

Marine Safety Flash

A16-27 (15th July)

Mooring Rope Fouled the Propeller and Parted

Incident Overview

An industry member has reported an incident in which mooring ropes were slacked more than required resulting in a fouled propeller. The incident occurred during berthing operations when the engines were being used. The fouled lines became taut and parted. Fortunately, the recoil was vertically up and down, as the angle was 90 degrees, straight down from the universal leads to the propeller.



The men on stations were standing in the snapback zone, but the near vertical whiplash missed them. The propeller was fouled – there were damaged rope guards and mooring ropes. The vessel had to come off-hire for repairs (fortunately, the stern tube seal was not damaged).

Key Findings

- Crew were using appropriate personal protective equipment (PPE) for the task;
- The immediate cause of the incident was excessive slackening of the ropes when the propeller was turning;

Causal factors included:

- lack of situational awareness and inadequate understanding of the physical constraints of the ship as the leads being almost directly above the propeller
- ineffective communication between bridge and mooring station

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- Bridge issuing orders to slack when the propeller was turning
- Mooring stations obeying the instructions without checking propeller clearance and/or warning the bridge
- Excessive line laid out on deck, which ran out to foul the propeller
- No risk assessment carried out for this mooring operation
- No safety briefing and no toolbox talk carried out
- Inadequate supervision;

The root causes were found to be:

- Inadequate understanding of risks involved
- Lack of situational awareness of the surroundings.

Recommendations

This industry member took the following preventative actions:

- Ensure proper risk assessment carried out for mooring operations;
- Ensure safety briefing and toolbox talk conducted by the person in charge, ensuring that all crew involved in the mooring operation know the risks and actions to prevent incidents;
- Vessel joiners should be properly briefed on ship-specific tasks and constraints;
- Ensure more effective communication between bridge and mooring stations to include warnings as to prevent such incidents;
- Person in charge to take extra precautions and ensure they supervise the area and task properly;
- Re-train crew on hazards and dangers involved in mooring operations;
- Entire mooring deck area should be considered a potential snap-back zone. All crew working on a mooring deck should be made aware of this with clear visible signage.