

IMCA Safety Flash 03/15

March 2015

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

I Capstan Wire Parted during Deployment of Anchor Buoy

A member has reported an incident in which a wire parted whilst dragging an anchor buoy on deck. The incident occurred when a vessel was involved in a Delta Flipper anchor drag test operation. The operation consisted of deployment one after the other, of an anchor buoy and a Delta Flipper type anchor, using two capstan wires, and then recovery back to deck using the main tow wire. Three tests were carried out successfully. During the fourth test, the port side capstan wire parted whilst dragging the anchor buoy on deck. There were no injuries.



Figure: view of back deck showing Delta Flipper anchor (left) and Anchor Buoy (right) and Capstan (arrow)



Figure: capstan showing parted wire

Our members' investigation noted the following:

- ◆ A clear deck policy was constantly followed;
- ◆ The certified safe working load (SWL) of the capstan wire was below the rated pull;
- ◆ Tear and wear – friction of capstan wire rope on the edging of capstan flanges;
- ◆ There had been no visual checks for tear and wear of wires made by the crew after each anchor drag test;
- ◆ Another, more preferable and safer, option of using tugger winches had not been considered for this operation.

The following lessons can be learnt:

- ◆ SWL requirements should always be considered when rigging/towing operations on deck. Ensure that the capstans rated pull is below the certified SWL of the capstan wire. The capstan should stall before the wire fails;
- ◆ Anchors should be moved on deck only with tugger wires connected either through towing pins or snatch blocks fixed on the pad eyes next to the stern roller, ensuring that all pinch points for the wires are identified and avoided;
- ◆ Capstan winches should not be used as a substitute for a deck tugger;
- ◆ When using capstans, care should be taken with wire lead in and lead out angles to avoid wire abrasion from the capstan flanges;
- ◆ Avoid excessive wraps on the capstan drum which would cause knifing damage of the wire and subsequently reduce the wire SWL;

- ◆ Visual checks: checks of the tugger/capstan wires and other rigging/towing equipment should be carried out by the crew before every test, and checks made of wire ropes SWLs on other anchor handling tug supply (AHTS) vessels for any wire underrating issues to identify/investigate and address each particular case;
- ◆ Vessel should carry at least one spare tugger and certified capstan wire to allow replacement of damaged wires immediately;
- ◆ Revised risk assessment for anchor drag test operations to include identified additional hazards and control measures;
- ◆ Ensure vessel personnel involved in rigging and lifting operations receive appropriate training;
- ◆ Design/size of the stern roller to be adequate to allow the Delta Flipper type anchor to go through it easily without getting stuck.

Members may wish to refer to the following similar incidents (key words: *wire, parted, SWL*):

- ◆ **IMCA SF 02/10** – Incident 6. *Fatality during anchor handling operation*;
- ◆ **IMCA SF 13/11** – Incident 1. *Near miss: dropped taut wire clump weight*.

2 Diver Sustains Water Jetting Injury

A member has reported an incident in which a diver injured himself using a water jetting tool. The incident occurred during the removal of marine growth from the leg of an offshore platform. When the diver was shifting the water jet from one side to another, the trigger was accidentally pressed as the nozzle passed over the diver's knee. No injury was felt or noticed by the diver at that time and the diver continued working. On returning to the surface on completion of the dive, the diver felt pain whilst undressing and an acute injury was noticed about 7.5cm long and about 2mm deep approximately 5cm above the left knee.

First aid was administered to the diver on board the vessel, before he was medevac'd to base by chopper for immediate medical attention. The diver was later shifted to an onshore hospital for further treatment where it was declared only as a superficial injury and only a change of dressing was advised till recovery.



Figure: showing injury to diver

Our members' investigation noted the following:

- ◆ During the water jetting dive the diver had on a wetsuit and a diving denim coverall for his protection;
- ◆ The safety lock was not activated on the water jet, allowing it to trigger whilst shifting position or location in water.

Our member took the following actions:

- ◆ The supervisor to give additional briefing before use of high pressure water jetting equipment;
- ◆ Divers should ask for the water jet to be 'made cold' or pressure turned off, before moving locations.

Members may wish to refer to the following similar incidents (key words: *water jet*):

- ◆ **IMCA SF 06/07** – Incident 1. *Diver injury using cavitation blaster*;
- ◆ **IMCA SF 05/11** – Incident 5. *Diver safety – high pressure water jetting operations*.

Members may wish to refer to **IMCA D 049** – *Code of practice for the use of high pressure jetting equipment by divers*.

3 Near Miss: Supply Vessel in Path of Helicopter Making Approach to Platform

The Marine Safety Forum has published the following safety flash regarding an incident in which a helicopter aborted an approach to a fixed installation because a supply vessel was positioned inside the ‘go around’ and take-off flight path.

Even though an engine failure is a rare and unlikely event, helicopters are always flown so that they can suffer an engine failure and safely ‘fly-away’ on its remaining engine. If a helicopter suffers a single engine failure at low speed (for example during the take-off and landing), then it needs to ‘dive’ on the speed and is likely to use all of the height between it and the surface to achieve this. Therefore, if a vessel is positioned within the helicopters ‘go-around’ flight path then there is a risk of collision during a single engine ‘go-around’.

The safety flash – including illustration – can be downloaded from www.marinesafetyforum.org/upload-files//safetyalerts/msf-safety-flash-15.08.pdf

4 Near Miss: Manual Handling in the Office

A member has reported a near miss incident in which a box of fluorescent tubes very nearly fell on someone’s head. The incident occurred in an office location when someone was searching for something in a store room. An unmarked cardboard box, initially used for folders delivery, was stored on a high top shelf (above eye level for the average person). As the box was moved, a fluorescent tube started sliding from the box towards the face and eyes of the person moving the box. On the end of this type of the tube there were two contact pins, which could have caused serious injury to the face and eyes. The quick reactions of the person meant that this was narrowly avoided – nothing fell and there were no injuries.

The person involved sought further assistance, and using a ladder, the box was sealed up, appropriately marked as containing fluorescent tubes, and moved to a safer location at floor level.



Figure: box as stored on high shelf



Figure: showing open box with fluorescent tubes



Figure: box appropriately sealed and labelled

Our members’ investigation noted the following:

- ◆ The person involved used improper manual handling techniques, trying to move box from the top shelf position without any assistance and without using a ladder, which was available in the store room;
- ◆ The fluorescent tubes were stored in an unsafe way in an open unmarked cardboard box on the top shelf.

Our member took the following actions:

- ◆ Ensured that clear responsibility for the store room was properly assigned;
- ◆ Prohibited access to the store room without that responsible person being present;

- ◆ Reviewed contents of store room and ensured that all items in the store room were properly marked, closed and stored in a safe and appropriate manner to prevent any further potential falling and/or moving of stored items. Unnecessary items were disposed of or sent away for storage elsewhere;
- ◆ Members may wish to review IMCA Safety Poster SPPI, *Manual handling* www.imca-int.com/media/102365/imcaspp01.pdf.

Members may wish to refer to the following similar incident (key words: *dropped, fluorescent, tube*):

- ◆ [IMCA SF 03/14](#) – Incident 2. *Dropped fluorescent light tube.*

5 Near Miss: Potential Fall from Height during Launch of Rescue Craft

A member has reported a potential near miss incident in which there could have been a fall from height during launch of rescue craft. During annual inspection of the rescue craft on a vessel, it was noticed that to secure and launch the rescue craft a crew member had to go around the rescue boat and stand outboard of it in an exposed place. There was no barrier in place to prevent a crew member carrying out this task falling from height.



Figure: showing safety chains installed



Figure: different vessel in fleet without safety chains installed

The crew reported this as a near miss and the short term solution will be to wear a safety harness when launching and securing the rescue craft. Arrangements were made to fabricate and fit a chain rail and stanchion to prevent recurrence.

Members may wish to refer to the following similar incidents (key words: rail, missing):

- ◆ [IMCA SF 05/03](#) – Incident 1. *Fall hazards associated with temporary deck openings;*
- ◆ [IMCA SF 15/09](#) – Incident 4. *Importance of inspecting fall protection equipment.*

6 Man Overboard (MOB) Rescue Lifting Slings Parted

A company has reported an incident in which there was a failure of lifting slings. During a MOB drill in port the dummy was brought to the MOB using a Sula Bedriftsteneste (SB) Rescue Sling, the sling was used with the davit to bring the dummy on board. The sling, under the weight of the dummy, snapped. Two other slings also parted during the exercises within a few hours at the same port.



Figure: showing typical SB rescue slings

Investigation noted the following:

- ◆ The slings were being used under 'normal' conditions and parted under the weight of the dummy. A copy of the manufacturer's instructions were obtained from the supplier and it was found that the slings were close to or beyond their replacement date;
- ◆ The slings had been exposed to the elements and were probably near or beyond their replacement date. It is also possible that their integrity had been compromised when being cleaned;
- ◆ Supply dates need to be noted, test and replacement dates adhered to.

A safety alert was circulated with a requirement to check all slings. Replacement slings were ordered to replace any that are near their replacement dates. Requirements for MOB drills were changed, such that it is now required that a proper dummy (to 'load test') is used every other drill.

Members may wish to refer to the following similar incidents (key words: *slings, parted*):

- ◆ [IMCA SF 11/06](#) – Incident 1. *Parting of slings causing fall of heavy object onto seabed;*
- ◆ [IMCA SF 17/08](#) – Incident 4. *Failure of webbing strop during lifting operations.*