

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

1 Failure of Lifeboat Lowering Mechanism

A member has reported that whilst lowering a lifeboat during coxswain training the bow release hook mechanism opened on contact with the water releasing the forward fall. The aft fall remained secured. Inspection found that the release was caused by a faulty cable mechanism. The forward operating cable end fittings had come loose and the cable was not holding the cam in place.

The incident could have been much worse. If there had been a jerk or sudden movement during lowering, the forward hook cam could have opened and dropped the lifeboat from height, resulting in serious injury and possible fatalities.

Key lessons noted by the company:

- ◆ All equipment faults/defects to be reported immediately on detection.
- ◆ All mechanisms to be tested on a regular basis. These tests to be included in Planned Maintenance System (PMS).
- ◆ Full inspection by manufacturer or designated reputable agent to be carried out at regular intervals.
- ◆ Recommended upgrades or modification to be carried out promptly.

The company's recommended preventative action:

- ◆ Lifeboat manufacturer or their designated agent to carry out full inspection of all mechanisms as soon as possible and replace where necessary (when locking pin is under handle as opposed to through handle).
- ◆ Regular inspection schedule to be established (part of weekly area inspections) and to be included as part of PMS.
- ◆ Manufacturer to carry out surveys at intervals recommended in SOLAS Regulations.
- ◆ Full visual inspection of all mechanisms to be carried out before any launching.
- ◆ All lifeboats to be test launched whenever the vessel is in port.

Pictures show mechanisms after modifications had been made.



2 Warning signs not respected

A member has reported that an electrician was on the deck of a semi-submersible crane vessel and was going to the lower part of the J-lay tower (clamp area) in order to install lighting necessary for the night time working activities.

To gain access to the tower he used a scaffold which had been an alternative route to it and which was directly connecting the vessel bow to that level just above the clamp area.

However, due to operational requirements, the scaffold had been disconnected from the tower and pulled toward the deck of the vessel. To indicate the hazard a white rope had been put close to the entrance, as well as a red tag that forbade the use of the scaffold.

Since the scaffold was not secured, it overturned under the weight of the electrician causing him to fall 13.8 m down, hitting the handrail of the narrow walkway located between the vessel and the clamp area. The electrician suffered fractures of his right arm and right leg. In addition, some of the pieces of the collapsed scaffold caused minor injuries to a scaffolder who was working in the clamp area.

Cause of the accident:

Despite all tool box talks held on board and the safety signs installed on the scaffold, the injured person by-passed the prohibition signals placed on the scaffold, risking his own safety and the safety of other employees.

Company's corrective action:

- ◆ Tool box talks with all personnel about the safe use of the scaffolds and respect of the warning signs.
- ◆ Ensure installation of more evident safety signs.
- ◆ Dismantle scaffolds immediately as soon as they become unnecessary.

3 Faulty bevel machine trolley

A member has reported that when a pipe joint was landed on a bevel station conveyor and whilst the operator was removing the sling from this pipe with his right hand and resting his left hand on a vertical beam in the bevelling cabin, the powered trolley on the bevel machine (not in use at the time) moved forward without warning, trapping the operator's left hand between the bevelling machine and the vertical beam, causing a fracture injury.

On investigation it was found that there was excessive wear on the drive wheel of the bevel machine trolley and the compensation had been adjusted to the limit. There was also a defective control valve and this caused uncontrolled movement of the hoist.

It was also discovered that the operator had noted a fault with the trolley the previous day, but had not reported this to his supervisor or barge management.

Key lessons noted by the company:

- ◆ All equipment faults/defects to be reported by operators immediately on detection.
- ◆ All control valves on all powered trolleys to be checked for integrity.
- ◆ Bevelling machines and associated equipment to be included as part of PMS.
- ◆ Hold toolbox talks with all machinery operators to stress the importance of reporting all equipment defects however trivial they may think they are.

4 Lifting operation incident

A member has reported an accident that took place during an onshore drilling operation. The crew was rigging down various rig components during the rig move to a new location. The assistant driller was assigned to move the mixing pump skid away from the pits. A crane was set up near the mixing tank and the eyes of two slings were to be attached to the hook of the crane at one end and to the lifting lugs of the mixing tank at the other end. There was a problem fitting one of the eyes over the lug nearest the crane. The assistant driller, who was also acting as a signalman for the crane, attempted to push the eye over the lug using his foot. As he needed to keep pressure on the eye of the sling and be out of the way of the skid as it was lifted, he moved inside the suitcase which was adjacent to the mixing pump skid, still keeping his foot on the sling. He gave the signal to lift and as the weight was taken on the sling, the sling came in contact with the unsecured lid of the adjacent suitcase, causing it to slam down on the assistant driller's arm.

The company's investigation of the accident led to the following conclusions:

- ◆ The crane arrived with unacceptable slings and was supplied with rig slings. The slings used to fit over the lifting lugs were not 'job specific'.
- ◆ The lids on the suitcases were not fitted with any securing device. No one recognised the open lids as being a hazard.
- ◆ There were some members of the crew who didn't attend the pre-job tool box meeting and the injured person was one of them.
- ◆ Safe work practices were not adhered to as the personnel dared to position themselves in hazardous situations.

The company's corrective action:

- ◆ All personnel must attend pre-tour, pre-job and all other safety meetings.
- ◆ Inspect certification of all cranes arriving on site before commencement of operation.
- ◆ Review safe work procedures for lifting operations and develop job safety analysis to encompass areas not covered by present system.

5 Corrosion pitting on bailout cylinder

A member has reported that during routine inspection and maintenance of the bailout cylinder, the diving supervisor found corrosion pitting on the cylinder body hidden beneath the harness strap.

The company reminded its personnel that seawater trapped for prolonged periods between the cylinder and strap, coupled with the regular rubbing of the harness strap with the cylinder body could cause corrosion pitting on the cylinder. Also that severe corrosion of the cylinder casing causes weakening of the cylinder which can fail with serious consequences. The bailout cylinder was taken out of service and sent for a full maintenance overhaul. The company reminded its personnel of the requirements to carry out regular inspection of such equipment (see IMCA Guidance Note D 018).

6 Toxic Gas Emission from Transponder

One of our members reported an incident involving lithium chloride batteries in a transponder unit which, having been recovered from depth, released a gaseous white powder through its vent valve. The gas was believed to be toxic.

People in the vicinity were immediately told to evacuate the deck area and brought into the accommodation. The air flow in the accommodation was increased to minimise the possibility of the gas entering the ship's internal facilities. The intakes were well away from the transponder.

Those on board immediately contacted the manufacturer. It was established that the most likely explanation of the whitish substance was a combination of sulphur dichloride and hydrogen chloride, both toxic. This combination is caused when the chemicals contained in lithium/thionyl chloride (LiSOCl) batteries leak and come into contact with water. Their advice was to leave the transponder alone until it had stopped venting before going near it and then to quarantine the unit.

The unit vented for some 10 hours before the relief valve reset. (The transponder was still under around 2 bar internal pressure.) It was removed to a well ventilated area, away from general operations, until specialists from the manufacturer could deal with the unit. It was later dis-assembled under controlled conditions using specialist PPE. The unit was then returned to the manufacturer in specialist packing for analysis.

The white powder contamination on deck was neutralised with sodium bicarbonate (baking soda) and washed by fresh water.

All people using transponders, beacons or similar battery powered underwater units should heed this notice, obtain relevant safety data from the battery supplier/manufacturer, and be aware of precautions they must take, especially if they either observe venting of the unit, or suspect water ingress into the unit.