

IMCA Safety Flash 09/20

March 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

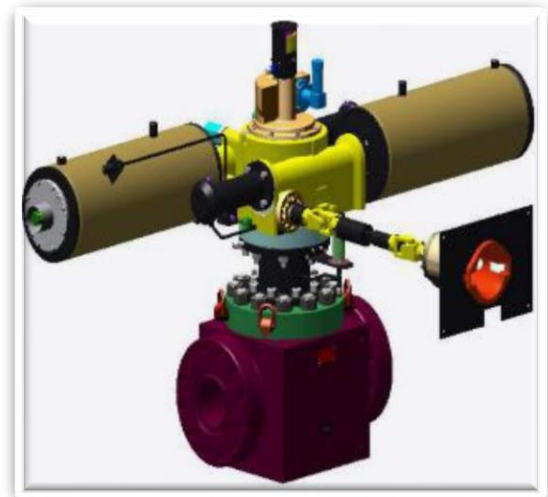
Any actions, lessons learnt, recommendations and suggestions in IMCA safety flashes are generated by the submitting organisation. IMCA safety flashes provide, in good faith, safety information for the benefit of members and do not necessarily constitute IMCA guidance, nor represent the official view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

1 Potential for Diver Injury Operating a Hand-held Torque Wrench

What happened?

A diver was involved in a near miss that could have resulted in serious injury when he was asked to function an ROV valve override on a subsea isolation valve with a hand-held torque wrench.

A diver was asked to operate an ROV override switch with a hand-held torque wrench. The operation was observed by a third-party technician who intervened and stopped the job. The use of hand-held torque wrench to operate an ROV override on the valve was inappropriate due to the possibility of a sudden uncontrolled unwinding of the spring mechanism; this could have caused the torque wrench to rotate and hit the diver.



What went wrong?

- ◆ The warnings on the GA (general assembly) drawing stating that hand-held tools should not be used were ambiguous and were missed;
- ◆ The valves procedure issued by the client did not include a warning or highlight the dangers of using hand-held tools to operate the ROV override;
- ◆ Engineers were not issued with the appropriate installation operations manual which included warnings not to use hand-held tools;
- ◆ The assumption was made that a hand-held torque wrench could be used. Our member notes that similar incidents have occurred within the organisation.

What actions were taken?

- ◆ Any operation of an ROV override on a double actuated spring ¼ turn ball valve (fail safe) should not be operated with a manual hand-held torque tool unless there is clear confirmation from the client or the valve manufacturer that it is safe to do so.

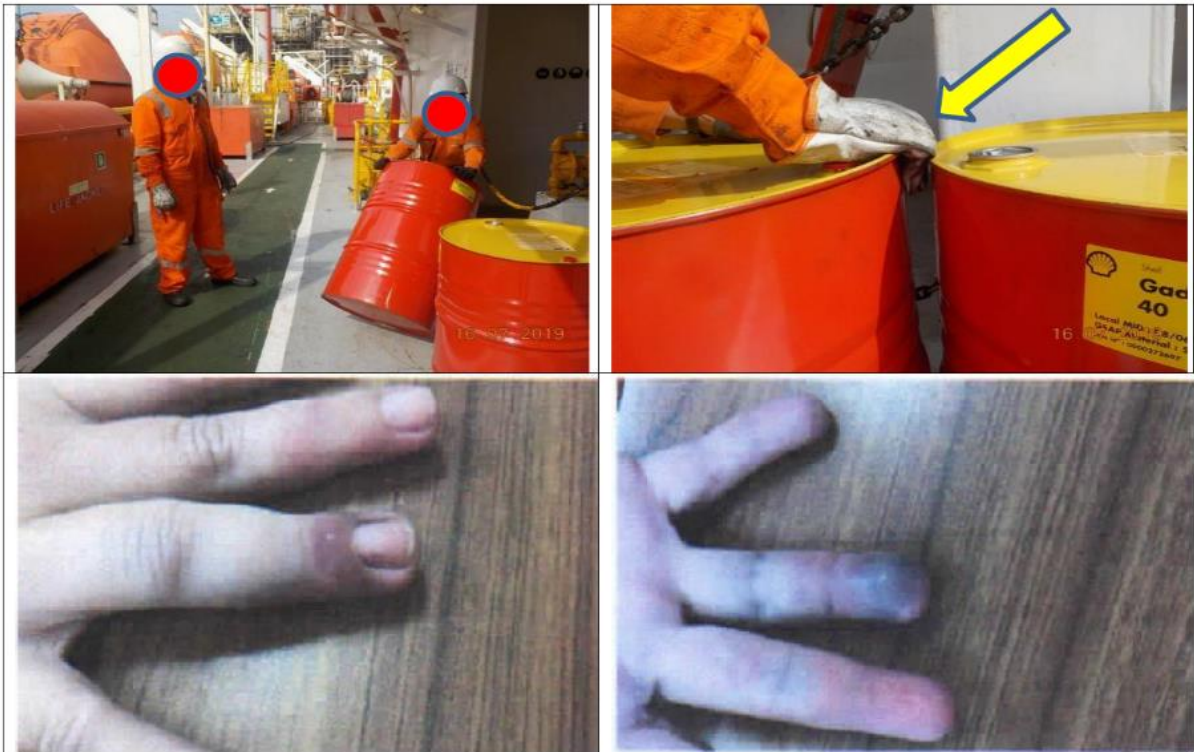
Members may wish to refer to:

- ◆ [LTI: Contact With Refrigerant Gas Causing Hand Injury](#)
- ◆ [Serious Finger Injury: Procedures During Engine Maintenance](#)
- ◆ [LTI: Injury To Right Wrist](#)

2 LTI: Finger Injury Caused While Working with Oil Drums

What happened?

A crewmember suffered a fracture to the right-hand ring finger whilst arranging 200l oil drums. The injured person was moving drums from a container using a pallet truck, assisted by a colleague. During this work, the injured person trapped a finger between the drums. At the time of the incident, there was no pain and the injured person continued to work. Once the operation was over, the injured person went to the medic to report the accident and took painkillers before resuming work. After shift, the injured person removed their safety gloves and found discolouration (purple/black) of the ring finger and returned to the vessel hospital again. The doctor advised to disembark the injured person for further medical examination ashore. It was discovered that there was a fracture of the distal phalange of the right-hand ring finger. The person was considered unfit to work for 15 days.



What went wrong?

- ◆ The incident was not reported to shore-based management (the DPA) in a timely and appropriate way;
- ◆ There were no appropriate procedures in place for this kind of work;
- ◆ The risk was seen as tolerable – crew took an incorrect and complacent attitude towards safety;
- ◆ No-one intervened to stop the job;
- ◆ There was no engineered mechanism to make this operation safer or hands-free. Such a mechanism was developed afterwards – see photos below.

What actions were taken?

- ◆ Suitable and sufficient risk assessment (RA) and toolbox talk (TBT) should be carried out for all routine and non-routine jobs, and these should make all crew involved aware of the dangers and risks involved with any particular job;
- ◆ Wherever manual handling is required, a proper handling method should be discussed and all hazards to be identified during RA/TBT and must be mitigated before starting work;
- ◆ Vessel management and crew to receive further instruction on hierarchy of safety controls;
- ◆ Engineered control – drum trolley and wheel – implemented on this vessel to remove people from the hazard.



Members may wish to refer to:

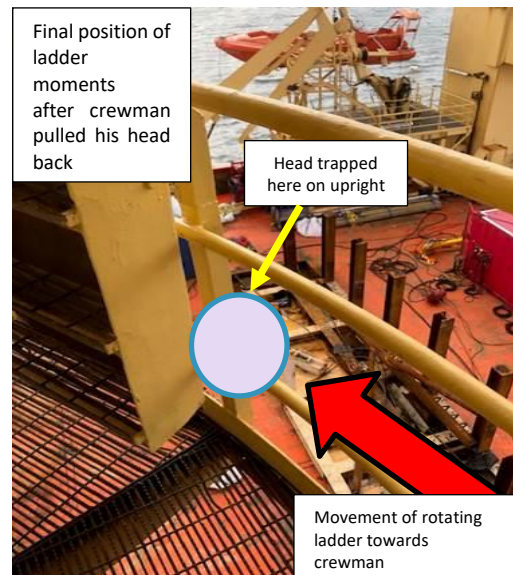
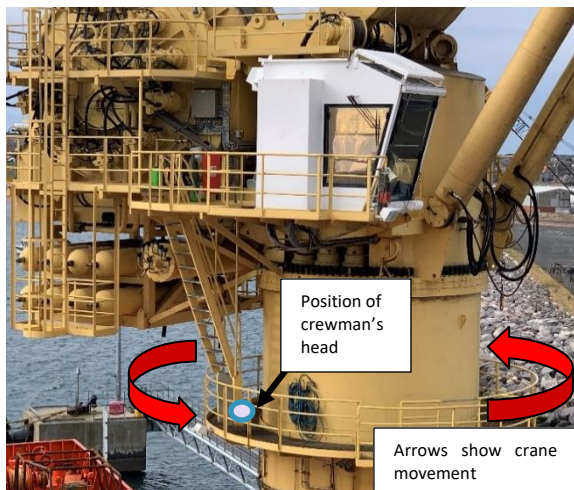
- ◆ [Line Of Fire/Pinch Point – Fractured Fingers](#)
- ◆ [Line Of Fire LTI: Finger Injury During Lifting Operations](#)
- ◆ [Lacerated Finger During Rigging Operations](#)

3 High Potential LTI: Rigger Ear Injury

What happened?

A crewman suffered a serious ear injury whilst removing some temporary rigging suspended from a crane gantry walkway. The incident could have been much more serious; the potential was for a critical injury or fatality.

A vessel was alongside demobilising when a crewman went up onto the crane gantry walkway to remove some temporary rigging. In doing so, he kneeled and put his head close to the handrailing. The steel access ladders of the crane cab, which moves with the crane as it slews, pushed his head against the railing upright. As he pulled back hard to free himself from being trapped part of his left ear was severed.



What went wrong?

Findings were:

- ◆ Lack of situational awareness/perception of risk;
- ◆ Ineffective communication and coordination protocol between the deck team and crane operator for access control to crane gantry;
- ◆ Ineffective assessment of hazards associated with on-site modification when introducing the temporary rigging;
- ◆ Bypassing warning signs and barriers by the crewman.

What actions were taken?

- ◆ Standardise signage and barriers around crane structures or other areas with large moving machinery;
- ◆ Ensure lifting procedures outline minimum requirements for communication and coordination protocol for lifting operations;
- ◆ Consistent use of dynamic risk assessment to identify risks arising from potential hazards in the **ongoing and changing circumstances** of work activities – this means asking what's changed and how this affects actions taken and instructions given;
- ◆ Review of control measures in place around crane access/areas with large moving machinery e.g. guarding, walkways, cameras, alarms, barriers;
- ◆ Consider whether suitable vessel-specific task risk assessments are in place for access to cranes and other areas of moving machinery and that these are well communicated to personnel e.g. during vessel, deck, ROV and dive system familiarisations and walkarounds;
- ◆ Ensure that changes, such as installation of small items of temporary rigging, are fully considered and risk assessed as part of a documented management of change (MoC);
- ◆ Use IOGP Life Saving Rules as a prompt whilst using risk management tools (TRA/TBT/MOC) – consider what Life Saving Rules are relevant to the task in hand.

Members may wish to refer to:

- ◆ [Near Miss: Personnel Almost Caught Between Crane House And Scaffold Pipe](#)
- ◆ [Crush Injury To Hand While Attempting To Secure Crane Hook](#)
- ◆ [Transfree Stepping From Gangway To Staircase During Rotation \[of gangway\]](#)

4 Near Miss: Failure of Work Procedures During Hot Work at Height

What happened?

During a crew change handover walk around the vessel hull, the Master observed a welder working close to the open/unsecured edge of a PS davit area. The incident occurred during planned installation of additional access support plates at the port side davit area. A 'hot work permit to work' was raised for completion of welding activities; the work area was agreed, a risk assessment conducted, and a toolbox talk (TBT) signed off by all participants.

Welding operations were immediately stopped, and additional fall prevention measures installed.

What was the cause?

The person authorizing the work did not properly assess the work area. Unprotected edge-related working at height hazards were left unattended with no safety precautions considered.

What went wrong?

- ◆ STOP WORK AUTHORITY was not applied;
- ◆ Risk seen as tolerable: the person working near the unprotected edge considered the job as a 'quick 5-minute task, so nothing to worry about'.

Members may wish to refer to:

- ◆ [Hot Work conducted within the 500 metres safety zone](#)
- ◆ [Two Electrical Incidents – UK HSE](#)



Arrow showing welder working with unprotected edge behind and potential to fall into water