

Cracking the Code

Head of risk management Phil Anderson undertook a detailed international survey of the ISM Code during 2001 and 2002. The Nautical Institute has now published the results in a new book *'Cracking the Code'*, 1 copy of which is being sent to each Member of the Association.

William O'Neil, Secretary General of IMO, officially launched the book in London on 14 October 2003. The involvement of Mr. O'Neil was most appropriate since he has been very much at the helm, steering the ISM Code into place as standard industry practice in an attempt to make ships safer and seas cleaner. The book has been dedicated to him and he also provided an encouraging foreword.

The findings and conclusions of the survey are based on the content of nearly 3000 completed questionnaires as well as nearly 800 detailed comments from seafarers, ship operators and a range of other individuals in different sectors of the shipping related industries and professions who are in some way involved with ISM implementation. This produced an enormous amount of data for analysis - not only quantitative statistical data but also a considerable amount of qualitative data - which required much time to evaluate fully.

Not surprisingly, many responses highlighted areas of concern, and often misunderstanding, about the ISM Code and reflected widespread problems with its successful implementation. There were frequent cries of '...too much paperwork', '...not enough resources', '...it's just a paperwork exercise' and similar were received from many different individuals in different parts of the world. Indeed, there seemed to be problems, to varying degrees, in the majority of responses.

However, a minority of the respondents claimed significant success with their implementation experience. The message emerging from this group was that not only was ISM making their ships safer but, as a direct consequence, the ships and the company had become more efficient and, very

importantly, more profitable. Some of these companies were able to show that they were saving considerable sums of money every year which they directly attributed to their ISM implementation.

Anderson decided to extend the initial research project to have a closer look at the companies and individuals claiming success to see what it was that they were doing which perhaps others were not. A number of significant common features emerged with regard to the style of management, leadership, recruitment policies and empowerment which led to the necessary motivation and culture change to make the safety management system effective.

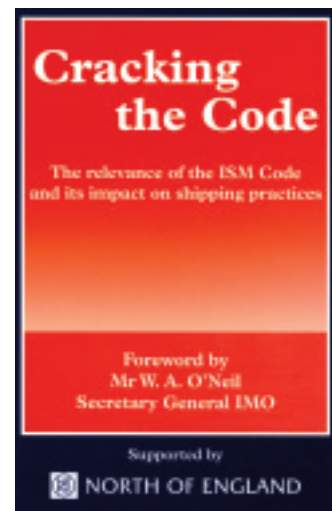
Rather than report back second or third hand on those positive experiences, Anderson invited three individuals from that group - each approaching the issue from quite a different direction - to contribute their own story by way of an additional chapter in the book. Captains John Wright, Sean Noonan and Stuart Nichols have made a significant contribution to the book by sharing their experiences first hand.

An extract from *'Cracking the Code'* appears on pages 6 and 7 of this issue of Signals.

Copies of *'Cracking the Code'* can be obtained from: The Nautical Institute 202 Lambeth Road London SE1 7LQ UK Phone +44 (0)207 928 1351 website www.nautinst.org

The full findings and conclusions of the research were submitted to Middlesex University as supporting evidence for a Doctorate which was awarded to Anderson earlier in the year.

He also maintains a website dedicated to ISM research and information at: www.ismcode.net



Don't bow to pressure

The charter and freight rates in many sectors of the industry appear to be at an all time high - clearly this is good news and has been long awaited. However, a number of Members have contacted the Association in recent weeks with problems they have been experiencing which appear to be linked to the buoyant market conditions.

In simple terms the problems involve pressure being applied from charterers to load more cargo into the ship than structural and safety criteria allow. For example, a Member was recently put under considerable pressure to load additional steel coils which would have exceeded the Classification Society calculated maximum tank-top loading limits.

Understandably charterers wish to load as much freight earning cargo as they can into the ships they charter - however, they cannot expect an Owner or Master to load cargo which will damage the ship or possibly even render it unseaworthy. Good seamanship must always take priority in the good times as well as the bad times.

Any Member finding themselves coming under unfair pressure from charterers should seek the assistance of their FD&D lawyers.

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Seafarers' health and welfare

The Association regularly stresses the importance to Members of ensuring that all potential seafarers undergo a thorough pre-employment medical examination before each and every term of engagement. The doctor's advice should be followed, particularly in cases where it is considered that the candidate is not fully fit for duty.

Members should beware of medical certificates which confirm conditions such as heart conditions, high blood pressure, diabetes and kidney problems, even where the seafarer is receiving medication. Cases frequently arise where a crewmember with a pre-existing condition becomes critically ill and has to be urgently repatriated, despite taking medication, due to other factors such as a change in climate, being in a different environment, increased stress or simply because he forgot to take his pills.

Where crewmembers have passed pre-employment screening medicals, effective and timely attention should still be given to any medical complaints. Treating a condition as soon as possible can reduce or even prevent any potential long term or permanent effects of an illness or injury.

Special precautions in Greece

Medical attention in Greece, like many other countries, is expensive and private facilities are realistically only open to those with significant means to pay for it or who have private health

insurance. The Association strongly recommends therefore that all sea-going employees are registered with the state within 8 days of being hired to ensure that NAT (Naftikon Apomachikon Tamion; the Seamen's Pension Fund) or IKA (Ildrima Kinonikon Asfaliseon; the Social Securities Foundation) cover exists for state medical attention.

The human and financial costs of illness

When a crewmember becomes ill it will be of concern both to the individual and their family. It is only when our health is jeopardised that we realise just how important it is. There will also be a negative impact upon other crewmembers aboard, since their own duties will probably increase. They will also worry about the welfare of their colleague.

Finally, it should be remembered that the economic cost attached to some illnesses and injuries can be substantial. It is therefore to everyone's benefit that any seafarer accepted for employment is fully fit before joining the ship and conditions on board should be conducive to maintaining good health. Every advantage should be taken of any state medical scheme which might be available.

If Members require any guidance about the nature of tests which should be included in pre-employment screening, the Club will be pleased to provide advice.

Stowaways in Brazil

Members are frequently reminded of the importance of taking active steps to prevent stowaways boarding their vessels. Stowaways not only pose a serious inconvenience on board but can result in very significant losses for a ship operator. The situation which seems to exist in Brazil illustrates the point very well such that a ship with stowaways on board may be quarantined for around six days and costs related to repatriation can quickly escalate into very high levels. Very recently one Member arrived in a Brazilian port with four stowaways onboard and security in the region of US\$350,000 had to be posted before the vessel was allowed to sail.

The Master may also be exposed to criminal penalties if he does not properly declare having stowaways on board.

The ship is likely to be quarantined if it has arrived in Brazil from a Yellow Fever area with people on board without a valid vaccination certificate.

The immigration authorities / federal police will board the vessel and interview the stowaways. A fine will probably be levied for each stowaway and the authorities are likely to insist that the stowaways are kept ashore, usually in a hotel, under guard until their fate is decided. All this is done at the ship operators expense. The stowaways may seek political asylum - a request which can take a long time to process - and the accommodation, maintenance and guarding costs continue to be for the ship operator. Repatriation may be decided by the authorities - which will include the stowaways being escorted back to their home countries with two Brazilian escorts - who have to be engaged for a minimum period of six days, plus their two way airfares, and hotel expenses. Again the ship operator will be obliged to cover all these costs.

The Federal Police apparently require the ships local agent in Brazil to sign a guarantee assuming responsibility and covering all these costs before the ship sails.

The only loss prevention solution to this problem would appear to be for ship operators, their Masters and crew to double their efforts and make sure that stowaways are not allowed to board their ships or to ensure that they are detected and put ashore prior to the ship sailing. Whilst Brazil has received special mention - the stowaway problem is global and getting worse - therefore the advice should be followed wherever the destination.



North of England stowaways search checklists will help with stowaway prevention.

Severe injuries - quick reaction can make all the difference

Occasionally a serious accident on board results in a part of an individual's body being severed or partially detached. This may be an entire limb or the end of a finger, for example.

Unfortunately, despite efforts made by colleagues, it is often not possible to re-attach the severed part as it has not been properly cared for.

In many cases it may be possible to attach severed parts by micro surgery but, to maximise the possibility, it is necessary to follow correct procedures. Clearly there must be the opportunity to get both the casualty and the severed part to hospital as soon as possible.

As the operation will require a general anaesthetic, the casualty should not be allowed to eat, drink or smoke. Shock is also likely to have occurred and will need to be treated. It is also important to know how best to preserve a severed body part.

Care of the casualty

1. Put on disposable gloves if available. Control blood loss by applying pressure and raising the injured part.
2. Apply a sterile dressing, or a non fluffy clean pad and secure it with a bandage.
3. Treat the casualty for shock.
4. Monitor and record vital signs - level of response, pulse and breathing.

Care of the amputated part

1. Do not wash the severed part. Put on disposable gloves, wrap the severed part in plastic cling film or a plastic bag.
2. Wrap the package in gauze or soft fabric. Place in a container full of crushed ice but do not allow the severed part to come into direct contact with the ice.
3. Clearly mark the container with the time of injury and the casualties name in order to assist the hospital. Give it to the emergency service personnel yourself and ensure that they understand what it is.

Condensation problems with bagged rice cargoes

Members who have been involved in the bagged rice trade know that condensation damage is one of the main causes of cargo damage claims being brought against the ship. One cause is ship sweat resulting from changes in sea water temperature. This is particularly so in the South East Asia to West Africa trade, where the ship has to pass from the relatively warm Argulhas current off the eastern coast of South Africa to the much colder Benguela current off the western coast. The sudden change in sea temperature can result in ship sweat, which may come into contact with the cargo.

Another condensation related question can arise with the use of bamboo poles and matting for dunnaging. It has often been felt that the bamboo contains a considerable amount of moisture as it is sometimes not fully cured when used. The bamboo can also absorb the ship sweat and pass it directly through to the cargo. However, bamboo has been accepted as standard trade practice for many years.

A Member of the Association who has been heavily involved in the bagged rice trade has recently reported very good results from using only kraft

paper and plastic as protection material. Plastic sheeting is placed against the steel and the kraft paper is placed between the cargo and the plastic sheeting. The Member conducted an experiment to compare the results, which involved loading hold No.1 with kraft paper / plastic and the other holds with bamboo. The number of wet damaged bags experienced in hold No.1 was at most 10% of the number of wet damaged bags discharged from the other holds.

The Member also instructed the crewmembers to ventilate the cargo as much as possible, including opening the doors of the mast houses and slightly opening hatch covers when possible. However, opening hatch covers at sea can be very dangerous and extreme caution must be exercised.

The Association would be very interested to hear from any other Members engaged in the bagged rice trade who have experience with protection methods other than bamboo poles and matting.

Please contact either Peter Scott or Dr Phil Anderson at the head office of the Association.



Romanian steel in open storage

The Association has become aware of problems in Romania where quantities of cold rolled steel products brought into Constantza, often by covered barges, exceeds the capacity of the existing storage facilities. It would appear that the problem is particularly acute in the Constantza South Port area, where significant quantities of both coils and packages are being stored in the open under tarpaulins or plastic sheeting. This form of protection has proved to be ineffective to protect the steel from the elements and from sea spray.

Members are warned that the majority of steel products shipped out of Constantza South Port are likely to be received wet on board their vessels and it must be assumed that moisture has penetrated into the coils and packages.

Members are reminded that all finished and semi-finished steel products should be surveyed before loading and that great care should be taken to ensure that bills of lading are issued properly clausured to reflect the apparent order and condition of the cargo.

Taking GM foods into China

Chinese authorities have recently brought into force the *"Biotic Safety Management Regulations on Transgenic Products"*. These provide that the Chinese inspection authorities need to issue a series of permits and carry out a multitude of tests before genetically modified (GM) foods can be imported.

The probable effect of this will be delay to the ship and an increase in costs of import. The Association is aware of two occasions, both involving cargoes of soya beans, one from Argentina and the other from India, where the inspection and certification process has been so prolonged that the ships have remained at anchor for four months. There is also the risk that the GM products will not meet the stipulated standards and will be barred from import.

Even if the cargo passes, there is still the risk that the receivers find that the costs of testing and the delay to the ship erodes their profit margins on the deal and will seek a way of avoiding the purchase and / or bringing a claim against the carrier to restore their profit margin. Most commonly, their means of bringing a claim against the carrier are by alleging that bills of lading are wrongly dated, most usually back dated, or alleging shortlanding and / or damage. To prove either of these latter claims, they appear to be able to obtain dubious certificates from local officials acting outside of their normal duties.

Advisors in China suggest that carriers should protect themselves by:

- arranging a draught survey at loading and specifying the draught quantity on the bill of lading
- ensuring that the bills of lading are correctly dated
- sealing hatch covers
- arranging a draught survey at the discharge port

If a Member discovers that a receiver of a grain cargo suddenly appoints a cargo or hull surveyor, for no apparent reason, they should immediately contact the Association for assistance. It may be that the receiver is trying to obtain evidence to manufacture a claim and prompt counter action should be taken.

Members requiring further advice should contact the Association.

Commercial issues of the ISPS Code

As no one can now fail to be aware, the new ISPS Code and amendments to SOLAS dealing with ships' security will come into force on 1 July 2004. In some countries new regulations and restrictions dealing with ships' security that mirror or add to the requirements of the Code and SOLAS will come into force even before that date. There is therefore now very little time left to prepare.

A primary concern is of course going to be to ensure that proper and effective security plans and procedures are drawn up and put into effect. However, in doing so, sight should not be lost of the importance of also thinking about the commercial implications that the Code will most certainly have. These also need to be planned for and addressed now and not simply left until the July deadline passes. It will by then be too late to prevent at least some of the problems that can reasonably be foreseen actually arising.

If the commercial implications issues are not addressed until the Code comes into force, Members run the risk of going through a period suffering delays, problems and expense that have not been planned or budgeted for that adversely affect their operations. Depending upon the nature of the trade that a Member may be engaged in, these difficulties could continue for a significant length of time. For example, a ship fixed on a long term time charter that does not take account of, or anticipate, the impact of the Code could give rise to difficulties for the entire length of the charterparty. The commercial consequences could be significant.

The commercial implications need to be planned for now. As well as thinking about contracts that will come into force after 1 July 2004, consideration will also need to be given to existing or imminent contracts that will continue beyond that date.

The following is intended to act as a guide to some of the issues that should be considered.

Existing contracts

It is recognised that it may not be possible to do much about contracts that have already been agreed and are in place unless the other parties involved can be persuaded to accept changes. Nevertheless a review of existing contracts may be useful so that Members can at least be aware in advance of problems and difficulties that may be likely to arise and have some opportunity of trying to mitigate them.

New contracts

Obviously, so far as new contracts are concerned, there will be an opportunity to try to agree clauses and provisions now, that will deal with the situations which may arise once the contract comes into force. By anticipating at least some of the issues that may arise, it may be possible to avoid disputes in the future by setting out clearly what responsibilities each party to the contract is to bear.

Which contracts?

Virtually any contract that deals in particular with the employment and operation of the ship may be affected by the new regulations. Charterparties are the most obvious example and bills of lading are another. Many bills of lading are of course on standard forms and it may not be easy, if possible at all, to amend their terms. There are though Members who use house bills of lading and it would be sensible for these to be reviewed.

Contracts with manning agents will also need to be borne in mind. As a result of enhanced security regimes in ports around the world it is likely that crews in particular will come in for close scrutiny. This is already happening in some places.

One of the objects of the Code and amendments to SOLAS is to prevent ships being used by terrorists. A corollary of this is that authorities will want to be satisfied that the crew themselves are not terrorists. When employing crew, manning agents should therefore not only be checking the qualifications of prospective crew but should also be looking into their background and history to ensure that they are not a security threat.

It will be important to ensure that there are provisions in contracts with manning agents to ensure that these checks are indeed carried out. It may be appropriate to include indemnity provisions in the event that they are not and the owner or operator of the ship suffers as a result.

Other, perhaps less obvious contracts will also be affected, such as those for the sale and purchase of second hand ships. In particular there may need to be additional documents handed over with the ship on completion of the sale, not least the ships' Continuous Synopsis Record. It should though be borne in mind that the ship security plan is a confidential document and should not accompany the ship when it is sold. It should be the obligation of the buyer of the ship to produce its own ship security plan.

Charterparties – issues that need to be addressed

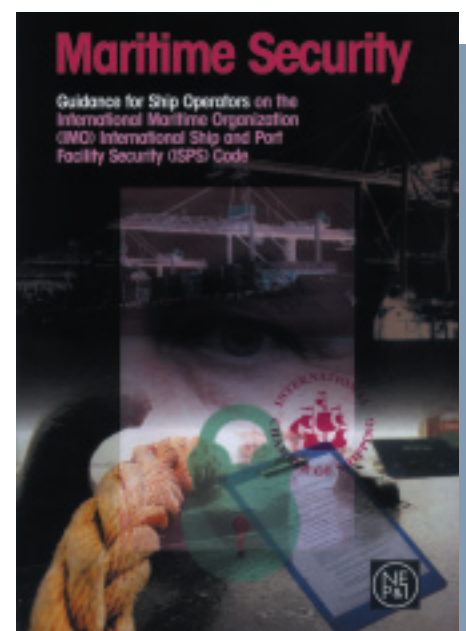
There are a number of issues that can reasonably be anticipated as likely to arise where a ship is employed under a charterparty. Although there are practical differences between time charters and voyage charters, the basic issues will be the same.

- Who bears any loss of time?
- Who bears any additional cost?
- What are the parties' respective obligations with regard to provision of documents and information?

Time charters

Questions such as the following need to be considered.

- What is the cause of any delay or loss of time?
- Does it relate to the ship and its crew or to the cargo to be loaded or the port or place to which the ship is sent by the charterer?
- Is the ship to be regarded as off hire? Are the standard off hire provisions in the form of charterparty to be used adequate to cover the contemplated situations, or are more specific, special provisions required?
- How are any additional costs to be allocated or apportioned, depending on the reason why they are incurred?



Voyage charters

The questions that need to be asked in the case of a voyage charter are similar to those for a time charter. Of particular concern though will be the effect that events relating to security may have on laytime.

- If a ship is delayed getting into a port because of security issues where and when can notice of readiness be given and when does laytime start?
- Depending on the cause of any delay or loss of time, what is the effect on the running of laytime or demurrage once time has started to run?
- Is there to be any effect on the running of laytime or any possible liability of the charterer for detention if a ship is delayed or prevented from leaving the port?

A number of other issues may be common to both voyage and time charterers.

Safe port warranties and increased levels of security

Most time charters and some voyage charters will contain an express warranty by the charterer that the port or places to which the ship may be sent are safe. It is doubtful whether a port where the security level in place is level 2 is unsafe. It is even arguable that where security is at level 3 the port is still not unsafe, if only on the basis that the port

is likely to be closed, preventing the ship from entering in any event. Nevertheless it may be worth considering specifying whether, for the purposes of that particular charterparty, an increased level of security is capable of rendering the port unsafe so that the Master can refuse to go there.

However, where a ship is prevented from entering a port, for example because security is at level 3, more important questions to consider will include the following.

- What is to happen to the charterparty as a whole in the event that the ship cannot load at that port? (This will be of particular relevance in a voyage charter).
- If the ship cannot enter the discharge port, where is the cargo to be discharged and who is to decide where the cargo is to be discharged?
- Is extra freight to be payable and who is to bear any additional sailing or discharging costs (for discharging elsewhere)?
- If the cargo is to be discharged elsewhere, what is the effect on the bills of lading?
- Are the charter party clauses incorporated into the bill of lading and is discharge at a port not named on the bill to be regarded as right and true delivery of the cargo and not amount to a deviation?

Information regarding the ships' employment

An owner needs to ensure that there is an obligation on the charterer to provide all its details with those of any sub-charterers, shippers, receivers and any other parties who may have any influence over the employment of the ship. Charterers in turn will need to ensure that the same information is passed to them by those with whom they sub-contract.

Indeed, owners may require a specific obligation on charterers to ensure that this particular obligation is passed down the contractual chain and may also require an indemnity from charterers in view of the potentially serious consequences of any relevant information being missing.

Proof of identity and other security measures

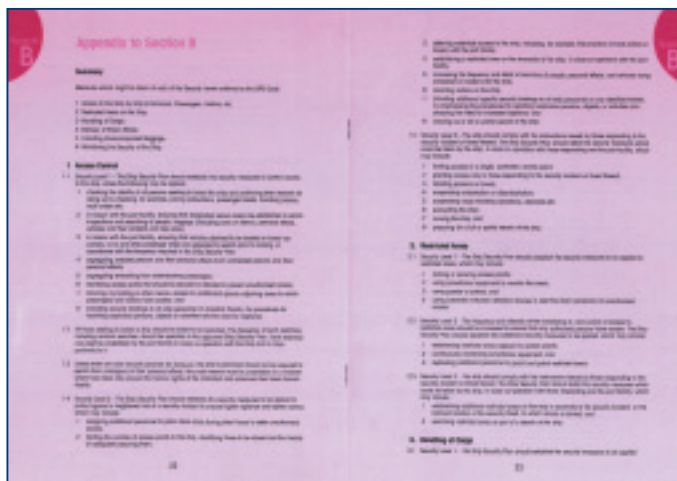
Clearly the owner will be responsible for all aspects of security on and relating to the ship. However, consideration needs to be given to who is responsible for security measures relating to people who may come aboard the ship during her stay in port, for example stevedores, and for ensuring that their identity is adequately documented.

Further guidance

It is not possible within the confines of this article to provide a comprehensive overview of all of the contractual issues that will need to be borne in mind and considered. These are examples only and there may well be others that also need to be addressed. It is also not possible in this context to make specific recommendations for how particular clauses should be worded and how certain risks should be allocated between the parties.

Some will of course be fairly obvious. There are however those that will depend more upon commercial considerations and the relative bargaining strengths of the parties concerned. Nevertheless more detailed guidance can be provided to produce specific provisions that may be appropriate to particular contracts. For example, BIMCO has published a clause of general application suitable for use in time charters.

The Association is of course happy to provide Members with further guidance on a case-by-case basis to meet particular concerns and contracts. Members requiring more information are recommended to contact the FD&D Department.



United States security measures

The Association has been contacted by a number of Members concerned about the introduction of ship security regulations in the United States. Members have been particularly concerned as to whether they need to submit Vessel Security Plans to the United States Coast Guard when their vessels visit the United States after 31 December 2003.

According to the United States Maritime Transportation Security Act (MTSA) regulations – contained in the Code of Federal Regulations (CFR), title 33, part 104 – owners or operators of foreign

vessels subject to SOLAS and the ISPS Code are not required to submit Vessel Security Plans to the Coast Guard for approval.

However, from 01 July 2004 foreign vessels must have ship security plans approved and verified by their Flag Administration or a Recognised Security Organisation (RSO) on behalf of the Flag Administration, and must carry on board a valid International Ship Security Certificate (ISSC). The Coast Guard will determine if a vessel is complying with its security plan and other maritime security requirements through the Port State Control

inspection system. Guidelines on the Coast Guard policy for Port State Control targeting and boarding have been published in Navigation and Vessel Inspection Circular (NVIC) 06-03.

Members wanting further advice should contact the Risk Management Department at the Association.

NVIC 06-03 can be downloaded from the United States Coast Guard website:

www.uscg.mil/hq/g-m/nvic/index00.htm

ISM – the way forward

This is an extract from Dr Phil Anderson's conclusions in 'Cracking the Code'.

If I was to try and identify one overriding conclusion of the whole research it could possibly be summarised by saying that a very significant section of our industry still appears to be struggling to implement the ISM Code because of inadequately functioning safety management systems. Having said that it has also been established that there are examples of SMSs which can and do work. More than that when the SMS does work it results not only in safer ships but also more efficient ships and, of great importance, a more profitable operation altogether. This is language which should make any ship operator and his accountant, sit up and take notice.

The fact that almost every ship operator in the world has to comply with the requirements of the ISM Code is incontrovertible. They must obtain the DOC for their office ashore and the SMCs for their ships. Inevitably resources must be made available both in terms of funding as well as labour to achieve this end. Such resources being poured into an inefficient and ineffective SMS are, it is suggested, equivalent to pouring money down the drain. There may be pieces of paper, nicely framed, up on the wall and auditors may have been sufficiently satisfied to verify the paper system but it produces little benefit to the ship operator, the seafarer or anyone else. Such systems are potential major problems for ship operators – time bombs just waiting to be picked up by a PSC inspector who has acquired a proper grasp of what a working SMS should look like or a court or insurer who is interrogating the system in detail following an incident.

The fact is that the difference in levels of resources required to do what is sufficient to merely maintain a system that will just satisfy the external auditors to obtain DOCs and SMCs and those required to implement an SMS which is working well and returning profits for the Company is relatively small. Indeed it is suggested that in the short to medium term the Company which applies the additional resources and commitment will recover that extra outlay many times over.

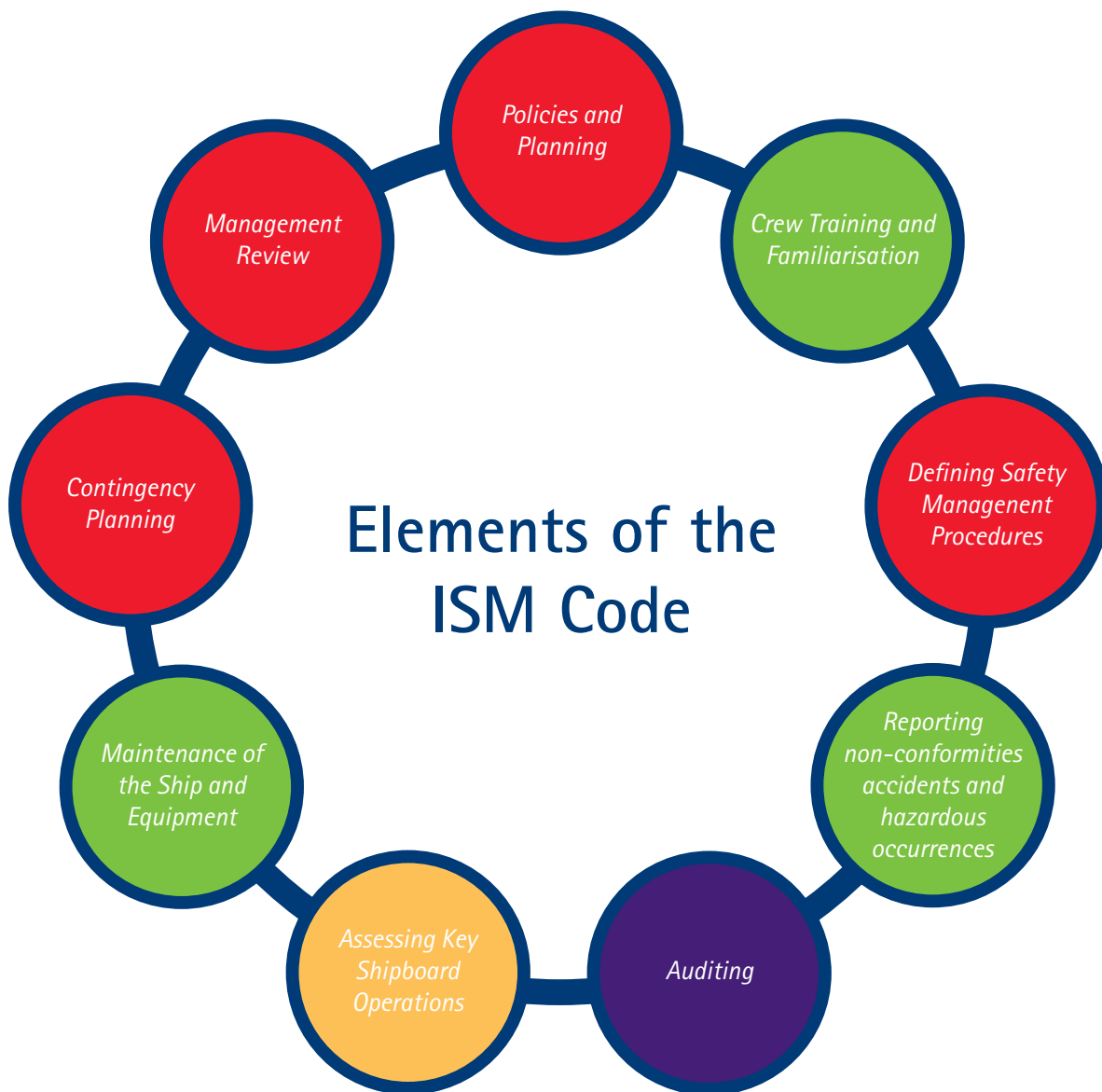
The important point to understand is that the ISM Code is identical, word for word, for every ship operator and every ship in the world. The reason why there is such a diverse range of experiences of ISM implementation is directly attributable to the way in which the individual SMS was designed and put into practice. Some of the common factors identified with SMSs which did not appear to be working satisfactorily, or at least where considerable negativity was expressed by individuals involved in its implementation, are set out below:

- Too much paperwork.
- Voluminous procedures manual.
- Irrelevant procedures.
- Bought-off-the-shelf systems.
- No feeling of involvement in the system.
- Ticking boxes in checklists (without carrying out the required task).
- Not enough people to undertake all the extra work involved.

- Not enough time to undertake all the extra work involved.
- Inadequately trained people.
- Inadequately motivated people.
- No support from the Company.
- No perceived benefit compared with the input required.
- ISM is just a paperwork exercise.
- No respect for external auditors.
- No respect for classification societies.
- No respect for Port State control inspectors.
- No respect for shore management by the seafarers.
- No respect for the seafarers by the shore management.

What must be understood is that it is not the fault of those people who expressed these negative attitudes that they feel the way that they do. They are the unfortunate recipients of a concept which has been basically dumped on them with little or no preparation, training or involvement. It is little wonder that so many systems produce little, if anything of real value. The SMS can only work if those who are involved in its implementation actually want it to work. This is at the heart of the very nature of management systems and is what differentiates them from prescriptive rules and regulations.





The motivation required to link the individual to the system can only arise within the concept of a culture. At its advanced stage it manifests itself as a safety culture but at the earlier stages it appears as a company culture. These are not just flowery words of modern management speak - it is the reality which must be understood if progress is to be made with ISM implementation. To highlight this point it is perhaps worth comparing some of the common factors which appear in those companies who appear to be operating very successful SMSs with the rather negative list on the previous page.

When an analysis was undertaken on those companies who claimed to be experiencing very positive results from their ISM implementation there were indeed a number of factors which were common to all and which stood out as being of special relevance. Some of these are set out right:

It was out of these various attributes that the Company culture, and in turn the safety culture,

- Leadership and commitment from the very top of the organisation, i.e. from the shipowner, chief executive, managing director, etc. and from that commitment and leadership throughout the management structure.
- Paperwork reduced to manageable levels - including procedures manuals, checklists, reports etc.
- A sense of ownership / empowerment by those actually involved in the implementation process of the SMS - i.e. the personnel on board the ship.
- Continuity of employment of personnel both ashore and on board ship.
- Two way communication between ship and office - with mutual respect.
- Awareness of the importance to the individual and to the Company of managing safety.

flowed as a natural consequence. The whole process of managing safety is not something which stands in some sort of isolation it is just part of the way in which things are done in that particular company. When these various components are combined they seem to be sufficient to produce a working environment in which people take responsibility for their own safety and contribute towards the safety of others and the Company as a whole. As a natural consequence of that shift in attitudes and values accidents, incidents and, consequently, insurance claims all start reducing. Once that starts happening there is a much more efficient use of time which allows genuine efficiencies to be made with the consequence that less money is draining out of the company.

¹ 'Cracking the Code'-Dr Phil Anderson-with contributions from Capt John Wright, Capt Sean Noonan and Capt Stuart Nichols-published by the Nautical Institute-2003-ISBN 1 8700 77 63 6.

Rescuing persons in distress

Going to the assistance of persons in distress has never been an easy task for ships' masters and crews. There are many difficulties associated with manoeuvring and rescuing persons from unseaworthy craft, and then looking after their health and welfare until they can be safely disembarked.

In recent times, the situation has become even more difficult with some governments reluctant to help and allow persons to be landed at a place of safety. The *Tampa* incident of 2001 - described in *Signal Special 7* - was an example of this.

To assist masters and owners bring such incidents to a satisfactory conclusion, Members should contact the Association as soon as possible. They should as a priority gather details about the persons in distress for passing on to the appropriate government and immigration authorities to facilitate their disembarkation.

It is also suggested that if a camera or video camera is available on board, it is used to record the rescue. This can be used as contemporaneous evidence in case the authorities later question the circumstances in which the persons came on board the vessel.



UNHCR

Reducing sulphur emissions

Having applied stringent emission controls on shore-based industries, legislators have turned their attention to the maritime sector with calls for tougher action against sulphur dioxide (SO₂) pollution from ships.

According to the International Maritime Organization (IMO), SO₂ emissions from ships' exhausts have been estimated at some 4.5 to 6.5 million tonnes per year - about 4% of the total global sulphur emissions. Within the European Union it is predicted that by 2010 ships will account for 30-40% of total sulphur emissions.

The response within the European Parliament has been to issue new emissions requirements that will

Revised confined spaces guide

The International Association of Classification Societies (IACS), in consultation with Intertanko, has revised and re-issued the excellent *Confined Space Safe Practice* guide.

The guidebook, which covers entry techniques into boilers, pressure vessels, cargo, ballast, oil tanks, cargo holds, void spaces, and other enclosures, has recently undergone extensive revisions and addresses situations commonly encountered by surveyors and ship personnel. It is intended as a supplement to existing training programmes.

The advice within the guide has a straightforward aim, that of protecting personnel through the safe and proper implementation of entry procedures from the correct identification of a confined or enclosed space through to atmospheric testing, safe rescue procedures and an appreciation of the hazards found within such dangerous spaces.

The guide also contains checklists to supplement permit-to-work systems and offers some timely reminders as to how easy it is to underestimate the hazards associated with entry procedures.

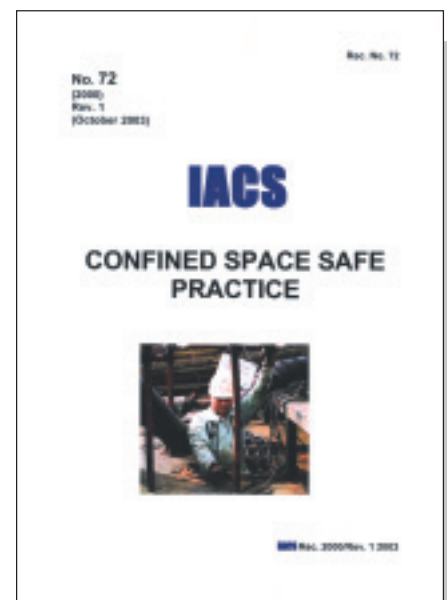
One of the most useful sections of the guide is that covering standby and rescue protocols, an area often overlooked when considering entry operations. The recommendations concerning the appointment of a dedicated standby / rescue person trained in emergency procedures and use of appropriate equipment and techniques stationed outside the confined space can and will save lives.

It is vital to stress the fact that an unplanned rescue will most likely end in tragedy as personnel repeatedly rush into lethal atmospheres under the misconception that they will be able to save colleagues. This is a point ably illustrated by the shocking statistic, issued by IACS, that over 50% of the workers who die in confined spaces are attempting to rescue other workers.

The guide also re-emphasises the fact that personnel should never trust their senses to determine if the air in a confined space is safe. Many toxic gases and vapours cannot be seen or smelt, nor can personnel determine the level of oxygen present without properly testing the atmosphere.

Letting your guard down just once can be fatal - vigilance saves lives and adherence to this revised guide will underpin any existing efforts to enter enclosed spaces safely.

An Adobe Portable Document Format (PDF) file version of the guide can be accessed at http://www.iacs.org.uk/_pdf/Rec72.pdf.



impose a 1.5% SO₂ content limit on all marine fuels burned in vulnerable areas such as the Baltic, the North Sea and the English Channel. It will also see an introduction of a 1.5% limit on fuels used by all passenger ships calling regularly at all EU ports, and a 0.2% limit on fuels burned in any EU port.

However, there is evidence that the EU may seek to amend the proposals so that the SO₂ limit level would be even stricter - levels of 0.5% have been suggested. In addition, member states will be asked to take all necessary steps to ensure that marine fuels containing no more than 0.5% SO₂ are made available in all community ports from 2009.

These strict limits will throw up a whole host of problems, but the most challenging will stem from the fact that there will be no alternatives to burning low sulphur fuels in European waters, costs

will rise and there is a real threat of product shortages due to a limited European capacity for producing low sulphur fuels.

From an international perspective, The IMO's Marine Environment Protection Committee (MEPC) has recently stated that the requirements for entry into force of Annex VI of the *International Convention for the Prevention of Pollution From Ships (MARPOL) 73/78 on Regulations for Prevention of Pollution by Air Pollution from Ships* (adopted in 1997) are now very close to being satisfied.

Shipowners and fuel suppliers are thus being urged to move quickly to put in place new procedures to ensure compliance and many will need to consider changes to engine room and bunkering procedures, fuel purchasing practices and even vessel design.

New report on shifting timber

The UK's Marine Accident Investigation Branch (MAIB) has examined incidents involving the shifting of timber cargoes carried on deck during 2001 and 2002 and issued a most informative report.

The root cause of most problems appears to be lack of friction. Many of the cargoes were packaged timber with square section timber bearers held together by steel bands. The steel bands were the only points of contact between the package and the steel deck or hatch cover. When wet, steel on steel provides very little friction. The best way of increasing friction is by the use of timber dunnaging. High friction coating applied to the hatch covers or deck also assists. This coating need not be a proprietary mix but can simply be sand mixed with paint.

The MAIB also identified incorrect lashings as being one of the problems. In particular, "up and over" lashings with the ends secured to points on deck do not, of themselves, provide deck timber cargoes with sufficient support to prevent transverse movement. Furthermore, the use of fabric straps rather than wires increases the probability of cargo shifting as the straps stretch under pressure and

therefore require frequent, more than daily, adjustment which can be difficult in heavy weather - which is exactly when you need tight securing the most.

The MAIB recommends that where steel uprights positioned in suitable sockets along the sides of the vessel are not available, the Master should insist upon log upright supports secured from side to side by hog wires between each tier of cargo. This will provide a rigid box structure, increasing resistance to racking and transverse shift.

Finally, the MAIB recommends incorporating a remote jettison system in the lashing so that, if the cargo shifts, the cargo can be jettisoned without placing the crew at risk of death or injury.

The IMO *Code of Safe Practice for Ships Carrying Timber Deck Cargoes* contains much useful advice on the safe carriage and each ship engaged in the timber trade should carry one. Further, the ship's cargo securing manual should contain a section specifically relating to the safe securing of timber deck cargoes for the ship in question.

Copies of the MAIB report can be obtained from the MAIB website, www.maib.gov.uk



Piracy Reporting Centre

The Association is one of the sponsors of the Piracy Reporting Centre operated by the International Maritime Bureau in Kuala Lumpur, Malaysia. The centre coordinates reports and issues alerts about pirate type activities and assists owners whose vessels have been attacked. It also publishes a *Weekly Piracy Report* on the internet containing details of areas at risk, suspicious craft and attacks.

Members and ships are advised to maintain anti-piracy watches in these areas and report any attacks and suspicious movements of craft to the Piracy Reporting Centre.

Further information is available from the IMB Piracy Reporting Centre, PO Box 12559, 50782 Kuala Lumpur, Malaysia. Tel: +60 3 2078 5763 Fax: +60 3 2078 5769 Email: imbkl@icc-ccs.org.uk Website: www.iccwbo.org then "search" for piracy.

24 HOUR ANTI-PIRACY HELPLINE
TEL: +60 3 2031 0014



UK's Marine Accident Investigation Branch

The UK's Marine Accident Investigation Branch (MAIB) is an independent government department responsible for investigating accidents involving British ships or ships in UK waters. It publishes some very useful reports, most of which are available free of charge on the internet. A Safety Digest is published three times a year, containing short reports and the lessons learned from investigations. More detailed reports, including safety studies on timber deck cargoes and lifeboat launching systems, are also available.

Further information is available from the MAIB website: www.maib.gov.uk

Ultrasonic tightness testing course

Leaking hatch-covers account for a number of the wet damage cargo claims reported to the Association every year. Traditionally, the most usual method of testing the watertight integrity of hatch covers was through a high pressure hose test. Though this was quite a reliable static test it did render a particular dilemma - if the holds were already loaded with cargo - the hatch covers may actually leak and result in damage to the cargo. The only safe time to carry out such tests was when the cargo holds were empty prior to loading.

However, in recent years the use of ultrasonic testing equipment has increased in popularity. This equipment can be safely used at any stage of loading without risk to the cargo. The equipment can be very accurate provided it is used by operators who are adequately trained in its use.

In order to ensure that the Association's staff were fully informed about the training requirements and operation of ultrasonic equipment, Survey Executive Paul Andrew attended a training programme held in Antwerp in October, 2003.

The programme resulted from a collaboration between SDT International and Independent Maritime Consultants & Surveyors (IMCS-Antwerp) and has been run since January 2002. It has recently gained Nautical Institute accreditation as an approved course. Delegates are supplied with their own class type approved Sherlog TA ultrasonic testing appliance for use during the practical sessions, which is also in compliance with IACS Unified Requirements.

The two and a half day course held in Antwerp between 1-3 October 2003 was built up of a series of classroom based theoretical and on-board practical sessions, terminating in a final exam and qualification as a "Qualified Operator in Ultrasonic Testing of Hatch Covers".

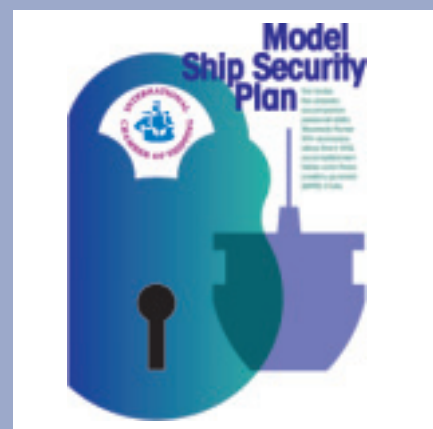
In response to industry feedback the course has since been shortened to one and a half days and split into two core modules. The hatch cover module, supported by Walter Vervloesem's Nautical Institute publication entitled "*Hatch cover*

Inspections" (published August 2003) looks at the various types of hatch covers and associated and / or frequently encountered problems, whereas the ultrasonic module focuses on the technical details of ultrasound and practical use of the Sherlog TA for tightness testing equipment.

The course attracts a wide variety of industry professionals including marine surveyors, consultants, superintendents, service engineers and P&I club executives.

For those interested in learning more about hatch cover maintenance, operation and repairs, but not interested in qualifying as a "Qualified Operator in Ultrasonic Testing of Hatch Covers", the new training format allows trainees to attend the hatch cover module only. In such cases, and upon passing the hatch cover module examination, delegates will be issued a "Statement of Attendance".

Courses are run throughout the year and in 12 different locations around the world. For information on the training course, hatch cover tightness testing, rules and regulations, visit <http://www.sdt.be/12sherlogPDF/sherlogpdf.pdf>, e-mail Sherlog-training@sdt.be or contact André De Graeve at SDT, Belgium on +32 2 332 3225 or Walter Vervloesem of IMCS-Antwerp on +32.475.46.81.63.



New model ship security plan

Over the last year the Association has provided various information to Members on preparing for the introduction of the ISPS Code. This includes a *Signals Special*, copies of the International Chamber of Shipping (ICS) guidance for ship operators and advice on the commercial implications - which is contained in this edition of *Signals* on pages 4 & 5.

To help shipowners further, the ICS has now produced a *Model Ship Security Plan* covering all relevant ISPS Code and SOLAS requirements. A CD version of the plan accompanies each copy, allowing companies to adapt it for individual ships and their own security needs.

The model plan includes:

- guidance notes on each section of the plan
- restricted and confidential sections as required by ISPS
- model documentation for ship specific data including suggested measures in response to different security levels
- advice on Ship Security Officer duties, and details of training and drills to be undertaken by crew
- guidance on procedures for responding to security breaches or threats, including maintenance of critical operations.

Members can purchase copies of the plan, costing £75, directly from the ICS at Marisec Publications, 12 Carthusian Street, London, EC1M 6EZ.

Tel: +44 (0)20 7417 2855,

Fax: +44 (0)20 7417 8877,

website www.marisec.org/pub

State medical benefits for Ukrainian crew

With the adoption of the "Law on Compulsory Social Insurance Against Industrial Accidents and Disease" the Ukraine has established a compulsory social insurance scheme to provide benefits for its nationals in the event of sickness, personal injury and death.

All Ukrainian employers must now pay a premium to the Social Insurance Fund (SIF) for their employees, who can then claim directly on the

insurance when their sickness, personal injury or death is work related.

Although the social insurance scheme automatically covers Ukrainian crewmembers employed by a Ukrainian based shipping company, under Article 11 of the new law there is a provision to enable Ukrainian seafarers employed on foreign flagged vessels to be insured on a voluntary basis.

Though the Ukrainian shipping industry has

declined over recent years, there has been an increase in the number of Ukrainian seafarers working on foreign ships with over 1,000 graduating annually from the various local maritime colleges. Members employing Ukrainian crew should consider the possible benefits of the Ukrainian SIF and, if it is decided to participate, then the necessary amendments should be made to crew contracts to reflect any state compensation which may be recoverable.

P&I Residential Course 2004

This year's Residential Course in P&I Insurance is scheduled to take place from the 12 to 18 June, 2004 - with Part I again being held in South Shields and Parts II and III at Lumley Castle. A brochure, setting out full details, and a registration form accompany this issue of *Signals*.

The course is extremely popular and for the last few years all available places have been taken well in advance of the event. Indeed, there has been considerable demand for places on this year's course even before it has been advertised. Anyone wishing to register therefore is strongly recommended to do so as soon as possible - the number of delegate places is strictly limited.

Further information, additional brochures and registration forms can be obtained from the Risk Management Department of the Association.



Far East trip

Tony Baker from the Risk Management department joined with staff from the Association's Hong Kong office to visit Members in Hong Kong, Singapore and Malaysia. The trip provided the opportunity to visit Members in their own offices and provide presentations on, and discuss, a choice of topical issues. The topics chosen included the commercial implications of maritime security, stowage and securing of containers, handling pollution claims and adding value to the ISM Code.

During the trip Alan Lo, Manager of the Association's Hong Kong office, and Tony Baker also attended part of Orient Overseas Container Line's crew seminar in Zhousan, where Tony gave presentations on the ISM Code and P&I Insurance to the gathering.

University prize winners

The annual North of England P&I prizes were awarded to the successful students at the University of Newcastle in December.

The outstanding student on the postgraduate MSc course was Hamid Chabane, whose name was engraved on a shield which remains within the University. Unfortunately Chabane was not available to accept his award personally, so the recently appointed chair of marine transport and management at the School of Marine Science and

Technology, Professor Kevin Cullinane, accepted the prize on his behalf.

The prizes for the best second semester students were awarded to

E Frangkoulis - B Eng in Naval Architecture

CW Ng - B Eng in Marine Engineering

SCI Lim - M Eng. in Marine Technology

Congratulations are extended to all the students on their excellent achievements - they each received a personal shield and a cash prize.



How much do accidents really cost?

During the last few months, head of Risk Management Phil Anderson has been delivering a similar message to Members far and wide: from masters of dredgers and aggregate carriers in the UK to liner operators in the Arabian Gulf and tanker operators in Greece. Within the context of providing feedback from his research into ISM implementation (see the front page of this issue of *Signals* and the article on 'Cracking the Code') he encouraged both office and sea staff to consider the true cost of accidents and the real implication to a commercial operation.

The thrust of his message was to compare the insured and the uninsured losses involved in any particular incident. Insured losses are relatively easy to calculate since they represent the claim against the P&I club or hull and machinery underwriters. Uninsured losses can be much more difficult to identify and calculate. Such items as the deductible or excess should be easy to identify and it is not too difficult to recognise that this

represents a direct loss from the shipowner's pocket. However, there are many other uninsured losses which are more difficult to quantify but which, never-the-less, involve considerable expense - often because of inefficient use of time. Clearly, in the shipping industry time is money!

Consider the delays to the vessel or the working of cargo which might occur following an incident. Consider the time involved investigating, analysing and reporting - by ship staff as well as personnel ashore and consider the communication cost and other administration expenses. An accident may not only be inconvenient - it could be very costly indeed. Frequently, the uninsured losses associated with an accident can exceed the insured losses many times and can have a direct effect on the bottom line operating figures.

The strong and positive message being put forward to Members is that safe ships are efficient and profitable ships!

Iranian seminar

In early December Steven Jones of the Association's Risk Management department and Mark Robinson, a Manager in the FD&D department gave two seminars and workshops in Tehran on the subject of the ISPS Code. Jones dealt with the details of the code and practical issues and Robinson dealt with the commercial implications. The seminars were hosted by Islamic Republic of Iran Shipping Lines at

its training institute and were also attended by other Members including National Iranian Tanker Corporation, Irano-Hind Shipping Company and Valfarje 8. The focus of the seminars was very much on practical issues and the enthusiastic participation of the delegates in the workshops in particular led to some lively and stimulating debate.

New VAT number

North of England P&I Association Ltd, as a result of the reorganisation of its VAT affairs, has been provided with a new UK VAT number. That number is 828 5711 10.

The effective date for this change was 19 November 2003.

Please amend your records accordingly.

UK VAT NUMBER 828 5711 10

Swot Quiz 18 - Answers Due to a number of requests from Signals readers, Swot Quiz answers from the previous issues of *Signals* will now appear in the following issue.

1. MEPC 2. US\$1,500 3. Paris MOU 4. Free of expense to carrier 5. No 6. Passport & identity document 7. A named individual or organisation 8. 11 - 18 June 9. IMAEST City Conference Centre - London 10. ISPS Code

Signals swot 18

Quiz Winner

John HW Chou

Taiwan Maritime Services

Runners-up

Ms M Dabirsiaghi - IRISL, Tehran

Captain Sylvester Charlesworth - Bergshav Management

Captain James Jeeris - Petroships Pte Ltd

Karla Townsend - Marsh Limited

Captain Mohammed Hussain - United Arab Shipping

well done!!!!!!

Signals Swot Quiz

Welcome to Signals Swot number 19. We invite you to pit your wits against "Bosun Bo" and become a *Signals Swotter!*

This is not a general knowledge quiz but rather the answers to all the questions are to be found within this particular issue of Signals.

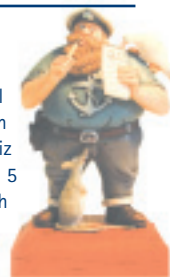
- The quiz is open to all readers of Signals.
- The quiz comprises 10 multiple choice questions - simply tick the correct answer ✓

- Send a photocopy of your answers, along with your name and, if appropriate, name of ship, position on board, company and address to the Editor of Signals at the Association.
- All correct entries received by the closing date will be entered in a prize draw.
- Closing date 15 March 2004.

PRIZES!

The first correct entry drawn will receive a 'Winners Plate' 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 following edition of Signals.



signalswot

Good luck to all you Signals Swotters!!

- 1** Who has produced a clause of general application on the ISPS Code which is suitable for use in time charters?

The International Group of P&I Clubs.....

BIMCO.....

LMAA.....

- 2** What do the 'Biotic Safety Management Regulations on Transgenic Products' deal with?

Importation of GM foods.....

The ISM Code.....

Bunker fuel quality.....

- 3** Where is the IMB Piracy Reporting Centre based?

London.....

Geneva.....

Kuala Lumpur.....

- 4** Which two organisations recently combined their efforts to produce a Confined Space Safe Practice guide?

IACS and Intertanko.....

Intertanko and Intercargo.....

IACS and ICS.....

- 5** Which Code is being cracked in Phil Anderson's new book?

The ISM Code.....

The ISPS Code.....

The enigma Code.....

- 6** According to IMO what is their estimate of sulphur dioxide emissions from ships exhausts each year?

200,000 to 300,000 tonnes.....

1 to 2 million tonnes.....

4.5 to 6.5 million tonnes.....

- 7** According to the US MTSA regulations, as set out in CFR, title 33, part 104, are owners / operators of foreign vessels subject to SOLAS and the ISPS Code required to submit their Vessel Security Plans to the USCG for approval?

Yes.....

No.....

- 8** Who has recently published a report examining incidents involving the shifting of timber deck cargoes?

MAIB.....

IMO.....

ICS.....

- 9** With which organisations should Greek seafarers be registered within 8 days of being hired?

NTA or IAK.....

NAT or IKA.....

TAN or AKI.....

- 10** What type of dunnage has been suggested by a Member as an alternative to bamboo sticks and mats when carrying bagged rice?

Plywood sheets.....

Plastic sheets and kraft paper.....

Timber spars.....

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

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