

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 NTSB: Flooding, sinking and loss of tugboat Mangilao

What happened

The National Transportation Safety Board of the United States (NTSB) has published a report entitled MAB 20-33 into the sinking of a tugboat. The tugboat, towed by another tugboat, sank in heavy weather in the Pacific whilst on passage from Guam to Subic Bay in the Philippines. There was no loss of life.



Applicable Life Saving Rule(s) Safe Mechanical Lifting

The incident occurred approx. 0440 local time, in worsening sea and weather conditions. The towline to the towed, uncrewed, vessel parted, and the two vessels separated. The towing vessel turned round and found the other vessel taking on water, and it eventually sank. There was no pollution nor were injuries reported.

What were the causes

Investigation determined that the probable cause of the sinking was the failure of the towing arrangement due to the loss of a towline shackle pin, which left the towed vessel adrift and resulted in the ingress of water from boarding seas in a developing typhoon.



Recovered 50-ton shackle with nylon rope, bent ear, and missing pin. (Source: Coast Guard, annotated by NTSB)



Further detailed information is available from the report at www.ntsb.gov/investigations/AccidentReports/Reports/MAB2033.pdf

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2 NTSB: Overturning of the Liftboat Kristin Faye

The National Transportation Safety Board (NTSB) of the United States has published Marine Accident Brief MAB 20-36 relating to the overturning of liftboat (small jack-up) *Kristin Faye*. Liftboats are three- or four-legged, selfpropelled, self-elevating vessels typically servicing Gulf of Mexico offshore facilities (such as oil drilling platforms) by providing cranes and deck space.

What happened

On September 8, 2019, about 1015 local time, the liftboat *Kristin Faye* overturned while preparing to conduct work alongside a platform in the Gulf of Mexico, about 18 miles east of Venice, Louisiana. All three crewmembers abandoned the vessel and were rescued. One person suffered minor injuries during the evacuation. An estimated 120 gallons of diesel fuel were released. The vessel was declared a constructive total loss at an estimated US\$750,000.



What was the cause

The probable cause determined by the NTSB was the company's **inadequate preload procedure** that did not account for crane movements or the planned loads (weights) to be lifted, resulting in a "punch through" of one of the vessel's three legs.

A full report can be found on the NTSB's website here:

www.ntsb.gov/investigations/AccidentReports/Reports/MAB2036.pdf

3 MSF: Cargo snagging

The Marine Safety Forum (MSF) has published Safety Alert 20-08 relating to the snagging of cargo during lifting operations.

What happened

A vessel was engaged in deck cargo operations at an offshore location. A number of lifts had been successfully discharged and backloaded which led to limited space on deck. The crane operator advised the next lift would be the 25ft basket on the starboard side which was duly connected to the crane hook. The vessel deck crew moved to a safe place and confirmed to the crane operator that he was clear to hoist. As the crane operator began to lift the basket off the deck, the vessel bridge team noticed a corner of the basket had become snagged on a heli-tank and called an ALL STOP.



The call was not acknowledged, and the crane operator

continued to hoist. As the 25ft basket was raised approximately 3m above the deck, the snagged lift was suspended approximately 0.5m and the 'Stop' call was given again by the bridge team. The crane operator continued to hoist causing the basket to rotate over the adjacent cargo and a third 'Stop' call was issued by the bridge team. The crane operator acknowledged the third stop call and began to take avoiding action. The crane operator was able to

successfully land the snagged helitank in a clear area of the deck. The snagged lift was naturally freed, the vessel deck crew remained in a safe location and the basket successfully offloaded without further incident.

What was the cause?

- The vessel deck crew did not 'tuck in' the heli-tank bridle on completion of backload;
- The crane operator missed two opportunities to stop the job when the call was given;

The vessel Master failed to report the incident in accordance with the company and charterers reporting procedure In this case, there were no personnel injuries or property damage however the potential for harm still existed where it could have been prevented.

Actions

- Reinforce the need for good communication between vessel and platform crew during lifting operations, particularly in relation to 'stop the job';
- Improve deck space management and planning. Vessel crew are encouraged to pro-actively give feedback in this area where possible;
- All crew are reminded to always be aware of potential snagging hazards and proactively take avoiding action where possible;
- Where possible, containerised cargo bridles should be stowed or tucked into the framework or basket to prevent snagging.

Members may wish to review the following:

- IMCA HSSE 019 Guidelines for lifting operations
- IMCA short video on lifting operations Are YOU prepared to work safely?
- A list of events involving snagging and cargo www.imca-int.com/safety-events/?searchitem=snagging+cargo

4 Stop work authority enforced – unsafe conditions, no appropriate lifting gear available

What happened

A vessel received instructions to pick up an aviation fuel tank at an auxiliary platform. The Master tried to tie up to the platform but was not successful because the landing was too small, having been designed for a crew boat as opposed to an AHTS vessel.

In addition, it was noted that the vessel did not have the appropriate lifting gear to handle such a heavy lift. The Master determined that the operation was unsafe and called it off, having informed all relevant stakeholders accordingly.

Findings

Often vessel Masters are required to juggle client expectations. Here the Master has done the "due diligence" through active engagement and then determining whether or not the operation warrants the use of **stop work authority**. Doing



this sends a clear example to the crew that they can do the same if necessary.

The Master did his utmost to meet client expectations. However, he exercised **stop work authority** after having determined the unfeasibility of the operation based on his situational awareness.



The Master actively updated all concerned parties throughout the process in order to ensure that all relevant stakeholders were kept informed.

Recommendations

- It is in everyone's interest to ensure that client expectations are met, so far as is reasonably practicable. However, the safe operation of the vessel and the safety of the crew should always take precedent;
- All crew, from Master downward, should understand that they can enact **stop work authority** in the event that operations pose risks which cannot be controlled in a manner as low as reasonably practicable.

Members may wish to review:

• Positive: STOP WORK by Master challenging Sailing Order

5 Secured material fell against crewman causing injury

What happened

A crewman was injured when a stack of assorted sheet metal and wood fell against him. The incident occurred when he was performing a safety walk round in preparation for a period of rough weather. He identified that the material was not secured sufficiently; it was seen to be rocking against the vessel's superstructure. This material had previously been stored in an area without any protection from outside environmental conditions. It had been decided some 6 months previously, to move it to its present position, a covered passageway.



Old storage arrangements

What went wrong

The sheets of material were secured with two webbing cargo ratchet straps hooked onto the surrounding ship's superstructure. In the process of removing slack from one of the webbing straps, the other loosened, resulting in both straps disengaging. At that point, movement of the vessel caused the unsecured rack to fall towards the crewman. He was unable to prevent the rack from falling on him and became pinned under the sheet material with most of the weight being taken on his right thigh. He called for help from a nearby colleague and was rescued. The following day he was able to visit a hospital ashore for X-rays to his leg, where no fractures of bones were detected, and he returned to his duties on board.

Lessons learned/actions taken

- Storage of such material
 - Ensure appropriate risk assessment is developed;
 - Consider whether or not sheet material, particularly metal, needs to be stored onboard;
 - Develop new and improved safer securing arrangments.

Our member took this as an opporunity for discussion at toolbox talks, including the following:

- Lone working should be discussed during start of shift/task toolbox talks, and crew should seek help from colleagues when necessary;
- How is change managed during a task, particularly with respect to worsening werather at sea, and most especially during lifting operations;
- How can we improve our toolbox talks:
 - When should we hold a toolbox talk? E.g. before start of routine or only higher risk/non-routine tasks?



location of injured person



Improved storage arrangement

- A routine operation may become non-routine due to a very small change, with new risks being introduced.
- A toolbox talk or meeting before a routine task is an opportunity to discuss the individual steps within an operation and where there things could change from the routine. When these changes are identified, any possible new risks can be discussed, and plans put in place for mitigation. Further to this, a toolbox talk may be held when change from the planned or routine has occurred during an operation.

Members may wish to refer to:

- Crewman injured when steel plates fell against him [exact same incident but with different causes]
- Unsecured object fell and injured crewman
- Toolbox Talks short 3' video (part of the "Are you prepared to work safely" series)
- Toolbox Talks longer video