

IMCA Safety Flashes summarise key safety matters and incidents, allowing lessons to be more easily learnt for the benefit of all. The effectiveness of the IMCA Safety Flash system depends on members sharing information and so avoiding repeat incidents. Please consider adding safetyreports@imca-int.com to your internal distribution list for safety alerts or manually submitting information on incidents you consider may be relevant. All information is anonymised or sanitised, as appropriate.

1 Riggers injured while disconnecting rigging

What happened

Three riggers were injured whilst removing rigging from a load of timber pads after they had been backloaded from the vessel to a cargo barge. The barge and vessel were located nearshore in a sheltered location.

The incident occurred when the load was lowered down from the vessel to the deck of the cargo barge. The load had been landed, but needed some adjustment to get it exactly in the right place. To do this the rigger foreman instructed the crane operator to lift the pads slightly then lower them again to the correct location. The crane operator was then instructed to slacken the slings so that they, together with the shackles connecting them to the lifting eye, could be removed from the load and the slings returned to the vessel.

While the riggers were in the process of disconnecting the shackle there was an unexpected movement of both the barge and vessel which caused the slings to tension up. This resulted in one riggers being struck by one of the slings on his arm and the other two riggers being struck by the load on their hands.

What went wrong

Investigation revealed that:

- The riggers started disconnecting the shackles before there was sufficient slack in the slings to compensate for the motions of both vessels;
- The riggers started disconnecting the shackles before they were given the instruction from the rigger foreman that it was safe to do so;
- The rigger foreman did not instruct the crane operator to pay out more slack to compensate for unexpected barge / vessel movements.

How to stop it happening again – action

- Be aware of the additional risks created by separate vessel motions when conducting lifting operations at sea, and take additional steps to take such motion into account e.g. pay out more slack;
- *Wait for it....* always wait for the instruction to start the task from your supervisor, even if you know exactly what your role is;
- Consider leaving the rigging arrangement in place where possible. This will eliminate the risk of injury as nobody will be required to disconnect anything.

Applicable
Life Saving
Rule(s)



Line of Fire



Safe
Mechanical
Lifting



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Members may wish to refer to:

- Riggers struck/trapped by pipe section
- Equipment on quay damaged when vessel started listing
- Near-miss: Trapped tagline pins banksman against stanchion
- Lack of safety awareness: crush injury during lifting operations

2 Near miss: Floor Plate fell from Main Mast during storm

What happened

A floor plate fell from the main mast to the deck during a storm. At the time there were violent storm force winds of 55 to 60 knots with an 11m swell. A crew member suddenly heard an object falling from above. It landed near the upper deck port forward crane. It was a piece of 50 x 80 cm aluminium plate with 4 holes for securing and weighing about 2Kg. There were no injuries nor property damage.

What went wrong

The four screws securing the floor plate had sheared. The plate was from the mid platform of the mast at the base of the Inmarsat dome mast.

The screws had been replaced by a sub-contractor during fabric repairs, just over one year previously, and were found to be too short, and of too poor a quality, to ensure the plate remained secured adequately.

Actions

- Re-secured the plate with proper fixings;
- Held a thorough check of all similar plates on deck, especially in areas where this particular sub-contractor had been working, so as to avoid similar potential problem;
- Fed back to the sub-contractor about this near miss, requiring higher attention to quality performance in future work.

Members may wish to refer to:

- Serious incidents involving the weather
- High potential dropped object – satellite dome fell from mast
- Galvanic corrosion causes dropped object – satellite dome fell from mast
- Dropped object: crane floodlight
- Lost time injury (LTI): loose grating fell from crane, a man fell through and was injured

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Rule(s)



Line of Fire



3 MAIB: Loss of containers overboard – task seen as routine

The UK Marine Accident Investigation Branch (MAIB) has completed a [preliminary assessment](#) into an incident where 34 containers were lost overboard.

What happened

On 31 October 2020, 34 containers were lost overboard from the general cargo vessel *Francisca*, near Duncansby Head in the North Sea. *Francisca* was on passage from Iceland to the Netherlands when severe weather conditions were encountered. The deck cargo of containers was struck by green sea forces when the vessel was pitching heavily into the waves, causing stacks to collapse and containers to be lost overboard. All but one of the containers was empty and some debris from the laden container washed up ashore. None of the containers were recovered, and the vessel suffered minor damage on deck. There were no injuries.

What went wrong?

The MAIB's preliminary assessment found that:

- Violent pitching and ploughing into the heavy seas resulted in a rapid loss of speed and heading control, which exposed the deck cargo to green sea forces capable of overwhelming the maximum loading of the container securing arrangements;
- Regular passages between Iceland and the Netherlands meant that the vessel crew **had become accustomed** to operating in the often poor weather in the North Atlantic, Pentland Firth and North Sea, and this had **lowered their appreciation of the significant weather-associated risks**. The preliminary assessment also identified that the absence of a protective breakwater at the vessel's bow increased the risk of cargo loss in heavy weather, and corrosion to the vessel's deck cargo securing arrangements may have contributed to the scale of the loss.

Members may wish to review the following incidents in which weather played a part.

- [NTSB: The sinking of the *El Faro* – an illustrated digest](#)
- [USCG: Unexpected heavy weather dangers](#)
- [Serious incidents involving the weather](#)

4 Maintenance and painting – two incidents

What happened

A member reports two incidents in which something went wrong owing to failures in the maintenance process.

Incident 1: Material failure during lowering of lifeboat

During lowering of a lifeboat, a small shackle broke. The shackle held the upper sheave guiding the brake release wire, resulting in the sheave falling down on top of the lower sheave. This caused the brake handle not to fall into brake position, with the consequence that the lifeboat did not stop lowering but kept on going down.

What went right

The situation did not get out of control: the officer on deck took over control and applied force on the brake handle to stop the boat going any further down. There were no injuries in either incident.



Brake release wire drum overpainted

What went wrong

Investigation showed that the brake release wire drum was stuck/not turning, apparently due to there being an excessive amount of paint (see illustration) applied during the recently done maintenance. Once the paint was removed, the drum could be easily moved by hand.

Incident 2: Damaged sheave due to main hoist high hook failure

The main hoist hook block overshot the highest position alarm and ran into the sheaves from the main runner under the jib. The jib was lifted by the force of the main runner and the crane stopped automatically when the slack wire alarm of the topping wire was activated.

What went wrong

Investigation showed that one of the runner sheaves underneath the jib was bent slightly and unable to move freely. During the inspection of the high hook alarm, it was discovered that the flat bar (see illustration) in front of the sensor was not moving. It was stuck in place because of dry paint from maintenance that morning.



High hook alarm flat bar



Damaged sheave

Further, the crane operator did not pay sufficient attention when working near the limits of the crane, not looking up to the hook.

Actions

- The damaged sheave was reshaped. Thorough examination of the sheave surface and inspection by means of dye penetration testing showed that there were no cracks;
- Ensure close monitoring of the crane movements after each order given and when working near any of the crane limits;
- Test alarms after maintenance on the crane;
- After maintenance/painting check that all equipment parts are still movable and fully operational.

Members may wish to refer to:

- [Oil leakage from cylinder head cover](#) [After completion of regular planned maintenance on an engine, the cylinder covers were not mounted back correctly]
- [Inadequate maintenance and securing arrangements of emergency exit hatches](#) [*"Safety inspections and maintenance of critical equipment should be conducted in an effective manner."*]
- [Failure of remote control/emergency stop on rescue boat winch](#)
- [Crane whip line parted during hook stop testing](#)

5 MSF: Manual Handling Injury During Bulk Hose Operations

What happened

The Marine Safety Forum (MSF) has published [Safety Alert 22-07](#) regarding an incident where a crewman was injured during hose handling operations. The incident occurred when a vessel was preparing for bulk cargo operations at an offshore installation. The installation crane operator lowered a bulk hose with dry break connection to the vessel where the crew were standing by to connect. Once received, the crew attempted to connect the dry break connection to the midships manifold on top of the safe haven, but the hose was too heavy to manoeuvre due to residual liquid inside. The crew further struggled to connect due to the angle of the vessel manifold and an awkward series of rigid connectors and adapters on the hose end. The crewmember was forced to put the hose over his shoulder and raise onto the balls of his feet to line up the connecting parts, resulting in a muscle sprain injury to his right calf muscle. The crewmember required first aid attention and a period of restricted work duties.



What went wrong?

The crewmember was forced into an awkward manual handling position causing additional strain and overexertion due to the following contributing factors:

- The angle of the vessel manifold in relation to the connections, deck and surrounding pipework;
- The length of the hose end including a series of rigid connectors and adapters;
- The weight of the hose due to residual liquid inside the hose length.

Hose connections are a common weak link and most likely to experience fatigue which could result in a leak. An increased number of connections and adapters, increases the risk of manual handling injury to crew and environmental pollution. Good practice would suggest that the number of connections on the hose should be kept to a minimum and efforts ought to be made to drain back the liquid contents of the hose on completion of operations and prior to transfer.

Actions

- Reviewed manifold arrangement and made proposal for modification and improvement on other similar vessels;
- Suggested to installation operator that they
 - Review the hose connection arrangement with opportunity for improvements;
 - Review internal procedures for draining back hoses.
- Proposed recommendations to be included in the review of relevant chapter of the *Guidelines for Offshore Marine Operations (GOMO)*.

Members may wish to refer to:

- [Injuries sustained during maintenance – worker positioning](#)
- [Mooring: increase in first aid cases involving over-exertion](#)