



## Following procedures for entering enclosed spaces

**S**topLoss has previously emphasised the critical importance of seafarers' adherence to proper safety procedures, prior to entering enclosed spaces.

In particular, IMO recommends that a competent person should undertake a preliminary assessment of the risk that the atmosphere might be toxic, flammable or oxygen-deficient.

The need for such measures has again been underlined by a recent case in which the responsible officer undertook a risk assessment prior to entry into a large chain locker, and concluded that there was no significant risk involving toxic or flammable vapours or gases.

But the risk of oxygen depletion appears to have been misjudged, such that the oxygen content of the atmosphere was not tested prior to entry. The misjudgment became apparent when a crew member collapsed shortly after entering the chain locker. And since no such difficulty had been anticipated, his colleagues did not have breathing apparatus on standby.

Nevertheless, tribute should be paid to the crew members who were present, who remembered their training and resisted the natural temptation to rush to the assistance of their stricken



The highest level of care is required during crew entry of enclosed spaces

colleague, without protecting themselves first. And tribute should be paid also to the suitably equipped ship's emergency team, which was quickly able to recover the seaman, who has since made a full recovery.

The owner's investigation concluded that the gradual process of corrosion (oxidisation) of the anchor cable and the compartment structure had depleted the oxygen in the chain locker, which was not adequately ventilated prior to entry.

This near-miss serves as a reminder of the dangers of oxygen depletion in apparently innocuous enclosed spaces. And, while the successful rescue emphasises the importance of comprehensive safety and rescue training, the owners are considering whether personal gas detection monitors could further enhance safety procedures.

### US personal injury claims reminder

The Club has seen a recent claim involving an injury to a Ukrainian seafarer in the United States, which has once again highlighted the importance of making a very swift and comprehensive response to such cases.

In particular, the earliest possible notification of the accident should be given to the Club. This will then enable expert consideration to be given to the individual facts and circumstances of the particular case.

This sort of background information will assist in making a prompt assessment of what the best and most efficient medical response will be likely to involve.

And, depending upon the seriousness of the injury, this may include the utilisation of a medical case management firm - to supervise any treatment required, and to co-ordinate outpatient or rehabilitative programmes and, ultimately, arrangements for repatriation.

Such organisations will, additionally, be able to assist in the monitoring and auditing of the significant expenses that can arise in claims of this type.

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## Beware bunker heat transfer

**T**he Club has seen a number of recent claims where bulk cargoes - usually grains and other agricultural products - have been damaged by heat transfer from bunker tanks, generally double bottom tanks, adjacent to the holds.

Main engine fuel oils are often unpumpable at ambient temperatures, and must be heated to facilitate transfer to the settling and service tanks. The ship's engineers control the temperature of the bunkers using heating coils within the tanks.

However, problems arise when the bunkers are heated to an unnecessarily high temperature, or for longer than is necessary.



Inattention to the dangers of heat transfer from bunkers can leave cargo looking like this

And, particularly when the bunker tanks are relatively full, the heat can be transferred into the adjacent hold, resulting in discolouration and caking of the cargo. The heat transfer usually affects a relatively

shallow layer of cargo. But the position of the double bottom tanks is often such that damage extends across the length and breadth of multiple cargo holds. And the problem is often compounded by a subsequent difficulty in segregating sound from damaged and caked cargo during discharge, when the sound cargo remains free-flowing.

Investigations suggest that in more than one case the ship's engineers simply did not consider the potential impact on the cargo of their heating of the bunker tanks, and the deck officers did not monitor the bunker temperatures. So, the recent cases are reminders of the need for both engineers and deck officers to be aware of the risk of excessive bunker heating leading to cargo claims.

## Permits to work

**S**topLoss 42 featured a report on a serious accident involving hot work, caused by inadequate planning of the task in question. As a result, a crew member was injured, even though he was following the permit to work issued by the responsible officer, who had failed to identify a fire risk.

But accidents also frequently involve 'execution' problems. These can arise in cases where, even though the planning was correct, the task was not performed in compliance with the permit to work. The Club has seen two recent claims of this type.

In one case, two motormen were hurt while conducting routine

maintenance of the rockers on a main engine. The job was not supposed to involve work on any hot or pressurised system. But the motormen decided to remove an adjacent thermometer pocket in the engine's water cooling system, in order to ease access to the rockers.

They did not understand that removing the pocket would release a spray of hot water under pressure, from the cooling system. And, crucially, they failed to consult with the responsible engineer before undertaking a task outside the scope of their permit to work. Both men suffered scalds as a result.

In another case, a chief engineer was supervising a temporary repair that involved welding a small doubler plate on a deck. He instructed a crew member to clear flammable material and stand fire watch in the space below. Wrongly assuming that it was safe to do so, the fire watchman then left his station without advising the chief engineer or the welder. While he was absent, weld flux dripped through the hole in the deck, landing on - and seriously burning - the forearm of another passing crew member, who was unaware of the hot work being performed.

These cases serve as a strong reminder of the need to seek specific authority from a responsible officer prior to deviating from a properly issued permit to work.



## Master detained for having undeclared descaler on board



Owners should be aware of the dangers of having undeclared cleaning agents on board when calling at Novorossisysk

**T**he Club has recently seen a troubling case involving the detention of the master of a bulk carrier which called at the Russian port of Novorossisysk, to discharge a cargo of sugar.

As usual, the master had provided a declaration of the ship's stores to the customs authorities, prior to arrival. But he inadvertently omitted to list the presence on board of drums of Unitor descaling fluid - a commonly used cleaning agent, the contents of which include hydrochloric acid.

When the authorities discovered the drums, they arranged for chemical analysis of the fluid. And when this unsurprisingly confirmed its acid content, the master was charged with smuggling a toxic

substance into Russia. As a result, the master was detained ashore and the urgent intervention of the Greek consulate was required to avoid his imprisonment. Following concerted efforts by the members, the Club, the correspondent, and industry organisations, the matter was eventually concluded by the payment of a modest fine - but only after the master had been detained for some 57 days.

The scale and nature of the authorities' response in this case underlines the particular importance to those trading to Novorossisysk of attention to the accuracy of customs declarations - and of the need for awareness of the potentially serious difficulties that can arise from the undeclared presence of cleaning agents containing hydrochloric acid.

### Drugs alert

Drug trafficking can present very serious hazards to ships calling at a number of South American ports, resulting in a need for onboard procedures and careful vigilance aimed at detecting any such activities. And the Club has seen a recent case - in Venezuela - which provides an illustration of the scale and nature of the difficulties that even the most careful masters and owners can face.

The loading of a bulk carrier had just been completed when the master noted and alerted the authorities to the presence of suspicious divers very close by. The authorities investigated and discovered a capsule attached to the underside of the ship's hull, containing 70kg of cocaine. But although the drugs had been found as a result of the master's attentiveness, the ship and crew were detained while the authorities investigated and considered criminal charges against the master and owners.

Although all the evidence pointed towards the master's innocence, these investigations were nevertheless extremely protracted - largely, it seems, as a result of political pressure on the local authorities to obtain a conviction. And it was only after 36 days, and intense endeavours through diplomatic, industry and legal channels, that the threat of proceedings (and the potential imprisonment of the master) was withdrawn and the ship freed to depart.



## The value of parallel indexing



The use of parallel indexing should help to avoid casualties, including groundings (*above*) and related damage to coral reefs (*below right*)

**R**eports received by the Club indicate that two recent casualties may well have been avoided if the bridge teams of the ships involved had made use of parallel indexing.

In one case, a bulk carrier was passing close by the edge of a busy anchorage while preparing to pick up a pilot. The master had approved a comprehensive berth-to-berth passage plan which confirmed that the ship would be subject to a strong, cross tidal stream on the last leg from the anchorage to the pilot station, and also identified an appropriate parallel index.

But the bridge team failed to set up the parallel index on the radar, and

also failed to fix the ship's position with sufficient frequency. The helmsman had been told to steer for a clearly visible landmark, but no-one realised that, while the helmsman had kept the foremast aligned with the landmark, the compass course was changing steadily as the ship was set off the intended track. The master had become distracted and, by the time he noticed the danger, it was too late to avoid a collision with an anchored vessel.

The other casualty involved a feeder containership during an approach to an inner anchorage which required the vessel to pass relatively close to a charted coral reef. In this case, the ship had no formal passage plan and the master was unaware that a strong

current ran across the intended track. Although the end of the breakwater provided an obvious target for use in a simple parallel index, no use was made of it. And that omission had been compounded by fixing only by GPS and at insufficiently frequent intervals. As a result, the master only became aware that he was off track when the ship grounded heavily, causing damage to the reef.

Both these casualties illustrate the value of parallel indexing, in addition to the proper fixing of a ship's position at appropriate intervals.

In particular, parallel indexing provides 'real time' monitoring for cross track error between fixes, in that the radar target can be seen moving off the index line if the ship deviates from the track. And the use of the technique in these two cases should have given the bridge teams early warning that their ships were running into danger.



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