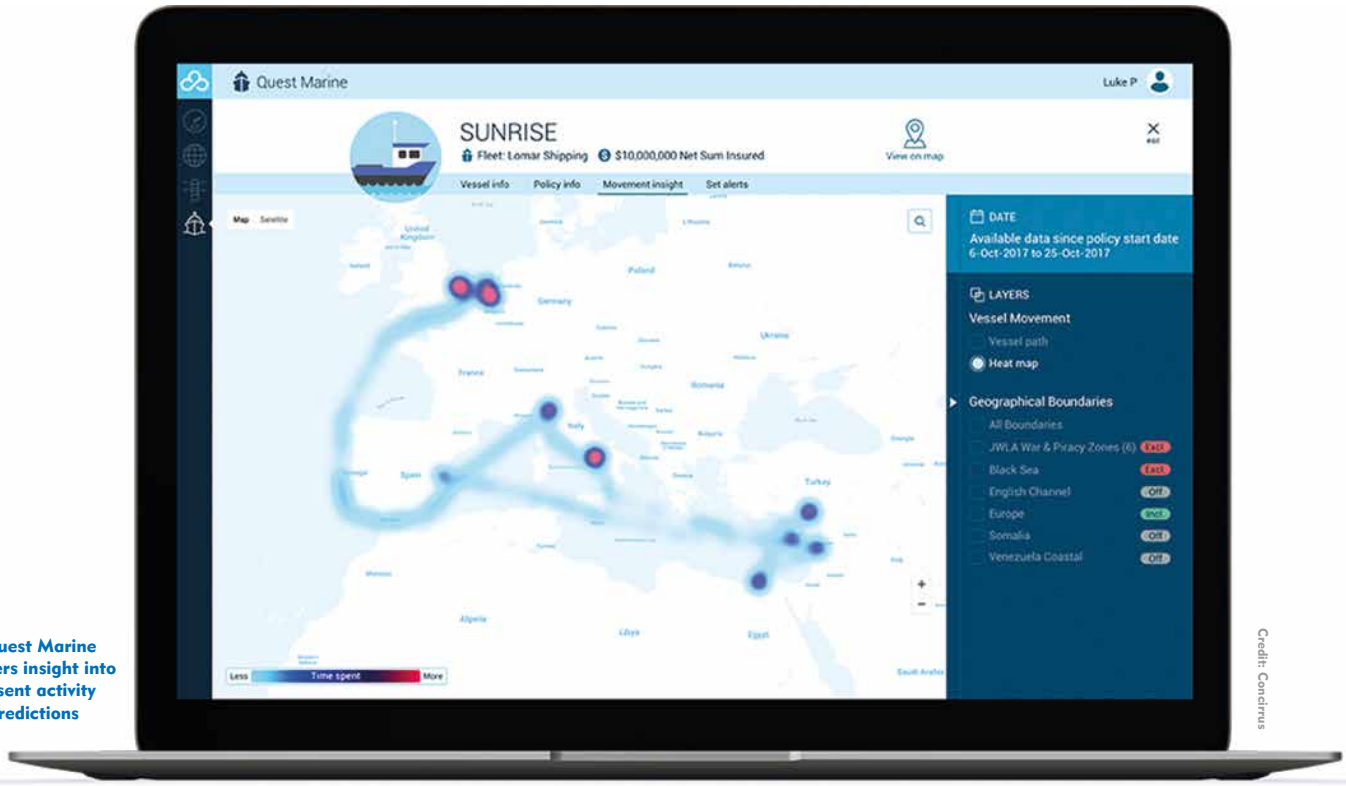
Background info: Marine insurers can now plumb new data depths to create bespoke, dynamic and automated policies

However, increasing the size of datasets causes its own problems. Traditional methods of analysis by actuaries alone can lead to bottlenecks, as humans can only process so much data at a given time. Implementing the right technology can automate data processing, removing potential bottlenecks to reveal critical factors as soon as they arise. This is where machine learning thrives.

Machine learning is a subset of artificial intelligence that utilises algorithms and statistical analysis to learn from data without specific programming. Such models are trained on historical data to assess accuracy before moving into the marketplace. We see the applications of such models within Insurtech today, including ourselves at Concirrus.

When combined with vast datasets, machine learning allows a (re)insurance broker or underwriter to understand the behavioural characteristics of each vessel within an account. It is a view of risk that will change the market moving forward, allowing for an understanding of asset specific factors against a broad view of types of asset based on static factors alone. Deeper insight leads to a greater level of segmentation for further control over the types of risk written, as well as new products for specific market segments. It is key to providing a scalable solution to ongoing profitability issues.

Looking at scale, Concirrus' marine platform (Quest Marine) serves the Hull, P&I and Cargo markets. Specific feature sets are derived from models which are designed not only to offer accurate insight into past and present activity, but also predict. These predictions serve as a score for underwriters and brokers to utilise regardless of experience. Democratising intelligence reduces the dependency on a specific human resource, driving consistency in decision making throughout the organisation. The benefits extend beyond the organisation to other areas of the value chain, giving the same level of understanding to partner organisations for improved market performance.



Concirrus' Quest Marine platform offers insight into past and present activity and makes predictions

Credit: Concirrus

Insight derived from this platform constantly improves over time. With verified partners providing new datasets and proprietary datapoints being created as a result of interpretation, Concirrus' Quest platform currently encompasses over 2 trillion datapoints. Datapoints enable feature sets, which empower stakeholders even further. When the development of such a platform is guided by the market, such as Concirrus' Power20 initiative, you can ensure that the platform will always prioritise the growth of such feature sets in line with market needs.

Business capability change is at the core of digital disruption and roles will augment as digital initiatives become more engrained into the daily process. We should expect to see not only a better understanding of risk, but improved valuations of that risk. Where markets were previously unpredictable, we will find stability, and policies themselves will become more dynamic to adapt to changing circumstances, becoming truly customer-centric products.

Predictive modelling

Through machine learning, we can derive models that calculate the expected loss of an account relative to the frequency and severity of claims. It is a feature that delivers on the value of big data, drawing insight at scale to create an accurate prediction. The benefits are stark, allowing marine underwriters to validate premiums ahead of writing business. Factors that positively or negatively affect a score are presented to the underwriter for transparency. An underwriter can validate their approach to adjusting premiums based on such information, or alternatively write clauses into the policy that mitigate exposure based on underperforming criteria. Importantly, there is no 'black-box' approach which can create unnecessary dependencies on a technology partner in a regulated market.

Quest Marine Cargo offers an interesting use case for optimisation. Its deductible matching feature allows cargo underwriters to simulate account underwriting decisions, such as adjusting deductible levels or removing goods from coverage. Running simulations around these variables can help measure the projected impact on performance and lead to a reduction of attritional losses.

With the many risk factors found in the cargo market, this application can provide both clear and actionable insight around premium adjustment and future business.

Dynamic policy structure

Value in insight is not limited to the identification and assessment of new and existing business. As risk varies continuously, the terms that were agreed at the start of a policy may not be suitable in circumstances experienced later in the life of the policy. The real-time aspect of data collation today means that insured assets can be viewed continuously. With this view, an underwriter can respond to adverse behaviour as it occurs, such as exceeding Institute Warranty Limits or breaching sanctions zones, to mitigate exposure. If an underwriter manages several accounts, however, they may not be able to ensure necessary changes are implemented across the portfolio. Automation is a useful tool to make this approach scalable.

By considering the rating factors at the start of the life of a policy, clauses can be written into the policy that only take precedence based on circumstance. As a vessel moves throughout global waters, the policy will change relative to the risk profile and therefore ensure exposure is managed. This can be enforced by establishing custom zones that send automated alerts. These alerts can be used as triggers to automate policy changes at pre-agreed rates or notify a stakeholder to act. This approach ensures optimal risk management on a per account basis, but also means that the insured is always protected.

These 'connected policies,' with a dynamic structure that blends proactive and reactive risk management don't have to reflect critical risk, they can adjust based on geographical challenges relative to the vessel. This can be as simple as the capability of a vessel in the Baltic versus the Mediterranean, weather forecasts, time and third-party activity.

This concept can be expanded further, implementing a connected policy and using it as a basis for a long-term relationship with the insured. By identifying risk factors that influence valuation, terms can be written that reward reduction in those factors. Such rewards can lead to a reduction in rates or identify what the premium of a future renewal will look like. Over time, collaboration with the insured will lead to a reduction in their overall risk profile and create trust. The added value of knowing how to reduce costs moving forward will also tie into the changing role of the broker, who will serve a far more consultative capacity during the life of the policy to ensure targets are reached.

A new view of risk

Marine insurance is becoming a far more capable market. Policies will no longer be rigid due to worldwide terms. They will be bespoke, dynamic and automated to cater for circumstance. Risk profiles will no longer be based on static factors, but include the behavioural traits exhibited by the insured to uncover underlying risk. The real-time nature of this granular view will mean that we can more accurately predict risk and dynamically adjust premiums to optimise portfolios. Automation makes this approach scalable and ensures those within the market can focus on the core relationships that have always underpinned the insurance business. The concept of assessing and writing risk will always exist, however they will augment to add-value and stabilise the market for future generations. **SN**

Nick Roscoe is chief operating officer of Concirrus, a company leveraging technology in new and impactful ways for the commercial marine insurance industry. Find out more at www.concirrus.com.

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Tools to boost Protection & Indemnity efficiency

North P&I Club's Alvin Forster explains how partnerships and tech are changing what Clubs can do

Alvin Forster

There are two key areas where North P&I has really embraced the use of technology in partnership with innovative and forward-thinking companies.

The first concerns how we as an insurer can best assess the risk of the vessels we cover. Traditionally, we used simple but effective metrics such as claims history and regulatory compliance performance (such as Port State Control inspection findings) to help us evaluate the risk a vessel or a fleet presents.

Topic: P&I

Key words: Metrics, Partnerships, Information

Background info: The P&I industry is embracing partnerships, even with competitors, for the good of the industry

These are still great indicators and we continue to rely on them. But harnessing the huge amounts of real-time shipping data available can tell us more. For example, AIS data, which tracks vessels all around the world, when coupled with casualty and claims data, can identify higher risk operations and trades. Therefore, we have partnered with Concirrus to develop a behaviour-based analytics tool that not only gathers this data but also makes sense of it.

The second area aids us in how we provide information to our members. Over the decades, we have accumulated a huge knowledge base and our members rightly take advantage of this so they can take suitable precautions when fixing new cargoes or trading in new areas.

In the past, we provided this information by posting articles and responding to direct enquiries.

Map view

Recently, we have partnered with Geollect – geospatial intelligence experts – to provide our members with a map-based information portal called MyGlobeview. This allows easy access to information that is specific to a port, country or region which can help a shipowner or charterer assess the risks of a voyage – whether it relates to sanctions, maritime security, port operations or if there is a history of cargo claims.

A simple example: a shipowner is considering fixing a charter to carry bagged rice cargo from the Far-East to a West African Port. A quick check on MyGlobeview will tell of the risks of piracy and robbery in the Gulf of Guinea (identifying hotspots) and the probability of cargo shortage claims at outturn. This is supplemented with loss prevention advice and links to useful resources that will help mitigate these risks should the shipowner decide to fix.

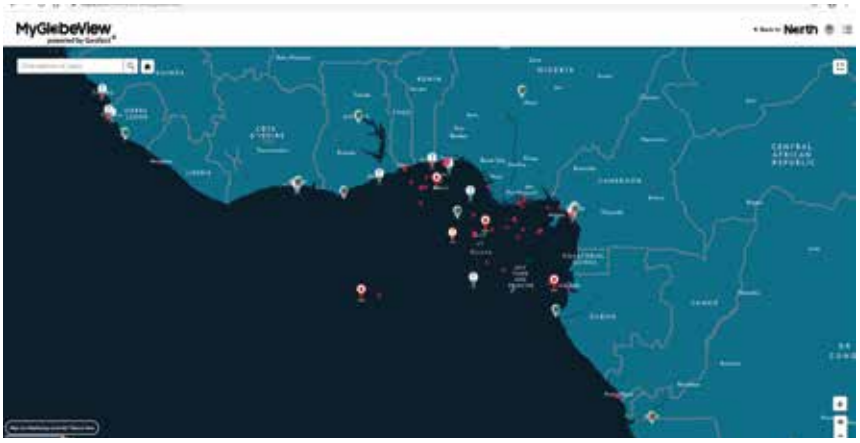
This was already proving to be a valuable resource for our members. But the events of the last few months have really shown its worth.

The Covid-19 pandemic has affected almost every nation in the world. Each country has taken measures to combat the outbreak and inevitably this impacts shipping – which of course carries on through it all. Shipowners, charterers and ships' crews need to know the latest news about specific ports and MyGlobeview has proven to be the ideal way to provide this information. By simply navigating the map and clicking on a country, information such as port entry requirements, quarantine arrangements and any restrictions on crew movement is at your fingertips.

In addition to the updates received from our global network of correspondents and contacts, it includes intelligence scraped by Geollect from numerous data sources. It has become a powerful tool in helping our members to continue trading during these exceptional times.

This has proven so successful in keeping our members up to date with the latest Covid-19 news that we, with Geollect, have been instrumental in developing a similar tool for the International Group (IG). The IG comprise thirteen P&I clubs which between them provide marine liability cover for approximately 90% of the world's ocean-going tonnage. Although the P&I clubs may be competitors, there are times when we can work together for the good of the shipping industry and – more importantly – the safety and welfare of the seafarers all around the world. **SN**

Alvin Forster is loss prevention executive at North P&I Club, www.nepia.com.



Credit: North P&I

North P&I's MyGlobeview can help a shipowner or charterer assess the risks of a voyage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Supporting shipping's educational needs

Susan Oatway reflects on the journey of the Institute's Educational Trust Fund

Susan Oatway

It was after the Council Meeting in March 1978 that Clifford Clarke, the then vice president, invited Robin Fenton, then current president, and Harry Lorkin, the immediate past chairman, to stay behind for a while. They went on to discuss the idea of forming an educational charity, to "promote shipping education where it would be inappropriate to use Members' funds".

This initial discussion of then senior officers of the Institute led to the establishment of the Educational Trust Fund (ETF) in 1978. The founders, who were well known in shipping circles, started fundraising, and as it was a time of prosperity among the Institute's membership, a substantial capital base was soon established.

The ETF supported the Institute's global book drive

Today, the ETF consists of six trustees, who are elected to serve on an annual basis. They are responsible for ensuring the capital investment is sensibly placed, to find new sources of funding and to spend the trust money on causes that lie within the principle objectives as inscribed in the Declaration of Trust. Needless to say, that list has grown since the original discussion, but the concept remains true. The ETF's principles are:

- To promote the education of persons in the business of shipping;
- To promote the maintenance of any school or faculty providing education in relation to the business of shipping;
- To provide scholarships for further education of persons wishing to pursue a career in the business of shipping;
- To provide lectures and films of an educational character in relation to making a career in the business of shipping;
- To do all such other charitable things as are necessary for the attainment of all of the above objects or any one of them.

Helping hand

Ov er the last few years the Trust has supported numerous causes, including the global book drive to help some branches set up a library; financial support for less privileged students in Africa and Southeast Asia; the president's annual prize for the most outstanding student of the year; support for two places each year at the PREP revision course held at Warwick University in the UK; sponsorship of a cadet through the Maritime London Officer Cadet Scholarship scheme; and donations to the High Tide project in the North East of the UK.

All of these projects are extremely worthwhile. They promote the Institute across the globe and stay true to the original ideals of promoting shipping education. The latest project - helping with the postage for the global book drive - is particularly pleasing. The idea for a book drive came from one of our tutors after a PREP session in Kenya. He realised that many of our students lacked a basic tool to help them study: books. He organised a reception back in his hometown of Athens, whereby everyone was encouraged to donate a maritime book. He was overwhelmed with the response and the ETF agreed to pay for those books to be sent to Mombasa.

Since then members around the globe have donated books in ones and twos and by the pallet load. All have been very gratefully received. Sri Lanka has already benefited from the drive and West Africa hopes to be next. West Africa also needs a library to house the books and sponsorship is being sought for that.

Whether it is paying for a student's exam fees or supporting the initiatives of our members outside of the Institute umbrella, the work done by the ETF delivers shipping education across the globe. Donations are always welcome, be assured that the money will be well spent. And if you have any projects you would like considered, please do get in touch. **SN**

Susan Oatway is chair of the ETF, in addition to holding the post of international chair of the Institute.

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Driving change through collaboration

Carly Fields speaks with Cyprus shipping deputy minister Natasa Pilides about her ambitious plans

Carly Fields

Natasa Pilides has served as shipping's deputy minister to Cyprus' President since March 1, 2018. Ms Pilides has brought an unusual mix of talents to the island's shipping sector. With tax and auditing, promotion, IT, investment, and professional training experience and fluency in four languages, she is proving to be an invaluable asset. *Shipping Network* caught up with her to find out more about her focus for enhancement of Cyprus' shipping offering.

Q: Thanks for speaking with us and sharing your vision for the shipping sector in Cyprus. I understand that you are keen to encourage a 'multidimensional blue growth strategy' for Cyprus. What's your vision for achieving that?

A: "The Cyprus Shipping Deputy Ministry (SDM) has spent the last two years, since inception, driving development to position Cyprus as a global maritime cluster for ship registration, fleet management and other related maritime services. In addition, the SDM has formulated an integrated maritime policy spanning all areas of the blue growth spectrum, including a detailed action plan which has been agreed with all relevant ministries and organisations. The integrated maritime policy aims at the protection of the marine environment and sustainable development of all relevant maritime operations. It also includes a marine spatial planning strategy which is being developed for implementation by March 2021.

"To achieve our goals, we see the value in promoting and supporting maritime education, and innovation in marine and maritime technologies. This involves working with all the relevant ministries and organisations, including working on different projects to ensure Cyprus can offer and support practical solutions to the challenges the industry faces, or will face in the years to come, such as a project on Marine Spatial Planning for which the Deputy Ministry has obtained European Union funding.

Natasa Pilides has served as shipping's deputy minister to Cyprus' President since March 1, 2018

"Education and innovation are critical to sustainable blue growth, both on a national and international scale, which relies upon nurturing closer cooperation and synergies between the maritime industry, the academic community, and innovators from other sectors."

Ms Pilides has growth plans for Cyprus' shipping sector

Q: Can you explain how your department's relationship with the Cyprus Marine and Maritime Institute will support that?

A: "The Cyprus Marine and Maritime Institute (CMMI), an independent, international, scientific and business centre of excellence, will nurture closer co-operation and synergies between the maritime industry and the academic community. Forging relationships such as this contributes to the transfer of knowledge, the development, application and dissemination of cutting-edge technologies, and the exchange of best practices.

"The partnership will enhance Cyprus' competitiveness and the EU's blue economy. CMMI forges partnerships with well-known European institutions and businesses, active in the fields of research, technology and innovation for the blue economy, contributing to the exchange of best practices for the growth and development of the maritime industry. It has also embarked on collaborations with a number of shipping companies for the specific purpose of developing solutions to meet the industry's environmental protection and automation objectives."

Q: What inspiration are you drawing from other maritime centres around the world?

A: "Collaboration and sharing knowledge is key to progress, so it is always important to be demonstrating and sharing best practice when possible. For example, when it comes to enhancing environmental protection, Cyprus is committed to sustainable goals and remains extremely active in the dialogue around the 2020 global sulphur cap and the decarbonisation objectives for 2030 and 2050. And to achieve our maritime safety targets we will maintain the excellent safety record of the Cyprus fleet, remain on the White Lists of the Paris and Tokyo MoU, as well as increasing the safety of the Cyprus coastal navigation to reduce accidents within the territorial waters of Cyprus.

Q: How important are the relationships that you have and that you plan to create with Cyprus' maritime industry and academic community in achieving your goals?

A: "The Cyprus SDM is actively involved in promoting positive change in the shipping industry, and it is particularly important to support initiatives as it shows our commitment to these advancements within our maritime cluster and on an international level.

"Cyprus SDM continues to forge partnerships with forward-thinking organisations and in the area of education, the Deputy Ministry is taking steps to incentivise young people to follow maritime careers by providing scholarships and grants to students of the Cyprus maritime academies, as well as through a number of programmes and awareness campaigns for young adults.

"As a member of the Board of Directors of the CMMI, we are also part of the positive change in regard to research and innovation initiatives in the maritime sector. We also have a close collaboration with universities here in Cyprus on various projects around decarbonisation. At the same time, we are in continuous communication with the Cyprus Union of Shipowners and the Cyprus Shipping Chamber, which both contribute significantly to the formulation of the SDM's National Shipping Strategy.

"Additionally, to build alliances and strengthen our negotiating position and role during the decision-making processes at European and international level, Cyprus remains actively involved in addressing and shaping industry issues, challenges and regulation. Through ongoing engagement with international shipping organisations and committees such as the IMO, EU, MEPC, EMSA, AMSA, REMPEC, tripartite meetings with Greece and Malta, bilateral meetings with shipping nations such as China, Singapore, Egypt, Georgia, and Poland, Cyprus is at the forefront on supporting progress in our rapidly evolving industry."

Q: How has your background in investment promotion and accountancy prepared you for this role?

A: "As a chartered accountant, I was able to gain some experience on the financial side of shipping companies in audit and tax. Later, as director general at the Cyprus Investment Promotion Agency, I was actively involved in the promotion of Cyprus shipping abroad as well as the broadening of the activities and services available within the Cyprus shipping cluster. Both these roles have been valuable in their own ways, providing me with a foundation of shipping industry knowledge, as well as the financial side of maritime business and global trade."

Q: "Given Cyprus' evident support for the shipping industry, why has it taken so long to create an autonomous deputy ministry?

A: "The Shipping Deputy Ministry was created on March 1, 2018 as an autonomous Deputy Ministry, dedicated entirely to the Cyprus maritime industry. Before this, the Department of Merchant Shipping which was functioning as a distinct entity in the Ministry of Transport, Communications and Works since 1977 and maritime services were being provided through the Department of Ports. It is true that the set-up of a dedicated ministry for shipping was a long-standing wish of the Cyprus shipping industry and we hope that the Shipping Deputy Ministry has met and exceeded their expectations in terms of the quality and speed of our services and our commitment to the implementation of an integrated maritime strategy aiming at the sustainable growth of our sector. It is worth noting that the Shipping Deputy Ministry was the first ever Deputy Ministry to have been set up in Cyprus (followed by Deputy Ministries for Tourism and Innovation in 2019 and 2020) and was unanimously approved by all members of the House of Representatives.

"International shipping is constantly changing in line with international trade and economic circumstances. As the Cyprus flag has grown into the 3rd largest fleet in Europe and is now firmly established as a world class international maritime centre, our national shipping administration needed to adapt to best support today's situation, hence this change in structure." SN

Institute presence proves Cyprus shipping expertise

The Cyprus Branch of the Institute was established in Limassol in 1996 and today is the fifth biggest Branch worldwide. This, according to Ms Pilides, really showcases the extent and quality of shipping expertise available in Cyprus.

The Branch has excellent links with the relevant state departments and maritime bodies and associations located and co-operates closely with the Cyprus Shipping Chamber on educational matters, providing thorough courses. "Cyprus has an integrated maritime cluster with more than 250 shipping companies and the presence of the Institute of Chartered Shipbrokers in Cyprus cannot be underestimated in providing support," says Ms Pilides.

Professional shipping training and qualifications is important to Ms Pilides and her ministry.

"Through continuous supervision of the marine academies and maritime training providers in Cyprus and Greece, co-operation with academies to improve and expand their offering, granting scholarships to marine academy students, and subsidies to marine cadets for on-board training, we are doing all we can to bring the next generation into the shipping industry and its related sectors," she says. The Ministry even makes regular visits to schools all over Cyprus to ensure that even the youngest children understand the exciting opportunities available to them in the nation's shipping industry. SN

‘Don’t forget the environment’

Carly Fields speaks with BIMCO president Şadan Kaptanoğlu about the future path for shipping

Carly Fields

Şadan Kaptanoğlu made history when she was elected as the first female president of global shipping organisation BIMCO last year. As managing director of HI Kaptanoğlu Shipping, Ms Kaptanoğlu is no stranger to shipping. In fact, shipping is in her blood. The Kaptanoğlu family is one of the oldest shipowners in Turkey with one hundred years of maritime experience and tradition under its belt. H Ismail Kaptanoğlu, the founder of the Kaptanoğlu Group, was one of the founders of the Turkish Shipowners’ Association. Today, the Kaptanoğlu Group is active in almost every segment of shipping. A year into her two-year term with BIMCO, Ms Kaptanoğlu speaks to *Shipping Network* about her achievements to-date, her plans for the remaining year and how Covid-19 has changed her outlook.

SN: I understand that the environment and climate change are key priorities of yours. How are you getting the shipping industry to embrace these topics through your role at BIMCO?

Şadan Kaptanoğlu: “I speak about them as often as I can. I think the environment and climate change are global priorities, and if the shipping industry does not embrace these issues and proactively reduce our environmental footprint, regulation and requirements will be thrust upon us. So, I try to convince fellow shipping leaders to work with us to come up with and work on proactive solutions to reduce our emissions and create our future on our own terms. The global climate crisis is currently not making headlines while the world deals with the Covid-19 pandemic, but the slow burn climate crisis is still there. We must move forward and do our part to cut the industry’s footprint on the climate and environment.”

“The global climate crisis is currently not making headlines while the world deals with the Covid-19 pandemic, but the slow burn climate crisis is still there”

SN: With that in mind, do you think the shipping industry is prepared to meet the IMO carbon requirements for 2050? If not, what more should it be doing today to prepare for tomorrow?

ŞK: “We are not ready. We need to innovate and make sure the ships built a decade from now have much lower emissions. That is why we are proposing the $5bn R&D fund. I think the big question now is: how will this pandemic and its economic consequences influence our approach? Will we learn that we can make great change much more swiftly, if needed? Or will we not have the money nor the energy after fighting the pandemic to continue our efforts to cut emissions?”

Şadan Kaptanoğlu, president of BIMCO, with Bahadir Tonguc, chairman of the Institute’s Turkey Development Branch

SN: Could you please share the latest information on that proposed $5bn R&D fund for zero-emission shipping? Are you frustrated by the lack of movement/slow pace of IMO on this?

ŞK: “The proposal is submitted for the 75th session of the IMO MEPC. The meeting, along with a raft of other meetings at IMO, has been postponed until later in the year because of the pandemic. Several outreach meetings with governments have also been postponed as travelling has been affected in most countries in the world. The current situation is unfortunate but cannot be blamed on the IMO. We are confident that the negotiations at IMO will resume as soon as it is considered safe to gather again. Climate change, while an urgent matter, cannot and will not be solved in the short term. That is why the IMO will be able to pick up from where we left off as soon as we can resume the meetings.”

SN: You have spoken in the past of gathering as many shipowners around the table as possible, to steer a course through the world’s environmental challenges. What initiatives do you have planned to support that goal?

ŞK: “The R&D fund I mentioned is a key measure. All the major shipowner organisations are behind the idea and it

shows the level of commitment in the industry to get on with solving the issues within the industry itself. Furthermore, tackling climate change is not only about technology, but also about behaviour. We need to take out inefficiencies in the industry such as unnecessary and counter-productive waiting time outside ports. If we can manage this together with the ports, we increase the efficiency of maritime transport and make it easier to reach the climate goals we have set before us. We also want to organise an innovation seminar, where we hope to bring innovators together with shipowners in 2020. The Covid-19 pandemic interfered with the planning, and we are now looking at alternative ways to hosting such an event – even that it could become an online conference. I think the world will be very focused on the human and economic impact of the pandemic this year. But the climate crisis has not disappeared, and we need to push forward to generate solutions to our emission problem."

SN: How have your priorities changed since the pandemic? If so, how?

ŞK: "The overall priorities of BIMCO have not changed for the long term, but we quickly rearranged our short-term priorities to reflect the situation the industry was facing due to this pandemic. As a response, we focused on providing guidelines and helping managing the issues the industry faces, such as crew change, health policies at local ports, charter party issues, force majeure questions and the general market situation to name a few. We made all this information free and open to everyone in the industry because we need to stand together as an industry in this crisis. The postponement of IMO meetings and the cancellation of conferences and in-person meetings meant more time for other projects now, while we prepare for a potential heavy workload in the autumn."

SN: What other concerns do you have relating to the pandemic and shipping?

ŞK: "Having seafarers recognised as 'essential workers' is important. It again demonstrates that shipping has become a 'forgotten' industry. We are one of the unseen cogs in the global machinery that makes our entire global economy work, and sadly most politicians never notice us, despite lobbying efforts from BIMCO, the International Chamber of Shipping, national shipowner associations and so on. Ultimately, getting recognised as an 'essential worker' status during the crisis is proving difficult.

"We are seeing some positive changes from local authorities, like for example in Gibraltar, but it hasn't solved the problem. I think we will need to ask our crews to be patient and shipowners and crew managers to be creative to solve this problem. Nevertheless we need more positive support from local authorities. Seafarers are one of the hidden heroes of this pandemic.

"The second big issue is the economic uncertainty. Consumer demand is dropping, and the oil price has reached historic low levels. A couple of segments are still making money, but the global economic slowdown will ultimately hit the entire industry. Worst off will probably be the cruise and ferry operators and container shipping, but everyone will feel it. However, at this point the financial impact is incredibly hard to predict." ***SN***

Continuing contracting work

The contract and clauses work that BIMCO is famous for hasn't stopped during the Covid-19. Ms Kaptanoğlu explains that providing contractual certainty in uncertain times "lies at the heart of BIMCO's activities".

During the pandemic, BIMCO has provided guidance on its interpretation of BIMCO contracts and recommended the use of charter party clauses specifically designed to address the uncertainties created by viral outbreaks. And the organisation has shared this information and guidance with the entire industry because, as Ms Kaptanoğlu acknowledges, BIMCO recognises that finding contractual solutions often "requires an open dialogue".

BIMCO has also continued with its non-Covid-19 documentary activities. At the beginning of 2020 it published new Sanctions Clauses for voyage and time charter parties – aimed primarily at the dry and wet bulk trades. It also plans to add to its collection of sanctions clauses with a version written specifically for the container liner trade operating on fixed routes and schedules. "We have worked together with major liner companies such as Maersk, MSC and CMA CGM to develop a clause that closely reflects current commercial practice in dealing with sanctioned containers," says Ms Kaptanoğlu. The container ship sanctions clause is due for publication in May.

BIMCO has provided guidance for ship owners throughout the pandemic

Work is also continuing on other projects, including the revision of GENCON 1994 and the creation of a new BIMCO ship sale and purchase agreement. BIMCO is working together with ASBA in New York to finalise a new gas voyage party, ASBAGASVOY, which will be followed by a revision of ASBATANKVOY.

"Lastly, we are liaising with arbitration service providers in London, New York, Singapore and Hong Kong to create a new and concise BIMCO Law and Arbitration Clause that will apply a single common set of nomination procedures for whichever choice of law and arbitration venue is made," says Ms Kaptanoğlu. ***SN***

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Brokerage where brokerage is due

ITIC's Andrew Jamieson advises on commission for fixtures that are cancelled or renegotiated

Andrew Jamieson

Let's start with an obvious point: brokers are only paid if their efforts lead to a fixture. If there is no fixture, the broker gets nothing even though many hours were spent on the negotiations. Once there is a fixture the key question is whether there is a commission clause and what it says. The lack of a commission clause is not fatal to the broker's right to commission, but it is easier if you can point to a clause that sets out the position.

Many commission clauses are simple statements that a commission of X is payable on freight or hire. There are however some clauses that make wider provisions.

If you look at the simple case of a fixture being agreed but not performed then the current version of the much used Gencon charterparty provides that "in the case of non-execution, one third of the brokerage on the estimated amount of freight" is payable by the party responsible for the non-execution. It is difficult to know how often the clause is applied but it may not remain as part of future editions of Gencon. The form is being reviewed and in February 2020 BIMCO published a draft for consultation. The proposed commission clause simply provides for commission to be paid on freight, deadfreight and demurrage received by the owners.

Commission could still be due even if the fixture falls through

English law has long held that, unless there is a specific provision in the agreement, brokers will not be entitled to compensation if the fixture is cancelled. But there appears to be a move away from such provisions. The Barecon 2001 commission clause, for example, provided that should the parties agree to cancel the charter the owner would indemnify the broker for the lost commission but limited to one year's hire. Barecon 2017 does not have a commission clause and unless the broker has made other arrangements (for example in a side letter) then the broker will get nothing by way of compensation if the fixture is cancelled.

Termination

Very few fixtures are simply cancelled with no money changing hands. The termination may be on the basis that owner has been paid lump sum compensation for the early redelivery. In other cases, the owner may bring legal proceedings to claim damages from the charterer who has failed to fulfil its obligations. The sums recovered can, if collected, be significant.

If the owner receives money from the charterer, whether due to an agreed cancellation or as damages for breach of charterparty, can the broker claim a proportion of it?

There is little English legal authority on this point, but an American court has held against a broker in these circumstances. The basis of its finding was that damages did not constitute "hire as paid" which was the expression used in the charterparty commission clause. The Court took the view that damages were not hire.

The same reasoning was once used by the English Courts when considering whether commission should be paid on demurrage. That ruling is why charterparty commission clauses are often altered to provide that commission is paid on "deadfreight and demurrage".

It is important to keep in mind that the courts will look at the reality of the situation and not any label that the owner and charterer choose to put on a payment. In a 1920s case, a judge ruled that, as the vessel had been in use for the time in question, a payment was really hire although it had nominally been paid as damages. Commission was accordingly payable.

Difficult market conditions can lead to charterparties being renegotiated rather than simply cancelled. The new business that emerges may simply be at a different hire rate or for a different period. In most renegotiations the broker to the original contract will be actively involved in finding a solution and will be paid commission on the resultant fixture. This may be based on a reduced hire rate but their role is recognised and rewarded. This is not always the case. Some principals will arrange the new contract directly. They will subsequently state that the original contract has been cancelled and the new business is a completely different fixture.

The courts pointed out that the general rule that brokers do not receive compensation on cancelled fixtures only applies if the contract truly is cancelled. The situation is different if the same business is continued but in a revised manner. In these cases, the owners may find that the brokers retain a right to commission based on their original work. This is even if the principals negotiated directly excluding the brokers from the replacement transaction.

The legal position if brokers are cut out of negotiations either for new or renewed business will be the subject of a future article. **SN**

Andrew Jamieson is claims director and legal advisor at ITIC. www.itic.com.

Legal Eagles...

Do you have a burning legal question for the HFW *Shipping Network* team? Email legaleagles@ics.org.uk for them to answer your question in the next issue of *Shipping Network*. Questions should be of a general nature and not specific to a particular live issue.

HFW's crack team of specialist shipping lawyers answer your legal questions

Guy Main

Cecilie Rezutka

Q I'm a shipowner who usually carries goods in circumstances where the Hague-Visby Rules apply. How onerous is the duty to ensure that a ship is seaworthy under those Rules? Can I delegate my responsibility to the Master and crew?

A Under the Hague-Visby Rules (and similarly the Hague Rules), a carrier has an obligation to exercise due diligence, before and at the commencement of each voyage, to make a ship seaworthy. The Rules seek to strike a balance between the preferred interests of ship owners and those of cargo owners.

Seaworthiness is essential for promoting the safety of life at sea, safety of navigation, and the protection of the marine environment. The concept affects a range of legal relations as well. As an example, cargo owners may argue that a vessel was unseaworthy as a defence against claims in General Average. Under the York-Antwerp Rules cargo owners do not have to pay such contributions if they can prove that a carrier's 'actionable fault' caused the relevant losses.

The Court of Appeal recently shed further light on the obligation. In *Alize v Allianz (The "CMA CGM Libra") [2020] EWCA Civ 293*, the Court found that an inadequate or defective passage plan and working chart had rendered a container vessel unseaworthy. Neither document had properly marked a warning, contained in a Notice to Mariners, that charted depths outside a fairway were unreliable. The vessel grounded on a shoal, and around 8% of the cargo owners refused to pay the contributions in General Average.

Testing case

The standard of seaworthiness is a question of fact to be analysed on a case-by-case basis. In *CMA CGM Libra* the first instance judge had set out the conventional test, derived from McFadden v Blue Star Line [1905] 1 KB 697, as follows: Would the prudent owner, if he had known of the relevant defect have required it to be made good before sending his ship to sea? Seaworthiness, therefore, goes beyond merely physical aspects and covers a number of areas, such as technical standards, systems, equipment and documentation. Seaworthiness is also to be looked at on a regular basis, and the requirements may change over time. The underlying rationale is that vessels should be safe at sea.

In *CMA CGM Libra* the Court confirmed that a vessel may be rendered unseaworthy by negligence in both the navigation and the management of the vessel. One-off instances of negligence as well as systematic failures can cause unseaworthiness. The Court found no distinction between mechanical acts of the master and crew, and acts requiring judgement and seamanship. Thus, prudent seamanship required the warning in the Notice to Mariners to be marked on the chart, and as it was not, at the commencement of the voyage the vessel was not safe to proceed to sea.

With regard to due diligence, the Court said that once the ship-owner assumed responsibility for the cargo as a carrier, all of the acts of the crew done in preparation for the voyage were performed in the capacity of the carrier. The ship owner could not delegate its duty to the crew, and was responsible for their failure. In *CMA CGM Libra*, therefore, the ship owner was not entitled to claim contributions in General Average.

The Hague-Visby Rules allocate risk in that carriers are under an obligation, before and at the commencement of a voyage, to exercise due diligence to make the vessel seaworthy. Where servants or crews make errors in the navigation or management of ships during the voyages themselves, however, carriers are entitled to be exempted from liability for such errors. This is in contrast to the Rotterdam Rules, where a carrier must make and keep a vessel seaworthy before, at the beginning of, and during each voyage. **SN**

While every care has been taken to ensure the accuracy of this information at the time of publication, the information is intended as guidance only. It should not be considered as legal advice.

Credit: SFbaywalk from Oakland, Cal

The standard of seaworthiness was tested in the *CMA CGM Libra* case

The Covid-19 outbreak has brought the application of force majeure provisions into the spotlight

What is force majeure and does Covid-19 trigger it?

The recent Covid-19 outbreak has brought the application of force majeure provisions into the spotlight.

Not everything that looks like force majeure is force majeure. Force majeure is not a common law concept and only exists as a creature of contract. Most, although not all, commercial contracts will contain a force majeure clause. These are clauses which alter parties' liabilities and/or obligations under the contract when an unforeseen event beyond the parties' control prevents contractual obligations being fulfilled. If no such clause is included in the contract, the doctrine of frustration may apply, although its scope is very narrow and the threshold to satisfy in order to demonstrate its application is very high.

It should not be assumed that any unforeseen event will trigger a force majeure clause. Whether an event qualifies as force majeure will depend on the specific wording of the clause and will be a question of fact. It is rare for a force majeure clause to use the term "force majeure" itself, rather the clause will typically contain a list of specific events or criteria which must be met.

Force majeure provisions are construed narrowly by tribunals and courts against the party seeking to rely on them. A party seeking to rely on the clause must adduce sufficient evidence to demonstrate its entitlement to rely on it. Although the wording of force majeure clauses can vary widely, contractual parties may wish to give consideration to the following:

1. Was the event unforeseen and outside the control of the parties? The legal test is usually an objective one.

2. Does the occurrence of the event cause the performance of the contract to be impossible/delayed? Impossibility means physical or legal impossibility which exceeds mere hardship/inconvenience or extra expense on the parties. Delayed means that complying with obligations under the contract as quickly as required is more difficult.

3. Is there an obligation to notify a force majeure event? If so, this should be strictly followed.

4. What effect does the clause have? Is the contract voided/cancelled, suspended or merely delayed, and how are existing obligations (e.g. payment) affected?

5. Does the clause oblige the parties to mitigate any consequences of the force majeure event? If so, any mitigation efforts should be well documented.

Does Covid-19 qualify?

Parties seeking to rely on a force majeure clause must consider (i) the wording of the clause and (ii) the specific factual circumstances.

Examples of situations where a force majeure clause may be triggered (always subject to the wording of the clause and the specific factual circumstances) include the following:

1. Owners may be prevented from tendering a valid notice of readiness, such that any delays in port due to Covid-19 may be for the owners' account if free pratique cannot be obtained and/or the port imposes preventive restrictions on the vessel.

2. Crew may be prevented from disembarking if local precautionary restrictions prevent changes. This may lead to a seller being unable to comply with his obligations under ship sale contract and may void the transaction.

3. A port may be rendered unsafe/owners could be entitled to refuse charterers' orders to proceed there as a result of the local restrictions/lockdown regulations.

4. Shipyards may declare force majeure, seeking more time for the performance of their obligations due to shortages of labour and delays in the delivery of materials.

Force majeure declarations from governments, port authorities, suppliers, shipyards and businesses may be useful evidence for the party seeking to rely on force majeure, although they are by no means conclusive.

Whether or not a force majeure event can be relied on will depend on a full review of the factual situation and the contractual agreement.

While every care has been taken to ensure the accuracy of this information at the time of publication, the information is intended as guidance only. It should not be considered as legal advice. The articles were written by Cecilie Rezutka and Guy Main. Cecilie is an associate and Guy a senior manager (partner equivalent) at HFW, a sector focused law firm specialising in shipping, aviation, commodities, construction, energy and insurance. Both are in the shipping department in HFW's London office. Guy is also a Fellow of the Institute and, before joining HFW, he spent 18 years as a shipbroker. Research was carried out by Colin Chen.

Boxing up the world's coronavirus fears

S&P Global's George Griffiths explores the Covid-19 impact on global freight

George Griffiths

As Confucius said: "Our greatest glory is not in never falling, but in rising every time we fall." Having spent months and indeed years warming up, the container freight market stepped into the ring to go toe-to-toe with the new International Maritime Organization's sulphur regulations, only to be tackled from behind by the unseen killer – Covid-19.

This blow from behind has left the container market on its knees and at this stage it appears uncertain whether it will get back up.

An endless barrage has seen container liners struggle to keep rates stable and resulted in them employing a raft of void sailings – a scenario in which previously detailed services along specific routes are pulled out of the supply side in order to counter low demand.

Void sailings works much like a bus service – you know how frequently the buses will come, but due to low demand, it doesn't make sense to have a bus every five minutes, so you pull every other bus.

The implementation of void sailings was a recurring motif seen last year; the eternal struggles of an oversupplied market. That's what we saw last year… until Covid-19 came along, that is.

You can pull services, you can trim back supply as best you can, but if there is no demand, there simply is no demand. Nothing, from the liner perspective, can magically bring demand back.

Some services were not pulled in time: some vessels were leaving China at 10% capacity in February, which in other terms is 90% empty.

Imagine buying that packet of crisps and finding out it was 90% air, but you still had to pay the same price for it. Transform that bag into a twenty-foot container, and multiply it by up to 20,000 times, then you have some idea of quite how crippling this was for shipping liners.

In the first three and a half months of 2020 alone, there were almost 400 void sailings, and on top of those were the vessels that had significantly lower utilisation rates. Then there were the container vessels stuck offshore for as long as two to three weeks as crackdowns at ports aimed at stymieing the infection rate began to bite. All the while carriers are incurring losses – engines are running, crews are eating, refrigerated containers are being cooled – and those with cargo onboard can only watch helplessly from the quayside as their precious goods are within sight of land, but too far away to get to.

What goes up must come down

It is worth noting at this point that there had been hopes of a bumper start to the year. 2019 had been tough, especially for the trans-Pacific trade which had been hit hard by the worsening US-China relationships and the escalating trade tensions. These were scaled back at the end of the year, however, seeing full capacity utilisation in January and even surplus demand that was being left at ports to be loaded on the next sailing. There were also widespread expectations that China would bounce back from Lunar New Year in record time, with a huge spike in demand into the summer.

Added to this, the hotly awaited IMO 2020 regulations finally came into force and were expected to drive the bunker element of the container freight market skyward, pushing up all-inclusive freight rates as a result. And as predicted, fuel costs soared… until January 6.

To say this year has put pressure on the container market would be a monumental understatement – the facts speak for themselves.

That said, for a market that has seen such weakening demand, carriers have been largely successful in their attempts to hold ground. Between February 1 and April 1, the all-inclusive cost of freight from North Asia to Europe for a forty-foot container fell from $1,500/feu to $1,275/feu, or 15%.

This fall is the result of lower importing volumes, the Chinese slowdown on Lunar New Year and Covid-19, and nothing more. If anything, the 15% decrease represents incredible carrier

"To say this year has put pressure on the container market would be a monumental understatement – the facts speak for themselves"

discipline at not letting these rates fall even further, as one might expect. But what of the bunker costs which feed into the all-inclusive freight costs?

With tumbling oil prices came tumbling bunker fuel prices. "The sad truth is that demand has tanked, but so have our operating costs – we should be raking it in with bunkers so low, but that is life," a seasoned trade lane manager at a large container carrier said – another pessimistic anecdote to add to the heap.

However, there is some truth to this matter. The Platts Bunker Charge along this route (PBC1) fell from $316.10/feu to $151.47/feu over the same period, a fall of 52.1%. This represented almost three quarters of the fall in all-inclusive freight, and that is from bunkers alone.

With carriers not able to recoup low demand when bunker costs are low, the question that rears its head is will they ever be able to?

Trade war or war of words?

Trans-Pacific shippers and carriers have had a fairly poor go of it recently, running the gauntlet between the US and China, two political heavyweights lumping one another with endless tariffs on landed goods, which was devastating for much of the market.

In 2019, volumes fell out of Chinese ports. This came hot on the heels of a bumper final quarter of 2018 as goods were 'front-loaded' to avoid the incoming tariffs, which in any case ended up being delayed.

As the year wore on, shippers moved whatever they could to Southeast Asia to try and circumvent the expected tariffs, and to keep product flowing at a reasonable rate, but the value of trade still rose out of China. Simply put, that is not an option this time. You can't circumnavigate a virus, you can't shift supply chains, and so what is there left to do, employ void sailings and hope that this all blows over sooner rather than later.

The container market has taken a beating for almost eighteen consecutive months. Due to the front loading there was no peak season in 2019 – demand typically spikes in summer allowing carriers to benefit from rising freight rates.

At the first signs of the shutdowns in China, the market response was largely that this will all blow over and the delay to Chinese exports will result in a huge spike in demand in the middle of the year. However, with the lockdowns across swathes of the world, the global market is charging headlong into a full-blown recession. This has been heavily signposted by China's first quarter fall in GDP of 6.8% - a huge fall, but even larger when you consider this is the first quarter since the 1970s that hasn't registered growth.

With fewer people out shopping, shops shuttering as their bank balances empty, and less money in everyone's pockets due to a recession, dreams of huge volumes of cargo shipping this year may remain just that.

One thing remains clear though, and that is that container freight will pick itself back up after this knockdown. However, the question remains as to whether the post-Covid-19 container sector will in any way resemble the post Covid-19 container sector, or whether we will see new players emerge, and potentially some larger players merge. **SN**

George Griffiths is the editor for global container shipping at S&P Global Platts. He heads up the company's container coverage globally, and develops and curates the all-inclusive freight rates and bunker charge assessments along key trade lanes. George can be contacted at george.griffiths@spglobal.com.

S&P Global
Platts

Homage to lithium...

Weird and wonderful facts about one of the shipping industry's commodities. This month, we take a closer look at lithium.

3

Li

Lithium
6.941

Lithium was discovered in the mineral petalite ($LiAl(Si_2O_5)_2$) by Johann August Arfvedson in **1817**

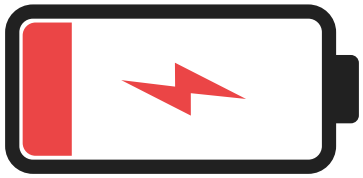
The mineral is white to grey, but when thrown into fire, it flares **bright crimson**

Lithium is often used as an alloy with aluminium, copper, manganese, and cadmium to make high performance super-light **aircraft parts**

Pure lithium metal is used in rechargeable **lithium ion batteries** such as those used in mobile phones

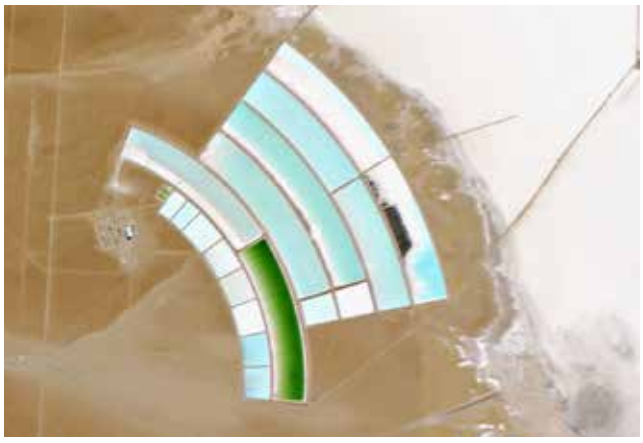
Lithium is the **lightest known metal**, which means it can store power without adding a lot of weight to devices

Lithium is so light it can **float on water**



At the current pace, demand for lithium could outpace production by **2023**

More than **half** of the world's lithium supply comes from high-altitude lakes and bright white salt flats in the 'lithium triangle' in **Bolivia, Chile,** and **Argentina**



A lithium mine in Argentina as viewed from **space**

Lithium is believed to be one of only three elements – the others are hydrogen and helium – produced in significant quantities by the **Big Bang**. Synthesis of these elements took place within the first three minutes of the universe's existence

Lithium carbonate is a common treatment of **bipolar disorder**, helping to stabilise wild mood swings caused by the illness

While lithium is something of a '**wonder** solution' to a lot of man's needs, the mining of lithium is not without **risks**... On the salt flats of Argentina, Bolivia and Chile, miners draw lithium-rich water from deep underground, and they pour it into shallow ponds where the water evaporates, leaving the lithium behind. In so doing, mining companies are **using up groundwater** that is **desperately needed** in the arid desert region

Sources: ducksters.com/science/chemistry/lithium.php
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mentalfloss.com/article/527936/facts-about-lithium
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Stormcrow Capital

Cruising one of Europe's great waterways

Australia/New Zealand Branch's Bob Hawkins reflects on a trip of historic import

Bob Hawkins

The idea of writing something about what amounts to a 14-day leisurely cruise along some the most picturesque rivers in Europe in Autumn didn't immediately surface as an idea suitable for our Institute's professional journal. However, while invigilating last November's exams in Auckland I was reminded of an Institute exam paper I sat way back in 1981. There was a question concerning some of the well-known canals, specifically where they were located and what ports they served. Among those named were the Kiel, North Sea and Suez canals.

There was no mention of the Rhine-Main-Danube Canal. In fact, if you were to look up the maps of the 1979 edition of the Lloyd's Maritime Atlas, there is no link between the Rhine, Main and Danube.

The reason being is that this 106-mile canal was only completed in the early 1990s. Herein lies the source material for this article. Hopefully the information might be of interest to those sitting papers such as Logistics & Multi-modal Transport in the future.

A container carrier passages down the Rhine

Both ends of this now popular river and canal waterway have existed as a means of transport for centuries having borders on several countries. They have also been the centres of conflict ever since humans occupied the European continent.

Connecting the two great river systems – the Rhine and Danube – was considered by many great kings and leaders over the intervening centuries however the engineering that was required wasn't possible until the earlier 20th century. Even then wars intervened and it wasn't until after World War II that the massive engineering works were undertaken in earnest and completed in 1992.

While most European nations in the region have good, fast rail services and mostly good highways connecting the main centres of industry with cities and coastal ports, there is still a need for bulk transportation that can only be provided by sea or, in this case, by river and canal.

Traffic flow

The main commercial traffic occurs along the main rivers, avoiding the extensive lock system that is a necessary requirement but slow, over the waterway's route. There is a total of 66 locks between Amsterdam and Budapest. Many low bridges and the size of the locks also restrict the size of vessels traversing over the full waterway. Ships wishing to utilise this waterway need to be within the following dimensions:

Length overall 450 ft (135m)
Beam 38 ft (11.45m)
Draft 6 ft (1.70m)
Air draft (about) 30 ft (9.15m).
Average speeds 7/8 kts upstream, 10/13 kts (downstream).

The three largest locks on the Canal each take vessels up or down 82 ft (25.0m). The highest point on the waterway is some 1,332 ft (406m) above sea level, in this case the North Sea level.

The largest volume of traffic traversing the Canal is passenger cruise vessels, some doing short cruises between one centre and another, but many doing 14 or more days over the full waterway from Amsterdam to Budapest and on down to Bucharest on the Black Sea. Others cruise on connecting rivers such as the Emms and Mossel.

The larger commercial vessels operate on the rivers to ports and towns as far as they are able. And while smaller vessels such as bulk and liquid carriers are easily observed, large barge convoys and container vessels are only seen beyond the locks and low bridges that occupy the upper reaches of both main rivers.

European Institute members will likely be well aware of most of the facts I have presented, however I'm sure many others in various centres around the world will be enlightened by the few facts and figures in this article. The rivers themselves are full of interest for someone like myself, fortunate as I am to have experienced a cruise over this fascinating European waterway. **SN**

Bob Hawkins FICS is chair of the Institute's Australia/New Zealand Branch.

Reforming education in transformational times

Education and Training Committee chairman Rob Gardner reports on meeting changing needs of students in the pandemic

Rob Gardner

In early February, when it was first mooted that we may not be able to hold a face-to-face Education and Training Committee (ETC) meeting in March due to Covid-19, I doubt that any of us fully comprehended the impact that this virus was going to have on our business and private worlds. We certainly hope that all of you are staying safe and healthy.

One of our frustrations was the lost opportunity to meet and assist our members and their students in Bulgaria and Turkey. It has been over two years since the committee last held a face-to-face meeting and there is always a danger of losing impetus and focus when you cannot brainstorm ideas across a table. Remembering to always mute your microphone when not talking and looking to see if anyone has typed a message on the chat section when doing a conference call is certainly not conducive to free-flowing conversation. I am therefore exceptionally proud of the enthusiasm and energy shown by the Committee and Head Office staff over the two days that we set aside to hold this meeting, each of us sitting at home trying to find a quiet spot from the rest of the family.

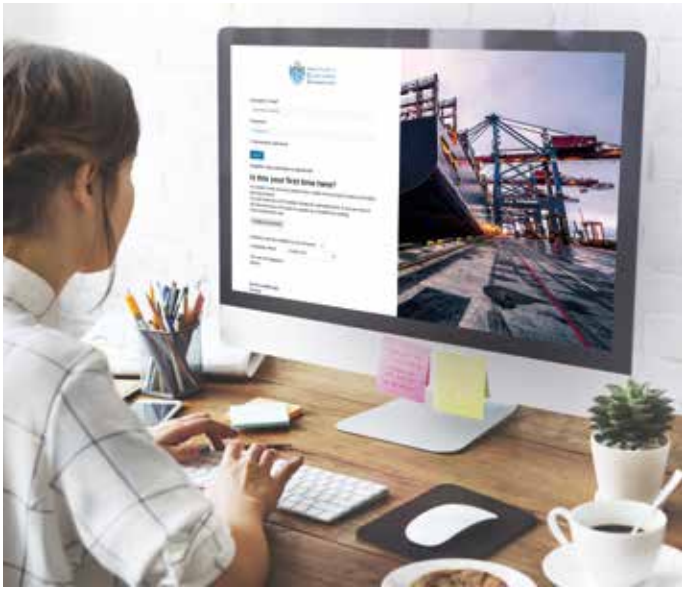
Some really good news to report is that for the November 2019 exams we achieved a pass rate of 65%. While one swallow does not make a summer, we believe that the collective work of the committee, the Board of Examiners, Examiners and Tutors, is certainly starting to show dividends. Well done and thank you to every one of you. Project 60 is a reality.

On to Understanding Shipping. This course was originally developed to fill a need for training in the shipping business for those with little or no previous exposure to ships or shipping. In 2016, a new syllabus was developed which has undergone continuous review in the last three years; launching in January 2020. Now, Cyprus Branch has moved over onto the new course and South Africa Branch is planning to do the same in June. The Australia and New Zealand and the Middle East branches have already received chapters 1 to 8 and are busy writing their region-specific chapter 9. The next step is for this to be submitted back to Head Office, accompanied by approximately 80 multiple choice questions.

Moving ahead

The current Covid-19 lockdown has brought to the fore the need for us to start doing more and more of our training online. We have in fact been discussing a number of possibilities for a while now and have made some small steps in this direction. These now need to be changed to large strides. The following are just some of the initiatives we are moving ahead with.

Webinars, podcasts and mini web videos: we have done our first tutorial podcast and are now looking for volunteers to come forward to do more of these.



Covid-19 has brought the fore the need to do more training online

Moodle: Head Office is in the process of acquiring this learning management system and will look to roll out corporate courses online. To this end we have decided to push ahead with the vetting of current courses that branches are offering. The hope here is that not only will we be able to share good material with each other, but we can also look at adapt these courses for online training.

Education Officers' LinkedIn Group: This is an online forum for Education Officers where information such as the mock exam, the self-assessment test, tutor mentoring programs and anything else that is deemed useful will be posted. It offers our Education Officers across the globe, the opportunity to discuss common ideas and problems. We think this is a great idea and yet to date we have only had ten branches sign up. If your branch has not signed up, please do it today.

Tutorship: This has been a successful vehicle in assisting our students over the years to pass their exams. It does need to become more contemporary and we have formed a small team to firstly identify what is needed by our students and from there we will look to develop an online version.

Lastly, at the last ETC meeting we said a fond farewell to three of our team, who have, over the last five years, put in a tremendous amount of effort and time to drive projects forward. Thank you, Guy Main FICS, Krishna Prasad FICS and Capt Suresh Bhardwaj FICS – you will indeed be missed.

Rob Gardner FICS is the chairman of the Education and Training Committee of the Institute and executive business development of Grindrod Freight Services.

Elected to Membership

We congratulate and welcome the following who were recently elected to Membership:

ELECTED TO MEMBERSHIP

Karen Kwok	Australia
Michael Laloli	Australia
Etienne Seguin-Bertrand	Canada
Hani Essam Alsabawi	Canada
Shweta Jayavant	Canada
Christos Antoniou	Cyprus
Dena Georgiou	Cyprus
Dimitra Isaakidou	Cyprus
Dumitru Jelavschii	Cyprus
George Chatzidimitriou	Cyprus
Nafsika Thaleia Karantza	Cyprus
Natalie Georgiou	Cyprus
Alexander Papadimitriou	Greece
Alexandra Patera	Greece
Alexandros Habeos	Greece
Alexandros P Kafouros	Greece
Anastasia Karintzi	Greece
Ariadne Benetatou	Greece
Chrysostomos Nikolaou	Greece
Dimitrios Dimopoulos	Greece
Dimosthenis Gkizas	Greece
Eleni Kosmidi	Greece
Eleni Oikonomou	Greece
Emmanouil Barmparis	Greece
Foteini Konstantinou	Greece
George Patsos	Greece
Georgios Valamvanos	Greece
Ifigeneia Delivelioti	Greece
Ioannis Kalothetos	Greece
Ioannis Manolis	Greece
Ioannis Stasinopoulos	Greece
Kelly Angela Sklavounos	Greece
Konstantia Taxidou	Greece
Lambis Minaidis	Greece
Leontios Chaviaras	Greece
Margarita Kavoussanaki	Greece
Maria-Elena Litsou	Greece
Mark Anthony Jolley	Greece
Panagiota Menediati	Greece
Periklis Vlachopoulos	Greece
Prodromos Angelidis	Greece
Spyridon Batsolakis	Greece
Stavros Dragatis	Greece
Styliani Vitetzaki	Greece
Theodora Panagiotou	Greece
Vasileios Dimitroukas	Greece
Vasileios Drempenteris	Greece
Vasileios Kyveris	Greece
Zeppos Athanasios Poseidon	Greece
Aditya Shah	India
Aniket Tamrakar	India
Avinash Dhaktu Kadam	India
Captain Mathew Joseph	India
Dr VN Parthiban	India
Gautam Banik	India
Jemimal Inbanathan	India
Karn Kapoor	India
Krishna Mohan Reddy Palle	India
Mugilrajan Devarajan	India
Pavansayee Srinivasan	India
Sachin Kubal	India
Sanath Shetty	India
Shashwat Kumar Sahai	India
Shirish Metri	India
Swapnil Satish Harne	India
Afnan Mohammed Swaleh Al-Amry	Kenya
Diana Businge	Kenya
Abhishek Yadav	Singapore
Alex Wang	Singapore
Edric Cheang	Singapore
Lim Zi Qin, Erin	Singapore
Michael Gennaro Watters	Singapore
Sim Min Xuan	Singapore
Eidris Dildar	South Africa
Mark John Bulter	South Africa
Panache Ramsuran	South Africa
Alexander Mikhailov	Ukraine
Anton Barbariga	Ukraine
Artem Postnikov	Ukraine
Ivan Martsynenko	Ukraine
Mikhail Denysov	Ukraine
Oleksander Razuvanov	Ukraine
Yegor Rogovenko	Ukraine
Adarsh Das	United Arab Emirates
Ganeswara Tuta	United Arab Emirates
Javed Adnaan	United Arab Emirates
Subhasis Behera	United Arab Emirates
Ben Struthers	United Kingdom
Christakis Ntiso	United Kingdom
Christos T Kottas	United Kingdom
Evgenia Nichoriti	United Kingdom
Jamal Elsahli	United Kingdom
Jonathan Highfield-Jefferies	United Kingdom
Lasse Holm Jensen	United Kingdom
Lional Roy Sharon	United Kingdom
Vishnu Shankar Rajalingaraja	United Kingdom

PROMOTED TO FELLOWSHIP

Mark North	Australia
Amalia Miliou-Theocharaki	Greece
Captain Shiv Samrat Kapur	India
Shashank Sharma	India
Jay Poojari	Singapore
Domenico Ferrara	United Kingdom
Ean Parsons	United Kingdom
Graham Thrall	United Kingdom
Leif Jeffer Ollivierre	United Kingdom
Paul Olvhoj	United Kingdom
Richard A Jones	United Kingdom

RE-ELECTED TO MEMBERSHIP

Ali Khan	Pakistan
Ranjit Nambiar	Singapore
Vishal A Velankar	Singapore
Captain Kaushik Samanta	United Arab Emirates
Tim Hartland	United Kingdom

Celebrating a well-deserved royal accolade

By Jacqui Gilbert

In April 2019 I received a mysteriously worded email and subsequently took a discrete telephone call from an industry contact who asked me some fairly unusual questions relating to Julie's work and projects. When the contact subsequently advised me that Julie was to be nominated for an OBE in the 2019/20 New Year Honours list, I was so pleased for her. Julie is such a hard working individual, always going the extra mile to achieve what she believes in. She often working late into the evening, pushing for the delivery of unique projects with education and the promotion of shipping at their root. I was, of course, sworn to secrecy about the context of the call and the call itself. Hand on heart, I did not tell a soul about Julie's pending achievement.

In November that year, Julie came into the office and asked me about the brown envelope she had left on my desk bearing a Royal Crest. She asked if I knew anything about 'it'; I confess it was a lovely moment to share with her. After much thought and discussion with her family she decided to accept the nomination.

Julie was, as we all expected, awarded the honour of The Most Excellent Order of The British Empire, Officer, for service to diversity in the maritime sector.

Julie proudly displays her OBE alongside Institute chair Susan Oatway, displaying her Institute badge of office

The ceremony and the celebration of her achievement was on March 3, 2020. It was a perfect day: the sun shone, there was an early morning frost, and Julie and her daughter Maia enjoyed a slow stroll from Green Park to Buckingham Palace. Entry to the Palace ran like clockwork, with all of the staff working their magic and making everyone attending the ceremony feel special and most welcome. Once everyone was divested of bags, coats and mobile phones Julie was taken away to the recipients' room somewhere in the depths of the Palace and we were all taken to the Ballroom. Buckingham Palace is truly a wonderful space, crammed with marble statues and enormous oil paintings, much gold and red décor. It is a truly impressive spectacle. Inside the Ballroom a small orchestra playing wonderful music from a gallery, while at the other end there was a dais that gradually filled with those involved in the ceremony, including five Yeoman of the Guard from The Tower of London.

There was a tension in the room as we waited for the Queen to arrive. When she arrived, surrounded by assistants, she stepped onto the dais, placed her handbag on a chair, she then turned and asked everyone to "please be seated". The Queen stood for the entire ceremony and spoke with each recipient shaking their hand as they left her.

Julie was eighteenth to come into the Ballroom to receive her award, and as she stood speaking with the Queen I felt honoured to be working with her; what a wonderful pinnacle to anyone's career, to be awarded an OBE, and to receive it from Her Majesty herself. I hope that Julie will remember how she felt on that day, receiving one of the highest accolades awarded in the UK for excellence and industry recognition. Julie is most deserving of this, and the Institute is extremely proud of this acknowledgement of all her hard work. ***SN***

Employment support initiative launched

The Middle East Branch has started a new initiative to support members in their search for new jobs in light of the chaos caused by the Covid-19 pandemic.

In launching the service, the Branch said: "The world is going through unprecedented times – economic paralysis, trade slow down, stifling movement restrictions and unusual government resolutions. This may result in suffering job loss, or other related difficulties."

To assist Members, the Branch is starting a Member Support System to provide guidance where required on the changing regulations and available options and to circulate the CVs of those who lose their job to Branch contacts.

The initiative is headed by Abdul Hafis FICS and the support team can be contacted by emailing support@icsmiddleeast.org. ***SN***

Professionalism extolled in East India

In his speech at an East India Branch seminar on professionalism in shipping, Branch chair Ravee S Tittei stressed that the growing challenges in trade coupled with changing global trading practices demand professionalism to ensure sustainable development of ocean trade.

Mr Tittei, who is also chief operating officer of German Express Shipping Agency India, took the opportunity to also explain the role of the Institute in maritime trade.

He was joined on the podium by chief guest KK Raman, group president of TV Sundaram Industries, and T Velsankar, joint managing director for PSTS Logistics, who emphasised the need to meet today's challenges in maritime trade.

S Sankaran, executive committee member of the Branch, spoke about China's port-led growth and infrastructure development, while a comparative analysis of trade and volume handled by Indian ports was presented by M Sayeeraman, vice chair of the Branch. He also stressed the need for professionalism in dealing with ports and container terminals.

Cargill's Capt Amar Mascarenhas – also a member of the Branch – delivered a speech on the 'Role of shipping individuals', while Jeyanth Thomas, general manager of Chakiat Agencies, highlighted the importance of developing skills in shipping.

Branch honourable secretary Capt John Prasad Menezes presented on understanding PQE and Priya Edwin, partner and head of chartering at Pearl Shipping & Chartering, spoke of the strategies necessary to overcome hurdles when undertaking Institute qualifications.

The seminar ended with a valedictory address by T K Ramachandran, chairman of VOC Port Trust, in which he applauded the role of the Institute for its continued contributions to shipping. ***SN***

Cass supports London Branch seminar

In March, London Branch held an event called 'Trading Paperwork' with its good friends at Cass Business School with whom the Branch has a long-standing relationship.

A number of speakers covering a range of topics were secured for the evening, including Nikos Nomikos FICS, professor at Cass Business School, who provided the welcome introduction; Institute head of membership and education, Robert Hill FICS; Jacco de Jong, head of global sales at Bolero, who spoke about e-bills of lading and blockchain technology for traders; and lecturer and arbitrator Jeffrey Blum FICS, who presented an INCOTERMS revision session.

The purpose of the evening was twofold. Firstly, it was to give insight into new international trading terms and how technology such as Bolero's plays a part in facilitating global commerce. Secondly, it was to deepen London Branch's ties with Cass, and to encourage students to continue their education and gain practical skills with the Institute after graduating.

Cass generously hosted networking drinks at the end of the evening where Members and industry professionals could impart some of their knowledge to students and offer a little career guidance.

Bolero's Jacco de Jong spoke about e-bills and blockchain

The Institute's London & South East Branch look forward to co-hosting events with Cass in the future and to assisting more of the Business School's students in achieving their professional status within the industry. ***SN***

Loss of Institute veteran

It is with sadness that the Institute informs Members of the death of Roger Heath.

Roger, who was elected to Institute membership in 1964, passed away on February 28, just short of his 84th birthday.

He was educated at Bristol Grammar School before attending a nautical college and serving an apprenticeship at sea. On return to shore, Roger became a shipbroker, moving through the ranks to take the position of director at Marine Navigation Co until he retired in 1996.

Events Calendar

15 June	**Registrations for the 2020-21 academic year open**
6-16 July	**Postponed May examination session**
10 September	**Institute Global Open Day**

Middle East propels webinar series

A webinar on *'Covid –19: Disruption in commodity trade – Whose baby is it?'* hosted by the Middle East Branch in April was heralded as a great success with over 475 participants from 32 countries registered for the event.

The Covid-19 pandemic and the resultant lockdown has thrown the commodity trade, and in turn shipping, into turmoil. With many countries clamped by lockdowns, many ports have declared force majeure, while traders, charterers and owners have started taking shelter behind the same, whether it is covered under the relevant contracts or not.

The importance of this topic in the present scenario was evidenced by the high number of registrations and the overwhelming number of questions received in advance and during the webinar.

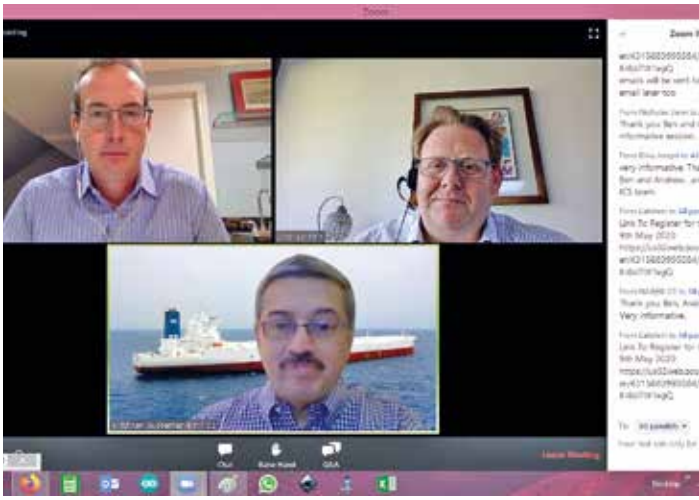
Franky George, regional claims manager of Charterers P&I Club, ably presented the seminar. Ms Franky's presentation kept the audience glued to their screens with her detailed explanation of the commodity trade chain and the application of force majeure. She made references to actual cases was proved to be an eye-opener for many participants facing similar situations.

Arbitrator and consultant Muthu Jagannath spoke about documentation

The Middle East Branch conducted a second webinar with over 330 registrations in April on *'Successful leadership in times of uncertainty'*, presented by Professor Christopher Abraham, head of campus (Dubai) at SP Jain School of Global Management.

Prof Abraham started his presentation discussing the volatile, uncertain, complex, and ambiguous world and the adaptability of the human brain. Taking cues from neuroscience, he explained the role of different types of intelligence during the Covid-19 crisis, the power of the human brain to focus on thriving through disruptions and the importance of the right mindset.

He then laid out the importance of collective focus and gave a step-by-step explanation on leadership in tackling the present crisis.



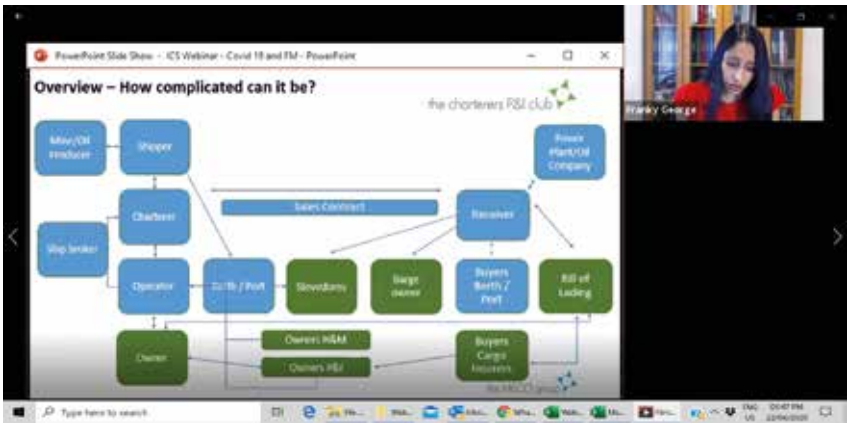
The webinar series has kept Members informed throughout the pandemic

The reaction from the participants said it all: "Today's session was awesome. Picked lots of valuable info. It was really a fantastic session," said Ms Anoma Ranasinghe, controlling council member from Sri Lanka; "Yesterday was really good with numerous ideas generated on how we/I in our Branch can encourage our students to be full of energy, full of motivation and full of purpose with their studies and exams. I enjoyed Christopher's presentation not only because of the content but also because of his passion and the absolutely masterful manner in which he delivered it!" added Norman Lopez, member of the Education and Training Committee of the Institute.

A third webinar in the series took place on May 2, focused on the *'Tanker market outlook'*, delivered by Ben Ognibene, chief executive of Concord Maritime USA, and Andrew Finn, partner, Affinity London. Once again, the event proved popular with 369 participants from 31 countries registered for the event.

Mr Finn gave a detailed presentation on the crude and product tanker markets and discussed the demand for storage and its resultant impact on the tanker market. The extremely low crude prices have led to very high demand for tankers as storage units taking charter hires to unprecedented levels.

Mr Ognibene presented the tanker market outlook from an owner's perspective. He graphically explained the volatility of the tanker market due to conflicts, regulations and mother nature. ***SN***



Charterers P&I Club's Franky George gave a detailed explanation of the application of force majeure

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www.international-maritime-rescue.org

The Secret Broker

Downsides of deskbound broking

Douglas Adams, in his comic sci-fi trilogy *The Hitchhikers Guide to the Galaxy*, describes a number of unlikely products: "Joo Janta 200 Super-Chromatic Peril Sensitive Sunglasses have been specially designed to help people develop a relaxed attitude to danger. At the first hint of trouble, they turn totally black and thus prevent you from seeing anything that might alarm you." I think my remote-working computer system works on the same principle. To prevent rising stress levels, the system closes down as soon as it senses that you have an important and time-critical message to send. Unable to receive or send emails, the system presumes it has liberated you from panic and freed you to wander down the garden and potter in the greenhouse.

Who'd be in IT? Acknowledged only when they fail, they are businesses' goal keepers, with all the saves going unnoticed. How we have forgotten how it used to be. I started in the era of telexes when you only got to go home once the pile of telex paper met the lowering cloud of cigarette smoke. And without remote access we worked Saturdays. Memorandum of Agreements (MOAs) were a work of artistry, where highly skilled secretaries would expertly and painstakingly insert boxes of text with the precision of surgeons. With the advent of fax, principals would append their signatures to an illegible grey smear on an MOA and hope for the best. Sending plans was an exhaustive zig-zag of couriers from owner to seller's broker, to plan copier, back to broker, to buyer's broker, to second plan copier, back to broker and finally to potential buyer. A business trip was a launch into radio silence – business continuity resting on stacks of drachma coins in Piraeus phone boxes and illegible faxes passed (or not) by indifferent late-night receptionists. But if you tell that to young brokers today, they won't believe you.

So I am truly thankful in this time of isolation for the lads in the basement (I always image IT departments being in the basement and being lads) for keeping the show on the road, even if the show is a bit lacking in jokes, slapstick and musical numbers. The truth is, this working-from-home lark isn't all that it was promised to be. Much as we bemoaned the crowded commute, the inescapable colleague and the hideous biological experiments in the back of the office fridge, when the order was finally given by the boss to scatter, we knew a period of frustration awaited.

Shipping business is tricky – investors are understandably shy of floating their treasure out into such a stormy sea. Values are hard to fix. The sheer practicalities of inspecting and delivering vessels have sunk quite a few prospective deals. Expressly against Ministry of Health guidelines the desk went for a final pint before we retreated to our individual foxholes. It seems a long time ago. I look forward to our next pint (if only because I bought the last round). **SN**

the stern

Shipping's pop-up Covid care

Innovative conversions of shipping containers feature regularly in The Stern. We've seen pop-up shops, art installations, apartment blocks and more. Now, a new use for shipping containers has been dreamed up, this time in response to Covid-19.

An international task force of designers, engineers, medical professionals, and military experts have joined forces to create Connected Units for Respiratory Ailments (CURA), an open-source project aimed at capacity building in Intensive-Care Units around the world.

Each pod, or 20-foot shipping container in its previous life, is converted into two-bed intensive care units, complete with extractors to create negative air pressure, which can be transported anywhere and deployed in just a few hours. The pods can work as standalone units, or they can be connected by an inflatable corridor structure to create larger, multi-bed clusters.

Carlo Ratti, an Italian architect based in Boston and part of the CURA taskforce, told *The Guardian*: "We thought, is there any way that you can get the speed of convention centre or tent hospital, mounted in a few hours or a couple of days, but at the same time have something that is as safe as the prefab hospital?"

The CURA containers offer intensive care flexibility

The designs are available as open source plans online to be freely copied around the world. CURAs have already been created in Dubai, Canada and Italy.

With the container market in freefall with voided sailings the norm rather than the exception, this might be the perfect time to put those redundant containers to better use. **SN**

No time to... lose

James Bond's latest movie *No Time To Die* might prove to be the franchise's unluckiest film. Injuries caused by rogue onset explosions, the star Daniel Craig being laid up by a sprained ligament and then the closure of cinemas as a result of Covid-19 meant inevitable delays to the film's release.

But despite these setbacks, one area where the shooting was not let down was with logistics.

DHL – logistics provider for five Bond films – was the official logistics partner for *No Time To Die*, transporting

Bond logistics shaken, but not stirred

everything around the globe via air, ocean, and road freight with precision timing to keep to the original filming schedule.

That meant ensuring that both filming units always had the right equipment available at the right time and place and moving equipment between filming locations in Norway, Jamaica, Italy, and all over the UK.

But even DHL with its ability to stick to any schedule thrown at it couldn't sidestep Covid-19 and pandemic-related delays to the film release. **SN**

Shipping Speak

"Despite the unprecedented difficulties, the industry has responded magnificently, working round the clock to keep the nation fuelled, fed and supplied with vital goods"
UK Shipping Minister Kelly Tolhurst

As the world battles with the COVID-19 pandemic, it has never been more critical to keep our ports open and goods moving. Shipping is chartering into many unknowns and new challenges"
Maritime & Port Authority of Singapore (MPA) chief executive Quah Ley Hoon

Find your next move

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This opportunity is perfect for those who wish to join an up and coming office within a growing, multinational network. With offices in Greece and the Far East, the team is small, yet very dynamic and have built a very successful track record so far and are now looking grow.

https://bit.ly/2PdR2Q5

LNG Broker, Italy

The ideal candidate must have a minimum of 3 years' experience in a shipbroking or chartering role and have completed a maritime degree. We're looking for someone with a strong network of clients who is a confident business developer.

https://bit.ly/2vPaaNA

Senior Broker/Regional Head, Houston

As an experienced and successful broker or commercial shipping professional within the U.S. tanker market, you will lead the established Houston office and be responsible for growing the business and team within the region along with managing your own clients and deals. We are looking for a natural leader – a player-manager who will develop and transact business at senior levels.

https://bit.ly/32gglkE

Dry Broker, London

This is perfect role if you've been used to working in a large, corporate broking environment and are looking for a role where you can make it your own, in a single office, working within a small team of successful brokers.

https://bit.ly/2uUwkOv

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