IMCA Safety Flash 01/01

These flashes summarise key safety matters and incidents, allowing wider dissemination of lessons learned from them. The information below has been provided in good faith by members and should be reviewed individually by recipients, who will determine its relevance to their own operations.

The effectiveness of the IMCA safety flash system depends on receiving reports from members in order to pass on information and avoid repeat incidents. Please consider adding the IMCA secretariat (imca@imca-int.com) to your internal distribution list for safety alerts and/or manually submitting information on specific incidents you consider may be relevant. All information will be anonymised or sanitised, as appropriate.

A number of other organisations issue safety flashes and similar documents which may be of interest to IMCA members. Where these are particularly relevant, these may be summarised or highlighted here. Links to known relevant websites are provided at www.imca-int.com/links Additional links should be submitted to webmaster@imca-int.com

I Diving Fatality

One of our members has reported the following diving fatality that occurred to a contract diver employed by a non-member company. During a surface supplied diving operation at a depth of 8 metres, whilst carrying out hook up operations, a diving fatality occurred. One of the divers was sick, vomiting inside his face helmet and clogging up his mask air demand valve. He pulled the helmet off his head in a rush, undid his bail out bottle harness, unhooked his umbilical safety hook from his body harness but failed to free himself from his bail out bottle pressure gauge hose. He subsequently drowned.

Many divers have been sick inside their masks and have survived this dangerous situation by clearing their helmet using the 'free flow' system. This system provides a massive flow of air directly into the helmet, which assists breathing and helps flush out food debris from the mask. In this case the diver appears to have tried to open the bail out bottle air supply in mistake for the free flow air valve.

The diver's breathing rate before the accident was very fast and shallow, and could have led to a build up of CO_2 in his mask. CO_2 build up can cause headaches, dizziness, nausea, vomiting, unconsciousness and death.

The post accident investigation revealed that the diver who had died had no offshore diving experience. The logbook presented for scrutiny prior to the diving operations commencing was new with no dive records; the old book was requested but never received. The diver's experience was apparently related to lobster fishing and gold digging in Rivers; this only came to light after the accident.

Key Lessons

The key lessons learned by the company involved were:

- The dangers involved in diving operations are continually present;
- Even with accepted standard procedures in place accidents can still occur, vigilance and the reinforcement of accepted procedures cannot be relaxed;
- If the diver had operated his free flow valve instead of his bail out bottle valve he would have, in all probability, cleared his mask and flushed out the vomit from his air demand valve;
- A diver being sick in his mask is a situation to be avoided at all costs;
- The Diving Supervisor should monitor the divers breathing patterns. If a diver's breathing rate is continually rapid and shallow, it is a positive sign that all may not be well with the diver;
- If a diver is feeling ill, which might lead to him being sick, he should notify the Diving Supervisor, who should terminate the dive and bring the diver safely to the surface, in order to minimise the chance of the diver being sick underwater;
- All divers should be competent in the diving technique being employed. Divers should hold a diving qualification suitable for the work to be carried out, and diving experience should be demonstrated by logbook entries.

2 Seafastening

One of members has reported that recently, whilst one of their barges was being towed across the Atlantic, shelving around the barge was found to be moving due to inadequate support and fixing. This situation could have resulted in injury to personnel or damage to equipment.

The member has issued a reminder to personnel on its vessels that during vessel movements it is imperative that all materials and equipment are securely fastened to prevent movement. This should include items such as shelving, filing cabinets, furniture etc. and all such items should be inspected to ensure that they are securely supported and fastened before the transit of the vessel commences.

3 Fatal Accident Involving a Horizontal Water-tight Sliding Door

We have been notified of a fatality on a vessel when a crew member became trapped between the door and door frame of an automatically actuated, horizontal water-tight sliding door and succumbed from his injuries as a consequence.

In conflict with the existing procedure the victim did not fully open the watertight door before passing through. By not opening the door fully but partly the victim put himself in a dangerous situation with no time to correct the situation safely.

This incident has highlighted the hazards involved with this type of door which, by necessity of their water tight functionality, are not provided with devices to prevent full closure in case of an obstruction being located between the door and the door frame.

The watertight doors were in accordance with the Rules of the Norwegian Maritime Directorate (NMD/MOU) as well as the IMO/SOLAS requirements and the instructions of the Flag State from Lloyds Register of Shipping.

The Operation Instructions of the watertight doors were posted on each watertight door.

It is recommended that the presence and functionality of this type of door and associated hazards be communicated to all personnel onboard vessels involved in offshore operations. There should be an adequate procedure for the operation and use of these doors and personnel should be instructed to strictly adhere to the procedure.

This is one of a number of reports we have recently received on incidents involving watertight doors. IMCA is currently collecting information from members on incidents and on appropriate legislation/guidance in this area and will disseminate further details in due course.