MARS

MARS Report 400 | February 2026

In this bulletin…

As a former Captain, marine accident investigator and as MARS editor since 2013, I have become sensitized to the fact that a non-negligible portion of maritime accidents have a common contributing factor – fatigue. The maritime industry operates on a relentless schedule, yet the human operators at its core are bound by circadian limits. Biology does not negotiate. Fatigue is the silent contagion of our trade – an 'invisible hand' on the mariner's shoulder that slows reaction times, clouds judgment, decreases our risk perception and, at times, causes us to literally fall asleep on the job.

The scientific consensus on this issue is damning, yet it appears to have less than adequate purchase within the industry. Härmä et al. (2008), among others, have documented the risks of the 6/6 watch system, proving that such fragmented sleep is often insufficient for cognitive recovery. The disconnect between official logbooks and reality is an open secret; as the World Maritime University describes in *Quantifying an Inconvenient Truth*, a culture of adjustment pervades the industry, where records are routinely modified to mask non-compliance with rest hours.

The MARS reports in this issue are merely a very selective glance at this insidious problem. Systemic negligence on a personal, corporate and international level is in play. By ignoring the findings of the research on this topic, stakeholders have allowed a preventable hazard to become a tolerated operational risk. The following case studies demonstrate the high price paid when we prioritise commercial schedules over the biological necessities of the crew. For additional references in MARS that concern fatigue, see 202529, 202365, 202107, 202027, 202028, 201451, 201444, 201428, 201401.

MARS 202605

Alone on the bridge, asleep and full speed ahead

A tug was pushing an oil barge in ballast, so that the two units were operating as an articulated tug and barge (ATB). The OOW took over the watch at 23:00. The vessels were in confined coastal waters with little or no other vessel traffic, light winds and some rain. The OOW was alone in the wheelhouse acting as navigator and lookout. At 00:20 the OOW made a planned course alteration to port. Some 30 minutes later, a further planned course alteration was missed because the OOW had fallen asleep in the bridge chair.

A few minutes after 01:00, the ATB struck a charted reef. The impact woke the OOW. He immediately reversed both engines and placed the rudders hard to port. The Master, awoken by the impact, went to the wheelhouse and took over the watch. The tug's starboard engine was disabled, so the Master attempted to reverse off the reef with the port engine while moving the rudder hard over, port to starboard. The ATB pivoted but remained aground.

The Master reported the casualty to shore authorities. Sea conditions worsened and some fuel from the tug was leaking into the sea. The tug's crew was evacuated some eight hours after the grounding due to the worsening situation. Clean-up and tug salvage operations continued for the next 40 days. The tug was declared a total constructive loss while the barge was salvaged and repaired.

The investigation found, among other things, that the OOW suffered from several fatigue-inducing factors at the time of the grounding, including sleep disruption both acute and chronic, circadian rhythm disruptions, and individual factors (ie his inability to nap during 'off' hours). In other words, he was fatigued.

Lessons learned

- 'Sleep hygiene' is a critical element of safety in the transportation industry, yet one that is mostly self-managed. Take it seriously.
- Sitting while navigating is one step towards further relaxation. Standing and moving (between navigation instruments?) means you are unlikely to experience a micro-sleep and may help your situational awareness.

Editor's note: While fatigue is certainly a major contributing factor in this accident, just to claim fatigue is to blame is to miss important underlying factors. Many of these have conspired here; the OOW's personal attributes as well as the corporate attitude to keeping the schedule. But another elephant is in the wheelhouse…a lone watchkeeper in darkness. This factor has become almost a cliché in accidents involving fatigue. This is a situation that not only contradicts good practice, but the STCW, which states that the OOW may be the sole lookout ***in daylight*** provided 'the situation has been carefully assessed, and it has been established without doubt that it is safe to do so, full account has been taken of all relevant factors…

Most Flag administrations interpret this to mean that a separate dedicated lookout is required in addition to the OOW when a vessel is underway at night. Yet common practice is often just the opposite.

As edited from TSB (Canada) report M16P0378

MARS 202606

You snooze you lose

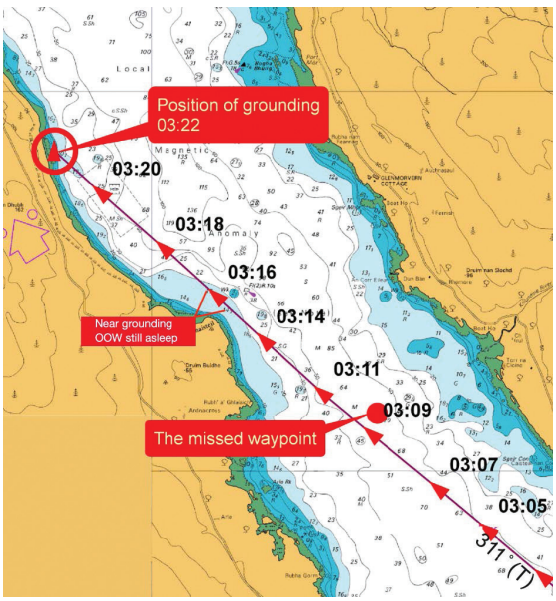
A small coastal general cargo vessel left port at 23:00. At 23:55 the second officer relieved the Master as OOW. The second officer felt normal and capable of keeping his watch, but there was no lookout assigned to that watch. After plotting the vessel's midnight position on the chart, the Master handed the watch over and went to his cabin to sleep about 40 minutes later.

At 02:56, the vessel had reached a course alteration waypoint, and the OOW adjusted the vessel's course. He then went out to the starboard bridge wing to get some fresh air. When he returned inside, he secured the starboard bridge door in the fully open position and sat in the port bridge chair. Shortly afterwards, he fell asleep. The vessel passed the next planned waypoint and maintained its course for just over 2.5 miles, at about 10.5 knots, until the OOW woke up.

Sensing danger, the OOW immediately moved the engine control to neutral, and then full astern, but the vessel grounded nonetheless at 03:22. The Master was woken by the resulting noise and vibration, came to the bridge and sounded the alarm.

The crew mustered with lifejackets and survival suits. The Master ordered the rescue boat launched so he could carry out an external inspection of the vessel. While the rescue boat was being launched, the Master informed the management company that the vessel was aground, and other members of the crew were sent to open and ventilate the forepeak tank.

After completing his external inspection from the rescue boat, the Master returned on board and



internally inspected the forepeak tank and duct keel. At the time of this inspection, there was no water ingress to the vessel. However, with the rising tide, the bow thruster space began to flood.

Later that day the crew carried out a temporary repair to stem the flooding. The vessel was re-floated at 21:20, making way for a port of refuge. After an inspection the vessel was found to have sustained significant bottom plate and frame damage to the forward part of the hull. Following the inspection, the vessel proceeded to another port to be repaired.

Lessons learned

- It is likely the BNWAS alarm was not activated.
- Once again, the OOW was alone on the bridge at night; a precursor for possible bad outcomes.
- Once again, sitting in a chair at night is step one in a two-step sequence of falling asleep on watch.

As edited from MAIB (UK) report 26/2013

MARS 202607

Fishing for a living is tiring

The crew of a fishing vessel landed their catch in port, cooked dinner, and then went home to rest. The skipper, however, remained on board to repair a pump. At about 02:00 the next morning, the skipper completed the repair and recalled the deckhands to the vessel for departure. The boat was underway about 30 minutes later, heading towards the fishing grounds off the port.

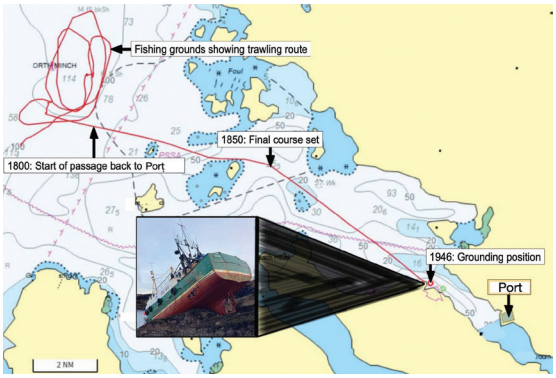
This was the fourth day of a planned eight to nine-day fishing run. At 03:00, the skipper handed the watch over to the two deckhands to complete the passage out to the fishing grounds and went below to rest. He was woken by the deckhands at 07:10 to take the watch so that they could prepare to shoot the net for the first tow of the day. The skipper remained on watch from 07:30, when the tow began, until about midday, when the crew hauled the net up and shot it away again at 12:30.

Following this, the skipper had a light lunch and took the afternoon watch. At 17:30, the second tow was hauled. At about 18:00, having recovered the net and catch, the skipper set a course back towards port. At about 19:30, the skipper felt tired, so he opened the wheelhouse windows to let in some fresh air, had a cup of coffee, then sat in the wheelhouse chair. He soon fell asleep.

About 10-12 minutes later, the fishing vessel grounded hard on rocks while making over 7 kts. The skipper woke up and took the vessel's engine out of gear and the deckhands, who were working below, came up to see what had happened. The skipper and one deckhand checked the area around the vessel to determine what the vessel had struck. The other deckhand checked the forepeak for damage or water ingress. The crew tried to move the vessel with its engine and by adjusting the power block and trawl doors but were unable to do so.

Following unsuccessful attempts to free the fishing vessel from the rocks, the crew were transferred back to port the next day. The following day, the vessel's hull had breached and was partially submerged at high water. It was soon declared a constructive total loss.

The investigation found that the early departure meant that the skipper was unable to obtain enough rest to comply with regulations and operate safely. It is likely that the skipper's decision seemed reasonable at the time because crew were accustomed to feeling tired and the alternative was to miss a day's fishing. However, the decision did not factor in the chronic sleep debt the skipper and crew were already experiencing.



Lessons learned

- Some decisions seem to make sense at the time but when considering all the factors, usually after an accident or near miss, the logic often fails.
- Never underestimate the performance inhibiting power of fatigue, which has been characterised as similar to that of alcohol. Reaction time, judgment and risk appreciation, among others, are severely reduced.
- If you need coffee and fresh air to stay awake, these are signs that you need rest. Do not sit down before the end of your watch – or call a relief.

As edited from MAIB (UK) report 2025-09

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