

IMCA Safety Flash 21/19

September 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 (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 info@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.

1 High Potential Near Miss – Rescue Boat Davit Failure (MSF)

What happened?

The Marine Safety Forum (MSF) has published Safety Alert 19-07 relating to a rescue boat davit failure during the boat's periodic launch and testing.

During the swinging out and lowering of the boat, the davit moved uncontrollably to the full extent of the piston, at which point the piston end cap separated from the piston and the davit carried on falling to the deck. On coming to a stop at the deck, the shock loading of the fall wire caused it to part and the rescue boat fell into the water.

There were no injuries as a result of this incident. The MSF notes that that this was due to the good practice of lowering the rescue boat unmanned to function test the davit and associated controls before boarding.



What went wrong?

The davit manufacturer and a local hydraulics expert were both unable to confirm the exact cause of the initial failure, however, a failure of one of the counterbalance valves or failure of the end cap itself were noted as the most probable first point of failure.

What actions were taken? What lessons were learnt?

• The vessel owner made it mandatory for vessels to complete an unmanned test lowering of the davit and boat, function testing all controls, before conducting manned launch;

- Replacement of fall wires on rescue boats at 30-month intervals;
- At the five-yearly thorough examination, maintenance and testing of the rescue boat and davit, replacement of the counterbalance valves and piston end cap;
- Review of the maintenance and inspection requirements within vessel planned maintenance system (PMS) to ensure alignment with the manufacturer's recommendations.

Note: the above actions were applicable to the submitting vessel owner in relation to their own maintenance and use of rescue boats and davits. The MSF recommends that all companies review their own procedures to asses potential for similar incidents.

Members may wish to refer to

- Lifeboat Davit Failure
- Lifeboat Damaged Whilst Being Lowered On Davit
- Lifeboat Falls After Equipment Failure

2 Davit Failures

What happened?

A member reports two recent issues relating to the davits of small boats:

- During routine inspection of the rescue boat equipment and davit swing, it was noted that the davit would not swing out. This was due to a malfunctioning hydraulic pump not building up pressure;
- During a weekly technical inspection of lifeboats and davits, a delay in response of the aft davit was noticed whilst swinging in the starboard lifeboat to the stowed position. After a few unsuccessful attempts, the hydraulic accumulator valve of the forward davit was changed over to 'evacuation mode' in order to direct hydraulic oil to the hydraulic cylinder of the aft davit only. After that, the aft



and forward davits came back to the stowed position at the same time.

What went wrong?

- In both cases equipment failure.
- The faults were observed in routine planned inspections of the equipment, which emphasises the importance of conducting inspections and planned maintenance.

Members may wish to refer to:

- Lifeboat davit failure
- Lifeboat damaged whilst being lowered on davit
- Lifeboat Drill Near Casualty
- Two Incidents relating to life-rafts/life boats
- Damage To Rescue Boat During Lowering

3 Listing of Crew Boat Due to Water Ingress

What happened?

During her first voyage after drydocking, a crew boat started to list. A bilge alarm signal was received on the bridge, informing that there was water inside starboard side void space #1. Following this, starboard side void space #1 was checked and it was confirmed that there was water present. At the same time the Chief Engineer inspected the void space and observed that the main discharge non-return valve was not installed improperly, and its gasket was not properly sealed. The other drain valve, placed between the forepeak and void space #1, was not installed at all and found lying nearby. The automatic bilge pump, which should have started immediately after the alarm was raised, had not started.

The portable fire pump was used to pump the space clear. At this point the vessel was listing heavily owing to some 2 cubic meters of water in the void space.

What went wrong?

- The crew boat had been in drydock before this voyage; important matters were not noticed before the vessel was launched:
 - the non-return valve gasket in starboard side void space #1 was damaged
 - the valve in the bulkhead between starboard forepeak and starboard side void space #1, was not installed;
- The bilge alarm signal was only a flashing light and not an audible sound alarm;
- The automatic bilge pump, which should have started immediately after the alarm was raised, had not started because the control button on the panel was in the manual position, which prevented the system from starting.

What were the causes?

There was no post-drydock maintenance inspection or dedicated testing to ensure that everything done in drydock was done properly and completely.

What actions were taken? What lessons were learned?

- Developed a pre-sail checklist of all and any critical equipment or systems (bilge systems, fire detection systems, alarms, navigation systems, propulsion and steering systems) to be checked as being in working condition before departure;
- Ensure equipment maintained, repaired or installed during drydock is physically checked and verified as working correctly.

Members may wish to refer to

- Water Ingress to bow thruster space
- Flooding in steering gear compartment
- Near miss: engine room flooding
- An error with fire flaps led to engine space flooding, causing costly damage





4 Routine test of Lifeboat Launch Results in Fatalities

What happened?

On the Auger platform in the Gulf of Mexico during routine testing, a lifeboat fell into the sea with two persons onboard. Both were fatally injured.

The incident occurred during a routine and mandatory test of a lifeboat launch and retrieval capabilities. It included testing of the centrally operated release mechanism, which detaches the lifeboat from the lifting mechanism. On completion of the test, the lifeboat was being recovered to its launching davits.

On reaching a height above the water of approximately 25-30 metres, the lifeboat support point released causing the lifeboat to swing in a pendulum fashion. The forward support point then separated, and the lifeboat fell to the sea.

This incident is still being investigated and any findings must necessarily wait upon that investigation.



Members may wish to:

- Suspend all testing involving launching and recovery of lifeboats where the lifeboat is manned;
- Suspend all maintenance and training requiring a person or persons to be inside lifeboats, unless the lifeboat is thoroughly and comprehensively secured in the davits by launch prevention devices.

Members may wish to refer to:

- Lifeboat Drill Near Casualty
- Lifeboat Damaged Whilst Being Lowered On Davit
- Failure Of Life Rafts During Servicing
- Life Raft Self-Activates And Falls To The Quayside