

# Marine Safety Flash

## A15-10 (15<sup>th</sup> May)



### Rope Fouling While Mooring

#### Incident Overview

A vessel was in the process of securing to the Back Down Buoy mooring rope in-order to moor up to a jack-up rig. During the operation, the back-down buoy mooring rope fouled the starboard side propeller causing significant damage to the starboard side propulsion train and gearbox.

The Master was on the Radio with the Rig while mooring to the mooring buoy and the vessel continued forward to a point where the mooring rope ranged alongside to the starboard side parallel body and was sucked into the starboard propeller.

This Safety Flash has been issued to reinforce the critical nature of these operations which are undertaken on a frequent basis and the importance to risk assess each and every mooring operation prior to execution.

#### Key Findings

- The Master who was initially attentive to the task was momentarily distracted by the communication traffic with the Rig via the VHF Radio. As the communications continued on with the rig's personnel, he momentarily lost attention to the task at hand, to a point the vessel was allowed to stray into a vulnerable position unchecked.
- When fouling was imminent the Master's immediate reaction was to operate the propulsion full astern resulting in irreparable damage to the gearbox as the fouling became more intense by this action.
- Vessels with Controllable Pitch Propulsion (CPP) are known to creep forward due to residual thrust caused by the revolutions of the propellers even at zero pitch. This aspect was not appraised and mitigated effectively. The current acting from astern of the vessel had also compounded to the problem of the vessel creeping ahead towards the mooring rope.
- The Chief Officer, who was at the forward manoeuvring controls, had no visual sight of the rope and the direction of the rope in the water. He did not realize the vessel continuing her forward movement from the time of making fast the rope on the bow. The deck crew did not indicate the rope direction in the water after making fast the rope on the bow as this requirement was not identified as being part of the duties of the deck crew.

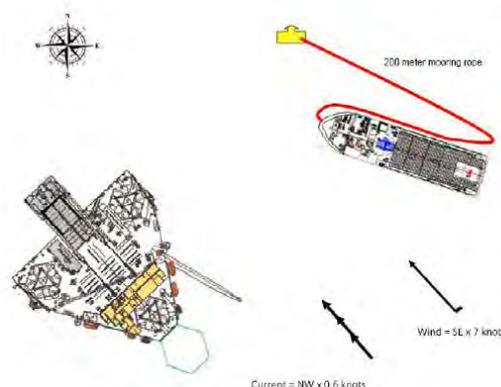
#### Recommendations

##### Procedures

- The crew working on the bow is to further assist to monitor and report the rope direction to the Master. This aspect is to be included in the JSA and Toolbox Talks. Additional monitoring and reporting by the deck crew would have forewarned the Master and could have prevented this incident.
- When fouling is imminent and cannot be avoided, the best course of action is to activate the emergency stops on the main engine. Applying excessive thrust as a last minute avoidance measure can result in more damage being caused on the propeller shaft train

##### Behaviours

- Always stay focused and concentrate on the critical task at hand. Avoid distractions at any stage of the mooring operations. Masters to ensure that vessel movement characteristics are carefully considered prior execution of close quarters manoeuvring operations especially when environmental conditions including current set are considered marginal and/or adverse.



Drawing depicting the mooring rope and the vessel position relative to the Back Down Buoy Mooring Rope.



Picture depicting the mooring rope wrapped around the starboard propeller hub and the A Frame supporting the propeller shaft.