

Signals

NEWSLETTER

NORTH 
SERVICE, STRENGTH, QUALITY



Welcome...

to this new-look issue of *Signals*. The design reflects improvements taking place across all North's printed and electronic publications, and we hope you like the new layout.

North wishes to ensure its loss prevention publications are delivered in a way that best suits individual reader requirements. Please see back page for more information.

Issue 87: April 2012

LOSS PREVENTION NEWSLETTER
FOR NORTH'S MEMBERS

Nickel Ore Warning

There have been a number of recent casualties involving ships carrying nickel ore cargo:

- LOST** October 2010 'Hong Wei' – 10 seafarers drowned
- LOST** October 2010 'Jian Fu Star' – 13 seafarers drowned
- LOST** November 2010 'Nasco Diamond' – 21 seafarers drowned
- LOST** November 2010 'Jianmao 9' – entire crew rescued by passing vessel
- LOST** December 2011 'Vinalines Queen' – 22 seafarers drowned

Nickel ore from lateritic sources is inherently dangerous for shipment and the lack of proper testing and storage by some shippers increases the risks associated with liquefaction.

Members fixed to load such cargoes, or who may be considering such a fixture, should contact the loss prevention department or their normal contact at the Club for advice and assistance.

IN THIS ISSUE

Signals continues to provide advice to seafarers about the key topic of health and fitness. Two different aspects are addressed in this issue, one is about taking exercise to burn fat and the other is about the critically important matter of male testicular cancer. Guidance is provided on how seafarers should examine themselves to ensure any problems are identified and treated at an early stage.

Three other topics – liquefaction, piracy and sanctions – continue to dominate shipping industry headlines and North is at the forefront of providing loss-prevention advice in these areas, including four articles in this issue of *Signals*.

The dangers of carrying liquefiable bulk cargoes continue to cause concern following the loss of the *Vinalines Queen* on 25 December 2011. An update is provided on the steps being taken by North to address the particular problems associated with the carriage of nickel ore.

To assist Members with their decision as to whether to carry armed guards as part of their best anti-piracy management practices, North launched a vetting programme to identify the capabilities of private maritime security providers in 2011. A number of common areas of concern about the employment of armed guards have been identified during this process, which are highlighted in this issue.

International sanctions against Iran and Syria are having a significant impact on international trade to those countries, and additional measures being implemented by the European Union and the USA are discussed in this issue. In December 2011 the Iranian Government threatened to close the Straits of Hormuz in a response to such measures. An article in this issue examines the rights of a coastal state to close its territorial waters.

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AVOIDING FLASH-POINT PROBLEMS WITH REFINED PETROLEUM PRODUCTS

North has noted a number of claims for contamination of refined petroleum products arising from a decrease in the flash point.

The ships involved were generally carrying a number of grades of cargo, usually middle distillates such as gasoil or jet fuel and light-distillates such as mogas or gasoline, or had carried a light-distillate fuel and its next cargo was a middle-distillate.

Two of the common causes of contamination and how to avoid them are considered here.

Improper Use of the Inert-gas System

Where a ship is carrying a mixture of grades, the decrease in flash point of a middle-distillate cargo can be caused by vapours from a light-distillate cargo passing through the inert-gas piping. This is demonstrated by the usual finding that top samples show the greatest decrease in flash point; middle samples show a lesser decrease; and bottom samples are very nearly on specification.

The significant contamination of a middle-distillate cargo by vapours from a light-distillate cargo via the inert-gas system can occur very quickly – two to three days in tropical areas is not unusual. It is important, therefore, that crews are careful to keep the inert-gas valves to each tank closed when not re-pressurising the tanks. A careful check should be maintained on tank pressures and a positive pressure should be maintained in each tank, especially when operating in areas where there is a significant variation in temperature between day and night.

If there is a possibility of tank pressures going into vacuum, the vessel's inert-gas plant may be used to re-pressurise the tanks. An example of good practice in this instance may be to run the inert-gas generator and blow through the main supply line. The inert-gas inlet valves to the tanks containing middle-distillates should be opened first, pressurised with inert gas and closed. The tanks containing light-distillates should be opened next, pressurised and closed. The inert-gas valve to each tank should be closed after pressurisation – no inert-gas valve should be left open.

Incomplete Purging of Tanks

When moving from a light-distillate cargo to a middle-distillate, a common tank-cleaning regime may involve washing or bottom-flushing followed by purging to reduce the hydrocarbon vapour in the tank atmosphere. A decrease in the flash point of a subsequent middle-distillate cargo is often caused by incomplete purging.

There are two possible factors involved:

- The inlet from the inert-gas system may be placed close to the pressure or vacuum valves. The inert-gas flows can short-circuit directly from the inlet to the pressure or vacuum valves without penetrating the whole tank volume. Vapours from the previous cargo can remain at the bottom of the tank unaffected by purging. When the middle-distillate cargo is loaded, its flash point is decreased by the remnants of the previous cargo.



- Although the vapours and previous cargo can be detected by the ship's testing equipment, crews may test only the escaping inert-gas for vapours rather than testing various levels of the tank.

Recommendations

It is recommended that ship operators instruct their crews to test tank atmospheres for vapours at a number of different levels to ensure that purging is complete.

In addition, it may be best to gas-free the tanks after washing and purging. This will require the tanks to be re-inerted but will ensure that all vapours and residues are removed before subsequent loading and will also permit hand-drying if required by the next cargo.

NEW POSTER HIGHLIGHTS CONTAINER COLLAPSE RISK

Container stack collapses are costly and in many cases, avoidable. North is continuing to experience claims arising directly or indirectly from inadequately planned container stowage that results in a stack collapse.

Members are reminded that although stowage and segregation of containers may be the responsibility of charterers, mistakes are sometimes made by planners. As such a thorough check of the stowage plan should be carried out on board as soon as it is received.

The second of North's new series of Cargo Wise posters, which highlights key issues relating to carrying different types of cargoes, draws attention to this issue. Key issues surrounding the safe carriage of containers and avoiding stow collapses are highlighted in the poster.

Copies of the new Cargo Wise poster 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/loss-prevention/publications-and-guides



CO-MINGLING AND BLENDING OF LIQUID CARGOES: OBLIGATIONS AND RISKS

Members are increasingly being requested to co-mingle or blend liquid bulk cargoes on board, be this crude oil, liquid petroleum gas (LPG) or refinery products. However, there is often uncertainty as to whether owners are obliged to perform such activities and, when they are, what they are entitled to ask for in return – particularly whether they are entitled to request claused bills or new (switch) bills of lading to be issued. This article addresses these issues from the point of view of an owner or master, but the principles apply equally to charterers.

Terminology

The terms co-mingling and blending are regularly used without full understanding of the technical distinction between them.

Co-mingling is accepted as the loading in the same cargo space of parcels of bulk cargo from different sources, such as different ports, but without taking any other steps in relation to the cargo other than to carry and discharge it.

Blending means the same activity as co-mingling, but with additional activity in relation to mixing the cargo parcels going beyond merely loading them in the same cargo space. For example, this could involve re-circulating the cargo through the vessel's cargo lines, resulting in a different product to that loaded.

Insurance and Contractual Issues

Subject to the particular facts in each case, there is no issue in respect of P&I Club cover for co-mingling (provided that the bill of lading is correctly drafted), but there can be issues in respect of blending. This is because blending is an activity which goes beyond carrier's usual duties of carrying and caring for cargo as it introduces a new specialist operation of actively blending cargoes on board.

Whether or not an owner is entitled to refuse a request to co-mingle or blend is governed by the relevant charterparty. There may be a co-mingling or blending clause in the charterparty and this will need to be examined carefully. Even if such a clause exists, the usual principles regarding bills of lading apply; the bill of lading, as in any other situation, needs to tell the truth and to reflect what has happened on board the ship.

A request from a charterer to put something on a bill of lading which does not tell the truth is an unlawful order and is one that an owner is usually entitled to refuse. Members should seek guidance from the Club if they are in doubt at all regarding their particular clauses and requests from charterers.



In both cases, co-mingling and blending, the ship's master and owner need to consider their rights and potential liabilities. In the case of co-mingling, this will be to state, for example, that two or more different ports or loading dates were involved and each parcel is identified separately on the bill of lading. This is because, for example, in the case of different shippers, each shipper will have title to part of the whole cargo, so they need to know exactly what they are receiving.

In the case of blending, the same clausuring will be required as for co-mingling, but additional wording will be needed to reflect the blending operation that has taken place and to describe it briefly. Again, this is so that the end receiver knows exactly what they are receiving.

Alternatively, for both co-mingled and blended cargo, switch bills of lading representing the facts of loading can be issued in return for the surrender of all original bills of lading. Deliberate failure to issue bills of lading reflecting the co-mingling of cargo will be likely to prejudice P&I cover.

In both cases, co-mingling and blending, North further recommends that a letter of indemnity is taken from the charterer (which is assumed to be the party making the request). The usual warnings about letters of indemnity apply, not least being sure that the party giving the indemnity has the financial substance to honour any claims, which could be substantial for a full cargo if the blending or co-mingling has led to damage to the entire cargo. This advice is general in nature and each matter should of course be reviewed on its facts, as a particular charterparty may specifically deal with indemnities and letters of indemnity.

Effects on the Vessel

When blending and co-mingling cargoes, the master and owner should also consider the overall effects on the vessel's stability. The blended density will be different to that of the originally loaded cargo and this may have a direct effect on the vessel physically, including trim and draught. There should also be consideration as to effects that may occur when blending or co-mingling cargoes and the reactions that take place between the different grades of cargo. For example, when blending or mingling crude oil cargoes, significant wax drop-out can occur which will result in difficulties in discharging and significant cleaning costs.

Finally, Members should also be aware that the International Maritime Organization has drafted an amendment to the International Convention for the Safety of Life at Sea, chapter VI, which is expected to be adopted at its maritime safety committee meeting in May 2012. This will prohibit the physical blending of bulk liquid cargoes during a sea voyage using the vessel's internal systems (cargo pumps and lines) with the intent to achieve a cargo with a new product designation. This will not apply if the master undertakes transfer for the safety of the vessel or protection of the marine environment. The Club will update Members on this issue when the proposed amendment is adopted.

Where a bulk liquid cargo is loaded from one or more shore tanks at the same port with the same grade of cargo and the same shipper, the above comments do not apply as this is not considered to be either co-mingling or blending.



NEW MEASURES AIM TO CUT NICKEL ORE LIQUEFACTION LOSSES



Wet nickel ore being loaded.

The loss of the six-year-old bulk carrier *Vinalines Queen* with 22 crew on 25 December 2011 brought the number of lives lost associated with liquefying cargoes in the past two years to 66. This tragic loss of life highlights the risks associated with the carriage of some ore cargo from Indonesia and the Philippines, prompting new loss prevention measures by P&I clubs and other industry organisations.

All of the ships lost were reported to be carrying lateritic nickel ore cargo. Some ore cargoes with a sufficient amount of small particles and moisture may liquefy and should only be carried in strict compliance with guidelines contained in the International Maritime Solid Bulk Cargoes (IMSBC) Code for Group A cargo. A lack of competent authority oversight in these areas has contributed to inadequate local testing facilities, poor stockpiling practices, the intimidation of surveyors and widespread disregard by shippers of their obligations under the code.

North, in association with the International Group of P&I Clubs, is working with other industry bodies – including Intercargo, the International Chamber of Shipping and the International Union of Marine Insurance – to introduce additional safety measures designed to reduce the likelihood of further casualties in this trade. This includes engaging with local authorities to identify aspects of compliance that could be improved and locating suitable resources to enhance competent authority oversight and stakeholder adoption of IMSBC Code requirements.

Representatives from Intercargo and the International Group recently travelled to Jakarta, Indonesia, to discuss the concerns of industry and establish a dialogue that is hoped will lead to a range of measures to address recent casualties and reduce the likelihood of further accidents associated with nickel ore liquefaction in this region. Clubs in the International Group are currently reviewing information on best practice contained in the group circular – Indonesia and the Philippines – Safe Carriage of Nickel Ore Cargoes, published in February 2011.

Members are advised to contact North prior to fixing or as soon as possible after being ordered to load a cargo of nickel ore from Indonesia or the Philippines. This is so that the Club is aware of the shipment and can provide any guidance, recommendations and loss prevention information considered appropriate having regard to the specific requirements of the charterparty, if applicable, and the circumstances of the loading operation and voyage in question.

Amendments to IMSBC Code

The editorial and technical group of the International Maritime Organization's subcommittee on dangerous goods, solid cargoes and containers (DSC) met in March 2012 to discuss amendments to the IMSBC Code.

Following a presentation on the development of their research on ore analysis in New Caledonia, the French representatives submitted a proposed new schedule for nickel ore. The new schedule will apply to all nickel ores and will also include a reference to a new test developed by the French government to assess the suitability of New Caledonia nickel ore for carriage by sea.

The new test is called the vibration table with penetration bit (VTPB) test and is a revised version of the penetration table test described in appendix 2 of the code.

The new test utilizes a larger penetration bit and a precursory compacting period of vibration of the sample before testing. The test has been reported to be suitable for use on ores with a particle size of up to 30mm and differs from the existing Group A tests in that the transportable moisture limit (TML) is not determined.

An alternative approach has been presented that includes the addition of water as a percentage of the total weight of the sample (added humidity content) as a safety factor before the sample is manipulated on the penetration table and assessed for penetration bit depth.

Shippers in New Caledonia will therefore present the master with a signed certificate stating the moisture content and declaration stating that the cargo is safe for shipment.

Although the French representatives suggest that following suitable geological research this process could be adopted in other nickel ore loading jurisdictions, the current appendix to the schedule detailing the new test method can only be applied to the New Caledonian ores.

The new schedule includes reference to the amended IMSBC Code paragraph 4.3.3 which emphasises the importance of robust procedures and practices required by shippers to ensure the cargo is suitable for shipment.

Draft guidelines for developing and approving procedures for sampling, testing and controlling the moisture content for solid bulk cargoes that may liquefy were also submitted by the French delegation for consideration.

A wide range of additional schedules and code amendments were discussed at E&T and these will be reported on in Signals 88.

If adopted at the IMO DSC meeting in September 2012, the new nickel ore schedule will be mandatory from 1 January 2015.

Further information on the risks associated with bulk cargo liquefaction can be found in North's loss prevention briefings which can be downloaded from the Club's website:

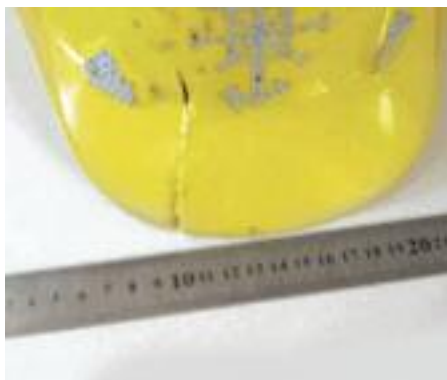
www.nepia.com/loss-prevention/publications-and-guides/loss-prevention-briefings

Club Circulars can be viewed on the Club's website:

www.nepia.com/publications/clubcirculars



PREVENTING GRINDING ACCIDENTS



Grinding wheels and other power tools can, if used incorrectly, cause serious injury to the user and other seafarers. Members are reminded of the importance of using such tools correctly.

In the case of grinding wheels, injuries most commonly result from the disc shattering, causing fragments to fly into the face of the operator at high speed and potentially towards other crew working in the vicinity. Injuries are usually to the face and eyes, although it is not unknown for sharp fragments to puncture deep enough to cause organ failure and death.

The most common cause of disc failure is human error, including using the wrong size disc, or the wrong disc for the intended job or using a grinding machine without a safety guard in place.

Recently a crew member was very lucky to escape with only a minor injury to his eye after a disc he was using shattered. On investigation, it was discovered he was using an over-sized disc without a guard in place. Fortunately he was wearing personal protective equipment which prevented a more serious injury. The photographs above show the damage sustained to the crew members safety hat and goggles.

Advice for Crew Members

Crew members can take a number of simple steps to take to ensure that grinding discs are used safely and minimise the risk of injury:

- Only use grinding wheels and discs from a reputable source.
- Always inspect grinding wheels and discs prior to use.
- Ensure wheels are properly mounted and balanced.
- Do not force the machine so that the wheel slows, or jam the work into the grinding wheel.
- Ensure guards are fitted to the machine and that safety glasses and face protection are always worn.
- Replace any wheel, or at least have it tested, after two years. The shelf life of a reputable grinding wheel is influenced by many factors, but it will certainly not last forever.
- Ensure that the grinding machine is regularly maintained.
- Always check that the manufacturer's disc speed is compatible with the machine speed. Never over-speed a grinding disc.

KEEPING A LOOKOUT FOR TESTICULAR CANCER

Testicular cancer is one of the most common but treatable forms of cancer in men, especially if diagnosed early. Male seafarers should be encouraged to keep a regular check for anything unusual.

North has recently assisted a number of crew members with advanced testicular cancer and other serious but preventable illnesses which had developed over a period of time.

In all cases the seafarers were probably aware of the symptoms but did not seek medical attention until the symptoms became serious – which in some cases can be too late.

Seafarers spend significant periods at sea, where the pressures of the job and the isolation can make it easy to forget that it is important to look out for tell-tale signs that something is not right.

Regular Checks

According to the UK Institute of Cancer Research, testicular cancer is the most common form of cancer in men between the ages of 15 and 45. If caught early, testicular cancer can be successfully treated in about 95% of cases. To stay safe, men should check themselves on a regular basis and this is more important for seafarers who are often away from home for long periods of time.

Testicular Cancer Self-examination

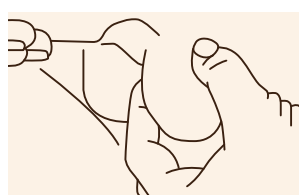
Carry out these easy steps regularly. A thorough examination may be easier after a warm bath or shower as the scrotal skin relaxes. Most lumps found on the testicles are benign but any changes in size, shape or weight should be checked by a doctor.



Support the scrotum in the palm of your hand and become familiar with the size and weight of each testicle.



Examine each testicle by rolling it between your fingers and thumb. Gently feel for lumps, swellings, or changes in firmness.



Each testicle has an epididymis at the top which carries sperm to the penis. Do not panic if you feel this – it is normal.

FIGHTING FLAB

It is very easy to put on weight while at sea, which can result in health and social problems as well as render you unemployable. This article explains how to burn off that excess flab.

Many seafarers do not have a particularly healthy lifestyle. It is not unusual, for example, to finish a watch in the middle of the night, raid the mess-room fridge for comfort food and fizzy drinks and settle down in front of a video for a couple of hours. Seafarers are also in a difficult position when it comes to healthy eating.

The effect of lack of exercise combined with a diet that is under someone else's control can easily result in gaining weight. But obesity brings with it associated problems such as heart disease, stroke, diabetes, and some types of cancer. It can also lead to depression and mental problems as it does not conform to society's image of what looks good.

Not only can seafarers suffer poor health from obesity-related problems, but these problems can also result in failed medical examinations and, as a result, loss of livelihood. What more motivation is needed to do something about that belly? Here are some suggestions of how to burn off excessive fat.

Getting the Balance Right

Your body needs a finite amount of energy every day. If you give it too much energy it will convert the excess to fat. Put simply:

Eat and drink too much = Weight gain

The excess energy stored as fat can be used if you do not provide your body with the total amount of energy it requires each day. The total amount of energy you require daily will vary from person to person and also depend on your lifestyle. A crew member involved in regular hold cleaning and other physical work is much more likely to be able to control their bodyweight than for example a navigation officer, whose job is mostly sedentary. Hard physical work needs more energy.

If you are overweight and want to do something about it you should increase your daily energy requirement and/or reduce your daily input in order to lose weight. The best way to do this is both to control your intake and introduce regular exercise:

Control intake + Increase exercise = Weight loss



Over time this will result in weight loss, increased fitness and a healthier more energetic person. It will also mean that you easily satisfy medical examinations and stay employed.

So it is all very simple. You can control your weight by exercising regularly and being careful about how much you eat. You can still eat whatever you like, you just have to be aware that some foods are sugary, starchy or fatty and can very quickly supply the necessary energy your body needs in a day. You need not limit the range of foods you eat, it is the amount that counts. Ask yourself is that second helping of rice necessary, do you really need two cans of coke?

Finding Motivation

While on paper the business of losing weight looks simple, in reality this is far from being the case. Long hours, bad weather, lack of equipment and lack of control over food types provided all stand in the way.

Motivation is key to controlling your intake and exercising regularly. Being healthy, losing weight and getting fit are all admirable goals but often are not really much of a motivation.

It helps to have specific personal goals to aim for over the short and medium term. This breaks the whole process up and gives you successes along the way to help keep you going.

Tips for motivation include the following.

- Team up – if you can train with one (or more) shipmates then you are more likely to take regular exercise.
- Keep a diary – weigh and measure yourself at the start of your programme and keep a record of your training sessions. You can also measure your fitness (see *Signals 85*). Monitor your progress on a regular basis.
- Plan a routine – make exercise part of your daily routine.
- Set goals that are realistic – do not be afraid to reward yourself when you reach a goal. Take a day off training or have a big meal – just the one will not hurt. If you have a period of leave coming up, think about that beach holiday, family wedding, or sweetheart that you want to look good for.
- Variety – do not use one training method, do different things.

Remember, if you get your head in the right place, the body will follow.



Colin Gillespie
Risk Management Executive

Exercising Options

Exercise increases your energy requirement. On a ship, long-distance running is not really an option. If you are lucky enough to have a cycling machine, rowing machine or treadmill on board then this can be a vital component in your exercise regime. However, this may not be available to many seafarers.

A good way to train in a confined space is to use circuit training. The 'circuit' is just a series of exercises performed for a set period of time and with set rest periods. This combination of work and rest allows for recovery between exercises and is good for improving fitness and for weight control.

The programme suggested below can be completed in less than 35 minutes and requires no equipment.

Before you start your circuit routine you should view some footage of the correct techniques to use for each activity. There are numerous websites that include both written explanations and videos of the exercises being used.

Activity	Time/number
Press-ups/push ups	30 seconds
Lunges	30 seconds
Squat jumps	30 seconds
Burpees	30 seconds
Crunches	30 seconds
Bench dips	30 seconds
Supermans	30 seconds
Rest between exercises	60 seconds
Rest between circuits	3 minutes
Circuits per exercise	2
Exercises per week	2-4

As you get fitter you can increase the duration of each set of exercises, perhaps work for 45 seconds, 60 seconds and so on, or alternatively reduce the rest time slightly. You can also add or remove exercises to the circuit as variety helps with motivation.

Remember, if you get severely short of breath or dizzy, stop exercising and consult a physician before resuming. Your health is your responsibility!

NEW EU RULES HARMONISE PASSENGER LIABILITY



A new European Union (EU) regulation comes into force at the end of this year under which existing passenger liability compensation limits from the Athens Convention 1974 will be significantly increased in all 27 EU member states.

The 1974 Athens Convention relating to the Carriage of Passengers and their Luggage by Sea, together with its 1976 and 1990 protocols, is the principal convention establishing a liability regime for damage or loss suffered by passengers on ships. Subsequent to a review of compensation levels, the International Maritime Organization (IMO) adopted a further protocol in 2002.

Plans for mass ratification of the 2002 protocol by EU members became overly complex. They were thus replaced with EU Regulation (EC) No 392/2009 on the liability of carriers of passengers by sea in the event of accidents, which effectively implements the Athens Convention 2002 protocol directly in all 27 EU member states from 31 December 2012.

This article by Hill Dickinson LLP provides guidance on the implementation of the EU Regulation 392/2009.

Harmonised Rules

The regulation ensures a new single, harmonised set of rules governing the rights of carriers and their passengers in the event of an accident across Europe by adopting the 2002 protocol almost wholesale. This is particularly important given the number of European passengers carried on cruise and ferry vessels.

In the wake of major casualties, it will no longer be necessary for a number of lawyers in a number of jurisdictions to apply different

sets of rules to liability, limitation of liability and time bars. Damages will still however be assessed in accordance with local law. The regulation will extend to different classes of ship and inland waterways over a period of time.

The performing carrier will be obliged under the new EU rules to make an advance payment in the event of the death (not less than €21,000) or personal injury to a passenger caused by a shipping incident within 15 days. An advance payment does not constitute recognition of liability and may be offset against any subsequent sums paid. The payment is refundable in limited circumstances.

The regulation also implements IMO guidelines that address terrorism-related damage and applies an overall limitation of liability, which is the lower of 250,000 special drawing rights (SDR) per passenger or 340,000,000 SDR per ship on each distinct occasion for such incidents (1 SDR is approximately US\$1.6).

Blue Card Issues

Some difficulty has been caused by the compulsory insurance provisions for 250,000 SDR per passenger evidenced by blue cards, which allow direct actions against insurers of EU-registered ships.

The market is expected to provide blue cards for liabilities arising from war and terrorism, which is where there is still some controversy and uncertainty for the industry. It is anticipated that this will not be available for vessels with a hull value of more than US\$1 billion. Blue cards need to be in place by 1 January 2013.

Where a non-EU flag vessel is covered by the new EU rules, it will be required by the relevant state to have the blue cards in place when entering or leaving its ports. The provisions relating to the enforcement of these provisions by the UK and other member states is still awaited.

The Club is very grateful to Maria Pittordis, Business Group Leader: Marine, Trade and Energy, Hill Dickinson LLP, for providing this article. Email: maria.pittordis@hilldickinson.com



Andrew Glen
Manager

PIRATES IN WEST AFRICAN WATERS

Members need to be aware of an increase in pirate activity in west African waters. Statistics from the International Maritime Bureau (IMB) for 2011 identify 10 reported incidents for Nigeria that included two hijackings. However, IMB is aware of over 30 other incidents that went unreported.

Amplifying cause for concern is the apparent extension of unrest into neighbouring Benin waters, with 20 incidents reported in 2011 against tankers – eight of which were hijacked and had part cargoes stolen. During the first two months of 2012 there were a further 10 piracy incidents off the coast of Benin, Congo, Ivory Coast, Ghana and Nigeria.

Use of Violence

Vessels are frequently boarded by armed pirates and more recently crew members taken hostage. Vessels are often diverted to unknown locations where some of the cargo is transhipped and crews' personal effects stolen. The period of detention of vessels off Nigeria and Benin tends to be about 10 days compared to an average of six months for Somali hijackings, but the attacks are considerably more violent.

Pressure on local authorities has so far produced joint Nigerian and Benin naval patrols. On 29 February 2012 the United Nations (UN) Security Council urged all states in the region to act quickly at national and regional levels, with Resolution 2039 (2012) encouraging international partners to provide support for regional patrols, coordination centres and the implementation of a region-wide strategy.

The UN Security Council also requested the UN secretary-general to support states and regional organisations to convene a piracy summit through UN offices in west and central Africa, as previously called for in Resolution 2018 (2011).

ARMED GUARD VETTING HIGHLIGHTS AREAS OF CONCERN

A total of 12 private armed maritime security providers have now been vetted for North by maritime intelligence, investigation and crisis-management firm Gray Page since September 2011 (see *Signals* 85). The vetting reports have helped to highlight a number of common areas of concern.

Contracts

The launch of BIMCO's GUARDCON contract should address a number of the current common contractual problems faced by shipowners when negotiating with prospective security providers. To date, owners have had to rely on Club support and guidelines from the International Group of P&I Clubs to ensure contractual terms are acceptable and would not expose them to unreasonable risk.

Some of the more common points of dispute include:

- lack of a knock-for-knock clause when contractual terms require a shipowner to provide an indemnity for liabilities in favour of the security provider
- inclusion of liabilities that fall outside those incurred under applicable law
- provision of insurance cover for the security provider that lies outside a shipowner's existing scope of cover.

Limitation of Liability

Liability limitation amounts should be on a reciprocal basis and industry guidelines suggest US\$5 million as a suitable minimum amount. Contracts submitted to North frequently contain preferential limitation terms in favour of the contractor and, although often referring to the US\$5 million limitation figure, it is stated as the cumulative total of liability for all policies held.

Rules on the Use of Force

Rules on the use of force is another key area that has undergone significant review in recent months, including a mention in the UK Government's Foreign Affairs Committee report on piracy off the coast of Somalia published at the beginning of the year. The report confirmed the need for better guidance on suitable rules on the use of force.

Clear unambiguous guidelines commensurate with the level of threat and nature of attack should underpin every security provider's terms of appointment. A significant number of providers still expect the ship's master to authorise the use of weapons. While masters are responsible for the overall safety of the vessel, they are not trained to make combat decisions and any contractual wording to this effect must be revised.

Insurance

It has taken the market some time to get up to speed on providing armed guards with insurance cover that reflects the nature of the work undertaken by operatives and will respond in the event of a claim arising. The range of insurance cover that can be expected should include:

- employer liability insurance covering the contractors' liability to the security personnel
- comprehensive liability insurance including insuring the contractors' liability to third parties for personal injury and death, property damage and other loss
- professional indemnity insurance
- travel insurance for the security personnel, including cover for emergency medical expenses, repatriation costs and personal accident cover.

A number of policies submitted as part of the vetting programme were written for different service providers working with the maritime sector and were not appropriate for the provision of armed guard services on vessels transiting the high risk area off the Somali coast. It can also be difficult to assess the suitability of the provider if they are not backed by a suitable ratings agency.

Weapons Licensing

A number of security providers did not offer sufficient evidence to demonstrate compliance with relevant fire arms legislation for the possession, carriage and movement of firearms and ammunition. This finding supports a growing concern within the industry about the type and standard of weapons being used by some providers. Satisfying regulatory demands can be a time consuming and costly process, particularly for the supply and movement of high-specification weapons.

Needless to say, regulatory compliance is a prerequisite for the delivery of services in keeping with standards identified in current best-practice industry guidelines. Recent amendments to UK licensing laws that entered into force on 23 February 2012 are likely to speed up the process. However, the new regulations come with additional control measures that may not suit the operating practices of some security providers.

Members requiring further information about North's AMSP vetting service and vetting results should contact the piracy contract review team at the Club. Email: piracycontractreviewteam@nepia.com



THE ULTIMATE MECHANICAL HEALTH CHECK

Lubricating oil is the life-blood of ships' engines and generators, flowing through and around almost every part. As such regular 'blood tests' can provide a cheap and efficient way of monitoring mechanical health – thereby avoiding potentially catastrophic failures while at sea.

The safe and efficient running of any ship depends greatly on the condition and reliable operation of its critical machinery, such as the main and auxiliary engines, diesel generators and shafts. While a prudent ship operator will arrange for these machinery items to be overhauled or serviced at the manufacturer's recommended intervals, mechanical failures can and do occur prematurely.

So how does one know, say, when a main engine is beginning to suffer? How does a generator communicate its problem before a catastrophic and costly failure occurs? For most mechanical machinery, lubricating oil analysis can provide the answer.

On-board Analysis

Monitoring the condition of lubricating oil provides not only a snapshot of the health of the machinery at time of sampling, but if tests are carried out at regular intervals, trends can be identified such as component wear and oil deterioration. In other words, a problem can quite possibly be identified and rectified before a catastrophic failure occurs.

It must be remembered that lubricating oil has to remain effective under very harsh conditions, such as extreme pressure, high temperatures and with varying degrees of contamination. It is also acts as a detergent agent that cleans the engine as it passes through.

Lubricating oil can be tested on board by ship's staff using a simple test kit which typically checks for base number, kinematic viscosity and water content.

These simple tests should only take 30 minutes of an engineer's time and, if carried out once a week, ensure the oil remains in serviceable condition and act as an early warning of incipient problems.

In-depth Analysis

Periodical analysis of oil samples carried out by a shore-based laboratory provides a more in-depth look into what is happening inside

machinery. This service is offered by most of the major lubricating oil suppliers and can prove very valuable. All that is required by ship's staff is the collection, bottling and labelling of samples.

The laboratory tests generally include those that can be carried out on board as well as:

- concentration of contaminants
- concentration of wear elements
- density
- flash point.

The analysis report should provide the results of all tests carried out at that time, the plotting of trends using previously submitted results, and the issue of warnings if threshold values have been reached or are being approached. This allows an easy review of the data by the ship's technical operators and crew.

For example, an increase in elements such as chromium could alert the crew to wear of the piston rings or cylinder liners, while lead and tin levels can indicate the rate of bearing wear. A fall in the base number and reduction in flash point could point to fuel contamination through a leaking injector.

Diligent monitoring of the machinery's life-blood, coupled with the early notification of potentially catastrophic failures, can go a long way in preventing breakdowns.

HEAVY WEATHER

Expecting the Unexpected

Members have recently experienced a number of accidents in heavy weather resulting in serious injury and death, in one case from a loss overboard. The incidents serve to remind all Members that, no matter how calm conditions may seem when a ship leaves port, it always needs to be fully prepared for things to change rapidly and unexpectedly.

A Typical Scenario

Consider a ship leaving port on a flat calm, sunny day. Anchors are secured and the bridge calls on VHF saying 'secure for sea and stand-down forward'. The forecastle team are in no particular hurry to return to the accommodation and take their time closing vents, dogging doors and hatches and stowing ropes while enjoying the sun and gentle breeze.

Two days later the sun is obscured by a black threatening sky, the sea is breaking over the bow and the wind has become a force 10 gale. The bilge alarm for the bow-thruster space keeps sounding – it looks like the forecastle team may have forgotten to close its ventilator flaps. The master decides to send three crew members forward where they will wait for a gap in the sea before going on the forecastle to check the vents.

Everything goes to plan. While waiting inside the forecastle, the crew notice the rope hatch is also leaking some water. They decide among themselves that when the word comes from the bridge to go on deck they will run further forward and tighten the dogs on the rope hatch.

The master scans the waves and decides the time is right – he calls the crew and they move out to check the vents. Within seconds of reaching the forecastle, a rogue wave appears out of nowhere and breaks over the bow. There is no response from the forecastle to the master's calls on VHF. He sounds the general alarm and finally the crew respond. One has a dislocated shoulder and the second is bruised. The third is lying twisted and lifeless under a winch bed.

Heavy Weather Precautions

The above scenario illustrates how quickly conditions can deteriorate at sea. It also exemplifies four common factors that have contributed to the recent heavy weather accidents:

- Failure to appreciate weather forecast information. In some cases there is little evidence of weather forecasts and charts being obtained and acted upon. When carrying out a risk assessment of the weather it is vital to remember that another word for forecast is 'guess'. It may be better to slow down and allow the forecast heavy weather to pass.



- Failure to anticipate large waves and the power of water breaking over the decks. A rogue wave has a height of more than twice the significant wave height and their formation is unpredictable. So by their very nature they always come as an unpleasant surprise.
- Failure to appreciate the absolute necessity to secure the whole ship on every occasion even though the weather at the time of securing seems fine. There should also be a robust system of checking – during rounds of the ship – that the ship is secure. The checking must operate on a positive reporting system and should not assume that because nothing is said, everything is fine.
- Failure to understand that a common-sense risk assessment – sometimes called a 'tool box talk' – for a task must be followed without significant change. If the task changes then there should be another common-sense risk assessment. In the case described before, the decision by the crew to go further forward on the forecastle deck was a significant change to the task that had been planned.



RIGHTS OF PASSAGE

Transit of International Straits

In December 2012 the Iranian Government threatened to practice closure of the Strait of Hormuz in response to international sanctions over its nuclear policy, raising concerns in general about shipping rights in such vitally important passages.

The 21 nautical miles wide strait between Iran and Oman forms the entrance to the Gulf and over 40% of the world's seaborne crude oil trade passes through it every year. Other straits such as Dover, Gibraltar, Singapore and the Dardanelles in Turkey are of similar importance to global shipping.

So does a coastal state have the right to close an adjoining strait?

Rights of Navigation

International law on rights of navigation was only codified as late as 1994, when the United Nations Convention on the Law of the Sea 1982 (UNCLOS) came into force.

Until the 20th century there was general recognition of the concept of 'freedom of the seas' over all waters more than three nautical miles from land – which was about as far as a cannon could reach! Throughout the twentieth century this right was increasingly questioned, with many coastal states attempting to extend their jurisdiction over security, fishing and natural resources.

UNCLOS codified international law on the following principles:

- All coastal states may exercise sovereign jurisdiction out to 12 nautical miles, this is their 'territorial sea'.



- Coastal states may also control economic development of the sea bed out to 200 nautical miles, this is their 'exclusive economic zone'.
- Everything outside territorial seas are 'international waters' and are free to all nations but belonging to none of them.
- All ships, including warships, have the right of 'innocent passage' through territorial seas.

Innocent Passage

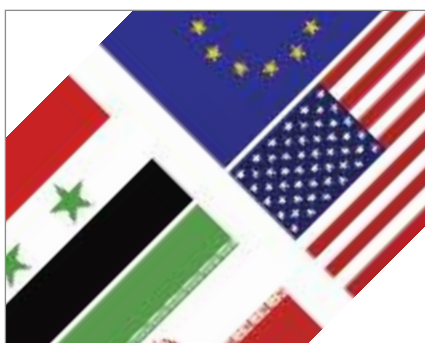
Passage is 'innocent' so long as it is not prejudicial to the peace, good order or security of the coastal state. It only includes stopping or anchoring if that is incidental to normal navigation or rendered necessary by force majeure. Innocent passage excludes any activity not having a direct bearing on passage, such as military exercises, collecting information, fishing and surveying.

Coastal states have the right to interrupt, divert or suspend innocent passage through territorial seas for short periods and for good reason. However, there can be no suspension of innocent passage through 'international straits', which are straits used for international navigation between international waters or between international waters and the territorial seas of another state. UNCLOS allows foreign vessels and aircraft the right of unimpeded 'transit of international straits' so long as the transit is 'continuous and expeditious'.

The convention codifies customary international law. As Iran has signed the treaty, it must therefore recognise innocent passage and the transit of international straits, including its territorial waters in the Strait of Hormuz. Closing all or part of the strait to shipping would thus be an illegal act.

SANCTIONS UPDATE

Members will be well aware of the existing international sanctions in place, in particular against Iran and Syria. North has commented on them in previous issues of *Signals* and full details can be found on the Club's website.



Although extensive and wide ranging sanctions are already in place the international political situation remains dynamic and further sanctions are imminent, including from the USA and European Union (EU).

The European Commission introduced Council Regulation (EU) 267/2102 with effect from 23 March 2012. This gave effect to Council Decision 2012/35/CFSP imposing a ban on the purchase, transport and insurance for the carriage of Iranian oil cargoes. This is a measure that is likely to have very far reaching consequences, not just for EU-based Members but also for Members in other jurisdictions which might carry Iranian oil cargoes.

In the USA, the Iran, North Korea, and Syria Nonproliferation Reform and Modernization Act 2011 is awaited. This is the so called '180 day rule' that is expected to have the effect of preventing ships from calling at US ports if they called at a port in Iran within the preceding 180 days.

As the situation with regard to sanctions generally is still developing, Members are urged to keep a close eye on the Club's website where industry news items are posted regularly advising on changes and developments to the various sanctions regimes are publicised.

A set of frequently asked questions on Iranian sanctions issued by the International Group of P&I Clubs also appears on the website and this will be amended and updated to take into account of developments and changes as they occur.

Members should continue to address any questions that they have relating to sanctions to the Club.

The latest information about sanctions and other current industry topics is available from the industry news pages of the Club's website: www.nepia.com/publications/industrynews



CHINESE POLLUTION-RESPONSE CONTRACTORS PROLIFERAE



The requirement to contract with an approved spill pollution-response organisation (SPRO) before entering a Chinese port from 1 January 2012 (see *Signals* 85) has resulted in a proliferation of would-be providers.

There are currently more than 120 SPROs approved by the People's Republic of China Maritime Safety Agency (MSA), with a number of these organising themselves into consortia. North's pollution team has been very busy over the past few months reviewing SPRO and consortia contracts to ensure they are not too onerous and comply with the International Group of P&I Clubs' recommendations.

Members should check for the latest developments using the industry news section of North's website. As always Members can also contact the Club directly for information and advice.

The latest information about Chinese oil spill response regulations and other current industry topics is available from the industry news pages of the Club's website:

www.nepia.com/publications/industrynews

Members should refer to the following websites for up to date information:

- MSA website: www.msa.gov.cn or <http://en.msa.gov.cn/msa> (English version).
- Oil spill response and prevention website: www.osp.cn

LATEST NEWS FROM THE IMO



New North American Emission Controls

Two years ago the International Maritime Organization (IMO) marine environment protection committee adopted amendments to annex VI of the International Convention for the Prevention of Pollution from Ships

(MARPOL). These included designating the North American emission control area (ECA) for nitrogen oxides (NOX), sulphur oxides (SOX) and particulate matter. The requirements within the North American ECA for SOX and particulate matter enter into force on 1 August 2012.

Advance Amendments to IMSBC Code

In May 2011, the IMO maritime safety committee agreed amendments to the International Maritime Solid Bulk Cargoes (IMSBC) Code, including changes to a number of existing schedules and the inclusion of new cargo schedules. The amendments will enter into force on 1 January 2013 and shall be deemed to have been accepted by 1 July 2012 if a sufficient number of objections have not been received from contracting governments. Governments can therefore opt to apply the amendments in whole or in part from this date.

As such, Members may receive requests for cargoes to be loaded in accordance with voluntarily introduced advance amendments. Prior to contracting to carry cargoes under these requirements, Members should ensure that the authorities at the load port, discharge port and the vessel's flag state agree to the advance application of the amendments.



NEWCASTLE UNIVERSITY AWARD CEREMONY

Staff and students gathered once again in Newcastle University's Marine Science and Technology campus for the presentation of sponsorship awards and certificates of achievement. 21 students studying for an MSc in Marine Transport with Management elected to take North's sponsored module on marine liability insurance and law.

Pictured are Mengmeng Li, Stella Chandra and Okwong E Udo. Mengmeng, from Dalian, China, received North's 2011 marine liability and law scholarship award. Okwong received North's best student award for his performance in the marine insurance and liability module and Stella received North's presentation for the best MSc student in 2011.



TRAINING COURSE MOVES TO DUBAI

Following the successful launch of an Asia-Pacific version of North's popular residential training course in P&I insurance and loss prevention in Singapore last year (see *Signals* 86), the Club will be holding a similar course in the Middle East this year at the Dubai Marine Beach Resort and Spa, Dubai, from 10 to 13 September 2012.

The course is aimed at Members', masters, officers and shore staff in the Middle East as well as regional P&I brokers, correspondents, surveyors and consultants.

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 occupy the delegates with intensive workshop-based training looking at pollution, collisions, cargo, charterparties, and people claims.

It is anticipated that demand for places will be high and Members are advised to book their place early.

Further information and an application form are available from the Club's website: www.nepia.com/loss-prevention/education-and-training/residential-training-course.php

UK RESIDENTIAL COURSE PROVING POPULAR

North's annual UK residential training course in P&I insurance and loss prevention, based at Lumley Castle and South Shields in the north of England, celebrates its 20th anniversary this June. The course is proving as popular as ever and is already over-subscribed, with many delegates from around the globe attending.

Members who have missed booking a place on this year's UK course may wish to consider attending a similar course to be held in Dubai in September 2012 (see left).

PRINT, ELECTRONIC OR BOTH – YOU CHOOSE

North 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 receive hard-copy versions of *Signals* newsletters, loss prevention guides, Hot Spots, DVDs and other loss-prevention publications can continue to do so.

Others may prefer to get these electronically by email or directly from North's website, and some may wish to receive both hard-copy and electronic versions.

The carrier sheet enclosed with this copy of *Signals* provides a choice of options for you to complete and return by fax or email to the Club, along with updated contact details if necessary.



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

Hard-copy packs of loss prevention publications will continue to be sent to Member's offices for onward dispatch to appropriate entered vessels.

Signals Search 31

Your copy of Signals

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

- Cargo Wise poster – Containers (appropriate entered ships only)

Questions

- 1 What oil should be tested at regular intervals?
- 2 Which wheels can cause injury if not used carefully?
- 3 A decrease in what cargo measurement point can be caused by vapours passing through the inert gas piping?
- 4 Which male cancer should be treatable if diagnosed early?
- 5 What is the acronym for approved pollution response providers in China?
- 6 Where will North's training course be held in September 2012?
- 7 Which international convention provides a liability regime for passengers?
- 8 What term is sometimes used for co-mingling without understanding the technical distinction?
- 9 What is the new standard contract for use with armed security providers called?
- 10 To what type of passage do ships have the right through territorial waters?



- 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 1 June 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 30

- | | | |
|----------------|---------|-----------|
| 1 Humanitarian | 4 IMSBC | 7 Nautica |
| 2 Container | 5 VDR | 8 Core |
| 3 Liquefaction | 6 Crew | 9 PCAMSP |

Signals Search 30 Winners

Winner: Mr NK Swaami, Goodearth Maritime Ltd, India.
Runners-up: Mr Isaac Cintero, Caroil Transport Marine, Cuba.
Captain Victor Zafra, Master MT Alpine Meadow, Seaworld Management, Greece

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 whatsoever 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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