

IMCA Safety Flash 13/15

September 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 Grounding and Flooding of Ferry – Complacency

The UK Marine Accident Investigation Branch (MAIB) has published a report into the grounding and flooding of the ro-ro (“roll on roll off”) ferry *Commodore Clipper* in the Channel Islands in July 2014. The vessel raked over two granite pinnacles at full sea speed of about 18 knots; its hull was breached and seawater flooded into double-bottom void spaces. The grounding caused a noisy and shuddering vibration, but the crew did not immediately check for damage.



The report identifies the following safety issues:

- ◆ Insufficient passage planning meant that the bridge team were unaware of the limits of safe water where the vessel was heading, and so headed into danger without appreciation of the navigational risk. A number of issues were not properly considered:
 - The very low tide;
 - The effect of vessel ‘squat’ in shallow water at high speed;
 - The accuracy of the chart data.
- ◆ The possibility that the vessel had grounded was denied. In the circumstances of a shuddering vibration, it is important that the crew establish the state of their vessel by searching for damage;
- ◆ The repetitive nature of ferry operations can induce a degree of complacency when planning;
- ◆ The electronic navigation system was not being utilised effectively because safety settings were not appropriate to the local conditions, warnings were ignored and the audible alarm was disabled;
- ◆ The local responsible port authority did not have an effective risk assessment or safety management plan for the conduct of navigation in its statutory pilotage area.

The full report can be downloaded here: <https://www.gov.uk/maib-reports/grounding-and-flooding-of-ro-ro-ferry-commodore-clipper>.

2 LTI – Rigger Struck by Rigging under Tension

A member has reported an incident in which a rigger was struck by a winch wire and sustained a fractured arm. The incident occurred during attachment and deployment of a clump weight to a riser through the moonpool. The vessel was in the process of installing a riser as part of a large field development in 400m water depth. In order to prevent damage to the riser during deployment of the clump weight, a hold-back winch was connected to it via a two part bridle and ROV hooks. The winch would then pull the clump weight forward to allow it to be lowered without clashing with the riser.

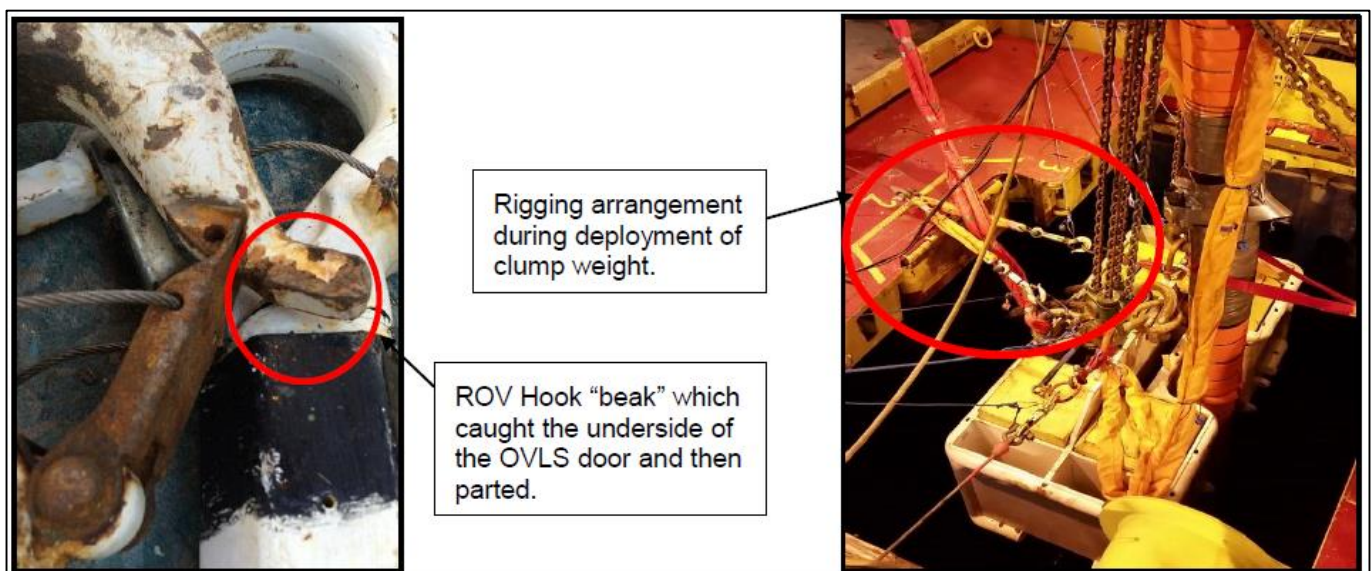
Once deployment of the clump weight had come to a stop, tension was released from the hold-back winch, and a rigger was instructed to enter the work area and disconnect the two slack ROV hooks by pulling on release ropes. The deck supervisor then signalled for the winch operator to commence hoisting up on the winch. It was during the winch hoisting movement that the “extension beak” on one of the ROV hooks got snagged. The beak parted which resulted in the two part bridle complete with ROV hooks and winch wire flying up and striking the rigger knocking him off his feet to deck.

The job was immediately stopped and the medic was called to the scene. The medic quickly diagnosed that the injured person had suffered a broken arm as a result of the incident. He was escorted to the on-board hospital and subsequently medivaced ashore to hospital where it was confirmed that he had closed fractures to the radius and ulna bones of his left arm.

Our members’ investigation is still underway, but the following preliminary findings were noted:

- ◆ Lack of hazard awareness and consequence for a routine task;
- ◆ Low risk perception to the task because of other associated higher risk tasks in the same area;
- ◆ The need to identify and mitigate all risks associated with a Management of Change (MoC) process;
- ◆ The Management of Change process should recognise where appropriate the introduction of required additional personnel into the task.

Although this task had been conducted without incident in previous riser installations, this incident acts as a reminder of the need to remain vigilant at all times, particularly with routine tasks which can be seen as being “low risk”. If there are any doubts about the safety of any operation, personnel should **stop the job** and ensure the situation is reassessed. All personnel should have good “situational awareness” of what is going on at all times, and are encouraged to actively and positively contribute to worksite safety. If in doubt **STOP THE JOB**.



Showing ROV hook beak (left) and rigging arrangement (right)

Further actions:

- ◆ Deck review to identify potential snap back zones and all lines of fire zones for all winch operations;
- ◆ Review of where crew are standing whilst doing this particular job;

- ◆ Further crew briefings covering:
 - Toolbox talk training and workshops
 - Line of fire awareness briefing (IMCA);
- ◆ A review of the Management of Change process and Job Risk Analysis for this operation;
- ◆ Assessment of suitability of ROV hooks for deck rigging activities;
- ◆ Assessment of task procedures and risk assessments – are they available, understood and do they reflect the way the job is actually being carried out;
- ◆ Consideration of possible negative or unforeseen effects of changes made to improve how a task is done;
- ◆ Consideration of the required sequence of activities (e.g. who, what, when?) and agreement and confirmation of readiness before starting work;
- ◆ Identification of any operations/tasks which could expose personnel to a “line of fire” risk.

Members may wish to refer to the following similar incidents (search words: *tension*):

- ◆ [IMCA SF 17/08](#) Incident. 3 – *Stored energy – injury sustained whilst removing metal straps*;
- ◆ [IMCA SF 11/15](#) Incident. 4 – *Mooring line failure resulting in serious injury*;
- ◆ [IMCA SEL 035](#) – *In the line of fire DVD*.

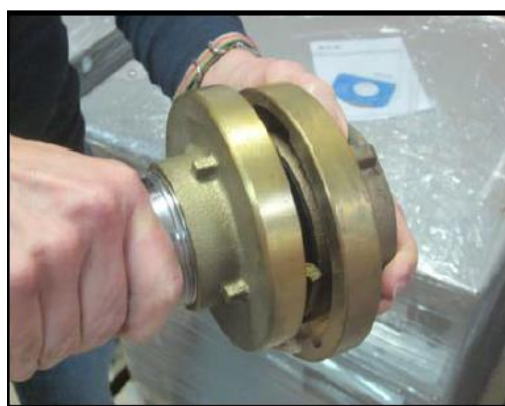
Members should be aware that IMCA publishes a safety promotional DVD called “In the line of fire” which can be downloaded or streamed online, or DVD copies can be purchased for a small charge. See [IMCA SEL 036](#) *In the line of fire*.

3 Fire Hydrants Fitted with Incorrect Coupling Sizes

A member has reported an incident in which replacement fire hydrants were found to be fitted with incorrect coupling sizes, leading to them being incompatible with fire hose couplings. This would have severely impacted the firefighting capabilities of the vessel. The incident occurred following a number of earlier occasions in the previous five years in which fire hydrant valves in the accommodation had been found leaking. Replacement hydrants were ordered and fitted, but the couplings were found to be incompatible. It was found that the coupling on the hydrant valve in the port side forward thruster room did not fit the adjacent fire hose coupling. The hose coupling measured 65mm and the hydrant coupling measured 80mm.



65mm hose coupling on right and 80mm hydrant coupling on left



80mm hydrant coupling not compatible with 65mm hose coupling



Fire hydrant with correct 65mm coupling
(compatible with 65mm hose coupling)

Our members' investigation revealed the following:

- ◆ The hydrant/hose coupling incompatibility was not followed up in a timely manner. Six days elapsed between the discovery of the incompatibility and a Hazard Observation being made;
- ◆ A total of thirty hydrant couplings were found with 80mm couplings fitted instead of 65mm couplings. Had there been a fire these thirty couplings (incompatible) on the fire hydrants would not have been serviceable;
- ◆ Firefighting capabilities were not entirely restricted as the outside accommodation fire hydrants on each deck were still pressurised and compatible with the fire hoses onboard and the shipboard accommodation sprinkler fire suppression system was available.

The lessons learnt:

- ◆ The need for vigilance and the importance of thorough inspections and correctly completing all checklists, including examination for missing or improperly installed components:
 - Lack of attention/due care/poor work practice
 - Failure to identify incorrect fire hydrant valve couplings during installation of valves
 - The thirty incompatible fire hydrant valve couplings were fitted in May 2014 and this had not been spotted for many months, despite maintenance, safety inspections and drills;
- ◆ When incidents, near misses, issues or concerns are reported, they should be followed up in a timely manner.

Members may wish to check their own fire-fighting equipment, to carefully and thoroughly inspect all equipment when first received, and to ensure that during fire drills, hoses are properly run and connected to hydrants, including in the accommodation areas.

Members may wish to refer to the following similar incidents relating to incorrect fittings (search words: *fitting, incorrect*):

- ◆ [IMCA SF 07/13](#) – *Near miss: Failure of gas quad fitting;*
- ◆ [IMCA SF 19/14](#) – *Injuries due to failure of diver's emergency gas cylinder.*