

Problems with liquefying cargoes

Any bulk cargo with fine material and moisture could potentially liquefy. The consequences for the ship can be delays at the load port or, even worse, stability problems on the voyage leading to a list, angle of loll or capsize. To prevent these potential problems the IMO Code of Safe Practice for Solid Bulk Cargoes (BC Code) prescribes tests and precautions for cargoes that may liquefy. The 'flow moisture point' of any cargo that may liquefy is absolutely critical – even the slightest excess of moisture above this point can lead to liquefaction. For this reason the master must be absolutely satisfied that testing has been carried out strictly according to the procedures set out in the BC Code. However, the testing methods developed in the BC Code rely on uniform physical and chemical properties throughout the cargo. For cargoes that consist of a wider range of particle sizes, such as unprocessed nickel ore, it may not always be possible to certify the flow moisture point using

the test procedures in the Code. Another cargo that may have a liquefaction hazard is fluorspar. In recent years a number of casualties have involved fluorspar cargoes loaded without certification as shippers may be unaware of their certification obligations under the BC Code. These cargoes present a particular problem for the shipowner, and are considered in this edition of *Signals*.

See page 4 for full story



'Black boxes' become mandatory

Passenger ships, and other ships constructed since July 2002, are already required to carry a Voyage Data Recorder (VDR) under the regulations in the International Convention for the Safety of Life at Sea (SOLAS). The VDR is similar to the aviation 'black box' recorder, such that if a vessel is involved in an accident or sinks, data can be retrieved to reconstruct the last hours of the voyage.

Amendments to SOLAS that came into force on 1 July 2006 now require cargo ships built before July 2002 to carry VDRs, although this requirement will be phased in and a simplified VDR (S-VDR), which records less detailed data, may be fitted instead.

See page 7 for full story

Dangers of heat stroke

Crew members sometimes work in high temperatures and it is vital that proper precautions are taken to avoid heat exhaustion. However, if precautions are not taken, the result in extreme cases can be heat stroke, which is far more critical. Heat stroke is caused by failure of the 'thermostat' in the brain and the body becomes dangerously overheated. It can occur suddenly, causing unconsciousness within minutes and on occasion it can be fatal. The precautions that should be taken to avoid suffering from heat are discussed in this edition of *Signals*.

See page 2 for full story

Favourable decision on laytime

The Court of Appeal appears to be setting a trend of owner-friendly decisions so far as notices of readiness and commencement of laytime issues are concerned. In the recent *Front Commander* case, the Court took a commercial view and by-passed legalistic semantics to protect the owner's position. The Court also gave some useful guidance as to the operation of the notice of readiness. The decision is considered in more detail in this edition of *Signals*.

See page 3 for full story

Oily-water separator poster

There have been a number of high-profile cases recently where ship's crew have by-passed or tampered with oily-water separator controls to discharge oil into the sea illegally. A number of seafarers have been imprisoned following successful prosecutions by the authorities. The latest North of England *If only...* poster highlights this problem and shows a seafarer languishing in prison after being prosecuted.

See page 2 for full story

Dealing with US authorities

The US Government tends to take an aggressive stance towards the investigation and prosecution of suspected violations of the International Convention for the Prevention of Pollution from Ships (MARPOL). During the US authorities' investigation of such suspected violations, officers, crewmembers and various shore-side employees will almost certainly be contacted by several members of the US

prosecution team. It is therefore essential that seafarers and shore-side personnel know their rights under US law and always tell the truth.

An article by George M Chalos in this edition of *Signals* provides basic, yet essential, advice for seafarers in their dealings with the US authorities.

See page 6 for full story





New poster on oily-water separators

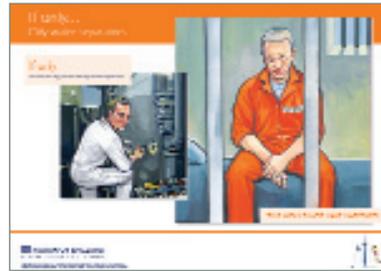
The latest poster in North of England's hard-hitting *If only...* series shows the consequences of tampering with oily-water separator equipment.

There have been a number of high-profile cases recently where crewmembers have circumvented requirements of the International Convention for the Prevention of Pollution from Ships (MARPOL) by by-passing or tampering with oily-water separator controls to discharge oil into the sea illegally.

Such actions can have very serious consequences for the shipping company and individuals involved. In addition to the imposition of fines, sometimes amounting to millions of dollars, both company management and seafarers can face criminal prosecution. A number of seafarers have been imprisoned following successful prosecutions by the authorities.

The poster depicts an engineer tampering with separator equipment and then languishing in prison after being prosecuted. *If only* he had followed the MARPOL requirements, this would not have happened.

A copy of the new 'If only...' poster accompanies this issue of Signals.



Stowaways get expensive in Brazil

Stowaways continue to be a major problem for Members. It was hoped that the introduction of the International Ship and Port Facility Security Code (ISPS Code) would prevent potential stowaways getting into port areas and that the problem would largely resolve itself. While the Code is likely to result in an improvement over time, it still seems that in many parts of the world ships remain solely responsible for ensuring stowaways do not get on board.

It is ironic therefore that the requirements of the ISPS Code for ship-side security means that it is getting ever more complicated and expensive to arrange for stowaways to be disembarked and repatriated. In Brazil this problem is becoming increasingly pronounced.

In the Association's experience, Brazilian authorities will rarely allow stowaways to remain on board and sail with the vessel, insisting instead that stowaways are disembarked and repatriated from Brazil. In some instances this can seem an ideal solution, but the reality is that the authorities will usually insist stowaways are removed to a hotel, which is an expense in itself, and supervised by security guards.

Frequently stowaways are not repatriated until some months after their initial disembarkation, making the cost of their stay in Brazil potentially exorbitant. A variety of reasons are given for the delays, ranging from problems with travel visas to a lack of properly qualified security escorts.

The actual costs of repatriation are similarly expensive. In a recent case, expenses of almost US\$150,000 were incurred for the repatriation of two stowaways from Salvador.

Members are urged not to rely upon port security in the usual stowaway hot spots, and to continue to take all reasonable precautionary measures to prevent stowaways getting on board.



Working in extreme heat

Seafarers are aware that heat illness can frequently occur on board ships due to the extreme temperatures in which they sometimes need to work. However, the onset is usually recognised and resolved quickly, with no permanent effects.

Heat stroke though is far more critical. Unfortunately the Association is aware of a number of cases where this has caused the crew member to become seriously ill, and has even resulted in death.

Heat exhaustion

Heat exhaustion usually develops gradually and is caused by loss of salt and water from the body through excessive sweating. Those who are unwell, especially with illnesses that cause vomiting and diarrhoea, are particularly vulnerable. As the condition develops there may be

- headache and dizziness
- confusion
- loss of appetite and nausea
- sweating
- pale, clammy skin
- cramps in the arms, legs or the abdominal wall.

Perspiration is the body's best heat-control mechanism, but the salt and water that is lost must be replaced. The salt is best taken with food and supplemented by drinks containing salt to prevent heat cramp. In conditions of moderate heat, at least 4 litres (7 pints) of fluid is required a day, but in high temperatures this increases to 6–7 litres (10–12 pints).

However, when the atmospheric temperature is the same or higher than the body temperature (37°C), it is no longer possible to lose heat by radiation. A humid atmosphere will only make matters worse as sweat will not evaporate so readily from the body.

Particular care must therefore be taken when working in hot temperatures, especially in engine rooms and other confined spaces. In very hot conditions, as well as drinking plenty of water, seafarers should wear protective clothing that ensures free circulation of air to allow evaporation of sweat.

Heat stroke

Heat stroke is caused by failure of the 'thermostat' in the brain and the body becomes dangerously overheated due to a high fever or prolonged exposure to heat. In some cases it can follow heat exhaustion when perspiration ceases and the body cannot be cooled by evaporation.

Heat stroke can occur suddenly, causing unconsciousness within minutes and on occasion it can be fatal. Sometimes there will be no indication of what is wrong until it is too late, but there can be warning signs. There may be

- headache, dizziness and discomfort
- restlessness and confusion
- hot, flushed and dry skin
- a rapid deterioration in the level of response
- a full, bounding pulse
- body temperature above 40°C.

In the case of heat stroke the patient should be wrapped in a cold, wet sheet, which is kept wet until the temperature has fallen to 38°C. The wet sheet can then be replaced with a dry one, and the patient carefully monitored.

Should the patient's responses deteriorate, or they become unconscious, ensure their airway is open and check they are breathing. In all cases, expert medical advice should be sought as soon as possible.



Myth or truth?

Put butter on a burn

Many people mistakenly believe that butter is helpful to skin burns. However, the butter actually traps the heat in the skin, prolonging the pain and should never be used for the treatment of burns.

For minor burns the best thing to do is to cool the burn under running water and, only after it has thoroughly cooled, apply an antibiotic ointment.

Honey is sometimes used because of its antibacterial affects and even boiled potato skins can apparently be helpful as they maintain a moist environment. But the only hot thing butter should be applied to is toast.



Positive decision on notices of readiness

The UK Court of Appeal appears to be setting a trend of owner-friendly decisions concerning notices of readiness and commencement of laytime issues.

In the *Happy Day* case, the Court decided in 2002 that where an invalid notice of readiness was tendered, laytime will nevertheless start running if the charterer proceeds to berth and loads or discharges the vessel.

In the *Front Commander* case, the Court decided in July this year that where a vessel, in accordance with the charterer's orders, tenders notice of readiness and proceeds to load before the first of the laydays specified in the charter, laytime will start with the tendering of the notice of readiness in the absence of any express agreement to the contrary.

The owner had chartered the tanker *Front Commander* on an amended Asbatankvoy form and the vessel arrived at the load port one day before the first contractual layday. In accordance with written instructions from the charterer, the vessel tendered notice of readiness, berthed and commenced loading all on the same day.

The charterer contended that, according to the terms of the charterparty, laytime was not to start before 0600 hours on the first layday without their written consent. The owner argued that the charterer's written instructions constituted this consent and that laytime was to start six hours after tendering the notice of readiness in accordance with the charterparty.

The charterer argued that two written consents were necessary, the first to early tendering and the second

to an early start of laytime, and that its instructions implied only the first of these two consents.

Charterer's argument rejected

The Court of Appeal rejected the charterer's argument and endorsed the commercial approach adopted in the *Happy Day*. In particular, it emphasised that notice of readiness is the trigger for the charterer's accountability for laytime. The charterer's orders were an express consent to an early start of laytime. Accordingly, the time used for loading, once berthed, was to count.

The Court of Appeal gave some useful guidance as to the operation of notices of readiness;

- In the absence of a contrary agreement, a vessel that has arrived early but has not tendered a notice of readiness is not obliged to load.
- An arrived vessel that is not ready to load is not obliged to tender a notice of readiness.
- An arrived vessel that is ready to load should immediately tender a notice of readiness even if earlier than the first layday.
- Where a notice of readiness has been tendered, an order from the charterer to load must be obeyed.

The Court of Appeal has once again injected commercialism into the courts and by-passed legalistic semantics in order to protect owners' positions. However, owners should be aware of clear and express clauses in a charterparty giving charterers free loading or discharging time.

US Sea Carrier Initiative programme ends

In *Signals 61* Members were alerted to changes to the US Sea Carrier Initiative Agreement (CIP – Carrier Initiative Programme) and the likelihood that it would be merged into another programme, the Customs-Trade Partnership Against Terrorism (C-TPAT). The Association understands that this has indeed now taken place so Members should now be applying to join C-TPAT rather than CIP.

Members should also take care to ensure that they no longer use any charterparty clause that refers to or requires them to be participants in CIP and should refer instead to C-TPAT.

Further information and application forms are available on the US Customs and Border Protection website: www.cbp.gov/xp/cgov/import/commercial_enforcement/ctpat/

Non payment now officially a 'dispute'

An arbitration handled in-house by the Association's FD&D department has been considered on appeal by the High Court in London and closed a loophole for defaulting debtors.

The question before the Court was whether an arbitrator had jurisdiction to consider a claim for an amount that a charterer had admitted was due but simply had not paid. The arbitrator had been appointed on the owner's behalf under a charterparty clause that referred to 'any dispute arising under this charterparty'. The arbitrator determined that he did have jurisdiction and issued an award in the owner's favour.

The charterer then sought leave from the High Court to appeal against the award. It argued that where the claim had been admitted, even though not actually paid, there could be no 'dispute' and no right to arbitrate.

Application rejected

The judge dismissed the charterer's case saying 'this is a wholly unmeritorious application'. He supported the very simple conclusion that where an amount is admitted but not paid there clearly is a dispute that, in this case, fell within the scope of the arbitration clause.

Many arbitration clauses, including those in some standard forms of charterparty, refer to 'disputes'. If the judge had come to a different conclusion, debtors could all too easily have been able to avoid arbitration by simply admitting the debt, leaving the claimant in a difficult position. This would have created uncertainty about in which courts the claim should then be pursued, not necessarily something that would always be clear. Fortunately though, this potential loophole for defaulting debtors has now been firmly closed.

Any Members requiring further information should contact Mark Robinson in the Association's FD&D department.



Avoiding cargo liquefaction



Ore cargo after liquefaction

Have you ever turned a bottle of ketchup upside down only to find nothing comes out, put the lid on, shaken the bottle and then swamped your plate with sauce? If so, you have experienced liquefaction.

However, what you do not want to experience is cargo liquefaction. The consequences for your ship can be:

- delays at the load port from rejecting cargo or problems with certification of cargo already loaded
- stability problems on voyage from loss of metacentric height (GM) due to free-surface effect leading to a list, angle of loll or capsizing
- delays at the discharge port or port of refuge making the ship safe and discharging a cargo in a fluid state.

The definitions, tests and precautions in the IMO Code of Safe Practice for Solid Bulk Cargoes (BC Code) for cargoes that may liquefy are widely associated only with metal ore concentrates, for which their application is relatively straightforward. But any cargo with fine material and moisture could potentially liquefy and should be queried with the shipper.

What is liquefaction?

In its solid state the particles of the concentrate are held together by friction and the cargo has the characteristics of a solid. Cargo on loading appears 'normal' – like slightly damp sand (see Figure 1).

However, if there is sufficient moisture in the cargo, then external agitation can increase the water

pressure to the 'flow moisture point' (FMP), where water pushes the particles apart. The material then undergoes a sudden transition to the flow state where it loses the friction between particles. The cargo begins to behave like a liquid (see Figure 2).

The 'flow moisture point' (FMP) of any cargo that may liquefy is absolutely critical – even the slightest excess of moisture above the FMP could lead to liquefaction.

Concentrate cargoes

Sections 4, 7 and 8 of the BC Code deal with assessment of acceptability of consignments for safe shipment and production of test certificates showing the 'transportable moisture limit' (TML) and actual moisture content of cargoes. Any ship operator contemplating carrying fine-grained mineral cargoes should carefully read these sections of the BC Code.

The laboratory test procedures for ascertaining TML and FMP are designed for mineral concentrates such as zinc, copper and lead where the production process results in uniform particle size. Most concentrates are produced using the flotation method, which involves immersion in water. The resulting concentrate is inherently 'wet' and for ease of handling some moisture content needs to be retained – if the concentrate was fully dried it would create a dust hazard when handled.

On voyage the cargo can be agitated by wave impact and engine vibration and, if there is sufficient moisture present, the cargo will reach FMP and liquefy. This may result in loss of GM from

free-surface effect, sudden cargo shifts and structural impact damage from sloshing.

For this reason the master must be completely satisfied that testing has been carried out strictly according to the procedures set out in Appendix 2 of the BC Code. With most concentrate cargoes there will be no reduction in moisture by drainage to the bilges – water may appear on the surface of the cargo but moisture will not overcome vertical pressure within the cargo to drain downwards. Because of the severe consequences of exceeding the FMP, the safety margin provided by the lower TML is critical and should not be compromised.

The TML is defined as 90% of the FMP. It is a requirement of the International Convention for the Safety of Life at Sea (SOLAS) that the average moisture content of any type of granular cargo in any cargo space must not be higher than the TML. The difference between the TML and the FMP is intended as a safety margin to protect against uncertainties in testing – such as laboratory errors, sampling errors and variations in moisture content in the cargo. Shippers must certify the TML and the moisture content of the cargo before start of loading. No cargo should be accepted for loading without valid certificates.

If the actual moisture content at any location in the cargo is greater than the FMP then the cargo can liquefy at any time without warning.

There are no 'safe' weather conditions or routings for carrying a cargo above its TML. If masters have doubts about the testing procedure and appearance of the cargo then they should conduct a 'can' test as described in the BC Code section 8.3.

Cargoes other than concentrates

Cargoes that may liquefy will contain moisture and at least a proportion of small particles. This includes a wide range of mineral cargoes other than concentrates, with widely differing physical and chemical properties. The FMP testing methods in the BC Code have been developed with concentrates in mind and rely on uniform physical and chemical properties throughout the cargo.

For cargoes that consist of a wider range of particle sizes – from rocks through pebbles to sand or soil-like material – the BC Code tests become less reliable. It may not always be possible to certify the FMP of these types of cargo using the test procedures in the Code. It may also be difficult to find qualified laboratories that are willing to certify the FMP of materials other than concentrates.

Nickel ore

The high price of minerals recently has made some trading viable which would otherwise be



uneconomic. One such trade is the shipment of unprocessed nickel ore from various remote islands in Indonesia and the Philippines on long ocean voyages. These ores have relatively low nickel content and have been shipped on shorter voyages to Australia and Japan for many years.

The nickel ore in question is simply dug out of the ground, sorted for size, stored in stockpiles and then shipped. Apart from 'solar drying' – which is of uncertain benefit – there is no further processing involved.

The ore is not found in a homogeneous form. Much of the material is very fine clay-like particles but there are also larger rock-like particles, some of which can be very large indeed. The materials also have relatively large moisture contents of up to 30–40% by mass. If the moisture content of the ore is too high then it can liquefy just like concentrates and display the same liquid behaviour. Serious problems have been experienced recently with ocean transport of these cargoes.

Because of the way the ore is mined the composition and physical behaviour can differ greatly from mine to mine, from shipment to shipment from the same mine, and even within a single cargo. Moisture content on its own is not a reliable indicator of liquefaction hazard. Some cargoes may be of very dry – even dusty – appearance and unlikely to liquefy, whereas another cargo with the same moisture content but from a different loadport may be of muddy, wet appearance and present a serious shifting hazard.

The BC Code certification requirements apply to nickel ore but the tests do not give well-defined results on this type of nickel ore and different laboratories have obtained widely differing results on samples supposedly representing the same cargo.

Fluorspar

Fluorspar is shipped in several physical forms, ranging from coarse gravel-like material not likely to liquefy to fine sandy material which can. Liquefaction of fluorspar is a known problem and there have been serious casualties including total losses in recent years. All the casualties have involved fluorspar cargoes loaded without certification and ship operators are strongly advised to insist on strict adherence to the BC Code requirements.

Frequently, shippers of fluorspar cargoes are unaware of their certification obligations under the BC Code partly because, until the 2004 edition, the BC Code had not specifically identified fluorspar as a 'Group A' hazard.

Iron ore

There are many grades of iron ore produced from different methods and exhibiting different physical properties. Iron ore grades which contain moisture and at least a proportion of small particles may be liable to liquefy and should be tested.

Most obviously at risk of liquefaction are iron ore grades described as 'iron ore fines', 'iron ore sinter

feed' or 'iron ore pellet feed'. Unfortunately cargo descriptions do not usually indicate the method of production. Some iron ores are concentrated using simple sizing grids or magnetic separation methods. These ores may well not be liable to liquefy either because of a relatively coarse consistency or because their inherent moisture contents are very low.

Other iron ores shipped with identical descriptions are produced by a flotation process in the same way as copper, zinc or lead concentrates. Even if the word 'concentrate' does not appear in the cargo description, these grades pose the same liquefaction risk and must be certified.

Other cargoes

Every cargo that contains moisture and at least some fine material should be queried prior to loading, and should be tested if in doubt.

The BC Code certification requirements apply to all cargoes which may liquefy regardless of whether or not the cargo is specifically identified as posing a liquefaction risk. Never assume there is no risk of liquefaction simply because a cargo is not identified as 'Group A' in the BC Code.

The Association is grateful to Martin Jonas (Dipl.-Phys., MPhil, PhD (Cantab), CPhys, MInstP MIFST), consulting scientist with Brookes Bell, for providing the information and pictures for this article. Website: www.brookesbell.co.uk

Figure 1. Solid state – before a 'can' test – particles held together by friction



Figure 2. Liquid state – after a 'can' test – no friction between particles



Abnormal waves – a real risk

It has previously been thought that rogue waves are rare but recent research carried out by the European Space Agency indicates that they are much more frequent than originally thought. They are now no longer called 'rogue' but 'abnormal' waves in recognition of that fact.

The Agency examined satellite photos of the oceans and found frequent examples of abnormal waves – some of them up to 30m in height. This height confirms the theoretical maximum calculated heights of abnormal waves.

Fortunately, however, the majority of abnormal waves are short lived and, after half a minute or so, gravity overcomes the wave energy and the wave collapses. The other fortunate fact is that the majority of such waves do not move and the only forward energy they have is the normal cyclical movement of a wave.

However, should any ship be unlucky enough to be in the path of an abnormal wave during its short life, the weight of water falling on the ship when the wave breaks is enough to damage it severely, if not sink it entirely. The other danger is that for every abnormal wave, there is an abnormal trough – of exceptional depth – preceding it.

Linked to strong currents

Researchers are still trying to pinpoint the conditions that might trigger abnormal waves but it is clear that they are more common where there are powerful currents, such as the Agulhas off South Africa, the Kuroshio off Japan and the Gulf Stream off the eastern United States.

It is well known, for instance, that abnormal waves and troughs can form in the Agulhas current when the wind suddenly switches from being a steady north-easterly to a strong southerly blowing against the prevailing current.

Another mechanism by which the waves can form is where wave trains travelling in the same direction but at different speeds pass through one another. When they synchronise, they combine to form abnormal waves.

It is not yet possible to forecast the possibility of abnormal waves though this could happen in the future. However, South African authorities do issue predictions in respect of the Agulhas current.

Ensuring forward buoyancy

In the meantime, seafarers should continue to take precautions such as ensuring that there is as much buoyancy as possible in the fore part of the ship.

Good seamanship practice should be followed and all weathertight openings at the fore part of the ship should be closed and secured whenever the ship is expected to encounter heavy weather.



Dealing with US authorities



The US Government's aggressive stance towards the investigation and prosecution of suspected violations of the International Convention for the Prevention of Pollution from Ships (MARPOL) has been well publicised.

The Government – through its Department of Justice (including local US Attorney's offices and the Environmental Crimes Section located in Washington), the Environmental Protection Agency, the Coast Guard and various other agencies – continues to investigate and prosecute shipowning companies and staff for suspected MARPOL violations. In particular it continues to pursue felony criminal charges and jail sentences against individuals including shore-side management and ships' officers and crewmembers.

Generally investigations focus on alleged crimes concerning false entries in the oil record book, as the US does not have jurisdiction over any alleged illegal discharges that occur more than 12 miles offshore. Under the Act for the Prevention of Pollution from Ships (APPS), the US enactment of MARPOL, the Government can prosecute crimes arising out of the presentment of a required record (i.e. the oil record book) that contains false entries.

Risk of prison and fines

In such instances the Government will seek, at a minimum, guilty pleas from the owner, the manager/operator, the chief engineer and/or the master under either 18 USC 001 or 33 USC 1908 (a) (APPS), for the presentment of a false record to Government officials. Such crimes are considered felonies, punishable with up to five years imprisonment and fines of up to US\$250,000.

In circumstances where the facts may suggest that some additional questionable and/or dishonest conduct took place, the Government will seek to charge additional crimes against the crewmembers and shore-side individuals, such as obstruction of justice or tampering with witnesses or evidence (18 USC Sections 1505 and 1512); conspiracy (18 USC Section 371); and Sarbanes-Oxley (18 USC Sec 1519). These charges are also felonies, punishable with jail time for the individuals involved of up to five years (with the exception of Sarbanes Oxley which is punishable with jail time of up to 20 years) and fines of up to US\$250,000 for each count charged.

Always tell the truth

During the investigation of suspected violations, officers, crewmembers and various shore-side employees will nearly certainly be contacted by several members of the US prosecution team, including representatives of the Department of

Justice, the Coast Guard, the Federal Bureau of Investigation and the Environmental Protection Agency. It is imperative that all seafarers and shore-side personnel know their rights under US law and always tell the truth.

The most basic, yet essential, advice for seafarers is to seek legal advice as soon as practical and always be truthful and forthright in their dealings with the US authorities. If the authorities undertake any onboard investigation, the owner and the Association should be contacted immediately and advised of the situation. Similarly, a criminal defence lawyer should be engaged immediately to protect the rights of the officers and crew, as well as of the owner or operator.

Using the Fifth Amendment

All of the individuals have a Fifth Amendment privilege against self-incrimination (see below), and should invoke such privilege until competent criminal defence lawyer is engaged and present. In short, once a criminal investigation has commenced and an individual invokes their Fifth Amendment privilege, they are not required to speak with the US authorities and/or respond to any of their questions, which may lead to self-incrimination whether in the US and/or abroad.

If an individual chooses not to invoke their Fifth Amendment privilege, they must be completely honest and forthright with the investigators. Nothing spins an investigation out of control and/or ups the ante for personal criminal liability and jail sentences than lying to Governmental investigators.

Most discussions and interrogations by the investigators are conducted in English, which for many seafarers, is not their native language. This has repeatedly led to meaningful misunderstandings and unnecessary complications. Nevertheless, there is, indeed, a great deal of sage wisdom in the age-old saying, 'The only fish that get caught are the ones with their mouth open!'

The Association is grateful to George M. Chalos of Chalos, O'Connor & Duffy, Counsellors at Law, for providing this article. Telephone: +1 516 767 3600. Website: www.codus-law.com

The US Fifth Amendment

The Fifth Amendment of the US Constitution, in pertinent part, states the following:

No person shall be held to answer for a capital, or otherwise infamous crime, unless on a presentment or indictment of a Grand Jury, except in cases arising in the land or naval forces, or in the militia, when in actual service in time of war or public danger; nor shall any person be subject for the same offense to be twice put in jeopardy of life or limb; nor shall be compelled in any criminal case to be a witness against himself, nor be deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation.

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Internet

Members can visit www.nepia.com for the latest *Industry News*, which is the proactive loss-prevention service provided for Members. News items are researched and selected on the basis that they will provide advice on which to base loss-prevention decisions.

Members can access Industry News from the direct link on the left-hand side of the Association's website at www.nepia.com

Email

News is also distributed to Members by email using *E News*, which provides a monthly digest of industry news items, club circulars and press releases.

Members' shore or sea staff who wish to be added to the E News circulation list should send their contact details, including their name, position, company and email address to the Association using the dedicated E News email address: add.enevs@nepia.com

RSS

The Association provides an RSS (really simple syndication) news feed that enables Members with an internet connection to receive up-to-date information directly from the Association to their desktop as soon as it is published, without having to remember to visit each site every day.

A guide to using the RSS service, and the news feed itself, can be obtained from the Association's website at www.nepia.com/rss

RSS

IMO UPDATE

NEW RULES HELPING PERSONS IN DISTRESS

Amendments to both the International Convention for the Safety of Life at Sea (SOLAS) and the International Convention on Search and Rescue (SAR) have now entered into force that should help masters disembark persons who have been rescued at sea.

The problem until now has been that although there is both a legal and moral obligation for ships to go to the assistance of persons in distress, there has been no corresponding requirement obliging states to allow them to be disembarked. The new amendments should overcome this situation because they mandate coordination and cooperation between states to assist ships' masters in delivering persons rescued at sea to a place of safety. The regulations also reinforce masters' obligations to assist persons in distress, regardless of their nationality or status.

The amendments to SOLAS, Chapter V, Regulation 34-1, Safety of Navigation, include a new

Visits to Members' offices

Over the last few months North of England's P&I claims and risk management teams have continued to visit Members' offices to meet both shore-based and sea-going staff. Presentations and workshops have been given at Members' offices in China, India, Indonesia, Malaysia, Mexico, Norway, Poland and Singapore.



Topics covered have included collision claims, pollution, risk assessment and carriage of various cargoes.

Visits to Newcastle

A number of staff from Member's offices have visited the Association's office in Newcastle for in-office training recently, including visitors from China, Croatia, Germany and Singapore.

Pictures:

- 1 PEMEX, Veracruz, Mexico
- 2 PT Berlian Laju Tanker, Jakarta, Indonesia
- 3 OMI, Mumbai, India



regulation making it clear that masters should have the discretion to make decisions relating to safety at sea. This states that

The owner, the charterer, the company operating the ship... or any other person shall not prevent or restrict the master of the ship from taking or executing any decision which, in the master's professional judgement, is necessary for safety of life at sea and protection of the marine environment.

Related guidelines on the treatment of persons rescued at sea (Resolution MSC.167(78)) provide guidance with regard to humanitarian obligations and obligations under the relevant international law. These confirm that the obligation of masters to render assistance should be complemented by the corresponding obligation of IMO member governments to coordinate and cooperate in relieving masters of their responsibility to provide follow-up care of survivors and deliver persons rescued at sea promptly to a place of safety.

The IMO and the United Nations High Commissioner for Refugees (UNHCR) have recently published a useful guide – entitled *Rescue at Sea* – to the principles and practice of rescue at sea as applied to migrants and refugees.



VOYAGE DATA RECORDERS BECOME MANDATORY

Passenger ships, and ships other than passenger ships of 3,000 GT and upwards, which were constructed on or after 1 July 2002 are already required to carry a Voyage Data Recorder (VDR) under SOLAS Chapter V, Regulation 20. The VDR is a system similar to the aviation 'black box' recorder, such that if a vessel is involved in an accident or sinks, data can be retrieved to reconstruct the last hours of the voyage.

Amendments to SOLAS that came into force on 1 July 2006 now require cargo ships built before 1 July 2002 to carry VDRs, although this requirement will be phased in and a simplified VDR (S-VDR) may be fitted instead.

The S-VDR is not required to store the same level of detailed data as a standard VDR, but has to retain information about the position, movement, physical status, command and control of a vessel for the last 12 hours of the voyage.

The new amendment stipulates that existing cargo ships on international voyages shall be fitted with a VDR, which may be an S-VDR, as follows;

- Ships of 20,000 GT or more constructed before 1 July 2002
To be fitted at the first scheduled dry-docking after 1 July 2006 but not later than 1 July 2009.
- Ships of 3,000 GT or more but less than 20,000 GT constructed before 1 July 2002
To be fitted at the first scheduled dry-docking after 1 July 2007 but not later than 1 July 2010.

LATEST ADVICE ON SAFE LIFEBOAT DRILLS

The IMO has recently updated and consolidated the numerous circulars on the subject of measures to prevent accidents with lifeboats into one document – MSC Circular 1206. The circular includes;

- Annex 1
Guidelines for servicing and maintenance of lifeboats, launching appliances and on-load release gear.

- Annex 2

Guidelines on safety during abandon ship drills using lifeboats.

Member governments have been invited to give effect to the annexed guidelines as soon as possible.

It appears that port State control inspectors are already following the guidance on safety during abandon-ship drills using lifeboats contained in Annex 2, paragraph 2.3.2. This states

Before placing persons onboard a lifeboat, it is recommended that the boat first be lowered and recovered without persons on board to ascertain that the arrangement functions correctly. The boat should then be lowered into the water with only the number of persons on board necessary to operate the boat.

If there is a safe and practical way of getting the assigned operating crew into the boat in the water this may be an acceptable alternative. For instance a port State control inspector would not want to see crew climbing down an exceptionally long boarding ladder overhanging the flare of the hull aft.

There is still a risk in hoisting the boat and then loading it with the crew for re-lowering to the water, but the overall risk should be reduced by the initial 'test' lowering, especially since many reported accidents have involved failure of brake systems which have been incorrectly re-assembled after maintenance on board. The initial 'test' lowering should confirm the brake system is functioning correctly.

Port State control inspectors should accept modifications to the lifeboat hook system that are designed to make lifeboat drills safer provided they are removed once the drill is complete. Interlocking devices designed for this purpose are available on the market.

Members can obtain further details of these amendments from the Industry News pages at the Association's website, or by referring to the cited IMO publications.



North Online – Providing Members with up-to-date information

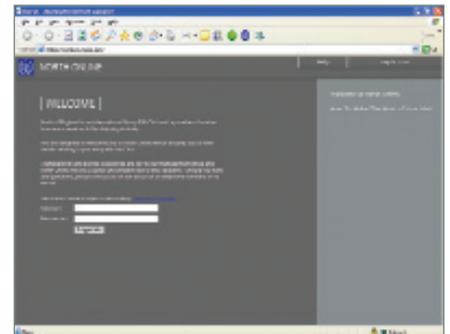
North Online, North of England's intranet service for Members, is an extremely useful tool that enables Members to keep track of their vessels' insurance arrangements.

The availability of up-to-date information, particularly relating to progress with claims, has already resulted in many Members becoming better informed. It is expected that more Members will take advantage of *North Online* over the coming months as they can access their information anytime and anywhere rather than waiting for renewal documentation to arrive. Any Members who have not yet used *North Online* can try it out by applying for access from the Association.

The Association has continued to work with Members to develop *North Online* and make access to information easier. For example, up-to-date claims and Member record information is available in an Acrobat format (PDF) which also reflects the Club's documentation format.

Members requiring access to North Online should contact Nigel Bradshaw, IT Manager, at the Association for a confirmation slip. Email: nigel.bradshaw@nepia.com

Members with ideas or suggestions for further improving North Online, or who would like to provide feedback, should also contact Nigel Bradshaw.



Signals Search 9 ?

Questions

- 1 What equipment should not be by-passed?
- 2 What should not be used to treat burns?
- 3 What is the severe form of heat exhaustion?
- 4 What may happen to bulk cargoes with excessive moisture content?
- 5 What are rogue waves now called?
- 6 The Sea Carrier Initiative is now part of what programme?
- 7 The Appeal Court has recently ruled favourably to owners over what sort of dispute?
- 8 Which principal convention contains new regulations relating to persons in distress?
- 9 What is the official name for a ship's "black box"?
- 10 New guidance has been published about which aspect of lifeboat safety?

- 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 Association.

- All correct entries received by the closing date will be entered in a prize draw.
- Closing date Friday 24th November 2006.

The first correct entry drawn will receive a prize along with a limited edition statuette of our quiz master

"Bosun Bo": The next 5 correct entries drawn will each receive a statuette.

Details of the winner and runners-up will appear in the next edition of *Signals*.



Your copy of Signals

Copies of this Signals should contain the following enclosures:

- If only... poster - Oily-water separators (Members and entered ships only)

Signals Search No.8 Winners

Winner: Yeo Chon Meng – Harrisons Shipping Division, Malaysia
Runners-up: Ronald Wohrn – Ahlers & Vogel, Germany • Richard Miles – RFIB Marine, London • John Chou – Taiwan Maritime Services, Taiwan • Melvin Zacharias – "MSC CHELSEA", – MSC Hong Kong • Jaudat Wassam – United Arab Shipping, Pakistan

Answers to Signals Search 8

- 1 Carrots
- 2 RSS
- 3 Baltic Sea
- 4 Permit to work
- 5 Engines
- 6 HBI
- 7 Cabin fever
- 8 Collision
- 9 Ventilation

• In this publication all references to the masculine gender are for convenience only and are also intended as a reference to the female gender. Unless the contrary is indicated, all articles are written with reference to English Law. However it should be noted that the content of this publication does not constitute legal advice and should not be construed as such. Members with appropriate cover should contact the Association's FD&D dept. for legal advice on particular matters.

• The purpose of the Association's loss prevention facility is to provide a source of information which is additional to that available to the maritime industry from regulatory, advisory, and consultative organisations. Whilst care is taken to ensure the accuracy of any information made available (whether orally or in writing and whether in the nature of guidance, advice, or direction) no warranty of accuracy is given and users of that information are expected to satisfy themselves that the information is relevant and suitable for the purposes to which it is applied. In no circumstances whatsoever shall the Association be liable to any person whatsoever for any loss or damage whensoever or howsoever arising out of or in connection with the supply (including negligent supply) or use of information (as described above).

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