

Web-free electronic publications

A CD is enclosed with this issue of *Signals* for Members and entered ships. It contains electronic versions of all North's most recent publications, including loss-prevention guide books, loss-prevention briefings, hot-spots sheets, posters, checklists and issues of *Signals*. Most of these are available on the Club's website but the CD avoids the need for an internet

connection as well as time-consuming downloads. Similar CDs including North's latest publications will be issued twice a year from now on.

Members and ship's staff should nevertheless keep checking the Club's website on a regular basis, or contact the Club directly, for specific enquiries and to ensure their information is up to date.



Tony Baker
Head, Risk Management

Understanding stowaways and migrants

Continuing conflict and economic problems in many parts of the world forces often impoverished people to migrate overseas. This can cause problems for ships and ship operators as some migrants attempt to stow away. Others attempt to travel in unseaworthy boats and get into distress. These issues, and some solutions, are discussed in a self-contained computer-based training module about migrants, stowaways and people in distress. Copies accompany this issue of *Signals* for Members and entered ships.

See page 5 for full story.

Managing concerns about radioactivity

Recent events in Japan have highlighted concerns about the safety of people, ships and cargo exposed to radiation. Some of these topics are addressed in this issue, with an article about different sources of radiation, measurement of radiation levels and typical exposure levels. A separate article looks at the commercial aspects of trading to areas that may be affected by radioactivity, and the comfort a suitable charterparty clause may provide.

See pages 6 and 11 for full stories.

New Clean Seas poster

North's latest poster in the Clean Seas series - Voyage Efficiency - outlines the steps that can be taken to reduce emissions by operating a vessel efficiently. Apart from the obvious environmental benefits of efficient operations, there are potential economic benefits particularly in relation to fuel costs. Efficient vessel operation is a win-win situation both for the environment and ship operators.

Copies of the new poster are enclosed with this issue of Signals for Members and entered ships. Electronic versions, suitable for printing, are contained on the CD accompanying this issue, or can be downloaded from the Club's website: www.nepia.com/loss-prevention/publications-and-guides/

Employing armed guards on ships

With the piracy situation off Somalia remaining a serious threat, and the area of risk extending into the wider Indian Ocean, the employment of armed guards on merchant ships has become more widespread and acceptable. The International Maritime Organization has been addressing this issue and has published guidelines for ship operators on issues arising from the employment of privately contracted armed guards, which are considered in this edition of *Signals*.

See pages 2 and 3 for full story.

New guidance for solid bulk cargoes

Implementation of the new International Maritime Solid Bulk Cargoes (IMSBC) Code, which became mandatory in January 2011, continues to cause some problems for ship operators. One of those problems is discussed in this issue of *Signals* and relates to cargoes derived from direct-reduced iron (DRI) by-products and fines being wrongly described in shippers' declarations. A number of amendments to the IMSBC Code enter into force from 1 January 2013 and include schedules for some cargoes not previously listed and other revisions.

See pages 9 and 14 for full stories.





Combating piracy – new guidance on armed guards

There has been a great deal of discussion in recent months about the use of armed guards on merchant vessels operating in the Gulf of Aden and the Maritime Security Centre – Horn of Africa (MSCHOA) high risk area extending throughout the wider Indian Ocean.

The subject was discussed formally at the 89th session of the International Maritime Organization's maritime safety committee (MSC) in May and interim guidance on the employment of privately contracted armed security personnel on board ships transiting the high-risk piracy area off the coast of Somalia, in the Gulf of Aden and the wider Indian Ocean was approved.

It was expected that joint guidelines would be issued for both ship owners and flag states. However, time constraints led to the development of two separate sets of guidelines, with those for ship operators given priority. This document is entitled *Interim guidance to shipowners, ship operators, and shipmasters on the use of privately contracted armed security personnel on board ships when transiting the high risk area* (MSC.1/Circ.1405).

It is intended to assist shipping companies when considering the appointment of security providers. The guidelines draw attention to the fact that flag state laws and regulations concerning the use of armed guards will apply as will those of the coastal state and ports. Members are advised that the use of armed guards in no way diminishes their responsibility to implement the shipping industry's Best Management Practice (BMP) tool for countering piracy.

Emphasising the overriding responsibility of the master for the safety, security and protection of the ship, the guidelines identify the need for a clear unambiguous relationship between the master and the leader of the armed guards. Rules for the use of force should be clear, unambiguous and made available for review. It is expected that the armed guards should contribute to constructive dialogue with



national and international military forces in the area but always subject to the master's authority.

Guidelines for shipowners

The following provides a brief summary of the sections covered in the guidelines for shipowners, operators and masters.

Risk assessment: The decision to use armed guards when navigating within the high risk area is one for the individual company following a thorough risk assessment and the adoption of all practical self-protection measures outlined in BMP.

Selection criteria for armed guards:

Concerns about experience and competence of security contractors have increased as more providers make their services available. This section has been written to support the adoption of due diligence when assessing prospective companies and includes a review of the company structure, background, vetting and training. A list of questions that a ship operator may wish to ask potential contractors has been included in an annex to the guidelines.

Compliance with flag and coastal state jurisdiction: As described above, it is extremely important that Members

consult their flag state at an early stage when considering employing armed guards on a vessel to ensure that all of the relevant legislation can be complied with. This section highlights the importance of fulfilling this requirement and identifies some of the operational matters that need to be discussed.

Insurance: Guidelines recommend that owners ensure armed guards maintain their own insurance cover and that terms of engagement do not prejudice the shipowner's insurance. Owners are strongly recommended to consult with their insurers prior to contracting with security providers, particularly as it relates to armed engagements.

Embarked security team size, composition and equipment:

The number of armed guards embarked requires careful consideration, and this section describes the contributing factors that owners should discuss with the security provider and includes being able to operate within the vessel's certification provision. The threat assessment and duration of employment will dictate the extent of provisions and equipment required to provide the level of security agreed at the time of employment.



Command and control: This is an extremely important aspect of any voyage undertaken with armed guards and requires a documented structure linking the owner/operator, master, ship security officer, the ship's other officers and the armed guard team leader. This section provides guidance on how to ensure transparent information flow between all parties.

Management of firearms: Documented compliance with flag state, coastal state and port state legislation is an essential requirement of every voyage assisted by armed guards. Weapon and ammunition storage, operational procedures and control systems will be required to ensure the highest standards of safety can be achieved.

Rules for the use of force: Armed guards should provide a detailed graduated response to a pirate attack. It is essential that all personnel have a complete understanding of the rules for the use of force and understand their primary function of boarding prevention. This section highlights the importance of only using force in a manner consistent with applicable law and proportionate to the threat and situation. Security providers should require that their personnel do not use firearms against persons except in self-defence or defence of others.

Reporting and recording: As a matter of good practice, a ship operator and master should maintain a log of every circumstance in which firearms are discharged. Such actions should be fully documented. This section also includes advice on the collection of contemporaneous written statements from all persons present at the incident in anticipation of legal proceedings.

Crew training: Training associated with the content of the guidelines should be given to the crew of a vessel carrying armed guards so that they can familiarise themselves with the complexities of the new dynamic on board.

Annexed to the guidelines is a set of questions Members may wish to ask potential providers of armed security services and a blank copy of the MARSEC 2011 agreement for the provision of maritime security services.

Recommendations for flag states

The interim recommendations for flag states recommend that flag states should have in place a policy on whether or not the use of armed guards will be authorised and, if so, under which conditions.

A flag state should take into account the possible escalation of violence which could result from the use of firearms and carriage of armed personnel on board



Andrew Glen
Manager, Risk Management

ships when deciding on its policy. The recommendations are not intended to endorse or institutionalise the use of armed guards and do not address all the legal issues that might be associated with their use onboard ships.

An inter-sessional meeting of the IMO working group on maritime security and piracy will meet in September 2011. This will develop recommendations to governments on the use of armed guards, review interim guidance to shipowners, ship operators and shipmasters and agree an MSC circular for the promulgation of recommendations to governments.

Up-to-date information about the interim guidance on the employment of privately contracted armed security personnel will be provided in Industry News on the Club's website: www.nepia.com/industrynews/

Keeping a proper look-out

There have been a number of recent collisions where a failure to maintain a proper and effective look-out has been found to have either caused or contributed to the incident.

The primary duty of the bridge watchkeeping personnel is to ensure the safe navigation of the vessel, including collision avoidance. It is therefore critical that the attention of watchkeepers is focused entirely on the task of appraising the vessel's current position and track in relation to surrounding vessels and navigational hazards.

Avoiding distractions

Equipment such as computers, mobile phones and mp3 players can cause

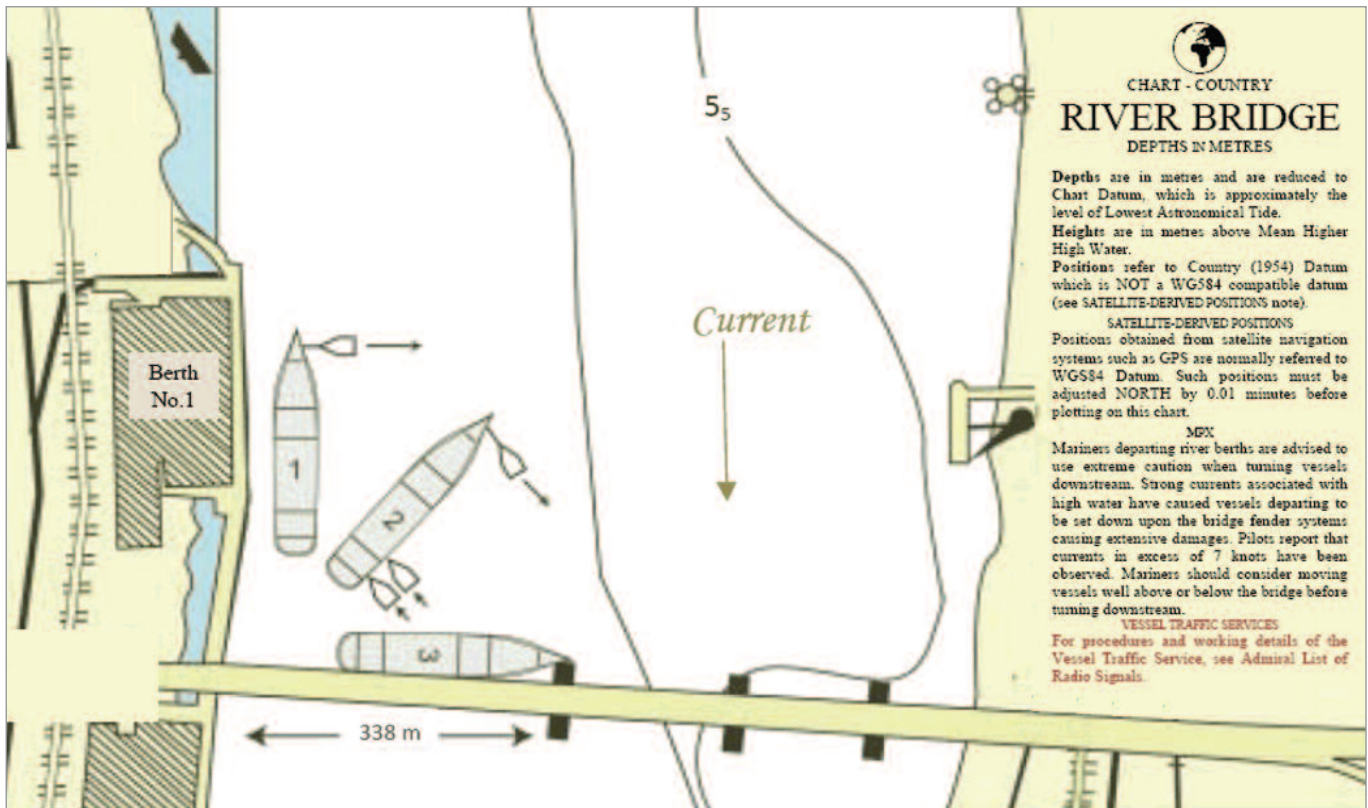
distraction to the bridge team and interfere with the safety of navigation. They should not be used on the bridge – even brief usage of such equipment can result in a loss of situational awareness and failure to recognise a developing risk.

It is vital that watchkeepers keep an effective look-out and use all available means to appraise the situation to determine if a risk of collision exists. Electronic navigational aids will assist the watchkeeper, provided they are fully operational and correctly used, but they are by no means infallible and so must be accompanied by the watchkeeper actually maintaining a physical look-out.





Departing the berth – what did you think?



The International Convention for the Safety of Life at Sea (SOLAS), chapter V, regulation 34, requires that masters shall, prior to proceeding to sea, plan the passage from berth to berth. But in practice what does that mean for masters faced with getting their ships away from the berth and safely on passage?

The Club put the question to *Signals* readers in the last issue (83) in the form of a real-life case study about a loaded 54 000 GT tanker departing from the berth at a northern hemisphere port. The clue to the source of the answer was in the question – the case study was not really a ship handling question, it was about passage planning. In fact the answer was written on the accompanying chart.

Under the chart title there were a number of notes, and under the note entitled 'MPX' (master/pilot information exchange) it stated:

'Mariners departing river berths are advised to use extreme caution when turning vessels downstream. Strong currents associated with high water have caused vessels departing to be set down upon the bridge fender systems causing extensive damages. Pilots report that

currents in excess of 7 knots have been observed. Mariners should consider moving vessels well above or below the bridge before turning downstream.'

The note on the chart was telling mariners – masters and pilots – to consider two options:

- move the ship well upstream before turning (the next chart north shows a turning basin designated for ships leaving the berth).
- move the ship well downstream before turning (the next chart south shows an alternative turning basin).

By the time it came to discuss leaving the berth with the pilot, the master should have been absolutely sure of these two options. The master should not have accepted the pilot's assurance that turning the ship's bow down-river from the dock was 'standard procedure'. The master and navigating officer should have taken note of the advice contained on the chart when preparing the ship's berth-to-berth passage plan. When the pilot suggested a manoeuvre contrary to that advice, they should have questioned this course of action.

What actually happened

The diagram above shows how, in the real event that this case study is based on, the ship failed to turn immediately from the berth and made contact with the bridge. The contact caused US\$8 million worth of damage to the concrete bridge pier and US\$750 000 damage to the ship's bow. No injuries or pollution resulted from the accident.

It turned out that the pilot had never taken a ship off this berth before and did not discuss his plans for manoeuvring ships with masters 'unless they ask'. The pilot told investigators that on letting go the bow began to swing away from the berth immediately and that the swing led him to believe he would not be able to straighten the ship. He said that he abandoned his original plan of turning below the bridge and decided to turn the vessel from the berth. However, he did not tell the master this. The port's vessel traffic information service (VTS) later stated that when the pilot informed them of his boarding and intention to 'leave the berth' they assumed that this meant backing down river as normal. The master did not speak to VTS.



Andrew Kirkham
Risk Management Executive

Looking at the chart, imagine that the white band is a conveyor belt moving down the page from top to bottom at 3 knots. This means that everything – the ship and tugs once let go – will move south at 3 knots, or put it another way the ship needs to be making 3 knots through the water or the tugs need to be towing at 3 knots just to remain stationary.

Both tug masters told investigators that in their experience 90% of large vessels departing berth number 1 are moved down-river through the bridge and then turned, and that the others are taken up-river to a turning basin.

The manager at berth number 1 had worked at the terminal for over 25 years and when interviewed after the incident he stated that large ships are taken either up-river or down-river and then turned, but that large ships do not turn from the berth.

The ship had been to load at berth number 1 on four previous occasions but this was the first time with this master in command. All four previous passage plans were available on board and all showed the ship being moved down-river through the bridge before turning. On the second occasion the VDR data had been saved to disc because of a threatened claim against the ship. The claim never materialised and an opportunity to use the VDR data for training or briefing purposes was not utilised. The data would show a successful un-berthing along with audio records of helm, engine and tug orders.

Congratulations to Captain Graham Starkey and Chief Officer Alex Castle of MV Norman Bridge for providing the winning entry to the case study. (See page 15)

Maritime Labour Convention 2006 – no room for complacency

There has been some debate recently as to when the International Labour Organization (ILO) Maritime Labour Convention (MLC) 2006 will actually be implemented. Members should nevertheless be prepared for its imminent introduction.

The convention will become effective 12 months after it has been ratified by 30 countries representing 33% of the world's tonnage. At the time of writing, 16 countries representing over 50% of the world's tonnage have ratified the convention so 14 further signatories are still required. It is nevertheless entirely possible that the convention will become effective in 2012 and Members should plan accordingly.

The global economic downturn and consequent government austerity measures have no doubt had an impact on the rate

at which governments have proceeded towards ratification. But despite the economic woes, governments have continued to make steady progress towards this end and the enthusiasm of both shipowners and seafarers for the convention continues to be a driving force.

Members should therefore start talking to their flag states and classification societies to establish what steps they need to take to ensure early compliance with the requirements laid down by MLC 2006. Certainly there is no room for complacency as to when this needs to be achieved by.

The Maritime Labour Convention 2006 now has its own new section at the International Labour Organization website, which contains useful tools and resources: www.ilo.org/mlc

New training module on stowaways and migrants

North has regularly published advice and information about stowaways, migrants and people in distress. This is now available as a computer-based training module, a copy of which is enclosed with this issue of *Signals* for Members and their entered ships.

There continues to be a serious problem with people attempting to stow away on board ships in many parts of the world. They are often trying to migrate overseas from regional conflicts or economic hardship, which they also attempt in small, over-crowded and unseaworthy boats liable to get into distress.

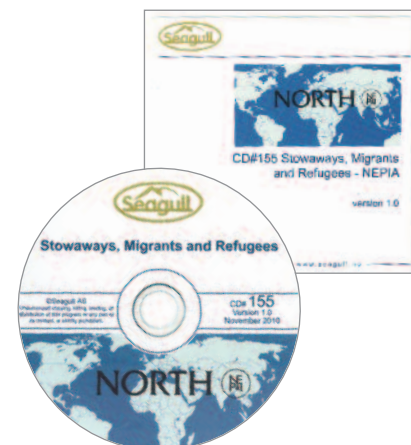
The stand-alone module has been produced by Seagull AS based on material originally supplied by North. It provides comprehensive guidance about migrants and refugees, the legal issues involved, and practical measures that can be taken to prevent and deal with stowaways and to provide assistance to people in distress at sea.

Seagull is a leading provider of computer-based training systems for seafarers

worldwide and offers a comprehensive library of training and onboard courses for regulatory compliance and improved seafarer knowledge.

Details of all North's loss prevention publications are available from the Club's website: www.nepia.com/loss-prevention/publications-and-guides/

Details of Seagull's products and training system are available from their website: www.seagull.no





Radiation: how much is safe?

Our daily exposure to radiation is something we tend to consider when a major nuclear incident reminds us of its dangers. But what is a 'safe' level? The most sensible answer is probably none, but the effects vary enormously from person to person.

There are two different measurements of radiation commonly used: the millirem (mrem) and the microsievert (μSv), with 1 mrem equalling $10 \mu\text{Sv}$. While radiation cannot be seen or felt, it is all around us and a part of our natural universe. The average annual dose per person from all sources is about 360 mrem, but it is not uncommon to receive far more in a given year, often due to medical procedures.

There are standards that limit the dosage that employees may be exposed to. For example, EU Council Directive 96/29/Euratom requires an employee's exposure to be limited to 10 000 mrem in any period of five successive years, but subject to a maximum dose of 5 000 mrem in any single year.

Typical sources of radiation

To assess our individual exposure accurately is practically impossible, but there are a number of factors we can consider.

- **Cosmic radiation:** This is radiation from outer space and is partly blocked by the earth's atmosphere. At higher altitude the levels are higher, varying from around 25 mrem at sea level, to double that at an altitude of 1.6 km.

A typical dose of radiation when flying is about 0.5 mrem per hour, due to the high altitudes involved.

- **Terrestrial radiation:** This is due to radioactive materials naturally found in the soil such as uranium and thorium. An average value is around 30 mrem a year, but in some places it can be as high as 1 000 mrem a year.
- **Radiation in food:** Foods naturally contain some radioactive elements such as potassium, resulting in an average dose of 20 mrem a year.
- **Other sources:** Watching television is about 1 mrem annually, a chest x-ray is about 5 mrem each time, but a computed tomography (CT) scan can be as high as 700 mrem.

Generally, the main source of increased radiation risk is not from being near a radioactive source but from ingesting (breathing in, drinking or eating) radioactive substances. Hence the advice from most public health authorities is not to drink or eat anything from areas affected by radiation and, when in an affected area, to wear a face mask and PPE so as not to breathe in or come into contact with possibly contaminated dust and soil.

In March 2011, after the explosions at the Fukushima nuclear plant in Japan, measurements taken at the gates indicated a radiation level up to 33 mrem an hour, but with time and distance this



Belinda Ward
Senior Executive, Claims

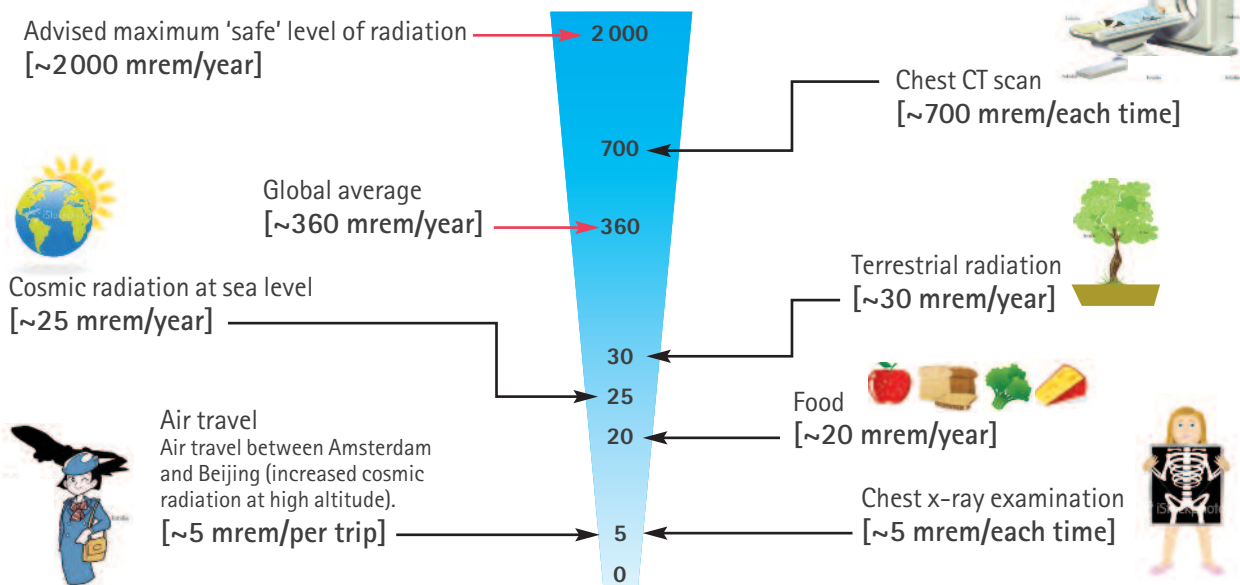
has substantially decreased. In Tokyo by early May 2011, the hourly level of radiation was reported as 0.009 mrem per hour (nearly 80 mrem per year) – almost double the normal background level of radiation but well below some areas of the world, and certainly within the internationally accepted guidelines.

Increased risk of cancer

It has been estimated that the likelihood of dying from cancer increases by 10% if a total of 250 000 mrem has been accumulated (an exposure of over 3 000 mrem every year for over 80 years).

There is much disagreement over how radiation measurements are calculated, what they mean in reality, what can be considered 'safe' and the level to which we should protect ourselves in our day-to-day lives. There is natural concern about radiation levels following a serious nuclear incident, but it should always be remembered that our world is naturally radioactive and our exposure can never be completely eliminated.

Radiation in day-to-day life





Changing bills of lading

North receives regular enquiries from Members as to whether they should comply with charterers' requests to amend a bill of lading. Requests range from correcting typographical errors to commercial matters.

Requests from charterers may also relate to trading and customs restrictions. For example:

- Part of a cargo of crude oil to be discharged, replaced with other cargo and a new bill of lading to be issued describing the whole cargo as 'fuel oil'.
- Cargo of gas oil to be retained on board at the named discharge port and new bills of lading issued showing port of loading to be the place where the cargo was retained on board (to evade export restrictions at the original port of loading).
- Cargo described on mate's receipts as being 'chrome ore' to be changed to 'chrome ore concentrate'.
- Cargo description to be amended from 'gas oil' to 'reformate' (to attract a lower customs tariff).

It is worthwhile reviewing which parts of a bill of lading can be amended and which should not. Certainly any changes to information on a bill of lading should be approached with great caution.

If shipowners are asked to amend an original bill of lading, the amendments should be made to all copies of the original (usually a set of three). If a replacement bill of lading is issued, it should only be released once all copies of the original bill of lading have been collected.

Owners should also consider obtaining suitable letters of indemnity from charterers. The Club can assist Members with necessary wordings for such letters. When considering whether to agree to an amendment request and/or to accept a letter of indemnity, it is important to assess the level of risk or exposure arising from a particular amendment.

Implications of specific changes

Shipper's identity: Once a bill of lading has been released by a shipper, it would normally have no further control of the bill of lading or interest in the cargo. However, it is possible the shipper would seek to retain some control over the cargo and therefore any change to the bill of lading may prejudice the shipper's position.

Consignee details: Consignees normally pay for cargo simultaneously with receiving the bill of lading. Normally, therefore, it is safe to amend the consignee details but there may be restrictions, such as export licences, linked to specific consignees and changing the consignee during transit may lead to breaches of these.

Notify party details: Changes may be made to the identity of the notified party without concern.

Load port details: The load port should never be changed or amended unless the cargo has been discharged and re-loaded at the port which is to be shown as the new load port.

Discharge port details: The discharge port may usually be amended provided the owner is agreeable to sending its ship to the named discharge port. Owners should be careful to ensure that going to the new discharge port does not breach any relevant charterparties or cause the ship to deviate from the voyage provided for in other bills of lading. Concerns can also arise due to a potential breach of restrictions such as export licences or trade restrictions or sanctions.

Description of the cargo: Owners should be extremely cautious about any requests to amend details of the cargo. Where a mate's receipt has been issued there should normally be no reason for the bill of lading to differ from the details contained on the mate's receipt. Any clausing on the original bill of lading must be transferred to the new bill of lading.



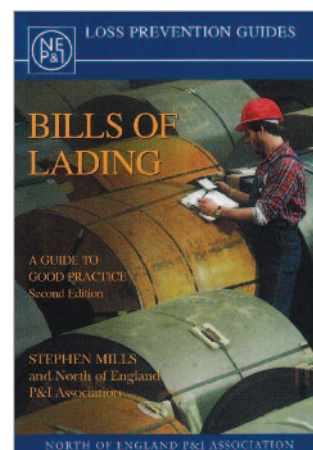
Peter Scott
Senior Executive, Claims

Place of issue: If the original bill of lading has to be replaced, the place of issue shown on the replacement bill of lading should be the place where it was actually signed. Charterers will sometimes request that the replacement bill of lading shows the same place of issue as the original. This is wrong, though sometimes the words '[replacement place of issue] as at [old place of issue]' can be used instead. However, it is best practice to state only the replacement place of issue. Changes of the place of issue can also affect the liability regime that might apply to the bill of lading contract.

Date of issue: If the original bill of lading has been replaced, the date of issue should be the date on which the replacement is actually issued. However, in that case, the date on which the cargo was loaded must be shown elsewhere on the face of the bill of lading, preferably in the form 'Loaded on board:....'

Prejudicing P&I cover

Members requested to amend details on bills of lading should consult with the Club before agreeing to do so. Members should also note that amending bills of lading may prejudice their P&I cover and that any letters of indemnity obtained may replace rather than complement their cover.





How to spot DRI (C)

The process of manufacturing direct reduced iron (DRI) from iron ore and the subsequent hot briquetting procedures generate unwanted by-products in the form of dust and broken chips. Some manufacturers recover these materials and offer them for shipment, but they are potentially dangerous and not always clearly identified.

DRI by-product and fines cargoes mainly originate from Venezuela and Trinidad, though there are also shipments from Mexico and Libya. Unfortunately this cargo has been responsible for a number of casualties, most notably the Ythan in 2004, in which six crew members lost their lives during explosions in four of five cargo holds and which also resulted in loss of the vessel.

Guidance on the carriage of DRI by-product and fines cargoes appeared in the 2009 International Maritime Solid Bulk Cargoes (IMSBC) Code in a new schedule entitled 'Direct Reduced Iron (C) (By-products, Fines)'. However, the definition of DRI (C) in the code is based only on its production, particle size and density, without reference to metallic iron or moisture content.

Important information before carriage

Blended iron-ore cargoes containing DRI (C) can be identified by their chemical composition, details of which must be requested. The chemical composition must include:

- total iron (Fe) content
- metallic iron (Fe⁰) content
- moisture content.

This information should preferably be supported by a certificate from an independent testing laboratory and must relate to the cargo that is being offered for shipment. A 'generic' analysis is not acceptable.

The certificate should state the method and standards followed when obtaining the tested samples (preferably ISO 10835) and the standards followed to determine the metallic iron content (preferably ISO 5416). DRI (A) and (B) cargoes typically contain about 85% metallic iron, whereas iron ore contains no metallic iron.

If a blended iron-ore cargo contains any metallic iron it should be regarded as DRI (C) and carried in accordance with the IMSBC Code. If in doubt, consult the Club.

Carriage of DRI (C)

Having identified a cargo as DRI (C), the IMSBC Code sets out the information that must be provided to the master. In addition to the general requirements, the DRI (C) schedule specifies the following.

'The shipper shall provide the master with a certificate issued by a competent person recognised by the national administration of the port of loading stating that the cargo, at the time of loading, is suitable for shipment; that it conforms with the requirements of the IMSBC Code; that the moisture content is less than 0.3%; and the temperature does not exceed 65°C. The certificate shall state that the cargo meets the loading criteria in regards to ageing and material temperature.'

'Prior to shipment, the cargo shall be aged for at least 30 days and a certificate confirming this shall be issued by a competent person recognised by the national administration of the port of loading.'

'Shippers shall provide to the master, prior to loading, comprehensive information on the cargo and safety procedures to be followed in the event of emergency.'



DRI cargo on fire



Colin Gillespie
Risk Management Executive

'The cargo temperature shall be monitored during loading and recorded in a log detailing the temperature for each lot of cargo loaded, a copy of which shall be provided to the master. After loading, a certificate shall be issued by a competent person recognised by the national administration of the port of loading confirming that throughout the whole consignment of fines and small particles the moisture content has not exceeded 0.3% and the temperature does not exceed 65°C.'

It is important to note the moisture content must be less than 0.3% for the cargo to be carried as DRI (C).

Incorrect cargo descriptions

Despite extensive publicity, cargoes are still being offered and shipped that do not have 'DRI' in their descriptions but which in fact are blends containing a significant proportion of DRI (C) fines. Descriptions for cargoes containing DRI (C) have included reoxidised iron fines, iron fines (blend), iron ore pellet chips, oxide fines, pond fines, sludge fines, remets, clarifier slush and dust, spent iron fines and lodos.

For the avoidance of doubt, all cargoes containing or derived from DRI should be described as DRI (A) hot-moulded briquettes, (B) cold-moulded briquettes, lumps or pellets or (C) by-products and fines, and must be carried in accordance with the relevant provisions of the IMSBC Code.

The Club is aware of an increase in the number of cargoes that are described wrongly on shippers' declarations. It is therefore vital to assess the characteristics of iron-ore cargoes presented for shipment, particularly in Venezuela, Mexico and Trinidad, before fixing to ensure the cargoes are accurately described.

Members are advised to notify the Club if they are considering carrying DRI cargoes or require additional information.

Avoiding cargo damage from hot bunkers



North regularly receives claims for cargo damage caused by over-heating of bunkers in tanks adjacent to cargo spaces. Defending such claims can be difficult so Members are advised to keep a close eye on bunker temperatures.

Fuel oil stored in side and double bottom tanks often requires heating to maintain the viscosity it requires for pumping. Heat transfer into adjacent cargo holds can cause problems. Effects range from 'toasting' and increased moisture migration in bulk cargoes to explosion of International Maritime Dangerous Goods Code cargoes in over-heated containers.

Most bunker suppliers' Material Safety Data Sheets recommend a minimum storage temperature of 40°C. ISO 8217 requires all distillate and residual fuel oils (except DMX) to have a minimum flashpoint of 60°C and classification societies state residual bunkers should not be heated to within 10°C of this. In practice this means cargo stowed next to a heated bunker tank – either on a tank top or adjacent to a side tank – will normally be subjected to temperatures of 40–50°C.

Defences being eroded

Where cargoes are subjected to higher temperatures resulting in damage, the ship is likely to face a claim. If it can be shown that the degree of heating was necessary and within recommended levels, the ship operator is likely to have a defence to such claims.

If the fuel oil has been heated to beyond the required or recommended temperatures, the courts may see this as a breach of the master's duty to carry, keep and care for the cargo. Until now, courts generally regarded the breach as falling within the 'error of management of the ship' (Hague Visby rules, article IV, rule 2) so owners could usually avoid liability. However, when the Rotterdam Rules are eventually introduced, the error-of-management defence will be removed such that owners can be held liable for over-heating damage.

Precautions to take

During all voyages a ship's crew should maintain a critical eye on temperatures within the fuel system using thermometers within the tanks.

The temperatures of the heating inlet and return line should also be monitored, and adjustments made if needed.

Cargo stowage plans should allow for the possibility of cargo being affected by adjacent heated tanks. Consideration should be given to providing suitable protection to avoid heat transfer and sweating of cargo within the holds.

When masters have little control over cargo stowage, such as when ships are on time charter and the charterers plan the stow and carry out loading, masters should notify the charterers of where bunker tanks are located and the temperatures to which the fuel oil is likely to be heated.



Iron ore or something more sinter?

There has been a significant increase recently in the number of vessels being presented with iron ore cargoes which, if taken as described on the face of shippers declarations, would be relatively benign cargoes described under group C of the International Maritime Solid Bulk Cargoes (IMSBC) Code as 'neither liable to liquefy nor to possess chemical hazards'.

The reality however is proving to be quite different. The Club is aware of a number of vessels that fixed to load iron ore (group C) cargo at Brazilian ports only to find on arrival the cargo is actually 'iron concentrate (sinter feed)' or 'iron concentrate (pellet feed)' both of which are trade names for mineral concentrates that are a group A cargo, which 'may liquefy if shipped at a moisture content in excess of their transportable moisture limit'.

Group A cargoes have featured prominently in the shipping press recently following the loss of three vessels and forty four lives in 2010 in accidents that involved nickel ore from Indonesia and the loss of

two vessels carrying iron ore fines loaded at Indian ports in 2009.

High moisture content

There has been a significant amount of rainfall in recent weeks on the east coast of Brazil which has led to high moisture content in the stockpiles of cargo presented for loading. Unfortunately a number of vessels have loaded cargo that has excessive moisture and has subsequently liquefied in the hold.

Problems are compounded by a lack of port facilities to off-load unsafe cargo and a lack of suitable laboratory testing facilities to assess cargo characteristics in accordance with code requirements. This has led to significant delays while cargo samples are sent to recognised testing facilities for proper analysis.

Members have also reported difficulties in persuading shippers of their obligations under the IMSBC Code which has led to increased pressure placed on masters to load cargo that is inherently unsafe.

The IMSBC Code describes cargo that has a propensity to liquefy as 'cargoes that contain a certain proportion of small particles and a certain amount of moisture'. Members are therefore strongly advised to carefully check information presented by shippers and question the cargo description and particle size of the intended cargo before loading commences.

Members are advised to contact the Club before fixing to load iron ore cargo from Brazilian ports.

Precautions to be taken when loading IMSBC Code group A cargoes can also be found in Club Circulars: *'Indonesia and the Philippines - Safe Carriage of Nickel Ore Cargoes'* (9 February 2011) and *'India - Safe Shipment of Iron Ore Fines from Indian Ports'* (14 December 2010).

The Club's loss prevention briefing - Cargo Liquefaction - provides further information on cargo liquefaction, which can be downloaded from the Club's website: www.nepia.com/loss-prevention/publications-and-guides/loss-prevention-briefings/

Hull fouling – the importance of evidence

The UK High Court decision in the *Kitsa* bottom-fouling case and the use of prolonged stay clauses was reported in issue 67 of *Signals*. Since the court's decision, it has become more common for time charterparties to include clauses dealing with the consequences of hull fouling caused by delays in ports or other places where marine growth is likely to take hold. Provided they are suitably worded, the operation and effect of such clauses is fairly straightforward.

However, where there is disagreement about the application and effect of a prolonged stay clause, the outcome is likely to turn on the quality of the available evidence. North has seen a number of instances where a Member's claim for hull fouling has been hampered by a lack of reliable evidence that the fouling arose as a result of a particular delay and was not pre-existing.

Photographs of hull

It is therefore important to have evidence indicating where and when a particular fouling took place. While it is not always

feasible to carry out a full underwater survey there are other things that can usefully be done.

For example, it may be possible for ship's staff or an attending surveyor to take photographs of parts of the ship's hull that are exposed and visible when the ship is in ballast (including boot topping, propeller and rudder) at the time of delivery under the charterparty.

Pictures can also be taken when the charterer orders the ship to proceed to a port or place where it can reasonably be anticipated that there might be delays and fouling.

Samples of fouling

At the very least, if the hull does become fouled, it is important to have good evidence of the nature and extent of the fouling before it is cleaned off, ideally by a good quality underwater survey. As well as the pictorial evidence it is useful to have the diving surveyor retain physical samples of the fouling, noting exactly where on the ship's hull they were taken from.



In the absence of positive evidence that the hull was clean at the time of delivery or when the ship embarked on a particular voyage, it may be possible to have an expert extrapolate from the available evidence once fouling has been discovered to determine how long the fouling is likely to have been present. However, as in any other case, good contemporaneous evidence of the condition of the ship's hull before a voyage will be better rather than relying on an after-the-fact reconstruction.

Members can view or download previous issues of Signals from the Club's website: www.nepia.com/loss-prevention/publications-and-guides/signals/



Radioactivity risk clause for time charterparties

As a result of the March 2011 earthquake and tsunami in Japan which damaged a nuclear power station at Fukushima, concerns have been expressed about the safety of ships, cargoes and crew that might be exposed to radiation released from damaged reactors.

Official information issued by the Japanese government, World Health Organization and International Atomic Energy Authority indicate that the levels of radiation outside the exclusion zone are not harmful and remain within acceptable levels. It would thus seem that some of the concerns, particularly those which have led to ships being refused entry to ports as a result of alleged radioactive contamination, may be an over-reaction.

Nevertheless, a level of anxiety is understandable and some shipowners and operators have incorporated clauses in their charterparties allowing them to refuse to allow ships to proceed to or

through ports or places, in Japan in particular, that may expose them to a risk of radioactive contamination. This has resulted in a number of 'home grown' clauses which so far remain untested and are of uncertain effectiveness. Many, if not most, would appear to operate on the basis of a judgement about the level of risk involved being formed by the master.

Providing balance

International shipping association BIMCO has expressed a view that clauses heavily biased in favour of shipowners are unlikely to be accepted by charterers in any event but are also concerned about the potentially far-reaching, negative effects that such clauses may have on Japanese trade. BIMCO has therefore produced a radioactivity risk clause for time charterparties that seeks to be more balanced and is based on a more objective assessment of the risk involved. The text of the BIMCO clause is shown below.



Mark Robinson
Associate Director, FD&D

There are two particular points that Members need to bear in mind if the clause is incorporated into their charterparties. The first is, as already pointed out, that the test whether the ship, cargo or crew may be exposed to risk is an objective one. It is not sufficient merely for the master or owner to form a view. Any judgement has to be supported by the relevant official authorities.

The second point is that any decision under paragraph (b) of the clause not to follow a charterer's instructions should be discussed first with the Club to ensure that proceeding elsewhere or to some other port does not amount to a deviation and prejudice a Member's P&I cover.

BIMCO Radioactivity Risk Clause for Time Charter Parties

- a) The Vessel shall not be obliged to proceed or required to continue to or through or remain at, any port, place, area or zone, or any waterway or canal (hereinafter 'Area') which may expose the Vessel, her cargo, crew or other persons on board the Vessel to danger from levels of ionizing radiations from or contamination by radioactivity from any nuclear fuel, nuclear waste or from the combustion of nuclear fuel, or the radioactive, toxic, explosive or other hazardous or contaminating properties of any nuclear installation, reactor or other nuclear assembly or component thereof (hereinafter 'Radioactivity') determined by a competent local, national or international authority (including but not limited to the International Atomic Energy Authority and the World Health Organization) to be harmful to human health.
- b) If in accordance with sub-clause (a) the Owners decide that the Vessel shall not proceed or continue to or through or remain in the Area they must immediately inform the

Charterers. The Charterers shall be obliged to issue alternative voyage orders and shall indemnify the Owners for any claims from holders of the Bills of Lading caused by waiting for such orders and/or the performance of an alternative voyage. Any time lost as a result of waiting for or complying with such orders shall not be considered off-hire.

- c) The Vessel shall have liberty to comply with all orders, directions, recommendations or advice of competent authorities and/or the Flag State of the Vessel in respect of arrival, routes, ports of call, destinations, discharge of cargo, delivery, or in any other way whatsoever.
- d) The Charterers warrant that they shall not load cargoes and/or empty containers and/or supply bunkers that have levels of Radioactivity in excess of normal background radiation levels for the Area. The Owners, at their discretion, may arrange for a radioactive survey by an independent qualified surveyor, at the Charterers' cost, expense and time. If the level of Radioactivity

in the cargoes, empty containers and/or bunkers is determined by the surveyor to exceed normal background levels, the Owners shall have the right to refuse to load such cargoes, empty containers and/or bunkers.

- e) Any delays arising out of measures taken by port authorities to screen the Vessel for radiation either in the countries affected by Radioactivity or at subsequent ports of call shall be for the Charterers' account. Any time lost as a result of complying with such screening shall not be considered off-hire.
- f) If in compliance with this Clause anything is done or not done, such shall not be deemed a deviation, but shall be considered as due fulfilment of this Charter Party. In the event of a conflict between the provisions of this Clause and any implied or express provision of the Charter Party, this Clause shall prevail to the extent of such conflict, but no further.

BIMCO are in the process of revising the above clause and Members should check the BIMCO website for the latest version: <https://bimco.org/>



New port state inspection campaign

During the 44th meeting of the Paris Memorandum of Understanding on Port State Control (Paris MOU), the committee agreed that a new concentrated inspection campaign focusing on structural safety and the Load Line Convention will be carried out from 1 September to 30 November 2011.

The campaign is to be run jointly with the Tokyo MOU, such that it will effectively cover most European and Asian ports.

A further joint campaign on fire safety systems has been scheduled to run from September to November 2012.



Simon MacLeod
Risk Management Executive

Guidance on combating piracy

A significant amount of time was spent discussing ways to combat piracy at the International Maritime Organization (IMO) maritime safety committee (MSC) session in May 2011. A number of documents were produced.

Employing armed guards

Interim guidance for ship operators and masters was approved on employing privately contracted armed security personnel on ships transiting the high-risk piracy areas off the coast of Somalia, in the Gulf of Aden and the wider Indian Ocean was approved. See the article on page 2 for more details.

Interim guidance on the same subject for flag states was also approved, entitled *Interim recommendations for flag states regarding the use of privately contracted armed security personnel on board ships in the high risk area* (MSC.1/Circ.1406). The document takes into account guidance provided by IMO for preventing and suppressing piracy and armed robbery against ships, including existing circulars

- *Recommendations to governments for preventing and suppressing piracy*

and armed robbery against ships (MSC.1/Circ.1333).

- *Guidance to shipowners and ship operators, shipmasters and crews on preventing and suppressing acts of piracy and armed robbery against ships* (MSC.1/Circ.1334).

Flag state jurisdiction and any laws and regulations concerning the use of private security companies need to be borne in mind, and port and coastal states' laws may also apply.

Investigating piracy incidents

Further guidance was also published to assist investigators collecting evidence, including forensic evidence, to support submission of written reports which may assist in the subsequent identification, arrest and prosecution of pirates.

Entitled *Guidelines to assist in the investigation of the crimes of piracy and armed robbery against ships* (MSC.1/Circ.1404), it is intended to be used in conjunction with resolution A.1025(26), *Code of practice for the investigation of the crimes of piracy and armed robbery against ships*.

New Best Management Practices published

The fourth version of the shipping industry's guidance to countering piracy will be published shortly. Best Management Practices version 4 (BMP4) contains comprehensive recommendations drawn up by the shipping industry and naval forces that are designed to assist ships to avoid, deter or delay piracy attacks in high-risk piracy areas. Evidence collected by naval forces shows that the application of BMP recommendations makes a significant difference in preventing a ship becoming a victim of piracy.

Members will be able to download BMP4 from the Industry News pages of the Club's website as soon as it is published: www.nepia.com/publications/industrynews/

BMP4

Best Management Practices to Deter Piracy off the Coast of Somalia, the Somali Basin, and in the Arabian Sea Area



New standards for lifeboat safety agreed



The safe operation of lifeboats during drills and emergencies has been of great concern to North and other industry organisations for a number of years. Accidents involving the use of on-load release systems continue to occur, with lifeboats becoming prematurely detached from their hooks and plummeting into the water, causing severe injury or death to the crew inside.

The Club has published comprehensive guidance on this issue, including a loss prevention briefing and a DVD about lifeboat safety.

Following sustained industry lobbying, new international safety standards and test procedures for lifeboat release and retrieval systems have been approved by the International Maritime Organization (IMO).

Industry lobbying

A working group representing a wide range of industry organisations, including the International Group of P&I Clubs, has been considering the issues for some time. It has lobbied in particular for the development of lifeboat release hooks with suitable safety features, which will only open when required to do so by the lifeboat operating crew.

Recently the group made submissions to the IMO sub-committee on ship design and equipment (DE) at its 55th session in

March 2011. The DE committee in turn made submissions to the IMO maritime safety committee (MSC) in May 2011, at which new measures for the evaluation and replacement of lifeboat release and retrieval systems were adopted.

Amendments to SOLAS and LSA Code

The measures include amendments to chapter 4 of the International Life-Saving Appliances (LSA) Code and chapter III of the International Convention for the Safety of Life at Sea (SOLAS). These amendments are expected to enter into force on 1 January 2013 and establish new safety standards for lifeboat release and retrieval systems which will require assessment of lifeboat release hooks.

Flag state administrations or recognized organisations will need to carry out design reviews of lifeboat hook manufacturers' submitted assessments to check existing lifeboat release and retrieval systems comply with the revised LSA Code, and to witness a specified performance test. This should be completed no later than 1 July 2013.

The assessment results will be reported to IMO's database for use in certifying systems onboard ships.

Existing lifeboat release mechanisms not complying with the revised LSA Code will need to be replaced no later than the first

scheduled dry-docking of the ship after 1 July 2014, but no later than 1 July 2019.

MSC also adopted circular MSC.1/Circ.1392 *Guidelines for evaluation of and replacement of lifeboat release and retrieval systems*, which provides guidelines to the implementation of these requirements on existing vessels.

Use of fall-preventer devices

North recommends the use of fall-preventer devices as an additional safeguard when operating lifeboats fitted with on-load release systems. This should be in accordance with IMO circular MSC.1/Circ.1327 *Guidelines for the fitting and use of fall preventer devices*.

IMO also recommends that fall-preventer devices are fitted on systems which are not compliant with the new LSA Code requirements until such time as the system is modified or replaced for compliance.

Further details of the above measures are provided in the following IMO documents.

Resolution MSC.317(89) - Adoption of amendments to the International Convention for the Safety of Life at Sea, 1974.

Resolution MSC.320(89) - Adoption of amendments to the International Life-saving Appliance Code.

Circular MSC.1/Circ.1392 - Guidelines for evaluation and replacement of lifeboat release and retrieval systems.



IMO update

The International Maritime Organization (IMO) maritime safety committee (MSC) held its 89th session in May 2011. Subjects discussed included the following.

Free-fall lifeboat tests

Revisions to the International Convention for the Safety of Life at Sea (SOLAS) chapter III, regulation 20, were approved. These explicitly allow free-fall lifeboat release systems to be operationally tested by a simulated launching device without the crew onboard as an alternative to a free-fall launch. An MSC circular allowing early implementation of the simulated launching test before the revisions enter into force is to be issued.

Passenger ship stability

Draft amendments to SOLAS chapter II-1, regulation 8, introduce a mandatory requirement for new passenger ships to have onboard stability computers, or access to shore-based support, to assist masters make a safe return to port after a flooding incident. It is expected that the next (90th) session of MSC will agree that 'new' ships are those constructed on or after 1 January 2014. Guidelines to implement the new requirement, which remain to be finalised, recommend that at least two independent stability computers are provided and that they are approved by the flag state administration.

Blending liquid cargoes

Revisions to SOLAS chapter VI, regulation 5, were approved which prohibit the blending of bulk liquid cargoes during sea voyages. Prior to adoption, scheduled

for May 2012, a proposal to prohibit production processing during sea voyages will be evaluated by MSC's technical working group. This covers any deliberate chemical process whereby a chemical reaction between the ship's cargoes or cargo and any other substance results in a cargo with a new product designation.

Tanker gas safety

IMO resolution MSC.291(87) will amend SOLAS chapter II-2, regulation 4, on probability of ignition with effect from 1 January 2012. The amendment requires all new and existing tankers to be provided with at least a portable instrument for measuring oxygen, including sufficient spares and a suitable means of calibration. This equipment is in addition to the portable instrument required for measuring flammable vapour concentrations. The amendment also requires all oil tankers of 20 000 t deadweight constructed after 1 January 2012, which are not fitted with constant operative inerting systems for ballast tanks and void spaces of double-hull and double-bottom spaces adjacent to cargo tanks, to be provided with a fixed hydrocarbon gas detection system.

Solid bulk cargoes

IMO resolution MSC.318(89) introduces amendments to the International Maritime Solid Bulk Cargoes (IMSBC) Code which enter into force from 1 January 2013, although they can be applied on a voluntary basis from 1 January 2012. The amendments include:

- New schedules for ferrous sulphate heptahydrate, granular ferrous sulphate, magnesium sulphate fertilisers and dried distillers grains with solubles (DDGS).
- Clarification of the roles and responsibilities for the cargo by replacing the words 'competent authority' with 'administration'.
- Revision of individual schedules for a number of cargoes.
- Identification of cargoes where the fixed gas fire-extinguishing system could be ineffective and actions to be taken.
- Identification of cargoes liable to cake.
- Identification of cargoes where bunkering of fuel oil in adjacent spaces Ois not allowed.



Loss-prevention feedback

North is always interested to receive feedback about Signals and other loss-prevention publications and services. Members are very welcome to contact the Club if there are any topics that they or their seafarers would like to be covered in future issues of Signals, any ways in which the loss-prevention service can be improved, or if there is any information that has been particularly useful.

North will be contacting some recipients of Signals in the near future to confirm receipt of this issue and hear their views.

A feedback form is provided on the back of the cover sheet sent with every issue of Signals. The feedback form can also be downloaded from the loss-prevention pages on the Club's website: www.nepia.com/loss-prevention/publications-and-guides/

The image shows a screenshot of a web-based feedback form. At the top, it says 'FEEDBACK FORM'. Below that, there is a section titled 'TELL US WHAT YOU THINK' with a paragraph of text. This is followed by a section titled 'HOW DO YOU RATE OUR SERVICES?' with a table for rating different services. There are several input fields for 'Name of Clubber', 'Date', 'Time', 'Place', 'Address', 'Comments', and 'What issues or areas have you had to raise?'. At the bottom, there is a 'SUBMIT' button and a footer with the 'NORTH' logo.



Big demand for residential training courses



North's annual residential training course in P&I insurance and loss prevention, now in its nineteenth year, took place in June 2011 at Lumley Castle near Newcastle, UK and was again in big demand. Some 40 delegates from 19 countries attended to improve their knowledge of P&I insurance and loss prevention.

The course provides delegates with information on ships, cargoes, marine insurance, maritime law and loss prevention, and is consolidated by intensive workshop training. Opportunities to socialise also help to forge friendships that can lead to a network of support in the future.

Highlights included a visit to ships on the River Tyne, experiencing a collision on a ship simulator at South Tyneside College and presentations and workshops with experienced North staff.

New course in Singapore

Members' staff wishing to attend future residential courses can register their interest for the 2012 course in the UK or for a similar course being held in Singapore from 17 to 21 October 2011, details of which will be announced soon.

Members wishing to register an interest in the 2011 residential course in Singapore should contact Elizabeth Er in the Club's Singapore office, email: elizabeth.er@nepia.com

Members wishing to register an interest in the 2012 residential course in the UK should contact Denise Huddleston in the loss prevention department, email: denise.huddleston@nepia.com



Signals prize winner



Alex Castle, joint-winner of the Signals case study competition receiving his prize from Andrew Kirkham.



North contacts app

As reported in *Signals 83*, North successfully launched the first of a planned series of mobile device applications (apps) earlier this year. The new North contacts app greatly simplifies the process of contacting the Club's staff from BlackBerry smartphones.

Versions of the app for Android handsets and iPhones will be available in the future,

followed by further apps to improve access to the wide variety of publications and services offered to Members.

The North contacts app is available to download from the Club's website: www.nepia.com/mobile



Signals Search 28 ?

Questions

- 1 What can be over-heated and cause damage to cargo?
- 2 What may a delay in port cause to a ship's hull?
- 3 What is the acronym for devices the IMO recommends using when operating lifeboats fitted with on-load release systems?
- 4 What should be kept of the bridge to ensure safe navigation?
- 5 How many residential training courses will North have run in the UK by the end of 2012?
- 6 What is the acronym for the ILO convention that may become effective in 2012?
- 7 What type of efficiency does North's latest poster address?
- 8 What type of inspection campaign will focus on structural safety in 2011?
- 9 What name is given to radiation from space?
- 10 What can happen to IMSBC Code group A cargoes?

- *Signals Search* is open to all readers of *Signals*.
- Send a photocopy or scan of your completed search, along with your name and, if appropriate, name of ship, position on board, company and address to Denise Huddleston at the Club. Email: denise.huddleston@nepia.com

- All correct entries received by the closing date will be entered in a prize draw.
- Closing date Friday 2 September 2011.

Prizes will be awarded to the first correct entry and two runners-up drawn.

Details of the winner and runners-up will appear in the next edition of *Signals*.

E L Z Y I V R C D K G S Q L L
L K O Z T O Z P L N F R U E C
V Q Q O A N F M I P E E A S G
M V H X K U E L I P S K L S N
H X P S U O U W K Q I N I E U
E T J K G O U B T Z S U T V B
N F G T F F R T E O U B Y F V
Z O A N I D M C I M S O C H U
D O Y K E L I Q U E F Y Z E A
R T G T X R E B R L X F Z V F
A V V B G Z T V C E J H H K M
U J R G X D I S L B T C Z K B
N I V P T C G P U U M D V E G
H H A A E F G J O C F S E Q P
D E T A R T N E C N O C M L C

Answers to Signals Search 27

- | | |
|---------------|----------------|
| 1 IMSBC | 6 Pterygium |
| 2 ECA | 7 Prejudice |
| 3 Contacts | 8 BNWAS |
| 4 Sanctions | 9 Chrome |
| 5 Cockroaches | 10 Arbitration |

Your copy of Signals

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

- Clean Seas poster – Voyage Efficiency (entered ships only)
- Computer-based training module – Stowaways, Migrants and Refugees (Members and entered ships only).
- Loss prevention publications CD (Members and entered ships only)

Signals Search 27 Winners

Winner:

Mr Oscar C Santillan, MV Shorthorn Express, Vroon BV

Runners-up:

Captain Sangeet Kumar, Master MV Nikolaos, Seatraders SA

Mr Ian Maitland, Wallmans Lawyers, Adelaide, Australia

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 Association's FD&D department for legal advice on particular matters.

The purpose of the Association's loss prevention facility is to provide a source of 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 that information are expected to satisfy themselves that the information is relevant and suitable for the purposes to which it is applied. In no circumstances whatsoever shall the Association be liable to any person whatsoever for any loss or damage whensoever or howsoever arising out of or in connection with the supply (including negligent supply) or use of information (as described above).

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