

# IMCA Safety Flash 07/16

March 2016

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

Any actions, lessons learnt, recommendations and suggestions in IMCA safety flashes are generated by the submitting organisation. IMCA safety flashes provide, in good faith, safety information for the benefit of members and do not necessarily constitute IMCA guidance, nor represent the official view of the Association or its members.

## Focus: Fire Hazards, Mooring, Hoegh Osaka

In this Safety Flash we cover five incidents. Two recent near miss reports on possible laundry room fires that once again highlight this "evergreen" issue. The root causes were failure to fully identify risk and failure to manage change.

During mooring operations, a man was injured by a capstan – his employer had failed to identify or control risks, and had failed to suitably heed warnings raised by its workers before the incident. In another mooring incident, fortunately a near miss situation, crew kept on working in a hazardous situation, not thinking to "stop the job".

Finally your attention is drawn to an initial report from the UK Marine Accident Investigation Branch (MAIB), on the causes of the recent running aground in the Solent of the *Hoegh Osaka*.

## 1 Near Miss: Laundry Fire Hazards

Two members have reported recent near misses which might have developed into fires in the laundry room.

#### **Incident 1**

A member has reported a near miss which might have developed into a fire in the laundry room. During a weekly inspection of the laundry room, rags and lint twisted together were discovered in the dryer exhaust fan. Further investigation revealed more accumulated lint within the dryer's outlet exhaust pipe. When the end of the outlet pipe was removed to check the inside, it was found that it was approximately 85% blocked by lint.







Our member's investigation revealed the following:

- Although the dryer's lint filter was in place at the time, the evidence clearly indicates that it hadn't always been in use, or had been used incorrectly the correct use and installation, and frequent checking of, lint filters is essential to avoid such potentially hazardous situations;
- Use of ventilation pipes and systems can create traps in which lint accumulates over a period of time, especially if lint traps are not in use or defective this creates a fire hazard. Such venting systems should be regularly checked to ensure that they are free of obstructions;
- There was no management of change (MoC), risk assessment or forward planning conducted to fully assess the impact of fitting the venting pipe.

Our member took the following actions:

- Immediately removed the outlet exhaust pipe for thorough cleaning and removal of lint;
- Subsequently, the dryers were relocated to an external area (winch housing) where they could vent directly to atmosphere.

#### Lessons learnt:

- Routine inspections are important they exist for a reason. Don't let "checklist" mentality take over. If the persons involved here hadn't taken the time to carry out a proper inspection, there could have been an actual fire rather than a near miss;
- Ensure that health and hygiene inspections have the same priority as other safety inspections;
- Take extra care when dealing with tumble dryers with outlet pipe connections with the permanent connection of a pipe, it is more difficult to identify any blockages or obstructions, and motors are exposed to increased load and overheating. Wherever possible, fitting/use of additional piping should be avoided;
- In this case, the vessel management decided to go **beyond checklists** the decision was taken to conduct electrical and cleanness checks in the dryer, going beyond the minimum required.

#### **Incident 2**

During a routine UK Health & Safety Executive (HSE) inspection, a potentially hazardous condition was observed which could have caused a fire. The vessel master and crew were unaware of the potential consequences of the accumulation of flammable lint inside tumble-drying machines. A small spark, a short circuit or static electricity inside of the machine could have been sufficient enough to start a fire.

Our member provided the following handy graphic which may be of use:



**Check the vent hose** – make sure your vent hose is in good shape.



Clean the vent line regularly – it is very important that the vent line (from the wall behind the dryer to the outside flap) is not restricted or clogged up with lint. This increases chance of a dryer fire.



**Keep the area around the dryer clean** – make sure there are no articles of clothing, boxes, cleaning supplies, or anything else behind or around the dryer.



Clean the lint out of the inside of the dryer regularly

– your dryer needs to be opened up and vacuumed

out periodically.

Members may wish to refer to the following incidents (search words: tumble):

- ◆ IMCA SF 16/09 Incident 4 Tumble dryer fire onboard a vessel;
- IMCA SF 03/16 Incident 3 Fire: Spontaneous combustion of towels.

## 2 Mooring: Port Operator Fined after Worker Injured by Capstan

The HSE has published the following report regarding an injury to a worker during mooring operations for an ocean-going vessel. The incident happened when a three-man team were securing a vessel's heavy mooring ropes to land in a maritime terminal. One worker suffered a serious injury after his arm became wrapped around a powered capstan.

Investigation found that the port operator had failed to suitably **identify and control risk** associated with the use of powered capstans at the port. Consequently, there was no **safe system of work**. Arrangements for instruction, training and supervision of workers using this equipment were found to be inadequate, as were those for audit and monitoring of safety.

Additionally and importantly, the port operator had failed to suitably heed warnings raised by its workers before the incident. Further information can be found here.

There is a good deal of training material around regarding mooring incidents. Members may wish to refer to the following:

- ◆ IMCA Safety Flash SF 04-09 Incident 3 *Mooring incidents* a useful document from the UK P&I Club which is of interest regarding potential accidents that can arise from mooring operations.
- IMCA Safety Poster SPP 12 Mooring safetyhttp://www.imca-int.com/media/114592/imcaspp12.pdf;
- IMCA SEL 029 Mooring practice safety guidance for offshore vessels when alongside in ports and harbours;
- ◆ IMCA DVD SEL 038 Mooring.

## 3 Near Miss: Mooring Without Port Assistance

A member has reported several incidents in which a shored-based mooring gang was not made available when a vessel arrived for a regular call at a designated berth. Rather than stop the job, the vessel crews had adopted an unacceptable routine of jumping between the vessel and the jetty to conduct the mooring on their own. A third-party assurance official was recently aboard and witnessed this behaviour – he immediately exercised the **stop work policy** and communicated a near miss report.

Investigation revealed the following:

- Neither the client nor the port authority were planning and preparing adequate support for vessel mooring operations;
- Everyone onboard had become complacent and accepting of a non-compliant, unsafe practice resulting in multiple exposures to the risk of falling overboard;

- Although some vessel crew had raised some safety observations about this situation, no one had elevated their concerns to shore-side management or raised a near miss report;
- The **stop work policy** was not being implemented by the crew it took a visiting third party to identify the hazardous occurrence, put a stop to it, and report it to the office.

#### Summary of actions taken:

- The client was informed immediately. The client provided feedback with acceptance and commitment to addressing the issue to ensure it did not happen again;
- Shore-based management have strongly engaged the client and port authority the vessel has since called at
  the berth on several occasions and mooring gangs have been present for all mooring and unmooring
  operations;
- A company regional director immediately conducted a vessel visit to engage with the Master and crew to discuss the incident.

Our member notes that when crew members draw attention to unsafe acts or unsafe conditions, or any hazardous occurrences, these should be brought to the knowledge of shipboard management and action should be taken – it is not acceptable to ignore these or do nothing.

Members' attention is drawn to the following:

- ◆ IMCA DVD SEL 038 Mooring;
- IMCA SEL 029 Mooring practice safety guidance for offshore vessels when alongside in ports and harbours;
- IMCA Safety Flash SF 04/09 Incident 3 *Mooring incidents* a useful document from the UK P&I Club which is of interest regarding potential accidents that can arise from mooring operations.

## 4 Listing, Flooding and Grounding of Vehicle Carrier Hoegh Osaka

The MAIB has published Accident Investigation Report 6/2016 regarding the recent listing, flooding and grounding of vehicle carrier *Hoegh Osaka*.

In summary, the report notes that the vessel developed a significant starboard list when turning to port, not long after it was departing Southampton, UK. As the list increased in excess of 40°, the vessel lost steerage and propulsion, and subsequently drifted aground. A cargo shift, as the vessel listed, resulted in a breach of the hull and consequent flooding. All crew were safely evacuated from the ship



and surrounding waters. There was no resulting pollution, and the vessel was later successfully salvaged.

It was shown through subsequent stability modelling and analysis that the vessel listed heavily to starboard while turning as a result of having inadequate stability, which had not been identified prior to departure.

The MAIB raised the following safety issues:

- Assessing a ship has adequate stability for its intended voyage on completion of cargo operations and before it sails is a fundamental principle of seamanship that must not be neglected;
- A loading computer is an effective and useful tool for the safe running of a ship. However, its output can only be as accurate as the information entered into it;
- It is imperative that working practices enable correct information to be provided and that sufficient time is made available before departure for an accurate stability calculation to be completed;
- An accurate stability calculation before departure is fundamental to safety.

The full report from the MAIB can be found here.