**Maintaining hatch covers**

Proper maintenance of hatch covers is essential if they are to be operated efficiently and kept weathertight. However, hatch covers can be complex pieces of equipment and maintenance and adjustment requires knowledge and experience. North has already published a loss-prevention guide – *Hatch Cover Maintenance and Operation* – as well as a loss-prevention briefing to assist seafarers with this task. To provide further help, a laminated help sheet is included with this issue of *Signals*. The aim is that the sheet will be readily available for use on deck and provide a guide to inspection. This would help identify problems before they become a serious threat and alert the maintenance team to intervene as soon as possible. It also provides an illustrated guide to common problems associated with sealing arrangements.


**Ensuring healthy crews**

A healthy crew helps to ensure safe operation of a vessel. It is therefore important to ensure that all seafarers considered for employment are in good health with no existing medical conditions for which immediate treatment may not be possible at sea. Two of the largest groups of seafarers are from the Philippines and Ukraine. North recommends that seafarers from these areas undergo enhanced pre-employment medical screening before being accepted for employment. To assist with this, the Club recommends a number of clinics in the Philippines and Ukraine which are regularly audited to ensure they continue to meet the required standards. See page 2 for full story.

**Residential training course**

North’s popular annual residential course in P&I insurance and loss prevention will take place in June 2010. At the time of publication the course was almost full and Members wishing to attend should therefore contact the Club as soon as possible. Full details and a brochure are available 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).

**Know your navigation limits**

Ships are generally insured for hull and machinery risks on the basis of trading limits defined by reference to International Navigating Limits. It may have gone unnoticed by some parties that these replaced the older Institute Warranty Limits in 2003. Some charterparties still refer to these out-of-date navigation limits, which could give rise to disputes under the charterparty. See page 4 for full story.

**Planning for safe navigation**

Two aspects of planning for safe navigation are looked at in this issue. One relates to voyage planning and, in particular, stresses the importance of planning and monitoring when under pilotage where the navigational risks are significantly increased. The other aspect examined is anchoring, where the importance of planning is also examined, as well as application of regulations to avoid collision. See pages 6 and 7 for full stories.

**Effects of ISM Code change**

Amendments have been made to the International Safety Management (ISM) Code and are due to come into force on 1 July 2010. They may have a significant effect on safety management systems currently in use as they incorporate the concept of risk assessment, and highlight the responsibility of ship operators to ensure that procedures, plans and instructions are established. See page 5 for full story.

**Safe carriage of cargo**

Two issues affecting the safe carriage of cargo are considered in this issue. The first is concerned with liquefaction of bulk cargoes, especially iron ore fines, and the importance of obtaining proper documentation before loading commences, and of carrying out appropriate testing of the cargo before and during loading to ensure it is safe to carry. The steps that need to be taken when considering carriage of non-containerised cargo on containerships are also looked at, particularly stowage, securing and stability, when a significant quantity of break-bulk or project cargo is being planned. See pages 8 and 9 for full stories.
Pre-employment medicals increase

Over 10,000 examinations were carried out under North’s enhanced pre-employment medical examination schemes in the Philippines and Ukraine in 2009, which is a significant increase over previous years. A significant number of Members have joined the scheme since it started in 2002, and they all report back on its effectiveness. The Club continues, with the assistance of Medical Rescue International, to undertake a thorough audit of each clinic annually. The most recent audit in November 2009 was a great success, with all clinics continuing to meet the required high standards.

Ukraine clinics – proving their worth
Due to an increased number of illness claims from Ukrainian seafarers, North introduced its second screening scheme in Odessa in 2007. This has been running successfully ever since, using the same three clinics initially selected – Medical Centre Zdorove (known as Medical Centre ‘Health’), Medical Centre ‘ArchiMed-T’ and Medical Centre ‘Academmarine’.

The Club constantly monitors the scheme and, as in the Philippines, carries out annual audits of the clinics involved. Member participation is also monitored to evaluate ongoing needs and whether to expand the scheme into other areas of the Ukraine.

New requirements for accommodation ladders and gangways

The International Convention for the Safety of Life at Sea (SOLAS) chapter II-1, regulations 3 to 9, require means of embarkation and disembarkation on ships constructed after 1 January 2010 to be manufactured, installed, inspected and maintained in accordance with guidelines provided in International Maritime Organization (IMO) circular MSC.1/Circ.1331.

Accommodation ladders and gangways used for embarkation and disembarkation are required to meet applicable international standards, such as ISO 5488:1979 Shipbuilding – accommodation ladders, ISO 7061:1993 Shipbuilding – aluminium shore gangways for seagoing vessels, and/or national standards or other requirements recognised by the ship’s flag state administration.

Accommodation ladders and gangways fitted on ships constructed before 1 January 2010, which are replaced after that date must, so far as is reasonable, also comply with the guidelines contained in MSC.1/Circ.1331.

Location and lighting
The guidelines stipulate that, as far as practicable, means of embarkation and disembarkation should be sited clear of working areas and should not be placed where cargo or other suspended loads may pass overhead. Lighting should be provided to illuminate the means of embarkation, the position on deck where people embark or disembark and the area where ladder controls are situated.

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The structure of accommodation ladders, gangways and their fittings/attachments should facilitate regular inspection and maintenance of all parts and, if necessary, lubrication of pivot pins where provided. Accommodation ladders and gangways, including associated winch and fittings, should be maintained and inspected at appropriate intervals as required by SOLAS chapter III, regulation 20.7, in accordance with manufacturers’ instructions.

Winches and wires
The construction and test of accommodation ladder winches should be in accordance with applicable international standards such as ISO 7364:1983 Shipbuilding and marine structures – deck machinery – accommodation ladder winches. All wires used to support the means of embarkation and disembarkation must be maintained as specified in SOLAS chapter III, regulation 20.4, for lifesaving launching appliances. This will require monthly inspections (with special regard for areas passing through sheaves) recorded in the log book and wire renewal when necessary, or at intervals of not more than five years, whichever is earlier.

Class surveys
Classification societies will initiate inspections as part of cargo ship safety equipment and passenger ship safety surveys as and when authorised by ships’ flag state administrations.

Ensuring medical care after repatriation
The Club is continuing its efforts to assure doctors in countries where crew members have been disembarked for emergency medical treatment that good ongoing treatment is available back home. The aim is to avoid unnecessary delays in obtaining a doctor’s consent to repatriation, even when a crew member is otherwise sufficiently fit to fly home.

While seafarers should not be discharged from a foreign hospital early, the Club believes they will benefit from returning home as soon as they are able – provided suitable medical care is available. Language difficulties will be removed and it will be easier for family members to visit, both of which aid recovery.

As many seafarers originate from the Philippines, North of England regularly liaises with suitable hospitals in Manila. These can provide high-quality facilities, including state of the art equipment such as a positron emission tomography (PET) scanner, for caring for seafarers after repatriation. Doctors, nurses and other specialist staff in such hospitals also have experience of the maritime industry as well as appropriate knowledge of rehabilitation care.
Crew employment contracts – a reminder

The P&I cover provided for Members includes liabilities arising from seafarers’ terms of employment, but only where these have been previously approved by the Club.

Members should thus ensure that copies of any crew contracts not yet submitted are forwarded to North as soon as possible. If any such contracts are due for review, the Club will be happy to assist Members in the drafting process.

Strokes – the importance of taking action FAST

A stroke is a brain attack and happens when the blood supply to the brain is disrupted, most commonly from a blood clot. Prompt action can prevent further damage to the brain, whereas delay can result in death or major long-term disabilities – such as paralysis, severe memory loss and communication problems.

When at sea it is particularly difficult to receive immediate and specialist treatment. This makes an early diagnosis all the more important, enabling radio medical advice to be sought immediately and arrangements put in place for urgent disembarkation.

FAST symptoms

The acronym FAST provides an easy way to remind ships’ crews how to assess three specific symptoms of a stroke and the action to take.

** Facial weakness**
Has the person smile? Has their mouth or eye drooped?

**Arm weakness**
Can the person raise both arms?

**Speech problems**
Can the person speak clearly and understand what you say?

**Time**
Time to obtain urgent radio medical advice.

It could be that the patient is suffering a transient ischaemic attack (TIA) or ‘mini-stroke’. This is similar to a full stroke but symptoms last just a few minutes, or perhaps a few hours, and have completely disappeared within 24 hours. However, a suspected TIA should never be ignored as it may lead to a major stroke, and again immediate radio medical advice should be sought.

Improving internet access at sea

There can be no doubt that the working environment on board has changed significantly in recent years, and there will always be opposing views whether this change has been for the better or not. However, one thing that has not changed is the potential for time on board to be a lonely experience for seafarers. Improving internet access can have significant benefits for morale and crew wellbeing if they are managed appropriately.

**Maintaining social links**

The current development and popularity of social networking websites is playing an increasingly important role in many areas of life on board ship just as it is ashore. More and more young seafarers expect to have the same or similar access to the internet during their time at sea as they do when they are at home.

North is a strong supporter of initiatives that improve the wellbeing of seafarers and recognises the contribution good communication links with family and friends can have in achieving this goal. This view was endorsed recently at a meeting of a young seafarers focus group hosted by the International Association of Independent Tanker Owners and the International Transport Workers’ Federation in London. Twenty delegates from seven different nations identified living conditions on board, and the quality and cost of communication with family, as two of their main issues of concern when considering a career at sea.

Many companies have, for some time, struggled with crew retention issues – this is undoubtedly a complex matter with no ‘quick fix’ solution. However, as identified by delegates from the focus group, improved personal communication facilities help.

**Professional development**

Crew retention can also benefit from investment in staff development and support. Continuous professional development programmes tailored to the individual can improve a seafarer’s sense of company loyalty and provide a mechanism to nurture prospective candidates for future promotion within the organisation.

Officer training programmes have evolved in the recent past and now consist of increasingly complex vocational training portfolios that rely on a significant amount of on-board training and supervision. More accessible communication links with training providers undoubtedly benefit mentors and students alike.

**Technical and legal issues**

Technical issues associated with the ability to download large amounts of data at rates comparable to those experienced ashore may, for the time being, be cost-prohibitive for many operators. It is hoped that in time costs will become more reasonable as system development and availability improve.

However, to satisfy expectations and utilise increasingly sophisticated and, perhaps more importantly, immediate methods of communication requires an undertaking by owners, managers and seafarers alike to address a number of social and legal issues if it is to be used responsibly. Suitably worded terms of use and contracts of employment are required to ensure that benefits can be enjoyed by all while maintaining the rights of the individual and employer.

The need to monitor material downloaded and stored on ship servers and crew personal computers is an issue that can have significant legal implications for crew members and ship operators. As vessels move from one jurisdiction to another the nature of material can, and has, come under the scrutiny of port officials. On occasions when material has been considered inappropriate, vessels have been detained and crew arrested.

It is true that there are a number of important issues that must be addressed to ensure that the development of more widely accessible means of communication on board can be progressed to the mutual benefit of all. Careful planning and cooperation between those involved is essential for the successful development of any new technology if it is to work effectively.
BIMCO has recently published an updated stowaway clause for time charterparties. The clause is considerably shorter and simpler than the previous version, and clearly divides the responsibility for stowaways between owners and charterers.

The changes are intended to resolve previous difficulties experienced in clarifying who is responsible for stowaway costs, which often led to disputes between owners and charterers. It is also intended that the indemnity provision will deal with the consequences of deviation, by clearly apportioning this between the two parties depending on how stowaways boarded the vessel.

In practice ship operators are responsible in the first instance for paying the ever-increasing stowaway-related costs, which include the instruction of local correspondents, port fines, security issues, maintenance and ultimately actual repatriation. The new clause is designed to make it easier for owners and charterers to reach an agreement on how costs should ultimately be apportioned, depending on how the stowaways gained access to the vessel.

In particular, the due diligence requirement in the old clause has been removed and replaced by a strict liability. Should stowaways gain access to a vessel through cargo operations, this amounts to a breach of charter by the charterer, irrespective of whether the charterer exercised due diligence to avoid the problem.

BIMCO stowaways clause for time charterparties 2009
(a) If stowaways have gained access to the Vessel by means of secreting away in the goods and/or containers or by any other means related to the cargo operation, this shall amount to breach of charter. The Charterers shall be liable for the consequences of such breach and hold the Owners harmless and keep them indemnified against all claims; costs (including but not limited to victualling costs for stowaways whilst on board and repatriation); losses; and fines or penalties, which may arise and be made against them. The Charterers shall, if required, place the Owners in funds to put up for bail or other security. The Vessel shall remain on hire for any time lost as a result of such breach.

(b) Save for those stowaways referred to in sub-clause (a), if stowaways have gained access to the Vessel, all expenses including fines or penalties, shall be for the Owners’ account and the Vessel shall be off hire for any time lost.

US rule B decision challenged
As reported in Signals 78, the US Second Circuit Court of Appeals sitting in New York decided in October 2009 that US dollar electronic transfer of funds (ETF) passing through the banking system in New York could not be attached as security for maritime claims under rule B of the US Federal Rules of Civil Procedure.

Shipping Corporation of India (SCI) recently filed a petition to the US Supreme Court seeking to overturn the decision, primarily on the grounds that the appeal court erred in considering the issue when it had not been raised or briefed by either party to the appeal. Specifically, SCI states that under the US constitution, maritime claims are governed by federal law and not state law. The appeal court’s reliance on New York state law in determining whether a party has a proprietary interest in an ETF is therefore wrong and, instead, should be viewed in the light of federal law, which recognises an interest in intangibles such as ETFs.

The Supreme Court will consider the petition and, if a sufficient number of the justices agree to grant the required writ of certiorari, then further briefing will be filed by both parties followed by an oral argument before the full court. On the other hand, if the justices do not grant the writ, then the appeal process will be concluded and the Second Circuit’s decision will remain as binding precedent for the federal courts in New York.

Further reports on the case will be given in future issues of Signals.

International Navigation Limits
It has long been common for time charterparties to define the limits within which the charterer is entitled to trade the ship. Until 2003 this was by reference to the Institute Warranty Limits (IWL) – such as, ‘always within IWL.’

However, it seems to have gone largely unnoticed that on 1 November 2003, IWL were replaced by new International Navigating Conditions / International Navigating Limits (INL). These were produced by the joint hull committee of the Lloyd’s Market Association and the International Underwriting Association of London, and they updated and revised the old IWL. Apart from re-arranging the relevant areas, some of them were redefined or more precisely defined, and new areas were added. Unfortunately many charterparties still refer to IWL.

As ships are now generally insured for hull and machinery risks on the basis of INL, it is important they are fixed under charterparties that refer to INL. If trading limits are still defined by reference to IWL, there is a danger that under the terms of the charterparty a charterer could order the ship to go to a place that did not fall within the exclusions contained in IWL but which is now excluded by INL.

Risk of uninsured loss
An owner could then find itself in the position of being contractually bound to go to somewhere for which cover is excluded by hull and machinery insurance. If the ship suffers damage as a result, and if there is otherwise no breach of contract on the part of the charterer, the owner could suffer an uninsured loss.

What is more, an owner would not necessarily be entitled to refuse to go to a place as ordered by charterer that is outside INL if the charterparty refers to IWL and the place in question is not outside IWL. In such circumstances a refusal to do so could amount to a breach of contract and expose the owner to a claim for damages.

The Club recommends that if Members are in any doubt about the extent of their hull and machinery cover, they should speak to their brokers or insurers.

Posters in use
North’s posters are regularly sent to ships entered with the Club. This photograph shows an innovative use of a poster on oily water separator equipment.
Amendments to the International Safety Management (ISM) Code contained in International Maritime Organization resolution MSC.273(85), adopted in December 2008, are due to come into force on 1 July 2010. The amendments may have a significant effect on many safety management systems (SMS) currently in use in that they incorporate the concept of risk assessment.

The existing code requires risks to be identified and safeguards established. The amended code will require that risks to ships, people and the environment will have to be identified, assessed and have appropriate safeguards put in place. The principal changes to the ISM Code are summarised in the table below.

The new requirements are more onerous as it would seem they will require a formal risk assessment of the identified risks, together with related control measures, to be in place for each of the identified risks. Although many SMS already contain such risk assessments, others may not. In effect the new code seeks to shift each and every SMS towards a more proactive approach to hazard identification and control.

Members who have not already done so should contact their flag state administration and/or recognised organisation for advice on incorporating the amendments in time for the 1 July 2010.

**ISM Code 2008 amendments**

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Changes</th>
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<tbody>
<tr>
<td>1.2</td>
<td>Objective</td>
<td>In section 1.2.2.2, ‘establish safeguards against all identified risks’ is replaced by, ‘assess all identified risks to its ships, personnel and the environment and establish appropriate safeguards.’ The concept of risk assessment is incorporated into the code by this change. In effect risk assessment has become mandatory for all vessels required to comply with the ISM Code.</td>
</tr>
<tr>
<td>5.1.5</td>
<td>Master’s responsibility and authority</td>
<td>Each SMS, if it does not already do so, will have to include a defined period acceptable to the ship’s flag state administration or its recognised organisation for the master’s review of the SMS and reporting of deficiencies.</td>
</tr>
<tr>
<td>7</td>
<td>Shipboard operations</td>
<td>The existing paragraph, ‘The Company should establish procedures for the preparation of plans and instructions, including checklist as appropriate, for key shipboard operations concerning the safety of the ship and the prevention of pollution. The various tasks involved should be defined and assigned to qualified personnel’ is replaced by ‘The Company should establish procedures, plans and instructions, including checklists as appropriate, for key shipboard operations concerning the safety of the personnel, ship and protection of the environment. The various tasks should be defined and assigned to qualified personnel.’ This change is in line with the wording change under section 1.2. This amendment highlights the obligation on the company to ensure that procedures, plans and instructions for key shipboard operations are in place.</td>
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<tr>
<td>8.1</td>
<td>Emergency preparedness</td>
<td>The existing paragraph, ‘The Company should establish procedures to identify, describe and respond to potential emergency shipboard situations’ is replaced by, ‘The Company should identify potential emergency shipboard situations, and establish procedures to respond to them.’ This change reflects the adoption of risk assessment into the code. Potential emergencies must now be identified, evaluated and have procedures developed by the company that deal with the potential emergency.</td>
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<tr>
<td>9.2</td>
<td>Reports and analysis of non-conformities, accidents and hazardous occurrences</td>
<td>The wording is amended to, ‘The Company should establish procedures for the implementation of corrective action, including measures intended to prevent recurrence.’ This change makes it a requirement that preventative measures are put in place. Previously only procedures for corrective action were required.</td>
</tr>
<tr>
<td>10.3</td>
<td>Maintenance of the ship and equipment</td>
<td>The wording is amended to, ‘The Company should identify equipment and technical systems the sudden operational failure of which may result in hazardous situations.’ This change makes it a requirement that such equipment is identified by the company. Previously only procedures for identification were required.</td>
</tr>
<tr>
<td>12</td>
<td>Company verification, review and evaluation</td>
<td>In section 12.2 the wording is amended to. ‘The Company should periodically evaluate the effectiveness of the SMS in accordance with procedures established by the Company.’ The word ‘efficiency’ is replaced by ‘effectiveness’, which seems to imply that the vessel management should be assessed against the SMS documentation in order to ensure that vessel operation is being managed effectively.</td>
</tr>
<tr>
<td>13</td>
<td>Certification and periodical verification</td>
<td>New paragraphs are introduced in this section that provide clarification on renewal dates and extensions.</td>
</tr>
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</table>
New Paris MOU inspection regime

The existing Paris Memorandum of Understanding on Port State Control (Paris MOU) inspection regime will be replaced by a new inspection regime (NIR) on 1 January 2011. The aim is to refine the targeting of vessels so that ships perceived as poor quality will be subject to more frequent and in-depth inspections, while those regarded as quality ships will be rewarded with fewer inspections.

Ship risk profile

Paris MOU has developed a ship-risk profile calculator that will categorise ships as either high risk ships (HRS), standard risk ships (SRS) or low risk ships (LRS). Vessels will then be inspected at intervals associated with their risk category:
- HRS – inspection interval 6 months
- SRS – inspection interval 10–12 months
- LRS – inspection interval 24–36 months.

There is a clear benefit to Members for having ships in the LRS category. The NIR awards points to vessels based on ship type, age, flag state and flag state auditing, performance of flag state recognised organisations (RO), whether or not the RO is EU recognised and the company’s ISM Code performance. The vessel port state history in the last 36 months is also taken into account.

To find a company’s ISM Code performance, a company performance calculator uses a matrix to decide company risk based on port state control detentions and deficiencies. Members should be aware that data gathered by Paris MOU from February 2009 will be used under the NIR. The Paris MOU is also establishing a new database called THETIS, which will receive information primarily through SafeSeaNet, a European Community maritime information exchange system.

Inspection spiral

There is potential with the NIR for ship operators to enter an inspection spiral. Poor inspection or detention can lead to another. Indeed one ship in a fleet with condition problems can create problems for the rest of the fleet.

It is therefore important that Members continue their efforts to educate and inform their crews on how best to properly prepare their vessel for port state control inspections.

Proposed banning rules

New proposed banning rules will apply to all vessels flying flags that are on the Paris MOU black or grey list if they are detained more than twice in 36 months. The first ban will be for a minimum period of three months. If a second ban is imposed this will be for a minimum period of 12 months and any subsequent ban will permanently expel a vessel from the Paris MOU. The banning rules are also applicable to any vessel that jumps a detention or fails to call at an agreed repair yard.

Vessel reporting requirements

The NIR will also oblige vessels to report their movements within the Paris MOU region. From 1 January 2011, information must be transmitted for all ships arriving or leaving a port or anchorage.

Ships eligible for an expanded inspection must send a pre-arrival notification in a specified format at least 72 hours in advance. This information can be sent by the ship’s operator, agent or master. Vessels subject to expanded inspection include any passenger ship, oil tankers, gas or chemical tankers or bulk carrier older than 12 years old, or any ship with a high risk profile.

All ships must send a pre-arrival notification in a specified format at least 24 hours in advance, as well as report their actual time of arrival or departure, to the relevant authority.

Members can get an early indication of how their vessels may be categorised by the NIR by visiting the Paris MOU website and calculating both their individual vessel risk category and their company performance: www.parismou.org/ParisMOU/New+Inspection+Regime/default.aspx

Anchoring and the rules of the road

An increasing number of claims are being notified from vessels at the overcrowded anchorages at the world’s maritime crossroads. However, while the claims are clearly linked to congestion, there also appears to be a lack of familiarity with anchoring techniques and uncertainty over the rules governing the conduct of vessels at anchor.

This article summarises the primary rules that apply to ships at anchor and highlights factors that should be taken into account by masters and deck officers when coming to, remaining at and leaving a busy anchorage.

COLREGS

The International Regulations for Preventing Collisions at Sea (COLREGS) apply to all vessels on the high seas and connected waters – which include anchorages. The COLREGS do not have many specific rules for ships at anchor; instead they rely on rule 2 on responsibility, which requires all mariners to comply with the ‘ordinary practice of seamen’ and the ‘special circumstances of the case’.

Over many years this basic rule has been expanded by a number of legal decisions and it is interesting to note that, while interpretation of manoeuvring under COLREGS has been made more complex by the greatly increased sophistication of navigational aids, the rules relating to anchorages remain firmly grounded in commonsense.

Most of COLREGS apply to ships that are ‘underway’, which rule 3 (i) defines as, ‘not at anchor or made fast to the shore’. This means a vessel is underway unless it is properly anchored, moored to a buoy or aground.

A vessel weighing or dropping anchor, or dragging or manoeuvring around its anchor, is also ‘underway’ and must keep clear of a vessel at anchor.

Anchoring position

A vessel can anchor in any reasonable position as long as it is not forbidden by local regulations. In selecting an anchor position a master should consider traffic in the vicinity and keep clear of narrow channels and traffic separation schemes. A vessel is permitted to anchor in a fairway unless local regulations forbid it.

When a vessel anchors it must not endanger other vessels navigating close by and it must not give other anchored ships a foul berth. If a ship needs tugs to help it come to anchor (and if tugs are available) then it should use them. It must use sufficient cable and should leave enough room for all neighbouring vessels to swing in ordinary circumstances.

While at anchor a vessel must still comply with COLREGS. It must show the correct lights and shapes and, in restricted visibility, it must make the correct sound signals. A vessel must keep its engines at appropriate readiness and its gear (such as second anchor and windlasses) must be available and in working order. Failure to do any of this may be negligence and a breach of COLREGS.

Dragging anchor

Sometimes a vessel cannot help dragging anchor but it can and must know when it is dragging.

This means it must always keep a good look out by an appropriately qualified person, which is someone who can recognise when something is going wrong and can do something about it – if only to call the master.

Dragging is prima facie evidence of negligence and, while there are defences of severe weather or other ships dragging nearby, if one ship drags and others do not then the dragging ship is likely to be liable for the consequences.

Actions to avoid the consequence of dragging include dropping a second anchor, veering more cable, employing tugs or clearing out of the anchorage altogether. As a last resort, a vessel at anchor is expected to use its wheel and/or engines to try to avoid a collision.

Finally, a vessel cannot require other vessels to shift anchorage unless they are already in the wrong position. The rule of the road in this case is ‘last in – first out’.
The importance of berth-to-berth passage planning

Many watchkeepers wrongly breathe a sigh of relief when a pilot reaches the bridge and ‘takes over’. In reality the pilot’s arrival is a signal that navigation risks are about to increase significantly, with rocks, buoys, fishing boats, other ships and concrete structures getting a lot closer.

From pilot station to berth, and from berth to pilot station, bridge-team concentration should be at its highest level. Apart from keeping a proper look-out, a berth-to-berth passage plan is vital to enable the bridge-team to monitor the master’s orders and pilot’s advice when entering and leaving port.

Rules and regulations

The International Convention for the Safety of Life at Sea (SOLAS) chapter V, regulation 34, requires that the master shall, prior to proceeding to sea, plan the passage taking into account the guidelines in International Maritime Organization (IMO) resolution A.893 (21). This states in paragraph 3.1 that the plan should cover the entire voyage from berth to berth.

Furthermore, paragraph 5.5 of annex 2 of IMO resolution A.960 – Recommendation on operational procedures for maritime pilots other than deep-sea pilots – states, ‘It should be clearly understood that any passage plan is a basic indication of preferred intention and both the pilot and the master should be prepared to depart from it when circumstances so dictate.’

Keep it simple

North recommends that the voyage or passage plan should include a basic indication of the intended passage from pilot station to berth and berth to pilot station. The minimum requirement would simply be to mark pilotage courses on the chart from the pilot station up to the vicinity of the berth and back to the pilot station. The berth is the intended area of the port where the ship will berth – the actual berth will be discussed during the master-pilot information exchange.

As a basic indication, the courses and their reciprocals can be marked in the appropriate part of the channel or fairway. This allows the master and the bridge team to monitor the pilot’s advice regarding courses and helm orders.

Record ship’s position

Court cases still place significant emphasis on contemporaneous evidence, for example, in the form of pencil positions on paper charts recorded at the time rather than reconstructed after the event. In a recent case (Kamal v Ariela [2007] EWHC 2434), the judge indicated that the single piece of contemporaneous evidence was a handwritten record of differential global positioning system (DGPS) coordinates – all other positions were obtained by reconstruction – and promptly found the other ship entirely to blame.

Watchkeepers should confirm what the safety management system says about position fixing and the need to cross-check one method with another. They should be wary of using GPS (including DGPS) as a sole method of position fixing during pilotage. Visual fixing and radar ranges should be used and visual navigational aids (including but not limited to buoys, beacons, leading marks and lights, piers, and breakwaters) should be recorded.

For example, simple records of times visually passing between sets of buoys will provide evidence of ship’s speed and of keeping a proper look out. Not only is this ordinary good navigation and seamanship but, as recent tests have shown, GPS signals are actually very weak and very susceptible to jamming or interference. It would be worth checking if a ship’s electronic chart display and information system (ECDIS) can automatically switch to enhanced long range navigation (eLORAN) if the GPS signal is lost.

Watchkeepers should not forget that the single most advanced aid to safe navigation is their eyes. They should look out of the window and visually confirm the information from other aids to navigation.

Including more information

Watchkeepers also need to be aware of all the written navigation warnings and symbols already on the charts.

Also, if the ship has been to the port on previous occasions, watchkeepers should not forget to include information gathered during previous pilotages. For example, simple wheel over positions can be recorded and reproduced for critical turns.

General guidelines for voyage planning

Annex to IMO resolution A.983(21), section 3.2.2.

The main elements to ensure safety of life at sea, safety and efficiency of navigation, and protection of the marine environment during the intended voyage or passage; such elements should include, but not be limited to:

1) safe speed, having regard to the proximity of navigational hazards along the intended route or track, the manoeuvring characteristics of the vessel and its draught in relation to the available water depth;
2) necessary speed alterations en route, e.g., where there may be limitations because of night passage, tidal restrictions, or allowance for the increase of draught due to squat and heel effect when turning;
3) minimum clearance required under the keel in critical areas with restricted water depth;
4) positions where a change in machinery status is required;
5) course alteration points, taking into account the vessel’s turning circle at the planned speed and any expected effect of tidal streams and currents;
6) the method and frequency of position fixing, including primary and secondary options, and the indication of areas where accuracy of position fixing is critical and where maximum reliability must be obtained;
7) use of ships’ routing and reporting systems and vessel traffic services;
8) considerations relating to the protection of the marine environment; and
9) contingency plans for alternative action to place the vessel in deep water or proceed to a port of refuge or safe anchorage in the event of any emergency necessitating abandonment of the plan, taking into account existing shore-based emergency response arrangements and equipment and the nature of the cargo and of the emergency itself.
Bypassed ballast plan causes hatch covers to implode

All bulk carrier operators will be aware of the requirements of the International Convention for the Control and Management of Ships’ Ballast Water and Sediments to meet ballast water exchange standards and to have a ballast water management plan.

As with setting up any procedure, the first steps should always include a full risk assessment which identifies the hazards and provides control measures to reduce the risks. These control measures are included in the procedure so that – provided people follow the procedures – the task is completed with the least risk. If the procedure is bypassed the risk of an accident increases.

In a recent ballasting accident the safe procedure was bypassed when the crew set about a mid-ocean ballast water exchange. The ship was sailing with a cargo hold ballasted and, when the pumps were started to empty the discharge port water to replace it with mid-ocean water, the crew were not instructed to open the hold vents.

Extensive damage

Within minutes the resulting partial vacuum caused the hatch covers to implode. Luckily no one was injured but the damage was extensive and compromised the weathertight integrity of the ship. Not only were the hatch covers damaged but the hatch coamings were set-in and the deck set-up. Instead of reaching the load port for the next hatch coamings were set-in and the deck set-up. Not only were the hatch covers damaged but the hatch coamings were set-in and the deck set-up. Instead of reaching the load port for the next

Carrying break-bulk cargoes on container ships

Project and out-of-gauge cargoes have been shipped in container vessels for many years. By following proper safety management procedures, best-practice guidelines and relevant regulatory requirements, such cargoes can be carried safely on container ships. However, some container-ship operators are now carrying, or considering carrying, cargoes that would normally be shipped as break-bulk or bulk in other vessel types – possibly requiring structural modification to hold tank tops and bulkheads.

For a ship operator to satisfy its contract of carriage obligations, the vessel must be ‘fit and safe for reception, carriage and preservation of the cargo’. Should the vessel’s ability be in any doubt, the operator must ensure the flag state and classification society are satisfied it is suitable to carry the intended cargo without modification, or that any alterations required and have been properly implemented.

There are a number of factors that should be considered when planning the carriage of non-containerised cargoes, including the following.

Cargo stowage and securing

Ensuring cargo is stowed and secured in accordance with the ship’s cargo securing manual is of critical importance. Adhering to the requirements of the manual, which must be approved by the vessel’s flag state, is a non-delegable responsibility that rests with the owner.

The manual is referred to in chapter VI, regulation 5, of the International Convention for the Safety of Life at Sea (SOLAS) and should include as a minimum the information specified in the Code of Safe Practice for Cargo Stowage and Securing (CSS Code). Chapter 5 of the CSS Code and its annexes outline the recommendations for stowage and securing of non-standardised cargo.

Stability

A detailed assessment of the effect of non-containerised cargo should be carried out to ensure that ship’s stability parameters and forces acting on the ship’s normal containerised cargo are within specified limits and that cargo securing arrangements are suitable.

In addition, calculations should be carried out to ensure the ship’s movement in a seaway is within safe operating parameters for the carriage of the non-containerised cargo, and that the number, disposition and strength of lashings are adequate.

Annex 13 of the CSS Code provides details of the information that should be included in the cargo securing manual and the methods to be used to assess the efficiency of securing arrangements. This includes tables and diagrams showing the accelerations expected at various locations on the ship with a range of applicable metacentric height (GM) values.

Examples of loads acting on typical cargo units subject to acceleration should be given, as well as the angles of roll and GM values above which the forces on the cargo exceed the permissible limit of the securing arrangements. Examples of how to calculate the number and strength of securing devices required to counteract these forces (including a suitable safety factor) should also be made available.

The provision of additional lashing equipment to secure non-containerised cargo may have to be included in an amended and approved cargo securing manual.

Ship’s structure

Tank-top load limits, the presence of comer fittings and the provision of suitable lashing points may require alterations in the hold that could involve hot work. Suitable risk assessments will have to be performed and precautions taken in case there is fuel oil in adjacent compartments.

Characteristics of cargo

Many cargoes routinely carried in bulk require monitoring and ventilation, and may contain moisture levels that are difficult to manage without mechanical ventilation. Cargoes susceptible to wet damage will require careful consideration when assessing the weathertightness of hatch covers and the level of care that can be provided within the cargo space. Carriers should pay particular attention to shippers’ instructions for non-standard cargoes if damage claims are to be avoided.

Hatch covers

Containerised cargoes are well protected from wet damage during routine carriage on board. Hatch covers on container vessels are therefore often maintained to standards of weathertightness in keeping with classification requirements for load-line certification.

However, the standard of weathertightness appropriate for a carrier to demonstrate due diligence when carrying water-sensitive non-containerised cargoes may require a precautionary hatch cover inspection that includes a weathertightness test. Ultrasonic testing is North’s preferred method of testing to determine whether hatch-cover sealing arrangements are suitable for the standard of cargo care required when carrying non-containerised cargo in container ships.
In late May or June 2010 the south-west monsoon will again bring its annual deluge to the western seaboard of the Indian sub-continent. In addition to a welcome cooling effect, the rains will set a potentially fatal trap for unwary ships loading iron ore fines from west Indian ports, thus serving as a reminder of the dangers of loading this cargo worldwide.

Any rain falling on open stockpiles of iron ore fines – whether in India or anywhere else in the world – will cause the moisture content to rise to dangerously high levels. If loaded onto a ship the fines could liquefy, resulting in a total loss of the vessel and its crew, or limping into a port of refuge with a dangerous angle of list.

Despite the huge safety risk, ships continue to load such cargoes worldwide due to several systematic inadequacies:

- Intense pressure from shippers and, in some cases, terminals to load cargo as presented.
- Failure by shippers to produce cargo documentation required by the International Convention for the Safety of Life at Sea (SOLAS).
- Cargo being intentionally mis-described by shippers.
- Inadequate testing methods by shippers.
- Absence of an entry in the International Maritime Solid Bulk Cargoes (IMSBC) Code for iron ore fines.
- Lack of crew awareness over the potential for liquefaction of iron ore fines.

Avoiding the risk

Members should seek to protect their vessels and crew from the risk of loading wet iron ore fines – not just from India but from anywhere in the world. One option is simply to make iron ore fines an excluded cargo under their charterparties. Where this is not an acceptable commercial option, they need to adopt practical measures to protect themselves from shipping cargoes that may liquefy.

A first step is to educate commercial, operations, technical and, most importantly, seagoing staff in the dangers posed by liquefaction of iron ore fines cargo. This should enable all parties to make informed decisions both before fixing and when the vessel is fixed to load such cargo.

Sections 4, 7 and 8 of the IMSBC Code are particularly relevant in relation to loading iron ore fines.

Where they do not already exist, procedures can be developed and implemented to deal with the loading of iron ore fines. Some of the typical problems with loading iron ore fines are described in the following sections and should assist Members when considering their procedures.

Shipper’s cargo declaration

In respect of cargoes with particular hazards, such as liquefaction, SOLAS is explicit in requiring the shipper to provide masters, or their representatives, with appropriate cargo information sufficiently in advance of loading to allow the necessary precautions for safe carriage to be put into effect. A typical format for the shipper’s declaration is contained in section 4.2.3 of the IMSBC Code.

Specifically a certificate of moisture content and transportable moisture limit (TML) must be supplied for cargoes which may liquefy.

Unfortunately there continue to be instances where the shipper’s cargo declaration has not been presented before loading, where the TML and moisture content certificates are not included with the declaration, where moisture content but not the TML is stated, and where the TML and moisture content certificates are present but do not appear to reflect the characteristics of the cargo presented for loading.

Members can protect their interests by ensuring that loading does not commence until the shipper’s cargo declaration is received. The cargo declaration must contain both the moisture content of the cargo to be loaded and its TML. These must be present on the documentation as, without both figures, the suitability of the cargo for transportation cannot be determined. The certificate should not be more than 7 days old. The moisture content of the cargo is particularly susceptible to change due to weather conditions, and heavy monsoon rains can quickly change the characteristics of the cargo.

Where the shipper’s declaration is not received, or where both the moisture content and TML are not included in the certification, the master should refuse to load the vessel and should immediately notify the ship operators.

Cargo testing

The shipper is required to test the cargo presented for loading, at a laboratory approved by the competent authority, using one of the procedures described in appendix 2 of the IMSBC Code.

By far the most common procedure is the flow table method, but this requires the testing facility to have the correct equipment and processes and skilled and experienced staff to determine the flow moisture point accurately. If any of these factors is missing, erroneous results may be presented to the vessel by the shipper.

The crew should also employ a can test (described in IMSBC Code section 8) to check the cargo at regular intervals as it comes aboard.

Crew awareness

As the shipper’s cargo declaration cannot be relied upon in all cases, it is essential that masters and officers remain vigilant throughout the loading process.

However, identification of a liquefying cargo is not easy as cargo above TML can appear dry and in a normal state. Even where a can test is used and no change in state is observed, there is no guarantee the cargo will not liquefy as the test is only a rough indication. Certainly splattering of cargo in the hold makes an already serious situation more dangerous.

Cargo unsuitable for shipment already aboard

Where liquefaction has occurred, masters should immediately and the ship operators notified of the cargo’s characteristics.

Cargo liable to liquefy should be regularly monitored while at sea. Should a loaded cargo liquefy the ship will be in a perilous situation; the ship operators must be informed immediately and experts sought. Members should contact the Club for assistance.

It is imperative in every case that the vessel has full stability calculations available. These are required to be carried out prior to departure from the load port and will be relied upon by the vessel, by the Member’s technical department and by experts when advising the best course of action if the cargo liquefies. Unfortunately there have been occasions in the past when full calculations were not undertaken by vessels that then experienced liquefaction. The absence of this vital baseline data makes an already serious situation more dangerous.

Once cargo has liquefied the vessel will remain at risk until it can reach a suitable port of refuge.

Best result

The best result for a vessel is to identify before loading any cargoes that are above TML. As such North recommends that Members employ a suitably qualified and experienced surveyor when loading iron ore fines. The surveyed can sample and test the cargo to be loaded before the vessel berths, and assist the master during loading. Members wishing to appoint suitable surveyors to help protect their interests can contact the Club for assistance.

North has produced loss prevention briefings on liquefaction and the carriage of iron ore fines and nickel ore. The briefings can be viewed or downloaded from the Club’s website: www.nepia.com/loss-prevention/publications-and-guides/loss-prevention-briefings/
**Bridge navigation watch alarm systems**

From 1 January 2011, amendments to chapter V of the International Convention for the Safety of Life at Sea (SOLAS) will require most ships to have a bridge navigational watch alarm system (BNWAS) in operation whenever the ship is underway at sea.

The International Maritime Organization has been concerned by the number of groundings and collisions where a BNWAS was not fitted or was switched off. The purpose of the system is to monitor bridge activity and detect operator disablement which could lead to such accidents. No reduction in manning of the bridge is intended and neither is it a tool for preventing fatigue.

Many ships already have BNWAS. The main change from January 2011 is that the system must activate automatically whenever the auto-pilot is engaged but all other modes – manual on/off and changing parameters – must be security protected so that access is restricted to the master only.

**Chinese pollution regulations**

P&I clubs in the International Group of P&I Clubs have recently issued several circulars describing in more detail how the new Chinese pollution regulations (see Signals 78) require operators to conclude a clean-up contract with a pollution response company approved by the country’s Maritime Safety Agency (MSA).

At the time of publication, response contract provisions within the Chinese regulations on the prevention and control of marine pollution from ships have not been finalised.

North understands that development of standardised response contracts is continuing, incorporating the various levels of response envisaged in the regulations, along with vetting of companies expected to be licensed.

It is expected that the original date of 1 March 2010 for operators to pre-contract with an approved pollution response contractor will not be enforced and ship operators may have a further period to make the necessary arrangements in order to ensure compliance.

In the meantime, Members should continue to work on the basis that the other provisions of the regulations are in force, but are strongly advised not to enter into any contract with a clean-up contractor in China without first checking with the Club.

Further information will be posted on the Industry News pages of the Club’s website as it becomes available. Members can view and download Club circulars from the website: www.nepia.com/publications/clubcirculars/

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**STCW changes set for adoption in June**

The International Maritime Organization will consider adopting amendments to the Standards of Training, Certification and Watchkeeping (STCW) Convention at a June 2010 conference in Manila, Philippines. If accepted they will be the first significant changes to the convention since 1995.

The proposed amendments will not only update the training of seafarers’ line with modern practice but will also help to address some of the inadequacies of the present STCW regime, such as certification fraud.

The revisions are designed to reflect changes in technology, the shift towards greener more environmentally-friendly operations, the piracy problem, the growth in use of vessel traffic services (VTS), and increased regulation of life at sea including hours of work, and drug and alcohol issues.

The proposed changes to each STCW Convention chapter are summarised in the table. Once ratified, the amendments will require administrations, training providers and ship-operators to update their training and employment practices in most areas. To allow time for the changes to be introduced, a transitional period of two years from the date of ratification has been proposed.

As is usually the case with new legislation, the extra training requirements and procedural changes will, no doubt, significantly increase the costs of training and employing suitably qualified, experienced personnel.

If they have not already done so, Members should start to prepare for the introduction of the amendments through liaison with their flag state administrations and training providers.

<table>
<thead>
<tr>
<th>STCW Code – proposed 2010 amendments</th>
<th>Chapter</th>
<th>Title</th>
<th>Proposed changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>I General provisions</td>
<td></td>
<td></td>
<td>The main changes to this chapter concern the efforts by administrations to combat fraudulent seafarers’ certification, changes to the medical standards required and rules for using simulators in training, in particular for electronic chart display and information system (ECDIS) training.</td>
</tr>
<tr>
<td>II Master and deck department</td>
<td></td>
<td></td>
<td>The amendments include changes to the training, certification and competence standard regimes for officers and ratings. One of the main changes is the requirement for officers to undergo ECDCS training, examination and assessment. Knowledge of VTS and blind pilotage planning are also included. Ratings will have written competence standards with which to comply.</td>
</tr>
<tr>
<td>III Engine department</td>
<td></td>
<td></td>
<td>The amendments include changes to the training, certification and competence standard regimes for engineer officers, electrotechnical officers and engine and electrotechnical ratings. Significantly this is the first time that electrotechnical officers and ratings have been included under STCW.</td>
</tr>
<tr>
<td>IV Radio communications and radio operators</td>
<td></td>
<td></td>
<td>The chapter is updated to reflect current regulations, including reference to the International Aeronautical and Maritime Search and Rescue (IAMSAR) manual.</td>
</tr>
<tr>
<td>V Standards regarding special training requirement for personnel on certain types of ships</td>
<td></td>
<td></td>
<td>This chapter introduces a requirement for vessel specific training for personnel on oil, chemical and liquefied gas tankers. Basic training for officers and ratings involved in cargo operations on oil and chemical tankers can still be generic. However, senior officers or anyone else given immediate authority for the cargo must, in addition to the basic training, have completed approved advance training specific to oil or chemical tankers. Basic and advanced training requirements specific to liquefied gas tanker personnel will also become a requirement.</td>
</tr>
<tr>
<td>VI Emergency, occupational safety, security, medical care and survival functions</td>
<td></td>
<td></td>
<td>The biggest change in this chapter is the requirement for seafarers engaged in security related duties to undergo an approved training course and training for seafarers to enable them better to cope should their vessel come under attack by pirates. Additionally seafarers will be required to provide evidence every five years of having maintained the required competence in survival and fire fighting duties.</td>
</tr>
<tr>
<td>VII Alternative certification</td>
<td></td>
<td></td>
<td>This chapter deals with the rules for administrations to issue alternative certification to that laid down in STCW. The main changes bring the chapter into line with the new provisions for support level functions.</td>
</tr>
<tr>
<td>VIII Standards regarding watchkeeping</td>
<td></td>
<td></td>
<td>This chapter introduces extra provisions to the hours of work regulations to combat fatigue. It is understood that the draft concerning hours of work could not be agreed at the STCW sub-committee stage and will be voted on at the Manila conference. The proposal is for a minimum of 10 hours of rest in any 24-hour period and 77 hours rest in any seven-day period. Also introduced are rules concerning the timing of drills, and the recording of hours of work and rest. Administrations are also required to introduce a maximum blood alcohol level of 0.05% or 0.25 mg/l alcohol on the breath and companies should consider introducing a clearly written policy to prevent drug and alcohol abuse.</td>
</tr>
</tbody>
</table>
North American emissions control area approved

International Maritime Organization (IMO) member states voted to adopt the North American emissions control area (NAECA) during the 60th session of the IMO marine environment protection committee in March 2010.

NAECA may come into force as early as 2012. It extends 200 nautical miles from the US and Canadian coast except where it coincides with waters of other states. As with other recognised emissions control areas, vessels passing through, or calling at a port within it, will be required to use compliant fuel to reduce emissions of sulphur and nitrogen oxides.

The US Environmental Protection Agency has decided that the International Convention for the Prevention of Pollution from Ships (MARPOL) annex VI emissions standards will apply within NAECA.

IMO update

Ballast water exchange
A new paragraph will be added to International Convention for the Safety of Life at Sea (SOLAS) chapter V, regulation 22, from 1 July 2010 relating to navigation bridge visibility for periods when ballast water exchange is taking place. Ballast water exchange may only be undertaken provided that

- a proper lookout is maintained, taking into consideration any increased blind sectors or reduced fields of vision resulting from the operation
- the operation is conducted in accordance with the ballast water management plan
- the start and finish of the operation are recorded in the log book.

ISM Code amendments
1 July 2010 will see the introduction of amendments to the International Safety Management (ISM) Code. These will include requirements for ship owners and operators to identify equipment and technical systems which, if they suddenly failed, could result in a hazardous situation. Owners and operators will also be required to establish procedures, plans and instructions for key shipboard operations rather than just procedures for preparing such plans and instructions. This includes emergencies, where procedures need to be established on how to respond to situations rather than just identifying and describing them.

Internal safety audits are to be carried out on board and ashore at intervals not exceeding 12 months. These will include requirements for ship owners and operators to identify equipment and technical systems which, if they suddenly failed, could result in a hazardous situation. Owners and operators will also be required to establish procedures, plans and instructions for key shipboard operations rather than just procedures for preparing such plans and instructions. This includes emergencies, where procedures need to be established on how to respond to situations rather than just identifying and describing them.

Procedures for implementation of corrective action under the safety management system should include measures to prevent recurrence of reported non-conformities, accidents and hazardous situations. See article on page 5 for more details.

MARPOL annex VI
IMO resolution MEPC 181(59) – 2009 Guidelines for port state control under MARPOL Annex VI – enters into force on 1 July 2010. This document is intended to provide basic guidance on the conduct of port state control inspections for compliance with the revised annex VI of the International Convention for the Prevention of Pollution from Ships (MARPOL). It aims to ensure consistency in the conduct of inspections, the recognition of deficiencies and the application of control procedures.

Subjects covered in MEPC 181(59) include annex VI compliance provisions, procedures to be followed for port state inspections of ships required to carry international air pollution prevention (IAPP) certificates, including criteria to determine ‘clear grounds’ for performing a more detailed inspection.

As well as guidance notes intended to assist port state officials determine what constitute detainable deficiencies under the revised annex VI, the document also includes a chapter on the inspection of ships of non-parties to annex VI and other ships not required to carry an IAPP certificate.

Another IMO resolution – MEPC 176(58) – notes that fuel oil quality is still required to be reported by means of a bunker delivery note. A sealed and signed representative sample of the delivered fuel oil is to be retained under the ship’s control for at least 12 months.

Port state control officials may require that the representative bunker sample be analysed, if a ship is not using compliant fuel oils, it may be requested to present a record of the actions it has taken to achieve compliance and provide evidence it attempted to purchase compliant fuel oil. Attempts to locate alternative sources for such fuel oil have to be shown. The ship should not be required to deviate from its intended voyage to obtain compliant fuel oil, but it has to notify its flag state administration as well as that of the port of destination when none can be found.

Installations containing ozone-depleting substances, other than hydro-chlorofluorocarbons, shall be prohibited on ships flying the flag of a MARPOL annex VI signatory state. This includes chlorofluorocarbons used mainly in air conditioning and refrigeration equipment. Each ship shall maintain a list of equipment containing ozone-depleting substances and a record book.

NOx Technical Code
1 July 2010 will see the introduction of the revised NOx Technical Code 2008. This includes a new chapter on nitrogen oxides (NOx) regulation of existing (pre-2000) engines established in MARPOL annex VI. It also provides direct measurement and monitoring methods, a certification procedure for existing engines and test cycles for tier II and III engines.

When a major conversion as defined in MARPOL annex VI, regulation 13 is made to an engine, an initial survey has to be conducted and this will result in the issue of an engine international air pollution prevention (IAPP) certificate and an amendment in the issue of an engine international air pollution prevention (IAPP) certificate.

There has also been a rewording of provisions for NOx emission measurement equipment and data to be measured; this introduces requirements for establishing equivalency for alternative systems or analysers. For new systems the determination of equivalency shall be based upon the calculation as described in ISO 5725–1 and ISO 5725–2 measurement accuracy standards.
New poster series on pollution risks

The new Clean Seas series of posters will highlight typical problems that may be experienced by vessels under each of the annexes of the International Convention for the Prevention of Pollution from Ships (MARPOL). The first poster relates to MARPOL annex I and features an accidental operational discharge arising during bunkering. The aim of the poster is to remind seafarers of the potential for oil spills to occur during bunkering operations.

A copy of the new poster – Clean Seas, Bunkering – is enclosed with this issue of Signals for Members and entered ships. A high resolution version, suitable for printing, can be viewed or downloaded from the Club’s website: www.nepia.com/loss-prevention/publications–and-guides/posters/

DLC certificate

Congratulations to Captain Nophpong Ratanaochaiphornphan (left) of Precious Shipping who is the highest ever scoring student in the distance learning course and to Captain Hemant Mehta (right) who completed the course, with distinction, in a record time of two months.