

IMCA Safety Flashes summarise key safety matters and incidents, allowing lessons to be more easily learnt for the benefit of all. The effectiveness of the IMCA Safety Flash system depends on Members sharing information and so avoiding repeat incidents. Please consider adding safetyreports@imca-int.com to your internal distribution list for safety alerts or manually submitting information on incidents you consider may be relevant. All information is anonymised or sanitised, as appropriate.

1 Flood light dropped to deck - corrosion

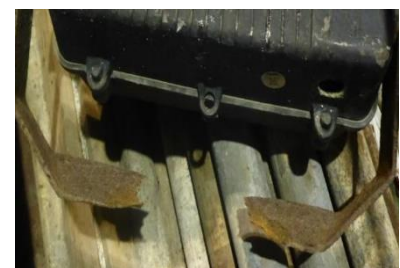
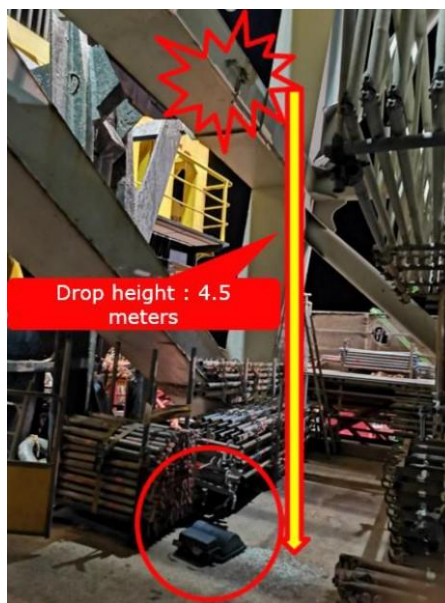
What happened?

A floodlight weighing about 6kg was found on the deck, near to the scaffolding storage area, underneath the main crane boom rest. The flood light affixed to the main crane boom rest dislodged from its frame and dropped to deck, a distance of 4.5m. The electrical supply to the flood light fitting was immediately isolated.

At the time of the incident there were no personnel in the area.

What went wrong?

- Hidden corrosion: The flood light mounting frame which remained affixed to the main crane boom rest, showed excessive wear and tear, and had completely corroded, leading to the flood light detaching from its mounting frame;
- There was no secondary retention;
- The flood light had not been identified as a potential dropped object;
- The advanced deterioration of the mounting frame was obscured by the paint work;
- Environmental conditions including vibration, humidity, wind loading, and sea salt corrosion may have impacted the mounting frame materials.



Dropped flood light



Flood light mounting frame

Actions

- Think carefully about what could become a dropped object - perform dropped object surveys;
 - Consider cross-departmental “hazard hunts” for drop hazards – get some “fresh eyes” in to spot what you may have missed;
- Ensure that everyone knows who is responsible for doing dropped object inspections;
- Make use of secondary retention where appropriate.

Members may wish to review:

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- [High potential near miss: dropped object \(flood lamp\)](#)
- [Lightning Conductor Fell – Dropped Object Near Miss](#)
- [Galvanic corrosion causes dropped object – satellite dome fell from mast](#)

2 MAIB: Anchor failures

The UK Marine Accident Investigation Branch (MAIB) has published [Safety Bulletin 1/2021](#) relating to anchor failures.

What happened

The COVID-19 pandemic has seen many cruise vessels anchored off the UK's south coast. During this period there were several anchor losses associated with the inclement weather over the autumn and winter and the use of the anchoring equipment beyond its intended design parameters. The MAIB has been made aware of several marine incidents since October 2020 where cruise ship anchors or anchor cables have failed, often while trying to ride out named winter storms. One cruise ship lost both its anchors within a week.

The MAIB have identified a trend in the nature of anchoring equipment failures and have released this safety bulletin to the cruise industry to mitigate against further losses both in the short term and when the vessels return to normal operations.

Though this bulletin is about cruise ships, the principles of safe management and use of anchors are relevant to all IMCA members operating vessels.

MAIB recommendations

- Operational limits for anchoring must be sufficiently cautious to ensure weighing anchor is not left too late, risking overloading anchor equipment. If strong winds are forecast, proactive action should be taken to seek a more sheltered anchorage in good time or proceed to sea and ride out the weather;
- Do not wait until the anchor drags or until most of the anchor cable has been paid out before weighing anchor;
- Steps should be taken to minimize the wear on the anchoring equipment as far as possible. When the opportunity presents itself, the anchor in use should be rotated and the scope of cable varied on a regular basis to minimize single point loading. An appropriately experienced crew member should also carry out regular checks on the windlass brake condition and areas where the cable is in contact with the ship;
- While at anchor for significant periods, ensure all watchkeepers are confident in the actions to be taken in the event of dragging or losing an anchor and there is a contingency plan ready for implementation in the event of having to proceed to sea or re-anchor. Also, watchkeepers and senior officers must be aware of the reporting requirements to the coastal state in the event of losing an anchor so that mitigation measures can be put in place if required;
- Anchoring equipment should be assessed before returning back into normal service if it has seen greater use at extraordinary times.

Members may wish to refer to

- [Near miss: uncontrolled movement of mooring chain](#)
- [Grounding of bulk carrier Kuzma Minin at Falmouth \(MAIB\)](#)
- [Anchor drag near-miss incident](#)

3 Injuries sustained during maintenance – worker positioning

A member has noted several injuries in the last 6-8 months relating to worker positioning and the use of tools and equipment. A review of these incidents has established a need for **improved risk assessments** which consider the relationship between the worker, their environment, tools, and activity. We call this the *ergonomics* of the task.

Applicable
Life Saving
Rule(s)



Line of Fire

What happened

In two cases where hand tools were being used, injuries resulted from not fully identifying the impact from the combination of the worker position, work environment and the tools, which created ergonomic challenges.

A technician was working on a hydraulic fitting with two spanners when one spanner slipped and struck him in the face. There was limited space available due to the position of the fitting. Holding one spanner in his right hand, he was loosening the fitting with a spanner in his left hand which slipped and struck his forehead causing the injuries. He was wearing safety glasses at the time but the struck safety glasses injured the bridge of his nose.

In another case a technician was using a cutting shear to break M20 bolts. While doing so he felt a twinge on his shoulder but continued to complete his shift. Further medical assessment later confirmed a significant muscle tear requiring treatment and rehabilitation.



3/4" Breaker bar with scaffold extension



Technician workspace at cooler box



Actions

Work in the marine and offshore environment may require individuals to lift, stoop, kneel, twist, grip, stretch, reach overhead, or work in other awkward positions. In planning these activities, task risk assessments, pre-job planning and toolbox talks should consider and review the combination of ergonomic factors that could impact the task.

Our member provides the following examples as a guide to support and develop worksite task risk assessments and activities.

Type of control	Example
Engineering Controls Implement physical change to the workplace, which eliminates/reduces the hazard on the job/task	<ul style="list-style-type: none"> • Use lifting equipment and reposition heavy objects to limit force exertion • Reduce the weight of a load to limit force exertion • Reposition to workshop where possible to eliminate a long/excessive reach and enable working in neutral postures • Select tools to enable neutral postures and reduce forces
Administrative and Work Practice Controls Establish efficient processes or procedures	<ul style="list-style-type: none"> • Require that where necessary and there are no alternative heavy loads are only lifted by two people to limit force exertion • Review workspace restrictions where equipment or fittings are located • Establish systems to minimize the duration of continual exertion, repetitive motions, and awkward postures. Rotate employees across tasks that use different muscle groups whenever practical • Properly inspect, maintain, and use power/hand tools
Personal Protective Equipment Use protection to reduce exposure to ergonomics-related risk factors	<ul style="list-style-type: none"> • Ensure “Top to Toe” assessment is made to review risk to work teams • Limit direct contact with hard, sharp, or vibrating surfaces • Wear approved PPE to help with grip, slip resistance, cold/hot conditions while maintaining the dexterity to operate tools and handle items easily

4 Britannia P&I Club: double fatality resulting from confined space entry

The Britannia P&I Club, as part of their [BSAFE campaign](#) have published a case study into a double fatality resulting from confined or enclosed space entry.



What happened

A bulk carrier was loading logs, and the Chief Officer entered a cargo hold which contained logs. Upon entry he rapidly lost consciousness and fell from the entrance ladder. A fellow crew member who tried to rescue the Chief Officer suffered the same fate. They were later both pronounced dead due to asphyxia.

It had been noted that a rubber seal on the hold access door needed replacing. The Chief Officer descended into the cargo hold and after only a few steps suddenly fell onto the logs below. The bosun immediately alerted fellow crew members standing at the gangway, then made his way to the aft mooring station to get a rope. The Second Officer was at the gangway and alerted the master by radio. He then fetched a breathing apparatus (BA) set and also oxygen from the ship’s hospital. An Able Seaman, having alerted the Third Officer, returned to the hold and started to climb down into the hold with another crew member about to follow. The Bosun managed to prevent the latter from entering but the Able Seaman collapsed and fell.



Photo: Britannia P&I Club

The two men were retrieved from the hold, not without some difficulty, but both were pronounced dead at the scene.

Members can review further information as follows:

- Britannia P&I Club case study material
 - BSAFE Incident Case Study No.5 – Summary
 - BSAFE Incident case study no.5 – reflective learning form
 - BSAFE Incident case study no.5 – presentation

- BSAFE Incident case study no.5 – britannia commentary
- IMCA videos
 - [Confined spaces: the dangers](#) (“Are you prepared” series short video)
 - HSSE 034 [Working in confined spaces](#) (longer training video)

5 Crew member thrown to the quay by unplanned movement of small boat

Transport Malta’s Marine Safety Investigation Unit (MSIU) has produced a report into an accident on a tugboat in harbour, which can be found [here](#).

What happened

The tug *Spinola* was alongside. The cover on the rescue boat needed replacement; two crew members from another boat were tasked with the job.

To facilitate the task, one of the crew members stepped on the unprotected outboard side of the rescue boat. At this time, he attempted to slacken the tension on the lifting slings holding the rescue boat. As soon as he operated the yellow handle, the rescue boat swung outboard, struck the crew member, and threw him onto the quay.

As a result of this occurrence he suffered from fractures to his left knee and left wrist, a broken nose and cuts to the face. He underwent surgery and physiotherapy and was over a week in hospital before discharge.

What went wrong?

Some of the conclusions drawn can be summarised thus:

- The crew members were not entirely familiar with the rescue boat davit operation - the davit’s slewing mechanism was activated accidentally, causing the rescue boat to swing outboard, dragging the crewman along with it;
- A risk assessment was not considered necessary for this task, which was considered trivial or routine;
- The injured person was working on the outboard side, where there were no guard rails fitted, nor was a safety harness or a hard hat worn.

A fuller treatment of the incident can be found [here](#).

Members may wish to refer to:

- [LTI Incident – Crew Struck by Cargo During Lifting Operations](#)
- [Stored energy near miss: Person nearly hit by equipment caught during light daughtercraft operations](#)

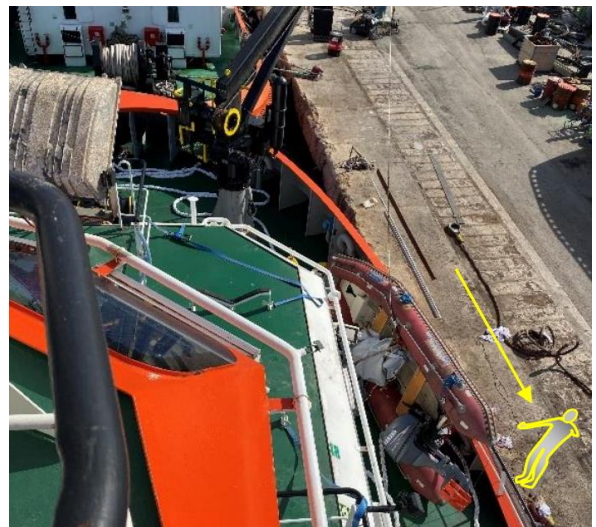
Applicable
Life Saving
Rule(s)



Bypassing
Safety
Controls



Line of Fire



Final position of rescue boat after the swing and approximate landing position of the injured person