

## IMCA Safety Flash 04/19

March 2019

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 ([incidentreports@imca-int.com](mailto:incidentreports@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 [incidentreports@imca-int.com](mailto:incidentreports@imca-int.com)

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### Fire!

All four of the following alerts relate to the likelihood or actuality of fires on offshore vessels. The first and second incidents relate to fires in galley equipment. The third incident relates to a small fire caused by sparks from the funnel – a causal factor being build-up of soot in the funnel not being cleaned out. The fourth incident covers a hazard hunt for fire-related hazards after a number of fire dampers and other essential fire-fighting equipment were found to be faulty.

#### 1 Galley Safety – Rice Cooker Smouldering

##### What happened?

A rice cooker not being used was either left on or accidentally turned on by someone walking past and activating the controls. No rice or liquid was in the tray, which caused excessive heat to build up and the rubber pan seal to smoulder.

No injury or major outcome resulted.

##### What was the cause?

An investigation found that it is likely the rice cooker was unintentionally turned on when someone walked past and activated the controls. The rice cooker controls were exposed to pedestrian traffic and able to be unintentionally operated.

##### What actions were taken? What lessons were learned?

- ◆ Procedures were reinforced to ensure galley crew isolate or unplug equipment when not in use for long periods;
- ◆ Protect galley equipment from being unintentionally operated by way of a physical barrier – a physical barrier was installed on all rice cookers to prevent unintentional operation;
- ◆ Area inspections should include a check of equipment in use or out of use and a check that physical barriers are in place to prevent unwanted operation of equipment.

Members may wish to refer to:

- ◆ [Fire Inside Falcom Steamer](#)
- ◆ [Galley Fire: Failure To Follow Stove/Oven Installation Instructions](#)

## 2 Near Miss: Potential Fire – Overheating of Oil in Deep Frying Pan

### What happened?

One of the engine room crew members came into the galley and noticed smoke coming from the oil which was in the deep-frying pan. The engineer, working with the cook who was in the galley during that time, checked the temperature of the oil in the deep-frying pan using a digital thermometer from the galley. The digital thermometer showed at out of range limit. The maximum for this thermometer was 200°C; therefore, the oil was above 200°C.

The deep-frying pan was switched off and a lock out/tag out was applied for further investigation. The frying pan was allowed to cool down and the oil drained out. When the oil from the deep-frying pan was cooled down and drained it was noticed that the temperature sensor elements of both thermostats were not in the original place.

After the temperature sensor elements were put back in the correct place, the deep-frying pan was filled with oil again; both thermostats (temperature control thermostat and safety/maximum temperature thermostat) were tested and found to be in good working order.

### What went wrong?

- ◆ Temperature sensor elements of both thermostats were not fitted in the original place;
- ◆ The galley crew were not aware of the function of the temperature sensor elements inside the deep-fryer, nor of the potential consequences if those sensor elements were in the wrong place.

### What were the causes?

- ◆ Lack of awareness;
- ◆ Lack of familiarity with equipment.

### What actions were taken? What lessons were learned?

- ◆ Clear instructions provided for galley crew about the cleaning of a deep-frying pan, including ensuring that the galley crew are aware of proper positioning of the temperature sensors inside the deep-frying pan during the cleaning process, and know not to move them;
- ◆ Recommend check of positioning of temperature sensors on similar equipment in galleys on other vessels;
- ◆ On this specific vessel, replace thermostat sensors in the original position and check thermostats with a calibrated temperature probe.

Members may wish to refer to:

- ◆ [Galley Fryer Fire](#)
- ◆ [Fire In The Deep Fat Fryer](#)
- ◆ [Galley Fire: Failure to follow stove/oven installation instructions \(2017\)](#)



*Temperature sensors*

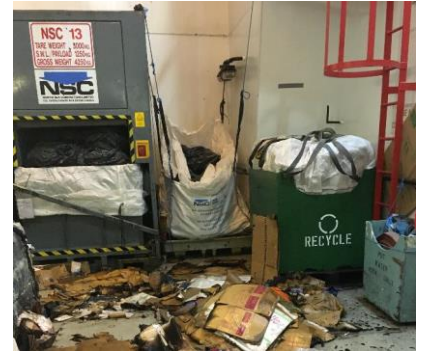
### 3 Sparks from Funnel Caused Small Fire

#### What happened?

A small fire was detected on the well deck area of a diving support vessel (DSV). This occurred during diving operations whilst the vessel was in DP3 mode.

The fire was extinguished by the Bosun, using two foam extinguishers. There was no injury to personnel or damage to equipment.

The correct protocol was followed by vessel personnel – activation of manual fire alarm and muster of all personnel; an amber light given to dive control (together with verbal warning of fire). The dive supervisor then ordered divers back to the Bell.



#### What went wrong?

The fire resulted from sparks which fell from the starboard funnel into the well deck area and ignited a 1 tonne gabion sack containing cardboard (which was being stored for onshore recycling).

#### What were the causes?

- ◆ A build-up of soot in the exhaust system, caused by prolonged operation of vessel engines in low load;
- ◆ Lack of maintenance routine for clearing of soot within the system.

#### What actions were taken?

- ◆ Extensions installed onto drain plugs to provide easier access for planned maintenance activities;
- ◆ As a secondary precaution, gauze type spark arrestors manufactured and installed on top of each exhaust stack;
- ◆ Update planned maintenance regimes, with regard to the cleaning of soot collectors and routine checks for soot removal.

Members may wish to refer to:

- ◆ [High potential near miss: dropped object – spark arrestor](#)
- ◆ [Disposal of flammable substances with ignition sources](#)

### 4 Hazard Hunt: Fire Dampers and Fixed Firefighting Systems

#### What happened?

A member reports four recent Port State Control detentions for its vessels; two of which related to fire safety, fire dampers and fixed firefighting equipment. In one incident, the fire dampers for four engine room ventilation fans were found to be faulty. On the same vessel, the manual isolation valve for the low-pressure CO<sub>2</sub> firefighting system was found to be in a closed position. Crew would not have been able to deploy the CO<sub>2</sub> firefighting system into protected spaces from the remote location. Additionally, the wrench used to open the manual isolation valve was not present in the local control area.



*Corroded engine room fire damper*



*No 'open' or 'close' markings*



*Broken flap on engine room fire damper*



*Poor sealing of fire damper*



*Brittle hose on fixed CO<sub>2</sub> bottles*



*Low pressure valves for CO<sub>2</sub> system kept closed*



*Disconnected CO<sub>2</sub> bottles*



*Faulty CO<sub>2</sub> actuation valves*

### **What lessons were learned?**

- ◆ Check that fire dampers are free of damage and corrosion;
- ◆ Check that fire dampers are clearly marked including open and closed positions;
- ◆ Ensure fire dampers are easy to operate;
- ◆ Ensure flame screens are in good condition;
- ◆ All operating handles, wires and stoppers should be in good working condition;
- ◆ All such equipment should be regularly inspected and maintained as part of a planned maintenance system;
- ◆ Crew should be familiar with the operation of fire dampers and this familiarity should be checked regularly with drills.

Members may wish to refer to:

- ◆ [Serious Failure Of CO<sub>2</sub> Firefighting System](#)
- ◆ [Fixed CO<sub>2</sub> fire extinguishing systems – US Coast Guard Alert](#)
- ◆ [An error with fire flaps led to engine space flooding, causing costly damage](#)