IMCA Safety Flash 09/15

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 webmaster@imca-int.com

1 “Routine” Task, Non-Routine Result: Batteries Stored Sideways Leak Battery Acid

A member has reported a near miss incident in which there was a spill of battery acid. An electrician had charged the wet cell batteries of two motion reference units (MRU), each contained in a plastic box. Once the charging was completed, the electrician closed the boxes and had to place them on the floor to wait for the next shift to test the equipment.

However, to limit the amount of floor space for storage the electrician placed the boxes on their sides, neglecting to remember that this improper orientation (batteries on their side) could allow the wet cell batteries to leak acid.

Crew on the following shift opened one case and noticed a smell, suggesting battery acid. Upon further inspection, the electricians noticed that battery acid had run out of the vents of the batteries in both plastic containers.

Had the circumstances been different, this could have been a very serious incident.

Figures above: No labelling on container indicating proper storage instruction or hazards of contents

Figure: Location of vents permitting acid to leak out of battery when improperly stored

Figure: Extent of acid spill
Our members’ investigation noted the following:

- A wet cell battery with vents would permit leakage of the battery if stored improperly;
- The containers were stored on their sides; the electrician forgot that in doing this, the batteries might leak;
- The battery containers were not labelled to provide information regarding:
  - Which way up they should be stored
  - What was inside – the possible hazards of wet cell batteries.

The lessons were:

- Boxes and containers should be clearly labelled so all crew know which way is up and any hazards relating to what is inside;
- This should particularly be the case for containers used for batteries;
- Consider replacement of the wet cell batteries with dry cell batteries – thus eliminating the hazard of an acid spill.

Members may wish to refer to the following similar battery-related incidents (key words: battery, acid):

- IMCA SF 01/02 – Incident 3. Dangers of battery charging;
- IMCA SF 05/13 – Incident 2. Battery damage caused by charger failure.

2 “Routine” Activities – Non-Routine Result: Finger Injury during Welding

A member has reported an incident in which a welder injured his finger whilst at work. The welder was finishing cutting and noticed there was some loose slag built up from previous work. He swept this slag away with his hand and felt he had cut his left index finger. He inspected the welder’s hot work gloves he was wearing and noticed there was a hole in the left index finger of the glove. He was unsure if the hole was caused by sweeping away the slag or if it was already present.

Figure: Injury to hand

This was a routine or everyday activity, where complacency had perhaps set in.

Our member notes:

- It is important to retain a focus on the routine as well as on significant, major or potentially catastrophic “high risk” events;
- Crew should remain alert to memory lapse or lack of awareness.
In this case:

- The welder should have used a broom for removing the loose slag;
- Gloves are personal protective equipment (PPE) and worn for protection, they are not sweeping tools;
- PPE should be regularly checked for damage. Perhaps most especially, helmets, safety glasses and gloves – **Change out and dispose of damaged PPE**;
- The incident was discussed at welder’s pre-start meetings and use of brooms was reiterated. The risk assessment for welding was reassessed regarding proper use of tools, equipment and materials.

Members may wish to refer to the following similar incidents (key words: gloves, cut):

- **IMCA SF 16/13** – Incident 5. Hand injuries;
- **IMCA SF 05/15** – Incident 4. Routine task: badly cut finger changing mop head.

Members should be aware that IMCA has a **pocket safety card** on this topic, **Watch your hands – you’ve only got one set!**

http://www.imca-int.com/media/102527/imcaspc08.pdf

---

### 3 Near Miss: Trapped Tagline Pins Banksman against Stanchion

The Marine Safety Forum has published the following safety flash regarding a near miss incident in which taglines became trapped under a load. During loading operations, a banksman was unaware that one of the taglines was trapped under the load and that he was standing in a potential pinch point. As he signalled by radio for the crane operator to hoist up the hook and taglines, the trapped tagline became tight pinning the banksman against the stanchion. The banksman, with assistance from one of the load handlers, managed to move the tagline, enabling him to give the radio command to lower the hook. The crane operator lowered the crane hook releasing the banksman. There were no injuries.

Some of the contributing factors or causes were:

- Inadequate supervision and oversight;
- Inexperienced and relatively new crew;
- Failure to recognize the hazard.

Members may wish to review the following similar incident: (search word: tagline):

- IMCA SF 05/11 – Incident 3. Lack of safety awareness: crush injury during lifting operations.

Members should also refer to IMCA SEL 019 – Guidelines for lifting operations.

4 Vessel Electrical Equipment Caught Fire

The Marine Safety Forum has published the following safety flash in which electrical equipment caught fire leading to the triggering of the vessel’s fire detection system. A capacitor in a deck floodlight failed, causing a small fire in an electrical ballast unit. The ship’s fire party mustered, the cause of the activation was quickly identified, the circuit isolated and the unit replaced with minimal damage.


Members may wish to review the following similar incidents: (search words: fire, electrical):

- IMCA SF 05/13 – Incident 3. Near miss: exposed live electrical cable;
- IMCA SF 14/11 – Incident 5. Diver helmet hat light [caught fire].

5 Fire on Offshore Renewables Industry Crew Transfer Vehicle (CTV)

The Danish Maritime Accident Investigation Board (DMAIB) has published a report on an incident involving a fire on an offshore renewables industry crew transfer vehicle (CTV). The vessel suffered an engine room fire while engaged in the transfer of wind turbine technicians in the North Sea.

The accident happened when a fire occurred in the transition area between the starboard main engine room and the adjacent casing. The immediate, technical cause of the fire was likely a combination of insufficient insulation and possibly elevated exhaust gas temperatures from the propulsion engine due to insufficient ventilation.

All passengers were evacuated, and the fire was extinguished with assistance from other ships in the vicinity. There were no injuries.

A full report can be downloaded here.

Members may wish to review the following similar incidents (search words: CTV, fire):

- IMCA SF 03/14 – Incident 4. Fire and subsequent foundering of wind farm support workboat;
- IMCA SF 10/14 – Incident 1 - 4 – This safety flash concentrates on one single issue – fires in engine room spaces.

6 Aberdeen Harbour: Annual Summary of Marine Safety Reports for 2013

The Marine Safety Forum has published information note 15/02, comprising a summary of marine safety incident reports during 2013, from Aberdeen harbour. The report contains short details of the 30 recorded safety incidents in 2013 involving vessels entering or leaving, or manoeuvring within, the harbour.

The summary report notes that 47% of the incidents reported were collisions, contact between vessels, or grounding. It notes that in three quarters (75%) of the incidents reported, human error was a cause.