



Signals

NEWSLETTER



Happy New Year and welcome...

to the January 2015 edition of *Signals*, which provides information relating to loss prevention and other topics of interest to those engaged in the business of operating ships both at sea or on shore.

IN THIS ISSUE

Fires remain an ever present danger aboard ships and fixed firefighting systems are a key tool in tackling fires. However, the systems are not always deployed in a timely or correct manner during an emergency. This edition includes an article which reminds crews of a typical CO₂ system's design features and looks at common factors that may lead to delays and system failures, and the importance of training to overcome these issues.

Ship-to-ship (STS) operations are becoming more commonplace and often there is a requirement to move personnel between vessels for STS purposes. Some of the main transfer methods available and the risks associated with these methods are considered.

Issue 98: January 2015

LOSS PREVENTION NEWSLETTER
FOR NORTH'S MEMBERS

The legal section includes useful and informative articles on dispute resolution provisions within charterparties, the use of 'without guarantee' to qualify terms in an agreement, a reminder on the recently revised Himalaya Clause, publicises BIMCO's new Non-Lien Clause for Time Charter Parties and warns of a potential sanctions busting in the waters off UAE.

The revised sulphur limits for MARPOL Annex VI, Emission Control Areas, were introduced on 1 January 2015 and in this edition we look at some of the practical challenges associated with the new 0.1% limit with a focus on potential loss of propulsion.

Planned maintenance is key in ensuring that machinery on board is in good operational condition. As such, changes to a planned maintenance systems (PMS), particularly those that may involve a change to the manufacturer's recommendations, need to be carefully considered. This is discussed in the article entitled Planned Maintenance and Safety Management Systems in more detail.

In a welcome move for ships visiting Ukraine, the long standing requirement for segregated ballast to be analysed by the Ukrainian authorities prior to discharge has been revoked. The current situation in respect of ballast water analysis in Ukraine is explained.

The people section includes a reminder on the importance of having crew contracts approved by the Club and our 'Chef of the Day' feature. If you have a good Chief Cook on board, please encourage them to send their menu to us.

Accompanying this edition of *Signals* is a Hot-Spots on the use of voyage data recorders (VDR) and an information sheet for container vessels on container stowage problems.





FIXED CO₂ GAS FIRE FIGHTING SYSTEMS – THE HUMAN LINK

A fire on board a ship at sea is one of the most frightening situations a mariner can be faced with. Being a great distance from land or the assistance of other vessels with a fire on board is not a situation any mariner would want to be in. The options of manning a lifeboat or jumping overboard are not attractive. Therefore, the best option is to try and put the fire out as quickly and effectively as possible. So how can a fire on board be extinguished effectively, or at least controlled?

Vessels are provided with a range of fire-fighting equipment and systems. These range from portable fire extinguishers to sophisticated fixed fire extinguishing systems. This article will discuss the use of fixed carbon dioxide (CO₂) gas fire extinguishing systems and why sometimes these fail to have the designed, or indeed desired, effect.

Regulations

The International Convention for the Safety of Life at Sea (SOLAS) Chapter 2-II lays down the regulations regarding fire safety on vessels in regard to construction, fire protection, fire detection and fire extinction. SOLAS is further supported by the International Code for Fire Safety Systems (FSS Code), which describes the requirements of the various systems.

System Design

For a fire to occur, three specific requirements need to come together at the same time in the required proportions, these being fuel, heat and oxygen (O₂) – the fire triangle. To extinguish a fire, only one of these requirements needs be removed. O₂ required to sustain a fire comes, in most cases, from air in the atmosphere which contains 20.9% O₂. A fixed CO₂ gas fire extinguishing system is designed to discharge CO₂ gas into a designated space, thereby displacing the air and reducing the oxygen content. However, the CO₂ may not extinguish a fire immediately. I explain this later in this article.

CO₂ gas is stored in liquid form either in pressurised tanks or cylinders. When needed, CO₂ liquid is converted into a gas and directed to the required space through a system of valves and pipes to discharge heads in the required space. The gas is directed into the intended space by operation of valves housed in a control box located outside of the protected space. There may be several valves to operate depending on the design of the system.

The FSS Code Chapter 5, Paragraph 2.1.3.3 states:

“The means of control of any fixed gas fire-extinguishing system shall be readily accessible, simple to operate and shall be grouped together in as few locations as possible at positions not likely to be cut off by a fire in the protected space. At each location there shall be clear instructions relating to the operation of the system having regard to the safety of personnel”.



A CO₂ Storage Tank



A Bank of CO₂ Cylinders

Limitations of a Fixed CO₂ Gas Fire Extinguishing System

The FFS Code Chapter 5, Paragraph 2.1.1.1 states:

“Where the quantity of the fire-extinguishing medium is required to protect more than one space, the quantity of medium available need not be more than the largest quantity required for any one space so protected”.

This means that, generally, it is a one-shot opportunity to use the system to its full effect. CO₂, as an extinguishing medium, works by reducing the amount of oxygen available to the fire. Should the space not be sealed effectively prior to release of CO₂, then there will be potential for CO₂ to disperse from the space and also for air including O₂ to enter the space.

The FSS Code, Chapter 5, Paragraph 2.2.1, stipulates the volume of gas required is contingent on the use of the space protected, e.g. engine room or cargo hold. For a cargo space this shall be:

“unless otherwise provided... equal to 30% of the gross volume of the largest cargo space to be protected in the ship”.

I would add that requirements are different for ro-ro and engine room spaces. Therefore, O₂ in the largest bulk cargo space will be reduced by 30%. This will result in an O₂ concentration of 14.63% in that space if the oxygen content has not been depleted by other means, such as oxidation of the cargo. The fire itself will consume O₂ and so reduce the O₂ concentration further. However, combustion can continue in very low O₂ concentrations if temperatures remain very high. As such, CO₂ released into a hold will not on its own be sufficient to immediately extinguish a fire. Indeed, it is possible that even with the use of CO₂ a fire may, at best, only be controlled to some extent and not extinguished.

CO₂, unlike water, has no cooling effect on a fire. Therefore, once CO₂ has been released into a space, such as an engine room, and if the fire is extinguished, time is required to allow the space and its contents to cool prior to opening the space, should re-entry be necessary. If a space is opened too soon, there is potential for the fire to re-ignite once O₂ re-enters the space.

The time required for a space to cool before re-entry, if essential, will be dependent on the size of the fire, the fuel involved, the size of the space, the contents and the thermal properties of the space. It may be that up to twelve hours or possibly more may be required for the space to cool sufficiently before re-entry. A bulk cargo space should remain closed and sealed after a fire and the use of CO₂, until additional arrangements are in place for the cargo to be discharged.

Factors that have been seen in delaying the release of CO₂ or failure of a system to extinguish a fire include:

- CO₂ not being released from tanks or cylinders.
- Only a partial release of CO₂ into the space.
- CO₂ released into the wrong space.
- A common cause of delay for release of CO₂ into an engine room is ensuring evacuation of personnel.



These, although not exclusively, have generally been as a result of operator error. A fire event is a very stressful situation for a mariner and a fixed gas fire extinguishing system can be complex in its operation, potentially requiring:

- A key to be removed from a break-glass box.
- Unlocking and opening the control cabinet of the specific space, which may be one of several control cabinets.
- Opening pilot cylinder valves.
- Operating a number of ball valves in a pre-designated order.
- A stipulated time delay may be required between the operation of designated ball valves in some systems.

How Can We Get It Right, First Time, Every Time?

Every system is likely to be different and therefore on joining a vessel, each crew member needs to be familiar with the specifics of the system on board. By regular training in the use of a fixed CO₂ gas fire extinguishing system, crews can become familiar with its operation and procedures. This training should include the actions required to release CO₂ into the correct space and how to maximise its effect. After a fire has occurred is not the time to explore the use, idiosyncrasies and effectiveness of a particular system. Train before it is too late.

We would like to thank Dave Myers – Fire Investigator, Brookes Bell for this article. (dave.myers@brookesbell.com)



A typical arrangement to control the release of CO₂ into a designated space. In this arrangement, there are only two ball valves. In some systems up to four ball valves may be required.

VDR LOSS PREVENTION BRIEFING

North has recently published a Loss Prevention Briefing on problems with, and recovery of, voyage data recorders (VDR) data. A Hot-Spots on VDR accompanies this issue of *Signals*.

IMO Requirements

All cargo ships over 3,000 GT built after 2002 and all passenger ships must have a VDR.

All cargo ships over 3,000 GT built before 2002 must have a VDR or a Simplified VDR (S-VDR).

The primary function of the VDR/S-VDR is to enable accident investigators to review incidents and help to identify the cause(s).

Problems

VDR downloads of incidents that are reviewed ashore are often damaged, incomplete, or cover the wrong time-frame, to the extent that they may be of little value as evidence or in defending claims.

In-built alarms and annual tests may not always identify every VDR fault.

Ships' officers may have an incomplete understanding of VDR operation, so that if a vessel does suffer an incident, the relevant data may be lost.

Recommendations

VDRs provide a means of enhancing operational safety by analysing data and noting trends – both good and bad.

Members are encouraged to consider:

- Extending the means of retaining VDR data beyond the mandatory 12 hours.
- Initiating regular checks to ensure that the VDR is recording properly.
- Ensuring ships' officers are familiar with VDR operation.
- Direct transmission of data from ship to office.
- Central analysis of VDR downloads.

North's Loss Prevention Briefing on problems with, and recovery of, Voyage Data Recorders (VDR) data may be found in the loss prevention briefings section of the Club's website at www.nepia.com/publications/loss-prevention-publications/loss-prevention-briefings



Remote Alarm Panel



VDR Data Storage Capsule



VDR Data Downloaded to Tablet



PERSONNEL TRANSFER DURING SHIP-TO-SHIP OPERATIONS

Over the last few years more and more cargo transfer operations have been carried out offshore via a ship-to-ship (STS) transfer. Many of these operations have been taking place in exposed deep water areas where the vessels are subject to increased exposure to weather and sea.

The transfer of personnel from one vessel to another may be an essential part of the operation. For example a surveyor may be carrying out gauging on both vessels to determine the amount of cargo transferred. Frequently, the vessels involved in a STS transfer will have a large difference in freeboard, be separated by large fenders and subject to the movement of a dynamic seaway.

So how can the transfer of people between vessels be carried out safely?

In general terms, the first thing to consider is if the transfer of personnel between vessels is actually required? Removing the operation completely automatically reduces the risk to zero. However, the majority of operations will require the movement of key personnel between vessels. If this situation exists then the number of operations and the number of persons transferred should be kept to an absolute minimum.

The most effective method of minimising the risk to personnel is to identify the hazards and put risk control measures in place to ensure that the risk is as low as reasonably practicable. This should be fully addressed in operation-specific risk assessments and company safety management systems.

In areas close to land, the most suitable method for transfer may be an approved launch. Unfortunately this option is often not available in STS areas far from land. If a workboat is chosen to transfer personnel, then the transfer should only take place using an appropriate ladder/accommodation ladder combination. It is of great importance that sea conditions are taken into consideration along with the suitability of the workboat and the experience of the personnel operating the boat.

If gangways are used for direct transfer then they should only be used when there is little or no vessel movement. The gangways should be lightweight and be fitted with rails and a safety net. They should be tended at all times to ensure they remain within safety parameters. Open rung ladders should not be used.

Personnel transfer operations using lifting equipment and personnel carriers should only be undertaken when the particular circumstances make it essential and it is not reasonably practicable to transfer personnel by less hazardous means. Only cranes certified for personnel transfer should be used.

According to the UK Health and Safety Executive, an incident analysis taken over a period of some years indicates that the main hazards faced during transfer of personnel by carrier include:

- Persons inadvertently falling from the carrier.
- Lack of lateral impact protection for personnel.
- Severe vertical impact on landing carriers.
- Lack of dropped object protection.
- Immersion or being placed in the sea.
- Hazards faced by personnel when accessing/egressing the carrier.
- Environmental hazards such as sea state, wind speed and direction, visibility, fog/mist etc.

As a minimum, risk assessments should cover the above situations together with any other type of hazard that may be present during a particular transfer and/or recovery operation.

Cranes which are designated, certified and suitable for lifting people, should be clearly marked at the crane operator's location 'SUITABLE FOR LIFTING PEOPLE' or 'SUITABLE FOR MAN-RIDING' and marked with the maximum number of people it can carry. Any crane that is not marked should not be used to lift people or for man-riding.

A risk assessment of personnel transfer at sea should include (but not be limited to) the following issues:

- Necessity of the transfer and alternatives available.
- Frequency of transfers and numbers of personnel involved.
- Environmental conditions:
 - wind speed and direction
 - sea state including swell height and direction
 - current or tide speed and direction
 - visibility
 - rain, snow and ice.
- Vessel movement (pitch, roll and heave).
- Action of the water up surging between vessels or structures in close proximity.

- Lighting in all areas of the transfer operation.
- Slip/trip hazards.
- Seaworthiness of all vessels, crew boats or small boats employed.
- Condition of all equipment used in personnel transfer, including certification where appropriate.
- Operability and constraints of lifting equipment.
- Condition and availability of life saving equipment.
- Communications.
- Training and competence of all personnel involved in assisting with and making the transfer.
- During personnel transfer, the potential for man overboard is always present. Consideration should be given to the recovery of personnel from the water.
- Consideration should be given to actions required in the event of injury to personnel during transfer.
- Contingency plans for equipment failure.

Personnel being transferred should be briefed prior to the transfer and should be familiar with the method of transfer and the equipment being used. Personnel involved in a transfer should be physically able to make the transfer, should understand the intended activity and should have agreed to the transfer method being proposed. Where available personal protective equipment (PPE), including a safety helmet, should be worn. Personnel joining or leaving a vessel or offshore structure at crew change may not be wearing appropriate PPE – such as safety boots, for example. A risk assessment, including these factors and consideration of the length of time personnel have been travelling and their tiredness, should be conducted prior to the transfer.

Where appropriate, an approved life jacket, fitted with light and whistle, should also be worn. In selecting the type of life jacket to be used the possibility of a fall from height should be taken into account.

In medical evacuation cases, specific risk assessments and methods would be required. Luggage should be transferred as a separate operation. Personnel should not carry luggage during the transfer. Personnel transfer during STS is clearly a hazardous operation. You will operate more safely if you keep such transfers to a minimum, carry out risk assessments every time you transfer, remembering that the relative freeboards of vessels and sea conditions change quickly, and use cranes, boats and other equipment that are suitable for the operation.



CHEF OF THE DAY

Often overlooked, the Chief Cook plays an important role to ensure that seafarers, through varied diets and balanced nutrition, remain fit and healthy – especially when we consider the demands placed on crew.

Some chronic diseases may develop as a consequence of poor nutrition and diet. Being overweight, for example, can lead to illnesses such as hypertension, type 2 diabetes and sleeping problems, as well as many other ailments.

In this issue we seek to promote the role of the Chief Cook and provide examples of the varied and nutritious menus available on board some of our Member's vessels. Pictured below is the Chief Cook of one such vessel as he prepares a meal for the crew.



Phil Lane – MV Hartland Point
AW Shipmanagement Ltd.

The Cook has also provided examples of the typical daily menus prepared on board using fresh ingredients. The menus provide seafarers with a choice of food from meat and fish as well as salads and fruit.

Could you be the next Cook to feature in *Signals*? If so, please send us a photograph along with details of a typical daily menu offered to your crew.

Sample Menu

Lunch

- Broccoli and stilton soup
- Escalope of turkey in mushroom sauce, lyonnaise potatoes, vegetable garni
- Salads and cold meats

Dinner

- Soup of the day
- Fried salmon with pesto topping, boiled ham with chutney sauce, dry roast potatoes, sliced carrots and savoy cabbage
- Fresh fruit

CHECK YOUR CREW CONTRACTS

It is vital that Members understand and trust their crew contracts to ensure they are not exposed to any unnecessary or excessive liabilities. Crew employment arrangements can be highly complex, often involving manning agents, crew managers and other entities. North regularly helps Members protect their position when arranging and drafting new crew contracts and collective bargaining agreements. The Club can also help Members to identify any problems with contracts that have already been negotiated and signed. North's P&I cover for Members includes protection against liabilities arising from seafarers' terms of employment, which should be approved by the Club. Members are thus reminded to submit their crew contracts to the Club for review if they have not already done so.

Members who require further information or wish to submit their crew contracts of employment for review should contact Maria Laffey at the Club, Email: maria.laffey@nepia.com

IRAN SANCTIONS – STS OIL SMUGGLING

In recent months, North's Members have been targeted as part of attempts to export crude oil originating from Iran in breach of applicable sanctions by means of ship to ship (STS) transfers at Khorfakkan in the UAE.

It appears that such oil may routinely be described as being of Iraqi origin and as having been loaded on board the transferring vessel at Basra a couple of days before the proposed STS operation. However, any such documentation should not be taken at face value. On two recent occasions the supplying vessels loaded the cargo in Iran before shuttling across the straits of Hormuz to supply vessels with oil – ostensibly from Iraq – destined for countries that do not benefit from a waiver under applicable US sanctions legislation.

It is unlawful for North to provide insurance to vessels which load Iranian cargo in such circumstances and cover will cease immediately such cargo is loaded in accordance with the Club's sanctions cesser rule. Members should also be aware that the transport of Iranian oil to states which do not benefit from a waiver under US law may trigger enforcement action against the vessel, its owners and related parties by the US authorities.

There is evidence of a sophisticated smuggling operation and those responsible may go to considerable lengths to disguise the true origin of the cargo. Cargo documentation is likely to appear credible and there may be no evidence of any designated parties being involved. Members are therefore advised to exercise extreme caution when engaging in STS operations in the Arabian Gulf.

In particular it is recommended that Members check with port agents to ensure that vessels providing cargo by means of an STS transfer in the region loaded the cargo at the port stated in the cargo documentation before any cargo is received. It is also advisable to ensure that charter parties contain an appropriate sanctions clause.

Members should contact a member of North's Sanctions Advice Team (which can be contacted at sanctions.advice@nepia.com) should they have any queries or concerns about a proposed cargo.



NEW BIMCO BUNKER CLAUSE

When a Time Charterer fails, it is not uncommon for an owner to incur a double financial hit. First, there will be a loss of earnings from hire not being paid. Secondly, an owner may be faced with the arrest of their vessel by suppliers because the now defunct Time Charterer has failed to pay for bunkers or other necessities supplied to the vessel. Indeed, it is not uncommon for the vessel to be arrested by the Time Charterer's contractual bunker supplier for non-payment of a bunker stem several months after a time charter has been terminated by the owners for non-payment of hire.

To try to avoid this, the practice has arisen for the *Bunker Delivery Receipt* to be stamped with a "Prohibition of Lien" Notice on receipt of the bunkers. This will state that the bunkers have been purchased by the Time Charterer and that their supply gives rise to no right of lien against the vessel. Unfortunately, this is often insufficient to prevent a lien arising because it does not prove that the contractual or physical supplier of the bunkers had notice that the bunkers were for Time Charterer's account before the bunkers were supplied.

Working with BIMCO, the Club has helped draft a "Bunker Non-lien Clause for Time Charter Parties". This requires a Time Charterer – prior to ordering any bunkers for the vessel – to inform the sellers in writing that the bunkers to be supplied to the vessel are solely for the Time Charterer's account; that neither the vessel, the owners nor the Master is a party to the bunker supply contract; and that no lien, encumbrance or rights shall arise on or over the vessel. This is referred to as the "Non-Lien Notice".

The Clause further requires a Time Charterer to inform the owners in writing of the name and contact details of the sellers of the bunkers and, if the owners so request, to provide owners with a copy of the Non-Lien Notice given to the sellers. In the event that a Time Charterer fail to inform the owners in writing of the name and contact details of the sellers or fail to provide owners with a copy of the Non-Lien Notice (if it has been requested), owners can refuse to allow the stem to take place, with any time lost and costs involved being for the Time Charterer's account.

A copy of the clause can be found at: https://www.bimco.org/Chartering/Clauses_and_Documents/Clauses/Bunker_Non-lien_Clause_for_Time_Charter_Parties.aspx

The clause may not assist where, for example, a Time Charterer gives his contractual supplier a Non-Lien Notice but, for whatever reason, the physical supplier does not receive a non-lien notice (or does not recognise its validity), is not paid and then asserts a claim against the vessel. That of course is the situation faced by many at the moment as a consequence of the OW Bunker collapse. Various issues can come into play in assessing the supplier's claim against owners/ the vessel, such as the physical supplier's terms, the law where the bunkers were stemmed, and the law that applies where the physical supplier threatens to take, or has taken, action against a Members' vessel. Members are referred to North's *Industry News* articles in this regard.

For advice regarding any claims against Members by a physical supplier who has not been paid – either by a Time Charterer or an intermediate trader – Members are encouraged to consult with a member of the FD&D department.



HIMALAYA CLAUSE

The International Group of P&I Clubs and BIMCO have jointly developed a revised "Himalaya Clause", dated November 2014, to provide greater protection to all those involved in the operation of ships from claims by third parties.

The purpose of a "Himalaya Clause" is to extend the benefit of contractual exemptions from liability to an entity which is not a party to the contract. For instance, a bill of lading provides the carrier with certain exemptions from liability for cargo damage. Without the incorporation of a "Himalaya Clause", cargo interests would be able to avoid the effects of the exemptions by suing someone other than the carrier, but for whom the carrier may be vicariously liable or who would have a right to recovery from the carrier.

The 2010 version of the Clause extended exemptions to a "servant, agent, direct or indirect subcontractor or other party employed by or on behalf of the Carrier, or whose services or equipment have been used in order to perform this contract." However, it was found that in certain US courts, cargo interests were successfully suing the ship manager by arguing that they did not fall within the above list.

The recently issued revised "Himalaya Clause" now extends the benefit to the carrier's Servant and defines "Servant" as including "the owners, managers, and operators of vessels (other than the Carrier); underlying carriers; stevedores and the terminal operators; and any direct or indirect servant, agent, or subcontractor (including their own subcontractors), or any other party employed by on or behalf of the Carrier, all whose services or equipment have been used to perform this contract whether indirect contractual privity with the Carrier or not."

It is hoped that this will block any loopholes in the protection that shipowners seek to extend to those they employ.

All International Group clubs are recommending their Members to use the latest revised version of the Clause in all their contracts of carriage. The Club has recently issued a Circular on this subject which may be found at: [www.nepia.com/news/circulars/revised-himalaya-clause-for-bills-of-lading-and-other-contracts-\(1\)](http://www.nepia.com/news/circulars/revised-himalaya-clause-for-bills-of-lading-and-other-contracts-(1))

THINK CAREFULLY – DISPUTE RESOLUTION PROVISIONS

To ensure that the dispute resolution provisions in a charterparty are ‘user-friendly’ and will not hinder a party from pursuing or enforcing any claims later on, attention should be paid to dispute resolution clauses at the negotiation stage.

Below are some examples of types of clauses to be wary of or avoid:

‘Dispute Escalation’ or ‘Multi-Tiered’ Clauses

These clauses oblige the parties to have ‘amicable discussions’ or mediate before starting proceedings. In the Club’s experience, they can hinder dispute resolution. The main problem is that if for tactical reasons a party wishes to appoint an Arbitrator immediately, they are unlikely to be able to do so.

What about if the other party refuses to participate in amicable discussions or Mediation – can you oblige them? Until recently, a contractual obligation to negotiate could not generally be enforced. However, with the growing popularity of Mediation and other forms of alternative dispute resolution (ADR), the English Courts have been more willing to uphold clauses obliging the parties to negotiate or even to have ‘friendly discussions’, provided that they are not too ambiguous.

Although the Club fully supports the use of negotiation and Mediation to resolve disputes, the option to negotiate is always available without having to put it in the contract.

The Club’s advice is therefore to use caution before agreeing such clauses in charterparties. **PROCEED WITH CAUTION**

‘Split’ Clauses

In ‘Split’ Clauses, the parties are usually given the option of choosing between Arbitration and Court Proceedings and there is a mechanism allowing one or both of the parties to make the choice once a dispute arises. Such clauses are valid as a matter of English law, but are not necessarily enforceable in other jurisdictions. Another potential pitfall is that in some jurisdictions Arbitration Awards are much more easily enforceable than Court Judgments, so your opponents might opt for Court Proceedings, simply because they know that in their jurisdiction, an Award will not be easy to enforce. Obviously, there is little point getting an Award or Judgment if enforcement will be an issue later on.

PROCEED WITH CAUTION

Tricky to Calculate Time-Bars

Time-bars are generally not problematic, unless you fall foul of them of course! However, clauses which state that claims must be brought within a certain period from ‘final discharge’ can cause problems. ‘Final discharge’ in the context of a time charter means discharge of the cargo on the particular voyage in which the incident giving rise to the claim happened. In a long term time charter, there could therefore be several claims all subject to different time-bars, which gives lots of scope for missing them! **AVOID**

Foreign Law and Jurisdiction Clauses

Members may wish to consider whether to agree to a clause that says, for example, New York or Indian Law/Arbitration. Agreeing to such a clause would for example mean that the Club’s FD&D lawyers cannot handle the case in-house in the usual way. Foreign lawyers would need to be instructed which means costs are incurred from the outset. The particular jurisdiction chosen may also not be favourable and costs may not be recoverable. **THINK**

Different Law to Jurisdiction e.g. English Law, Singapore Arbitration

This kind of clause seldom works well in practice. **AVOID**

It is challenging enough trying to resolve a dispute successfully, without having the added burden of an unhelpful dispute resolution clause. If the parties’ respective bargaining positions allow it, a little more attention should be paid to the dispute resolution provisions at the time of fixing. Why not just try to insert the comprehensive BIMCO Dispute Resolution Clause? It might be uncontroversial and it could save a lot of unnecessary hassle later on. Members should also not forget that the Club’s FD&D Department can advise on any potentially doubtful provisions during fixing if needs be. https://www.bimco.org/Chartering/Clauses_and_Documents/Clauses/Dispute_Resolution_Clauses.aspx

WITHOUT GUARANTEE

W.O.G. or “without guarantee” is a means of qualifying a term of an agreement.

More often than not, it is used in time charters in respect of the description of the vessel’s performance and/or regarding the duration of the charter.

a) Description of the Vessel’s Performance

A typical speed and consumption warranty might read “capable of about 14 knots on about 25 MT IFO/day in good weather ADA W.O.G.”

Where the vessel’s performance is said to be W.O.G. such performance is **not** in fact warranted and no claim can be made if the vessel does not perform at the stipulated rate, unless the charterparty details were not given in “good faith” (see right).

b) Duration of the Charterparty

In early and late redelivery disputes, the first task is to ascertain the charterparty duration.

Problems may arise when a charter is expressed to be for e.g. for “one time charter trip duration about 70/80 days without guarantee”. In such cases, the duration clause is merely an estimate of the duration of the trip which the Charterer is required to have given in good faith only.

The meaning of “good faith” was ruled upon in the “LENDODIS EVANGELOS II” (1997) LLR 404.

“If I were to formulate a test of good faith myself, I would say that all it requires is that the charterers **genuinely believed** at the **time of fixing** that the trip would last between 70 and 80 days”. (per Longmore J at p.406)

Here, the charter stipulated a duration of “about 70/80 days w/o guarantee”. The voyage took more than 103 days. Owners sued charterers for late delivery. The arbitrators concluded that the test of good faith was whether the estimate was made **reasonably** at the time of fixing. On appeal it was held that the charterers’ estimate did **not** have to be reasonable. It only had to be made at the time of **fixing** with a **genuine belief** that it was accurate.

Where there is a without guarantee qualification to the duration of the charter, it is only likely to be in exceptional circumstances – where lack of good faith can be evidenced – that a claim for damages will be available for the early or late re-delivery of the vessel. As such, before fixing, Owners should make enquiries locally as to the realistic loading/discharge time for the trade/ports in question and ask charterers for the basis of their estimate.

GET READY FOR THE NEW SULPHUR LIMITS

As widely reported, revised sulphur limits for MARPOL Annex VI Emission Control Areas were introduced on 1 January 2015.

The previous sulphur limit of 1% for vessels sailing within these areas was reduced to 0.1% and in most cases this will lead to the burning of distillate fuel oils such as marine gas oil (MGO) or marine diesel oil (MDO) rather than residual fuel oils such as intermediate or heavy fuel oil (IFO or HFO).

At the time of this revision, the Annex VI Emission Control Areas are:

- North Sea ECA.
- Baltic Sea ECA.
- North American ECA.
- United States Caribbean Sea ECA.

The worldwide sulphur limit outside of the ECAs remains at 3.50%, however on 1 January 2020 this will be reduced to 0.5% (subject to a review on fuel availability in 2018 and may be pushed back to 2025).

Compliance

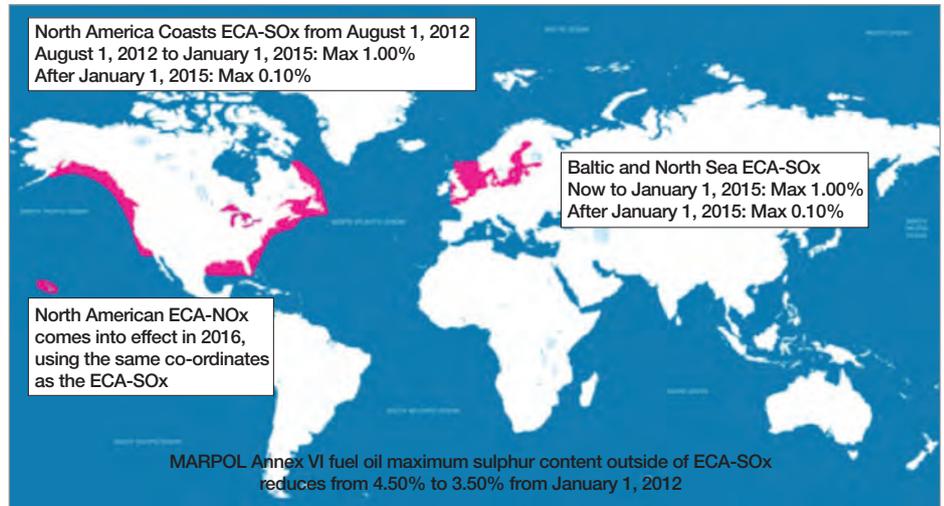
In order to comply with the revised sulphur limits in the ECAs, the options available to vessels and their operators include the following:

- i. Changeover to 0.1% sulphur maximum distillate fuel, such as MGO but properly known as DMA, DMZ or DMB as per ISO 8217.
- ii. Changeover to 0.1% sulphur maximum residual heavy or hybrid fuel as they become available.
- iii. Modify the vessel to burn alternative fuels such as LNG.
- iv. Install alternative technology such as exhaust gas scrubbers.

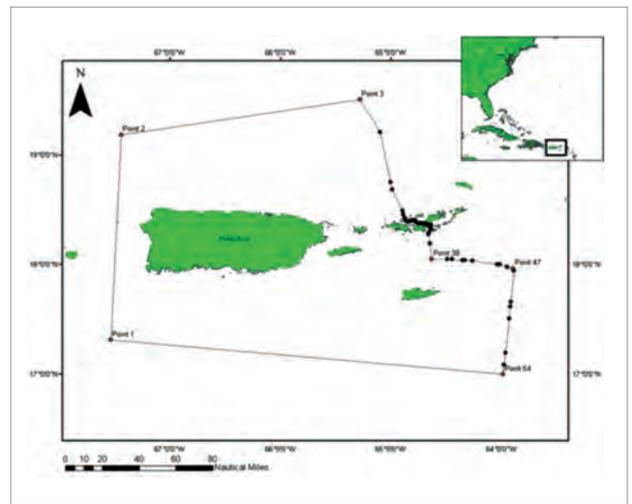
Supply and Demand

It is expected that the most popular option will be to burn 0.1% sulphur distillate fuels and as such a huge demand is expected. Although we are not privy to the suppliers' abilities to meet the demands, simple economics tells us that such an imbalance between supply and demand tends to lead to an increase in price.

It is also noteworthy that as oil refineries produce less finished marine products there is more reliance on oil traders blending fuels to create marine products and this can lead to potential issues with quality and composition.



Heavy Fuel Oil



Purchasing

The international standard for marine fuel oil specification remains as ISO 8217, the latest edition being 2012 and this should still be referred to when purchasing fuel or agreeing fuel requirements in charter parties. However, at time of writing, it is not known if the 0.1% sulphur residual fuels that will be introduced to the market will meet the specifications of ISO 8217 and attention should be given to this when assessing the suitability of the fuel and its impact on charter parties. This is even more pertinent when using 'hybrid fuels' where the specification of the fuel can fall between the distillate and residual criteria.

Maximum sulphur limits expressed in ISO 8217 do not necessarily correspond with the maximum sulphur limits in the intended trading area. To ensure compliance with any ECA requirements it is essential that in addition to referring to ISO 8217, the maximum sulphur limit must also be stated.

Changeover - Potential Problems

Ships have transited ECAs for several years and have routinely changed from 'high sulphur' fuel to 'low sulphur' fuel and back again without incident. Other than the sulphur content, these two fuels are residual grade and have similar characteristics with almost the same pre-heating and treatment requirements.

However, there are significant differences when changing from high sulphur heavy fuel to a distillate fuel whilst on passage. If the changeover is not carried out correctly or there are problems with the distillate fuel at the engine manifold then there is a significant risk of losing propulsion and electrical power blackout. There are the added considerations that the fuel changeover could occur in busy traffic areas or relatively close to shore and that the typical weather conditions in the North Atlantic on the implementation date are less than clement.

The California Experience

The State of California enforced similar requirements in 2008 under the California Ocean-Going Vessel (OGV) Fuel Regulation, which necessitated the changeover to distillate fuels before entering Californian waters.

According to information from the California Air Resources Board (ARB) and the United States Coastguard (USCG), there have been a number of reported 'loss of propulsion' type incidents when changing to/from distillate fuel (see chart on right).

The California ARB has further reported the following factors leading to propulsion loss whilst the OGV regulation has been in effect:

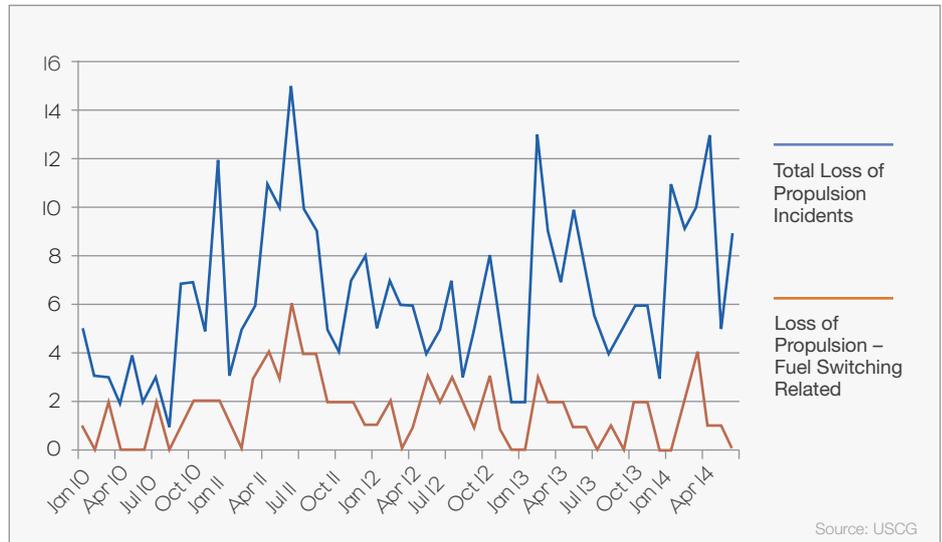
- Main engine not starting or stalled when running at low speeds.
- Incorrect temperature control.
- Main engine did not start in the astern direction.
- Loss of fuel pressure caused by factors such as incorrect parameters or excessive leakage at fuel injectors and high pressure lines.
- Blocking of filters.

Challenges with Distillates

When considering how to best manage the changeover process and the prolonged running on distillates, it is important to bear in mind the fuel's characteristics and how they will impact the operation of not only the main engine, but the diesel generators and oil-fired auxiliary boilers.

Key considerations include:

- Generally, distillates do not require heating before injection whereas heavy fuel is heated to temperatures in excess of 140°C. If, during changeover, the fuel heater is shut down too soon the heavy fuel remaining in the line will not burn. If the fuel heater is shut down too late then the distillate fuel could "gas up" (vapour locking). It is also possible that cooling of the fuel may be required.
- Lubricating oils with lower base numbers (reserve alkalinity) may be needed.
- Low sulphur fuels have a lower lubricity which could lead to engine fuel pump seizures. The engine manufacturer should be consulted on minimum sulphur content to maintain requisite level of lubricity but generally a minimum 0.05% is recommended.
- Lower kinematic viscosity that may be less than engine manufacturer's instruction.
- Fuel leaks become apparent or significantly worsen as distillates pass through hardened seals where heavy fuels previously could not.



Source: USCG

- The flushing and cleaning characteristics of distillates can effectively remove sludge and residues from within fuel system and this can lead to increased clogging of in-line filters.
- Engine timing adjustment may be required for prolonged running at high loads and boiler burners may require tip/nozzle adjustment.

Preparing for the Switch

It is apparent that there are notable risks when changing over from heavy fuels to distillates and vice versa. It is strongly recommended that Members review and update their vessels' procedures for this operation and safety management systems revised accordingly.

A priority will be to establish and document fuel changeover procedures which includes the necessary controlling of the rate of temperature change when changing between fuels and ensures fuel oil spill returns from engines and other equipment are properly routed to avoid contamination of tanks. Changeover procedures must be workable and practical.

Crew should receive training and instruction on the fuel changeover procedure and ensure that they fully understand the process and consequences of getting it wrong.

When there are two fuels mixing in the supply line, there may be compatibility issues which can lead to the formation of sludge and block the pipework. It is advisable to carry out compatibility tests between the different fuels on board before use.

Be aware that there may be a need to undertake modifications to the vessel and its systems, such as fuel treatment arrangements. There will be a need for adequate storage capacity for the various grades of fuel and the suitability of the tanks must be assessed, such as protection from heat sources and cleanliness.

Consider the benefits of sending distillate bunker samples for laboratory testing and if operating in cold climates, know the cold flow characteristics of the fuel. Distillates can be adversely affected by the formation of wax in cold weather conditions and the fuel specification should be checked for cloud point and cold filter plugging point.

If possible, carry out the changeover operations away from busy traffic areas and coastal areas.

Before entering an ECA for the first time under this revision, practice the changeover beforehand.



Marine Gas Oil (MGO) on left and Marine Diesel Oil (MDO) on right



Marine Gas Oil and Diesel Oil

PLANNED MAINTENANCE AND SAFETY MANAGEMENT SYSTEMS

Modern day machinery and equipment all need servicing at recommended intervals to ensure sufficient life span, reduce down-time and for safe operation. Regular preventative maintenance can also reduce the overall running costs because it helps to identify problems early, which in turn allows the problems to be rectified without serious damage occurring.

On board, this is normally referred to as planned maintenance. Most planned maintenance systems (PMS) use specially designed software which prompts the vessel to carry out maintenance and allows oversight of the maintenance by superintendents ashore.

A key aspect of any PMS is that it should correctly identify maintenance intervals in accordance with equipment manufacturer's guidelines and be set up to alert the ship's crew and the ship's manager should these maintenance intervals be bypassed.

If used to its full potential, there are many advantages to a PMS. This includes alerts when equipment approaches the planned running hours, the recording of event history which can be entered following an inspection or overhaul; noting performance criteria, and any irregularities or observations.

Planned maintenance can be costly and when resources are scarce cutting back on such maintenance may be an attractive proposition. However, the consequences of cutting back can mean you are saving in the short term only to incur more costs in the longer term. Any revision to planned maintenance should be carefully considered and carried out in consultation with the manufacturer and the vessel's classification society. This is highlighted in the scenario below.

Scenario

A large slow speed main engine on a container vessel has been running at lower loads whilst slow steaming. The planned maintenance system states that main engine crank pin bearings should be changed at 72,000 hours, but a recent crankpin bearing inspection showed very little signs of wear and no damage on the white metal bearing or crank pin. There are, potentially, significant cost savings if the replacement of the bearings was postponed to a later date. However, before proceeding, the vessel's managers would need to seek approval from engine makers and class. Classification societies must comply with International Association of Classification Societies (IACS) Unified Requirements as a minimum when formulating their rules.

The IACS unified requirement concerning planned maintenance comes under **Z20 – Planned Maintenance Scheme (PMS) for machinery:**

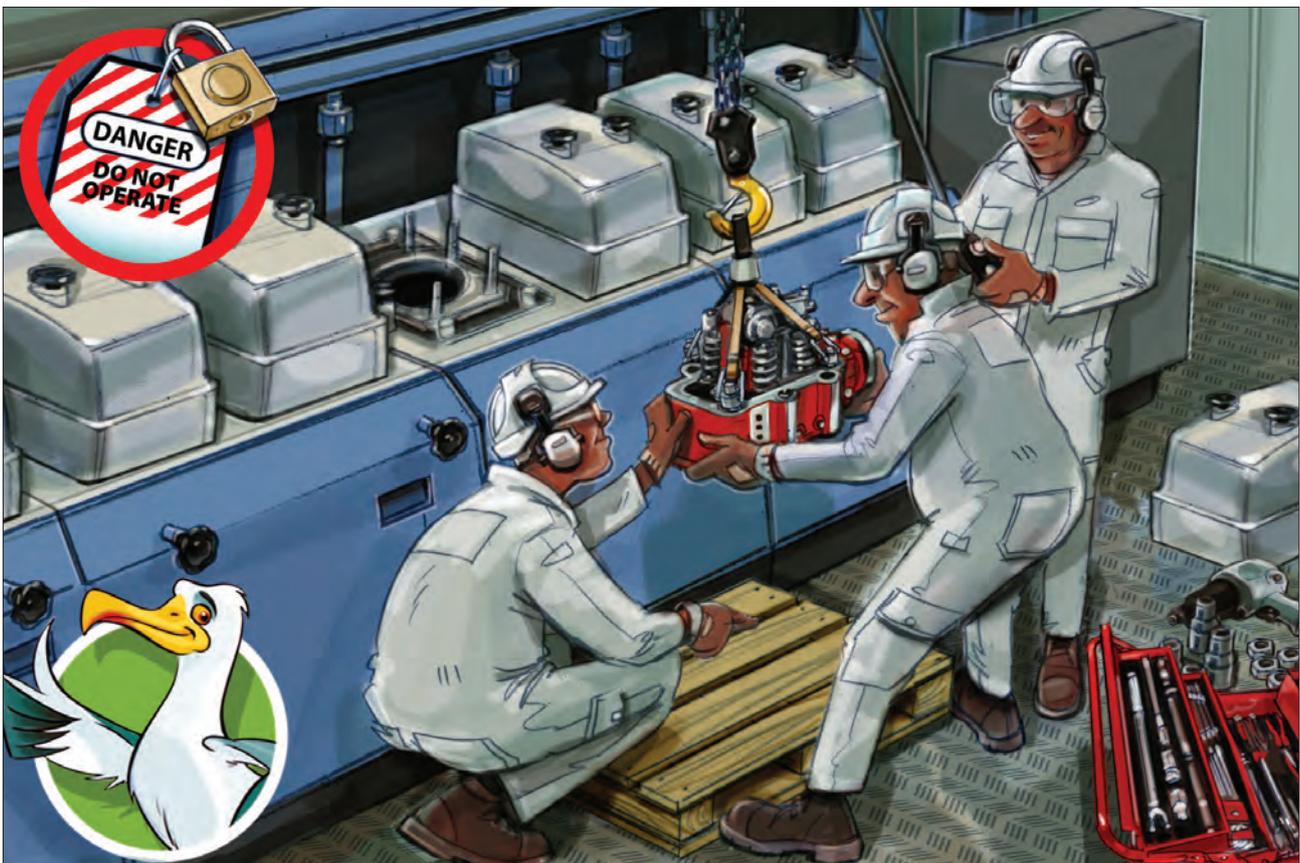
"1.2 Maintenance Intervals

1.2.1 In general, the intervals for PMS shall not exceed those specified for CMS.

However, for components where the maintenance is based on running hours longer intervals may be accepted as long as the intervals are based on the manufacturer's recommendations.

1.2.2 However, if an approved condition monitoring system is in effect the machinery survey intervals based on CMS cycle period may be extended."

It is clear that in order to satisfy this IACS unified requirement, owners will have to comply with the PMS running hours and work closely with engine manufacturers when seeking to extend running hours. Failure to do so may result in serious machinery damage and breakdown which may put the vessel, its cargo and most importantly the crew at risk.



UKRAINE – SAMPLING OF BALLAST WATER – REQUIREMENT REVOKED



Ballast Water Sampling - 1



Ballast Water Sampling - 2

North's correspondents in Ukraine have advised that the long-standing requirement (under Ukraine's Ecological Control Regulations) to have ships' segregated ballast analysed by Ukrainian authorities prior to discharge, has been revoked.

On 27 July 2014, an amendment was made to the Ukrainian governmental decree "On approval of the regulations of ecological control". The amendment came into effect on 30 September 2014. The amendment removed the requirements for:

1. Ecological inspectors to sample segregated ballast.
2. Masters to complete an "ecological declaration".

Therefore an "ecological declaration" is no longer a mandatory document for ships calling at Ukrainian ports. Nevertheless, state ecological inspectors still have discretionary rights to inspect ships and check how ballast systems are operating.

North's correspondents have cautioned that permission must still be obtained from ecological authorities before discharge of segregated ballast can commence, even though sampling and analysis of the segregated ballast will no longer take place. If discharge of segregated ballast is undertaken, without official permission being obtained, then an 'administrative fine' may be levied against the offending ship.

We believe that the fine imposed will be of a relatively low value – at the time of writing less than US\$100, but obviously subject to currency exchange rate variations and changes to the regulations.

We are also advised that non-segregated ballast, i.e. cargo hold ballast, is still subject to the previous regulations and will be sampled and analysed prior to discharge. As such, reducing the amount of hold ballast required to the minimum required for the safety of the vessel before arrival at a Ukrainian port may assist in alleviating the level of fines that may arise from sampling of such ballast water.

Many thanks to Pavel Svertilov of correspondents CIS Pandl in Odessa for his assistance with this article, odessa@cispandi.com

IMO UPDATE

Amendments to IMSBC Code Become Mandatory

During its ninety-second session the International Maritime Organization's Maritime Safety Committee adopted amendments to the International Maritime Solid Bulk Cargoes (IMSBC) Code under Resolution MSC.354(92).

These amendments, which include changes to existing cargo schedules and the inclusion of new cargo schedules became mandatory on 1 January 2015.

Amendment to SOLAS

During the ninety-second session of the International Maritime Organization's Maritime Safety Committee amendments to the International Convention for the Safety of Life at Sea (SOLAS) under Resolution MSC.350(92) were adopted.

These amendments which include additional requirements for training and drills, details on the carriage requirements for shipborne navigational systems and equipment and special measures to enhance maritime safety through the authorisation of recognised organisations became mandatory on 1 January 2015.



CONTAINER STOW COLLAPSE

The Club has experienced a number of container stow collapses recently. Enclosed in this edition of *Signals* is our Container Stowage supplement for Members operating container vessels. We trust that this will serve as a useful reminder of the various issues relating to stow collapse for both shore staff and crew.



COLLISION CASE STUDY

Introduction

North's loss prevention guide *Collisions: How to Avoid Them* includes a series of collision case studies intended to generate discussion about the International Regulations for preventing Collisions at Sea (COLREGs). Further case studies are published in *Signals* from time to time and below is the latest of them. Each case study is set out as simply as possible, with the minimum information necessary to describe a developing situation. The case studies ask a number of questions but answers are not provided. The case studies are intended to promote wide-ranging discussions about collision avoidance.

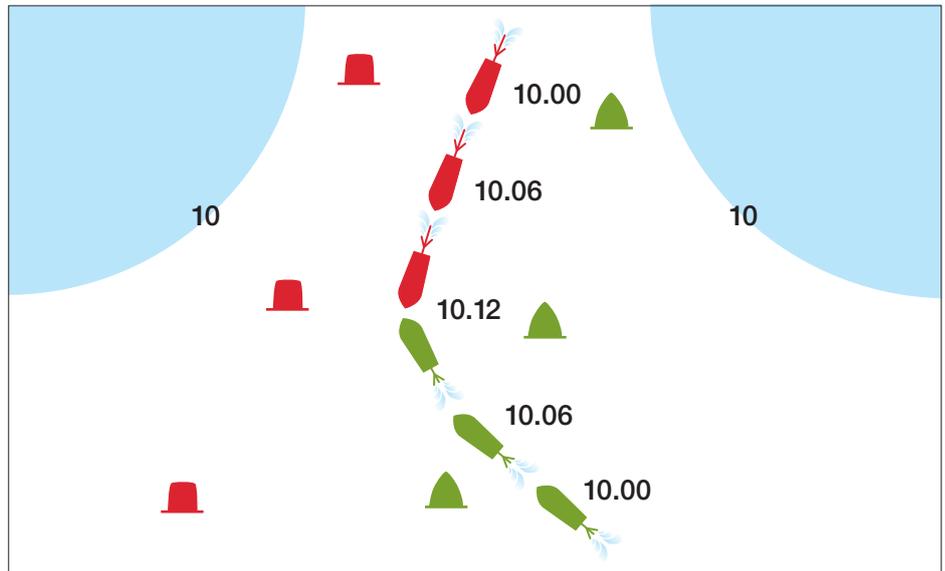
Scenario

The 'red ship' is leaving port in ballast (draft 6m), following the buoyed channel. The 'green ship' is entering port (draft 13m) from the anchorage. Visibility is good. Both ships have pilots on board.

Questions

You are Master of the 'red ship':

1. Does Rule 9 apply to this situation?
2. What action should you take and when?



Further Information

North's loss prevention guide entitled *Collisions: How to Avoid Them* can be viewed on its website: www.nepia.com/publications/loss-prevention-publications/loss-prevention-guides/

Your Copy of *Signals*

Copies of this issue of *Signals* should contain the following enclosure:

- Hot-Spots Poster – Advice on VDR
- Container Stowage Problems (appropriate entered ships)

Disclaimer

In this publication all references to the masculine gender are for convenience only and are also intended as a reference to the female gender. Unless the contrary is indicated, all articles are written with reference to English Law. However it should be noted that the content of this publication does not constitute legal advice and should not be construed as such. Members with appropriate cover should contact the North's FD&D department for legal advice on particular matters.

The purpose of this publication is to provide information which is additional to that available to the maritime industry from regulatory, advisory, and consultative organisations. Whilst care is taken to ensure the accuracy of any information made available (whether orally or in writing and whether in the nature of guidance, advice, or direction) no warranty of accuracy is given and users of the information contained herein are expected to satisfy themselves that it is relevant and suitable for the purposes to which it is applied or intended to be applied. No responsibility is accepted by North or by any person, firm, corporation or organisation who or which has been in any way concerned with the furnishing of data, the development, compilation or publication thereof, for the accuracy of any information or advice given herein or for any omission herefrom, or for any consequences whatsoever resulting directly or indirectly from, reliance upon or adoption of guidance contained herein.

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'Signals' is published by:

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