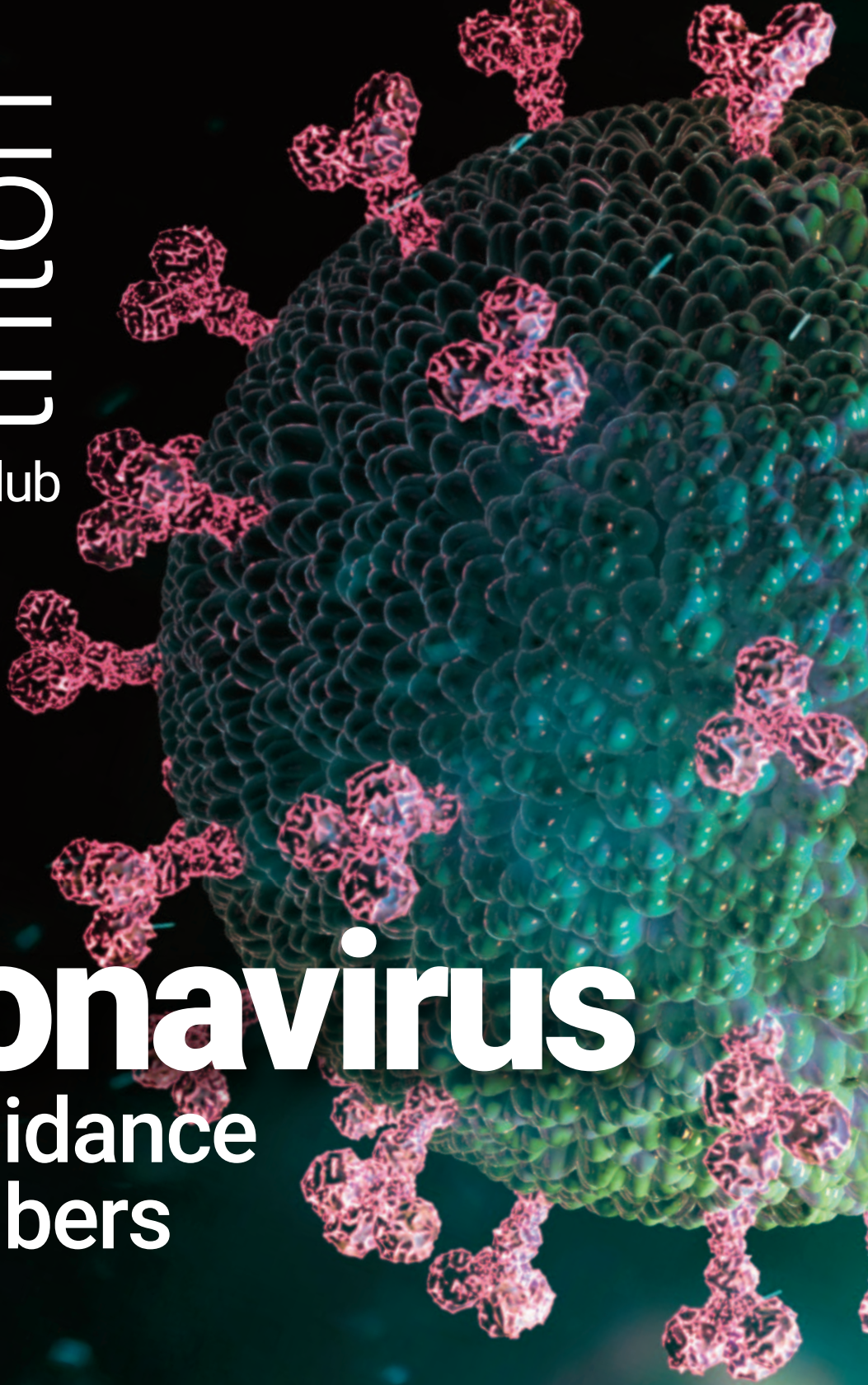
No.1 | 2020

triton

The Swedish Club



Coronavirus

Legal guidance for members

TELP helping members navigate today's uncertain world

Cyber security and unseaworthiness

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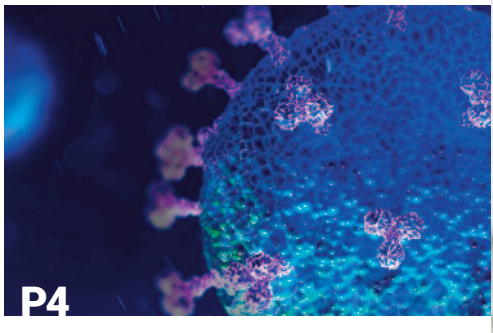

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Our thoughts are with you

Dear members, brokers and friends of The Swedish Club.

We have just spent the Easter break in a way we have not experienced before. The current situation affects all parts of society in a way we have not been able to envisage previously. I sincerely hope you are all safe and healthy.

The COVID-19 pandemic has produced unprecedented operational challenges for members. Crew changes, quarantine requirements, disruptions and delays, have become day-to-day issues in these difficult times. These are the imminent challenges; the long-term effects are more unpredictable.

The Swedish Club is fully committed to supporting members with advice and recommendations. We continuously respond to many questions relating to claims, disputes and the Coronavirus generally and how these issues affect the cover afforded. Our top priority is to service our members and brokers at all times.

The immediate impact for the Club concerns investments. However, I can confirm that we maintain a very strong capital position. Our Finance & Audit committee have been active during the first quarter of the year. A stress test required by the regulator in the latter part of March shows that our solvency margin has not been greatly affected.

For the safety and wellbeing of members, brokers and friends of The Swedish Club, we have cancelled all social arrangements this spring, and in connection with the AGM planned for 10, 11 and 12 June. The actual corporate Annual General Meeting will still take place on 11 June 2020 and we are at present looking into virtual options available for conducting this meeting.

Our aim is to be back next year in full force with an ambitious programme. We are in a people business and look forward to meeting up again soon, when circumstances permit.

In the meantime, take care and stay safe and I hope you will find some interesting articles to read in this issue of Triton.

Lars Rhodin
Managing Director

COVID-19 a disease like no other

Nigel Griffiths
Head of the Marine Advisory Medical Service, UK

The shipping industry, and indeed the world has already been impacted in a number of ways by the emergence of COVID-19: It is a pandemic, the enormity of which mankind has never endured before. It is affecting the daily lives of people in all countries of the world and the mortality rate has made enormous inroads into the world's population.

The main signs and symptoms of COVID-19 include fever, dry cough, fatigue, sputum production, shortness of breath, myalgia or arthralgia, sore throat, and headache. Nausea or vomiting has been reported in a small percentage of patients (5%).

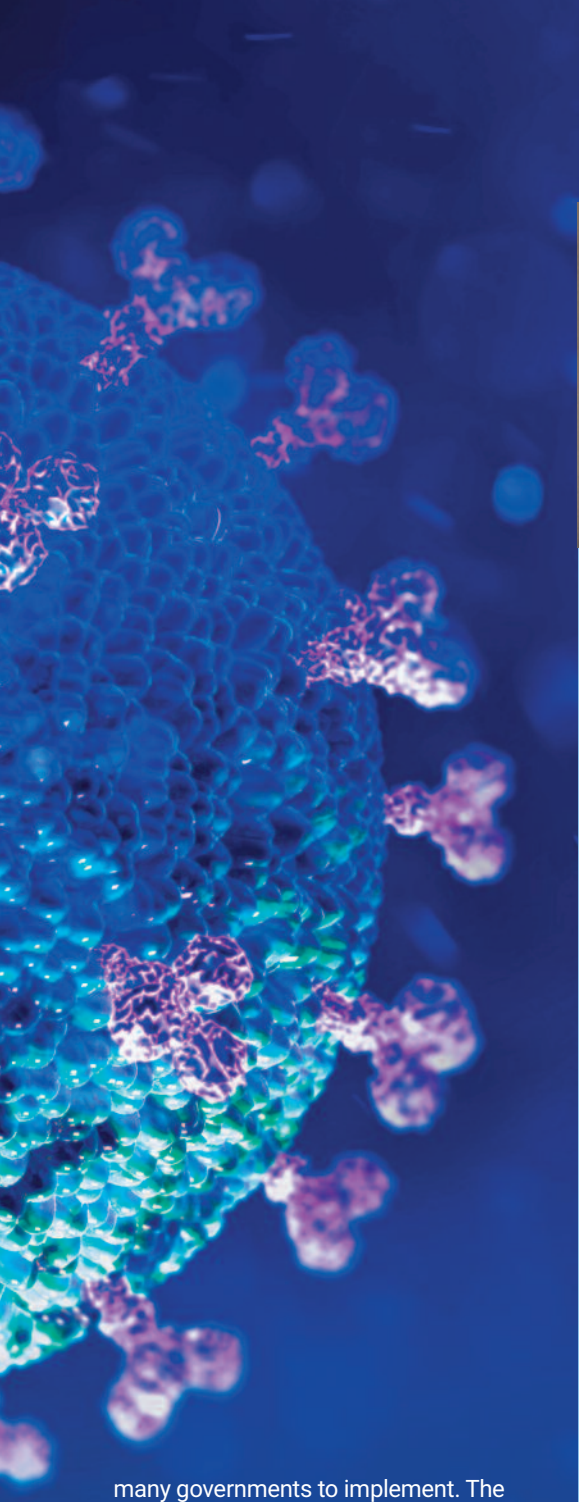
A new strain

Coronaviruses (CoV) are a large family of viruses that cause illness ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS-CoV) and Severe Acute Respiratory Syndrome (SARS-CoV). The novel coronavirus (nCoV) is a new strain that has not been previously identified in humans. The virus found to cause COVID-19 was initially isolated from a clinical sample on 7 January. It is notable that within weeks following the identification of the virus, a series of reliable and sensitive diagnostic tools were developed and deployed.

COVID-19 started in China and worked its way around the world in a matter of months. COVID-19 differs from Ebola, for example, because Ebola is transmitted by direct contact, whereas COVID-19 is mainly transmitted by droplet infection, making it much more transmissible.

Control

Many governments are following China's lead and taking steps to control this virus by lockdown measures or 'social distancing'. Withdrawal from society, with its basic rights and freedoms, does not go unchallenged and has been difficult for



many governments to implement. The European Convention on Human Rights gives a right to liberty under Article 5, the right to respect for family and private life under Article 8, freedom of thought, conscience and religion under Article 9, freedom of expression under Article 10 and freedom of assembly under Article 11. COVID-19 has challenged to the very core the rights of individuals to follow their desires, which were hitherto protected under national laws. New laws have been created to withdraw these freedoms, and it is not unnatural for people to express resentment at what many see to be intrusive legislation. It would be fair to say that this will be easier to implement in some countries than others.

World Health Organization (WHO) Guidelines to reduce transmission are as follows:

Wash your hands frequently
Regularly and thoroughly clean your hands with an alcohol-based hand rub or wash them with soap and water.

Why? Washing your hands with soap and water or using alcohol-based hand rub kills viruses that may be on your hands.

Maintain social distancing
Maintain at least 1 metre (3 feet) distance between yourself and anyone who is coughing or sneezing.

Why? When someone coughs or sneezes, they spray small liquid droplets from their nose or mouth which may contain virus. If you are too close, you can breathe in the droplets, including the COVID-19 virus if the person coughing has the disease.

Avoid touching eyes, nose and mouth

Why? Hands touch many surfaces and can pick up viruses. Once contaminated, hands can transfer the virus to your eyes, nose or mouth. From there, the virus can enter your body and can make you sick.

Practice respiratory hygiene
Make sure you, and the people around you, follow good respiratory hygiene. This means covering your mouth and nose with your bent elbow or tissue when you cough or sneeze. Then dispose of the used tissue immediately.

Why? Droplets spread virus. By following good respiratory hygiene, you protect the people around you from viruses such as cold, flu and COVID-19.

Stay informed and follow advice given by your healthcare provider
Stay informed on the latest developments about COVID-19. Follow advice given by your telemedicine service, your national and local public health authority or your employer on how to protect yourself and others from COVID-19. For those that work at sea, this may be via a telemedicine service.

Why? National and local authorities will have the most up to date information on COVID-19. They are best placed to advise on what people should be doing to protect themselves.

If you have fever, cough and difficulty breathing, seek medical care early
Advice for those ashore would be to stay home if you feel unwell. If you have a fever, cough and difficulty breathing, seek medical attention and call in advance. Follow the directions of your local health authority. At sea, self-isolation should be considered if exposure is a possibility.

Why? National and local authorities will have the most up to date information on the situation. Calling in advance will allow a telemedicine advisor to help you. This will also protect you and help prevent spread of viruses and other infections.

Advice for Masters of vessels

- Only persons cleared by local port officials, authorities and the Master should be allowed on board, including marine/harbour pilots, technicians, ship agents, etc.
- Limit visitor access to the vessel as much as possible.
- Crew disembarkation from the vessel whilst in port must be minimised and allowed only in absolute need situations.
- Minimise interpersonal exchanges with persons from ashore, avoiding contact with people who show symptoms of flu or high temperature and take care of personal hygiene including more frequent handwashing, etc.
- Limit, as much as possible, shore side persons' direct access to internal spaces of the vessel.
- If possible, designate a central location/room with direct access from the outside and enclosed toilet to receive authorised persons from shore in order to avoid unnecessary physical contact and possible contamination inside the vessel. The room should have the minimum of furnishing and be easy to decontaminate with disinfectants. Social distancing MUST be observed. Wipe down areas and items visitors have touched or may have touched with disinfectant wipes and/or sprays.
- If authorised persons need to enter the vessel ensure they are wearing or, if necessary, provide them with, applicable mask and gloves.
- Masters should take precautions to minimise the potential spread of the virus among seafarers if symptoms appear. Isolate the seafarer to a location preferably with segregated ventilation and separate from the common areas used by seafarers such as seafarers' lounge, gym, mess rooms, etc.
- Avoid shaking hands, a simple bow or nod will suffice.
- Handwashing is the best way to reduce the risk of infection being transmitted from one person to another.
- Shipowners must keep up to date with COVID-19 developments.
- Ensure proper training and provide information and education on the virus for the workforce including how the virus spreads, how to prevent the virus in order to prepare workers and how to dispel myths, fears and misconceptions.
- Keep up to date with details of the affected areas through WHO or from the relevant centre for disease control via disease outbreak updates and maps.
- Be aware and respect any quarantine restrictions that any country/port may apply, and of any requirements by Port Health in this respect.
- Engage with safety managers and ensure there is continual and ongoing communication with workers, providing updates on the outbreak and training refreshers and drills as and when required.

Dr Tedros Adhanom, Director General of the WHO has said that whilst scientists are looking for way to manage the disease, "Our greatest enemy right now is not the virus itself. It's fear, rumours and stigma. And our greatest assets are facts, reason and solidarity."

The key to containing this virus is to break the chain of transmission by means of for example, regular and effective handwashing, social distancing, appropriate personal protective equipment to reduce the chance of transmission, and self-monitoring. The virus is transmitted from a sick person to a healthy person through respiratory droplets when an infected person coughs, sneezes or talks in close proximity to another person. If it is not possible to limit exposure by the methods stated, there will be over demand on intensive care systems in hospitals and many people will die.

Treatment

COVID-19 is spreading with astonishing speed; outbreaks in any setting have very serious consequences; and there is now strong evidence that non-pharmaceutical interventions can reduce and even interrupt transmission. Various experts have put forward opinions on treatment methods. Much research has centred around the drugs hydroxychloroquine, azithromycin and remdesivir as possible methods of treatment, but the search for expedient answers makes many of the scientific community critical of those not following established protocols for testing. At present treatment is the primary hope, for a vaccine is a long way from manufacture, with many believing the earliest is in late 2021.

For country by country advice as to what requirements are in place please refer to:

https://www.cdc.gov/coronavirus/2019-ncov/travelers/map-and-travel-notices.html

Coronavirus

Legal guidance for members

The World Health Organization (WHO) classified the Coronavirus disease (COVID-19) as a pandemic on 11 March 2020. In response to the outbreak and spread of COVID-19 members may encounter a number of legal issues in relation to charter parties as a result of measures that are being imposed by national authorities.

By James Mackay,
Claims Executive Consultant,
The Swedish Club

Port safety

Time charterers may not order a vessel to an unsafe port in breach of an express or implied warranty in the charter party. The test is whether at the time when the order is given the vessel can reach it, use it and return from it without being exposed to dangerous features that are not the result of an abnormal occurrence. There is also an obligation to change voyage orders if the port subsequently becomes unsafe before the vessel reaches it.

In some charters (the Baltime form, for example), there is an express prohibition on the charterer ordering the vessel to a port where fever or epidemics are prevalent. Where there is no express provision such as that, however, there is likely to be substantial doubt as to whether the safe port warranty permits the rejection of an order by reference to concerns about COVID-19. It involves questions of fact and law.

Case law

Generally, case law deals with the risk of physical damage to the vessel or detention due to political risks. In theory it is conceivable for a port to be unsafe if the spread of infection at the port would put vessels at risk of being disabled by crew sickness or would cause vessels calling at the port to be barred or detained at other ports.

Such scenarios, however, seem unlikely in practice: health risks can be avoided if the crew take proper and effective precautions. Although vessels might be subject to quarantine delays at subsequent ports, it is unlikely that they will be permanently blacklisted, detained or impounded. Also, it is questionable whether an outbreak of COVID-19 would be a feature of the affected port, rather than an abnormal occurrence.

Individual circumstances

Each case will be decided on its specific facts and will require careful consideration bearing in mind that the refusal of a legitimate order can constitute a repudiatory breach of the charter. Aside from that, if the vessel is laden, the owner will be subject to separate obligations to the shippers/consignees under the bill of lading contract to deliver the cargo at the contractual discharge port.

Time charters

If an owner accepts a time charterer's voyage orders in full knowledge of the unsafe features of the nominated port the owner may have waived the right to refuse to obey the order. This will not necessarily mean that the owner has waived the right to damages for breach of the safe port warranty or an indemnity for complying with the charterer's orders.

Voyage charters

The position is different for voyage charters, where the port has already been nominated without an express warranty of safety. The general view is that there is no implied warranty of safety under a voyage charter, and the charterer is not under a duty to re-nominate on grounds that the nominated port is unsafe.

Port closure

Time charters

If COVID-19 results in the closure of a port to marine traffic it will not be possible for a vessel on time charter to perform the charterer's order to load or discharge cargo at the port and the charterer should give replacement orders.

Voyage charters

In a voyage charter, if the closure prevents the vessel from arriving at the port to load cargo before the end of the laycan period, the likely outcome will be that the charter will be cancelled. If the discharge port is closed there will probably be a liberty which permits discharge of the cargo at some other port (e.g. 'so near thereto as she may safely get').

Owner's protection

Also there is some protection for the owner in that situation under Article IV(2) of the Hague and Hague-Visby Rules (if incorporated into the charter) which states that neither the carrier nor the ship shall be responsible for loss or damage arising or resulting from: (h) quarantine restrictions; (j) strikes or lockouts or stoppage or restraint of labour from whatever cause, whether partial or general; (q) any other cause arising without the actual fault or privity of the carrier.

Delays

Delays in port to vessels in or arriving from affected areas might arise in relation to granting free pratique, the availability of pilots or quarantine arrangements. Precautions that owners may take to minimise the risk of such delays include making a pre-arrival declaration of health and documenting measures taken on board to reduce the risk of contamination. The allocation of risk between the owner and charterer for delays will depend on the relevant facts and the charter party wording.

Time charters

Time charterers are obliged to pay hire continuously throughout the charter period unless they can prove that an exception applies. Some examples of possible off hire events under the New York Produce Exchange (NYPE) form are: 'deficiency of men' where time is lost due to crew members being incapacitated/repatriated due to illness or the imposition of quarantine restrictions; delay caused by the refusal of free pratique as a result of suspected infection on the ship where off hire events extend to 'any other cause whatsoever preventing the full working of the vessel'. In the Shelltime 4 form time lost due to 'quarantine restrictions' is an explicit off hire event.

An owner may be entitled to an implied indemnity, arising from compliance with the time charterer's orders to call at a port in an infected region, for losses resulting from consequential delays, including loss of income for off hire periods.

Voyage charters

For a voyage charter, it is necessary to examine specific laytime / demurrage provisions and exceptions. A valid Notice of Readiness (NOR) requires the vessel to be physically and legally ready for cargo operations. While a 'wifpon' ('whether in free pratique or not') provision may permit NOR to be given before clearance has been granted by the health authorities, it probably does not override the common law position which prevents laytime from commencing if it is not simply an administrative formality but instead is specifically refused or delayed for reasons related to the health status of the crew .

It is possible that some charters may include provisions (including a force majeure clause) that exclude from the running of laytime or demurrage periods of delay directly caused by quarantine restrictions imposed on shore labour. The rules of construction should be examined to determine the applicability of such provisions.

Doctrine of frustration

It will only be in relatively rare cases that the doctrine of frustration will enable the parties to treat the charter as terminated for reasons related to COVID-19, including delay. For frustration to apply, the delay (or other circumstances related to COVID-19) must be of such nature and magnitude as to constitute an unforeseen event which makes it impossible to perform the charter or at least radically changes the nature of the contractual obligations outside the reasonable contemplation of the parties at the time of the fixture. Also, it must not be 'self-induced' in the sense that the party seeking to rely on it cannot have made the performance impossible by its own choice.

Force majeure

There is no English common law doctrine of force majeure which excuses a party from performing its contractual obligations (other than an event which brings the contract to an end under the doctrine of frustration). There can, however, be contractual terms which provide that a supervening event in a specified category beyond the control of one or both contracting parties may excuse non-performance or result in the cancellation of the charter.

The key points to consider in relation a force majeure clause is whether the non-performance of the obligation due to a COVID-19 issue fits within the force majeure wording (eg if force majeure events include 'quarantine', 'embargo', 'disease' or 'epidemic') and the event itself, rather than a consequence of it, is the proximate cause of the party's inability to perform its obligations by reason of circumstances which are beyond its control.

Performance

It is necessary to make a distinction between an event which prevents performance and one which renders performance more difficult or uncommercial. The latter event does not itself prevent performance but rather the non-performance is due to the party making a commercial choice to avoid loss of profit and will not meet the requirements of a force majeure clause which describes event that prevent performance of contractual obligations.

Recommended clauses

Both BIMCO and Intertanko have published clauses for use in charters which deal with infectious or contagious diseases. For further details, including accompanying guidance notes, see:

https://www.bimco.org/contracts-and-clauses/bimco-clauses/current/infectious_or_contagious_diseases_clause_for_time_charter_parties_2015

https://www.bimco.org/contracts-and-clauses/bimco-clauses/current/infectious_or_contagious_diseases_clause_for_voyage_charter_parties_2015

https://www.intertanko.com/info-centre/model-clauses-library/templateclauses

This article is not intended to address these matters in detail nor be a comprehensive assessment of all potential issues arising under charter parties in relation to COVID-19, particularly as the situation is constantly changing. It addresses the issues from the perspective of English law. Members should also take into account the advice and guidance of local correspondents on practical, regulatory and procedural matters in operation at specific ports.

Safety scenario

Lack of cooperation lead to grounding

By Joakim Enström, Loss Prevention Officer

Each month the Club's Loss Prevention team issues a new safety scenario to assist members in their efforts to comply with international safety regulations and to follow best practice. Visit Swedish Club OnLine (SCOL) for more examples.

CASE STUDY

A 1,000 TEU container vessel departed its berth after loading. During the loading there had been some delay and the gantry cranes had stopped operating because of strong winds, so the Master was eager to depart. The navigation officer had prepared the bridge before departure. On the bridge was the Master, pilot, lookout and Chief Officer. A tug assisted the vessel during departure. The Master gave the pilot the pilot card and offered him some coffee. After this the Master gave the pilot the conn.

Under pilotage

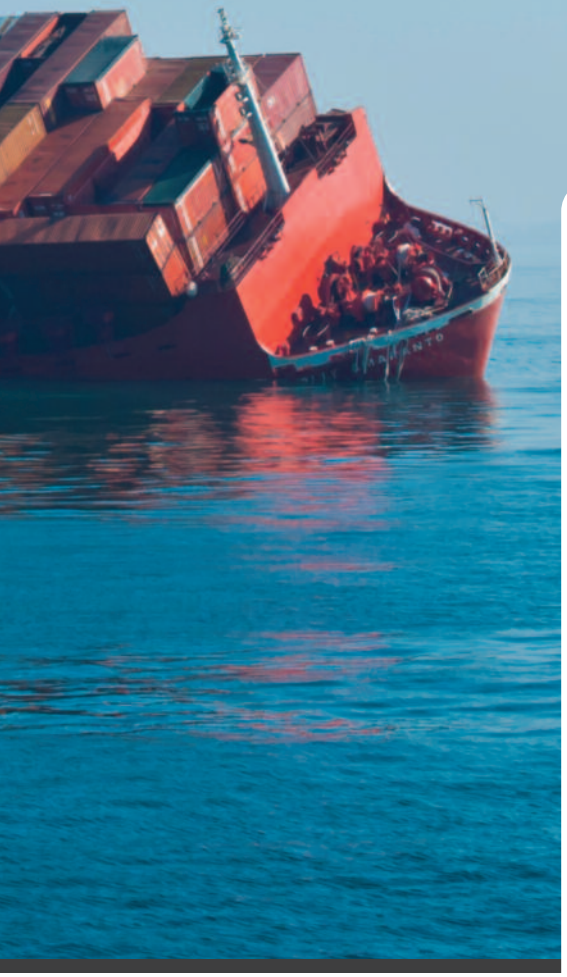
The pilot was steering from the port side bridge wing. The berth had a heading of 317° and there were still WSW winds at Beaufort scale 9. The vessel was moored at the end of the berth. The fairway leaving the port had a heading of 230°. The pilot's plan was for the vessel to go astern and swing to port and clear the end of the berth and then follow the fairway. However, he did not explain the plan to the Master and the Master didn't ask the pilot about any plan.

The Master ordered all lines let go. The bow started to fall off quicker than the stern as the wind pushed on the vessel's port side, off the berth. The pilot ordered half astern and the plan was to use the bow thruster to let the vessel's bow swing past the end of the berth and to position the vessel to sail out in the fairway. At this time the vessel had a course of 310°.

Tug assistance

A tug assisted, pushing the vessel on the starboard side. The vessel was now moving astern at two knots and towards the south side of the fairway - the opposite side to the vessel's position. There were several buoys marking the fairway. The closest buoy was on the starboard quarter about 50 metres away. The wind continued to push the vessel from the portside causing the vessel to drift SE in the fairway towards the south side of the fairway. The vessel had a stern thruster and it was set full to starboard to assist the vessel in turning

A tug assisted, pushing the vessel on the starboard side. The vessel was now moving astern at two knots and towards the south side of the fairway - the opposite side to the vessel's position.



Discussion

When discussing this case please consider that the actions taken at the time made sense for all involved. Do not only judge but also ask why you think these actions were taken and could this happen on your vessel?

1. What were the immediate causes of this accident?
2. Is there a risk that this kind of accident could happen on our vessel?
3. How could this accident have been prevented?
4. Do we have a pre-departure meeting with all the people involved in the vessel's departure regarding the plan and what to expect? (In this case these issues also apply for arrival)
5. Do we let the pilot manoeuvre the vessel?
6. If we do, is the plan for departure discussed with the pilot and the entire bridge team?
7. What are the environmental limits for departure?
8. How do we ensure that if a tug is ordered that it is sufficient for the prevailing winds?
9. Has everyone in the bridge team received Maritime Resource Management (MRM) training?
10. Do we use closed-loop communication on the bridge?
11. What sections of our SMS would have been breached if any?
12. Does our SMS address these risks?
13. How could we improve our SMS to address these issues?
14. What do you think was the root cause of this accident?
15. Is there any kind of training that we should carry out that addresses these issues?

The vessel continued its movement astern and hit the buoy on the starboard quarter. The entire buoy was dragged underneath the vessel and damaged the propeller, rudder and rudder stock.

to port. The vessel started to slowly come around and had a heading of 291° but was still drifting SE towards the buoy.

The Second Officer was on the stern and warned the Chief Officer over the UHF that a buoy was only 30 metres away on the starboard quarter. The vessel now had a heading of 320° - a 90° angle towards the fairway. The Chief Officer informed the pilot and Master but neither of them acknowledged or took any action. The Second Officer then informed the Chief Officer that the buoy was only 10 metres away. The pilot ordered half ahead on the engines, and then for some reason the stern thruster was stopped. During this time the pilot also received a job-related mobile phone call which he answered.

Collision with buoy

The vessel continued its movement astern and hit the buoy on the starboard quarter. The entire buoy was dragged underneath the vessel and damaged the propeller, rudder and rudder stock. The damage caused the vessel to lose its steering and because of the damage the Master stopped the main engine. This caused the vessel to start drifting even quicker SE towards shallow waters.

The pilot suggested that the anchor should be dropped, and the Master ordered the port anchor to be dropped. This was delayed as the Second Officer had to cross the ship from the stern to the bow. When he reached the bow and the bosun tried to drop the anchor it became entangled and it took a minute before it was released. At that point the vessel ran aground.

How acceptable are environmentally acceptable lubricants?

A new study from DNV GL, in conjunction with a number of marine insurers, including The Swedish Club, has discovered two specific viscosity-related characteristics where environmentally acceptable lubricants (EALs) differ from mineral oils. These properties affect the safety margin of the aft stern tube bearing in certain critical operating conditions and have led to DNV GL introducing new design rule criteria.

Öystein Åsheim Alnes,
Principal Engineer, Maritime
DNV GL - Group Technology and Research

The study was carried out to better understand how EALs perform compared to traditional mineral oils commonly used in stern tube bearings. This investigation originally stemmed from a surge of stern tube bearing failures seen since 2014, which tied in with the introduction of EALs to replace the mineral oils traditionally used.

The study identified two main aspects where the tested biodegradable lubricants behave differently when compared with a reference mineral oil: pressure-related and temperature-related viscosity properties. Additionally, one of the EALs studied has been found to display shear thinning properties at high shear rates.

Background

The introduction of the Vessel General Permit (VGP) requirements in 2013 resulted in a sudden and massive uptake of EALs as stern tube lubricants for ships. This trend coincided with a reported widespread increase in the number of stern tube bearing failures, and it was inevitable that the maritime industry began to question the actual lubrication performance of the EALs.

Trying to bridge the obvious knowledge gap in the industry, DNV GL, together with insurers initiated a joint EAL development project (JDP) in late 2017 to investigate the topic. The primary aim of the project was to map out potential differences in

Chart 1. Viscosity vs pressure of tested lubricants - 40°C

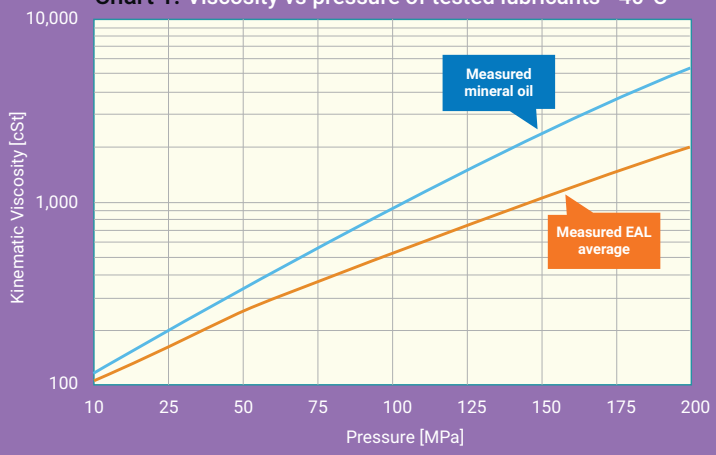
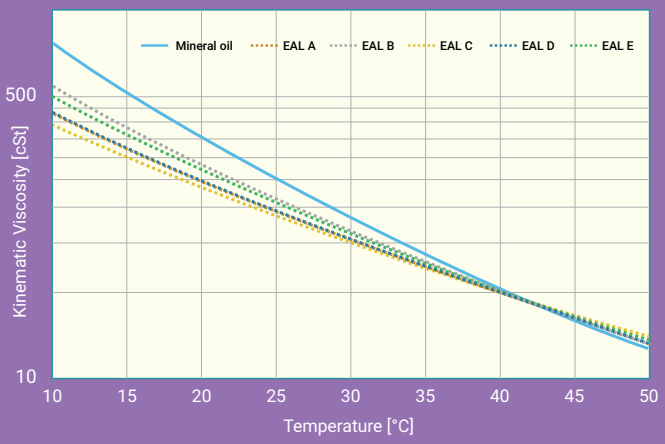


Chart 2. Viscosity vs temperature of tested lubricants



the lubrication capabilities of EALs compared to traditional mineral oils for a stern tube application.

Observations

Most of the observed failures were found to happen very early in the lifetime of the vessels, and during operating conditions known to inflict significant shaft deflections in way of the aft bearing. Operations such as extreme turning in the upper speed range are known to inflict very high localised loads on the aft end of the aft stern tube bearing. The JDP thus initially focused on studying the core lubricant properties affecting the load-carrying capacity.

From a design perspective, the lubricant viscosity is a key property that must be chosen correctly to ensure that hydrodynamic lubrication is given in all continuous operating conditions. The DNV GL study has, however, discovered two specific viscosity-related characteristics where EALs differ from mineral oils. These properties affect the safety margin of the aft stern tube bearing in certain critical operating conditions.

Pressure-viscosity coefficient

Firstly, the pressure-viscosity coefficient of typical stern tube EALs is different than that of the same-grade mineral oil. The practical consequence of this difference is that under the high-load operating conditions typical for the observed aft stern tube bearing failures, an EAL will operate with a lower true viscosity in the minimum oil film thickness region. Knowing that the viscosity is proportional to the oil film thickness and load-carrying capacity of a journal bearing, it must therefore be understood that the safety margin is reduced for an EAL installation in the high-load running modes. (See chart 1).

Viscosity index

Secondly, the viscosity index is significantly higher for EALs compared to mineral oils. This means that the EALs will operate with a much lower viscosity in the lower temperature region typical for stern tubes in certain conditions such as mooring trials and cold start-up. Again, the safety margin will be reduced in those types of operation. (See chart 2).

Resolution

To retain the safety level of a mineral oil installation, there are in practice two options:

(i) Increase the specified viscosity of the EAL (one viscosity grade up).

(ii) Optimise the aft stern tube bearing design to increase the shaft-bearing contact area and reduce the peak pressure in the lubricant film.

New DNV GL design rule criteria

Based on this conclusion, DNV GL has revised the main class shaft alignment rules from July 2019 to achieve an equivalent safety margin for the aft stern tube bearings intended to be operated with an EAL. The rule update includes the introduction of a viscosity influence parameter in the hydrodynamic oil film lubrication acceptance criteria, differentiating between EALs and mineral oils. This requirement is not retroactive for vessels which comply with older class rules.

Ongoing investigations

Work is continuing to investigate some of the operational aspects that have caused problems for EAL installations. Leaking seals have been a widespread issue, and it is believed that the main risk is related to leaving a static mix of sea water and EAL unmonitored in the aft seal chamber no. 2. It is known that some sea water will periodically pass through the outer sealing rings during e.g. operation in heavy sea states. This means that if the lubricant in seal chamber no. 2 is not monitored and water drained out, the EALs will start to chemically react with the water resulting in acidification and degradation. In such cases the risk of premature sealing ring failure will be high.

The clear advice is to regularly circulate/flush the chamber, to drain water from the lowest point in the system and to monitor the condition of the aft seal lubricant. Note that some seal designs do not include double piping (needed for circulation).

Trade Enabling Loss Prevention (TELP)

Helping members navigate today's uncertain world

In today's climate of uncertainty, The Swedish Club has been able to use its Trade Enabling Loss Prevention (TELP) tool to reach out a helping hand and guide vessels into ports around the world. Launched only late last year, following trials, TELP has gone live just in time to help members overcome the difficulties they are facing in operating ships during the current COVID-19 outbreak.

Measures to prevent the spread of the virus have closed ports or meant strict quarantine measures for crew. Ports are operating with their own individual approaches to managing the COVID-19 situation, making it difficult for the Master to prepare the vessel - or the crew – for the challenges facing them when they prepare to berth.

At the time of going to press, The Swedish Club was sending around 80 COVID-19 related messages a day to its members, through TELP, using information provided by the Club's network of correspondents and automatically triggered by the ship's AIS.

TELP uses AIS technology to track members' vessels and automatically identify any that are moving towards an area that has been highlighted through the Club's own claims statistics as being of particular risk. These are known as 'hotspots'. Tailored advice is then generated and sent out a few days before arrival. An added dimension is that any new alerts from local correspondents are added in where appropriate.

PILOT PROGRAMME SETS FIRM FOUNDATIONS

During 2019, The Swedish Club organised a four-month pilot of TELP with a small number of members operating a range of vessel types, to help develop and refine the system.

The feedback from the pilot was overwhelmingly positive. "First of all, we proved it works," says Peter Stålberg, Senior Technical Advisor. "We had some very positive feedback that Masters appreciated the information and would take it into consideration when calling at the specific port in the next few days. One thing we learned is that in addition to the high-quality loss prevention advice we provide based on our extensive claims statistics, members also very much appreciated the 'local' news, i.e. the information provided by the correspondent."

Quotes from pilot scheme participants

> *"Getting information on board that is specific to the trading area will sharpen the eyes of the crew. TELP is a very good idea that we are sure will reduce claims."*

Sebastian Völchner
NSC Shipping GmbH & Cie. KG

> *"A useful and interesting tool and a worthy initiative."*

Nektarios Katikas
Ionic Shipping (Mgt) Inc.

> *"Once again The Swedish Club is at the forefront in converging modern technology to meet the needs of the shipping fraternity."*

Neelakantan Vasudevan
Precious Shipping

Member's viewpoint

Captain VS Parani, HSSEQ Manager at Oceanic Marine Management, was delighted when The Swedish Club asked members for their views when beginning to develop TELP.

"In today's world, we have so much information that the tendency is to put it all on side and not really consult it," he says. "In a previous role in the industry, I provided ships with focused information - it makes people aware right away of what they can expect and how to prepare for it.

"When The Swedish Club proposed TELP, I immediately said yes, this is the perfect thing, and was able to share what I had done previously and some legacy reports on the way I had worked. We used to keep an eye out for anything important from P&I and Loss Prevention teams – for example, navigational safety issues, stevedoring, security, Port State Control and specific advice on which areas or landmarks to avoid, or to keep so much clearance, and so on.

"The combined experience in the Club is quite enormous and they have many experts to do detailed analysis."

Captain Parani also says he would like to see the system allow information to pass in both directions. "Masters used to come back and say 'we have also had this experience and you might want to add this or that in'."

He adds: "I was really pleased to be involved with TELP by giving my experience of starting and coordinating such a project. TELP is of enormous value and I would wish that everyone uses it.

"P&I Clubs hold a huge repository of information that often no one has the time to refer to. From the loss prevention point of view, TELP is an incredibly effective knowledge sharing platform."

TELP IN PRACTICE

At present the Club has identified 30 'hotspots' around the world. These are based on actual data, rather than what might previously have been anecdotal or even just a 'feeling'.

"We have now integrated the vessel positioning information with where claims happen; we know where our fleet is and, based on our claims knowledge, we have identified the hotspots," says Peter Stålberg, Senior Technical Advisor at the Club. "In some cases, we found there were two different criteria for the same hotspot – for example, navigational hazard and cargo problems. On the other hand, there were cases where we had the perception of it being a difficult place but the statistical analysis based on trading patterns showed something different.

"Also, we are re-evaluating all the time – there are always new trades and cargoes to consider. The 30 hotspots are the places that stood out in the 'first round'."

Now fully automated

The team also continues to refine and finetune the system, including IT and information flow and making sure everything is working well. TELP has been set up to be fully automatic; any vessel in the Club's insured fleet that has signed up for the TELP service will be automatically 'caught' in the system and be sent relevant messaging and loss prevention advice via its ship manager.

So far over 80 members have signed up for TELP. "That's more than 18 per cent of our members, with approximately 500 ships across a mix of vessel and geographical types," says Peter. "This is the first round of signing up. From now, for new members, it will be mandatory to sign up to TELP when you join The Swedish Club – it will be on an 'opt out' rather than 'opt in' basis."

It's also important to emphasise, of course, that the TELP system is entirely free to members.

Correspondent's advice

The positive feedback relating to advice from correspondents has prompted the Club to do more on this front, says Peter. "We have decided that as we receive advice from our correspondents, we will put it into the system as well, even if it isn't necessarily regarding a hotspot. It is an extremely good way to handle this information.

"Every day we receive information from our local correspondents – anything from a stevedoring strike to a buoy missing in the channel. If it is big news, of course we will place a particular alert on our home page – but you have to go online to see it. For more 'local' news, we wouldn't do that because the website would be flooded by member alerts which, in the end, no one would read."

This approach means that in addition to the loss prevention advice connected to a hotspot, the team will decide how to classify and time limit specific correspondents' advice and, where relevant, feed it towards ships heading that way. In the wake of the COVID-19 pandemic the system has proved capable of handling large quantities of Correspondent's Advice messages on a daily basis.

"The whole key of this project is to provide relevant and timely information," says Peter. "We are now considering TELP2 – where we would bring correspondents closer to us and make it more structured. This means inviting correspondents to provide information on a web interface – we will make sure it is properly tagged and linked into the TELP system. After a preset time, the system will automatically check with the correspondent whether the information is still current or needs to be updated or deleted."

Two-way communications

There will be follow-up, too, to check how effective TELP is. "For example, if we provided information that an approach is particularly tricky but the ship did run aground anyway, then we can always ask if they actually saw the advice. We can also measure whether claims reduce in a specific hotspot. We are doing this for our members to make sure their operations are safer – and the spin-off we hope for is fewer claims, again to the benefit of all the members."

Staying relevant

TELP is not carved in stone, he says – the team is continuing to review the process and there might be new hotspots. Above all: "We must keep on our toes as we update, and make sure the advice is relevant. We make sure the system doesn't keep sending the same information to the same ship, unless it needs updating or adding to."

As he says: "There is so much information flying around at the moment and of course we could post all the information on our website without any limitations. But then every individual has to go to the web and update themselves – and 90% of it will not be relevant to where they are right now. We want to be very targeted in our advice.

"We have excellent information and data and we understand that we all take more notice of information that is specifically relevant to us. As a Club, we provide industry-best publications when it comes to special loss prevention. And TELP is the same."

"We have now integrated the vessel positioning information with where claims happen; we know where our fleet is and, based on our claims knowledge, we have identified the hotspots."

Engine Room Fires: Intelligent fire detection

Interview with Rick Jeffress, Business Development Director at Fike Corporation.

Lube oil or fuel oil mist spraying on to hot surfaces and then igniting – it's one of the main causes of engine room fires, and the costs can be enormous.

The Swedish Club's analysis has shown that the frequency of engine room fires may be lower than other H&M claims, but the average cost of such fires is among the highest. According to recent analysis, the cost of an engine room fire averages out at USD 1.8 million per occurrence, compared with USD 320,000 for H&M claims in general.

And who can forget the headlines seven years ago when the Carnival Triumph lost power because of an engine room fire caused by a leak in a fuel oil line, leaving the ship and thousands of passengers drifting in the Gulf of Mexico for five days?

Classification societies and the International Maritime Organization (IMO) are responding to the issues. Last year DNV GL added a new class notation to its Rules on Equipment and Design Features – Fire Prevention in Machinery Spaces.

"This notation requires CCTV cameras covering critical oil leakage points and recommends a proven technology for rapid atmospheric oil mist detection using video analytics," says Rick Jeffress, Business Development Director at Fike Corporation.

As The Swedish Club frequently points out and Jeffress repeats: engine rooms have all the ingredients for a fire, in terms of oxygen, heat and flammable liquids under pressure.

"Oil mist leaks can take place on fuel or hydraulic flexible lines, piping or equipment connections, creating a spray or mist. They can also occur inside engines and release into the space as a fine mist or fog," he says. "Detecting oil mist in machinery spaces using fixed-point gas detectors is difficult due to the numerous locations where leaks can occur and airflow direction can vary depending on engines running, ventilation

The Swedish Club's analysis has shown that the frequency of engine room fires may be lower than other H&M claims, but the average cost of such fires is among the highest.

units online or hatches opened or closed. Atmospheric oil mist explodes violently when it reaches ignition temperature – in most cases releasing more fuel, expanding the fire."

Oil mist is formed in one of two ways, – minute leaks in oil lines which under pressure give off very fine atomised spray, or when oil hits a hot surface and boils, creating a mist.

He says that their own monitoring shows that engine room fires or potential incidents are a common occurrence. Owners are taking measures to identify hotspots and this helps to avoid explosion and fire in the event of an oil leak. "We are seeing proactive companies covering hot equipment and working to reduce areas where there could be a leak, by doubling the walls of piping and using different types of connectors, for example. We are not seeing any increase in incidents but we are not seeing a decrease either – perhaps reflecting the increase in older ships, with older equipment."

Detecting oil mist

Following costly high-profile oil mist fires such as that on board the Carnival Triumph, major cruise lines began to evaluate video analytics oil mist detection technology in 2013, he says. "Extensive onboard assessment and testing, on several ships, was conducted over two years – resulting in software modifications and upgrades to meet the demands of the shipboard engine room environment and consistently recognise the specific oil mist visual signatures," says Jeffress.

Atmospheric oil mist explodes violently when it reaches ignition temperature – in most cases releasing more fuel, expanding the fire.

Machinery spaces and low ceilings make engine room monitoring extremely challenging. "Also, there are people walking close to the cameras, so there is a high potential for false alarms," he says. "We have addressed this issue by adding human recognition to the oil mist and a smoke algorithm as well as other setting options for this environment."

Reduced manning is an issue as personnel will likely not be in the space to notice the event and mist can be light or near invisible to the eye. Unmanned engine rooms on many ships will have cameras and conventional smoke and fire detectors, but what happens if there is an event? Without analytics software, the crew must take the extra time to find the correct camera based on the location of the event.

Video analytics software automatically annunciates an alarm, with location information, and live video of the detection, allowing shipboard personnel to quickly and easily evaluate the incident. Live video of the event, accessed quickly, can increase response time and decrease potential fire damage and/or personnel injuries.

Specialist video analytics

The company has responded to the challenge with a solution that combines

shipboard camera networks with its video analytics. This, says the company, creates a highly efficient means for rapidly detecting oil mist. The system can be linked to automation and safety management systems that automatically alert shipboard personnel with alarm and pop-up video of the event as it is happening. This allows critical time to take action before disaster occurs.

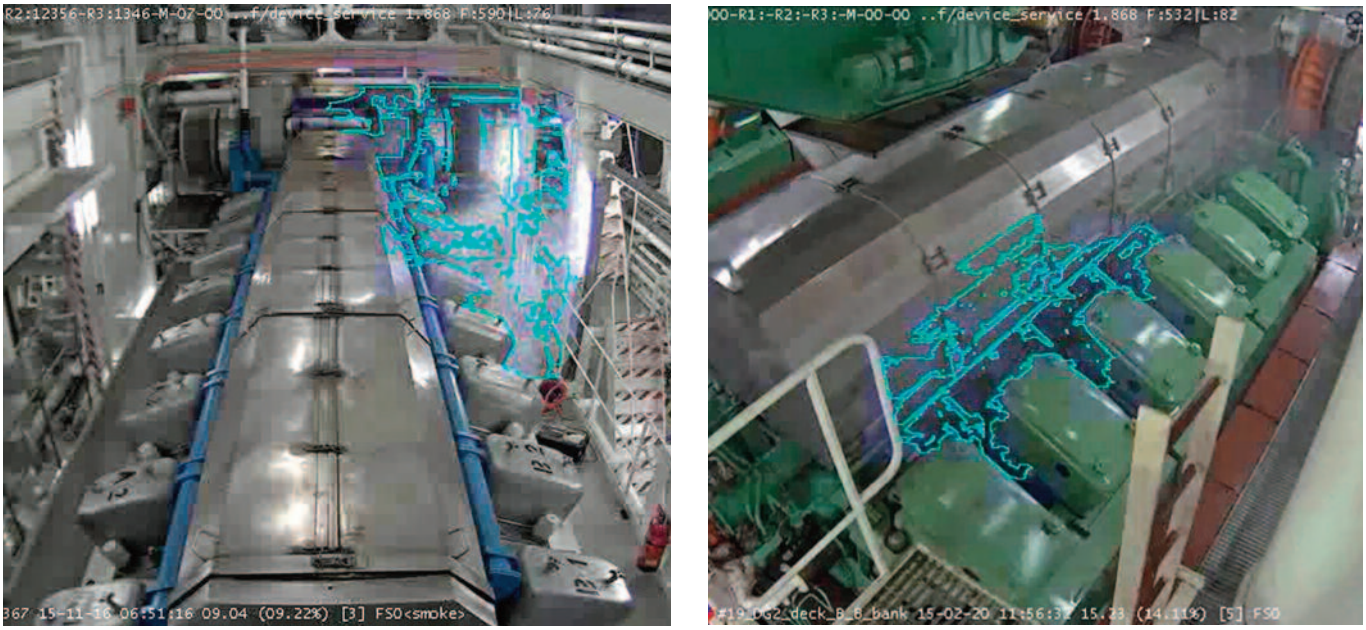
The system is designed to provide early detection of oil mist, smoke, flame as well as reflected flame – the latter being particularly important to supplement existing flame detectors around fuel systems.

Artificial intelligence

The video analytics software, installed in onboard servers that are connected to the CCTV camera network, was developed with artificial intelligence and sophisticated 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, after very brief tracking, a detection is confirmed, a signal is sent to the monitoring equipment and an alarm is set off. "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 Jeffress.

Oil mist detection using video analytics has been designed to provide early detection of oil mist, smoke, flame as well as reflected flame.



Blue shadow indicates oil mist.

"Standard flame detectors monitoring engine and fuel modules receive energy directly from the flame in order to raise the alarm and any obstruction would prevent them from receiving that energy," explains Jeffress.

A key point is that a video analytics system makes use of video cameras that are already installed. "We aim to use 'off-the-shelf' cameras and make the most of their functionality," says Jeffress. "Ships have numerous cameras and there is a lot you can do with them. In airports, for example, security camera algorithms will detect if someone puts down a bag and walks away, setting off an alarm automatically. This is reducing the load on personnel to physically monitor cameras 'in case' there is an event."

The analytics server provides enough storage for 35 days of full-time video recording. The software tracks date, time and duration of the event to allow for event identification, post-event video viewing and download.

Rapid installation

Installation is often done during a one-day port visit – including server installation, alarm integration with the engine automation system (or other monitoring systems), camera programming, detection settings configuration, testing and crew training. System programming of detection settings is carried out by technicians with knowledge of the shipboard machinery space environment. Remote connection is also possible if configured and managed by the ship owner's IT staff.

Jeffress says: "We ran pilot systems on multiple ships for more than two years, to develop our solution and refine the algorithms. We have added proprietary analytics and interface capabilities to simplify the actions by the crew and added features to disable the system easily during work in machinery spaces, with automatic turn-on when the work is complete."

RoRo fires - Swedish early detection project: **LASH FIRE**

Fires on vehicle decks are another major challenge. Detection of fire or smoke is difficult on the internal vehicle decks of RoPax or vehicle carriers due to the large volume and high ceilings of the spaces.

Video analytics is commonly recommended for warehouses and automated car garages, due to its ability to evaluate the entire camera image, normally including floor to ceiling, and its fast detection of flame and smoke.

Managed by the Research Institute of Sweden, LASH FIRE (Legislative Assessment for Safety Hazards of Fire and Innovations in RoRo ship Environment) is a project focusing on the early detection of fires on the enclosed vehicle decks of RoRo ferries. Funded through its research and innovation programme Horizon 2020, the European Commission is investing EUR 12.2 million in the four-year project, which started in September 2019.

The project's stated aims are to reduce the occurrence of fires on RoPax ships, general RoRo cargo ships and pure car/truck carriers (PCTCs), increase the proportion of fires detected and controlled at an early stage, and improve independent fire management capabilities on board.

The project consortium is looking to develop and demonstrate new procedures and technical innovations to enhance RoRo ship fire safety – the solutions developed will lead to regulatory proposals, assessed and validated according to the IMO Formal Safety Assessment methodology, providing the basis for the revision of international maritime regulations.

Fike is a partner in the project, supporting LASH FIRE in its evaluation of these systems.

Meeting the SOLAS challenge on older vessels

Interview with **Steffen Cronauer**, Thermamax

It is well known that high numbers of vessels still operate with their original fitted insulation in the form of metallic heat shields or soft fabric insulations. This can mean that SOLAS (Safety of Life at Sea) requirements are no longer met which in turn can lead to a high potential risk of engine room fires. This type of claim, although rare, can be costly, easily resulting in damage of many millions of dollars - even before consideration of injury and potential loss of life.

Steffen Cronauer, Director Technical Sales Aftermarket at Thermamax, a specialist in design and manufacture of thermal and acoustic insulation systems for engine compartments and exhaust gas systems, is not surprised. "SOLAS is centered around safety on board. One key requirement of the specification is that no exposed component in the engine compartment may have a surface temperature that exceeds 220 °C. This is based on the ignition temperature of some fuels, which can be as low as 250 °C. Reducing the

"We have to be especially careful to focus on the interface between turbocharger and exhaust line as this is considered the most critical area from a thermal perspective."

Old and worn-out cladding

New 100% SOLAS-compliant insulation solution

surface temperatures of all parts of the engine and exhaust system to a non-critical 220 °C requires suitable high-temperature insulation. We have even seen lower surface temperatures (60°C – 100°C) required by certain shipping companies," he says.

Missing data

When carrying out a retrofit, Cronauer explains, the main difficulty is quite often the absence of computer aided design (CAD) data for the engine to be insulated. Such data is essential as the basis for the development and design of the appropriate insulation.

"Our challenge was to come up with a process that enables this design work to be carried out safely and efficiently, when vessels may have been in operation for some time and only limited data is available. Safety should not be dependent on the age of the engine."

During a recent retrofit, Thermamax were dealing with a cruise liner taken into service in 1995, which, following a thermal scan of the engine, showed multiple hot spots with a temperature of over 220°C. "No CAD models of the engine existed, but we went on board and carried out a full 3D-scan in order to generate our own CAD model of the engine. This then provided all the data needed to develop a reliable cladding.

Simulations

"We have to be especially careful to focus on the interface between turbocharger and exhaust line as this is considered the most critical area from a thermal perspective. We also use computer aided engineering (CAE) to run simulations and to make predictions about the performance of the cladding design," said Cronauer.

In the case of the cruise ship, after design release the production of the insulation system started. A prototype was built up and assembled in the factory to make sure that all components fitted perfectly with each other. Once the prototype fit was successful, parts were then shipped directly to the vessel.

Installation on board

After the installation on board a subsequent thermography showed a consistent and positive result: At an ambient temperature of approx. 35 °C, the measured cladding had surface temperatures of approx. 120°C - with an exhaust gas temperature of 550 °C.

"From a starting point with worn-out cladding that had hotspots in multiple areas, and lacking any 3D data, the project took only 13 months until the finished product was designed, manufactured and installed," said Cronauer. "Quite a result for a 25-year old vessel with 30 year-old engines."

Cyber security and unseaworthiness: what it will mean for owners in 2021

The IMO global sulphur cap, effective from 1 January 2020, followed by the COVID-19 pandemic, has made the start of 2020 particularly challenging for the maritime industry. Despite this, shipowners need to keep in mind that, from the beginning of 2021, issues of cyber security will need to be addressed in the Planned Maintenance System (PMS) and Safety Management System (SMS). These developments are now being referred to as 'IMO 2021'.

Matthew Montgomery
Partner, MFB

Matthew Montgomery joined MFB in 2018 and was promoted to partner in 2019. He has a broad practice advising primarily on contentious matters across wet and dry shipping. Over recent years, he has also developed a detailed knowledge of cyber security issues in the marine market, publishing a number of articles on the subject. He is frequently invited to share his expertise in the area with clients and industry groups.

Matthew is a recommended lawyer in The Legal 500's 2020 rankings.

Background

Maritime cyber security has been under discussion now for at least ten years. This is unsurprising as, over that period, vessels have become increasingly automated, integrated and connected to digital networks. The developments in electronic connections and interfaces, and the increased dependence on electronic systems, makes the threat of cyber security incidents both more likely and potentially more damaging to onboard operations.

A cyber attack can be described as any occurrence that targets onboard systems, networks or computers with the aim of compromising, destroying or accessing those systems. It may not necessarily be malicious. For example, it could be due to an inadvertent action or inaction by a crew member on board.

There are numerous published reports on the high-profile cyber attacks that have taken place over recent years. What we have learned from recent cyber attacks is that:

- No industry or sector is immune.
- Even the largest blue-chip companies, with sophisticated IT infrastructures, have been attacked and suffered losses as a result.
- Cyber attacks are becoming increasingly sophisticated.

Regulatory framework

We need only go back to 2011 to find the first set of guidelines on cyber security published by the European Network and Information Security Agency (ENISA). Since then, the US Coast Guard (USCG) has issued a comprehensive report and BIMCO has also released its own set of guidelines on the subject.

Under the BIMCO guidelines, the starting point is to identify where threats may exist and the potential vulnerabilities within a company's electronic systems. Then, depending on risk exposures, to develop protection and detection measures in order to prevent an attack from succeeding.

The BIMCO guidelines also advise establishing an emergency response plan, with external advisors — such as IT experts, lawyers and others — in place to assist if required. Such a plan is essential to ensure that roles are designated, and decisions are made in a logical and effective manner.

IMO 2021

Despite the previous guidelines, there is no escaping the fact that IMO 2021 is going to be a 'game-changer' with regard to ship cyber security, in the same way that its older brother, IMO 2020, has been for fuels.

"There is no escaping the fact that IMO 2021 is going to be a 'game-changer' with regard to ship cyber security."

"Member governments are required to ensure that cyber risks are appropriately addressed in SMS systems."

Up-to-now, there has only been general guidance and recommendations regarding what measures to take. However, IMO Resolution 428(98) states that, from 2021, a vessel's SMS will need take into account cyber risk management in accordance with the objectives and functional requirements of the ISM Code.

The guidelines are very general but, in effect, member governments are required to ensure that cyber risks are appropriately addressed in SMS systems. Member governments are 'encouraged' to ensure that safety management systems address cyber risks no later than the first annual verification of the Document of Compliance after 1 January 2021.

Being prepared

It goes without saying that the smaller owners and operators will find the process more challenging than those with dedicated IT teams. However, there are still over six months until IMO 2021 takes effect so, if action has not been taken yet, there is still time.

The evidence is that steps are now being taken in the lead-up to IMO 2021. TradeWinds has recently reported that engineering group ABB and classification society DNV GL have made maritime history by awarding a large cruise ship — under construction at a European shipyard — cyber security verification. The Korean Register has also recently awarded full cyber-security compliance to the 2009-build *Songa Hawk*.

Scenario

It does not take much imagination to identify a situation where a shipowner falls foul of these new provisions:

Take a scenario where a vessel suffers a system black-out due to malicious software infecting its computers via weak IT defences. As a result, the ship loses steering and runs aground.

If the attack was successful as a result of those weak cyber defences affecting the ability of the vessel to operate safely, then there is a strong argument that the ship was unseaworthy at the start of the voyage. The argument would be that it was not fully equipped for the voyage it was undertaking.

If unseaworthiness can be established, it is likely owners would try to argue, nonetheless, that they had exercised due diligence. This would then involve an analysis of the regulatory framework, including IMO 2021 and the owners' SMS and PMS. It would not be enough to argue that other owners in the market had similar vulnerabilities in their cyber security defences. Claims under the charter party would also be likely.

The legal impact

With regard to charter parties, BIMCO has introduced a cyber security clause which requires each party to:

- Implement appropriate cyber security measures.
- Have plans and procedures in place to effectively respond to an incident.
- Regularly review cyber security arrangements to make sure that they are fit for purpose.

We can expect to see clauses like this more often in future charter parties, particularly after IMO 2021 has come into force. If an incident does occur, the party that has suffered the attack will need to take all necessary steps to mitigate the loss and notify their counter-party of the incident within 12 hours. It will also have to prove that the attack occurred despite it having put in place effective cyber security measures. If it is unable to prove compliance with the clause, then a claim for damages can be expected.

If a cyber attack causes losses to be suffered by cargo interests, then owners

will also need to show that the vessel was seaworthy at the commencement of the voyage. The question that the English Courts (or a Tribunal) would ask is 'would a prudent owner have required that the defect be made good before sending his ship to sea, had he known of it?' The English Courts have said that seaworthiness must be judged by the standards and practices of the industry at the relevant time. After the introduction of IMO 2021, the expectations of the prudent owner on matters of cyber security will be higher than ever. There is clearly a real risk that a vessel could be deemed unseaworthy as a result of failures and vulnerabilities in electronic cyber security systems.

Owners would still potentially be able to defend claims if they could show that, despite the unseaworthiness, due diligence had been exercised. This would require a close review of the owners' SMS and PMS to see whether they met the IMO guidelines, were fit for purpose and had been understood and put into effect by the crew or any others to whom the duties had been delegated.

"There is clearly a real risk that a vessel could be deemed unseaworthy as a result of failures and vulnerabilities in electronic cyber security systems."

Final comments

The COVID-19 pandemic has made electronic connectivity and remote-working more important than ever. IMO 2021 is only going to increase the pressure on owners and operators to prove that their electronic systems are secure and that the risks have been carefully mapped out and addressed.

The good news is that with careful forethought and proper risk assessment, prudent owners can identify and address risks in their SMS and PMS.

Forward thinking

The Swedish Club is at the forefront of modern technology, using our skills and expertise to anticipate and meet the needs of the shipping community. Together with our members and business partners we are constantly developing, and creating new digital tools to help us work more efficiently.

Technology coupled with the quality of our people helps deliver our sophisticated loss prevention activities including Maritime Resource Management (MRM), Emergency Response Training (ERT) and Trade Enabling Loss Prevention (TELP), the next generation in loss prevention.

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Legal update

CMA CGM Libra – Decision of the Court of Appeal

Defective passage plan can make a vessel unseaworthy

On 4 March 2020 the Court of Appeal upheld the decision of the High Court in Alize 1954 & another v. Allianz Elementar Versicherung AG & Others (The *CMA CGM Libra*) [2020] EWCA Civ 293, holding that a defect in the passage plan – being a failure to update the passage plan with a Notice to Mariners – rendered the vessel unseaworthy at the commencement of the voyage.

First instance judgment

The *CMA CGM Libra* is a container vessel that ran aground near Xiamen, China on 17 May 2011. A passage plan was prepared by the crew and contained two documents. Firstly, the passage plan document and, secondly, a working chart. The working chart contained a plotted route. Upon passing buoy 14-1, the vessel came outside the fairway. The Master attempted to take corrective action to no avail and the ship ran aground. This was despite the fact that the working chart recorded a depth of 30 metres, which should have been sufficient clearance on the vessel's draught. Owners declared General Average and sought contribution from cargo interests.

A Notice to Mariners had been issued in December 2010 advising that numerous depths less than the charted depth existed within and in the approach to Xiamen. The judge at first instance found that the passage plan was defective because the working chart had not (but should have) been marked with a written warning that depths were less than chartered outside the fairway and that this made the vessel unseaworthy at the commencement of the voyage.

Decision by the Court of Appeal

In the Court of Appeal, the owners argued that the preparation of the passage plan constituted a record of navigational decisions to be taken on the voyage. As such, it was submitted that any defect in the passage plan fell within the exception in Article IV rule 2(a) of the Hague Visby rules – which stipulates that the carrier is not liable for errors in navigation or management of the vessel. Consequently, a defect in the passage plan would not constitute unseaworthiness and the owner should be entitled to its General Average contributions.

Torbjörn Claesson
Senior Claims Executive, P&I and FD&D Team Gothenburg

In ruling against the owners, the Court of Appeal agreed with the High Court that the lack of the warning on the uncorrected working chart constituted a defect in the chart and that this was an attribute of the vessel which rendered it unseaworthy. Consequently, the owners were not entitled to a General Average contribution.

From sea to law

Malin Högberg was appointed to the role of Director, Corporate Legal, on 1 January 2020. As she explained to Triton, it was a sailing trip at the age of 13 that set her on the path to a career in shipping.

Growing up in a small fishing village on the island of Orust Malin qualified and volunteered as a sailing instructor; she had summer jobs on tour boats; she gained her Master's ticket for vessels up to 500 tonnes - so was the sea always in her bones?

She says not – at least not until she was 13. "That was the age I started sailing on traditional sailing vessels," she says. "As part of the heritage of the island of Orust, high school students get to spend a few days on board a traditional rigged ship run by a volunteer association, to get a sense of our heritage. This was a mandatory part of the curriculum.

"I was a bookworm, and very unhappy at the idea of going out sailing. But when my parents picked me up at the end of the trip, they found a 13-year-old who couldn't wait for more!"

A school at sea

Malin gained more experience, qualified as a sailing instructor and then, from the age of 15, opted to attend the Öckerö Sailing College. "This provided for three months of every school year out sailing and the rest of the time at normal school," she says. "We would be given three months of homework and go out on a three-masted barque. The first year we flew to Spain and embarked at Cadiz, then sailed to Morocco, Cape Verde, and crossed the Atlantic to South America making landfall in French Guyana, making our way up the South American coastline. We signed off in Curacao after three months."

The vessel had a permanent crew of ten and took 38 students, who carried out research in each port as part of the curriculum and also worked on board as part of the watch. "It was very hands-on – climbing the mast, maintenance work, navigation and engine room duty, assisting the cook - really taking part in running the ship."

When she graduated from high school three years later, Malin was convinced she would be a professional sailor. While she embarked on studies in history, political science and law, she continued to work as a sailing instructor and working on two sailing college trips. She qualified to be a Master up to 500 tonnes and was sailing as first mate on a voluntary basis, and she had her 'perfect summer job' as an AB on tour boats heading through the Göta canal.

But, to use her words: "I realised I needed to do something else – this was not satisfying my inner bookworm!"

“It is really important to continually review how we as a club can act more sustainably and environmentally consciously in our everyday operations.”

Moving to ‘where it happens’

Malin was inspired by a two credit maritime law course included in her Deck Officer Class VII courses at Chalmers University. This was followed by a master’s degree in commercial law at Gothenburg University and a Master in Maritime Law at Oslo University. Between the two, there was another turning point. “During a conversation with someone in the industry from Cyprus, I was told that if I really wanted to learn about maritime law, I should get into P&I – ‘because that is where it all happens’.”

Malin joined The Swedish Club as a trainee in 2012 and worked as a Claims Executive in P&I and FD&D between 2012 and 2017, including a spell in the Piraeus office in 2013. In 2017 she was appointed Senior Claims Executive in Gothenburg and in June 2018 she was appointed Head of Claims, P&I, again for Team Gothenburg.

A new role

How does she see her new role as Director, Corporate Legal?

“For me personally, I am moving more into compliance and governance – which is very different but still has that maritime connection. I believe it will be a big advantage in my new role having an insight into the world we operate in, having worked closely with P&I rules and understanding mutuality,” she says. “This is a good foundation for me to examine how we operate as a business, consider how we can improve by using governance and compliance, and find ways to facilitate and improve the business.”

A sense of responsibility

She believes that if we are to live in an ethical, responsible society, a commitment to corporate social responsibility (CSR) and environmental, social and governance (ESG) is crucial. “And it isn’t about talking, it isn’t about a glossy brochure or a nice-looking website. It has to be about the values we actually live on an everyday basis throughout the organisation,” she emphasises.

“It is really important to continually review how we as a club can act more sustainably and environmentally consciously in our everyday operations.”

An immediate challenge in her new role is to update and implement the Club’s sustainability policy, based on a significant amount of work undertaken in 2019 to map out what has already been achieved and set new goals. As part of its ESG review, the Club has chosen four of the UN Sustainable Development Goals (SDG) for particular focus: SDG Goal 3 – Good Health and Wellbeing; SDG Goal 12 – Responsible Consumption and Production; SDG Goal 14 – Life Below Water; and SDG Goal 16 – Peace and Justice, Strong Institutions.

Each of these is being carefully connected with the ‘real world’ business of the Club, from Loss Prevention and waste prevention to ensuring quality members and having zero tolerance for bribes.

And next?

Apart from taking ESG to the next level, Malin highlights sanctions as ‘still one of the big challenges for the Club and its members’, while she expects ‘green investment’ to move ever higher up the agenda. Responsible investment is not regulated yet but it will be soon, she says – “and it is part of being transparent”.

Safety in our DNA

Zeaborn Ship Management took part in The Swedish Club Academy's MRM Train the Trainer programme earlier this year. We interview **Rob Grool**, CEO of Zeaborn Ship Management to find out more.

Zeaborn Ship Management is a young pure third-party shipmanager with a rich heritage, much of which lies in the shipmanagement and shipowning background of German family-owned shipping companies. Originally set up as an acquisition of three companies - E.R. Schiffahrt and Rickmers Shipmanagement in 2018, and Claus-Peter Offen Tankers in 2019, it has a headquarters in Hamburg, runs crew management from Cyprus, has a ship management centre in Singapore and manning offices in Ukraine, Manila, Romania and Poland.

"There is a genuine understanding of what a shipowner needs and wants in the technical and crewing part of ZSM because of our commercial management/operations connection," explains Rob Grool, CEO of Zeaborn Ship Management. "But I still wanted to move away from simply carrying out safety campaigns on board. Instead we need to have safety in our DNA – both on board and in the office."

Experience of MRM

In previous roles Rob Grool used The Swedish Club Academy's Maritime Resource Management (MRM) as the business's safety programme, which had some very real results, and he encouraged the Zeaborn management team to do the same. But this time, said Rob, "we are going to put all office staff through MRM training as well – because in the office we can only support our

seagoing personnel to make their job possible, we cannot run the ships from the office. So we need to understand exactly how our people on board make sure that every day our 'Safety@ZEA' philosophy gets them home safely.

Rob knows his stuff, having joined Zeaborn in 2019, after some 36 years as a ship manager in Hanseatic Shipping in Cyprus, Wallem Group in Hong Kong and Seaspan Ship Management in Vancouver. "I joined because I liked what I saw. The shareholders of ZSM agreed a set of priorities that we should focus on: Safety of our people and ships; transparency on financial and ships-performance to our customers; asset protection of the ships in management and reliability in operation of the ships. That was an ethos I could believe in."

Creating a safety attitude

MRM is now being rolled out and implemented on board and in the offices. The journey will initially take Zeaborn until autumn this year. "But then MRM will be with us forever," says Rob Grool. "We'll never let go, we'll never turn down the safety focus and I know that MRM will help us to make our ships better-managed, better-performing, with fewer totally avoidable accidents and incidents.

"I am looking for a safety attitude: the things you do when nobody is watching. Behaviour is not good enough: behaviour is when you throw your rubbish in a bin when a Singapore police officer is watching you. Attitude is when you also take your rubbish to a bin in a polluted city.

"I have seen too many examples of incidents and accidents when seafarers thought that out of sight at sea meant that the safety rules no longer applied," he said. "The strength of MRM is that it puts constant emphasis in making the best use of all available skills on board and on challenging unsafe acts before they become disasters. And 'all available skills' also means awareness of unsafe practices about to happen, or taking ownership of a quality/safety issue until it has been resolved. Do not walk past a quality problem – we keep repeating this mantra," he says.

Zeaborn Ship Management, now managing a fleet of about 140 containerships, bulkers, tankers and multi-purpose carriers, is not the only shipping investment of the Group. Harper Petersen, a well-established name in commercial ship management and S&P broking, complements ZSM's own commercial management department offering commercial management, S&P knowledge and capacity and a post-fixture operations team from which its customers can benefit.

Continuous improvement

"We do have a good safety and insurance record in Zeaborn and especially in Zeaborn Tankers, with their excellent Tanker Management Self Assessment (TMSA) rating," concludes Rob. "But I know that MRM will make us even better. It is a chicken or egg situation: is a well-managed ship safe or is a safe ship well-managed? I just know that these two go hand in hand and if we want to deliver reliability in performance of our managed ships, then we have to have safety in our DNA."

The Swedish Club Academy welcomes Zeaborn and Enesel to MRM

The first quarter of the year opened with two Swedish Club members signing up for the MRM programme and hosting in-house Train the Trainer events. We welcome Zeaborn Ship Management and Enesel Limited who were both eager to start implementing MRM by sending their employees to be trained as MRM facilitators.

Zeaborn Ship Management

The first stop in our back-to back Train-the-Trainer session was Zeaborn Ship Management, hosting a two day in-house MRM Train-the-Trainer course at their headquarters in Hamburg, Germany on 6-7 February 2020.

There is a strong commitment from the management team to implement MRM from top to bottom of the company, encouraging employees to be more proactive and to continuously contribute to a culture of minimising accidents and incidents both on board and shoreside.

At the event case studies were examined, enabling participants to discuss and exchange ideas on what went wrong and how the incidents/accidents could have been avoided. There was a good mix of participants from shoreside management and officers working on board that made the discussions wide ranging and at times controversial.

Enesel Limited

After Hamburg we headed to Limassol, where, on 10-12 February, Enesel hosted its own MRM Train-the-Trainer session, which was held at the Crowne Plaza Hotel, Limassol.

In-house training allows the learning to be focused on the company itself, and participants are able to discuss real life examples. In addition to the MRM learnings, in-house events like these allow for team building, encouraging participants from different departments to gain awareness and understanding of each other's roles. Train-the-Trainer events provide plenty of time for discussion and the opportunity to go through new training material in depth, equipping participants with appropriate knowledge and skills in a very short time.

The event was very well-received, with excellent feedback being received from participants.

Interview

Amalia Marcou

Crew/HR Manager, Enesel Limited

As Crew/HR Manager at Enesel, Amalia Marcou has to deal with issues related to human factors on a day-to-day basis. She believes that MRM is an essential way of doing business for the shipping industry, especially with the new generation of seafarers coming through, and the challenges faced by the industry today.

"Learning how to use the knowledge and experiences of our seafarers effectively, and to manage our available resources in the most productive way will lead to the establishment of set tasks, improve teamwork and ultimately increase safety on board our vessels," she said. "During the training we learned how to empower our company culture by changing an individual's behaviour during everyday operations."

"It's a 'value for time' course," she said. "It gives new impulses to the team and takes a totally different approach about how to deal with and manage human error."

Following the course, Enesel has identified 13 MRM Facilitators who will have the task of travelling to its recruitment centres and undertaking high intensity training sessions with its seafarers ashore. Following on from that, it will then visit specific vessels, carrying out training sessions with individual groups to address specific problems on board.

Amalia has no doubts about the value of the course: "It's a 'value for time' course," she said. "It gives new impulses to the team and takes a totally different approach about how to deal with and manage human error."

Notice board

Uruguay implements the International Maritime Solid Bulk Cargoes (IMSBC) code

Uruguay's Coast Guard Authorities have recently issued a new by-law, 'Disposición Marítima N° 172', which establishes mandatory compliance with the International Maritime Solid Bulk Cargoes (IMSBC) Code.

It also sets that the shipper shall provide the Master or his representative with appropriate information on the cargo which may be necessary for proper stowage and safe carriage of the cargo.

When carrying a concentrate or other cargo which may liquefy, the shipper shall provide the Master or his representative with a signed certificate of the Transportable Moisture Limit (TML), and a signed certificate or declaration of the moisture content issued by an organisation approved by the Maritime Authority.

Ref: Member Alert 26 February 2020

New Guidelines for the Carriage of Seed Cake in Containers published

New Guidelines for the Carriage of Seed Cake in Containers have been published jointly by the CINS (the Cargo Incident Notification System) and the International Group of P&I Clubs.

'Seed cake' is the term used for pulp, meals, cake, pellets, expellers and other similar cargo, where edible vegetable oils have been removed from oil-bearing seeds, cereals or commodities with similar properties.

The Guidelines are intended to improve safety during the carriage of seed cake and to ensure that it is declared, packaged and carried properly. Seed cake shall be transported in compliance with the requirements set out in the IMDG Code. The practices set out in the Guidelines include selected provisions from the IMDG Code plus additional precautions to enhance its safe carriage.

Ref: Member Alert 23 January 2020

Regulations from the People's Republic of China (PRC) on the Prevention and Control of Marine Pollution from Ships

Members are informed that the PRC Maritime Safety Agency (MSA) recently published new Measures of Administration on Agreement for Ship Pollution Response Regime, which became effective on 1 March 2020. In conjunction with the new Measures, the MSA has also published a Directory of Hazardous Bulk Liquid Cargo Apt to Cause Pollution (the 'Directory') for which oil booms need to be deployed during cargo operations or an Agreement with a Ship Pollution Response Organisation (SPRO) needs to be concluded.

There is no material change to the SPRO requirements as a result, however members will note that from 1 March 2020, no SPRO Agreements will be needed for any of the following:

1. Any ship under 10,000 GT either in ballast or carrying a liquid cargo in bulk not listed in the Directory; or

2. Any ship of any size that is driven by clean fuels and either (i) carrying a liquid cargo not in bulk (even if that liquid is listed in the Directory) or (ii) carrying a liquid in bulk that is not listed in the Directory or (iii) carrying a non-liquid (i.e. solid) cargo.

Oil booming is still only required, inter alia, for ships loading, discharging, transferring over 300mt of cargoes listed in the Directory.

Ref: P&I Circular 21 February 2020

Greece updates its environmental legislation

Greece has recently made changes to the law regulating pollution of marine environment. Some of the changes concern penal sanctions and administrative fines for infringement of the regulations on ship-source pollution.

A polluter may be fined up to EUR 100,000 for any degradation of the sea water quality. A vessel imposed with a fine will be prohibited from sailing until the fine is paid or a bank guarantee is provided.

Ref: Member Alert 26 February 2020

Out and about

International Group Regional Seminar for P&I Correspondents

Karoline Rydelid
Correspondent Manager

In recognition of the growing importance of the Asia Pacific region to shipping and the global economy, the International Group held its first Regional Seminar for P&I Correspondents at the Raffles City Convention Centre in Singapore on 4 December 2019.

250 correspondents from all 13 P&I clubs attended, and The Swedish Club was represented by Julia Ju, Head of P&I Claims (Hong Kong), and Karoline Rydelid, the Club's Correspondent Manager. Julia was also invited to speak on 'Current People Risks Issues in Asia'. The event proved very popular, with approximately 350 attendees from 63 countries across the world.

The Seminar focussed on Modules 4-7 of the P&I Qualification: People Risks, Cargo Risks, Collision, FFO & Pollution, and Towage, Salvage & GA. Specific presentations included: Mental Wellness at Sea, Investigating Fixed Object Damage, Main Challenges Associated with Salvage and Towage in Remote Locations, and Rules & Practical Considerations for World-wide Exporters of Goods and Services to China.

Alongside the Regional Seminar, delegates also enjoyed a welcome reception at the Raffles City Convention Centre and a buffet dinner at the Hotel Fort Canning. There was also a VIP event at the Singapore Stock Exchange for government representatives, members, brokers and senior representatives from the clubs.

Staff news

GOTHENBURG

Alice J. Chen
Alice joined Cash Management in February 2020 for a period of nine months as CM Controller.

Torbjörn Claesson
Torbjörn joined Team Gothenburg in March 2020 as a Senior Claims Executive P&I and FD&D. Prior to that he was with the Standard Club in London and is a qualified English solicitor with a law degree from the London School of Economics (LSE).

Malin Högberg
Malin has taken up the position as Director, Corporate Legal, following on from Anders Leissner who resigned in December 2019. Malin previously worked as Head of Claims, P&I in the Club's Team Gothenburg office.

Linda Rydén
Linda joined Team Gothenburg in February 2020 for a period of one year as Assistant Claims Executive. She holds a Master of Law.

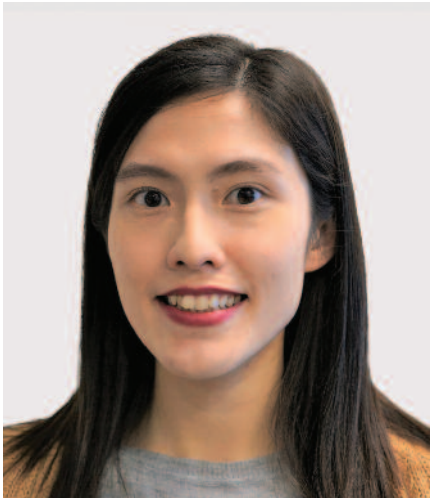
Johan Rönning
Johan joined Team Gothenburg in February 2020 for a period of one year as Assistant Claims Executive. He holds a Master of Law and BSc in Shipping and Logistics.

Ingrid Svensson
Ingrid has accepted permanent employment as Claims Executive in Team Gothenburg.

HONG KONG

Angus Lai
Angus joined Team Asia in January 2020 as Claims Executive, P&I. He has a BSc in Shipping and Logistics and LL.B from the University of London and has previously been working for one of the Club's members.

Carmen Tsang
Carmen joined Team Asia in November 2019 as Team Assistant.



Linda Law
Linda joined Team Asia in November 2019 as Team Assistant.

Club Quiz

1 – Sometimes ships have more than three masts. What is the fourth, much smaller mast known as?
1 Foremast
X Mizzenmast
2 Jiggermast

2 – How long is a fathom approximately?
1 From toe to toe if you can do the splits
X From fingertip to fingertip if you outstretch your arms
2 From fingertips to the ground if you reach straight up

3 – When did The Swedish Club become a full member of the International Group of P&I Clubs?
1 1872
X 1949
2 1981

Mail your answer to quiz@swedishclub.com The first correct answer pulled out of the hat will win a prize.

Winner of Club Quiz 3 – 2019

The winner is Samuel Bull, Bull Marine Surveyors S.L., Barcelona

The right answers to Club Quiz No 3-2019 are:

1 **1890**
(When were the first York Antwerp Rules adopted codifying general average?)
X **193 km**
(How long is the Suez Canal including access channels?)
X **Cape Agulhas**
(Which is the southernmost point of the African continent?)

Club Calendar 2020

For the safety and wellbeing of our valued members, business partners and staff members, we have cancelled all Club events this spring and summer.

The corporate Annual General Meeting will still take place on 11 June 2020 but in a virtual format for members and business partners.

We sincerely hope you keep well and we look forward to meeting you again when circumstances permit.

SVERIGES ÅNGFARTYGS ASSURANS FÖRENING
The Swedish Club
Est. 1872

The Swedish Club is a mutual marine insurance company, owned and controlled by its members. The Club writes Protection & Indemnity, Freight, Demurrage & Defence, Charterers' Liability, Hull & Machinery, War Risks, Loss of Hire insurance and any additional insurance required by shipowners. The Club also writes Hull & Machinery, War Risks and Loss of Hire for Mobile Offshore Units and FPSOs.

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