

The Nautical Institute Marine Accident Reporting Scheme

MARS Report No 185 March 2008

MARS 200815

Careless hull painting



Glaring violations of safe working practices (not in any order):

- 1. Apparently unsupervised lone crew member at work.
- 2. No flotation aid, lifeline or eye protection in use.
- **3.** Two separate ladder sections, and pilot ladder (the lower section) being used in an unauthorized manner and also inclined dangerously.
- **4.** Discarded wharf fender with suspect stability and no safety railings or manropes being used as a punt.
- 5. Highly inappropriate and unsafe use of messroom chair.
- **6.** Unsecured paint container can topple and cause pollution.

MARS 200816

Fatal fall from hatch cover

Official Report Source: IMO Sub-Committee on Flag State Implementation – eleventh session

While closing the hatch covers on a small bulk carrier after hold cleaning, an officer climbed on to a partially-closed hatch cover to unshackle and move the wire leading from the winch. He slipped, fell into the hold and was killed.

Root cause/contributory factors

1. In the absence of written procedures, the ship's crew was using an incorrect and dangerous procedure for closing the hatches;

- 2. The decks and hatch covers were wet, oily and slippery and the officer placed himself in a dangerous position by climbing on to, and working at the very edge of, the partially-opened hatch cover;
- 3. The officer was not wearing a safety harness or a helmet.

Lessons learnt

- 1. Vessels must have written procedures (as required by the ISM Code) for safely carrying out routine procedures and ships' crews must be familiar with these procedures and follow them.
- 2. Seafarers should not take risks that place them, even briefly, in a dangerous position.
- 3. Seafarers should always wear safety equipment where appropriate, and be alert for any hazards caused by the presence of oil, grease or water on deck.

MARS 200817

Poor watch at anchor

Our tanker anchored off a port, about four cables from another small tanker. The following day, the wind veered and freshened such that our ship was lying downwind from the other tanker. With my second officer maintaining an anchor watch, I left the bridge at noon, leaving the other vessel almost dead ahead. I worked in my cabin for about two hours and when I looked ahead out of my window, I could not see the other tanker. I went up to the bridge, and found my OOW correcting navigation charts.

Noting that our heading and the wind direction had not changed, I asked him what time the other vessel had sailed, and he said he hadn't seen it go, nor had he heard anything on the VHF. From the AIS display, I discovered that the other tanker was seven cables abaft our beam; and from the ECDIS display I noted that she was in shallow water, and was very close to a sandbank, but still exhibiting the anchor signal.

I immediately called her on the VHF, told the person on watch that his vessel was probably dragging anchor, and told him to call his captain. Soon, the tanker got under way and reanchored in deeper water. Noticing the very short time taken to heave up the anchor, it is likely that the other ship had paid out insufficient chain under the conditions. Finally, I asked myself, how close to us did that ship pass? It must have been very close but nobody noticed.

Lessons learnt

- 1. Because you are at anchor, it does not mean all lookouts can be suspended.
- **2.** Be aware that others may not be as observant as you, and watch their positions as well as your own.

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3. If you have guard rings on your radar, use them when you are at anchor too.

MARS 200818

Cell phone activated inside tank

On a vessel that was coasting, a crew member's cell phone was activated by an incoming call while he was engaged in tank inspection. Although the presence of flammable atmosphere had been ruled out during the pre-entry risk assessment, the hazards of carrying a cell phone into an enclosed space were pointed out to him by the responsible officer and also discussed at the following onboard safety committee meeting.

MARS 200819

Unsafe stevedoring practices

I witnessed very unsafe working practices at a container terminal where my vessel called recently. For every lift, the stevedores clambered on to the roof of the container without a proper ladder, although occasionally they would be hoisted aloft while standing on the forks of a fork lift truck. The dangerously exposed men struggled to position the spreader on the containers and were working without any safety shoes,



▲ 1: Manhandling the spreader: one worker has no shoes and the other is wearing 'flip-flops'



lack 2: Stevedore climbing down a container. Note the relatively well-kitted out 'supervisory' staff

helmet or working gloves. At least one of them was barefoot. On board another vessel that was finishing loading at the terminal, we witnessed a stevedore climbing down from a height of five containers.

My questions are: when there are so many regulations enforcing safe working practices on board ship, why and how can an international container terminal allow stevedores to work without any safety gear? Don't they have a safety management system? I find it hard to believe that service conditions do not include safety training and free issue of working gear for employees and that the local authorities have permitted these unsafe operations to continue without any sanction.

My concern is that if a stevedore is injured on board, the vessel will be subjected to a very harsh inquiry/investigation and the authorities will likely exonerate the stevedore company of any blame and instead unfairly hold the ship liable for damages.

MARS 200820

Scavenge space explosion

While discharging in port, the second engineer was informed by the engine room watch that two cylinders of a running auxiliary diesel engine were displaying abnormally high exhaust temperatures. While he was inspecting the running engine, the cover of scavenge space suddenly blew out and the issuing fire and heat caused third degree burns on his hands, arms and legs. He was immediately transferred to a hospital ashore for further treatment.

Root cause/contributory factors

1. Inadequate procedures / instructions.

Corrective / preventive actions

- 1. Instruct all fleet vessels to discuss incident in the shipboard safety committee.
- ${\bf 2.} \quad {\bf Conduct\ accident\ /\ incident\ investigation\ and\ analysis.}$
- ${\bf 3.} \quad {\bf Machinery\ problem\ identification\ and\ analysis.}$
- 4. Investigate personal protective equipment and record keeping.

Lessons learnt

- 1. Clear standing orders from the chief engineer must be given in such cases.
- 2. Alertness and proper interpretation of warning signs from the engine could have prevented this accident.
- Editor's note: Any machinery or equipment showing signs of abnormality or strain must be stopped and taken 'off load' immediately. Investigations should then be carried out using all available resources on board and, if justified, assistance from shore management and experts.

MARS 200821

Interaction incident between vessels

A loaded tanker was outward bound along an estuary at about 10 knots with an underkeel clearance of about three metres. A cargo vessel of similar size, drawing about 6.5 metres, was

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also proceeding outwards at about 18 knots and was overtaking the out-bound tanker. Both vessels and the VTS had previously agreed on the manoeuvre.

The cargo vessel passed down the starboard side of the tanker with a distance between vessels estimated at only 50 metres. As the cargo vessel approached the starboard quarter of the tanker, the tanker's bow took a sudden sheer to port. The alert pilot countered this by putting the rudder hard to starboard. Again, as the cargo vessel cleared the tanker's bow, action had to be taken to counter the vessel's swing to starboard towards the overtaking ship's stern.

Prompt action by the pilot on the tanker prevented the vessels colliding with each other and the tanker making contact with one of the navigation buoys.

Root cause/contributory factors

- 1. The cargo vessel passed too close to the tanker at high speed;
- 2. Ill-considered action on the part of the relatively low-draft cargo vessel to pass on the 'inside' of the tanker, when she had sufficient sea room to safely navigate outside the channel, or alternatively, could have overtaken on the tanker's port side, there being no inward traffic.

MARS 200822

Vessels exhibiting confusing lights

This is an observation and query concerning the lights exhibited by a passing ship. In addition to the normal lights for a power driven vessel a passing container ship was showing a flashing red light at the masthead. Is it normal for such vessels to show these lights these days and what does it mean? Is it a warning that the ship is carrying dangerous goods, which I expect all container ships do, or is it for low flying aircraft? Or is it a signal for a particular port that they did not turn off? Thanks for any clarification.

■ Editor's note: The last reason is the most likely. In many regions, local regulations require vessels carrying dangerous cargoes to exhibit a flashing red light. In Japanese waters, 'huge' vessels (more than 200m long) are required to exhibit a flashing green light. To avoid potential confusion outside port areas, and in the good practice of seamanship, bridge teams should ensure that these port specific lights are extinguished before leaving port.

MARS 200823

Accidental lifeboat release

During the annual inspection of lifeboats, both craft were launched into the water. On that occasion, a qualified manufacturer's technician had inspected the release mechanisms. Two weeks later, the monthly abandon drill exercise was executed. It was a practice to lower the boats without any persons during monthly exercises. The starboard lifeboat was lowered first and secured without incident. Shortly afterwards, the port lifeboat was lowered. After the davit had reached its outboard position, the forward hook of this lifeboat released accidentally causing the lifeboat to hang only on the after-fall.

Fortunately there was no personal injury, but the lifeboat $\[\]$

hull, aft suspension fittings and the aft davit arm were damaged.

Root cause/contributory factors

- 1. It is likely that the forward hook and locking cam were not engaged correctly when the lifeboat was recovered after launch during the last annual inspection;
- **2.** Before the latest launch, the crew failed to confirm the correct engagement of hook and locking cam;
- **3.** Poor system design with no indication device at or near the lifting hook;
- **4.** Difficulty in verifying cam position from inspection window at release handle position;
- 5. Insufficient training of crew in operating and resetting release mechanisms:
- **6.** Inadequate warning / instruction inside and outside lifeboat on proper launch and recovery procedures;
- 7. False sense of security after recent annual inspection by maker's technician;
- 8. Crew not referring to critical instructions in maker's manual and to recent USCG Safety alert on this subject.

Corrective and preventive actions

- 1. Verify release mechanism of other lifeboat was in correct position;
- 2. Notify release system manufacturer for inadequate due diligence during yearly inspection
- 3. Conduct accident investigation;
- 4. Order for new lifeboat, davit arm and improved design of release system;
- **5.** Affix warning instructions inside and outside lifeboat on proper engagement and verification procedure of release mechanism;
- **6.** Implement effective training on new release system, supplemented by maker's video programme;
- 7. Update procedures, maintenance instructions and complement these with adequate checklists to incorporate critical check;
- 8. Communicate lessons learned from accident.

MARS 200824

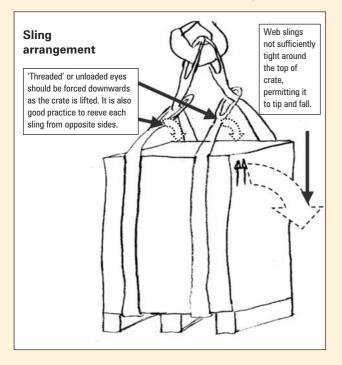
Crate dropped during lowering

On a ship at anchor, a crate containing machinery spares, reeved with two webbing slings, was being lowered into the engine room through the engine room hatch using the ship's stores crane. During the lowering process, a corner of the base of the crate caught on a section of ducting immediately below the hatch coaming, became unbalanced and tipped through the slings, falling to the deck below. The impact destroyed the crate; however, there were no injuries or damage other than that the spares were rendered unuseable.

Root cause/contributory factors

- 1. Failure to sling the crate properly; webbing slings not tight around the top of the crate;
- 2. Ship rolling slightly at anchorage, causing the crate to swing during passage through hatch;

- **3.** Failure to conduct / review formal risk assessment prior to the lifting operation;
- **4.** It is thought that the spare part was inadequately secured inside the crate and as the crate tilted, the internal shift of weight assisted the 'tipping' motion;
- **5.** The crate's height was greater than the other two dimensions, which made it more prone to tipping;



- **6.** The crate had no fitting to prevent the slings from slipping off in case the load became unbalanced;
- 7. 'Routine task' complacency and inadequate understanding of risk assessment among the ratings.

Corrective actions

- 1. The company issued notices to masters and safety bulletins on risk assessment, work planning and safe lifting techniques.
- 2. Crane operator familiarisation training was conducted on board and will be supplemented by further computer based or practical training in crane operations and rigging / slinging.
- **3.** Permit to work system presently applying only to lifts within hazardous areas to be extended to include all lifting tasks.
- 4. Investigate and solicit vessel proposals for a steel cage $\!\!/$ box to be used for lifting operations into engine room.

Lessons learnt

- 1. Expensive and relatively fragile components should be given a higher level of planning and supervision.
- 2. Although a task review was conducted during the initial work planning, it was not documented and should have been followed up with risk assessment and a tool box meeting.
- **3.** There was a failure to assess the risks adequately, specifically vessel motion and the possibility of the crate contents shifting.

MARS: For company safety managers – give and take

You give:

SMS reports on accidents, near misses, safety issues

You take:

- **1.** The satisfaction of contributing towards safety.
 - **2.** Recognition and a letter of appreciation.
 - **3.** Evidence for your next ISM audit.

Seafarers can make a difference

Can you save a life, prevent injury, or contribute to a more effective shipping community? Everyone makes mistakes or has near misses but by contributing reports about these events to MARS, you can help others learn from your experiences. Reports concerning navigation, cargo, engineering, ISM management, mooring, leadership, ship design, training or any other aspect of operations are always welcome.

MARS is strictly confidential and can help so many – please contribute.

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