Safety Clicks

Learning from others' mistakes

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Mooring Line Safety

By Shannon Smith

Mooring operations, even on smaller vessels, can be dangerous. The main cause of mooring injuries and fatalities is mooring lines parting and injuring or killing crewmen in the snap back zone.

TDI recently experienced a parted mooring line on the RV Proteus. Fortunately no one was injured. But it serves to remind us not to get complacent when performing mooring operations.

TDI uses plasma rope for its coring operations, which does not have an elastic memory nor present a snap back hazard. However, the mooring lines are made of regular rope materials and DO present a snap back hazard.

In a sampling of mooring line accidents and fatalities the same issues seemed to be part of the root cause of each one:

1. Lack of proper planning.
2. Poor or failed communications between bridge and crewman doing the mooring.
3. Crewmen were unaware of the locations of snapback zones or did not realize they were standing in unsafe positions.
4. Mooring ropes in poor condition

The following story about the *Sea Melody* shows that even simple procedures such as moving from one berth to another present potentially deadly hazards. Keep an eye on your position and that of your coworkers. Look out for each other and make sure everyone understands the plan before you start mooring.

Doc worker places a mooring line on a bollard

Ropes correctly stowed off deck

Ropes badly stored on wet deck

Sea Melody MOB/ Mooring Fatality: Communications, Planning and a Thoughtless Moment

We've all had them: Those moments of thoughtlessness when knowledge, experience and even reason seem to take a holiday and we get hurt and kick ourselves for doing something we knew to be unsafe but didn't think

TOP 3 Safety Card Hits

(Fleetwide last month)

Safety Attitude	**13**
Housekeeping	**11**
Tools & Equipment	**3**

Sea Melody MOB/ Mooring Fatality (continued)

about it and wonder why we did so. Sergey Gaponov will not be wondering why he stepped on a bight of rope: He was pulled overboard and has not been found.

Sergey was a crewman on the general cargo ship *Sea Melody*. He was a 40 year old Russian able seaman and had obtained a Certificate of Competency as a rating, forming part of a navigational watch, in 2002. This was his third consecutive tour of duty on *Sea Melody*. He was well regarded by his shipmates and had received positive reports on his conduct and ability during his time on the ship.

Sea Melody had discharged her cargo of steel products at Groveport on the River Trent and was required to move to another berth to load another cargo. The vessel was now in light condition, which would reduce the effectiveness of its bowthruster, and moored starboard side to with two headlines and two springs forward, and two sternlines and two springs aft.

At 1600 a shore linesman advised the Chief Mate of the vessel's required position at the adjacent berth for loading cargo, the sequence in which the forward mooring ropes should be transferred from bollard to bollard during the move and the VHF frequency for ship to shore communications during the operation.
At 1830 it was dark. The master called the crew and prepared to manoeuver the vessel from the control console on the starboard bridge wing. He did not brief the crew on the mooring plan, even though the ship's SMS required it.

- The mooring crew to liaise with the master with regards to the mooring plan
- All personnel should be aware of the operations going on around them
- During operations there are safe places to stand, as well as dangerous ones. Never stand in a bight of rope
- During all mooring operations there shall be a responsible person in charge

Without the briefing the chief officer did not get the opportunity to be reminded of the information he had been given and to pass it on to the master. And Sergey was not reminded about stepping on bights.

The flood stream was flowing at a rate of about 2 knots from ahead, and the wind was blowing off the berth and increasing in strength as the operation to move *Sea Melody* began. The master instructed the crew, all of whom carried portable VHF radios, to let go the aft mooring ropes and then ordered the forward mooring party to slack away the headlines.

The two second officers and one of the seamen were tending the two forward springs on the starboard side while the other seaman, Sergey Gaponov, worked alone on the port headline.
The master used the engine, helm and bowthrust to control the vessel, which moved away from the berth and into the center of the river on three times during the manoeuver.

The shore linesmen, whose VHF radios were set to channel 17, attempted to contact the master to inform him of the preferred sequence for transferring the mooring ropes from bollard to bollard on the wharf. But they were unable to do so. They called across from the wharf to the forward mooring party that the master

Sea Melody MOB/ Mooring Fatality (continued)

should monitor VHF channel 17, but this message was relayed to the master as VHF channel 73.
The wind continued to increase in strength, up to Beaufort force 7, and it began to rain as the maneuver proceeded. The forward mooring party found it difficult to handle the mooring lines as the vessel veered off the berth into the river, and the master sent another second officer to assist them.

With all officers except for the master handling the lines there was no-one to maintain and overview of what was happening and no-one was looking at Sergey.

At about 1915 Sergey was heard to call out for help. His colleagues turned towards him. His left leg was caught in a bight of the headline and he was being pulled towards the bow as the vessel moved astern. The crewmen went to help Sergey, but could not stop him from being pulled over the bow due to the weight on the headline.

When the crewmen looked down from *Sea Melody*'s bow they saw Sergey face-down in the water. One man monitored his position while the others threw two lifebuoys, with lights and lines attached, that landed on the water close to Sergey, who remained motionless.

One of the men continued to monitor Sergey's body, which was taken by the tidal stream along *Sea Melody's* starboard side until he disappeared from sight beyond the vessel's stern. The master instructed the crew to launch the vessel's fast rescue craft (FRC) to search for Sergey and then reported the accident to the ship's manager at 1917. At 1938 the crew of the FRC recovered the lifebuoys from the opposite bank of the river, but found no trace of Sergey.

A search and rescue (SAR) helicopter was diverted from another mission and began to search the river in conjunction with coastguard rescue teams and a Humber Rescue lifeboat. The search for Sergey continued until 2200. The search resumed the following morning, with police divers in attendance, but Sergey's body was not found.

We cannot know whether this tragedy would have happened had the master been given the guidance that didn't reach him, or had he given the briefing required by the SMS or if someone had been supervising the operation but it certainly would not have happened if Sergey had not stepped on that rope.

Watch your step.

(Story by the Maritime Accident Casebook website. Article by Bob Couttie)

What can we learn?

Multiple things had to go wrong in order for this accident to happen.

What do you think were main root causes of the accident?

What could we learn from when it comes to our own mooring process?