

**Transport Safety Investigation Bureau
Safety Flyer – 2017/1**

Accident involving mooring rope

Aim

1. This Safety Flyer¹ is issued with the intention of raising awareness of the known dangers involving mooring ropes and wires under strain².

Recent occurrences

2. On two separate accidents during berthing operations under pilotage, involving two distinctly different type of ships, one being a bulk carrier, and the other being an oil tanker, the forward spring rope got stuck at the shore fender in the course of being picked up after being secured to the shore mooring hook.

3. The matter was reported to the Bridge by the mooring crew of the respective vessels. To facilitate release of the mooring rope from its stuck position, the assist tug's power was eased off. At about the same time, the stuck mooring rope jumped upwards striking the ship's personnel in-charge of the mooring operation, who was standing next to the railing assessing the status of the rope. It is likely that the mooring rope's slack was picked up almost at the same time as the tug eased off its power to facilitate the released of the stuck rope.

4. While one of the occurrences resulted in serious injuries, the injured crew member fortunately subsequently recovered from his injuries.

5. However, the other occurrence resulted in an unfortunate event as the officer did not survive the injuries sustained. A safety investigation is underway into this occurrence with a view to identify lessons learned and prevent recurrence.

Precautions to be taken

6. It must be recognised that under strain, mooring ropes and wires are expected to have tremendous amount of energy stored in them which can, and will be released once the environment under which the strain occurs, changes. This may be as a result of failure of the ropes / wires parting or simply being catapulted as a rubber band. These changes may be sudden and not readily apparent to officers and crew.

¹ The contents contained in the flyer are based on prima-facie evidence available at the time of publishing and do not intend to undermine or bias the investigation findings that may be published at a later date.

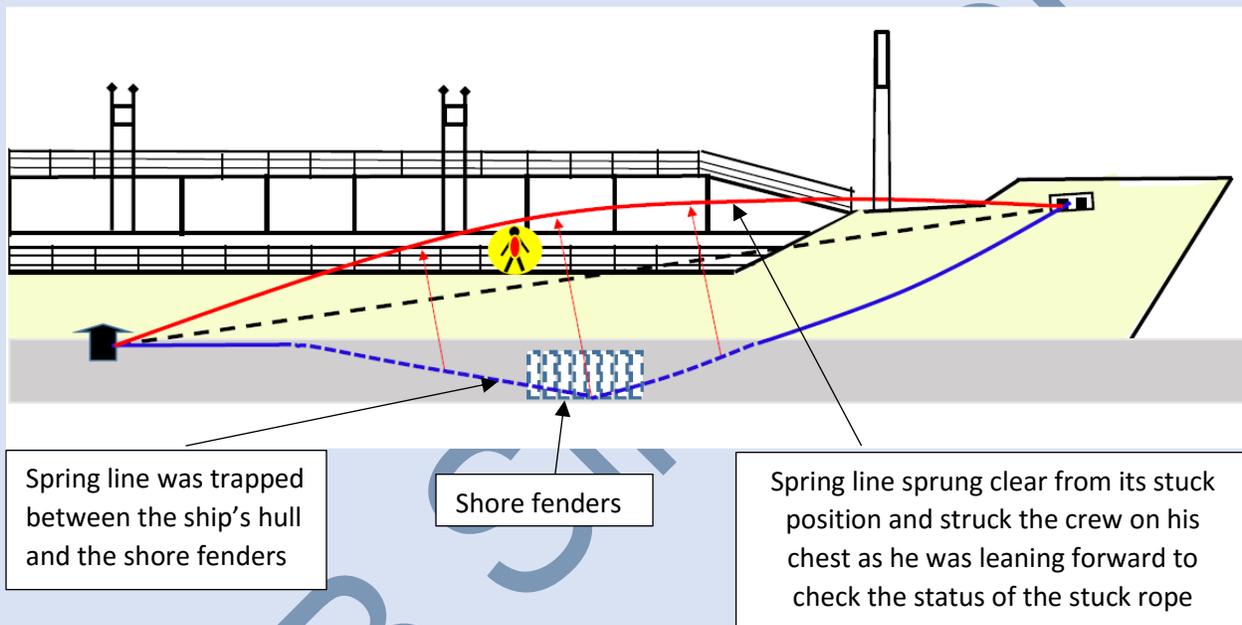
² Code of Safe Working Practices (21) September 2015, introduced additional guidance on snap-back zones and advised that the entire area of a mooring deck should be considered a potential snap-back danger zone. Snap-back zones are typically spaces where it is anticipated a failed mooring line could recoil.

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7. It is thus extremely important that mooring operations are recognised within the company's Safety Management Systems as operations that require a thorough risk assessment including the DO's and DON'Ts associated with such operations.

8. As a matter of good practice, personnel involved with mooring operations should be briefed and reminded before every operation to pay particular attention to the safety precautions to achieve a safe mooring operation and ensure proper communications at all times.

For illustration only - Side View



For illustration only - Plan View

