

IMCA Safety Flash 16/13

October 2013

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 What is a Safety Flash?

IMCA safety flashes and systems for incident reporting and analysis are an important tool for sharing vital information. By publishing them, IMCA helps its members around the world identify potential hazards, share lessons learnt and avoid repetition. Any member can submit material to incidentreports@imca-int.com. All submissions are handled in the strictest confidence, with information anonymised, checked before issue and published only with clear permission from the originator. Safety flashes should be succinct, specific, factually correct and written in clear language. The secretariat will assist with this through formatting and checking of the material submitted.

When a member incident report is received by IMCA, it will firstly be reviewed by a technical adviser. A draft "IMCA version" of the incident will be prepared, and this will be sent back for review to the originator. No further action is taken until the originator signals clearly that the incident is OK to be published. Sometimes a number of iterations of this process are required before the incident report is ready for publication.

IMCA remains aware that it is sometimes necessary for members to take legal advice before sharing incident information, and we would stress that published safety flashes are always completely anonymous. IMCA does encourage members to continue to share information about incidents, hazards and lessons learnt, as far as is reasonably practical.

Sometimes IMCA receives links or references to incidents published by other organisations (for example, the Marine Safety Forum (MSF)), or to incidents that are otherwise already in the public domain. If it is considered that further sharing of these incidents would be of use and interest to members, we will create a short note within a safety flash providing a link to that incident.

Members can help by following a number of pointers:

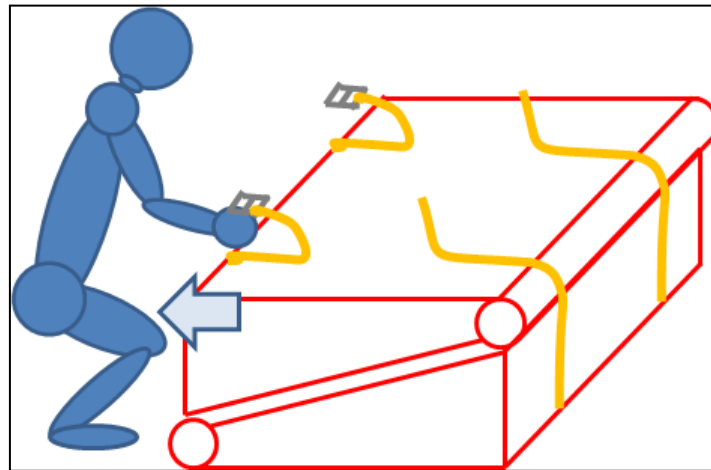
- ◆ The title should be concise and focus on the main issue;
- ◆ The focus should be on lessons learnt and how to prevent a recurrence, rather than on the incident itself;
- ◆ The content should be succinct, specific and, as far as possible, a common theme or pattern should be followed:
 - What happened? An incident or an issue will be described;
 - Why? What were the immediate causes and, if appropriate, the root causes;
 - Learning: what can members learn from this?
 - Action: what are the recommendations for members?
- ◆ Ideally there should be photographs or illustrations.

A safety flash incident report should provide sufficient detail and communicate risks, precautions and necessary actions effectively without releasing information about the people or organisations involved. For further information, please contact the secretariat.

2 Fatality – Man Overboard

A member has reported an incident in which a crew member was lost overboard and drowned whilst working on a load on deck near to the side of the vessel. The incident occurred when a team of riggers was working on deck at night securing a load composed of two metal elements (bulwarks) one on top of the other. One of the riggers was approximately 3 metres to one side, in an area where temporary barriers were installed to prevent falling into the sea. During the operation, there was an unexpected movement of the metal structure on the top in the direction of the vessel side. The rigger moved backwards to avoid the movement of the load toward his position; after 2-3 steps back he fell backward and passed through the barriers, falling into the sea.

The rigger was not wearing a life jacket. The sea state was critical (1.25-2.5 metres swell) and he was not able to reach the life buoys that were launched. The rescue craft reached him and recovered him; the casualty was back on board the vessel eight minutes after the MOB alarm had been raised. Unfortunately, efforts to resuscitate him were in vain.



Position of worker as upper element started to move



One of the stanchions for holding in place was missing (its support was partially covered by plate)

Showing site of incident

An investigation revealed the following:

- ◆ The area where the injured person was working (3m away from side) had been previously risk assessed as “safe” with regard to the risk of falling into the sea, and so the requirement for a life jacket had not been identified for the task;
- ◆ During the operation, the worker was positioned “in the line of fire” of the metal bulwark element on the top;
- ◆ Temporary barriers were found not appropriate, just beside the workplace of the injured person, due to a missing stanchion for holding barriers.

The following lessons were drawn:

- ◆ Risk of fall overboard should be considered not only for work over the side but also for work in close proximity to the side;
- ◆ The suitability of temporary barriers should be assessed before the start of the tasks in close proximity;

- ◆ Housekeeping should be of the highest standard to eliminate any unnecessary slip, trip and fall hazards;
- ◆ All personnel taking part in a task should attend a toolbox talk (TBT) and a job safety analysis (JSA) and/or risk assessment (RA) discussion before starting;
- ◆ In a MOB scenario, a constructive working relationship between marine crew and project crew is vital.

The following corrective actions were taken:

- ◆ A new risk assessment for bulwark removal and storage;
- ◆ Reinforce implementation of safe system of work;
- ◆ Verify vessel search light possible improvements and purchase night visors and personal locator beacons in order to improve the performance of MOB rescue;
- ◆ Replacement of missing post in port side temporary over-the-side protection;
- ◆ Increase housekeeping control on the deck;
- ◆ Complete audit and evaluation of MOB emergency procedure to be carried out utilising all required emergency equipment.

3 Irukandji Jellyfish Awareness (Australia)

A member has asked IMCA to raise awareness amongst divers and dive supervisors of the presence of Irukandji Jellyfish in certain Australian waters. Members are encouraged to pass this information so that personnel are aware of the presence of Irukandji Jellyfish and if encountered, to recognise the signs and symptoms of a sting and the initial first aid treatment.

There are at least 10 species of Irukandji known, ranging from as small as 1cm to over 10cm in diameter; all are transparent and virtually invisible in water which makes them difficult for swimmers and/or divers to notice. Irukandji are most likely to be found in Australian tropical waters (see map). The normal Irukandji season begins from November through to May.



(L) Irukandji jellyfish (R) Areas in which Irukandji jellyfish are most likely to be found

Signs and Symptoms: The initial minor skin sting is followed 5-40min later by severe generalised muscular pain, headache, vomiting and sweating. The sting from some species can cause very high blood pressure or have effects on the heart which may be life threatening. These combined symptoms are sometimes referred to as 'Irukandji Syndrome'.

First Aid: As with all tropical Jellyfish stings the victim should be doused with vinegar.

- ◆ Call for help or send someone for help;
- ◆ Treat the victim (provide emergency CPR if necessary). Apply 100% oxygen if patient is at an ambient pressure where it is safe to do so;
- ◆ Treat the sting (flood with vinegar), do not rub or apply freshwater;
- ◆ Seek medical assistance (transport to hospital).

Further notes: Particular care is to be taken when dressing the diver to ensure all exposed skin is covered, and any potential exposure is considered, for example taping gloves to sleeves and exposed skin around the neck area.

Often the greatest threat is not to the diver but to tenders on deck handling divers' umbilicals and associated lines that have been submerged. Great care should be taken by topside personnel, paying particular attention to covering exposed skin by wearing gloves and long sleeve coveralls at all times.

Ensure that topside personnel working in such waters look for the presence of Irukandji and other marine stingers on equipment and wash down equipment thoroughly. Ensure all personnel are familiar with the location of vinegar and associated first aid equipment, and its use.

If hot water suits are being used in tropical waters (for example, by saturation divers) there should be adequate filtration of water intakes in place to prevent jellyfish, or parts of jellyfish, from being drawn into the hot water suit intakes and then being pumped down to the divers' hot water suits. Sufficient PPE to prevent jellyfish stings should be worn by anyone required to clean such water intake filters.

4 LTI: Crewman Injured Foot during Offshore Renewables Mooring Operation

A member has reported an incident in which a marine crewman sustained a serious injury to his foot during a routine mooring operation. The incident occurred during cable laying operations on an offshore renewables project.

Background

A DP2 construction vessel and a number of purpose built crew transfer vessels (CTVs) were being used, the CTVs to transfer work parties between the DP vessel and wind turbine towers. When transfers are completed the CTVs routinely moor up to one of the turbine towers until required. This enables them to save fuel. The mooring uses a 100 metre length of rope which is attached to the bow of the CTV at one end of the rope. The rope is then fed around an upright stanchion on the tower and the second end attached to another point on the bow of the vessel. The CTV then backs off from the tower and is held down-tide approximately 50 metres from the tower until required. This operation requires that around 100 metres of rope are lying on the foredeck before the CTV backs away from the tower.

The incident

During a mooring operation one of the CTV's crewmen attached the rope in the manner described above. He signalled to the Master in the wheelhouse that he was clear to back away from the tower. He then stepped out of sight of the Master. The Master applied full reverse power briefly, to get away safely from the tower, then put the engines into neutral. The crewman was then seen being dragged by the foot, which was attached to the mooring line, across the foredeck. The rope pulled him into a gap between the hand rail sections causing a serious injury to his foot. The operation was stopped and the CTV called for assistance. Medics from the DP2 vessel attended and provided initial treatment before the crewman was conveyed by helicopter to hospital. As a result of the injury the crewman suffered a partial amputation to his foot which included the loss of his toes.

An investigation is still underway, but the following early findings were:

- ◆ There should have been formal procedures in place for this operation;
- ◆ The crewman should not have been working alone;
- ◆ There should have been an identified area where the crewman could safely stand during the operation, ideally where he could be seen by the vessel Master;
- ◆ A CCTV installation would have meant that the Master could see the operation taking place from the wheelhouse;
- ◆ There should have been voice communication between the crew operating on the foredeck and the Master;
- ◆ The mooring should have used a shorter length of rope.

In any mooring operation there is always the potential for crew entanglement with the mooring ropes, or for a rope to become over tensioned and break causing the rope to whip across the deck and injure anyone standing within its range.

Members' attention is drawn to the following IMCA documents:

- ◆ IMCA SEL 029 – *Mooring practice safety guidance for offshore vessels when alongside in ports and harbours*;
- ◆ IMCA safety poster 12 – *Mooring safety*.

5 Hand Injuries

The Marine Safety Forum has published the two following safety flashes regarding hand injuries.

Incident 1

A crewman suffered crush injuries when his hand was caught between a small boat and a davit frame as the small boat was being recovered. The incident occurred because he put his hand out to steady himself, didn't look where he put his hand and inadvertently placed it on the FRC davit frame. The safety flash can be downloaded from <http://www.marinesafetyforum.org/upload-files//safetyalerts/msf-safety-flash-13.33.pdf>.

Incident 2

Whilst unpacking supplies, someone received a 1.5 to 2.0cm cut to the back of his left hand between his index and middle finger. The injury was caused by an old packing knife blade of approximately 7cm. It was not known how or why the blade came to be in the box. The safety flash can be downloaded from www.marinesafetyforum.org/upload-files//safetyalerts/msf-safety-flash-13.40.pdf

Members are reminded that IMCA has published a pocket safety card on hand safety: IMCA SPC 08 – *Watch Your hands*.