

#### Welcome...

to the July issue of Signals which explores new and topical information relating to loss prevention and examines the implications and consequences of these developments for shipowners and operators.

#### IN THIS ISSUE

Signals regularly provides advice to seafarers about health and fitness. Two different aspects are addressed in this issue; one is about how to eat healthily by providing advice on the benefits of different food groups, and the other is about providing first aid and aftercare on board ships.

Ship security is a serious worry in many parts of the world and a particular area of concern is West Africa, where maritime crime extends further than piracy. In this issue, maritime intelligence specialist Gray Page provides an overview of the problem and the actions that ship operators and seafarers can take to protect themselves.

Problems with bulk cargoes are highlighted in this issue. The safe carriage of nickel ore and bulk cargoes that may liquefy continues to be a cause for concern for many bulk carrier operators.

International sanctions against Iran and Syria remain in the headlines, particularly following the recent ban on the carriage of Iranian oil and petrochemical cargoes imposed by the EU. This is discussed in an article that also considers a recent US executive order targeting non-US individuals and entities that violate US sanctions against Iran and Syria.

Two environmental issues in the USA are also considered, one about new ballast water regulations and the other about the vessel general permit scheme for discharges from ships incidental to normal operations.

#### ELECTRONIC, PRINT OR BOTH-YOU CHOOSE

As announced in Signals 87, North will be changing the way Signals and other loss prevention publications are distributed to Members' offices and staff. From issue 89 of Signals in October 2012, copies will be distributed electronically by email rather than by post in printed format.



However, the Club wishes to ensure its loss prevention publications are delivered in a way that best suits individual reader requirements. Members and their staff who wish to continue receiving hard-copy versions of *Signals*, loss prevention guides, 'Hot Spots', CDs and other loss-prevention publications will of course be able to do so. Others may wish to receive both hard-copy and electronic versions.

To ensure you will receive North's loss prevention publications by email, or to continue receiving hard-copy publications, please choose your option and complete and return the carrier sheet enclosed with this copy of *Signals*, along with updated contact details if necessary.

Alternatively you can submit your choices via the Club's website: www.nepia.com/publications/choices

Hard-copy packs of all loss prevention publications will continue to be distributed to entered vessels via Members' offices.

**Issue 88:** July 2012

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# NEW RULES FOR PILOT LADDERS

On 1 July 2012 amendments to the International Convention for the Safety of Life at Sea (SOLAS) came into force which should see pilot transfer become a lot safer.

Getting pilots on and off a ship is a dangerous and risky business given the hazards of weather, sea state and often a high freeboard. These are difficult enough to manage without adding to the risk by poor ladder rigging or using a ladder in poor condition or constructed incorrectly.

Mechanical pilot hoists can no longer be used but winch reels can be installed for raising and lowering pilot ladders. Winch reels cannot be relied upon to support the pilot ladder when it is in use, the ladder must be secured to a strong point independent of the winch reel.

All pilot ladders must be certificated for correct construction and on-board records must be kept of dates in service and repairs.

A new International Maritime Organization 'pilot card' poster is being published detailing the new boarding arrangements. It shows details of pilot ladder winch reels in place of references to mechanical pilot hoists, along with other updates.

North published a pilot ladder 'Hot Spots' sheet in 2010 which demonstrates good and bad practice when rigging a pilot ladder.

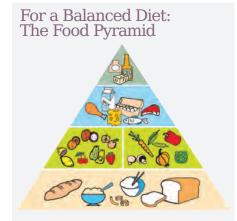
Members can view or download 'Hot Spots' from North's website: www.nepia.com/loss-prevention/ publications-and-guides/hot-spots.php





Photographs showing pilot ladders with no proper securing arrangements.

## HEALTHY EATING



Exercise techniques to help seafarers keep healthy at sea have been promoted in the last few editions of *Signals*, but any exercise regime should be accompanied by healthy eating. It only takes a little effort, plus the cooperation of the ship's cook, to provide a healthy and tasty diet on board.

The following article is one of a series on healthy food produced by the Seafarers' Health Information Programme, run by the International Committee on Seafarers' Welfare (ICSW). The Club is grateful to ICSW for permission to use this article.

### Potatoes and Cereal Products: Essential!

There is a persistent myth that eating potatoes and bread will make you fat. This will only happen if you eat too much bread and potatoes, just as you would if you were to eat too much of anything. Popular diets also confirm that you need products such as bread, potatoes, rice and pasta to keep your energy levels up.

Potatoes, rice and pasta are rich in starch and contain hardly any fat, that is, unless you put lashings of chocolate spread on your bread or smother your pasta in creamy sauces.

#### **Bread**

Slices of bread are increasingly disappearing from our menu. Yet cereal products such as these should be among our staple foods!

Bread, particularly the brown and wholemeal varieties, contains many important nutrients such as vitamins, minerals and dietary fibre. Dietary fibre promotes digestion, and stops you from feeling hungry. Types of bread such as brown and wholemeal are very healthy as they are very high in fibre and make you feel full, meaning that you are less likely to snack between meals. Depending on whether you do a lot of physically challenging work during the day, it is perfectly healthy to eat roughly 5 to 12 slices of bread per day. It does not make sense to compensate for using too much butter or fatty spreads by eating one

less slice of bread. In doing this you would be depriving yourself of essential nutrients. If you are worried about your figure, try replacing chocolate spread, salami or high-fat cheese with turkey or chicken breast, low-fat cheese or some stewed apple.

#### Rice, Potatoes and Variation

Potatoes are delicious, nutritious, low in fat and contain enough vitamin C to make a lemon envious. They can be boiled, steamed, baked, grilled, roasted or mashed. Ideally people should aim to eat between 3 to 5 potatoes a day, yet most of us only usually around 1½ per day. For those who do not like potatoes, rice can be a useful and similar alternative. However, rice does not contain vitamin C, those eating rice instead of potatoes would need to get the daily intake of vitamin C from another food source. As a general rule it is advisable to eat 20g of rice, pasta or other cereal products for every potato that you eliminate from your diet.

Brown or coated rice again contain a lot of fibre and are therefore healthier than other types of rice available. Cereal products such as bulghur, couscous, barley, spelt or quinoa are other healthy alternatives to rice.

#### Pasta

Nowadays, you will often find pasta at the top of the black list of 'fattening foods'. This is not true; in fact nothing could be further from the truth. Pasta provides essential nutrients, just like bread and rice. Unfortunately, the properties of pasta are often confused with the sauces poured over them. It is very tempting to add a little extra cream to your pasta sauce, or cheese, or perhaps fried mince or diced bacon. The ready-made sauces that you can buy may well be practical, but when you read the small print on the label closely you will generally see that it is not the pasta itself that leads to weight gain, but the sauce. Burying your plate of pasta under grated cheese is not a good idea either. Cream and cheese can be eaten as part of a balanced diet, but only in moderation.

In general, vegetable sauces (usually made from tomato, courgette or peppers) are a better choice than cheese or cream sauces. Wholemeal pasta is not only tastier, but also healthier, as it contains more fibre. Experiment with a sauce made from different types of vegetables. High-fat grated cheese can easily be replaced with a light variant, and as for the diced bacon: only eat it in moderation.

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# PRINCIPLES OF FIRST AID AT SEA

The primary purpose of this article is to help medically untrained seafarers assist in the immediate care of a colleague who has suffered a heart attack or a stroke at sea, but the basic principles apply to any medical emergency.

#### Assess the Scene

The first action on coming across anybody in obvious medical distress is to assess the immediate scene. Quickly evaluate if there are any possible dangers either to you or the patient, and whether such danger may lead to further injuries.

#### Raise the Alarm

The next priority is to summon help and raise the alarm.

#### Assess the Patient

Having done a safety check and summoned help, undertake an 'ABC' evaluation of the patient to assess life-threatening conditions, this should take no more than 60 seconds. as follows:

- Airway check the patient's airway is open. A noise accompanying the intake and output of air from the chest indicates some form of obstruction, so place the patient carefully onto their side in the recovery position, with support for the head such as a pillow. If breathing is still noisy, check if there is any obstruction in the mouth, such as false teeth, and quickly remove it.
- Breathing check the patient is actually breathing, by watching for a rise and fall of the chest. Measure the rate of respiration on each intake of breath, the normal rate is 12-20 breaths per minute, more or less than this will require oxygen.

 Circulation – check the presence and regularity of the pulse at the wrist and estimate the rate – the normal rate is 70-80 beats per minute. A simple test for circulation is to press the patient's thumbnail with your own, remove the pressure and then measure the time for the patient's nail bed to return to its normal pink colour. This is capillary refilling and should be less than two seconds.

#### Level of Consciousness

Finally assess the patient's level of consciousness using the mnemonic 'AVPU', as follows:

- Alert Awake, speaking and responding to questions.
- Verbal stimulus responds to direct verbal commands.
- Painful stimulus responds to pain, such as pinching the skin.
- Unresponsive no response to any of the above.

#### Record and Repeat Checks

Once the initial checks are undertaken, repeat and record the results every 3-4 minutes until assistance arrives. Note any changes in pulse, or rate of breathing and maintain the patient lying in the recovery position, as shown in the picture below.

The management of the patient over the next 24-48 hours, assuming that the vital signs of pulse and respiration are maintained, can be greatly aided by keeping a simple record at regular intervals and transmitting this to a doctor as soon as possible.



Gary Clifton Claims Executive

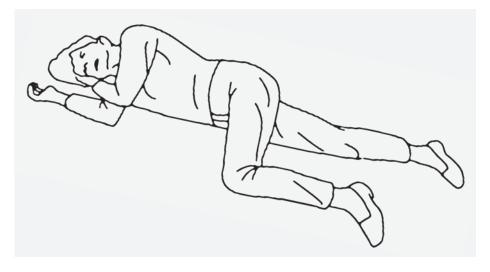
#### Using Simple Equipment

The availability on board of simple and inexpensive monitoring equipment can be particularly useful to help seafarers record a patient's temperature, blood pressure and pulse as well as partial pressure of oxygen (pO2).

For example, a blood pressure monitor can simply be strapped around the patient's wrist so that its sensor picks up the pulse, while a pulse oximeter fitted onto any finger measures the transfer of oxygen across the lung surfaces. Crew members should be regularly trained in the use of such equipment, and spare batteries should be kept.

All data obtained on the patient should be transmitted to a medical call centre as soon as practicable, where a doctor can advise on treatment using the ship's medical supplies until the patient can be transferred to hospital. Electronic photographs should also be sent if possible.

North is grateful to Dr W J Baker, Medical Director to MRI Ltd, for the information provided in this article. Tel: +44 1962 735 955. Email: joe.baker@medrescint.com







## WEST AFRICAN MARITIME CRIME

The increase in maritime crime in West Africa is of great concern to Members and seafarers who operate in that region. In the following article, James Mainstone from Gray Page – a specialist maritime intelligence, investigation and crisis management company – provides an overview of the current situation and action that ship operators can take to protect their vessels and seafarers.

An increasingly common mistake is to talk, or write, about West African (more specifically, the Gulf of Guinea, including the Bight of Benin and the Bight of Bonny) 'piracy' and immediately draw parallels with Somali piracy. But if you want to mitigate the risk in the Gulf of Guinea, you must first understand the threat there, not in the Indian Ocean.

We have deliberately termed the threat 'West African crime', not piracy, because acts of piracy in the Gulf of Guinea are a sub-set of broader criminal activities which cross borders, touch all natural environments, and reach into society, commerce, law enforcement and government. Somalia, on the other hand, is different. There, piracy is a largely self-contained criminal activity which has developed, for self-protection purposes, a small number of links into clans, regional government and local security forces. In short, maritime crime is firmly established within West African societies, but not within Somalia.

The activities of West African criminals and militants often transcend borders. The numerous gangs and groups use different methods of attack; determining which gangs your crew and ships are at threat from should be one of the first steps in any threat assessment. In no particular order, criminal activities in the region include:

- Kidnap for ransom in the Niger Delta region, including offshore platforms, support vessels and riverine vessels. Here, heavily armed militants and criminals use manoeuvrable speedboats to attack vulnerable targets.
- Theft of crude oil and fuel oil, particularly in Nigeria's coastal and offshore regions.
   Methods include the tapping of pipelines, and illegal transfers from vessels, refineries and temporary storage facilities.
- Cargo smuggling and fraud, particularly refined petroleum products.
- Cargo theft, of various commodities, not just petroleum products.
- Robbery of vessels at anchor. Items taken can include cash, valuables and personal possessions, as well as the pilfering of containers.
- Vessel hijack for the purpose of cargo theft. The primary targets are refined petroleum products, particularly gasoline.

Of the criminal maritime activities listed above, we apply the term 'West African piracy' to the attacks where the intent is to hijack the vessel for cargo theft or to kidnap individuals for ransom. Many of these criminal activities, not just those that could be termed as 'piracy', are linked to one another, and incidents across the board are significantly under-reported.

#### Robbery and Hijack Trends

So how do you protect vessels, cargo and crew? We are most often asked about the 'robbery' and 'vessel hijack for cargo theft' threats, so it makes sense to pick out some trends relating to these two criminal activities:

- The gangs that rob vessels are probably different to those that conduct the significantly more complex crime of hijacking for cargo theft.
- Most robberies are against vessels at anchor or drifting, usually at night. The attackers use small skiffs and are lightly armed, for example with knives or perhaps small arms. The attackers can be violent but they rarely kill crew members. Anchorages off Nigeria, Benin and Togo are at greatest risk.
- Vessels have been hijacked for cargo theft while conducting ship-to-ship (STS) operations, at anchor, drifting or making way. Thus, any counter-hijack plan should take into account all aspects of likely vessel operations. In very general terms, the hijacking of vessels making way has been more common south of the Niger Delta, while the hijacking of vessels at anchor, drifting or conducting STS operations is more common in the Bight of Benin. Ships are sometimes targeted specifically with knowledge of the vessel (including location, cargo, and operations) being passed locally to criminal gangs, which may not be local. The gangs target refined petroleum products, particularly gasoline, and will often steal between 5,000 and 10,000t.
- Typically, pirates will attack the vessel they plan to hijack at night and use small arms. They can be violent but do not aim to kill crew members. The vessel will be ordered to sea where the pirates' lighter vessel will conduct an illegal STS. The total length of hijack can be up to a week. Hijack for cargo theft is likely to dovetail with many of the other criminal activities listed earlier and thus the pirate gangs are able to identify lighter vessels willing to conduct illegal STS operations and able to sell the cargo into the black market. Widespread corruption makes it harder to counter the threat, and exceptionally difficult to locate assets once hijacked or stolen.

#### Counter-Hijack Security Measures

Each vessel at risk must have its own counter-hijack plan. The following are some factors that should be considered:

- The West African criminal gangs are more sophisticated than the Somali pirates. They have better vessel/cargo intelligence, access to weaponry, knowledge of shipping operations, links into black markets and corrupt government/law enforcement officials. Thus, one obvious strategy would be to try and limit knowledge of the most vulnerable locations, such as STS locations and anchorages, and to closely monitor the vessel while at these locations. Another would be to thoroughly assess the strengths and weaknesses of local military and law enforcement agencies to determine whether they might form part of your counter-hijack plan. Good surveillance and communications will improve your ability to warn and utilise those local military/law enforcement agencies that you assess as being capable of providing timely, effective support.
- A good watch and surveillance plan is essential, particularly at night. Take professional advice on the costs, strengths and weaknesses of the various night vision devices that are available.
- Ensure an emergency communications and tracking plan is in place before the vessel enters the Gulf of Guinea.
- If you are thinking of employing private or government-linked armed guards, take professional advice when you assess the capabilities of the various providers. This area of security is much less mature in West Africa than it is in the India Ocean, and the more complex shipping operations impose additional difficulties, as do local laws and regulations, particularly in territorial waters.
- Because the pirates attack vessels that are stationary, physical defences must be of a particularly high standard. This is an area where comparisons with Somali piracy must be avoided. The Gulf of Aden/Indian Ocean Best Management Practices (BMP) guide has been consistently weak on the subject of physical defences. Dummies, fire hoses, and a coil of loose razor wire do not protect moving vessels from Somali pirates, so they won't protect stationary vessels from West African pirates. It would be better to think about physical defences on board vessels in West Africa in the way you would think about protecting the perimeter of a sensitive land-based establishment from criminals, protestors, or terrorists.

The Club is grateful to James Mainstone from Gray Page for providing this article. Gray Page, Willow Barn, Willow Park, Cumnor Road, Oxford, OX2 9NX, United Kingdom. Tel: +44 1865 861 400. Email: enquiries@graypage.com www.graypage.com

# SPARE PARTS - HAVE YOU GOT ENOUGH?



Main engine spare parts.

While a typical seafarer would probably say there can never be too many spare parts on a ship, the view of most superintendents and ship operators is likely to be different. There are budgets to control, overhauls to be properly scheduled and service agreements to consider.

Identifying and maintaining appropriate stock levels of spare parts on board can therefore be quite difficult. The best approach to identify a proper minimum level of spares that should be carried.

#### Costing the Consequences

When deciding on a minimum spares level, consideration must be given to what would happen in the event of a piece of critical machinery breaking down when on passage or berthed in a remote port. For example,

if a cylinder liner failed on the main engine while on passage, would the crew be able to carry out repairs and complete the journey to the discharge port without excessive and unreasonable delay? If a fuel injector failed on an auxiliary engine of a fully laden reefer ship, could it be replaced before the cargo hold temperatures rise and the cargo starts to spoil?

The failure of critical machinery can result in costly complications, whether it is damage to cargo or breach of charterparty requirements.

#### **IACS** Recommendations

Members can obtain guidance on the recommended minimum stock levels of spare parts for critical machinery from various sources. For example, the International Association of Classification Societies (IACS) has issued recommendations 026 to 030 detailing the type and minimum numbers of spare parts to be held on board. Each classification society then issues its own guidance based on this criteria, often to a higher standard.

Members wishing to confirm the guidelines appropriate to their ships should therefore consult the relevant classification society's rules and regulations.

#### **Using Appropriate Parts**

Care must also be taken when purchasing and using spare parts for internal combustion engines, be it main engines for propulsion or auxiliary engines for power generation. Attractively priced parts and components are readily available on the market, but these may be sub-standard or counterfeit. The use of such parts must be carefully considered as their premature failure can result in catastrophic damage to machinery, resulting in costly repairs and down-time.

Additionally, engines built or retrofitted after 1 January 2000 and rated above 130 kW must comply with the regulations for the prevention of air pollution in annex VI of the International Convention for the Prevention of Pollution from Ships (MARPOL).

Such engines need an Engine International Air Pollution Prevention (EIAPP) certificate. This includes a requirement for a nitrogen oxide (NOx) technical file to be maintained on board the vessel, which must be updated when any NOx-influencing engine parts are replaced and details of their serial numbers and International Maritime Organization markings recorded accordingly.

#### SCRAP THE SHIP, BUT WHAT ABOUT ITS OWNER?

In the current market, Members may be scrapping or selling some vessels and preparing to purchase others, but if there is an ongoing P&I or FD&D claim they should think twice before closing the ship-owning company too.

When a vessel is to be scrapped or sold it is also common for the company that legally owns the ship to be dissolved and removed from its national company register, wherever this may be. However, if there is a prospect of making a recovery against another party, such as a charterer, it may be preferable for the ship-owning company to remain in existence.

#### Dissolution Prevents Recovery

Once a ship-owning company has formally concluded the process of dissolution, the company ceases to exist as a legal entity. This means the company cannot be a claimant in any future legal proceedings.

North, in turn, will not be able to support a Member in pursuing a recovery action as the Club cannot be a party to the proceedings. This could leave Members having paid out incurred losses but unable to pursue any recovery action.

An example is claims made under the Inter-Club Agreement. A third party substantive claim may have been completed, or be continuing, when the vessel is sold and the ship-owning company dissolved. The dissolution will prevent the Member from being able to pursue any recovery action under the Inter-Club Agreement.

It does not matter that the Member may have already notified the claim under the Inter-Club Agreement within the time-bar period; if the company no longer exists there is no principal to commence proceedings, should this be required.

### Varies from Country to Country

The precise details of each situation will depend on the applicable jurisdiction.

In some countries, once the dissolution is complete and the legal entity ceases to exist, its shareholders at the time of completion of the dissolution are deemed to be its successors in title and may be entitled to any net proceeds of the liquidation and, under certain circumstances, they may be called to meet and pay taxes or other obligations of the dissolved company.

In such circumstances the shareholders could be held to have legal personality and they could commence proceedings. Alternatively, in some jurisdictions, the company may be reinstated to the register. This will vary from country to country and it is always recommended that the Club is informed before any company dissolution takes place so that an assessment can be made as to whether this may have any detrimental effect on any claims the Club is handling for Members.



## SANCTIONS

#### Europe

Since the last issue of *Signals* the most significant development with regard to sanctions against Iran has been that EU regulation 267/2012 has come fully into force and the grace periods for the carriage of petrochemical and oil cargoes have now expired.

The ban on carriage of Iranian petrochemical cargoes came into force on 1 May 2012 and on oil cargoes on 1 July 2012. It is now unlawful for shipowners and operators based in the EU to carry these cargoes and for P&I clubs based in the EU to insure their carriage. Even though it is not unlawful for North's Members which are not in the EU to carry such cargoes, the Club cannot cover their carriage.

As well as applying to oil cargoes, the regulation also applies to bunkers that may be of Iranian origin, whether wholly or in part. This is potentially problematic as it is well known that bunkers supplied in various parts of the world, not least in Singapore and various ports in the Arabian Gulf, contain oil that is of Iranian origin.

If Members do take bunkers that have an Iranian component they will unfortunately be without cover. It is therefore important for Members to make proper enquiries with their bunker suppliers, or with their charterers if they are arranging the stem, to ensure that there is no Iranian oil in the fuel. Further guidance on this issue was added to the International Group of P&I Clubs' frequently asked questions document on 25 May 2012, a copy of which can also be found on North's website.

#### USA

In the USA the proposed '180 day rule', which would ban any ship that has been to Iran, North Korea or Syria in the previous 180 days, has still not come into effect and there are no clear indications of when or if it will do so.

However, on 1 May 2012 the President issued a new executive order targeting non-US individuals and entities which violate US sanctions against Iran and Syria. In the event of any violation, shipowners and operators face the prospect of being excluded from access to the US financial system.

Even if Members are not US-based or do not have any US connection, they should therefore exercise caution if they continue to have any dealings with Iran or Iranian companies to ensure that they do not act in any way which is inconsistent with US sanctions.

Generally the position with regard to sanctions, particularly against Iran, remains fluid and further developments are likely. Members should therefore continue to monitor the Club's website where news of relevant developments will continue to be posted as and when they occur.



#### PERFORMANCE CUARANTEES BY EMAIL

A recent court decision has clarified the English legal position regarding emailed guarantees of a charterer's performance.

Performance guarantees are legally binding agreements by which a third party guarantees a charterer's obligations under a charterparty. Shipowners generally request a guarantee where the charterer is a newly formed entity.

However, the UK 1677 Statute of Frauds requires guarantees to be in writing and signed by the guarantor or someone lawfully authorised by the guarantor. How does this apply in today's age of electronic communications?

#### Application to Modern Practice

In the recent 2012 case of Golden Ocean Group v. Salgaocar Mining Industries (EWCA Civ 265), the UK Court of Appeal considered the application of the 1677 statute to modern business practices, particularly in relation to negotiation of a charterparty and guarantee between brokers by email.

In January 2008, negotiations began between Golden Ocean Group as owner and Salgaocar Mining Industries (SMI) for chartering a new vessel. SMI's broker identified nominated charterer Trustworth as 'fully guaranteed' by SMI.

Detailed charterparty terms were agreed, but no written guarantee was drawn up and the charterparty was never signed by Trustworth or SMI. Trustworth refused to accept the charterparty and Golden Ocean Group sought to recover from SMI under the purported guarantee.

SMI contended that the guarantee was unenforceable under the Statute of Frauds. However, the court held that it was arguable that the agreement contained in the emails was an agreement in writing for the purposes of the statute, without the need for all terms to be included in one document.

The court also found that the signature requirement was satisfied and the signature on the final email, assuming the broker's authority, was to be regarded as authentication of the contract or guarantee contained in it. The court said that it had no doubt that this was sufficient to meet the underlying requirement of the statute, namely to authenticate the contents of the guarantee. The question as to whether the broker had the necessary authority to provide the guarantee is to be dealt with at a later date.

#### Need for Necessary Authority

Whereas the case is potentially useful to Members in establishing a guarantee which has not been formally drawn up, the person giving the guarantee must have been authorised to do so. The mere fact that there are exchanges in relation to the guarantee means nothing without this authority. To this extent, the scope and effect of the case is limited.

In practice, North would always recommend that Members take the following steps when obtaining a performance guarantee:

- Ensure that a signed, written guarantee is obtained.
- Ensure that the guarantor sees the final terms of the charterparty before signing the guarantee.
- Ensure that the guarantor signs the guarantee before the charterparty is entered into or simultaneously with the charterparty being entered into.
- Ensure that any amendments to the charterparty are drawn to the attention of the guarantor.
- Check that the guarantee will be enforceable in the country where the guarantee is. There may, for example, be registration requirements and local legal advice may be required.

If Members are in any doubt, please contact the Club's FD&D team.

# NEW US BALLAST WATER RECULATIONS

Earlier this year the US Coast Guard (USCG) issued regulations on Standards for Living Organisms in Ships' Ballast Water Discharged in US Waters, which amend existing regulations for managing ballast water and create a standard for the allowable concentration of living organisms in ballast water discharged in LIS waters

#### Management Methods

The regulations require all vessels with ballast tanks bound for or departing US ports, with certain exemptions, to utilise one of the following methods for managing ballast water:

- Install and operate a management system for ballast water that has been approved by the USCG.
- Use only water from a US public water system as ballast water. Vessels using a public water system must meet certain tank cleanliness requirements and use such water exclusively.
- Perform complete ballast water exchange in an area 200 nautical miles from any shore prior to discharging ballast water unless the vessel is required to employ an approved ballast water management system. An alternative management system may also be used so long as it was installed on the vessel prior to the date the vessel is required to comply with the ballast water discharge standards.
- Do not discharge ballast water into US waters.
- Discharge all ballast water to an onshore facility or another vessel for treatment.

#### Compliance Dates

USCG has clarified that only vessels that discharge ballast water while in US waters require installation of a ballast-watermanagement system and not simply the presence of ballast tanks. The compliance date varies based on the date of construction and the ballast water capacity, as follows:

- All new vessels constructed on or after 1 December 2013, regardless of ballast water capacity, must comply on delivery.
- Existing vessels with a ballast water capacity between 1500 and 5000 m<sup>3</sup> must comply by the first scheduled drydocking after 1 January 2014.
- Existing vessels with a ballast water capacity less than 1500 m<sup>3</sup> or greater than 5000 m<sup>3</sup> must comply by the first scheduled drydocking after 1 January 2016.

#### **General Practices**

The regulations require all vessels to follow a number of general non-indigenous species reduction practices, such as:

- avoiding or minimising the uptake of ballast water in a variety of situations;
- avoiding the uptake or discharge of ballast water near marine sanctuaries, preserves, parks and reefs;
- cleaning ballast tanks regularly to remove sediments:
- discharging only the minimal amount of ballast water essential for operations;
- rinsing anchors and anchor chains when retrieved:
- removing fouling organisms from the hull, piping and tanks on a regular basis;

- maintaining a ballast water management plan developed specifically for the vessel; and
- training the master and crew.

#### Record Keeping

All vessels bound for a port or places in the USA are required to maintain accurate written records relating to all ballast water related operations and activities.

Vessels are also required to submit vessel and ballast water management information to USCG at least 24 hours prior to arrival.

All ballast water management related records should be maintained on board for two years.

#### Exempted Vessels

USCG has, at present, granted exemptions from the regulations to some vessels provided the general non-indigenous species reduction practices are being complied with. The vessels currently exempted are:

- Crude oil tankers engaged in coastwise trade and vessels that operate exclusively in one Captain of the Port (COTP) zone.
- Seagoing vessels that operate in more than one COTP zone, do not operate outside of the Exclusive Economic Zone and are less than or equal to 1600 GRT or 3000 GT.
- Non-seagoing vessels.
- Vessels that take on and discharge ballast water exclusively in one COTP zone.

The USCG regulations on Standards for Living Organisms in Ships' Ballast Water Discharged in US Waters can be downloaded from the US government website: www.gpo.gov/fdsys/ pkg/FR-2012-03-23/pdf/2012-6579.pdf

# US VESSEL CENERAL PERMITS

The US Environmental Protection Agency's (EPA) 2008 scheme of 'vessel general permits' for discharges incidental to normal operations ends in 2013 and is likely to be replaced by a more rigorous regime.

The permits authorise routine discharges within three nautical miles of the US coastline. The regulated discharges cover 26 waste streams and include, for example, discharges of:

- Seawater cooling water.
- Fire-main systems.
- Chain-locker effluents.
- Deck washings.
- Grey water.
- Ballast water.

#### Notification of Intent

To obtain vessel general permits under the 2013 programme, operators of vessels over 300 GT must file a 'notification of intent' with EPA. Thereafter ship operators must ensure that they complete:

- detailed annual inspections and file inspection reports;
- routine visual inspections, which must be recorded in the ship's log; and
- non-compliance records.

The 2013 scheme includes new and more stringent numeric, technology-based effluent limitations for ballast water, including sample testing at state-certified laboratories. This requirement represents a new cost and an administrative concern for ship operators.

North understands that the 2013 permits will be more rigorously enforced than those under the 2008 programme. Members are thus encouraged to pay early attention to all requirements of the 2013 scheme to ensure their internal systems are fully in place by the anticipated introduction date of December 2013.





### KEEPING DRI BRIQUETTES WHOLE AND DRY



Hot moulded briquettes of direct reduced iron (DRI) are one of three DRI derivatives listed in the International Maritime Solid Bulk Cargoes (IMSBC) Code, but are the only type that can be carried without an inert gas blanket. This is because the hot-briquetting process used to produce so-called 'DRI A' effectively reduces its reactivity.

However, ship operators and crew members should not be lulled into a false sense of security, believing DRI A is 'safe' to carry. The danger for sea transport is that the chemical process which removes oxygen and increases the iron content in the production of DRI can be reversed by exposure to air and moisture or water. Carriage by sea will always take place in an environment where there is airborne moisture and potential for exposure to water.

In simple terms, carriage by sea of DRI and its derivatives can always create a potentially dangerous situation. The IMSBC code entry for DRI A lists over 20 individual tasks that must be completed before, during and after loading, during the voyage, and before discharge. It is not a task that should be entered into lightly.

#### **Avoiding Broken Briquettes**

One key factor in the carriage of DRI A is to ensure that the cargo is composed of complete briquettes so that the potential reactivity is reduced to a level where carriage without an inert gas blanket is possible. The code requires that there must be precautions in place during loading to ensure that the cargo is mainly composed of briquettes and that any broken briquettes and fines do not exceed 5%. After loading, a competent person must provide a certificate stating this is the case.

The code allows the carriage of DRI A with, 'surface ventilation only, either natural or mechanical'. If the cargo has not been certified as 'composed of essentially whole briquettes' and has a high proportion of broken briquettes and fines, the potential for reaction with oxygen to produce heat and reaction with moisture or water to produce hydrogen is significantly increased.



Andrew Kirkham Risk Management Executive

#### **Intrinsically Safe Ventilation**

Heating of the cargo can produce significant amounts of ship's sweat which, on contact with the cargo, will release hydrogen. If the ship is relying on natural ventilation only and underway, then surface ventilation may be sufficient to reduce the hydrogen concentration. If bad weather or a stop on voyage prevents natural ventilation then, without intrinsically safe mechanical surface ventilation, the hydrogen concentrations may rapidly increase towards its lower explosive limit.

In view of the above it would be prudent to consider only carrying DRI A where intrinsically safe mechanical surface ventilation is available. Shipowners and operators should also bear in mind that any ventilation at sea has the potential of exposing the cargo to moisture and, during bad weather, no surface ventilation will be possible.

#### PROTECTING ACAINST RO-RO ROAR



Seafarers expect to see 'Wear Ear Defenders' signs when they enter a ship's engine room but what about in cargo decks? Take car-carrier and ro-ro decks for example, there are cracks and bangs from flexible decks and ramps, squealing tyres, vehicle engine noise, lashing gear noise and high levels of persistent background noise from ventilation fans.

Marine consultant and surveyor CF Spencer & Co Ltd has been measuring noise levels on vehicle decks and has consistently recorded over 80 dB, with peak levels often exceeding 100 dB. Both exceed the typical current legal limits for the provision of ear defenders, although national and flag requirements may vary.

The firm recently advised all owners and operators of car carriers and ro-ros to determine whether an issue exists with noise levels in respect of all people (including crew, stevedores, surveyors and agents) working on vehicle decks. They recommend providing 'wear ear defenders' signage at the entry points and making ear protection available to demonstrate a reasonable duty of care to those working on the vehicle decks.

According to the firm, the risk of people wearing ear protection equipment and not hearing vehicles approaching should not really be a problem as they should also be wearing high visibility clothing and vehicles should be proceeding at an appropriate speed. It also points out that with the rise in shipments of electric vehicles, which make little or no noise when being driven, workers will not be able to hear them approaching with or without hearing protection unless their horns are sounded.

Members operating car carriers and ro-ros should therefore consider measuring noise levels on vehicle decks during cargo operations. If significant, they should then consider providing appropriate signage and personnel protective equipment to people working in such areas.

North is grateful to CF Spencer & Co Ltd for the information provided in this article. C F Spencer & Co Ltd, The Old Malt House, West Street, Banwell, Somerset, BS29 6DB, UK. Tel: +44 1934 822 666. www.cfspencerandcoltd.com



# NICKEL ORE -MANDATORY NOTIFICATION



Source: Ken Grant.

Following discussions with the Indonesian authorities as reported in Signals 87, North has issued a Club Circular (2012/023) entitled Dangers of Carrying Nickel Ore from Indonesia and the Philippines – Mandatory Notification Requirements. Other clubs in the International Group of P&I Clubs have issued similar circulars.

This mandatory notification circular requires Members who plan to fix or charter a ship to load nickel ore from ports in Indonesia and the Philippines, or where under an existing fixture a ship is ordered to load such cargo, to contact North at the earliest opportunity and, where possible, provide the following information:

- ship name:
- port/anchorage of loading and estimated time of arrival;
- date of intended loading;
- charterer/shipper details;
- agent details; and
- a copy of the shipper's cargo declaration and supporting certificates.

The information is designed to ensure that North can provide Members with information on the hazards associated with the carriage of nickel ore. Although it is considered improbable that risks can be completely excluded, it is hoped that this information will enable Members to more accurately determine appropriate precautionary measures in advance of agreeing to load this cargo.

It is intended that over a period of time the information will also help to identify organisations that are following the requirements of the International Maritime Solid Bulk Cargoes (IMSBC) Code and those that are not.

Members can view Club Circular 2012/023 on North's website: www.nepia.com/ publications/clubcirculars/pandicargo/ 1259/nepia.com





Nickel ore with excessive moisture content. Source: Ken Grant.



Andrew Glen Manager

# IMO TAKES ACTION ON CROUP A

The International Maritime Organization (IMO) Maritime Safety Committee (MSC) discussed two papers concerning cargo liquefaction at its meeting in London in May this year (MSC 90). These related to cargo categorised in the International Maritime Solid Bulk Cargoes (IMSBC) Code as Group A, which may liquefy if shipped at moisture content in excess of its transportable moisture limit.

Intercargo submitted a paper co-sponsored by BIMCO, the International Chamber of Shipping, the International Union of Marine Insurance and P&I clubs. This urged the early utilisation of additional measures agreed during the IMO Subcommittee on Dangerous Goods, Solid Cargoes and Containers meeting in September 2011 (DSC 16) to control the moisture content of Group A cargoes, prior to the mandatory application of such measures in January 2015.

China also submitted a paper suggesting the same early implementation, additionally proposing an MSC circular to this effect. The committee agreed and a circular will be issued in the near future.

The measures agreed at DSC 16 include requirements for:

- Shippers to have in place procedures for the control of moisture content, approved by the competent authority.
- Certificates or declarations of transportable moisture limit and actual moisture content to be issued by an entity recognised by the competent authority.
- Shippers to facilitate access to stockpiles for the purpose of inspection, sampling and subsequent testing by the ships' nominated representatives.

The IMO circular will urge early implementation of these measures on a voluntary basis.



### IMO UPDATE



#### Passenger Ship Safety

The International Maritime Organization's (IMO) Maritime Safety Committee (MSC) agreed in May 2012 on a series of voluntary interim safety measures for passenger ships while awaiting the findings of the official investigation into the loss of the Costa Concordia.

IMO member states have been asked to recommend that passenger ship operators flying their flag conduct an urgent review of operational safety and consider implementing MSC's interim measures, which include the following:

- Carrying additional lifejackets, to be readily accessible in public spaces at muster stations, on deck or in lifeboats, so that in the event of an emergency passengers need not return to their cabins to retrieve the lifejacket stored there.
- Reviewing the adequacy of the dissemination and communication of the emergency instructions on board ships.
- Carrying out a muster for embarking passengers prior to departure from every port of embarkation, if the duration is 24 hours or more.
- Limiting access to the bridge to those with operational or operationally related functions, during any period of restricted manoeuvring or while manoeuvring in conditions that the master or company bridge procedures deems to require increased vigilance.
- Ensuring that the ship's voyage plan
  has taken into account IMO's guidelines
  for voyage planning and, if appropriate,
  guidelines on voyage planning for passenger
  ships operating in remote areas.

#### **SOLAS** Amendments

MSC also adopted at its May 2012 meeting the following amendments to the International Convention for the Safety of Life at Sea (SOLAS), which are expected to enter into force on 1 January 2014:

- Chapter II-1, regulation 8. Introduces a mandatory requirement for new passenger ships for either onboard stability computers or shore based support for the purpose of providing operational information to the master for safe return to port after a flooding casualty.
- Chapter III, regulation 20. Requires that the operational testing of free fall lifeboat release systems shall be performed either by free fall launch with only the operating crew on board or by a simulated launching.
- Chapter V, regulation 14. Requires administrations to establish appropriate minimum safe manning levels taking into account the guidance adopted by IMO resolution A.1047(27) on principles of minimum safe manning and issue an appropriate 'minimum safe manning' document or equivalent.
- Chapter VI, regulation 5. Prohibits the blending of bulk liquid cargoes during the sea voyage and prohibits production processes on board ships.
- Chapter VII, regulation 4. Replaces existing regulations on documents covering transport information relating to the carriage of dangerous goods in packaged form and the container/vehicle packing certificate.
- Chapter XI-1, regulation 2. Makes mandatory the International Code on the Enhanced Programme of Inspections during Surveys of Bulk Carriers and Oil Tankers, 2011 (ESP Code) according to IMO resolution A.1049(27).

#### **Load Lines Amendments**

MSC further adopted amendments to regulation 47 of the International Convention on Load Lines to move the winter seasonal zone off the southern tip of Africa further southward by 50 nautical miles.

The amendments are expected to enter into force on 1 January 2014 under the tacit acceptance procedure.



#### Other Code Amendments

Finally MSC adopted amendments to the following codes which are mandatory under SOLAS, with expected entry into force on 1 January 2014:

- International Code of Safety for High Speed Craft (HSC Code), relating to radio communication and testing of satellite emergency position-indicating radio beacons (EPIRB).
- International Code for Fire Safety Systems (FSS Code) relating to fixed foam fire extinguishing systems and automatic sprinkler, fire detection and fire alarm systems.
- International Maritime Dangerous Goods (IMDG) Code and supplements (amendment 36-12), including harmonization of the code with the amendments to UN recommendations on the transport of dangerous goods. Amendment 36-12 will enter into force on 1 January 2014, but contracting governments may apply the amendments in whole or in part on a voluntary basis from 1 January 2013.

#### LIABILITY LIMITS LEAP

In April 2012 the International Maritime
Organization agreed to amend the 1996
Protocol to the 1976 Convention on Limitation
of Liability for Maritime Claims (LLMC) to step
up the liability limits for maritime claims.

The significant increases have been adopted in light of rising claims values over recent years, particularly for bunker spills, as well as inflation. The new limits are expected to come into force on 19 April 2015.

#### **Property Claims Liability**

The limit of liability for property claims for ships not exceeding 2,000 GT will rise from 1 million SDR to 1.51 million SDR (1 SDR is currently worth around US\$1.5). For ships over 2,000 GT, the following additional amounts will be used in calculating the limitation amount:

- 2,001–30,000 GT: 604 SDR per GT (was 400 SDR).
- 30,001–70,000 GT: 453 SDR per GT (was 300 SDR).
- Over 70,000 GT: 302 SDR per GT (was 200 SDR).

In practical terms, the new limits mean a bulk carrier of 40,000 GT with a current fund for property claims of 15,200,000 SDR will, from 19 April 2015, have to raise this to 22,952,000 SDR. A very large crude carrier of 160,000 GT with a property claims fund of 42,200,000 SDR will have to raise this to 63,722,000 SDR – equivalent to nearly US\$100 million.

Separate increased limits have been adopted for loss of life and personal injury claims.

## NORTH P&I TRAINING COURSES

#### Successful 20th **UK Training Course**

40 delegates from ship operators, insurance brokers, reinsurers, correspondents and marine surveying companies attended North's 20th annual residential training course in P&I insurance in the UK last month.

The course was a resounding success, with delegates particularly appreciating the expert guidance provided by staff from the Club's claims, FD&D, underwriting and loss prevention departments. They singled out the workshops as being of great benefit to helping them deal with various kinds of P&I claims, and particular praise was also given for the networking opportunities.

#### **Dubai Training Course**

As announced in Signals 87, a similar four-day residential training course is being be held in Dubai on 10-13 September 2012.



An overview of P&I insurance - scope of cover will be provided on the first day with some explanation of how P&I works with other marine insurance policies. The remaining three days will provide workshop based training looking at pollution, collisions, cargo, charterparties and people claims.

Although the course is already fully subscribed, Members who would like a place on the reserve list should contact Denise Huddleston at North. Email: rtc2012@nepia.com



A common problem faced by seafarers is trying to work out whether an ore cargo about to be loaded on board matches that described by the shipper. The latest in North's series of Cargo Wise posters

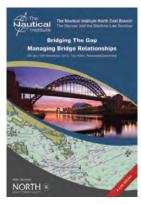
aims to offer assistance with identification.

Entitled Ore Cargo Types, the poster is designed to provide a quick visual reference for seafarers on the typical particle size and appearance of the main types of ore cargo - namely fines, concentrates, pellets, lump ore and lateritic ore.

It contains scaled photographs of each type along with a brief physical description, including liquefaction behaviour and categorisation under the International Maritime Solid Bulk Cargoes (IMSBC) Code. If there is any doubt that the cargo being offered is not what was expected, seafarers should be instructed to stop loading and seek expert advice.

Copies of the new Cargo Wise poster -Ore Cargo Types – are enclosed with this issue of Signals for appropriate entered ships. North's loss prevention publications can also be viewed at and downloaded from the Club's website: www.nepia.com/lossprevention/publications-and-guides

# LATIONSHIPS



The Nautical Institute's north east England branch, in partnership with North, is dedicating the 18th biennial 'The Mariner and the Maritime Law' seminar to managing relationships on ships' bridges.

Entitled Bridging the Gap, the seminar will take place in November 2012 and features leading industry experts explaining and examining all aspects of bridge relationship management.

#### Free Places for Seafarers

North is sponsoring a number of free places on the seminar for serving seafarers and students. Members can take full advantage of these for their seagoing staff and trainees.

The seminar will take place at The Hilton, Newcastle Gateshead on 9 and 10 November 2012 and North will be delighted to welcome Members who can attend.

#### New COLREGS Guide

North is also planning to launch a new loss prevention guide about collision avoidance at the event.

The International Regulations for Preventing Collisions at Sea (COLREGS) are published by the International Maritime Organization (IMO) and provide rules to be followed in order to prevent collisions between vessels. North's new guide will highlight key collision avoidance rules and provide back-to-basics guidance for bridge watch keepers, which can then be discussed and practiced with included example scenarios.

Details of the seminar and a registration form can be viewed and downloaded from the Nautical Institute north east branch's website: www.ninebranch.org

For more information please contact Denise Huddleston at the Club: niseminar@nepia.com

# ALL LOSS PREVENTION PUBLICATIONS NOW ON CD

A CD is enclosed with this issue of Signals for Members and entered ships, which contains electronic versions of all North's most recent loss prevention publications. It includes guide books, briefings, 'Hot Spots', posters, checklists and back-issues of Signals.

Members and ship's staff should nevertheless check the website regularly to ensure they have the latest electronic editions.



#### New Video on Collecting Evidence

The CD includes North's loss prevention guide published in January last year, in association with The Nautical Institute, entitled The Mariner's Role in Collecting Evidence Handbook. A video loosely based on the guide has been produced by Videotel and is also included on the CD. It features a dramatised scenario following an incident in which a seafarer has a fall on board. It makes clear that collecting accurate, factual evidence will help establish the facts, in turn making investigations by surveyors, lawyers and others faster and more accurate.

Videotel Marine International, 84 Newman Street, London, W1T 3EU, UK. Tel: + 44 20 7299 1800. Email: sales@videotel.com www.videotel.com

# Signals Search 32 ②

#### **Ouestions**

- 1 The latest Cargo Wise poster shows information about which type of cargo?
- 2 What is the acronym for checking a person's level of consciousness?
- 3 Liability limits under which convention will increase in 2015?
- 4 Reporting when loading nickel ore from which country has been made mandatory by P&I Clubs?
- 5 What type of guarantees are legally binding agreements by which a third party guarantees a charterers' obligations?
- 6 Where will North's training course in P&I insurance be held in September 2012?
- 7 Potatoes and cereal products contain hardly any of what substance?
- 8 For which type of ship is the IMO recommending the voluntary introduction of new safety measures?
- 9 A ban on carriage of what type of Iranian cargo was introduced by the EU on 1 July 2012?

#### Your Copy of Signals

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

- Cargo Wise poster Ore Cargo Types (appropriate entered ships only).
- North publications CD, including Videotel "The Mariner's Role in Collecting Evidence" video (Members and appropriate entered ships only).

I	Ε	Χ	L	R	Υ	L	D	W	Α	I	R	Ε	J	Р
D	R	Н	U	Р	0	R	D	I	Т	V	С	J	Α	Υ
J	0	1	Т	S	Р	D	U	В	Α	I	Р	S	Υ	F
Κ	U	Ν	S	G	F	R	S	Α	٧	Z	S	U	Т	Т
D	R	D	G	L	Ν	Т	Ε	R	С	Е	M	Р	1	Е
S	J	0	W	V	J	Е	Ε	V	Ν	0	С	Χ	L	С
Α	Н	Ν	Z	G	Ν	S	R	G	Ε	U	L	С	Α	L
Р	Z	Е	V	F	Ν	W	Е	Т	R	Ν	M	Р	U	L
F	G	S	G	W	S	R	Z	Т	S	W	Т	Р	Q	M
Υ	Т		L	I	В	Α	Т	S	S	0	Т		Κ	С
Ν	S	Α	Т	Α	F	L	L	V	Τ	U	Ν	F	0	Z
С	Т	Υ	Q	S	J	F	Τ	1	Χ	Н	В	U	R	Ν
Т	0	٧	Υ	С	0	Е	Е	V	0	Е	Χ	J	С	Z
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F	F	Χ	Е	Z	U	Т	1	U	Τ	В	Z	Ε	Q	Н

- Signals Search is open to all readers of Signals.
- Send a photocopy 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 30 November 2012.

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*.

#### Answers to Signals Search 31

Lubricating
 Testicular

5 Grinding

6 SPRO 7 Blendina 8 Flash 9 Dubai

10 Guardcon

3 Athens4 Innocent

#### Signals Search 31 Winners

Winner: Captain MK Mohan, "Ham 312", Vanoord India PVT. Runners-up: Isaac Cintero – Caroil Transport Marine Ltd Captain Ashwani K Sharma, "Vinni", Bergshav Management

### 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 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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