

IMCA Safety Flash 16/20

May 2020

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) 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 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 Fall from Height Leading to Injury

Applicable Life Saving Rule:



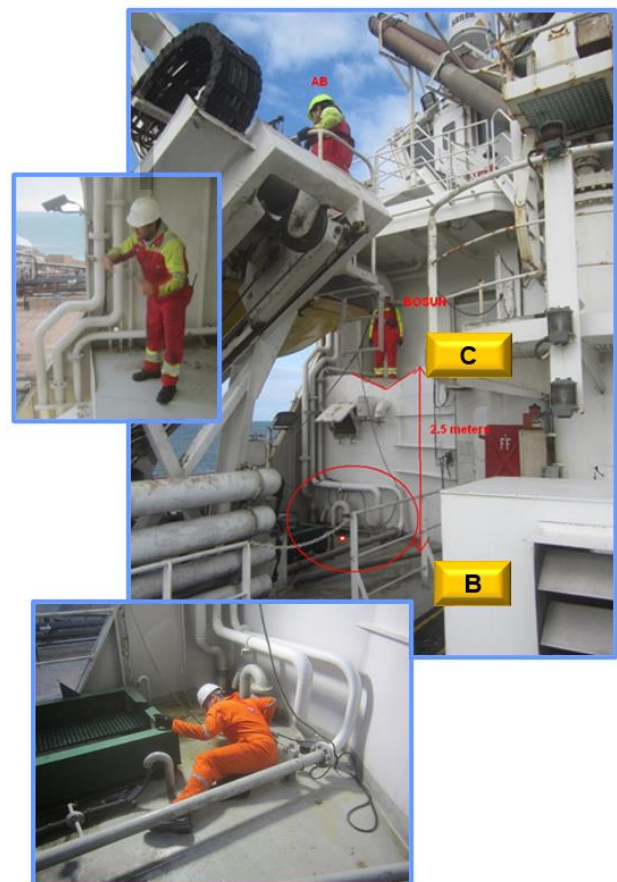
What happened?

During work to change a wire on an FRC davit, a crewman lost his footing, slipped and fell 2.5m to deck below. At the end of the operation, the bosun proceeded to a place where he could monitor the stowage of the FRC. The area of deck near to where the FRC bow was stowed was uneven and sloped to allow for FRC stowage. He slipped and fell to the deck below. Due to the specific design of the vessel, there was no barrier or guard to prevent a fall when the FRC was not in the stowed position.

The bosun sustained damage to his ankle which was placed in a cast. He missed landing on several obstructions which had the potential to cause life-changing injuries had he landed on them. This incident was considered high potential by our member.

What went wrong?

- ◆ A job safety analysis (JSA) and permit to work (PTW) was performed for the job, but the hazard of falling was not identified in either;
- ◆ The incident happened during parking of FRC in what would be the clean-up phase for the wire-change job;
- ◆ The incident was not an isolated consequence uniquely generated from changing the wire on the davit but would be recurring for each launch/retrieval of FRC;
- ◆ Work on wire changing may have exposed the bosun's safety shoes to oily residues that potentially contributed to slipping while in hazardous area on C-deck;
- ◆ The area on C-deck was not clearly marked as hazardous or no-go and the area where bosun was standing is not used during retrieval stage;
- ◆ The design of the area and the way the FRC was positioned when stowed meant the area could not be fenced off. The stowed FRC fully closes off the dangerous area, effectively mitigating the risk of falling from height.



What were the causes?

Contributing causes identified were that there was no non-slip coating, and an uneven surface, in a hazardous area. This had not been identified.

What lessons were learned?

- ◆ Improve on attention to detail – our member noted the 4C **Continuous Safety Awareness** methodology:
 - **Consider:** What can happen during the task and what are the risks?
 - **Communicate:** Talk to your team and supervisors and ensure that everyone involved remains fully aware of the risks and continues to consider all mitigating measures.
 - **Control:** Ensure that all measures necessary to eliminate or mitigate the risks are implemented and remain in place.
 - **Complete:** Finish the task safely;
- ◆ Importance of safety rounds/hazard hunts/inspections in different circumstances and by different people – ‘cold eyes’;
- ◆ Standardized or frequently repeated tasks are not risk free;
- ◆ The clean-up phase of a task maybe where crew are more prone to hazardous behavior;
- ◆ Develop a broader understanding of what ‘working at height’ is or could be, when considering whether or not fall arrestor gear should be employed. [IMCA notes: this is mandated in some countries.]

What actions were taken?

- ◆ Improved signage requiring fall protection equipment at certain locations;
- ◆ Review and amends to JSA for FRC launch/retrieval;
- ◆ Dedicated check on all vessels during the next hazard hunt for ‘latent’ or ‘less visible’ hazards such as:
 - similar unguarded areas such as when a davit or crane is swung outboard;
 - ineffective spill containment;
- ◆ Have ‘cold eyes’ perform the next hazard hunt – get someone not familiar with the space, e.g. deck crew in engine spaces or engine crew in deck areas;

Members may wish to refer to:

- ◆ [Fatal Fall Aboard Tanker *Marinor*](#)
- ◆ [Slips, Trips And Falls – Raising Awareness](#)

2 Sewage Spilled onto the Quayside

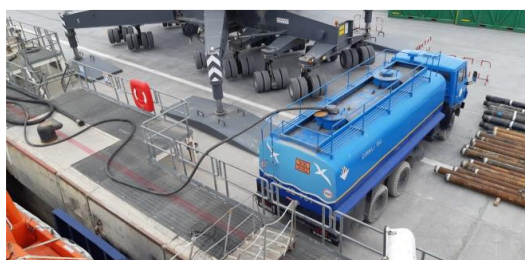
What happened?

30-40 litres of sewage water was spilled onto the quayside during a transfer operation from vessel to sewage truck. There was no discharge into the sea due to a contained concreted area on the quayside.

Applicable
Life Saving
Rule:



Incorrect connection practices – hose hung through the tank hatch

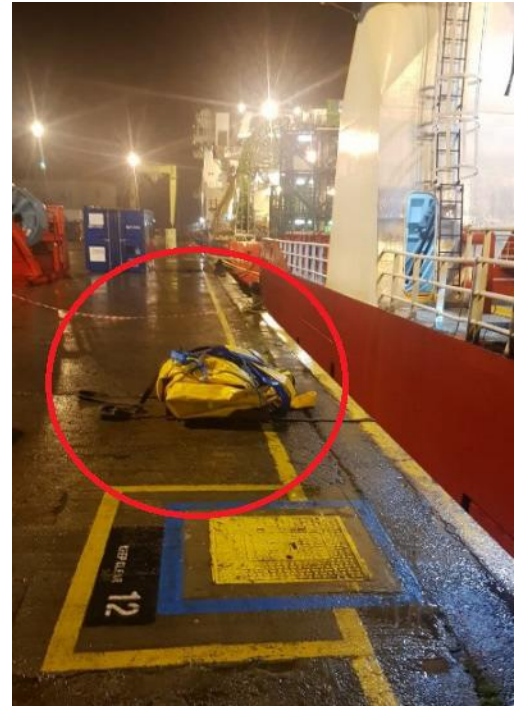


Correct connection with whip check

What were the causes? What went wrong?

Our member identified the following preliminary causes:

- ◆ An incorrect connection method was used. The correct hose connection was not available on the truck. The sewage transfer hose was hung through the hatch of the tank and secured by rope only;
- ◆ An unsafe latent condition was left unattended; the unsafe condition was neither reported nor challenged until after the actual spill had taken place;
- ◆ There was a lack of communication – no radio was provided to the truck driver, so there was a delayed response/shut down of transfer pump on the vessel;
- ◆ A company safety management system (SMS) requirement was not followed – a wet bulk transfer check list was not completed.



What actions were taken?

- ◆ Confirm that proper compatible hose connections and whip checks are available for all liquid waste trucks to ensure safe transfer operations;
- ◆ Confirm that all equipment utilized for sewage and oil water transfers are in good condition and certified in line with local regulations;
- ◆ Provide proper communications equipment – in this case, radios for all transfer operations;
- ◆ Re-iterate requirement to complete wet bulk transfer check list for waste oil and sewage transfers.

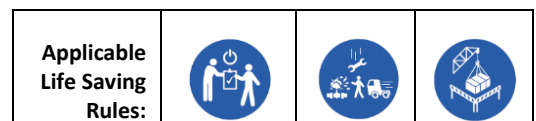
Members may wish to refer to:

- ◆ [Low Pressure Mud Hose Parted](#)
- ◆ [Near Miss: Unplanned Release Of 2" Blasting Hose Outlet From Air Receiver Coupling Clamp](#)
- ◆ [Oil Spill Incident](#)

3 Fall from the Quayside into Water

What happened?

Whilst slinging a palletted water bag (load), a third-party contract worker who was assisting in the operation fell approximately 3 metres from the quayside into the water.



The original, risk-assessed plan was to use the vessel crane to lift the load from the vessel onto the quayside; however, it was not available. This resulted in the ROV crane being used with no re-assessment of the task. The ROV crane had less reach than the vessel crane resulting in the load being placed close to the edge of the quay and in the exclusion zone (as shown in the photograph). During the slinging operation, the worker entered the exclusion zone to feed the sling through the side of the pallet nearest the quayside edge.

During this operation the sling appeared to snag requiring additional force to release it. The sling released more easily than expected causing the worker to lose balance and fall into the water. He was uninjured and self-rescued via the quayside ladder within 3 minutes.

What went wrong?

- ◆ No-one stopped to think or **STOP THE JOB**;
- ◆ Change was not managed appropriately – the new circumstances meant equipment was being used in such a way as to place crew in danger.

What actions were taken?

- ◆ Emphasise the need to recognise and manage changes in operations requiring re-assessment and the management of change (MoC) process;
- ◆ Emphasise the need for good situational awareness and do not allow people to put themselves in the line of fire;
- ◆ Ensure all third-party personnel involved in tasks are suitably briefed.

Members may wish to refer to:

- ◆ [Near Miss: Non-Fatal Man Overboard Incident](#)
- ◆ [Lost Time Injury \(LTI\): fall overboard/fall from height](#)

4 Pedestal Drill Chuck Assembly Detached Causing Head Injury

What happened?

A crewman was drilling a hole through a wooden plank using a benchtop heavy drill machine in the vessel's engine room. The drill chuck assembly detached and hit the right side of his forehead resulting in a laceration above his right eyebrow.



What went wrong?

Our member's investigation noted the following:

- ◆ The bench top drill was not fit to use, as the spindle sleeve was not available;
- ◆ There had been an unauthorized modification of the drill chuck assembly (spindle sleeve) – a hexagon headed bolt was modified for use as a spindle sleeve;
- ◆ The injured person and the supervisor were not fully aware of the scope of the assigned activities or job requirements;
- ◆ The job should have been stopped but the risk was deemed tolerable. Safety controls were bypassed;
- ◆ No personal protective equipment (PPE) was worn;
- ◆ The injured person was not familiar with the bench top drill assembly, operation or safety precautions and it was his first time operating the machine.

What were the causes?

- ◆ The immediate cause of the injury was the ejection of the chuck assembly along with the modified spindle sleeve from the spindle hole;
- ◆ The root causes were lack of appropriate supervision and lack of a safe system of work – the injured person should never have been allowed near the machine;
- ◆ Causal factors included:
 - risk was seen as tolerable by both the supervisor and the injured person;
 - the bench top drill had not been quarantined to prevent unauthorized use;
 - there had been no appropriate toolbox talk or risk assessment beforehand;

What lessons were learned? What actions were taken?

- ◆ Handmade or modified tools should not be used;
- ◆ Tools and equipment to be inspected for their fitness, and unfit equipment to be isolated – all equipment was subject to further inspection and unfit equipment was removed from the vessel.

Members may wish to refer to:

- ◆ [Failure Of Home-Made Equipment](#)
- ◆ [Welding Of Shackles](#)
- ◆ [Hand Injury Whilst Using Pillar Drill](#)
- ◆ [Arm Injury Whilst Using Pillar Drill](#)
- ◆ “Tolerable” – see <https://www.imca-int.com/?s=tolerable>

5 Lightning Conductor Fell – Dropped Object Near Miss

What happened?

A lightning conductor mounted on top of a service crane came free from its mounting and dropped 75 meters. The conductor fell through the deck carousel hatch and landed on the carousel bottom plate. Five crew members were working in the carousel; however, they were not positioned under the open deck hatch area.

The vessel was in dry dock at the time of the incident. There were no injuries.

What were the causes? What went wrong?

Initial investigation has indicated:

- ◆ The mast has been vibrating during high winds causing the lightning conductor to work itself free from the threaded housing;
- ◆ There was no material failure;
- ◆ The lightning conductor was not secured to its housing by any means other than the threaded connection – no secondary securing;
- ◆ The potential for the lightning conductor to become unscrewed was not recognised;
- ◆ The connection is not easily visible during regular drops inspections;



Mast and lightning conductor



Lightning conductor

Applicable
Life Saving
Rule:



- ◆ Equipment was not part of planned maintenance system.

What actions were taken?

- ◆ Consider the potential for a similar incident to occur on your vessels;
- ◆ Perform an inspection of all similar equipment at height and assess the secondary securing arrangements in place.

Members may wish to refer to:

- ◆ [Dropped object near miss: Antenna parts worked loose and fell to deck](#)
- ◆ [Near miss: Dropped object – falling camera](#)
- ◆ [High potential dropped object near-miss: antenna fell to deck](#)