

MOORING LINE ACCIDENT

The Story

Not long ago, a cruise ship pulled into an Alaskan port at high tide on a windy day. With an ebbing tide and wind speeds of 25 knots gusting up to 35 knots, the Master was well aware of the potential dangers this situation could create, especially in a place like Alaska that is known for its extreme tidal ranges. As a result, he alerted his crew concerning the need to tend mooring lines on a regular basis.

About four hours after docking, the Third Mate relieved the watch and then went on deck to check the lines which had been tended about an hour before. Unfortunately for this ship's officer, he was in the wrong place at the wrong time when one of the lines parted. Within five short minutes of coming on watch, the Mate became another victim of what is sometimes called "synthetic line snap-back." Struck in the head and neck, he died several days later.

Investigators felt that slackened lines, caused by an outgoing tide and strong winds, resulted in powerful surges and heavy strains on the mooring lines which then caused them to part. The line that struck the Mate was made of nylon and had a rated breaking strength of 46.6 tons. When it finally parted, an incredible amount of energy was released causing the line to "snap-back" in a manner similar to what occurs when a very large rubber band breaks. Later, it was found that another line had also parted.

Chafing of the mooring lines as they passed out the roller chock may have also contributed significantly to the mooring line failure. The angle of the mooring line as it passed out the chock and down to the dock was very severe. Combined with the powerful surges that the vessel experienced and the fact that no chafing gear was being used at that time, the conditions were right for this accident to occur.

Lesson Learned

Safety on any ship, whether inport or underway, depends upon the vigilance of its personnel. Many situations outside of the ordinary can be easily corrected or overcome simply through heightened awareness. Personnel must also be constantly aware of the status and condition of the ship's equipment. This is especially true when certain variables work in concert to increase the potential for hazards. If equipment is missing or improperly used, quite simply, it will not

function properly and could cause an accident.

Prevention Through People



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