

# IMCA Safety Flash 09/14

June 2014

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](mailto: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](http://www.imca-int.com/links). Additional links should be submitted to [webmaster@imca-int.com](mailto:webmaster@imca-int.com)

## I Serious Dropped Object Incidents

A member has reported two serious dropped object incidents. In the first, an object weighing 100kg was dropped 2.4m. In the second, an object weighing 15.3kg fell 20m, struck a worker on the head and shoulders and caused a first aid injury.

### Incident I:

During a routine change out of the HOM (Hang Off Module) pads, a pad weighing 100kg was dropped 2.4m. The pad landed on the portable access steps on which the operations technician was stood. The impact caused damage to the steps and caused the technician to lose his balance and fall over.

Our member's investigation revealed the following:

- ◆ The female thread in the HOM pad assembly was corroded;
- ◆ Due to its location the corrosion was not readily identifiable at the time the eye bolt was fitted;
- ◆ Owing to the eyebolt having to pass through a lifting bracket the effective thread was reduced by 10mm.

Eye-bolt through lifting plate reducing effective thread by 10mm

Thread inside the pad was found to be badly corroded

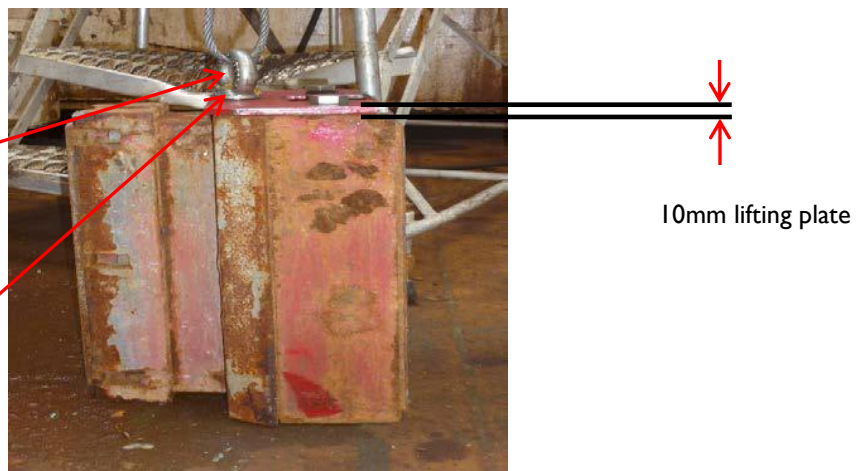


Figure 1: Showing HOM (hang-off module)



Figure 2: Showing damaged steps

Our member took the following specific actions:

- ◆ Redesign of the lifting device – three threaded bolts now used to secure the lifting brackets in position;
- ◆ Weld type pad eyes will be fitted to all HOM pad lifting brackets;
- ◆ All tapped holes to be checked and re-drilled and tapped the next size up if found to be worn;
- ◆ Once all sizes are established, stainless steel grub screws will be purchased and will be greased and fitted to all tapped lifting holes on HOM pads to help eliminate corrosion.

## Incident 2:

On a pipelay vessel, a side roller guide for the track chains fell from the upper tensioner onto the protection roof of the lower workstation, before administering a glancing blow to a rigger, resulting in first aid treatment. The object weighed 15.3kg and fell 20m.



Figure 3: Side roller guide

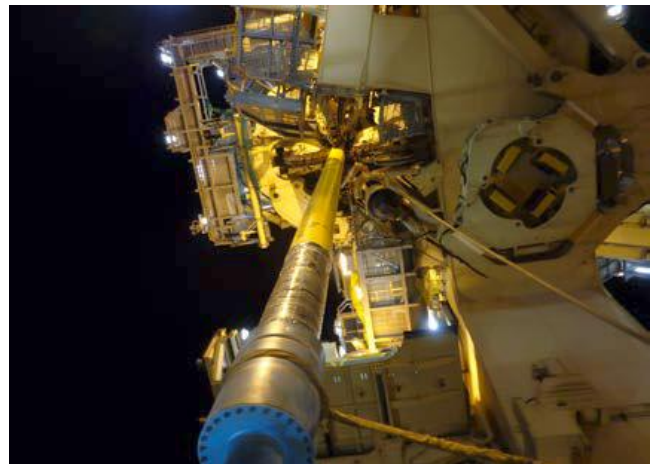


Figure 4: Pipelay tower

Our members' investigation revealed the following:

- ◆ The retaining bolts on the bearing rail had been sheared;
- ◆ The upper section had only one bolt in place.

All members are encouraged to check carefully all equipment used at height for:

- ◆ Corrosion;
- ◆ Insufficient security of bolts and tensioners.

These incidents highlight the need for constant vigilance for dropped objects. The re-occurrence of dropped object incidents is evidence that dropped objects are still harming and have the potential to kill. IMCA members have reported a number of dropped object incidents already this year.

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

- ◆ IMCA SF 09/07 Incident 3 *Lifting rigging on "Frog" personnel transfer capsule*  
<http://www.imca-int.com/media/50013/imcasf09-07.pdf>
- ◆ IMCA SF 04/10 Incident 2 *Falling object*  
<http://www.imca-int.com/media/48886/imcasf04-10.pdf>
- ◆ IMCA SF 01/12 Incident 5 *Dropped Object Injury Resulting from Failure Caused by Corrosion*  
[http://www.bsee.gov/Regulations-and-Guidance/Safety-Alerts/SA\\_298-pdf.aspx](http://www.bsee.gov/Regulations-and-Guidance/Safety-Alerts/SA_298-pdf.aspx)

## 2 LTI: Serious Hand Injury – Caught in the Bight

A member has reported an incident in which a seaman sustained serious injuries to his hand resulting in the loss of his little finger. The incident occurred during when the vessel was engaged in the inter-field transfer of personnel and equipment. The vessel proceeded to an unfamiliar platform and disembarked five personnel during rising seas. Two personnel declined

to transfer deeming the sea state unsafe for transfer operations, and the vessel was manoeuvred away to standby. Later that afternoon the vessel was instructed to pick up the five passengers from the platform. The weather had deteriorated further, with 3m swells and wind speeds of up to 15 knots, and the master deemed it unsafe to transfer passengers.

However, a suggestion was made to transfer the baggage via heaving line, to which the master agreed. The injured party passed the vessel's heaving line across to the platform personnel who ran the heaving line up to the middle platform, securing the midsection to a railing. Platform personnel then lowered the first two bags one at a time to the vessel. The third and fourth bags were simultaneously lowered down to the crew boat via both ends of the heaving line. The injured party received one bag on the port side and the 2<sup>nd</sup> Officer received the second bag on the starboard side. Both proceeded to untie the knots at each end of the rope.

As the injured party was untying the line, the vessel took a sudden dip due to the high swells. He could not retract his left hand fast enough and three of his fingers were caught in the bight of the knot when the heaving line suddenly tensioned. The injured person pushed against the stern deck railing to prevent being pulled overboard. Subsequently the heaving line severed his little finger and lacerated the ring and middle fingers. The rope was finally cut and removed from his finger after crew fetched a knife from the accommodation.

The casualty was medivaced to shore hospital four hours later but his finger could not be saved.



Figure 5: Showing how fingers were caught in the bight (reconstruction)

Our members' investigation revealed the following:

- ◆ This was the first time this method of baggage transfer had been used by any of the crew. It was initiated on the spur of the moment, without any thought, risk assessment or planning – there was no Management of Change;
- ◆ The rope was secured to the platform in such a way that it could not easily be released or slackened;
- ◆ The platform crew were inexperienced at tying appropriate knots and tied excessive knots in the small diameter polypropylene rope which were difficult and time consuming to untie;
- ◆ To speed up the transfer process two bags were lowered on each end of the secured heaving line, dividing the attention of the deck crew.

Our member learnt the following lessons:

- ◆ Always ensure operational risks are identified and assessed prior to starting operations;
- ◆ Don't be tolerant of unacceptable risk;
- ◆ Always be mindful of the impact of changing customary methods of routine operations;
- ◆ Always ensure operations are well planned, communicated and supervised;

- ◆ Don't give in to external pressure to work beyond safe working limits, always exercise your right to stop work.

Finger and hand injuries are amongst the most common safety flashes reported. See the following typical example:

- ◆ IMCA SF 04/12 Incident 1 *Lacerated finger during rigging operations*  
<http://www.imca-int.com/media/48717/imcasf04-12.pdf>

However, incidents referring specifically to the consequences of being "caught in the bight" are rarer. Members may wish to refer to the following similar incidents (key words: *crush, injury, rope, bight*):

- ◆ IMCA SF 05/06 Incident 2 *Hand injury sustained by diver*  
<http://www.imca-int.com/media/50063/imcasf05-06.pdf>
- ◆ IMCA SF 13/12 Incident 3 *LTI: Serious Hand Injury during Subsea Lifting Operations*  
<http://www.imca-int.com/media/96685/imcasf13-12.pdf>

### 3 First Aid Incident During at Sea Fuel Transfer – Mooring Lines

The Marine Safety Forum has published the following safety flash regarding an incident in which two crewmen were injured by being hit by mooring lines under tension during at sea fuel transfer.

The safety flash can be downloaded from [www.marinesafetyforum.org/upload-files//safetyalerts/msf-safety-flash-14.23.pdf](http://www.marinesafetyforum.org/upload-files//safetyalerts/msf-safety-flash-14.23.pdf)

Mooring safety is topical and members may wish to refer to the following similar incidents (key words: *mooring, tension*):

- ◆ IMCA SF 02/08 Incident 1 *Finger Injury Whilst Casting Off Towing Line*  
[www.imca-int.com/media/49897/imcasf02-08.pdf](http://www.imca-int.com/media/49897/imcasf02-08.pdf)
- ◆ IMCA SF 04/09 Incident 3 *Mooring incidents* (a document from the UK P&I Club)  
[www.imca-int.com/media/49007/imcasf04-09.pdf](http://www.imca-int.com/media/49007/imcasf04-09.pdf)
- ◆ IMCA SF 07/10 Incident 2 *Crewman Fatally Injured During Mooring Operations*  
[www.imca-int.com/media/48911/imcasf07-10.pdf](http://www.imca-int.com/media/48911/imcasf07-10.pdf)

### 4 Vessel Blackout During Close Standby

The Marine Safety Forum has published the following safety flash regarding an incident in which there was a vessel blackout during close standby. Investigation revealed that blocked fuel filters were part of the cause.

The safety flash can be downloaded from [www.marinesafetyforum.org/upload-files//safetyalerts/msf-safety-flash-14.15.pdf](http://www.marinesafetyforum.org/upload-files//safetyalerts/msf-safety-flash-14.15.pdf)

Members may wish to refer to the following similar event (key word: *blackout*):

- ◆ IMCA SF 13/08 Incident 1 *Faulty Governors*  
<http://www.imca-int.com/media/49946/imcasf13-08.pdf>

### 5 Pressure Vessel Systems - Response to Fatal Accident

The Australian Marine Safety Authority (AMSA) has published information about a fatal accident involving pressure vessel systems. A fatality occurred when the observation glass of a main compressed air receiver drainage pot failed catastrophically while a ship's engineer was draining accumulated water (condensate) from the ship's main air reservoir.

Further information can be found at <https://apps.amsa.gov.au/MORReview/Attachment/ShowAttachment/589>

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

- ◆ IMCA SF 08/03 Incident 2 *Fatality – Pressure Build-Up leading to Sudden Release of Mechanical Plug*  
<http://www.imca-int.com/media/50855/imcasf08-03.pdf>
- ◆ IMCA SF 18/09 Incident 1 *Fatality During Pressure Test*  
[www.imca-int.com/media/49884/imcasf18-09.pdf](http://www.imca-int.com/media/49884/imcasf18-09.pdf)