## **RISK WATCH**

### FEBRUARY 2024

SAFE CARRIAGE OF ALTERNATIVE FUEL VEHICLES ADVICE AI IN SHIPPING BENEFITS AND CHALLENGES OPERATING IN AREAS WITH GEOPOLITICAL TENSIONS PEME BRITANNIA GROUP INTRODUCES 'YOUR EXCELLENT HEALTH SERVICE' WIND-ASSISTED PROPULSION LATEST TECHNOLOGIES FOR CARGO SHIPS CARRIAGE OF ENERGY STORAGE UNITS LITHIUM-ION BATTERIES MARITIME DRUG SMUGGLING IN BRAZIL PREVENTATIVE MEASURES CLAIMS AND LEGAL IMPORTANT CASES DISCUSSED



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## A MESSAGE FROM THE EDITOR



Welcome to the first edition of Risk Watch for 2024. In this issue, we are pleased to introduce 'Your Excellent Health Service' (YEHS), our new PEME consultant dedicated to evaluating crew fitness and prioritising workforce wellbeing.

Our loss prevention team offers valuable insights on navigating areas with ongoing geopolitical tensions and ensuring the secure transportation of liquefied natural gas-fuelled vehicles. Additionally, they delve into the realm of innovative wind-assisted cargo ships, exploring cutting-edge technologies that contribute to sustainable shipping practices.

This edition also explores the carriage of energy storage units on bulk carriers, providing valuable insights and advice for shipowners. Shifting our focus to the dynamic landscape of artificial intelligence, we highlight its transformative impact on the industry and emphasise the importance of a holistic approach. Combining Al-based systems with robust human oversight and ethical considerations is crucial to mitigate the associated risks and unlock the full potential of Al implementation.

We also address the complex and evolving issue of drug smuggling in Brazil, providing preventative measures and advice for vessels calling at ports in the country. To wrap up, we present our regular legal update, shedding light on significant legal cases impacting the maritime sector.

Jessie Dunn Editor



We hope you enjoy this copy of Risk Watch. We will be looking for ways to maintain and increase the usefulness, relevance and general interest of the articles. If you have any ideas or comments please send them to: britanniacommunications@tindallriley.com

# SAFE CARRIAGE OF LIQUEFIED NATURAL GAS FUELLED VEHICLES



IN RECENT YEARS, THE MARITIME INDUSTRY HAS WITNESED A GROWING INTEREST IN THE SHIPPING OF VEHICLES USING ALTERNATIVE FUELS, WITH LIQUEFIED NATURAL GAS (LNG) EMERGING AS A FRONTRUNNER. ENSURING THE SAFE TRANSPORTATION OF ALTERNATIVE-FUELLED VEHICLES IS CRUCIAL FOR SHIPOWNERS. THEY MUST PRIORITISE SAFETY, ADHERE TO REGULATORY FRAMEWORKS, AND IMPLEMENT BEST PRACTICES TO SECURELY CARRY SUCH VEHICLES.

The International Maritime Organization (IMO) sets regulations for the transportation of vehicles, including Alternative Fuel Vehicles (AFVs). Shipowners should consult their flag state for conclusive advice on these regulations. Additionally, the European Maritime Safety Agency (EMSA) provides guidance on the carriage of AVFs.

The transport of vehicles, including AFVS, is generally governed by the International Maritime Dangerous Goods (IMDG) code. The applicable UN number for LNG fuelled vehicles is UN 3166, which includes vehicles powered by flammable gas, fuel cells, and flammable liquid powered vehicles.

However, the IMDG code contains Special Provisions (SP) that may exempt loaded cargo from certain requirements of the IMDG code. SP 961 of the IMDG code states that vehicles are not subject to the provisions of the code if certain conditions are met, such as stowing the vehicles in designated spaces approved by the flag state and ensuring there are no signs of leakage.

Before accepting the cargo for loading, the storage method for LNG fuelled vehicles should be clarified with the shipper. You may need to consult with the ship's flag state and classification society to ascertain whether the storage method complies with SOLAS Chapter II-2 Regulation 21.1, which imposes additional requirements for ships transporting vehicles with compressed hydrogen or natural gas.

Shipowners and seafarers should undertake a structured risk assessment to evaluate the carriage considerations, cargo care, stowage, lashing requirements and any limitations. Consider the following important factors when carrying LNG fuelled vehicles on board:

• If LNG leaks, it can rapidly develop vapour clouds that can easily catch fire

• LNG is stored at very cold temperatures and contact with LNG or cold surfaces can cause cryogenic or freeze burns

• Relief valve and ventilation measures may be necessary during the voyage to address the potential rise in pressure inside the tank. Establishing holding time is essential to prevent the LNG vehicle from producing flammable gases or vapours

• Secure the cargo in accordance with the on board Cargo Securing Manual (CSM) and the Cargo Stowage and Securing (CSS) Code Appendix

• The shipper must provide detailed transport instructions, covering handling, additional lashing and securing requirements, and emergency protocols

• Crew members and personnel involved in handling LNG powered vehicles should undergo specialised training to understand the unique characteristics and handling of LNG as a fuel, along with emergency response protocols

• The ship must carry adequate emergency response equipment, including personal protective gear, firefighting equipment, and spill response kits

Shipowners requiring any further guidance are advised to contact the Britannia loss prevention team at: lossprevention@tindallriley.com.



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# THE USE OF AI IN SHIPPING

**ARTIFICIAL INTELLIGENCE (AI)** IS POISED TO REVOLUTIONISE THE SHIPPING SECTOR, PROMISING INCREASED EFFICIENCY, SAFETY, AND ENVIRONMENTAL SUSTAINABILITY. HOWEVER, AS WITH ANY TRANSFORMATIVE TECHNOLOGY, THE INTEGRATION OF AI INTO SHIPPING PRESENTS A COMPLEX ARRAY OF BENEFITS AND CHALLENGES.



#### WHAT IS AI?

First, it is important to understand what AI is and what capabilities it has. The global management consultancy McKinsey & Company defines AI as:

AI IS A MACHINE'S ABILITY TO PERFORM THE COGNITIVE FUNCTIONS WE ASSOCIATE WITH HUMAN MINDS, SUCH AS PERCEIVING, REASONING, LEARNING, INTERACTING WITH AN ENVIRONMENT, PROBLEM SOLVING, AND EVEN EXERCISING CREATIVITY.



Al stands out from traditional computer software due to its capability to learn and adapt to tasks, improving its outputs as it becomes more familiar with them, making it an exceptionally versatile tool. Consequently, the retail and e-commerce industry frequently utilises Al to enhance customer experience. It achieves this by predicting consumers purchasing patterns through the analysis of past buys and internet search history, leading to personalised recommendations.

### WHERE CAN AI BE UTILISED IN THE SHIPPING INDUSTRY?

If you ask about AI's applications in the shipping industry through one of the freely available chatbots on the internet, you will receive a plethora of suggestions.

### This includes:

- Autonomous vessels
- Route optimisation
- Predictive maintenance
- Cargo management
- Supply chain and logistics optimisation
- Safety and security
- Environmental monitoring
- Port operations
- Crew training and assistance
- Communication and navigation systems
- Customs and compliance
- Market analysis

Considering the information above, it is important to acknowledge that AI sees its own role in shipping as highly transformative, offering solutions that range from operational efficiency and safety enhancements to environmental conservation and strategic decision-making. While these aspects are positive, they also highlight the complexity associated with AI. Although it promises and may be capable of a lot, understanding its limitations is essential for successful implementation.

### **AI USAGE ON SHIPS**

Several shipping companies have implemented Al, either on a trial basis or as a more permanent feature to improve safety and efficiency. The Club commonly observes Al trials in areas such as:

### **BEHAVIOUR BASED SAFETY**

Behaviour based safety, also sometimes referred to as vision platforms, uses Al to analyse thousands of hours of footage from on board CCTV. It identifies crucial safety and security events in real time, offering users continuous insight on shipboard activities and behaviours. For instance, it monitors whether the bridge is manned in compliance with regulations and company procedures or if Personal Protective Equipment (PPE) is used correctly. This approach enables shipowners to enhance their understanding and assessment of the safety culture on board, facilitating the sharing of insights and best practice with the crew and fleet.

### **COLLISION AVOIDANCE**

A combination of cameras, thermal imaging, bridge navigation equipment and other installed sensors actively monitors the ship's surroundings to detect potential hazards. Al processes the data and provides real-time insights and recommendations to the officer on watch. This can help with increasing situational awareness by prioritising targets, reducing workload and minimising human error.

### FIRE DETECTION

While traditional fire detection systems rely on predefined thresholds to activate an alarm e.g., the presence of heat, smoke or a visible flame, Al based fire detection analyses real-time video



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Al powered vision systems enable real-time monitoring helping to minimise human error on watch.



feeds from onboard cameras. This enables them to detect potential fire hazards even before smoke or flames become visible. Furthermore, Al based fire detection systems can learn from previous incidents, enabling them to be "trained" to identify specific patterns associated with fires. This learning process enhances early fire detection accuracy over time, providing greater protection for the ship and its crew.

### **ROUTE OPTIMISATION**

Route optimisation systems consider numerous sources, including variables such as the weather, currents and sea conditions. Using this information, Al calculates and identifies the most economical and environmentally friendly route, thereby reducing fuel consumption and assisting in cutting emissions.

### **MISDECLARATION OF CARGO**

The misdeclaration of dangerous goods in containers causing fires is a recognised issue in the shipping industry. Al makes it possible to analyse vast amounts of data by crossreferencing cargo documentation, weight, container size etc and to identify discrepancies that may indicate misdeclared cargo. Subsequently, such cargo can be further inspected before being loaded.

### POTENTIAL RISKS WITH IMPLEMENTING AI

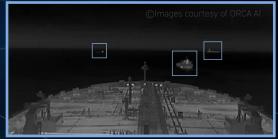
While the benefits of AI are numerous and evident, it also poses challenges and limitations that require attention. Shipowners must conduct due diligence to ensure that AI implementation aligns with their specific needs and operation, justifying its cost. Key considerations include:

#### - CYBERSECURITY

Companies should review existing cybersecurity measures and procedures to prevent potential compromises due to the introduction of AI. If necessary, updated contingency plans should be implemented to address AI related cyber-attacks.

### - ACHIEVING CREDIBLE DATA

Al's ability to continuously learn relies heavily on accurate and comprehensive data for precise predictions and decisions. Ensuring Al has access to such data is crucial to maximise benefits and obtain reliable output.



### - OVERRELIANCE

It's important to note that AI systems are not statutory requirements and should only complement, not replace, other mandatory bridge equipment. Traditional methods for collision avoidance, such as visual assessment and RADAR use, remain applicable. Overreliance on AI leading to incidents must be avoided.

### - TRAINING

Users need a thorough understanding of how to use AI confidently and an awareness of its limitations. Ideally, initial training should occur in a controlled environment to familiarise users with the system and its interactions with other equipment. If on board training is conducted, comprehensive risk assessments and detailed plans are necessary.

### - PRIVACY

Al implementation entails not only technical but also ethical considerations. Many Al systems rely on input from cameras and real-time footage, raising concerns about crew privacy. Owners must have a clear and transparent strategy regarding predicted benefits, especially for the crew. Additionally, robust procedures must be in place for handling Al data to ensure privacy and compliance with relevant legislation.

While some believe that the utilisation of AI in the shipping industry signifies a transformative leap towards efficiency, safety, and sustainability, its full realistic potential remains unknown.
However, the successful integration of AI in
shipping also poses its own set of challenges, encompassing costs, technical aspects, procedures and, not least, ethical considerations. A holistic approach that combines AI based systems with robust human oversight and ethical considerations is essential to mitigate the risks associated with the implementation of AI and to unlock its full potential.



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## OPERATING IN AREAS WITH ONGOING GEOPOLITICAL TENSIONS OR CONFLICTS

SHIPOWNERS FACE A NUMBER OF CHALLENGES WHEN OPERATING SHIPS IN AREAS WITH GEOPOLITICAL TENSIONS. NAVIGATING THROUGH SUCH REGIONS REQUIRES CAREFUL PLANNING, RISK ASSESSMENT, AND ADHERENCE TO LOCAL AND INTERNATIONAL REGULATIONS.

BEFORE ENTERING AN AREA WITH HIGH-RISK TENSIONS OR CONFLICTS IT IS RECOMMENDED TO NOTIFY THE CLUB'S UNDERWRITING DEPARTMENT. IN ADDITION, THE JOINT WAR COMMITTEE (JWC) CIRCULAR ON HULL WAR, PIRACY, TERRORISM AND RELATED PERILS SHOULD BE CONSULTED. IF THE AREA IS LISTED BY THE JWC, IT MAY ALSO HAVE A DIRECT IMPACT ON HULL PREMIUM.

The below provides practical advice on how to mitigate some of these risks:

• Consult the flag state for any advice or recommendations for navigating in a particular high tension area

• Follow flag state requirements in relation to Ship Security Levels under the International Ship and Port Facility Security (ISPS) Code

 Review any regional specific security guidance, such as the Best Management Practice Guides

• Conduct a pre-voyage threat and risk assessment before entering regions with ongoing tensions

• Amend the Ship Security Plan if the pre-voyage security threat and risk assessment deems it necessary

• Ensure the Automatic Identification System (AIS) and any other identification systems are switched on and functional unless otherwise advised or for security reasons. If a system is turned off, remember to keep a paper trail to later document that it was switched off due to security reasons • Consider privately contracted Armed Security Personnel as a risk mitigation measure only in regions where local regulations permit their use

- Preserve Voyage Data Recorder data in the event of an incident
- Conduct security drills prior to entering these areas
- Avoid entering exclusion zones
- Maintain a full and vigilant bridge watch
- Always monitor and log relevant Very High Frequency (VHF) calls
- Masters are to follow the advice of local/military authorities
- Masters are encouraged to comply with all available Voluntary Reporting Schemes (VRS)

 Promptly report suspicious activity as per the guidelines issued by the flag state, VRS or local authorities

• Activate the Ship Security Alert System immediately in the event of an incident where the ship or crew is endangered. Operating ships in areas with geopolitical tensions can be challenging, but with careful planning and risk management, shipowners can navigate through these regions successfully. Additional guidance regarding onboard security, including broader security details, are available on the Britannia website.

Due to the fluid nature of many of these situations this guidance is to be considered generic and local agents are to be contacted for the most up to date and specific information.

For further information please do not hesitate to contact the loss prevention team at: lossprevention@tindallriley.com

### BRITANNIA GROUP INTRODUCES **YOUR EXCELLENT HEALTH SERVICE** (YEHS) AS NEW PEME CONSULTANT

Crew health remains of paramount concern, and the significance of comprehensive pre-employment medical examinations (PEMEs) is at the forefront of industry discussions. Many shipowners already incorporate enhanced medical screenings for their crews, either fleet-wide or for specific crew categories.

IN A RECENT ANNOUNCEMENT. THE BRITANNIA GROUP HAS **REITERATED ITS COMMITMENT** TO THE PRE-EMPLOYMENT MEDICAL EXAMINATION (PEME) **CONSULTANCY SERVICE, INITIALLY LAUNCHED IN 2018.** SERVING AS A REMINDER. THE GROUP IS INTRODUCING **YOUR EXCELLENT HEALTH SERVICE (YEHS) AS THE NEW PROVIDER OF THIS ESSENTIAL SERVICE, DESIGNED TO ASSIST** IN ASSESSING CREW FITNESS FOR WORK AND MAINTAINING THEIR WELLBEING **CONTINUALLY.** 

Over the years, Britannia's Managers have fielded numerous inquiries from Members, addressing both general crew health issues and specific concerns related to the employment of certain individuals. These include inquiries about testing criteria for different ages and nationalities, the choice of clinics, and the impact of past and pre-existing illnesses on future employment. The PEME Consultancy service is available to all Britannia Group Members, with YEHS charging per inquiry. To support its Members, Britannia will absorb the first USD1,000 of aggregate charges incurred by each Member per policy year.

This initiative is highly flexible, tailored to individual Members' needs and concerns, addressing a broad spectrum of questions related to the pre-employment health of crew Members destined for Britannia P&I ships. Some examples of the questions that the consultancy service may cover include:

- Adequacy of existing PEME examinations, policies, and criteria
- Recommended validity periods of PEMEs
- Scope of examination recommendations what to include, for whom, and how often
- Specific health concerns for particular countries, conditions, and age groups
- Fitness for sea duty based on PEME results
- Risks related to pre-existing medical conditions
- Impact of past medical history or medical restrictions on fitness for sea work



- HIV and hepatitis testing requirements and related employment issues
- Obesity levels and BMI criteria
- Control of ongoing medical conditions on board through medication
- Selection of PEME clinic and recommendations for inspection and audit of clinics
- General advice on developing and running a member's own PEME scheme

All inquiries will be treated confidentially, and the Britannia Group and its Managers assure Members of their commitment to data privacy, adhering to the General Data Protection Regulation (GDPR).

### About Your Excellent Health Service (YEHS):

YEHS, under the leadership of Medical Director Dr. Charlie Easmon, boasts more than a decade of experience in maritime PEMEs. With a strong reputation and a history of advising IG Clubs, shipowners, and managers on recommended schemes, YEHS is well-positioned to support Britannia Group Members. Additionally, the YEHS team brings over 20 years of expertise in Cruise Line Medicals and is registered to conduct UK Oil and Gas Medicals.

For more information about YEHS, interested parties are encouraged to visit its website at https://yourexcellenthealth.org/

All inquiries about this facility should be directed to the Managers at:

### PemeEnquiries@tindallriley.com.

Any inquiries falling within the PEME Consultant initiative will be forwarded to YEHS for a comprehensive response.



# WIND-ASSISTED PROPULSION

THE MARITIME INDUSTRY IS UNDERGOING A PROFOUND TRANSFORMATION AS IT SEEKS TO REDUCE ITS ENVIRONMENTAL FOOTPRINT AND TRANSITION TOWARDS MORE SUSTAINABLE PRACTICES. ONE INNOVATION THAT HAS RECEIVED ATTENTION IS WIND-ASSISTED CARGO SHIPS. WHILE SHIPS HOLD GREAT POTENTIAL FOR SUSTAINABLE SHIPPING, THEY ALSO COME WITH CERTAIN RISKS THAT NEED TO BE CONSIDERED.



Sailing ships have been harnessing the power of the wind for centuries. However, recent advancements in technology and design are breathing new life into this ancient form of transportation. These modern windassisted systems are designed to complement traditional propulsion methods, rather than replace them entirely. This hybrid approach helps maximise efficiency while reducing environmental impacts. Several windassisted systems are currently being developed and tested. Some of the most notable systems include:



**FLETTNER ROTORS** – These tall rotating cylinders are mounted on a ship's deck. As the rotor spins, it creates a Magnus effect, generating forward thrust.

**KITES** – Modern kite-like sails are deployed from the deck of the ship to capture wind energy to generate forward thrust.

**RIGID WING SAILS** – Rigid wings are mounted on the ship's deck and use the Bernoulli principle to generate

their performance in varying wind conditions.

forward thrust. These wings can be adjusted to optimise



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### The adoption of wind-assisted propulsion offers several advantages to shipowners such as:

### Fuel efficiency and emissions

**reduction** – Wind-assisted cargo ships utilise various technologies, such as sails, rotors, and kites to capture wind energy and assist the ship's propulsion, resulting in reduced fuel consumption and subsequently a reduction in greenhouse gas emissions.

**Cost savings** – By relying on wind propulsion, shipping companies can reduce their fuel expenses, which constitutes a substantial portion of their operational costs.

**Compliance with regulations** – As the maritime industry faces increasingly stringent emission regulations, wind-assisted cargo ships offer a means of meeting these requirements without compromising operational efficiency.

**Improved reputation** – Operating wind-assisted cargo ships demonstrates a commitment to sustainability and environmental responsibility, which can enhance a shipowners reputation and appeal to the increasing number of ecoconscious customers and consumers.



However, before installing windassisted propulsion there are also certain technical and operational risks that should be considered and be sufficiently mitigated:

**Structural integrity** – The forces exerted by the wind-assisted propulsion technologies on the ship's hull, particularly at the interface between the rig and the hull, need to be taken into account.

**Manoeuvrability** – The use of the sails at sea may impact a ship's steering characteristic including rate of turn, stopping range etc and should be duly considered by the officer on watch as part of their decision making when determining a specific manoeuvre.

### Technological integration -

Implementing wind-assisted technology may require specialised engineering and design expertise, ensuring the seamless integration of wind propulsion systems with traditional engines to prevent unexpected technical issues.

**Cargo handling** – The use of wind assistance technologies can potentially hinder the process of loading and unloading cargo. This depends on both the mechanisms used for these operations and the structure connected to the technology. Port cranes or other moving objects may also cause damage to the installed wind-assistance. **Stability and heel** – The large forces created by the rigs can produce heeling forces which may need to be catered for, both during standard operation and extreme weather conditions.

Visibility – Many of the technologies produce obstructions to lines of sight both in operation and when stored. These issues need to be checked against the International Convention for the Safety of Life at Sea (SOLAS) requirement for bridge visibility as well as shipowners' own procedures and port state rules for safe navigation.

**Air draught constraints** – Bridges and similar structures can impose air draught limits that must be taken into account, either restricting the height of the installation or necessitating the use of a folding/collapsible rig.

**Crew safety** – Moving parts associated with wind assistance technologies could present safety hazards to the crew.

**Maintenance** – The system will require regular maintenance and may experience wear and tear. Ensuring reliable maintenance and repair infrastructure is crucial to prevent downtime and operational disruptions.

**Repair costs** – Technology associated with wind assisted propulsion is likely to be expensive. Therefore, any damages caused by mishandling or collisions are likely to prove costly. **Crew training** – Crew members and shipowners must undergo training to effectively operate wind-assisted ships, enabling them to manage the additional systems and comprehend the limitations of the installed technology,

As with all new technologies and prototypes a higher risk exposure may be expected at the "start-up" phase as the technology is still new and being tested. Therefore, to mitigate the risks, a robust risk management approach is required, as the crew and ship owner become familiar and comfortable with the new technology. As the technology matures and is mastered by the crew, shipowners, and operators, the risk exposure may decrease.

How widespread wind-assisted propulsion technologies will become as part of the maritime industry's green transition is still uncertain. Whilst this technology has several advantages it can only complement and will not likely replace fuelled propulsion. Therefore, shipowners are likely to also seek alternative fuels to meet the decarbonisation demands of the future. However, as the future price for green alternative fuels may be substantial, a high fuel efficiency will be of further importance to shipowners. Windassisted systems may play a valuable part in the initial investment towards decarbonisation if the cost of windassisted technology can be offset by long-term fuel savings.

## CARRIAGE OF ENERGY STORAGE UNITS ON BULK CARRIERS

LITHIUM-ION BATTERIES HAVE GAINED SIGNIFICANT ATTENTION IN RECENT YEARS DUE TO THEIR PIVOTAL ROLE IN THE GLOBAL SHIFT TOWARDS SUSTAINABILITY, AS WELL AS THEIR ASSOCIATION WITH CERTAIN FIRE RISKS RELATING TO THERMAL RUNAWAY, SELF-IGNITION, AND THE RISK OF AN EXPLOSIVE AND TOXIC ATMOSPHERE. WHILST THESE FIRE RISKS HAVE PREDOMINATELY BEEN DISCUSSED IN CONNECTION WITH THE TRANSPORT OF ELECTRICAL VEHICLES, THE CLUB HAS RECENTLY SEEN SEVERAL ENQUIRES RELATING TO ENERGY STORAGE UNITS CONTAINING LITHIUM-ION BATTERIES AS BREAK BULK ON BOARD BULK CARRIERS.



### DECLARATION

The energy storage unit typically comprises a box or container of varying sizes, within which the Lithium-ion batteries designed for energy storage are subsequently installed.

As the cargo is packaged, it will be governed by the provisions of the International Maritime Dangerous Goods (IMDG) code. Lithium-Ion batteries are listed by the IMDG code as class 9 which covers miscellaneous dangerous substances and articles. However, the IMDG code lists a number of various UN numbers all related to the transport of lithium-Ion batteries as detailed below:

#### THE INTERNATIONAL MARITIME DANGEROUS GOODS (IMDG) CODE

ENTRY C	LASS	UN No.
LITHIUM BATTERIES INSTALLED IN CARGO TRANSPORT UNIT Lithium-ion batteries or lithium-metal batteries	9	3536
LITHIUM-ION BATTERIES (Including lithium-ion polymer batteries)	9	3480
LITHIUM-ION BATTERIES CONTAINED IN EQUIPMENT (Including lithium-ion polymer batteries)	9	3481
LITHIUM-ION BATTERIES PACKED WITH EQUIPMENT (Including lithium-ion polymer batteries)	9	3481
LITHIUM-METAL BATTERIES (Including lithium-alloy batteries)	9	3090
LITHIUM-METAL BATTERIES CONTAINED IN EQUIPMENT (Including lithium-alloy batteries)	9	3091
LITHIUM-METAL BATTERIES PACKED WITH EQUIPMENT (Including lithium-alloy batteries)	9	3091
BATTERY POWERED VEHICLE	9	3171

### RISK ASSESSMENT

Given both the potential risks associated with lithium-ion batteries and the high value of the energy storage units, the loading and securing process requires careful attention and planning. The shipper should provide the shipowner with detailed transport guidelines which should contain all the procedures required for the safe carriage of the entire shipment, including handling/lifting plan, lashing and securing requirements (including the gear, lashing points etc.) and emergency protocols. In addition, shipowners should undertake a structured risk assessment to assess the carriage considerations, cargo care, stowage, lashing requirements and any limitations, based on the information provided by the shipper and any statutory requirements as highlighted above.

### LOADING AND SECURING

It is advisable to appoint a competent surveyor or supercargo during the loading operations to assist the master and to ensure the stowage, loading, and securing procedures are executed properly. The following loading and securing advice should be considered, though the list should not be seen as exhaustive:

• Lifting may be a critical stage of the operation with elevated risk of damage to the cargo. It is essential to ensure the inspection and maintenance of the cranes and lifting gear is fully up to date, the records are in order, and that the manufacturer's recommended operational practices are followed. The limiting conditions of the lifting plan, such as wind, ship motions, slewing speed etc. must be complied with. The crane operator(s) must be duly qualified for the intended lifting operation.

• The cargo should be secured in accordance with the ship's Cargo Securing Manual (CSM), taking into account the applicable recommendations of the Code of Safe Practice for Cargo Stowage and Securing (the CSS Code) – Annex 13.

• The CSM must detail all lashing and securing arrangements and devices provided on board the ship, including their correct application and recommended methods for securing of cargo which the ship is approved for.

• If the ship's CSM does not specifically cover the carriage of the intended project cargo, shipowners should consult the Classification



Society in order to obtain approval and the CSM should be amended accordingly. This may also require an alteration of the physical lashing arrangement and/or for additional lashing equipment to be provided.

• The stowage plan should duly consider the availability of securing points. The securing lugs/pad-eyes should be aligned with the lashings so they are not subject to forces acting out of the nominal direction.

• The securing points fitted to the ship must be strong enough to withstand the dynamic loads. Where welding is required to install additional securing points, it should be performed by qualified welders and the welds should be inspected and tested as appropriate. The relevant safety procedures for hot work must also be followed.

• Verify that the weight of the cargo does not exceed the maximum permitted weight load on the tank top. These considerations should take into account the adequate distribution of the point load. Additional load spreading may be required so that the maximum point load is not exceeded.

• Consideration should be given to the securement of cargoes to ensure they do not shift or impair the project cargo.

• Ensure the cargoes do not possess any chemical risk of contaminating the project cargo during the voyage.

• Hatch cover testing should be conducted prior to loading the project cargo to ensure the weathertight integrity of the hatch covers.

• The onboard loading and stability software should be able to accommodate the loading of project cargo to ensure accurate stability calculations prior to departure.

### VOYAGE CONSIDERATIONS

The ship must always comply with intact stability requirements. The ship's metacentric height (GM) should also be considered during the planning phase for all phases of the voyage so that it remains within acceptable limits. Therefore, it is important to take into account weather routing to minimise the impact of the ship's motion on the cargo. As weather permits, the crew should frequently inspect the condition of the cargo and its lashings – entry into cargo holds should be governed by the shipowners entry into enclosed space procedures. The retightening of lashings should be documented as well as images of the cargo.

### EMERGENCY TRAINING

The guidance provided by the IMDG code's Emergency Schedule (EmS) and Medical First Aid Guide (MFAG) should be followed. The crew should be trained and familiarised with the specific characteristics and risks associated with a lithium-ion battery fire, as these may not be covered by the crew's traditional STCW firefighting training. This may include the increased risk of an explosive and toxic atmosphere developing. Therefore it is important for the crew to consider the early and effective deployment of the ship's fixed firefighting system.

### DISCHARGE

If the master has any concerns about the condition of the cargo, the master should inform the Club. This will enable a surveyor to attend the discharge port, verify the condition, and protect the shipowners' best interests. The surveyor may also assist the crew with monitoring the discharge operation to ensure the cargo is handled correctly and any damages caused by the stevedores are promptly recorded and documented.

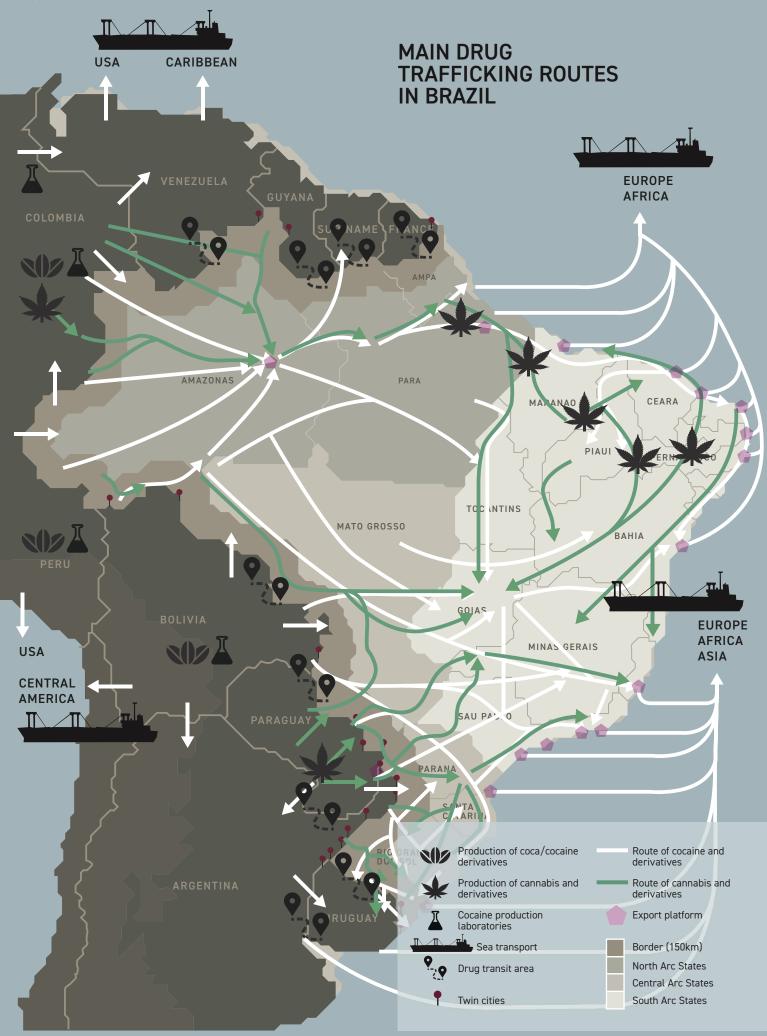
In case of a claim the following evidence should be preserved:

- Weather forecasts and weather routing covering the voyage
- Surveyor/supercargo's loading report
- Stability calculations
- Route planning
- Cargo ventilation logs
- Latest hatch cover test report
- Documentation of the crew's inspection and retightening of lashing etc.

For further information, please do not hesitate to contact the loss prevention department at: **lossprevention@tindallriley.com** 



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# MARITIME DRUG SMUGGLING IN BRAZIL



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BRAZIL'S POSITION IN SOUTH AMERICA, WITH AN EXTENSIVE COASTLINE AND NUMEROUS PORTS, RENDERS IT AS A PRIME CHOICE FOR DRUG TRAFFICKING ORGANISATIONS SEEKING TO TRANSPORT ILLICIT DRUGS TO LUCRATIVE MARKETS IN EUROPE, NORTH AMERICA, AND OTHER REGIONS ACROSS THE GLOBE. THE USE OF SHIPS FOR DRUG SMUGGLING IN BRAZIL IS A COMPLEX AND EVOLVING PROBLEM AS SMUGGLERS EMPLOY A VARIETY OF SHIPS AND TACTICS TO CONDUCT THEIR ILLEGAL TRADE.

Unfortunately, the discovery of illicit drugs on board can put the crew in a very difficult situation. It is therefore important that shipowners demonstrate due diligence and take appropriate measures to prevent drugs being brought on board their ships.

To assist shipowners and their crew we would like to draw their attention to the information previously shared by Brazilian P&I correspondent PROINDE on maritime cocaine trafficking in Brazil which highlights the main drug trafficking routes in Brazil. Shipowners should implement preventative measures when calling at the areas shown on the map on page 10.

Furthermore, another Brazilian correspondent has issued guidance because of the increase of smuggling of narcotics on board ships in Brazil, which highlights some useful precautionary measures to be taken while operating in Brazilian waters.

The Club also continues to raise awareness around drug smuggling and the severe consequences it may have for shipowners and their crew. As part of its award winning **BSafe** campaign, the Club's loss prevention department has issued guidance covering onboard security as well as drug smuggling prevention. This guidance contains further advice around increasing onboard security if a ship is calling at ports with an increased risk of drug trafficking. Here are some measures to consider:

• Contact local correspondents, agents, or authorities for updated advice on the potential risk of smuggling

• Assess the security risks in conjunction with the Ship Security Plan (SSP) to ensure that appropriate mitigation measures are implemented • Identify and monitor all access points to prevent unauthorised access

• Use appropriate and robust identification systems for all visitors

- Closed circuit television (CCTV) cameras can be used as a further means of monitoring and recording activity on deck
- Maintain vigilance while in port or at anchor, including frequent security patrols
- Observe the cargo operation especially when a cargo hold is being 'topped up' to ensure that packages are not being placed on top of the cargo as the hatch covers are about to be closed

• Keep areas, such as accommodation and deck stores, locked in port

- Maintain illumination of deck areas and access points
- Consider the installation of physical barriers such as metal gratings above any accessible openings to the rudder spaces

• Conduct a thorough search of the ship, including the use of sniffer dogs and divers to inspect the submerged parts of the hull

Lastly, it is important for crew members to always remember to prioritise personal safety. Due to the nature of their activity, smugglers may be dangerous and armed. It is advisable to avoid direct contact with any smugglers, and instead report any suspicious behaviour to the watchkeeping officer.

For further information, please do not hesitate to contact the loss prevention department at: **lossprevention@tindallriley.com** 

# CLAIMS AND LEGAL

### TIME SPENT PERFORMING UNDERWATER HULL CLEANING AFTER REDELIVERY



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THE ENGLISH HIGH COURT HAS CONSIDERED WHETHER CHARTERERS MUST PAY HIRE AT THE CHARTERPARTY RATE FOR TIME OWNERS SPEND CLEANING A SHIP'S HULL AFTER REDELIVERY.

Smart Gain Shipping Co. Ltd. v Langlois Enterprises Ltd. (The '*GLOBE DANAE*') [2023] EWHC 1683 (Comm)

### DISPUTE

The parties entered into a charterparty on an amended New York Produce Exchange (NYPE) form for a one-time charter trip via the east coast of India to Brazil.

After delivery of the ship to charterers, metallurgical coke in bulk was loaded at Haldia. The ship then proceeded to Brazil. The receivers in Brazil rejected the cargo, and as a result the ship remained idle, but laden, in Brazilian tropical waters for at least 42 days. The cargo was eventually discharged, following which charterers redelivered the ship to the owners without cleaning the hull, ignoring owners' requests for them to do so. The owners, therefore, carried out the underwater cleaning of the hull themselves before the ship was delivered under its next employment.

To deal with the risk of marine growth on the ship's hull in the event of a prolonged stay in tropical waters, the following clause had been included in the charterparty:

### CLAUSE 86 HULL FOULING

"Owners not to be responsible for any decrease in speed/increase in consumption of the Vessel whether permanent or temporary cause [sic] by Charterers staying in ports exceeding 25 days trading in tropical and 30 days if in non-tropical waters. In such a case, underwater cleaning of hull including propeller etc. to be done at first workable opportunity and always at Charterers' time and expense. After hull cleaning vessel's performance warranties to be reinstated."

### ARBITRATION

The owners commenced arbitration proceedings in London against the charterers, asserting a claim for the time lost at the hire rate specified in the charterparty for the time spent performing the underwater cleaning. The charterers argued that clause 86 only applied if the ship had not yet been redelivered, and that the owners were only entitled to claim time lost at the charterparty hire rate if cleaning was performed while the ship was still on charter. If the charterers were correct, this would imply that the owners could only recover damages for losses incurred after redelivery, provided they could prove loss of time. However, the arbitration tribunal decided that clause 86 created a debt claim in relation to the time element. They ruled that the use of the term "always" in clause 86 meant that the charterers had been assigned liability for time, and they would be liable regardless of any actual loss of time experienced by the owners. The tribunal also determined that the requirement to arrange underwater cleaning "at first workable opportunity... at Charterers' time and expense" could conceivably be after discharge.

### APPEAL

The charterers appealed against the tribunal's decision to the High Court.

Based on principles of contractual construction, the Court upheld the tribunal's decision, finding that the words in clause 86 "always on Charterers' time" must have meant that the charterers would always pay for the time associated with underwater cleaning. The court said that if this was not the case, the parties could have stated in clause 86 that compensation would be for "any loss of time".

The court also agreed with the tribunal that "at the first workable opportunity" covered periods both before and after the charter period. The court pointed out where the charterparty was for a single trip, the "first workable opportunity" for underwater cleaning would most likely be after the ship's redelivery.

### COMMENTS

This decision makes commercial sense and confirms that owners do not need to show an actual loss of time where a clause allocates liability for that time to charterers. However, as always, each case will turn on the wording of the relevant clause and therefore careful consideration should be given to the wording incorporated into the charterparty.

### MAERSK CHENNAI: WHEN DOES A CARRIER'S LIABILITY END AFTER CARGO DISCHARGE?



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THE ENGLISH HIGH COURT HAS RECENTLY ISSUED ITS JUDGMENT ON THE CASE OF JB COCOA SDN BHD AND OTHERS V MAERSK LINE AS [2023] EWHC 2203 (COMM). THE DECISION PROVIDES A REFRESHER ON SEVERAL ISSUES RELATING TO A CARRIER'S LIABILITY FOR CARRYING CARGO, INCLUDING THE PERIOD OF CARRIER'S RESPONSIBILITY.

The facts of the case involved the sale by JB Foods to JB Cocoa of 300 metric tonnes of Nigerian cocoa beans, to be sold "c.i.f. [Cost, Insurance and Freight] Tanjung Pelepas, Malaysia" with payment to be made "Cash Against Documents". JB Foods had bought the goods from a company called DIT S.A., which had, in turn, bought them from a company called WACOT Ltd.

A "to order" bill of lading was issued for the cargo for carriage on board the *MAERSK CHENNAI*, naming WACOT as the shipper. The cargo loaded at Lagos was discharged at Tanjung Pelepas on 1 October 2017. However, the cargo was not collected from the container yard until around 28 November 2017. Upon inspection, the cocoa beans were found to be mouldy and to have suffered from condensation. At the trial it was established that the cargo had suffered damage following discharge due to prolonged containerisation and lack of ventilation.

JB Cocoa, its subrogated insurers and JB Foods brought a claim against the carrier for cargo damage, alleging that the carrier had both breached the contract as set out in the bill of lading and been negligent in tort in its care for the cargo. Deciding the claim in the carrier's favour, the Court considered several issues.

Firstly, JB Cocoa was found to have neither legal ownership nor possessory title to the cargo at the time the damage to the cargo occurred, so could not establish title to sue in contract or tort. On the other hand, while JB Foods could not establish title to sue in tort, it was the party to whom the bill of lading had been endorsed and the lawful holder of the bill. This gave JB Foods title to sue the carrier in contract, as if it had been a party to the bill of lading pursuant to section 2 of the Carriage of Goods by Sea Act 1992.

The voyage was subject to the Hague Rules. On the question of when the carrier's responsibility for the cargo ended, the court considered that the Hague Rules only govern the period between loading and discharge. The period outside of this (that is to say, before loading and after discharge), and any liability that the carrier may have during that period, would be determined by the terms of the contract contained in the bill of lading. The court considered various terms of the bill of lading, particularly clause 5, which provided that the carrier's liability should be determined in accordance with Articles 1 to 8 of the Hague Rules and that the carrier had no liability for cargo damage after it had tendered the cargo for delivery. The Court found that the bill of lading terms limited the carrier's liability to the period governed by the Hague Rules. This meant that the carrier was not liable for any damage occurring after discharge.





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