



Mooring Operations Pose Serious Threat to Mariners

The focus of this article is mooring operations, the major cause of lost-time injuries aboard many vessels. Because mooring operations are a fundamental part of shipboard routine, mariners are regularly subjected to the occupational hazards related to mooring.

On deck, mariners must remain aware of their surroundings and of what could happen when working around deck machinery. In 1996, a mooring process hazard analysis was completed, generating an amazing amount of input fleetwide. A number of physical measures cited in the report have been completed (equipment modifications, stoppers, etc.), and some are currently under review (synthetic mooring lines, fire wires, etc.). But the truth of the matter really lies in the hands of the individual mariner and supervisor involved. You may have the best-designed mooring equipment in the world, but the weak link is the human element in failing to recognize dangerous or potentially dangerous situations. If all our ships were identical and were on regular operational schedules, it would be very easy to standardize mooring procedures.

Unfortunately this is not the case, and only our respective ships' crews can gauge their unique mooring operations from personal experience. Experience is the key word here – especially the ability to transfer that experience into practical safety measures at pre-mooring operations meetings in unique situations.

Crew Member Transfers

One mariner might have the highest level of mooring experience and seamanship (surging rope, tying stoppers, etc.), but these skills, although essential, will not protect him from serious or fatal injury if he cannot recognize the unique hazards involved with each ship and each port.

On the other end of the spectrum is the supervisor who has great oversight, safety perception, etc., but limited practical experience. This supervisor may not notice if a mariner ties a stopper incorrectly or fails to surge a line under strain. Regardless of the scenario, each situation has the potential for an incident.

Both these facets are essential and usually available in a mooring team, even if they are not necessarily specific to one individual. Good practices and experience need to be shared throughout the team.

Another factor that is hard to ignore is our desire to take shortcuts in order to please. How often have we heard the command, "When you have the manpower, let go of the tug"? In our desire to please, we will sometimes hear only the "action" aspect of the command – in this case, let go of the tug. One now has a situation where the supervisory aspect of the mooring task is split up, and often the more reliable seamen (ones who are consistently safe and possess good seamanship skills) are dispatched from the main operation, leaving the officer in charge with shortened and less experienced manpower.

Should time and experience be compromised for safety? The answer should be simple and unanimous. Supervision and discipline play a major part in mooring operations. Sometimes crew members, in their desire to please, will take it upon themselves to embark on other associated tasks during the mooring process. These might include:

1. Putting rope on bit.
2. Transferring wire for storage on the split drum.
3. Moving into position ready to anticipate the next task.



4. Putting out the fire wire.
5. Moving toward a stopped line before ensuring that the stopper is intact.

These spontaneous acts, although seemingly helpful, have the potential to start a chain reaction by placing crew members in an area where they might be in danger or not readily available for the task at hand.

The same could be said about the supervisor who feels it necessary to get physically involved with the mooring operation. This action has the potential of deflecting the supervisor's attention. While now being preoccupied with one particular task, the supervisor can no longer take on a general observation role to ensure crew safety. Supervisors may encounter situations where their attention needs to be complemented by additional support, such as heaving lines and communicating with dockworkers. In cases like this, the supervisor could rely on the bosun, pumpman, or experienced sailor as an extra pair of eyes to ensure that all crew members and danger potential are being monitored.

Pre-mooring meetings need to be conducted to identify specific or unique danger areas, determine crew roles, and prioritize tasks before the operation commences. In some cases crew members with little or no experience are involved in mooring operations. They should receive individual instructions at pre-mooring discussions and should be observed throughout the mooring process for critiquing afterward. This type of instruction is a practical method to ensure that new crew members receive the necessary mooring experience in an environment that is related to their skill level.

On a vessel there are many operations we can train for – lifeboat launching, firefighting, etc. – which we do on a regular basis. Mooring operations, however, present a greater challenge; although the risk of fatality and serious injury exists, we are faced with an operation that is difficult to train for.

That is why the observation aspect and danger recognition are paramount.

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