Bunker quality

Although bunker quality disputes have continued unabated over the last 20 years, aspects of bunker quality such as lower sulphur fuels and associated sampling procedures have changed significantly. This issue of Signals highlights the principal changes relating to fuel quality, sulphur content, sampling, charterparty clauses and suppliers’ terms and conditions.

See page 4 for full story.

Slick satellites

The use of satellites for navigation and communication has grown considerably over the past two decades, particularly following completion of the US Global Positioning System in 1994. Satellites are also now being used to detect marine pollution, which can lead to identification and prosecution of ships and crews involved. This issue describes the European CleanSeaNet system – you have been warned!

See page 5 for full story.

Tooth care

North launched its first enhanced pre-employment medical scheme in 2002, and analysis of recent results reveals a surprisingly high number of instances of crew members being found unfit for work because of dental problems. This issue highlights measures that can be taken to prevent tooth decay and gum disease to help ensure that seafarers are considered fit for work.

See page 2 for full story.

Carriage of dangerous cargoes

This edition looks at the carriage of two types of potentially dangerous cargoes. One of these is sodium dichloroisocyanurate and the other is direct reduced iron. Both need particular care to identify the category of cargo being shipped so that the proper precautions can be taken.

See page 3 for full story.

North celebrates its 150th anniversary this year, which also marks the 80th edition of Signals after 20 years of publication. The first edition appeared in summer 1990, a year before the Club’s loss-prevention department was formed, and it focused mostly on cargo and legal issues. It nevertheless set the course for today’s version and North’s many other loss-prevention initiatives developed over the past two decades.

Both the Club and the industry have changed significantly since then. The biggest change in the industry has probably been continuing globalisation – of trade, ship operations and manning – with an ongoing shift in all sectors across the world. Ships have grown in scale and complexity while their crews have downsized: the container trade being a prime example. Communications too have changed, from the predominant use of fax and telex to today’s satellite and cell phones, email and internet. Likewise, navigation has changed fundamentally, with the widespread use of satellite positioning systems and other electronic means of navigation.

Perhaps one of the most significant areas of change is in regulation and care for the environment. While very welcome, some measures are not well thought out and the increasing criminalisation of seafarers in this regard is to be deplored. Ship operators and seafarers have also had to start complying with the International Safety Management Code, the Standards of Training, Certification and Watchkeeping Convention, the International Ship and Port Facility Security Code and new annexes to the International Convention for the Prevention of Pollution from Ships as well as unilateral requirements in the USA and European Union.

Of course, there have been changes in the Club’s loss-prevention department and activities. Loss prevention has continued to evolve with, for example, introduction of bespoke Member services such as in-house seminars, adoption of a risk-based approach and development of a comprehensive range of electronic publications and information services.

After 20 years this edition of Signals coincides with publication of a poster on avoiding oil spills in the new Clean Seas series. There is also a new hot-spot sheet on pilot ladders. Last month also saw the 18th annual residential course in P&I insurance and loss prevention, which was well received by the 40 delegates attending.

A copy of Signals issue 1 along with all the latest issues can be downloaded from the Club’s website at www.nepia.com/lossprevention/publications-and-guides/signals/
Health and safety – 20 years on

‘Health and safety’ is a phrase which is today synonymous with the image of a petty-minded official preventing people from working, playing and just getting on with their lives. While the idea that people should take care of themselves and others is fundamental to human civilisation, over the last 20 years it has become an industry all of its own.

But though it sometimes goes too far, today’s health and safety culture has certainly improved working conditions for vast numbers of employees and reduced the number of industrial accidents and fatalities.

In many countries health and safety policy is steeped in domestic legislation, the basic concept being that employers are required to provide safe working conditions for their staff. In some countries, where the requirements are also binding upon the individual directors and managers of a company, there is the possibility of criminal proceedings should they fail in that duty.

ISM code now accepted

In a maritime context, whatever domestic legislation may be in place, the introduction of the International Safety Management (ISM) Code has had a similar effect. Although the code was initially greeted with dismay and despair by many, there was no choice but to comply. Gradually this has turned to acceptance and even appreciation.

Twenty years ago in the first edition of Signals, North advised Members to ‘Beware Canadian tackle inspectors’ – persons appointed by the port with the power to suspend a ship’s operations if they suspected the individuals involved may be at risk. Is this advice still relevant today?

It is true that not all ports today have their equivalent of the Canadian tackle inspector, but modern shipowners already know the importance of safety aboard ship. They would not be surprised if any bad practices – either on their part or on the part of stevedores – resulted in a suspension of activity. It thus now goes without comment, and would no longer merit an article in Signals.

Health and safety may be criticised, but it is surely a good thing to encourage employers to care about the safety of their employees.

Beware diabetics

Previous editions of Signals have provided advice about diabetes, which is still not always regarded as the debilitating and life-threatening condition it actually is. In the last few months North has observed some significant cases of diabetes which could have been prevented.

Specific cases have involved seafarers suffering advanced ulcerations of their feet as a direct result of uncontrolled diabetes and, in more than one case, facing the prospect of amputation after repatriation. Other cases have involved seafarers collapsing onboard through other complications, requiring vessels to divert for emergency medical assistance.

The cases endorse the Club’s concern that caution should be exercised when considering the fitness to work status of individuals with diabetes, with an emphasis on the fitness to work status of insulin, or drug, dependent diabetics as insulin levels can fluctuate with temperatures, hydration and manual work. Diabetics also regularly forget to take their medication as prescribed.

Seafarers not following doctors’ instructions can face serious consequences – and the overall dangers of conditions like diabetes are exacerbated by the time at sea and the uncertainty of treatment.

Brushing twice a day keeps redundancy at bay

The clinics involved with North’s pre-employment medical schemes provide regular statistics of would-be crewmembers failing to achieve ‘fit for work’ status and why. Many deemed unfit have treatable conditions – a surprisingly high number of which relate to tooth decay and gum disease.

Unemployment due to dentistry problems must be extremely frustrating for otherwise able-bodied people wishing to go to sea, especially when it is entirely preventable. However, when the damage is done it can be costly to remedy.

It is thus worth providing a reminder of the three main weapons in the fight against tooth decay and gum disease:

• oral hygiene and plaque control
• correct diet
• fluoride.

Removing plaque

Oral hygiene is important because it prevents the build up of dental plaque which is the main cause of both dental decay and gum disease. The longer plaque is permitted to stick to teeth, the greater the risk of disease.

Dental plaque is a thin coating of bacteria and food particles that stick to teeth and cannot be rinsed off. It converts dietary sugars to acid which then dissolves the tooth material causing decay. Further, plaque can calcify and harden to become tartar, which can only be removed by a dentist or hygienist.

Plaque must therefore be removed every day by thorough brushing and flossing both after breakfast and before bedtime. It is important to ensure that the correct toothbrush is used and replaced at the first sign of wear, this would normally be every 4 to 6 months. The toothbrush should have a head that is small enough and correctly angled to reach all teeth.

It should be multi-tufted and have a medium/soft texture as hard bristles can damage teeth and gums. Electric toothbrushes have proven to be very successful in maintaining good oral health and in removing plaque.

Diet and fluoride

Diets which are rich in refined carbohydrates (sugars) assist the formation of plaque and tartar as are those foods and drinks which have added sugar, such as sweets, biscuits and cakes. Cutting out sugar is one of the best ways to reduce tooth decay.

However, chewing gum can help maintain oral health provided it is sugarless. It can help reduce tooth decay by removing food debris from the teeth and the action of chewing stimulates the flow of saliva which in turn neutralises mouth acids. Saliva also contains minerals that strengthen the teeth and an adequate flow is essential for a healthy and comfortable mouth.

Fluoride is also a valuable weapon against tooth decay as it makes teeth more resistant to mouth acids and can reverse the effects of decay in its early stages. Most toothpastes contain fluoride as do many mouthwashes. A daily rinse with a fluoride mouthwash is recommended.

Simple dental care can help keep people fit for work – and that is definitely something to smile about.
Carriage of DRI

The Perishable Products Export Control Board (PPECB) works closely with the South African government’s Department of Agriculture to monitor and regulate the temperatures of reefer containers and reefer vessels leaving South African ports. Failure to comply with PPECB regulations – which can apply to refrigerated cargoes of fruit, vegetables, dairy, flowers and fish – could result in containers or vessels not being permitted to leave the country.

Responsibilities and penalties
Both shippers and masters are provided with temperature instructions from PPECB prior to loading. During the voyage, all delivery and return air temperatures, wet point readings and vent settings of all containers and spaces containing the cargo should be reported to the board.

Whereas PPECB has no jurisdiction beyond South Africa, there is a concern that, should the required temperatures not be followed, it may be possible for the board to impose penalties if the vessel returns to a South African port in future.

North has investigated the possibility and it seems that, once instructions have been issued and a vessel leaves the country, PPECB is very unlikely to be involved with the vessel again. However, the board may be called as a witness should a cargo claim arise and proceed to arbitration, and the issue of PPECB compliance is raised by the claimant or defendant.

Conflict with bill of lading
The Club is also aware of occasions where the temperature required on a bill of lading and the temperatures imposed by PPECB conflict. In these circumstances the master should follow the instructions provided by the shipper on the bill of lading.

The bill of lading provides specific requirements for a particular cargo on a particular voyage, whereas PPECB’s instructions are general guidance applying to any voyage carrying such cargo. It follows that compliance with the bill of lading should be a valid defence to non-compliance with PPECB regulations should the matter go before a court or arbitration.

If Members become aware of a situation where PPECB instructions and temperatures required by a bill of lading conflict prior to the voyage, the master should clarify with the shipper which instructions should be followed and make sure these instructions are included on the bill of lading. This would be the best way for Members to avoid liability for potential cargo claims arising due to cargoes being carried at incorrect temperatures.

Members will be aware that North, in common with the other clubs in the International Group of P&I Clubs, recently published a circular about carrying direct-reduced iron (DRI) and related cargoes. It draws attention to the requirements of the new International Maritime Solid Bulk Cargoes (IMSBC) Code, which is recommendatory until January 2011 and mandatory afterwards.

Particular attention is drawn to the re-designation of DRI cargoes in the IMSBC code into three groups – DRI A, DRI B and DRI C. The circular also includes a summary of the main changes under the code.

In light of the code changes, Members carrying DRI B or C cargoes should satisfy themselves that the nominated vessel is capable of maintaining oxygen levels at a concentration below 5% throughout the voyage.

Understanding Sodium Dichloroisocyanurate

Ships carrying sodium dichloroisocyanurate (SDIC), a common source of chlorine for sterilising swimming pools and disinfecting drinking-water, are reminded to keep it dry, cool and away from all combustible materials.

A number of cases have been documented in which sodium dichloroisocyanurate has been the source of fierce and destructive fires on ships, and North has been involved in a number of incidents involving fires within containers. Fortunately, all fires were extinguished – but the potential for a serious incident clearly exists.

Two forms, same behaviour
Sodium dichloroisocyanurate is manufactured either as an anhydrous (containing no water) or dihydrate (dried) material. Both are white and solid. The anhydrous form provides a relatively rich source of chlorine and is commonly declared as an International Maritime Dangerous Goods (IMDG) Code class 5.1 oxidising substance.

The dihydrate form is less potent and usually declared as an IMDG class 9 substance under United Nations (UN) number 3077 - environmentally hazardous substances. However, it is still an oxidising material and similar in chemical behaviour with the anhydrous form, making the IMDG differentiation somewhat misleading.

Severe gas and fire risk
Sodium dichloroisocyanurate in either form is an oxidising agent and thermodynamically unstable. While not itself combustible, it can support vigorous and even violent combustion of materials that are combustible.

Water and/or heat can induce self-sustained or runaway decomposition, generating large quantities of noxious gases – principally chlorine but also hydrogen chloride, nitrogen oxides, carbon monoxide, carbon dioxide and toxic fumes of sodium oxide. It can also produce nitrogen trichloride, an oily explosive liquid.

In recent fire incidents it has not been possible to identify the precise chemical mechanism of ignition. This may partly be due to the wide range of substances with which sodium dichloroisocyanurate can exhibit incompatibility, including acids, bases, peroxides, petroleum products and solvents.

Ensuring stability
According to manufacturers’ data, sodium dichloroisocyanurate should be stable when stored dry and cool and away from combustible materials. However, recommended safe temperatures vary between manufacturers, with some quoting 240°C as the threshold for thermal decomposition and others specifying as low as 35°C.

In the event of an incident involving sodium dichloroisocyanurate, manufacturers’ recommendations and the IMDG code should always be followed.
Avoiding bunker disputes – 20 years on

Twenty years ago in the first issue of Signals, North offered advice to owners on how to avoid marine fuel oil (or ‘bunker’) quality disputes. This can be summarised as follows.

- Ensure the charterparty contains a precise description of the fuel oil to be provided by the charterer, by reference to the appropriate specifications and standards.
- Take and retain adequate representative samples of fuel oil supplied.
- Have samples of the fuel oil analysed prior to use.
- Train crews in sampling fuel oil and the proper use of fuel oil handling systems.
- Where an owner contracts directly with a fuel oil supplier, obtain the latter’s standard terms and conditions before contacting.

With bunker quality disputes as prevalent as ever, this article reviews what, if anything, has changed over the past two decades.

Quality

Certainly the quality of bunkers has not improved. Intermediate fuel oil in particular is still a residual fuel – what is left after the lighter and more valuable products have been removed in the refining process, and is still sometimes used as a dumping ground for other materials that should not be in any fuel. Notably, there is still a high incidence of bunkers with excessive catalytic fines (aluminium and silicon) and of fuel oils that produce excessive sludge. Waste lube oil still makes an appearance, and recently North has seen cases of contamination by other organic compounds.

What has changed over the years is that fuel oil specifications and standards have been developed and made more detailed, and more attention has been focused on issues such as ignition quality.

Sulphur content

More significantly, regulations have been introduced in various parts of the world limiting the sulphur content of fuel oil. It is therefore important to ensure that, in addition to a clear description in the charterparty of the fuel oil supplied, there is also suitably worded sulphur clause, such as the one produced by BIMCO. It is also important to remember that as a result of the need to use low-sulphur fuel oil, the engine’s lube oil may also need to be changed to avoid physical damage.

Operations and sampling

There are also now guidelines on bunker sampling procedures forming part of the International Convention for the Prevention of Pollution from Ships (MARPOL), which also specifies what samples are to be retained and for how long. One issue this has highlighted, particularly with a more widespread use of commercial analysis programmes, is to ensure that sufficient samples are drawn to allow multiple analyses when problems do occur with the fuel oil.

North has seen cases where the only remaining sample that could be analysed is the mandatory MARPOL sample, which is of course the sample that should be retained on board. It may be possible to obtain dispensation from the flag state to allow a MARPOL sample to be breached and tested, but this is a situation that should be avoided.

Charterparty clauses

A significant change over the past 20 years has been the introduction of a variety of standard bunker clauses in charterparties that cover many of the most important issues, define the parties’ respective rights and obligations and provide mechanisms for resolution of any disputes.

BIMCO in particular has been, and continues to be, active in this regard. In addition to the sulphur clause referred to above, the organisation has a general fuel oil quality and liability clause – the ‘Bunker quality control clause for time chartering’. This is a useful general clause and can be found on BIMCO’s website (an improved clause is currently being developed). The organisation is also working on a general bunkering operations and sampling clause.

Suppliers’ terms and conditions

One thing that has not changed, despite the fact that, for example, BIMCO has produced a more balanced and user-friendly form of bunker supply contract, is that most supplies of fuel oil still take place on the basis of suppliers’ terms and conditions.

Many bunker contracts are weighted in suppliers’ favour and often have fairly onerous provisions, particularly with regard to time limits for notification of claims, sampling and analysis. It remains as important as ever to be aware of those terms before contracting with a fuel oil supplier.

In the case of time-chartered ships, the bunker contract will of course be made by the charterer – and the owner is unlikely to have any control or influence over the terms of the contract.

How good are good faith clauses?

North has seen an increase in the use of ‘good faith’ or ‘goodwill’ clauses in charterparty agreements. Typical examples include

- each party undertakes to exercise good faith and fair dealing in the performance and enforcement of this charterparty
- both charterer and owner will use their best endeavours to ensure both parties’ interests are looked after and agree to work together with good faith to overcome any operational and production problems that may arise during this contract period
- owner and charterer undertake at all times to recognise each other’s problems in the operation of this contract and shall make best endeavours to discuss and resolve such problems amicably with good faith.

The increase could be because there is no general duty that parties must act in ‘good faith’ in the performance of contractual obligations under English law, or it could be because parties are attempting to avoid the types of disputes that inevitably result when one party acts solely in its own interests to the detriment of the other.

Either way, Members should think twice before using good faith clauses as they may not have the desired effect.

Good faith and best endeavours

The main themes running through any definition of good faith are the concepts of honesty, fairness and reasonableness. This means that parties performing their respective obligations under a contract should do so honestly and fairly, displaying the type of honest and fair conduct that both parties would expect of the other in the performance of the contract.

Often wrapped up in good faith clauses are concepts such as ‘best endeavours’ or ‘reasonable endeavours’. To use best endeavours requires the parties to take all the steps in their power capable of producing the desired results and which a prudent, determined and reasonable party acting in its own interests would take. The parties do not need to disregard their commercial interests to achieve the required result, but they should not disregard their obligations simply because they are financially unattractive.

An obligation to use reasonable endeavours is something less than an obligation to use best endeavours. It does not require the parties to do anything that would involve sacrificing their own commercial interests.

Problems of application

However, while having a ‘catch all’ clause to ensure parties act in good faith in a situation not contemplated in the charterparty may seem prudent, such clauses can be problematic in reality and may not provide the additional level of protection intended.

For example, if there is an obligation that one party must do a certain thing, but there is a good faith clause that provides that the parties must use reasonable endeavours generally – does the good faith clause lessen the obligation to perform the specified obligation? It is an uncertainty that could be argued – and so should be avoided.

Further, it is difficult to think of a situation to which a good faith clause would actually apply that is not already covered by most standard charterparty agreements.

There is also the difficulty of proving that a party has not acted in good faith. This might be fairly simple in situations of gross bad faith – for which there will no doubt already be remedies under the charterparty – but it would be a very unusual situation where a decision was made during a charterparty that could not be justified on bona fide commercial considerations.

Care should be thus taken by Members when considering the use of good faith clauses, especially general clauses such as the ones above.
Clean Seas poster on oil spills

North has published the second in its new series of Clean Seas environmental awareness posters. Like the first poster on bunkering, the second poster also highlights the importance of adhering to regulations for preventing oil pollution as set out in annex 1 of the International Convention for the Prevention of Pollution from Ships (MARPOL).

Entitled Clean Seas – Spills, the new poster highlights typical problems that can be experienced by vessels during oil transfer operations. It illustrates examples of good practice that will assist in the prevention of accidental spills at sea.

A copy of the new poster 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/

Slick eye in the sky

As indicated by recent events in the Gulf of Mexico, the use of satellite imagery for tracking and measuring oil spills is becoming increasingly sophisticated. A less well-known use is to assist in the detection and prosecution of vessels that pollute the sea, whether accidentally or deliberately.

One such system, CleanSeaNet, is operated by the European Maritime Safety Agency (EMSA). Another is the use of the satellite Radarsat by the Canadian authorities. To bypass the limitations imposed on optical satellite imagery by the need for daylight and the inability to see through cloud, these systems form images using the time delay of microwave energy pulses. Essentially the satellites are using radar, albeit an advanced form called synthetic aperture radar (SAR).

Untroubled waters

However, the systems are not all-seeing eyes. They work by identifying areas of reduced backscatter – essentially smooth areas of sea. One of the causes for these smooth areas can be the presence of oil, which damps capillary surface waves. The smooth areas are then analysed and interpreted to ascertain whether or not they could be an oil slick. Erroneous reports, known as false positives, can occur due to phenomena such as sea ice, turbulence generated by a ship’s propeller, rain, algal blooms and wind shadow areas.

Due to the possibility of false positives, SAR images are not proof of oil pollution in themselves. The system works by sending alerts to the appropriate coastal authority within 30 minutes of the satellite passing overhead. This then allows appropriate surface and/or air surveillance units to be despatched to the suspected scene of pollution for further investigation and sampling.

Positive identification

Where a pollution incident has been confirmed at the scene, the relevant authority will then make attempts to identify the vessel responsible. Modern vessel tracking systems such as automatic identification systems make the identification of vessels that have passed through the polluted area relatively straightforward. Vessel speed and heading data can be further interrogated to identify the most likely polluter.

Samples of the pollutant can then be taken, analysed, and cross-referenced against samples taken onboard the likely polluter. If the samples match, the evidence against the vessel is very strong and the usual outcomes – including claims, vessel arrest, fines for the owner and/or officers and custodial sentences – can result.

Beware spotter planes

When passing through coastal waters and being over-flown by a spotter plane, remember that its actions may not be random. It may be trying to confirm the presence of a slick identified by satellite imagery and positively to identify the polluting vessel. Do not let that vessel be yours.

Members can find more information about the CleanSeaNet system on the EMSA website: http://cleenseanet.emsa.europa.eu/index.html

Pilot ladder hot-spot sheet

North has published the second in its new series of ‘hot-spots’ sheets, this time on pilot ladders.

The sheets are not checklists – they aim instead to provide practical hints and tips to help avoid incidents, claims and port state control deficiencies, or help to prepare for inspections and surveys. They are designed to be placed with spares or alongside equipment where they can provide a quick reference to all, which might not be the case if they were filed.

The issues identified in the new sheet come direct from the pilots themselves – in this case from Belfast Pilots, Northern Ireland, who are key members of the UK Maritime Pilots Association. Those on board should always be aware that pilot boarding is a very dangerous and risky business given the hazards such as weather, sea state and often a high freeboard. These are difficult enough to manage without adding to the risk by poor ladder rigging or using a ladder in poor condition or constructed incorrectly.

Following the easy-to-understand hints and tips will help make the pilot’s task of getting on board ship easier and safer.

A copy of Pilot Ladder Hot Spots 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/forms-and-checklists/

Source: Belfast Lough Pilotage Services Limited
The International Maritime Organization’s (IMO) Maritime Safety Committee (MSC) held its 87th session in May 2010. The agenda included safety of navigation, the Standards of Training, Certification & Watchkeeping (STCW) Convention, piracy, amendments to mandatory instruments and goal-based new ship construction standards.

STCW revision
The committee discussed revision of the STCW convention. Changes were subsequently agreed at a STCW conference in Manila, Philippines in June 2010.

Training institutes, ship owners, manning agents and ship managers were urged to ensure that they are sufficiently acquainted with the revised convention.

Piracy guidelines
Many states and organisations expressed deep concern about the continued problem of piracy, especially off the coast of Somalia. The committee discussed what could be done further to develop new or existing tools for combating the problem.

The discussions were primarily centred on drafting guidelines for seafarers subjected to pirate attacks and guidelines for gathering evidence on ships for use in legal proceedings against pirates.

Member states and other organisations were urged to submit specific proposals to make it easier to assess the need for guidelines and how to draft them at the next session.

New ship standards
The committee adopted goal-based new ship construction standards. These have been developed for a ship design life of not less than 25 years and provide for suitable strength, hull integrity and stability to satisfy the requirements of unrestricted service with minimum risk to the marine environment from structural failure.

The committee also adopted a new International Convention for the Safety of Life at Sea (SOLAS) regulation that requires new bulk carriers and oil tankers in excess of 150m length constructed with a single deck (excluding ore carriers and combination carriers) to be built to classification society rules verified by the IMO to meet the new standards. ‘New’ means ships constructed to be built on or after 1 July 2016, or vessels with keels laid or which are at a similar stage of construction on or after 1 July 2017. All ships delivered on or after 1 July 2020 are considered ‘new’.

Ships constructed in accordance with goal-based standards must also be provided with a ship constructed file (SCF), detailing the application of goal-based standard functional requirements during construction. This file must be provided on delivery of the new vessel and maintained on board/ashore for inspection by the classification society and flag state.

Classification societies must submit their rules to the IMO by the end of 2013. The International Association of Classification Societies (IACS) is in the process of completing harmonised common structural rules to bring the two sets of IACS rules into line. These will consist of three parts – a common part for general hull requirements and separate parts for oil tankers and bulk carriers.

Gas detection equipment
The committee adopted revisions to SOLAS which will require portable instruments for measuring flammable vapour concentrations also to be capable of measuring oxygen. Compliance is required on entry into force of these revisions on 1 January 2012.

Oil tankers of 20 000 dwt and above constructed on or after 1 January 2012 are to be provided with a fixed hydrocarbon gas detection system. The system is to be capable of measuring hydrocarbon gas concentrations in all ballast tanks, including the forepeak tank, and voids in double-hull and double-bottom spaces adjacent to a cargo tank. Oil tankers provided with constant operative inerting systems for such spaces are exempted from this requirement.

IMO adopts HNS protocol
A protocol to the International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, 1996 (HNS Convention) was adopted in April 2010 by a diplomatic conference convened by the International Maritime Organization (IMO) and attended by 79 participating states. The purpose of the protocol is to facilitate ratification and rapid entry into force of an international regime of liability and compensation for HNS damage. It addresses practical problems that have prevented many states from ratifying the original convention.

Limits of liability
Under the protocol, if damage is caused by bulk hazardous and noxious cargoes, compensation would first be sought from the shipowner (so-called first tier), up to a maximum limit of 100 million special drawing rights (SDR). Where damage is caused by packaged hazardous and noxious cargoes, or by both bulk and packaged cargoes, the maximum liability for the shipowner is 115 million SDR. As Members will be aware, this latter liability limit, representing a 15% increase compared to the HNS convention, was agreed to counterbalance the potential increased exposure of bulk importers of hazardous and noxious cargoes to the HNS fund.

Once the liability limits are reached, compensation would be paid from the so-called second tier, the HNS fund, up to a maximum of 250 million SDR, which includes compensation paid under the first tier. The fund will have an assembly, consisting of all states parties to the convention and protocol, and a dedicated secretariat. The assembly will normally meet once a year.

Lifeboat release mechanisms
Following criticism from some sectors of the industry and several member states of the testing standards established in draft guidelines developed by the design and equipment sub-committee for the assessment of lifeboat hook release mechanisms, it was decided that the sub-committee should examine the test standards in consideration of the issues debated at the meeting.

The work will be carried out at a special inter-sessional working group meeting in October 2010 to finalise an MSC circular on guidelines for evaluation and replacement of lifeboat on-load release mechanisms referred to in SOLAS chapter III, regulation 1.5.

International data exchange
With regard to the long-range identification and tracking of ships (LRIT) system, a solution for establishing a permanent international data exchange was discussed. European Union member states received support for their proposal to establish the server with the European Maritime Safety Agency in Lisbon, Portugal.

During the discussion the committee also decided to establish a facility in the LRIT system to assist with the fight against pirates in the Gulf of Aden and the western part of the Indian Ocean. Positional data from ships in the area would be transmitted to coalition forces. This would provide an improved overview of shipping in the area.

Because of the voluntary nature of the facility it was decided to establish it with the IMO secretariat, giving individual flag states the option as to whether to take part or not.

Entry into force
The conference agreed that the protocol will enter into force 18 months after the date on which (a) at least twelve states, including four states each with not less than 2 million units of gross tonnage, have expressed their consent to be bound by it; and (b) the IMO secretary general has received information that those persons in such states who would be liable to contribute have received during the preceding calendar year a total quantity of at least 40 million tonnes of cargo contributing to the general account.

The diplomatic conference also adopted resolutions on setting up the HNS fund, on promotion of technical co-operation and assistance (to avoid a situation in which two conflicting treaty regimes are operational) and on implementation of the protocol.
IMO environmental update

The International Maritime Organization’s (IMO) Marine Environmental Protection Committee (MEPC) held its 60th session in London in March 2010. Subjects discussed included the prevention of pollution from ships, ballast water management, recycling of ships and amendments to, and the interpretation of, the International Convention for the Prevention of Pollution from Ships (MARPOL).

**Energy efficient design**

A draft text for the mandatory application of an energy efficiency design index (EEDI) was submitted to the committee with a majority support in favour of mandatory application for some ship types.

Unfortunately, there was not sufficient time for the working group to consider the draft regulations in full or discuss possible dates of application. The committee set up an intersessional meeting to ensure progress can be made.

**Ballast water management**

Ratification of the Ballast Water Management Convention was reported at 24 government signatures representing 23% of the world’s merchant fleet tonnage. Thirty governments representing 35% of the world’s tonnage are required to ratify the convention.

Following submission of a report by the ballast water working group of the joint group of experts on scientific aspects of marine environmental protection, concern about the lack of certainty with sampling procedures was expressed by some members.

The committee also agreed to issue a resolution on installation of ballast water management systems on new ships in accordance with the application dates contained in the Ballast Water Management Convention in the hope that national administrations will encourage fitting of systems on new ships.

**Ship recycling guidelines**

Work on guidelines to the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships continued.

Additional guidelines for ship recycling facilities, ship recycling plans and the authorisation of recycling facilities were also discussed with the intention of completing these documents by 2012.

**Antarctic oil ban**

MARPOL annex I was revised with the addition of a new regulation 43 which, with the exception of vessels engaged in securing the safety of ships or search and rescue, prohibits the carriage in the Antarctic area of:

- crude oils with a density in excess of 900 kg/m³
- oils other than crude oils having a density at 15°C higher than 900 kg/m³ or a kinematic viscosity at 50°C higher than 180 mm²/s
- bitumen, tar or their emulsions.

Subject to acceptance in February 2011, this amendment could enter into force on 1 August 2011.

**Fuel oil sulphur limits**

The new 200 nautical mile North American emission control area was adopted (MEPC.190(60)). Scheduled to enter into force on 1 August 2011, a MARPOL annex VI sulphur limit of 1.0% will apply from 1 August 2012, 12 months after the entry into force of MARPOL annex VI, regulation 14.7. Sulphur limits for the Baltic and North Sea emission control areas were effective from 1 July 2010.

Apart from those vessels using exhaust gas scrubbing plant, vessels transiting emission control areas from 1 January 2015 will be required to adhere to revised sulphur limits of 0.10%.

A revision to the supplement to the international air pollution prevention certificate issued under MARPOL annex VI was approved to document clearly which sulphur limit a ship meets. If adopted at MEPC 61 in October 2010, the revisions will enter into force in February 2012.

**Next meetings**

The next session of MEPC (61) will be held from 27 September to 1 October 2010. MEPC 62 and MEPC 63 are tentatively scheduled to be held in July 2011 and March 2012 respectively.

**Keeping up-to-date**

North offers a comprehensive range of up-to-date loss-prevention information aimed at providing advice and guidance for all Members and entered ships. The principal electronic information services available on the Club’s website are summarised below.

**Industry news**

The club’s online industry news service provides Members with knowledge of current issues, changing legislation and any potential difficulties with particular cargoes or trades. Recent articles include briefings notes for the Deepwater Horizon incident in the USA, information about the current Asian gypsy moth season and updated information on piracy in the Gulf of Aden and Indian Ocean. Industry news is available on the Club’s website: www.nepia.com/publications/industrynews

**Loss-prevention briefings**

Online loss-prevention briefings provide ready-made packages of information about single topic issues. Recent updates and additions include the carriage of iron ore fines and pre-employment medical programmes. They can be viewed and downloaded from the Club’s website: www.nepia.com/loss-prevention/publications-and-guides/loss-prevention-briefings

**Loss–prevention newsletter**

Electronic copies of the latest and previous issues of the loss-prevention newsletter Signals can be viewed and downloaded from the Club’s website, along with a comprehensive index of articles published during the last five years, from: www.nepia.com/loss-prevention/publications-and-guides/signals

**North’s annual residential course a great success**

The Club’s annual residential training course, now in its eighteenth year, took place in June 2010 at Lumley Castle in the north of England. Almost 40 delegates from all parts of the world attended and had an enjoyable time as well as expanding their knowledge of P&I and marine insurance.

Highlights included a visit to ships on the River Tyne, experience on a ship simulator at South Tyneside College, South Shields, and presentations and workshops with experienced North staff.
New handbook on collecting evidence

North’s new guide on collecting evidence will be launched in November this year at the 17th international Mariner and the Maritime Law seminar run by the Nautical Institute’s north-east England branch.

Entitled The Mariner’s Role in Collecting Evidence – Handbook, the guide is being written by club staff and will be published by the Nautical Institute, with a Club version being distributed free to Members.

The guide is intended to complement the third edition of the Institute’s Mariner’s Role in Collecting Evidence in Light of ISM and provide an updated and handy reference to seafarers on the evidence they should collect and preserve.

The seminar will consist of presentations and role-play explaining and emphasising the critical importance of collecting good evidence. Speakers will include ship owners, seafarers, experts, insurers, correspondents and lawyers from around the world.

The event takes place on 12–13 November 2010 at Hilton Newcastle-Gateshead Hotel, Gateshead, UK.

Further information about the event is provided in the brochure enclosed with this copy of Signals.

Questions

1. The protocol for which convention was adopted in April 2010?
2. What is the acronym for the organisation that works closely with the South African department of agriculture?
3. What is the less potent form of sodium dichloroisocyanurate?
4. Where was North’s annual residential course held?
5. What topic is covered by North’s latest hot spots sheet?
6. What is a valuable weapon against tooth decay?
7. What is celebrating its eighteenth anniversary?
8. Which IMO committee held its sixtieth session in March 2010?
9. What surveillance system is operated by EMSA?
10. Which type of charterparty clauses may not provide the additional level of protection intended?

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

Your copy of Signals

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

- Clean Seas poster – Spills (Members and entered ships only)
- Signals Experience case study – Bungled bunkers (Members and entered ships only)
- Pilot Ladder Hot Spots – (Members and entered ships only)
- Mariner and the Maritime Law seminar brochure

Answers to Signals Search 22

1. ECDIS
2. NANCEA
3. BIMCO
4. Supernumeraries
5. Boilers
6. Lumley
7. Medicare
8. North Online
9. FPD
10. Stripping

Answers to Signals Search 23

1. Implode
2. Crew
3. Liquefaction
4. COURAGE
5. IWL
6. Clean seas
7. Paris
8. ISM
9. FAST
10. NAECIA

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 FDDO 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 wheresoever or howsoever arising out of or in connection with the supply (including negligent supply) or use of information (as described above).