MARS

MARS Report 392 | June 2025

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MARS 202524

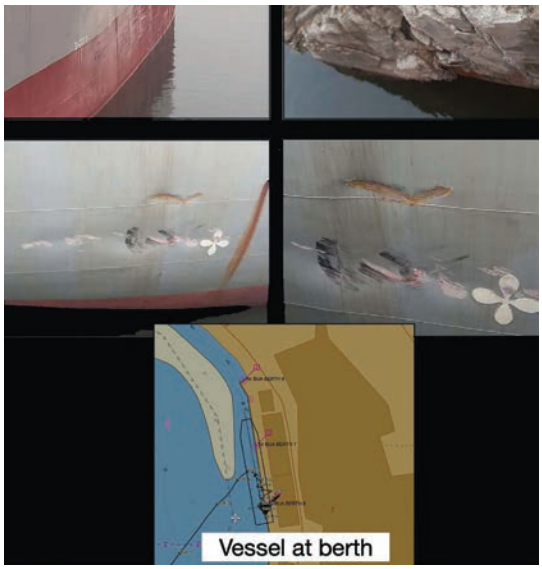
Challenging berth location and questionable tug services adds to docking difficulty

A cargo vessel was berthing under pilotage and with tug assistance. The berth was in a confined waterway with strong currents and shallow waters. The operation was further complicated by local regulations prohibiting tugs from fastening to the vessel, limiting them to push-assist manoeuvres only.

On the approach to the berth, the vessel was making 4.8 knots before corrective actions were initiated. Despite multiple engine manoeuvres and the eventual deployment of the port anchor, the vessel contacted the pier at a speed of 0.9 knots.

Damage to the vessel was concentrated at the starboard bow and the aft starboard quarter. The company investigation found, among other things, that a combination of environmental, operational, and systemic factors contributed to the incident. Strong currents and shallow waters were significant contributors, impeding the vessel's manoeuvrability and amplifying the challenges posed by the angular design of the pier. These natural challenges were compounded by local regulations, which restricted tug operations to push-assist only, eliminating their ability to provide 'pull' support.

Communication gaps between the vessel's bridge team, the pilot, and the tug operators were also identified as a critical factor. Additionally, the delayed deployment of the port anchor limited its capacity to counteract the vessel's swing to starboard during the final moments of the approach.



Lessons learned

- The importance of comprehensive pre-berthing planning and preparation should not be underestimated.
- Open and continuous communication between the Master, pilot, and tug operators is essential for addressing the dynamic challenges associated with berthing operations.
- Regular drills focusing on emergency responses, such as timely anchor deployment and adaptive manoeuvring, are vital to ensuring that crews are prepared for similar scenarios.

MARS 202525

The ghost in the machine, part 3

A new tanker (2024-built) was preparing for departure from the berth. Once the pilot was on board the unberthing operation began. As the vessel cleared the berth the pilot requested the dead slow ahead (25 RPM) and started a turn to starboard. The pilot then requested slow ahead, but the RPM would not increase beyond 25. The pilot and Master attempted several engine settings to progress through the critical RPM band, (30-37) but with no success.

The Chief Engineer explained that the funnel emissions were too high, and the computer auto-control system would not allow the engine increase until the emissions were within tolerance levels. According to the Chief Engineer there was no override to this.

In this instance the problem was not critical, but it could have been if they needed more power to clear the berth. And imagine being at anchor near a lee shore and you start dragging anchor!

Lessons learned

- To use shipboard equipment effectively, crews must know how to operate that equipment during routine and emergency situations.
- This incident demonstrates that new technology can introduce unintended consequences. A wide range of vessel functions may now be subject to automated control, and crew need to have a thorough understanding of the peculiarities of each device or system.

Editor's note: The title 'The ghost in the machine, part 3' refers to past MARS reports (202003 and 202004) where we underline how new devices intended to make work easier can introduce new risks. In this incident we can observe the same phenomenon. New technology has given the engine controller decisional control and cannot be overridden. This seems to run against the necessity of an emergency.

MARS 202526

Uncontrolled release of lifeboat

A new operator took delivery of a vessel from a previous operator, and the crew were changed over.

The vessel was at anchor, and crew familiarisation and emergency drills were carried out before departure, including an abandon ship drill. While a lifeboat was being lowered to sea level, the brake release wire became stuck. The brake band remained open and the lifeboat descended to the water in an uncontrolled manner. Luckily, there were no injuries and no damage.

The company investigation found, among other things, that:

- The lifeboat wires were well maintained and greased at the time of the vessel's delivery.
- The vessel's records indicated the last abandon ship drill with lifeboat lowering had taken place about six weeks earlier with the previous crew.
- While the lifeboat wire was being paid out, the remote brake release wire got stuck on its drum and began to coil backwards, keeping it under tension, and thus keeping the brake in an open position. The remote wire eventually parted, and the port lifeboat dropped to sea level.

It was found that the remote release wire had been improperly stored on its drum as a result of poor handling by the previous crew. The wire was stuck within the storage drum and coated entirely in grease, which obscured the view and prevented early detection of the issue. Furthermore, it was noted that the system had remained unused for a prolonged period, contributing to this condition.

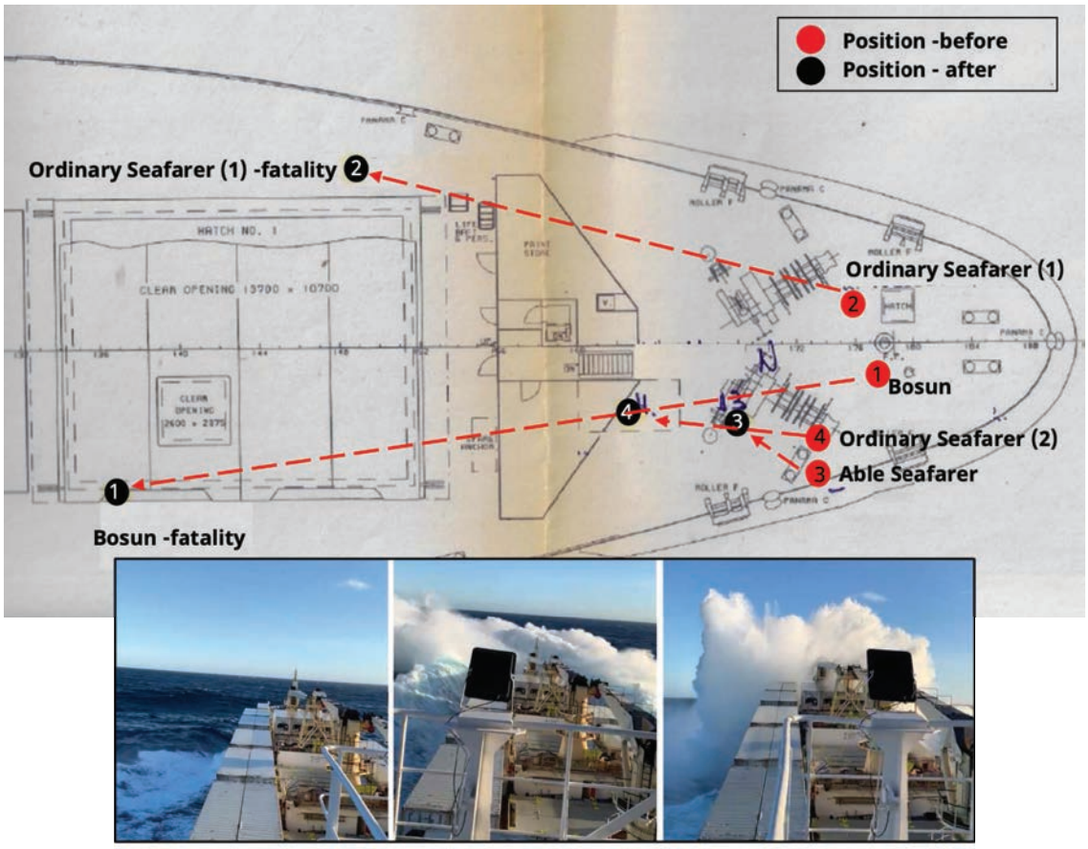
Lessons learned

Equipment and systems on newly acquired vessels under a company's management must undergo comprehensive, close-up inspections and testing to identify potential defects or issues, ensuring safe and reliable operations.

MARS 202527

Green water on deck has fatal consequences

A cargo vessel completed loading and left port in the early morning hours. By about 0400, the pilot departed the vessel, and the Master notified the deck crew to ensure that the berthing stations were secured for the passage; heavy weather was forecast. At 0415 the second officer notified the bridge that all aft lines and machinery were stowed and secured. Five minutes later, the bosun notified the bridge that all was secured at the forward mooring station. In fact, it was not. He had decided to leave the deck to rest, intending to come back later and finish securing.



View of seas encountered (one hour after accident)

The vessel encountered increased swell activity, causing it to slam. This woke the Master, and he instructed the officer of the watch (OOW) to reduce speed and alter course to minimise the slamming effects. By midday, the swell had increased. Wave heights were now more than three metres.

After lunch, the chief officer informed the OOW that he was going on deck for a safety check. At around the same time, the bosun and some deck crew, having slept through the morning to recuperate, made their way forward to finish the job of securing the forward mooring station. The vessel was struck by a series of large waves, breaching the forecastle and washing the crew off their feet.

As the chief officer arrived on the forecastle, he found two injured crew members. He raised the alarm and then discovered two other injured crew members further aft. The Master came to the bridge and decided to alter course for the nearest port. The injured crew members were transferred to the ship's hospital and a request for med-evac was made, but no helicopter was available. Paramedics finally boarded the vessel that evening. Of the four crew members injured, two were declared deceased while another member required emergency surgery. The fourth crew member received treatment on board for minor injuries.

Lessons learned

This report screams 'fatigue,' yet this was not brought out in the official report. Why else would the bosun and his team decide not only to mislead the bridge team about the state of the forward mooring station after departure, but also to 'get some sleep first' before securing the forward deck?

Fatigue reduces performance in many insidious ways including:

- Reducing problem-solving ability;
- Causing one to forget or ignore normal checks/ procedures;
- Reducing situational awareness;
- Increasing propensity to take risks.

Measures were taken to mitigate the slamming, but at no point was the company's heavy weather checklist used, nor was access to the open deck restricted.

As edited from Bahamas Maritime authority report published 5 Feb 2024

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