Safety Clicks

Learning from others' mistakes

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Situational Awareness and the Supervisor

By Shannon Smith

Have you ever been carrying a heavy load or doing something you could use some help with and someone near you, who is perfectly capable of assisting, doesn't lift a finger to help? Those people are total jerks! Or they might be supervisors… (Hopefully not both)

Situational awareness is different for the workers doing the work and supervisors watching the work. While each individual is focused on his personal task, the supervisor must stay aware of the overall situation and respond to any changes.

When a supervisor who is supposed to be overseeing a project gets involved in doing the project, he loses the ability to see the big picture.

In the following incident report, a supervisor tried to help with operations, lost sight of a worker and assumed breast lines were off when they weren't. He almost winched boat into the dock!

The pilot recognized this was a high potential near miss and reported it as such. The company investigated to discover lessons learned and prevent a recurrence.

Unmooring – Momentary Human Error – Wait for the splash… !

SUMMARY: Whilst unmooring, the forward breast lines were lowered by ships staff for release at the hook by the shore linesmen. The officer in charge (OIC), assuming that the ropes had been released, gave the signal to the winchman to heave the ropes home. The winch operator commenced heaving. The OIC realized, simultaneously with advice relayed via the pilot and master, that one of the mooring ropes had not released.

He signaled to the winch operator to stop heaving, and to slacken the rope. The rope was then released by the linesmen and the unmooring operations continued.

Extracts from the Company Report:

The company conducted a thorough investigation and analysis of the incident, focused upon human factors rather than blame. The salient points are as follows;

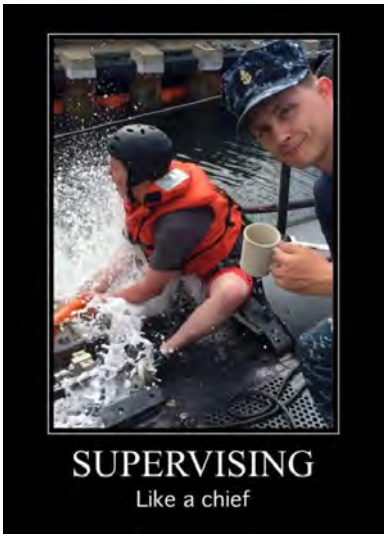
•• Mooring operations are covered by company's Safety Management System, including work control manuals with specific reference to mooring. Procedures refer to appropriate industry publications, cover familiarization/ training, job hazard analysis and proper operation/ maintenance of equipment.

•• The mooring team consisted of the OIC and four ratings. All personnel were experienced, considered fully competent for the mooring operation, and had completed familiarization training prior to taking up any mooring duties. They were familiar with the terminal, and the communication practices between the linesmen and the mooring stations.

•• Prior to departure a tool box talk was given to all mooring party members and reported to the bridge. Similarly, the unmooring plan was agreed between master and pilot, then communicated to all involved.

•• Communications were supervised by the bridge. Standard practice is that the OIC communicates directly with the shore linesmen and vice versa using visual signals. There is no bridge intervention unless further clarification or guidance is required.

•• The linesmen unhook the lines once slacked by the vessel. The OIC and the winch operator



We work with heavy gear on a moving deck. The **Deck Chief** is responsible for keeping an eye on the whole operation and stopping work if a deckman put himself or others in a dangerous position.

If you see a hazard, speak up and STOP WORK. You might be the only one who sees it...

The **Officer Of the Watch** is responsible for overseeing any deck work by vessel crew—especially mooring. Make sure you have clear communications and a plan because the view of the work is often obstructed. Designate a spotter to view what you can't see and report back to you.

TOP Safety Card Hits

(Fleetwide last month)

Housekeeping	**5**
Safety Attitude	**4**
Procedures	**4**

Situational Awareness and the Supervisor

stand close to each other, so that effective verbal communication can be maintained. During critical verification times, the OIC stands in a location which ensures that both the shore and ship's teams can be seen. Following confirmation of release from the hooks, (by visual signal, which is acknowledged), the vessel heaves up the lines using the winches, initially at slow speed.

•• This was effectively implemented whilst releasing the headlines. With the breast lines however, and at the critical point of release, the OIC was not standing at the proper location, and was not able to verify that all lines were released. Instead an assumption was made that the lines had been released, based upon the elapsed time from the last visual contact with the linesman. Although unintentional, this was a violation of standard practice.

Conclusions

•• **Procedural improvement indicated**— A review of the unmooring Job Hazard Analysis shows that there is no direct reference to the need to communicate with shore staff to prevent this kind of incident.

•• **Lack of situational awareness**— The OIC had become involved in the releasing/retrieval of the mooring ropes and had momentarily assisted the crew instead of overseeing the operation.

•• **Lack of proper communication and improper position for the operation—** The lines of communication, for handling the breast lines, were insufficient as the OIC had not received a signal from the linesmen ashore to verify that all was clear and the mooring rope tails had been released from the hooks. Additionally, this had not been acknowledged, and the OIC was not in a position to determine that shore linesmen were in a position of safety away from the hooks. (

•• **Failure to recognize risk**— A human behavioural issue was identified in the unintentional risk taken by using time elapsed to infer critical information related to mooring operation.

•• **Improper operation of equipment and lack of supervision**— Finally, the fact that the winch was operated at high speed at the initial stage of heaving up implies inadequate supervision.

Actions Taken

•• The **near miss analysis** to be discussed with the terminal operator to improve existing mooring practices.

•• Just Culture **(no blame, "Just" improvement) process** was applied with regard to the OIC, and will include a training session.

•• A **Fleet Circular** issued, sharing the lessons learnt and requesting a mooring operation evaluation review to be discussed on board and shared across the fleet. The review to include a mooring operation hazard analysis to ensure the lessons learnt from this near miss are incorporated, for use in future toolbox talks.

•• The lessons learned are to be **included in Fleet Training Officer material** for on-board training.

The Maritime Advisory Board emphasized that the person in charge should not get involved in handling ropes and should always maintain a full oversight of the operation.

The company's effort to investigate the human factors is refreshing – it is only by doing this that root causes will be properly addressed, as opposed to simply saying "Did not comply with the SMS!"

Useful references – OCIMF *Effective mooring*, and the Nautical Institute *Mooring and Anchoring Ships Volumes 1&2*.