

## IMCA Safety Flash 26/18

2018

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.

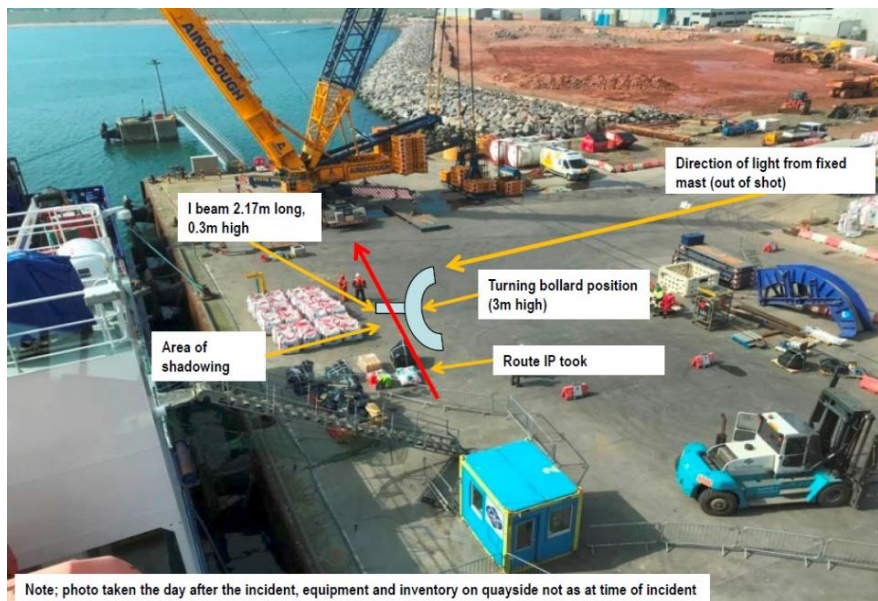
A number of other organisations issue safety flashes and similar documents which may be of interest to IMCA members. Where these are particularly relevant, these may be summarised or highlighted here. Links to known relevant websites are provided at [www.imca-int.com/links](http://www.imca-int.com/links).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

Any actions, lessons learnt, recommendations and suggestions in IMCA safety flashes are generated by the submitting organisation. IMCA safety flashes provide, in good faith, safety information for the benefit of members and do not necessarily constitute IMCA guidance, nor represent the official view of the Association or its members.

### 1 LTI – Rigger Tripped Over Quayside Obstacle in the Dark and Fell

#### What happened?

A rigger walking along the quayside tripped over an obstacle, and in the resulting fall suffered fractures to both wrists, a bone in his hand and his elbow. The incident occurred at night during a project mobilisation. The rigger walked down the gangway and onto the quayside to help the deck foreman. He tripped over a grillage I-beam fabricated to the turning bollard that was awaiting lift onto the vessel.



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

- ♦ The rigger did not take sufficient care or recognise the hazards and risks associated with walking through an area where equipment had been stored for loading;
- ♦ Other personnel involved in quayside operations and handling of equipment did not intervene or fully recognise all hazards and risks associated with activities and equipment;
- ♦ Identified control measures for slips, trips and falls were not applied to quayside operations;
- ♦ The QA/QC checks performed were not fully effective as they focused on dimensional and integrity checks rather than occupational safety hazards;
- ♦ The grillage 'I' beam was not identified as a potential tripping hazard during inspection or handling activities;
- ♦ The grillage 'I' beam was in shadow and there had been no consideration of additional onsite lighting;

- ◆ Responsibility for management and control of quayside operations was not clearly defined.

#### **What actions were taken? What lessons were learned?**

- ◆ Ensure that shift handovers clearly identify who has responsibility for operations on the Quayside. Before starting work, at the start of each shift the Quayside should be checked by those responsible for hazards and to ensure it provides a safe place of work;
- ◆ Consider provision of further portable lighting as required during mobilisation;
- ◆ Ensure principles of dynamic risk assessment are applied to day-to-day routine operations; this provides opportunity to continually assess the surrounding environment for hazards and adapt to change throughout the shift.

Members may wish to refer to the following incidents:

- ◆ [LTI: Feet trapped in motion compensated telescopic gangway](#) [one of the identified causes: insufficient lighting on the gangway resulted in a lack of awareness of the location and movement of the sliding step];
- ◆ [Guidance on safety in shipyards](#) (IMCA SEL 032).

## **2 Glow Sticks Breaking Open – Chemical Splash Risk**

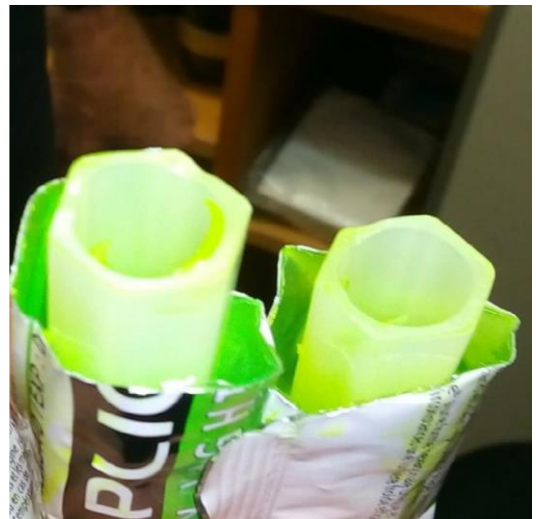
### **What happened?**

While activating a 'glow stick' the casing snapped releasing the glow dye. Our member noted that a number of sticks from the same batch broke open, releasing the chemical dye contents.

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

Probable causes noted:

- ◆ Storage – the plastic from which these are made is known to be brittle if exposed to extreme temperatures. This may be a probable cause considering warehousing locations of the item;
- ◆ Issues with manufacture – the manufacturer speculated that *“during the injection when we make the tube a small piece of dust [may have] prevented the tube from forming properly which can cause this type of phenomenon.”*



### **What actions were taken? What lessons were learned?**

- ◆ Ensure long-term storage in appropriate air-conditioned environment;
- ◆ When opening such light sticks, do so well away from your eyes, and wearing protective gloves;
- ◆ Check expiry date and/or authenticity of existing stock of such materials.

Members may wish to refer to:

- ◆ [Life Raft self-activates and falls to the quayside](#) [causal factor: exposure of equipment to very high temperatures].

### 3 High Potential Dropped Object During Lifting Operations

#### What happened?

A crewman was hit by a steel plate bouncing off the deck after it fell 14m from a load after a magnet failed. The incident occurred when shaped steel plates for reinforcing were being lifted from the main deck to the ROV hangar through a hatch. The lifting equipment was a 25T crane, two connected soft slings and a heavy-duty magnet. As a lift was swung into position over the hatch opening, one steel plate (sized roughly 1.5m x 1m and weighing approx. 450 kg) came loose from the magnet and fell approximately 14 meters down into the ROV hangar.

A welder foreman who was in the area underneath, was struck by the plate in the back of his legs as the plate bounced up from deck. Investigation after the incident showed the plate had bounced twice and the last time it struck the bulkhead forward in the ROV hangar. The welder was able to walk away from the incident but complained subsequently of pains where the plate had struck. He was sent to hospital for a check-up and returned to work the next day.



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

- ◆ The plate was so shaped that the magnet could not hold it properly: it was noted that 8 or 9 rectangular plates without cut outs had been lifted successfully with the magnet. The plate that fell was shaped differently, having a rectangle 68 cm x 54 cm cut from it (see photographs). As this plate was to be lifted, no one took into consideration that this plate had a large cut out, limiting the connection area for the magnet;
- ◆ Clear instructions were not followed: investigation also shows that the lifting operation was planned with clear instructions **NOT** to use magnet for lifting into ROV hangar. Pallets were to be used to lift plates into hangar, and magnet to distribute only, not above 300mm off deck.

#### What actions were taken? What lessons were learned?

- ◆ Lifting plans should be followed and should also cover all aspects, as in this case, where there are differences in object properties. This short cut could easily have resulted in major injury and, more than likely, a fatality if the plate had struck directly;
- ◆ The importance of following plans and also focus on identifying increased risk cannot be stressed enough.

Members may wish to refer to:

- ◆ [LTI as a result of load dropped from lifting magnet](#);
- ◆ [Guidelines for lifting operations \(IMCA SEL 019\)](#).

## 4 High Potential Near Miss: Tensioner Pad Dropped to Under Deck Carousel

### What happened?

During the trans-spooling of an umbilical, a tensioner pad retaining bolt sheared, resulting in a 1.5kg tensioner pad dislodging and falling 11m to the under-deck carousel, where it struck the already trans-spooled umbilical. The dropped pad then bounced towards the starboard side, narrowly missing the deck supervisor, and landed on a salt sack approximately 1 metre from him.

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

- ◆ A decision had been taken not to change the grade 8.8 bolts with the 10.9 bolts, due to resources, timescale and difficulty of access;
- ◆ The retaining bolt was not subject to an inspection, nor were the torque values checked due to the difficulty in accessing the tensioner;
- ◆ Risk assessments had not been conducted prior to the work activity, therefore there had been no consideration of potential dropped objects or mitigation thereof.

### What actions were taken? What lessons were learned?

- ◆ Replace M10 x 25mm grade 8.8 retaining bolts with M10 x 25mm grade 10.9 on all equipment prior to mobilisation to vessels;
- ◆ Corrective work orders to be fully completed inclusive of inspection of tensioner pad retaining bolts and torque value checks, prior to mobilising equipment to vessels;
- ◆ Risk assessment of this type of work should take place before it starts.

Members may wish to refer to:

- ◆ [High Potential Dropped Object](#);
- ◆ [Serious Dropped Object Incidents](#);
- ◆ [Dropped Object: lay tower adjuster leg pin](#);
- ◆ [Avoiding Dropped Objects](#) (pocket card)
- ◆ [Saipem Drops – Choice not Chance](#) (video);
- ◆ [Technip Drops](#) (video).



Direction of travel and landing area of tensioner pad from 20te Tri-Cat tensioner

