

# IMCA Safety Flash 06/19

April 2019

These flashes summarise key safety matters and incidents, allowing wider dissemination of lessons learnt 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](mailto: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](http://www.imca-int.com/links) Additional links should be submitted to [info@imca-int.com](mailto:info@imca-int.com)

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## 1 Latent Trip Hazards

### What happened?

A member reports several trip hazards in vessel machinery spaces. On one occasion, a crew member entered the emergency generator room, stepped on an exposed support gusset, and twisted their left foot and ankle resulting in a lost time injury (LTI). On another occasion, a crew member on routine watch keeping duty tripped on an uneven surface in the upper bow thruster room, causing a medical treatment case (to the shoulder).

### What were the causes?

Investigations confirmed that depending on the age and design of the vessel, many latent hazards have been present, usually from design/construction, or because of engineering changes during the life of the vessel. Much of the time, these hazards remain latent and do not result in injury.

Uneven surfaces were the cause of both incidents. One was due to a redundant support gusset located on top of a step and the other because of multiple uneven walkways.

### What lessons were learned?

Latent hazards can be eliminated by:

- ◆ Including human factors in the design of vessels;
- ◆ Eliminating uneven surfaces;
- ◆ Applying management of change (MoC) to any engineering design changes and when not possible to eliminate, use of signage ('tiger tape') to identify uneven surfaces;
- ◆ In addition, keeping all access ways clear, use of non-skid paint, keep surfaces clean of grease/dirt, ensure lighting is adequate and wear appropriate footwear and personal protective equipment (PPE) that is in good condition and fastened properly.

### What actions were taken?

A fleet wide latent hazard hunt was conducted, focussed on all lessons learned. Many similar hazards were identified and rectified immediately and/or included in maintenance schedules including an MoC process.



Members may wish to refer to:

- ◆ [LTI: engineer injured following engine room slip/trip](#)

## 2 Near Miss: Crewman Struck on Head by Crane Hook (Marine Safety Forum)

The Marine Safety Forum (MSF) has published [Safety Alert 18-26](#), in which an AB was struck on the head by a crane hook during routine deck cargo transfer operations.

A platform supply vessel (PSV) was carrying out the routine deck cargo operations at an offshore installation. Two crew on deck were routinely hooking on and off cargo as it was being discharged and back loaded to and from the vessel. Shift change was due, so after discharge of the cargo carrying unit (CCU), the crew moved to the forward end of the cargo deck for shift change. However, before departing from deck, there was no routine check of the next CCU to ensure it was ready for discharge; this critical step was overlooked.

The crane was landing the previous CCU on the installation deck whilst the crew completed their handover on the PSV's deck. The oncoming crew were waiting in the 'safe area' for the crane hook to return to vessel in order to attach the next CCU. As the crane hook was being lowered, the new crew noticed that the lifting bridle was snagged; their attention was immediately drawn away from the approaching crane hook as they freed the lifting bridle. This took only a matter of seconds; they then stood back to look up for the crane hook, which had continued its descent to the deck unchecked by the crane operator.

As one of the crew looked up at the crane hook, it struck his hard hat before continuing its descent to the vessel deck. Luckily, his hard hat did the job and he was uninjured.

### What went wrong? What were the causes?

Several critical factors were identified from this incident:

- ◆ There was a shift change as soon as the previous CCU had been discharged;
- ◆ Neither shift ensured that the lifting bridle on the next CCU was clear and ready to hook;
- ◆ When the new crew noticed the lifting bridle had snagged, their attention was drawn away from the approaching crane hook;
- ◆ Crew did not contact the crane operator to advise him to stop lowering the crane hook whilst they handled the snagged lifting bridle, therefore the crane operator did not realise that their attention was elsewhere.

The **root cause** was deemed to be failure to follow established routine and best practice procedures:

- ◆ There was a breakdown in communication between the crew and the crane operator; the crane operator should have been advised by radio and/or hand signals to stop lowering the crane hook;
- ◆ Crew should use available time when the previous CCU is discharged to inspect the next CCU and ensure that it is ready for hooking onto the crane hook when lowered;
- ◆ If extra time is needed for shift change, 'stop the job' and take the required time for handover.

### What actions were taken?

- ◆ Investigation found that neither the vessel operators' nor the crane operators' procedures provided clear, detailed guidance on how cargo transfer operations should be conducted. Both parties were requested to review and update their procedures;
- ◆ The client imposed step-by-step instructions to be followed by all involved in cargo transfer operations, in order to allow the operators time to update their procedures accordingly.

The full safety alert can be found on the [MSF website](#).

### 3 Personal Injury Following PPE Violation and Slip and Fall on Deck

#### What happened?

A vessel Master was injured when he went to the main deck to perform routine checks without safety footwear or a safety helmet. While walking on the wet main deck, he slipped and fell, sustaining an injury on his head. Following first aid administered onboard, he was taken to a local hospital for investigation, and it was confirmed there were no other consequences other than abrasions on the affected area.



#### What went wrong? What were the causes?

This alert emphasises the following:

- ◆ Leading by (bad) example – all of us should be role models for a good safety culture, but most especially those in leadership positions;
- ◆ The importance of PPE compliance – neglecting the use of personal protective equipment is not only a breach of the PPE procedure, but also a disregard for your own person;
- ◆ Acceptance of unsafe behaviour – all should be empowered and expected to exercise the ‘stop work policy’;
- ◆ A personal decision was made to cut corners – this incident is evidence that shortcuts very rarely save time or energy; the ‘shortcut’ in this case actually cost his colleagues and the company a lot of unplanned time and effort to take proper care of his injury.

#### What actions were taken?

- ◆ Formal warning issued given the deliberate violation of a safety procedure.

Members may wish to refer to:

- ◆ [How PPE works: fire and thermal protection](#)
- ◆ [LTI: Engineer Injured Following Engine Room Slip/Trip](#)
- ◆ [LTI – person slipped on the stairs and broke his arm](#)

### 4 Hand Injury During Closing of Hatch

#### What happened?

Four crewmen made a journey by small boat to inspect an SPM and floating hoses. After completion of the inspection and maintenance work, two of them were closing the SPM hatch, but were informed by the control room that the door was not sealing properly. The hatch was repeatedly opened and closed without achieving the required seal. On further inspection, it was noticed that a hatch locking part was misaligned. This was corrected, and the hatch was closed. The moment the hatch stopper was removed, the hatch door swung inside towards one of the workers, and as he tried to move away from the path of the hatch he slipped, causing his left thumb to be pinched between the hatch and bulkhead.



The injured person was taken ashore for treatment. There were contusions and a minor fracture. Following medical treatment, the injured person was declared by a doctor to be fit to return to light duties.

#### What were the causes?

- ◆ The worker slipped on a slippery/wet uneven surface;

- ◆ The hatch would not lock properly because the locking mechanism was mis aligned;
- ◆ Hatch door on the SPM was not secured by rope in the open position.

#### What actions were taken?

- ◆ Added names of local land hospital on Emergency Response Plan and list of Emergency Contacts;
- ◆ Means to secure the hatch when open were added to the Hazard Identification and Risk Assessment Register.

Members may wish to refer to:

- ◆ [Finger Injury: Pinch Point](#)
- ◆ [Injury – failure of hatch holdback arrangements](#)
- ◆ [Finger Injury: Diver caught finger in bell door](#)

## 5 LTI: Head Injury

### What happened?

A provisions lift onboard a vessel became stuck. The chief engineer was called to attempt a repair. During assessment of the problem, the lift dropped whilst his head was in its path, causing a serious head injury resulting in an LTI. He made a full recovery.

### What went wrong?

The vessel provisions lift was loaded with items to be stored onboard when one of the crew identified that the lift had become stuck. This was due to packaging from some of the food items fouling the lift shaft. The chief engineer asked for the pry bar to see if he could clear it. He then struck the jammed object (food packaging) with the pry bar and at this point the elevator dropped suddenly to the main deck. The crew member was struck in the back of his head by the front horizontal cabinet bar after it had dropped from the jammed position. It is estimated that the elevator cabinet fell about 15-20 cm before it made contact with his head.

The provisions elevator dropped in an uncontrolled manner;

- ◆ The elevator lifting chains were in a slack position and not supporting the weight of the elevator cabinet due to the packaging being stuck. When the food packaging jam was removed, it allowed the provision elevator to drop in an uncontrolled manner;
- ◆ The Chief Engineers body position was in the line of fire. When using the crow bar, he lent forward, and his head was then inside the elevator cabinet.



### What were the causes?

Our members' findings were:

- ◆ Manufacturers' quality control – deficiencies in the quality control and document control process;
- ◆ Oversight during commissioning – inadequate oversight during commissioning;
- ◆ There was inadequate risk perception: formal work planning tools were not in place (permit to work (PTW), risk assessment).

**What actions were taken?**

- ◆ Provisions elevator removed from service until issues identified have been addressed and repaired by manufacturer;
- ◆ New risk assessment developed to cover any work required on the elevator;
- ◆ Vessel training sessions developed and will be conducted with onboard management. Onboard management will then present these topics (i.e. risk management process, life-saving rules, to their teams at safety meetings.

**What lessons were learned?**

- ◆ The incident may have been avoided had the formal work planning tools (i.e. PTW, risk assessment, tool box talk (TBT)) been in use when the problem with the jammed provision elevator occurred;
- ◆ It was also identified after further investigation that the manufacturer's approved electrical drawings had a design flaw allowing some safety interlocks to be electrically bypassed.

Members may wish to refer to:

- ◆ [Lost Time Injury \(LTI\): Stored Pressure Release – Crewman lost an eye](#)
- ◆ [Fatality During Maintenance of Elevator Lift \(2001\)](#)