

IMCA Safety Flash 04/11

April 2011

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 Crane Boom Dropped Object

A member has reported an incident on an offshore construction vessel in which a piece of wood from the main crane boom rest cradle became detached from the cradle and stuck to the crane boom, before falling on to the main deck. The crane was required for lifts on the main deck and the boom was lifted from its rest cradle on the starboard side of the vessel. The crane boom was then swung into position over the area of the lift on the main deck. A piece of wood from the main crane boom rest cradle had become detached from this cradle and had stuck to the crane boom before falling an estimated 20 metres onto the main deck. There were six people working in the area at the time and the wood landed approximately 1.5 metres from the nearest person. Fortunately no one was injured.

The piece of wood which had been stuck to the crane boom was not noticed by anyone before it fell.



Figure – piece of wood dropped from crane boom

Our member's investigation revealed the following:

- ◆ The piece of wood was originally secured only by a tack welded strip in position on the crane boom rest;
- ◆ Some other fixings for the piece of wood were missing or rusted, and remaining pieces of wood showed signs of deterioration;
- ◆ A crane operator had reported verbally to the first engineer approximately one week earlier that the piece of wood in the crane boom rest appeared loose. This report was not made through the normal channels and was not formally recorded on a safety observation card for effective follow up;
- ◆ There was a lack of regular inspections to check on the condition of the crane boom rest and fixings;
- ◆ A similar incident had occurred on a similar vessel in the previous year, but this incident had not been effectively communicated to the other vessels in the fleet.

Our member took the following actions:

- ◆ Firmly secured the remaining pieces of wood in the crane boom rest;
- ◆ Replaced the existing wood in the crane boom rest with hard wood replacements at the first suitable opportunity, ensuring that these were firmly secured to the crane boom rest;
- ◆ Fabricated and installed a suitable and sufficient access ladder and platform to provide safe access for the inspection of the crane boom rest, and included the relevant inspection regime within the vessel's planned maintenance system;
- ◆ Ensured that information about the incident was widely circulated.

2 Low Pressure Mud Hose Parted

A member has reported an incident in which a low pressure mud hose parted. The incident occurred during the disconnecting and lifting of the mud hose from a vessel to a platform. The mud hose was disconnected from the vessel manifold, and the vessel banksman gave a signal to the crane operator to lower the sling. The hose was attached to the sling and a signal was given to raise the hose. The intent was that the crane should take the weight of the hose and then the securing line from the vessel to the hose could be more easily disconnected. However, the crane operator misunderstood the hand signals and continued to lift whilst the hose was still lashed to the vessel. As a result the coupling and hose parted. As transfer of mud had stopped, there was no spill and there were no injuries.



Figure – Mud hose and connector following incident

Our member investigated and noted the following immediate causes of the incident:

- ◆ Procedures not understood – the crane operator may not have been aware that the hose was lashed to the vessel;
- ◆ There was poor visibility at the time of the incident owing to heavy rain.

The following root causes were identified:

- ◆ Communication between workgroups was not effective – poor visibility noted at the time of the incident, and the crane driver may not have seen the stop sign by the banksman. The banksman did not have direct very high frequency (VHF) communication with the crane operator.

The following lessons were learnt:

- ◆ There should be clear and continuous radio communication between vessel master and the crane operator and banksman during lifting operations;
- ◆ Hand signals can be used provided the banksman can always be clearly seen by the crane operator. In conditions of poor visibility, radio communication between banksman and crane operator should be clear and continuous.

With regard to communications during lifting operations, members are reminded of IMCA's guidance on this topic:

- ◆ [IMCA SEL 019](#) – *Guidelines for lifting operations*;
- ◆ [IMCA SEL 020](#) – *Guidance for operational communications: part 2 - Lifting operations*.

3 Hot Work Conducted within the 500 metres (m) Safety Zone

A member has reported an incident in which someone was found conducting hot work on a vessel within the 500m safety zone of a platform. Whilst the platform personnel were preparing for the lifting operation, the deck foreman noticed that someone was grinding on the deck of the vessel. The distance from the platform to the vessel at this time was 20m. The deck foreman immediately contacted the master of the vessel via the radio and asked him to have the grinding operation stopped, as this activity was not permitted within the 500m zone.

Investigation revealed the following immediate and root causes:

- ◆ **Immediate Cause** – violation of procedures (by individual): an experienced member of the crew had decided to restart the hot work task (grinding) from the previous day without going through the formalities of the control of work (COW) process. All crew had been advised by the chief mate that the vessel was entering the 500m zone;
- ◆ **Root Cause** – incorrect judgment: the person conducting the hot work was a longstanding employee with over seven years experience in the job. He knew all the requirements but nonetheless decided to violate the procedures as the job would only take a couple of minutes to complete.

The incident serves as a reminder that procedures are written in order to protect personnel from injury and illness, prevent damage to property and to protect the environment, and should not be ignored. The consequences of this violation - the possible ignition of a pocket of flammable gas or vapour – could have been catastrophic to the individual, the vessels and platform crew. All hot work should be controlled using the permit to work (PTW) system.

Prior to entering a 500m zone all crew on duty should be advised that:

- ◆ Smoking on deck is prohibited;
- ◆ Hot work on deck is prohibited;
- ◆ The use of a mobile phone on deck is prohibited.