

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 Near-Miss Incident involving Subsea Headache Ball

Keywords: *Lifting*

A member has reported a recent incident which occurred during diving operations. A dive team was engaged in removing rock dump from a subsea pipe, in order to position a hyperbaric welding chamber. A combination of manual rock removal and air lifting operations were being utilised to clear the area.

Approximately six hours into the bell run, there was a break in air lifting operations, to allow the divers to manually remove exposed rocks. The air lift was left in a vertical position approximately four metres from the divers. The divers intended to resume air lifting, so the air line was not vented. When the rock had been cleared, the decision was made to lay down the air lift to disconnect the air hose and crane, as the bell run was approaching completion. The crane began lowering the air lift, at which time the diving supervisor requested that the air line be vented. The air lift was lowered as the air line was venting.

When the air lift was at approximately 30 degrees to the seabed, the divers asked whether the crane was still coming down. It was confirmed that it was. The air lift landed in a controlled manner. As the air line was vented, a headache ball dropped from approximately 12-13 metres to the seabed – one metre from the working divers.

The company involved has identified the following contributing factors:

- ◆ The main contributing factor in this incident was the air line not having been vented when the air lift was laid down. The buoyancy in the air line resulted in an uplift effect, indicating to the diving supervisor and divers that the load was still on the crane. Consequently the crane wire was continually slackened, resulting in a catenary in the wire. When the air line was vented at the surface, the buoyancy in the 4" hose was removed, resulting in the uncontrolled descent of the headache ball and excess crane wire;
- ◆ The diving supervisor had asked for the airline to be vented, but no confirmation that this had been achieved was obtained;
- ◆ The implications of the buoyancy in the airline were not fully understood;
- ◆ The company's air lifting procedure clearly stated that the 4" hose was to be bled prior to the air lift being laid down. Despite this instruction, the operation proceeded without confirmation that this step had been completed.

The company involved has noted that this incident demonstrates the importance of all employees engaged in a task having a full understanding of the associated hazards and of the implications of not strictly following safety procedures.

In addition, the company has set out the following guidance for its personnel on aspects to be considered when planning, risk assessing and carrying out air lifting operations, which others may wish to consider:

- ◆ Air lift operating procedures to include a step which requires confirmation from surface and divers that venting is complete prior to lay-down of the air lift;
- ◆ Air lift job hazard analysis should clearly highlight the hazard of buoyancy in the air line;
- ◆ Personnel conducting air lift operations should review this incident to increase awareness of the associated hazards.

2 Near-Miss Involving Bail-Out Bottle Pillar Valve

Keywords: Pressure

After replacement of the pillar valve on a bail-out bottle, the bottle was being filled with air. When the pressure reached about 100 bar, the threads slipped from the bottle and the pillar valve flew out. Fortunately, nobody was injured and nothing was damaged.

Earlier, during routine inspection, it had been noticed that the pillar valve plastic handle of the bail-out bottle was slipping on the valve seat. The diving supervisor had instructed the lead diver to check spare stocks and to locate and replace the defective valve seat. The lead diver had not found a valve seat in stock, but found a spare pillar valve. Although a very experienced lead diver, he was convinced that all pillar valves were of a universal type and could be cross-fitted to any bail out bottle. He had not shown the valve to the diving supervisor to confirm and proceeded to change the valve. It was found that the size and thread-type of the pillar valve was incorrect.

To prevent recurrence, the company involved has reminded its diving supervisors of the following:

- ◆ Repairing and maintenance of bail-out bottle pillar valves is a critical activity. Therefore, effective supervision and monitoring must be provided when such activities are carried out;
- ◆ Instructions provided to personnel regarding such activities must be clear and precise, leaving no room for misunderstanding;
- ◆ Stocks of spares must be regularly checked. All spares must be tagged and marked to indicate specific equipment for which they are suitable;
- ◆ All divers need to be given regular reminders regarding such important issues during safety meetings.

3 Snaking Air Hose

Keywords: Hoses

A mechanic had started a deck air compressor, when the sudden delivery of pressurised air through the delivery hose caused momentary snaking of the hose. The mechanic acted in a calm manner and switched off the compressor immediately. Fortunately no one was positioned close to the coiled hose, so nobody was injured. Nothing was damaged.

The snaking hose had the potential to cause injury to personnel on deck.

During investigation, it was also noticed that the isolation valve's handle was missing.

Before starting the compressor, the mechanic had not checked the delivery valves to confirm that these were closed. The missing valve handle had not been reported.

The company involved has issued a safety reminder to its personnel as follows:

World-wide, many serious accidents occur due to snaking hoses. It is, therefore, necessary to follow some simple safety precautions before and during use of any compressor:

- ◆ *Before starting up a compressor, ensure that all air delivery valves are shut;*
- ◆ *Check that all valve handles are secured in place;*
- ◆ *Check condition of hose for any physical damage;*
- ◆ *Check all hose line clamps for tightness, to ensure non inadvertent parting of hoses while in use;*
- ◆ *Check all hose connections are secured with safety rope, to prevent a whiplash/snaking effect if parted;*
- ◆ *Ensure insurance wire is fixed on all quick-release couplings to prevent inadvertent parting of couplings while in use;*
- ◆ *Ensure all hose lines are anchored/secured with rope to fixed structures, to prevent a whiplash effect if parted;*
- ◆ *Know where the compressor's 'emergency stop' button is situation and how to use it;*
- ◆ *After use, ensure that air-delivery valves are closed and that the delivery hose is coiled and kept safely;*
- ◆ *Report all unsafe acts and unsafe conditions.*

4 Lack of Access Provided

Keywords: Fall

A member has reported the following incident, whereby an employee sustained an injury to his right shoulder when he fell while jumping off a Zodiac inflatable (in a cradle suspended by a crane) onto the vessel deck, using the bulwark as a step. The injury required him to seek hospital treatment and to remain off-duty for four days.

The company involved has noted that this was 'an incident waiting to happen', because:

- ◆ there had been no access-way/platform on the vessel to allow personnel to transfer safely between the deck and Zodiac;
- ◆ project personnel had been jumping between the Zodiac and deck for over two years – this was considered normal practice on the vessel;
- ◆ at the time of the incident, the employee's right diving bootie had grease on its sole, which contributed to his slipping off the bulwark.

The company has now provided safe access for personnel to transfer between the Zodiac and deck and has reminded its personnel that: *"it is everybody's responsibility to identify and report hazards, so that immediate corrective action can be taken to prevent incidents"*.

5 Use of Prescription Medicines/Drugs

Keywords: Drugs

A member has forwarded its recently-issued safety reminder concerning the use of prescription medicines.

Sometimes, employees who are under treatment of a qualified doctor may be prescribed to take medicine(s) that may impair work performance or weaken reflexes, especially in the event of an emergency.

- ◆ *While under medical treatment, it is the responsibility of all such employees to make the vessel master or diving supervisor aware of such a situation/condition.*
- ◆ *It is also the responsibility of the master/supervisor to enquire of new/transferred employees during familiarisation whether they are under medical treatment/taking prescription drugs. The purpose of identifying such personnel is for the master/supervisor to be aware of their limitations in work performance and in the event of any emergency, thus preventing a potential accident.*

6 Open Porthole

Keywords: Leakage

A member has reported the following incident which occurred onboard one of its vessels. The vessel was sailing in 6 8ft swell and 35kts wind speed, when it was noticed that one of the accommodation cabins was flooding with water. Upon opening the cabin door, it was noticed that water was entering the cabin from an open porthole.

The duty seaman immediately switched off the power supply to the accommodation cabins in order to prevent any short circuiting of the electrical system and possible fire. He also closed the porthole immediately.

The company's basic sailing procedures require that 'all portholes be securely closed when sailing' irrespective of the weather conditions. This procedure was not followed.

The company has issued a reminder as follows:

Responsibility and Authority of The Vessel Master – A Reminder

The vessel master has the ultimate responsibility to ensure the safety of the vessel.

- ◆ *He is responsible for ensuring through HSE meetings, training, familiarisation etc., that all personnel (including passengers) onboard the vessel, understand the safety procedures & instructions as per SOLAS and other relevant requirements, to be followed on the vessel, and to ensure that they strictly follow all such safety instructions;*
- ◆ *He has the authority to carry out regular checks/inspections to ensure that all necessary safety instructions & procedures are being followed;*

- ◆ He also has the authority to take disciplinary action as necessary, against those personnel onboard the vessel who do not follow necessary safety instructions & procedures, and put the vessel at risk

7 Near-Miss: Sailing Close to a Construction Barge

Keywords: Near-Miss

A member has reported a recent near-miss where a vessel sailed close to a construction barge and crossed over two of its anchor wires. Immediate communication took place between the vessel, the barge and the complex and the vessel moved out of the anchor area. Nobody was hurt and nothing was damaged.

The company noted that:

- ◆ a general navigation warning had not been issued regarding the barge's work area;
- ◆ the vessel master had not contacted the barge before approaching the barge area.

The company has issued a reminder of relevant rules included under the Convention on the International Regulations for Preventing Collisions at Sea (COLREG). Relevant rules could be:

- ◆ Rule 5 – *“Every vessel shall at all times maintain a proper look-out by sight and hearing as well as by all available means appropriate in the prevailing circumstances and conditions so as to make a full appraisal of the situation and of the risk of collision.”*
- ◆ Rule 8(a) – *“Any action to avoid collision shall be ... made in ample time and with due regard to the observance of good seamanship”*
- ◆ Rule 8(a)(ii) – *“(A power driven vessel shall keep out of the way of) a vessel restricted in her ability to manoeuvre”*.

The company involved has also issued the following advice: *“Construction barges in the field need a wide anchorage area while working. Normally, navigation warnings indicate the distance to be maintained from the working barge. When no such warning has been provided, it is the master's responsibility to ensure that the vessel sails at least one nautical mile away from any construction barge, unless communication with the barge has been established, he has permission to come closer than one nautical mile and a sailing course has been established”*.