

Loss prevention newsletter for North of England Members



Liquefied nickel ore cargo



**Tony Baker**  
Head of Risk Management Department

## Combating piracy and its consequences

The latest edition of the industry's best practice guidelines and protection measures against piracy was published in August 2011, and the use of armed guards as an additional layer of protection has been widely discussed. To assist Members with their decision as to whether to carry armed guards or not, North launched a vetting programme to identify the capabilities of prospective security contractors towards the end of 2011.

Armed guards or not, seafarers are suffering increasing trauma as they transit high-risk piracy areas, particularly if their ships come under attack or, in the worst case, are actually hijacked. A new humanitarian response programme has been launched by the shipping industry to address this, providing guidance and advice on supporting of seafarers and their families.

See page 4.

## More advice on staying healthy at sea

Following on from an article in the last issue of *Signals*, which described a straightforward way for seafarers to obtain an indication of their fitness level, this issue offers some simple exercises to help seafarers maintain their core muscle strength and thereby reduce the risk of back pains.

See page 7.

## Advice on avoiding cargo liquefaction

This issue of *Signals* again flags up the dangers to ships of liquefiable bulk cargoes along with practical steps to avoid loading them in the first place. The first of North's new *Cargo Wise* posters highlights the dangers of liquefaction in a graphic but humorous way, and the latest *Hot-Spots* information sheet provides practical advice on how to identify whether a cargo may be in danger of liquefying and what precautions to take when such cargoes are presented for loading.

See page 12.

## New Chinese pollution regulations

The People's Republic of China (PRC) introduced new regulations governing the prevention and control of marine pollution from ships on 1 January 2012. The regulations require most ships to enter into a pollution clean-up contract with an approved pollution response company before the vessel enters a PRC port. In this issue of *Signals*, Natasha Lippens provides a useful overview of these regulations.

See page 8.

## Automatic evidence: don't rely on it

Gathering evidence after an incident, particularly a major one such as a collision, is vital to limiting liability. North published a comprehensive loss prevention guide on the topic in 2010, entitled *Mariner's Role in Gathering Evidence – Handbook*. Fitting automatic data-recording systems on ships should help, but this can also lead

to complacency about collecting data by other means – resulting in a complete lack of evidence if the automatic system fails. Clive Reed considers some of the issues related to saving data on 'black box' voyage data recorders in this issue.

See page 3.

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# Collision conundrum

Have you got what it takes to advise an admiralty judge? Using a real collision as a case study, this article provides a quick test of your expertise and knowledge of the maritime 'rules of the road'.

London's Admiralty Court is one of the very few maritime courts that specialise in collision and its decisions in these cases are highly persuasive around the world. Judgments in collision actions are less common than they used to be but they give valuable insight into the interpretation of the International

Regulations for Preventing Collisions at Sea (COLREGS) – and should be studied carefully.

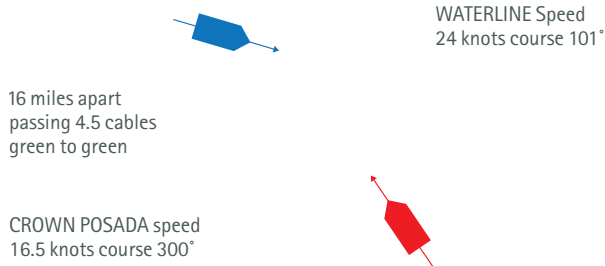
A unique feature of the Admiralty Court is that the judge sits with two 'nautical assessors', experienced master mariners who advise the court on matters of seamanship and who take the place of expert witnesses.

One recent collision case concerned a traditional 'crossing situation' and discussed the actions of both ships under regulations 15, 16 and 17 of COLREGS. Set out here are

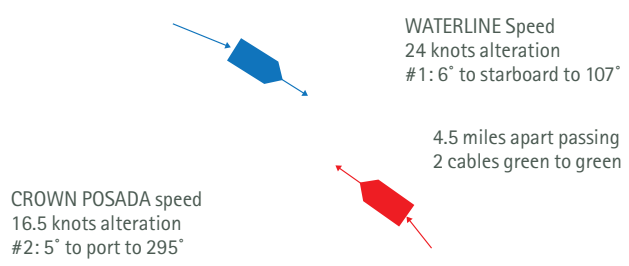
the basic facts of the collision together with six questions the judge asked the nautical assessors (the real names of the ships have been changed).

The questions are progressive and presume the ships have taken the correct action at each preceding stage. Test yourself and see if you have what it takes to advise an admiralty judge! For simplicity the questions have been put into a multiple-choice format and the answers are given on page 10 of this issue.

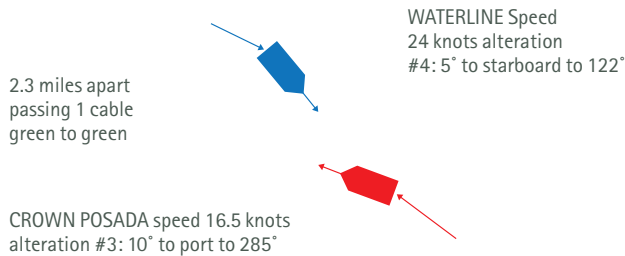
## Collision minus 27 minutes



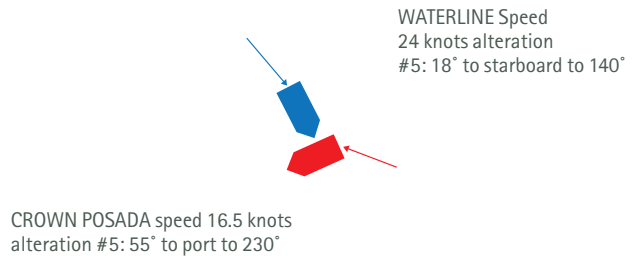
## Collision minus 7 minutes



## Collision minus 4 minutes



## Collision



1. At collision minus 27 minutes, what action should WATERLINE have taken?

- A Stand on
- B Bold alteration to port
- C Bold alteration to starboard
- D Call on VHF
- E Other: .....

3. By collision minus 7 minutes, what action should WATERLINE have taken?

- A Stand on
- B Bold alteration to port
- C Bold alteration to starboard
- D Call on VHF
- E Other: .....

5. At collision minus 4 minutes, what action should WATERLINE have taken?

- A Stand on
- B Bold alteration to port
- C Bold alteration to starboard
- D Call on VHF
- E Other: .....

2. At collision minus 27 minutes, what action should CROWN POSADA have taken?

- A Stand on
- B Bold alteration to port
- C Bold alteration to starboard
- D Call on VHF
- E Other: .....

4. At collision minus 7 minutes, what action should CROWN POSADA take?

- A Stand on
- B Bold alteration to port
- C Bold alteration to starboard
- D Call on VHF
- E Other: .....

6. At collision minus 4 minutes, what action should CROWN POSADA have taken?

- A Stand on
- B Bold alteration to port
- C Bold alteration to starboard
- D Call on VHF
- E Other: .....



# Voyage data recorders: empty black boxes?

Most ships on international voyages are fitted with a voyage data recorder (VDR) and this can lead to complacency about recording evidence from other sources. However, if the 'black box' fails there may be little other evidence available in the event of an accident and there may also be significant limitations in the use of VDR equipment. Clive Reed examines why VDRs are often not quite as good as people like to think they are.

VDRs were introduced with the intention of enabling accident investigators to review events leading up to an incident to help to identify the cause. Simplified VDR (S-VDR) is, as the name suggests, a VDR system that collects less information than a full-blown VDR. Most vessels of 3,000 GT and above engaged on international voyages should now be fitted with one or other of these 'black box' systems.

As a result, people now assume that all incidents involving ships should be capable of being unravelled, reconstructed and understood quite easily. However, as is well known, assumptions made on the basis of scanty information should be avoided.

In the incidents we have investigated, less than 50% of black boxes recorded everything they were supposed to. The rest varied from recording nearly all information to complete failure to record anything useful at all.

It is therefore prudent to consider that any VDR may well fail to provide sufficient information to fully reconstruct events leading up to an incident. But is also possible to reduce the risk of VDR failure by addressing the following questions.

## Is the VDR fitted correctly and working properly?

In a three-ship collision in the South China Sea, one of the vessels was just a month old and fitted with a first-generation VDR. Some time after the incident, when it became possible to access the data, it was clear the system had failed to record radar or any form of position information for the vessel. It did, however, record the Italian master saying 'Oh s\*\*t!' in English about 6 seconds before impact. Amusing though that was, it added nothing to the investigation.

The VDR did however record that the rudder went hard to port a short period before the collision. This recorded 'fact' conflicted with the evidence of the master and the helmsman, who stated the rudder was put hard to starboard.

This was obviously a serious discrepancy that could significantly affect liability for the collision. Fortunately the VDR managed to record the gyro-compass heading, which showed the ship turning to starboard. It would appear that the VDR sensors on the rudder were installed by a technician who did not know port from starboard.

## Is the equipment connected to the black box switched on, set-up correctly and feeding information?

Another common problem, especially with S-VDR, is that the connected radar is switched off or on stand-by and therefore no radar data is recorded at all. Even when the radar is switched on it is often on a range scale that makes interpretation difficult. Radar images are also generally saved at low resolution on VDRs, making accurate reconstructions closer to art than science. Even when radar images are correctly recorded on a suitable range scale, it is still a time-consuming exercise to convert the radar images, which are more often than not relative images (if the radar is operating in relative mode), into an absolute/true plot of the movements of all vessels involved.

Furthermore, when the black box is connected to the automatic identification system (AIS) receiver, additional problems exist as the displayed AIS positions of the other vessels often jump around when the next broadcast from that vessel is received. These problems can lead to misinterpretation, especially by interested parties who are not aware of the errors that exist in the systems. This has happened in several high-profile cases including the *Hebei Spirit* and *Tosa* incidents.

## Is information likely to be saved in the event of an accident?

Sometimes events are so chaotic following an incident that the master forgets to save the VDR data or the data is not recorded as no-one is aware that evidence is likely to be needed. This is compounded in many cases where the hard disk has proved to be corrupt and has not saved any data, even though the correct procedure had been followed on board.

## Summary

The mistaken belief that VDR black boxes have recorded everything can lead to a false sense of security, resulting in failure to collect other evidence before it is lost.

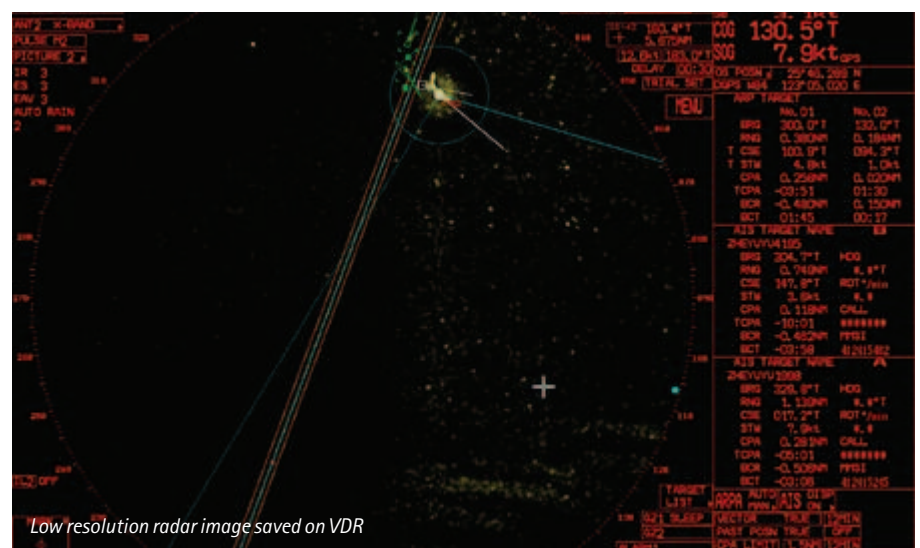
Masters and navigational officers need to be fully aware of which equipment is connected to the black box on their particular ship and understand how to best use the navigational and communication equipment to preserve as much evidence as possible.

Procedures on board individual ships should be amended so that the bridge team is more conscious of the particular idiosyncrasies of their black box and how it records data. Simple suggestions include 'save VDR data' at the bottom of appropriate incident checklists and labelling the radar that is connected to the black box.

*The Club is grateful to Clive Reed for providing this article. Clive Reed is an independent marine casualty expert based in Singapore who has investigated more than 300 casualties.*

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## Piracy – vetting armed guards

Photo courtesy of USCG



It has been suggested that austerity measures being introduced by many countries around the world, and pressure on defence spending within such countries that contribute to naval coalition forces in the Indian Ocean and Gulf of Aden, may result in a gradual withdrawal of military assets from the region.

At a time when assets are already stretched this could undermine the already limited support available to the large number of vessels trading through the pirate infested waters of the wider Indian Ocean. Any reduction in military support would leave vessels increasingly dependent on the self-protection measures outlined in BMP4 and will inevitably see an increase in the number of owners that consider the appointment of Privately Contracted Armed Maritime Security Providers (PCAMSP). Acceptance of this situation may see more flag states drop their opposition to the use of armed guards. Cyprus, Germany, Norway, Malta, Greece and the UK have all revised their position in recent months.

It is estimated that there are well in excess of 100 different companies bidding for this work and North's piracy contract review team is reporting an increase in the number of contracts for the employment of PCAMSP being submitted by Members for review. North review the contracts provided by armed maritime security providers and ensure that they do not adversely affect Members' P&I cover.

### Vetting programme underway

The introduction of North's Armed Maritime Security Provider Vetting Programme was reported in the last issue of *Signals* in October 2011. This programme includes the contract review

process outlined above as one of nine key areas of a PCAMSP's ability. These areas are assessed against the standards outlined in the International Maritime Organization's (IMO) guidance set out in its circular MSC.1/Circ.1405/Rev.1 – revised interim guidance to shipowners, ship operators and ships masters.

IMO guidance highlights the importance of compliance with flag state requirements as well as those of coastal states and ports. It also emphasises the overriding responsibility of the master for the safety, security and protection of the vessel. There should be an established structure of command between the master and armed maritime security provider. Detailed 'rules for the use of force' should also be provided by the PCAMSP. Other issues that should be addressed include incident reporting, crew training and the appropriate carriage of weapons.

The initial round of armed maritime security provider vetting is now complete. Members who have submitted draft contracts to the Club from PCAMSP which have been vetted have been contacted by a member of the piracy contract review team and advised of the vetting results.

Members who are considering the appointment of a PCAMSP should contact the piracy contract review team for information and advice.

*Email: PiracyContractReviewTeam@nepia.com*

*North has published a Club Circular and a set of answers to frequently asked questions about the vetting programme which can be downloaded from the Club's website: [www.nepia.com](http://www.nepia.com)*

## Pricy bunkers fuelling disputes

Ship operators and charterers will be well aware that fuel oil prices have rocketed recently. As such any transaction involving bunkers – whether purchasing, loading or determining the remaining on board (ROB) quantity at the beginning or end of a time charter – are being subject to increased scrutiny, which in turn is leading to a higher number of bunker disputes.

The most effective defence in the event of a bunker dispute is to be able to show that best practices were followed in all bunker-related matters, and to be able to provide documentary evidence to support this. However, bunkering is a regular event for ship's staff and surveyors, and when a routine task has been carried out many times without incident there can be a tendency to become complacent and cut corners – with potentially expensive consequences.

### Following best practice

Advice on best bunker practice can be found in the North's loss prevention guide *Bunker Claims Prevention – A Guide to Good Practice*. The following points may act as a timely reminder on good shipboard practice.

- Ensure all ROB calculations are carried out using the relevant correction factors. If carrying out manual calculations, then approved and applicable ASTM tables (such as Table 54B) should be utilised. If the ship uses a computer programme, it should have these tables and calculations built in.
- Maintain a clear record of daily on-board fuel tank soundings, ullages and fuel consumption figures.
- Before starting to load fuel oil, take soundings and temperatures and agree contents of all tanks on the bunker barge – not just the nominated tanks.
- Check for any improper piping on the bunker barge, which could be used to divert fuel oil elsewhere.



- Check the bunker barge for its compressed-air-blowing arrangements. Ensure these are closed off during the operation to prevent the chances of a 'cappuccino effect'.
- If time allows, upon completion of bunkering give the fuel oil tanks time to settle before taking final soundings and ullages.
- Do not rely on attending independent bunker surveyors to carry out or replace the ship's staff's responsibilities.
- Be aware of local guidelines and regulations. For example, the Marine and Port Authority of Singapore issue standards and a code of practice for bunkering operations within port limits.

### Testing during bunkering

The use during bunkering of on-board test kits for water content, density and viscosity can be invaluable for giving ship's staff an early warning of any problems with the fuel.

Strict adherence by crew members to the ship's safety management system, operations manual and proper use of bunker checklists will also go far in preventing bunker-related problems.



Photo courtesy of Kittiwake Developments Ltd

## Indemnities for ship-to-ship operations

North is receiving an increasing number of enquiries from Members about requests for an indemnity before commencing ship-to-ship (STS) operations. These requests should be treated with great caution.

The most common requests come from STS organisers, who will generally have been appointed by cargo interests. The requests are usually presented to masters of the ships involved together with the STS organiser's instructions. The indemnities stress that responsibility remains with the master of each vessel and provides for an indemnity from each shipowner to the STS organiser for all claims, costs and expenses arising from the STS operation.

Rather surprisingly, the requests can also try to create a contract between shipowners and the STS organiser, under which the owners 'ask' for the services of the STS organiser, who then agrees to provide the services in exchange for an indemnity. This is a legal fiction because the STS organiser is generally appointed and paid by a third party, usually one of the cargo interests, and has no direct link to the owners. The STS organiser is thus already contracted to the operation and should look to its own contractual partner for any necessary indemnity. Members should therefore be suspicious of contractual indemnities which are based upon a legal fiction and are not even-handed or reciprocal.

### Responding to requests

North understands Members can be under significant commercial pressure not to delay STS operations or raise unnecessary difficulties. To this end, the Club's advice to masters and Members on receiving a request for an STS indemnity is as follows.

- Whenever a request for an indemnity is received, the master or ship operator should refer the requestor to its own contractual partner.
- Alternatively, the request should be forwarded to the charterer, asking for instructions and authority to sign the indemnity on the charterer's behalf.
- If a Member and/or master is under urgent or commercial pressure, they should sign an indemnity 'for receipt only' and inform the charterer as soon as possible that they have done so pursuant to the charterer's instructions regarding the STS operation.



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Senior Executive (Claims)

- Members should not attempt to negotiate the terms of an indemnity with the requestor; to do so might suggest the requestor is entitled to it.
- Members should seek advice from the Club if they have any concerns.

Finally, the Club has also seen indemnities included in STS checklists exchanged between vessels. Such indemnities should never be agreed and, if necessary, the indemnity wording should be struck through with black ink before the checklist is signed and returned to the other ship.

### Confusing liabilities

STS indemnities have no legal justification unless they are freely agreed and exchanged between concerned parties. Unilateral indemnities will only confuse the liability regime governing STS operations and should not be agreed. They may also confuse the express and implied indemnities that Members have already agreed in their charter party.







# New programme aims to reduce piracy trauma

A new shipping industry programme has been launched to help reduce the trauma of seafarers and their families subject to pirate attacks.

Despite, or perhaps as a consequence of the ongoing activities of coalition forces and inter-governmental organisations to eradicate piracy in the Indian Ocean, the period of detention for vessels hijacked has increased to an average of more than 7 months.

Instances of cruelty and brutality to hostages have also increased significantly in frequency. In addition, crew members on vessels transiting pirate-infested waters can be traumatised by the transit experience itself or from sheltering in a citadel for prolonged periods during an attack while waiting for coalition forces to arrive.

A pan-industry alliance of shipowners, unions, managers, manning agents, insurers and welfare associations has thus come together to establish the Maritime Piracy: a Humanitarian Response Programme (MPHRP).

## Addressing humanitarian aspects

MPHRP intends to address the three phases of before, during and after an incident, with the aim of providing a model of assistance for seafarers and their families that addresses the humanitarian aspects of a traumatic incident caused by a piracy attack, armed robbery or being taken hostage. The programme's objectives include the following.

- Guidelines on 'good practice' for companies and seafarer welfare organisations on supporting seafarers and their family members through the three phases of a piracy incident – from pre-deployment, during the crisis and post release/post incident.
- The development of relevant training modules.
- The development of an international network of trained first-responders with appropriate skills within partner and associated organisations.
- Access to a network of professional aftercare.
- The availability of a seafarers' telephone helpline.
- A resource to collect appropriate research and information, and to make this available where further advice or assistance is sought.

The programme aligns fully with the International Maritime Organization's action plan to, 'provide care for those attacked or hijacked by pirates and for their families'. It has been built around the findings of industry experts following extensive fact finding and feedback obtained from meetings and

interviews with seafarers and families, including many with first-hand experience of attacks and hijackings. This has been combined with information from advisory groups on industry practices and procedures, pre-deployment piracy training and the skills required of responders, and the advice and assistance of a project steering group.

## Good practice guide

In its first phase the programme has developed a good practice guide for use by ship operators, manning agents and welfare associations to support seafarers and their families through a piracy incident. The guide covers the period from pre-crisis to post-crisis, identifying elements of best practice from start to finish.

In addition to vessel-hardening measures now commonly undertaken to prepare ships for transit of the high-risk piracy area, the crew should also undergo training to prepare them for every eventuality during the transit. As well as training associated with vessel security, there are psychological considerations that should not be overlooked. Interviews with seafarers released after an attack and hostage situations suggest that those briefed in advance of the voyage are better able to cope than those who are not. Information on how to behave before, during and after the event can play a large part in how the crew respond in the first instance and their ability to cope thereafter.

It is a well-known fact that the role of the family plays a significant part in the lives of seafarers, never more so than at times of increased anxiety and stress. The guide is also intended to assist shipowners and operators support family members at a time when the seafarer may be a victim of pirate activity. Guidance includes the role of a family liaison representative and how best to select appropriate individuals to perform this important task. In the same way that planning is important for the shipowner and operator, planning is also important for the family – just knowing that procedures are in place can in itself be reassuring to family members.

The guide contains a range of tools and examples of best practice that will assist owners and operators support a seafarer's family in their time of need. Speed of response can be critical; suitable notification by the operator as the first responder is important to gain the trust of family members. Who, how and when are all covered by the publication as well as the support and role that will be



**Andrew Glen**  
Manager

required after release if crew and family are to recover fully from the ordeal.

## The three R's

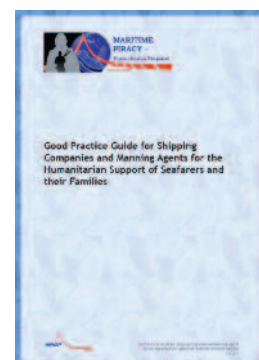
Appendix 1 of the guide contains a series of practical recommendations based on the findings of wide-ranging research into similar traumatic experiences. In particular it identifies resistance, resilience and recovery as key stages in working through a traumatic experience.

- **Resistance** – the form of psychological/behavioural immunity to the impact of distress.
- **Resilience** – the ability of an individual, a group, an organisation or a population to cope with and rapidly and effectively rebound from a traumatic incident.
- **Recovery** – the ability to recover and adaptively function in a post-traumatic situation.

It is hoped planning and training for these stages can significantly improve coping mechanisms for those involved.

*Further information about Maritime Piracy: a Humanitarian Response Programme can be found on the MPHRP website: [www.mphrp.org](http://www.mphrp.org)*

*The MPHRP good practice guide can also be downloaded from its website: [www.mphrp.org/publication.php](http://www.mphrp.org/publication.php)*





## Banishing back pain

The last issue of *Signals* described a fitness test that could be completed on board ships, introduced some general exercises for seafarers and explained how a fitness session at sea can be structured. In this issue some on-board exercises specifically aimed at avoiding back pain are suggested.

North receives many claims in relation to bad backs being suffered by seafarers – usually through injury caused during manual work. Spending some time strengthening this area may help avoid injury in the future.

The so-called 'trunk' or 'core' muscles include those of the lower back and abdomen. When these muscles are in poor condition, additional stress is applied to the spine as it supports the body, and back injury or back pain is more likely.

### Benefits of core strength

The core muscles can benefit from being exercised together in a single session. Developing combined strength in the stomach and back can

- reduce the likelihood of back-pain episodes.
- reduce the severity of back pain.
- protect against injury by responding efficiently to stresses.

A series of core muscle exercises are shown here. Remember to concentrate on technique, keep the pace slow and controlled at all times. A word of warning – do not start back exercises for the first time during an acute back-pain episode without first consulting a physician.

If the short routine is repeated twice a day, three to four times a week, benefit should be noticed within 2 to 3 months. The routine is based on increasing core strength and is not aimed at cardiovascular fitness or fat-burning – there will be more on fat-burning in the next issue of *Signals*.

## Core muscle exercises

### Pelvic tilt

- Lie on the floor with knees bent, feet parallel and arms to the side.
- Tighten lower abdominal muscles, pulling the navel and lower back toward the floor, without using buttocks or leg muscles.
- Hold for 5 seconds.
- Repeat 5 to 10 times.

### Trunk curl

- Lie on the floor with knees bent and arms crossed on the chest.
- Using upper abdominal muscles, raise trunk of body off the floor slightly, to about 15 degrees.
- Hold for 5 seconds.
- Lower trunk slowly to the floor.
- Repeat 5 to 10 times.

To be effective, the motion should raise the chest rather than the head or neck, and only be a slight lift. Rising too far, to a sitting position, works leg muscles not the abdominal muscles.

### Legs up

- Lie flat on your back and bring your knees up as close to your chest as you can manage.



- Keep your back flat and extend your legs down until you can feel your stomach working, then bring your legs back up.
- Keep the pace slow throughout.
- Repeat 5 to 10 times.

### Back extension

Many of us work our abdominal muscles, but neglect to work the lower back, which can lead to muscle weakness and imbalance.

- Lie face down on a mat and place the hands on the floor or behind the head (more advanced).
- Contract the abdominal muscles and keep them contracted throughout the exercise.
- Squeeze the back to lift the chest a few inches off the floor.
- Lower the chest to the floor.
- Repeat 5 to 10 times.

### Tips

- Imagine that you are lengthening the torso as you lift the chest up.
- To add intensity, you can also lift the legs off the floor at the same time.

### Cat stretches

- Get on your hands and knees. Your hands should be directly below your shoulders and your knees under your hips. Do not lock your elbows.
- Exhale and rock your hips under (imagine you are a dog putting its tail between its legs).
- Inhale as you release your tailbone out. Lift your chest and extend your spine long keeping your muscles tight.
- Repeat 5 to 10 times.

### Tips

Think of this as a good cat and angry cat. A good cat stretches its back and becomes long, the angry cat lifts its spine with its head down.

## Crew contract reviews – a reminder

Crew employment arrangements can be highly complex, often involving manning agents, crew managers and other entities. It is vital that Members have certainty in their crew contracts to minimise their potential liabilities.

North regularly helps Members protect their position when negotiating and drafting crew

contracts – including collective bargaining agreements – as well as identifying any problems with contracts which have already been negotiated and signed.

North's P&I cover for Members includes protection against liabilities arising from seafarers' terms of employment, which should be approved by the Club. Members

are thus reminded to submit their crew contracts to the Club for review if they have not already done so.

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



# China launches new pollution regulations

The People's Republic of China (PRC) has recently introduced regulations for the prevention and control of marine pollution from ships. These include a requirement for shipowners to enter into a contract with a local approved pollution-response company before entering any port.

The People's Republic of China Regulations on the Prevention and Control of Marine Pollution from Ships were published in September 2009 and came into force on 1 March 2010. They cover oil and hazardous and noxious substances (HNS) spills from a vessel, and aim to establish comprehensive rules governing marine pollution prevention, response and clean-up within Chinese waters.

The new regulations will have significant impact on visiting ships since article 33 makes mandatory provision for operators of any ship carrying polluting and hazardous cargoes in bulk, and any other vessel above 10,000 GT, to contract with a PRC Maritime Safety Agency (MSA) approved pollution-response company before entering a Chinese port. The companies are referred to as spill pollution-response organisations (SPRO) and the MSA publishes lists of approved SPRO. This requirement entered into force on 1 January 2012.

## Spill pollution-response organisations

SPROs are classified into four categories: 'level 1' being the highest and 'level 4' being the lowest. Level 1 organisations can deal with oil and HNS response in PRC waters; level 2 with oil and HNS in PRC waters within 20 nautical miles from the shore; level 3 with oil-spill response in port; and level 4 with oil-spill response in a certain working area in a port or along a wharf.

Ship operators will need to contract with an approved SPRO in accordance with the size and type of their vessel and the operations being carried out (see table).

The clean-up contract must be kept on board the ship since it may be necessary to present the agreement to local MSA officials upon entry into port, unless it has been submitted in advance by the operator. The approval criteria for SPROs are based on the standards of personnel training, standard and quantity of equipment, geographic coverage and response time to deploy to within that geographic area.

## Ship operators

The term 'operator' for the purposes of concluding and signing a contract with a SPRO is defined by MSA as the owner, manager or operator of a ship. Operators domiciled or with a representative office in the PRC must sign the contract with the SPRO directly. Operators without an office in the PRC may also contract with appropriate SPROs directly and may obtain assistance from legal entities located in mainland China in arranging contacts. Details of such requirements can be obtained from the Club.

The Master may also sign the contract in certain circumstances, for example where speed is necessary, although an authorisation would still be necessary for the master to sign on behalf of the operator.

Operators of ships calling at different Chinese ports during the year may need to contract with approved SPROs in each port of call, which is potentially a considerable task for operators having to sign and negotiate contracts with separate SPROs in each and every possible port of call. To

address this, SPROs are forming various alliances among themselves to offer a 'one stop' solution for operators.

## Model contract

MSA issued 'Detailed Rules on the Implementation of the Regime of Agreement for Ship Pollution Response' in May 2011, including a model 'Agreement for Ship Pollution Response' (the 'model contract'). Certain items in the contract are mandatory: for example, each SPRO has to carry out at least two emergency response exercises a year. Other aspects, including the amount of retainer fees and rates to be charged during a response are termed 'optional' as the operator and SPRO are free to negotiate these aspects as they see fit.

In order to ensure that Members can negotiate and sign the necessary contracts, P&I clubs in the International Group of P&I Clubs have issued a recommended spill response contract and authorisation letter for agents to negotiate and sign the contract on behalf of overseas operators. Supplemental clauses have also been drafted for inclusion in this contract that relate to termination of work and insurance to be maintained by the operator and the SPRO.

## Fee structures

Different SPRO have established different fee structures, which propose to charge operators different levels of retainer fee (which do not fall within the scope of Club cover) for stand-by purposes when a contracted ship enters the SPRO's service area. SPROs are also proposing different tariffs for a response in the event of an incident while a ship is within the service area, with options available on a per voyage or an annual basis.

It is understood that certain SPROs that are members of the China Association of Communication Enterprise Management (CACEM) have prepared 'standardised rates' for daily retainer fees. CACEM is a Research Centre for Environmental Protection and Transportation Safety (formally known as a Ministry of Transport Enterprise Committee), which operates under the China Academy of Transportation Sciences (CATS), which in turn is part of the Ministry of Transport.

However, it is important to note that although it is clear operators will be required to pay some form of retainer to each SPRO with which they sign a contract, the rates proposed by CACEM will be for guidance only. It is understood that for these rates to become

SPRO categories according to the size and type of vessel and its operation.

Vessel type	Vessel carrying oil in bulk			Vessel carrying liquid and hazardous cargo in bulk other than oil		Other vessels > 10,000 GT	
	In port	Entering/ departing a port	Ship-to-ship transfer - loading or discharging cargo outside port	Entering/ departing a port	Ship-to-ship transfer - loading or discharging cargo outside port	Entering/ departing a port	Ship-to-ship transfer - loading or discharging cargo outside port
SPRO level 1	—	> 10,000 GT	> 20 nm	> 10,000 GT	> 20 nm	> 50,000 GT	> 20 nm
SPRO level 2	10,000 – 2,000 GT	< 10,000 GT	< 20 nm	< 10,000 GT	< 20 nm	50,000 – 30,000 GT	< 20 nm
SPRO level 3	2,000 – 600 GT	—	—	—	—	30,000 – 20,000 GT	—
SPRO level 4	< 600 GT	—	—	—	—	20,000 – 10,000 GT	—





mandatory, they must first be published by China's 'Price Control Administration' and to date this is not anticipated.

Retainer fees and response tariffs should be charged on a reasonable basis. Members should ensure that response tariffs are incorporated into contracts, and should contact the Club in the event that they have a concern regarding their reasonableness.

### Additional training and exercise

Operators may also wish to consider including an additional training, exercises and coordination (TEC) clause in their contract, with the option to require the following.

**Training:** additional training to be undertaken by the SPRO on a yearly basis on a particular topic such as dispersant application or shoreline cleanup, for example. The training course would be offered by a suitably qualified third party appointed by the operator.

**Exercises:** requiring the operator and / or an operator-nominated third party to assist in both the design and evaluation of the two exercises that the SPRO is under a mandatory requirement to conduct. Under the regulations, operators are required to cooperate in these exercises.

**Coordination:** a coordination role to be assumed by the operator and / or a third party – such as a special spill representative (SSR) appointed by the operator – working with the SPRO in managing the response and, subject to MSA agreement, liaising with MSA's Headquarters for Emergency Response in delivering a response directed by MSA. As a consequence of close involvement with the response, an operator-nominated third party (or SSR) would also be in a good position to assist operators in the preparation of the response-evaluation report required by the new regulations at the close of the incident.

### Keeping up-to-date

Members should consult North's website on a regular basis for the latest information – *Club Circulars* and *Industry News* – relating to the new pollution regulations. Members can also contact the Club for information and advice.

## IMO update

### Meters required on tankers

Following the eighty-seventh session of the International Maritime Organization's (IMO) maritime safety committee (MSC) in May 2010, resolution MSC.291(87), which revises the International Convention for the Safety of Life at Sea (SOLAS) chapter II-2, regulation 4, was adopted. The resolution, which entered into force on 1 January 2012, requires all tankers to be equipped with at least one portable instrument for measuring oxygen and one for measuring flammable vapour concentrations, together with a sufficient set of spares. Suitable means shall be provided for calibration of such instruments.

### Certificates to be carried onboard

Following its thirty-sixth session in September 2011, the IMO facilitation committee, under circulars FAL.2/Circ.123, MEPC.1/Circ.769 and MSC.1/Circ.1409, has finalised its revision of the list of certificates and documents required to be carried on board ships, together with a brief description of the purpose of the certificates and other relevant documents. This work has been carried out in accordance with the provisions of the Convention on Facilitation of International Maritime Traffic (FAL) concerning formalities required of shipowners by public authorities on the arrival, stay and departure of ships. The revised list of certificates and documents takes into account amendments to SOLAS, the International Convention for the Prevention of Pollution from Ships (MARPOL), the Standards of Training, Certification & Watchkeeping (STCW) Convention and the entry into force of the Anti-Fouling Systems (AFS) Convention.

### Dangerous goods

The MSC also approved amendments to the International Maritime Dangerous Good

*Members should also refer to the following websites for up to date information*

- MSA website: <http://www.msa.gov.cn> or [http://en.msa.gov.cn/msa/\(English version\)](http://en.msa.gov.cn/msa/(English%20version))
- MSA oil pollution prevention website: [www.osp.cn](http://www.osp.cn)

*North is grateful to Natasha Lippens, Managing Director of Marine Pollution Technical Advisory Services Asia Pacific Ltd for help in preparing this article.*

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Website: [www.mptas.com](http://www.mptas.com).*



**Simon MacLeod**

Risk Management Executive

(IMDG) Code annexes and supplements Emergency Response Procedures for Ships Carrying Dangerous Good (EmS Guide) at its eighty-seventh session. These amendments, as covered in MSC.1/Circ.1360, entered into force on 1 January 2012.

### MARPOL annex I

The IMO marine environment protection committee (MEPC) agreed during its fifty-ninth session in July 2009, under resolution MEPC.186(59), that a new chapter 8 should be added to annex I of MARPOL. The new chapter details regulations for the prevention of pollution during transfer of oil cargo between oil tankers at sea that will apply to oil tankers of 150 GT and above which are engaged in ship-to-ship (STS) operations on or after 1 April 2012. STS operations conducted before this date but after the approval by the coastal state administration of the STS operations plan shall, as far as possible, be in accordance with the STS operations plan.

### IMSBC Code changes

During its eighty-ninth session in May 2011, MSC adopted resolution MSC.318(89) amendments to the International Maritime Solid Bulk Cargoes (IMSBC) Code. The amendments entered into force, on a voluntary basis, from 1 January 2012 and will become mandatory from 1 January 2013. The amendments include changes to existing individual cargo schedules and the addition of new schedules for 'distillers dried grains with solubles', 'ferrous sulphate heptahydrate', 'fly ash, wet', 'granular ferrous sulphate', 'magnesium sulphate fertilizers' and 'wood products – general'. The entry for 'wood pulp pellets' is deleted.





**Peter Scott**  
Senior Executive (Claims)

# Container stowage reminder

## How dense is your vegetable oil?

North has recently noted a number of shortage claims arising from vegetable oils discharged in Egyptian and Chinese ports relating to disputes about the density of the oils.

The quantity of vegetable oil cargo in a bill of lading is usually stated only as its weight in metric tonnes, which is calculated from its density and its loaded volume. In many cases, the density figures are provided by the shipper. However at the discharge port, the density is either taken from standard tables or, more often, calculated by the receiver after the ship leaves. Any reduction in the density figure may result in the delivered weight of cargo being calculated as less than shown on the bill of lading, potentially leading to a shortage claim.

One of the warning signs of such claims is when receivers' surveyors sign an ullage survey report, 'for ullage and temperatures only', or similar words. This may leave it open for the receiver to allege a different density in due course, allowing them to make a claim.

To protect themselves, ship operators and their masters should consider taking samples to verify the density of the cargo on loading. Ideally these should be drip samples taken at the manifold throughout loading, but consolidated samples from individual tanks are acceptable. Samples should also be taken during discharge.

Such samples may assist operators to defend any shortage claims or in subsequent indemnity claims against the shipper or charterer.



North is continuing to experience claims arising directly or indirectly from inadequately planned container stowage. Causes of recent claims include tier weights being exceeded, resulting in stack collapses, and non-compliance with the requirements of the International Maritime Dangerous Goods (IMDG) Code with regard to segregation of containers containing dangerous goods.

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 onboard as soon as it is received.

When stowage does not comply with the vessel's cargo-securing manual or requirements of the IMDG Code, ships' masters should raise this with charterers, requiring them to restow the cargo in accordance with the manual or code.

*Further information on container stowage and securing is available in the Club's loss prevention briefing 'Carriage of Containers, Stowage and Securing', which can be viewed on, or downloaded from, the Club's website: [www.nepia.com/loss-prevention/publications-and-guides/loss-prevention-briefings/](http://www.nepia.com/loss-prevention/publications-and-guides/loss-prevention-briefings/)*

**Answers to collision conundrum**  
1. A, 2. A, 3. C, 4. C, 5. E – Keep altering hard to starboard. 6. E – Keep altering hard to starboard.  
This was a standard 'crossing situation' and the correct answers are the obvious ones. The vessels could 'stand-on' until they were about 4 to 5 nautical miles apart. The 'give-way' vessel should have made a bold alteration to starboard by 12 minutes before collision and, if it did not do so, the 'stand-on' vessel should have made a bold alteration to starboard 7 minutes before collision.  
Both ships should have continued to alter course to starboard.  
At about 4 minutes before the collision, both watchkeepers spoke on VHF, wasting valuable time and confusing the situation. They should not have done so. *Waterline* was held 60% liable for the collision because it was the 'give-way' vessel and created the 'close-quarters' situation; Crown Posada was held 40% liable because it altered course to port.



# Residential course hits 20 and goes east

North's annual residential training course in P&I insurance and loss prevention has been going from strength to strength over the past two decades, so much so that a parallel version has been launched in the Asia-Pacific region. The courses provide delegates with information about marine insurance, maritime law and loss prevention, and are consolidated by intensive workshop training.

The twentieth UK course will take place between 15 and 22 June 2012. As ever the event is likely to prove very popular, so those wishing to take part need to book early to avoid disappointment.

*Further information, a course brochure and an application form are available to view or download from the Club's website: [www.nepia.com/loss-prevention/education-and-training/residential-training-course.php](http://www.nepia.com/loss-prevention/education-and-training/residential-training-course.php)*

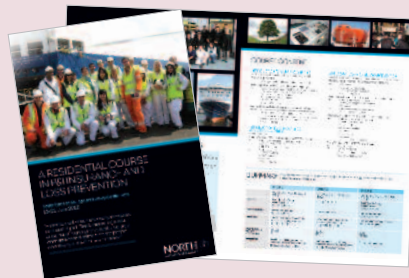
## Asia-Pacific version launched

An Asia-Pacific version of the course was launched in October 2011. Held at Singapore's Shangri-La Rasa Sentosa Resort it was a great success, with over 40 delegates



attending – primarily from the Asia-Pacific region but with some from as far afield as North America and the Middle East.

Highlights included a visit to a Singapore MPA container terminal and experiencing a collision on Singapore Polytechnic's marine simulation unit ship simulator. Positive feedback received has led to the event being scheduled on a biennial basis, with the next one taking place in autumn 2013.



**Andrew Kirkham**

Risk Management Executive

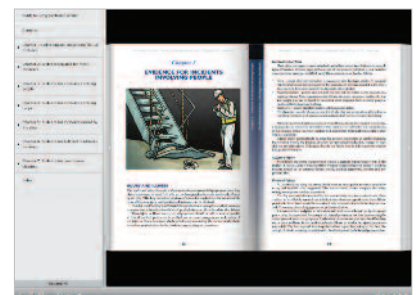
## Members turn out in force for North's annual Greek seminar

About 120 members of the Greek shipping community attended a seminar on cargo liquefaction hosted by North's Piraeus office in October.

The event at the Piraeus Marine Club was chaired by office manager and associate director Tony Allen and focused on the safety, regulatory and practical issues which arise when shipping bulk cargoes prone to liquefy together with the legal and commercial aspects facing masters when suspect cargoes are presented for loading.

North claims executive Gordon Robertson examined the documentation issues that arise on shipment, after which senior claims executive Claire Andrews focused on how to manage surveyors and experts. Risk management executive Andrew Kirkham provided practical advice for masters to ensure only safe cargoes are loaded. He emphasised that if there is any doubt about the true nature of a cargo, the only prudent course is to treat it as an International Maritime Solid Bulk Cargoes (IMSBC) Code group A cargo until adequate testing proves otherwise.

Greek office deputy manager and FD&D lawyer Helen Yiacoumis then examined the legal and commercial aspects, focusing on what to do when cargoes suspected as unsafe are presented for loading. The seminar concluded with FD&D lawyer Gillian Stanton looking at the steps owners could take to help protect their position and ensure safe carriage of cargoes.



## Publications made easier to view online

North's wide range of printed loss prevention publications are being made available as web-based, page-turning versions to make them more accessible online.

Most publications have been freely available for Members as pdf files for several years, with all but the guide books being directly downloadable from the Club's website. The new option avoids the need for file transfers as well as providing direct online access to the guide books for the first time. Fully indexed, standalone pdf

versions of the guide books will still be freely licensed to Members on request.

A complete electronic set of all North's current loss prevention publications was sent to every Member and entered ship in July 2011 and a CD containing an updated set will be distributed to Members and entered ships with the next issue of Signals in April 2012.

*North's loss prevention publications can be viewed at and in many cases downloaded from: [www.nepia.com/loss-prevention/publications-and-guides/](http://www.nepia.com/loss-prevention/publications-and-guides/)*





## New information sheet and poster on cargo liquefaction

North's *Hot-Spots* information sheets provide practical hints and tips to help avoid incidents and claims. The latest in the series, entitled *Liquefaction*, offers practical guidance on the steps to take when a dry bulk cargo that may liquefy is presented for loading. It is intended to be used alongside the regulation and guidance provided in the International Maritime Solid Bulk Cargoes (IMSBC) Code.

Liquefiable bulk cargoes also feature in the first of North's new series of *Cargo Wise* posters, which highlight key issues relating to carrying different types of cargoes. The new poster shows

a bulk cargo that has liquefied, using a humorous eye-catching image to highlight and remind seafarers of the very serious consequences that can arise if proper precautions are not taken when loading such cargoes.

*Copies of the new Cargo Wise poster and Hot-Spots information sheet 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/](http://www.nepia.com/loss-prevention/publications-and-guides/)*



## Signals Search 30

### Questions

- Which aspect of piracy does a new industry programme address?
- Poor planning of the stowage of which type of cargo continues to result in incidents?
- What is the topic covered by North's first Cargo Wise poster?
- Amendments to which code entered force on a voluntary basis on 1 January 2012?
- What may record less than 50% of everything they are supposed to?
- What type of contract should be submitted to the Club for approval?
- What assessors are a unique feature of the admiralty court?
- Exercise of which muscles can help avoid back problems?
- What is the acronym used for commercial armed maritime security providers?

- Signals Search is open to all readers of Signals.
- Send a copy 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](mailto:denise.huddleston@nepia.com)

- All correct entries received by the closing date will be entered in a prize draw.
- Closing date Friday 4 March 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*.

### Your copy of Signals

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

- Cargo Wise poster – Liquefaction (appropriate entered ships only)
- Hot-Spots information sheet – Cargo Liquefaction (Members and appropriate entered ships only)

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

### Answers to Signals Search 29

- |            |             |
|------------|-------------|
| 1 EEDI     | 6 Creeping  |
| 2 LOF      | 7 Armed     |
| 3 Bribery  | 8 Maximum   |
| 4 Gypsy    | 9 Oxidising |
| 5 Interest |             |

### Signals Search 29 Winners

**Winner:** Matthew James Geddes, MV City of Westminster, United Marine Holdings

**Runners-up:** Captain Neeraj Tripathi, MT Pacific Opal, Tanker Pacific Management (Singapore) Pte Ltd  
 Captain Guo Bao Tian, MV Cook Strait, Pacific Basin Shipping (HK) Ltd

## 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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 SERVICE, STRENGTH, QUALITY



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