

Seaways

The International Journal of The Nautical Institute

Multitasking

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Focus

Compelling Need

“Action must be taken to reduce the administrative mountain that Masters have to climb every day. Ideally, this will be moved ashore, but a sensible first step, particularly for the company, is to assess whether all the demands for reports and other documentation are really necessary.”

An abiding principle for the work at the IMO these days is that there needs to be a compelling need to make changes to regulations or bring into force new ones. That certainly has not reduced the workload of the delegations, but it does focus the mind. There is also a move to reduce the regulatory burden where possible with an Ad Hoc Steering Group formed for this purpose as this is a constant plea from those at sea.

In an admirably short and concise article, Captain Tomasz Kilanski sums up the bureaucratic burden that the Master has to carry (p16). This should be read and acted upon by all those ashore who add more and more tasks onto these professionals' shoulders. While the IMO is undoubtedly the highest authority in shipping, there are many other entities which drive the creation of the administrative mountain that Masters have to climb every day – flag states, port state control, class, cargo interests, ports, and of course the company's office among others. This article really must be required reading for all ashore and action taken to either move much of the administrative work to the shore based staff with electronic data feed from the ship or, as Captain Kilanski suggests, put a clerk on board. A sensible first step though, particularly for the company, is to assess whether all their demands for reports and other documentation are really necessary. Ask the question 'What do we do with this?' and if the answer is 'Not much', get rid of the need to produce it and let the Master concentrate more of his or her time on the real job of operating the ship safely and efficiently.

Similar points are made by Captain Kuba Szymanski on looking beyond human error (see p 21) to identify systemic reasons for accidents rather than the easy option of blaming the seafarer on the spot. He lists some 18 people likely to pile into the Master's office as soon as the ship arrives in port, all clamouring for his or her attention during the increasingly short port stay. Again the plea is for realistic manning levels taking all the operations of the ship into account rather than just the simplistic sea-going part of the

voyage. He makes the point that we all know that piling so many tasks onto the small crews prevalent these days makes it impossible for them to carry out their duties effectively or even within the law in many cases, and the lack of standardisation of equipment and reports is hindering it as well.

Interestingly, Captain Mladen Simicic discusses multitasking and safety (see pp 8-11), showing that multitasking is actually a danger and less efficient than dealing quickly and effectively with one task at a time.

Recruitment and retention remain topics of concern in many quarters, but even with so many questions being asked about the work and life of seafarers, many of the younger generation around the world are still willing to take up a maritime career. We were delighted to have a full set of Generation Y speakers at the Institute's Command Seminar in London (see pp 5-7). Held in Trinity House and also well attended by Generation Y seafarers plus many from previous eras, the presentations directly addressed the theme of navigational competence and generated healthy discussion from the delegates. The conclusions covering technology and education were debated and agreed at the end of the seminar, have been shared with the remaining seminars in the series and will feature in the overall conclusions when the outcomes of the five seminars are summarised, published and used in the Institute's work to improve the safety of navigation. There was no doubt in older minds that Generation Y seafarers are up to the task facing them and the industry will be in safe hands – provided they are given the right education, training and time to develop experience. Their views will also inform the follow-on seminar on the maritime education and training aspects of navigational competence which will be held with the AGM 2015 in San Francisco on 11th/12th May. Well worth getting those dates and the preceding British Columbia Branch Conference about the marine environment on 7th/8th May in your diaries. 🌊



p5



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Mariners' Alerting and Reporting Scheme

MARS Report No. 266 December 2014

MARS 201462

Two large ships and one small anchorage = trouble

➔ Upon arrival at a large, busy port a laden tanker (VLCC 1) was anchored at a short term waiting anchorage. Before disembarking the pilot confirmed that only one ship was allowed to make use of this anchorage at any time. A few hours later, another tanker (VLCC 2), in ballast, anchored within the limits of the same anchorage less than two cable lengths from VLCC 1.

The Master of VLCC 1 repeatedly requested the Port Administration to require VLCC 2 to shift away from his vessel. However, none of the responsible local authorities responded to his requests. The Master decided to keep the main engine fully manned and on stand-by. They also maintained anchor watches forward and aft to monitor the swing radius and the distance between the two vessels.

Some time later the bow of VLCC 2 closely approached the stern of VLCC 1. By quickly manoeuvring with the engine and the wheel hard to port, all the while picking up the anchor, VLCC 1 managed to avoid VLCC 2's bow by about 50 metres. It was only after this that those on VLCC 2 realised the likelihood of a collision. However, they then proceeded to lower more shackles into the water, thereby increasing her swing radius.

Not long after, the stern of VLCC 2 moved towards the stern of VLCC 1. Once again the Master of VLCC 1 quickly manoeuvred his vessel to successfully prevent contact. This time, the Master of VLCC 1 decided to leave the anchorage, positioning his vessel between the anchorage's south border and the inshore traffic lane. A few hours later VLCC 2 ordered a pilot and proceeded towards one of the larger anchorages.

Lessons Learned

Notwithstanding the local practice of having only one vessel at that particular anchorage, the Port Control allowed two large vessels to anchor there hence contributing to a hazardous situation.

The Master and officers of VLCC 2 demonstrated poor judgment when more shackles were used after the first close call. This only increased the vessel's swing radius making the vessel more likely to close VLCC 1 once again. Additionally, the crew did not respond to the calls from the crew of VLCC 1 to jointly coordinate actions and move safely apart after the first close call.

One should not assume that the nearby anchored vessels keep proper anchor watches nor act according to maritime best practices.

Masters and watchkeepers must remain vigilant at anchor. It might be safer to pick up anchor and move to a safer location.

When traffic or weather make it necessary, the engine should be kept at short notice at anchor to ensure the possibility of immediate picking up the anchor.

■ **Editor's note:** Port Control is not a perfect entity – it is manned by humans. Do not assume that a situation is safe if it appears to be condoned or initiated by shore authorities. Always do your own risk assessment and, if necessary, communicate your preoccupations to authorities. See also MARS 201464 in this issue.

MARS 201463

Near miss at anchorage

➔ Own vessel was at a busy anchorage in calm weather and excellent visibility with three vessels anchored on our starboard side, the nearest at 0.7 nm. Additionally, two vessels were anchored on our port side, the nearest about 0.5 nm. The nearest vessel on the port side picked up anchor and proceeded to board a pilot. The vessel was observed to alter course to port and it appeared she would pass between own vessel and another anchored vessel. At first this manoeuvre appeared safe. But the vessel continued altering to port such that she would pass close ahead of own vessel.

Own vessel's crew called on the VHF to warn the manoeuvring vessel that she would be passing too close and to keep a greater distance from our bow. The manoeuvring vessel acknowledged, but continued to cross the subject vessel's bow at distance of less than one cable.

Master and/or pilot of the manoeuvring vessel did not consider two things:

- The tidal current could bring the vessel closer than their calculations; passing so close can cause a collision.
- The anchor chain of the anchored vessel may be stretched. Should it come into contact with the manoeuvring vessel, this could cause undesired interactions and possible contact between the vessels.

MARS 201464

Anchorage choice not good for the long haul

Edited from official report M03L148 Transportation Safety Board of Canada

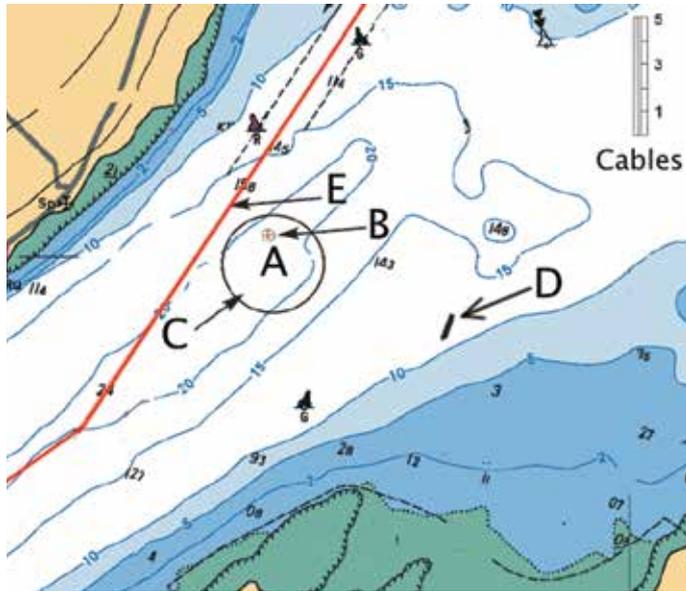
➔ The vessel, loaded to a draught of 13.5 metres, was upbound in a river estuary. Before arrival, the Master was advised the intended berth was not yet free and to anchor at a short term, ad-hoc anchorage downriver from the port. The vessel was anchored using seven shackles of chain in position A (see diagram), which gave a swing circle as indicated by C. The weather forecast for the next few days was relatively good; as per the agent's arrangement, the captain released the pilot.

The main engine, windlass and other equipment were kept on emergency standby and the position of the vessel was monitored frequently. The next day, the pilot of another vessel in transit reported to VTS that the anchored vessel was a hazard to shipping due to its proximity (B in the diagram) to the upstream end of the main fairway (E). He also indicated that the vessel had probably dragged its anchor although it was still within its swing circle. Concerned about the safety of the navigation, safety of the vessel and given that there was no pilot on board, he suggested that the vessel be moved.

This suggestion triggered several communications between VTS, the Harbour Master, and the vessel's agent. Assuming that the vessel would be docked within the next 24 hours and with no adverse short-term weather forecast, a decision was made not to move the vessel. However, the berth did not free up within 24 hours. Two days later the vessel was still at the same anchorage when the weather began to deteriorate, with

winds increasing first to 20, then 30 and more knots.

As the winds increased, and with an ebb tide running northeast at 2.5 knots the vessel began to drag anchor. The Master tried to manoeuvre the vessel but it continued to be driven by the wind and current toward the shore; during the attempts to manoeuvre the anchor was weighed. About an hour after the initial dragging the vessel's crew reported they had been pushed aground (D on diagram).



After re-floating, the damage survey showed the vessel had sustained damage to its bottom plating in way of the forepeak and ballast tanks 1, 2, and 3. Additionally, three blades of the propeller were deformed and two were fractured. Also, the port bilge keel in way of ballast tank 3 had buckled over a length of about 1 metre.

Some of the findings and lessons learned from the official report were:

- Considering the large size and deep draught of the vessel, the low keel clearance, the strength of the currents and winds and its limited room for manoeuvre, the vessel was not anchored safely in an appropriate anchorage.
- A risk-based approach was not used by various agencies to identify anchorages that pose unique risks. This in turn permitted vessels to be assigned anchorages that may not be suitable.
- Water depth to draught ratio (Wd/D) is an important factor to consider when anchoring in strong currents, as smaller ratios will cause greater forces to act on the hull (and thus may cause the vessel to drag anchor). For example, a large full-bodied vessel in a five knot current will experience nearly three times as much hydrodynamic force on its hull with a Wd/D ratio of 1.2 than had the ratio been 3.

■ **Editor's note:** When your Wd/D ratio equals 1 you are most assuredly aground.

MARS 201465

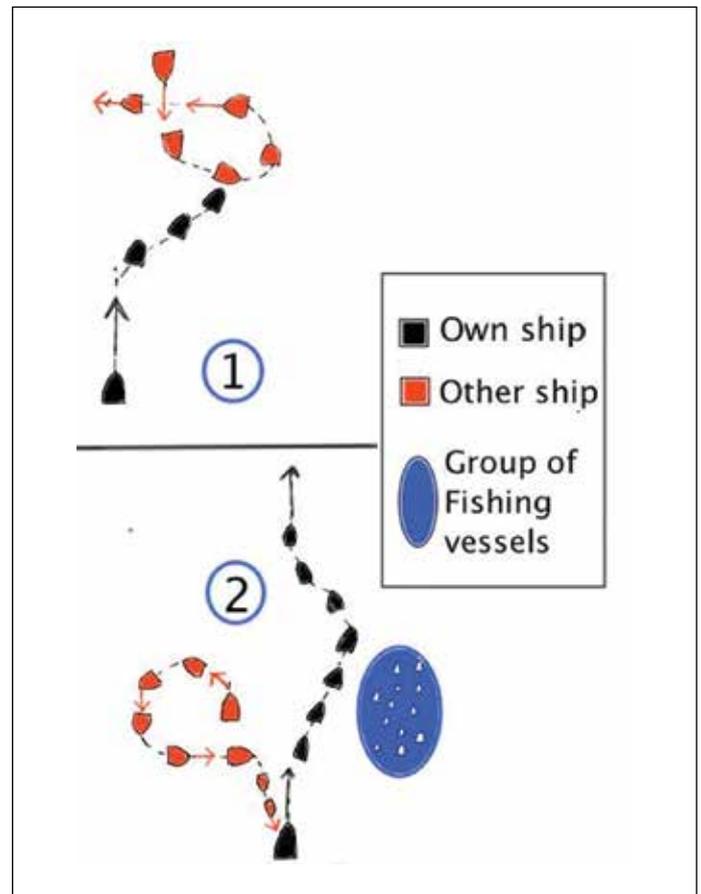
Unsafe Safety Manoeuvres

➔ Own vessel was making way in a busy strait. The OOW and the Master were on the bridge; the OOW plotted another vessel on reciprocal course passing on the starboard side with CPA of 2.5 nm. A few minutes later, the other vessel was observed to alter course to port, ostensibly to increase CPA. However, shortly thereafter this vessel was observed to continue altering to port, effectively coming around 270 degrees and transforming the meeting into a crossing situation (red ship in diagram number one). Since own vessel was now the give way vessel, appropriate action was taken by altering course to starboard.

After about 10 minutes, both vessels were now heading in the same direction (diagram number two) when the other vessel again altered to port and created a crossing situation. Own vessel had numerous fishing vessels on the starboard side and could not safely alter in that direction. The OOW noted that own vessel was the stand on and the other vessel was required to take avoiding action. As the situation developed the other vessel did not take avoiding action so own vessel altered to starboard to the extent possible given the fishing boats. Once the situation was clear the other vessel called up own vessel on VHF radio and advised that they were carrying out 'Safety Manoeuvres' and asked own vessel to stay clear.

Lessons learned:

- All the actions taken by own OOW were in compliance with R.O.R. Other vessel showed clear disregard for R.O.R and to their and own vessel's safety. Since it was open sea condition with sufficient sea room available as compared to congested waters, actions taken by own OOW were correct and in compliance with company's procedures.
- A short navigation meeting was carried out with all bridge team members to inform them of the situation. The importance of proper lookout was emphasised.



MARS 201466

Wind farm collision

Edited from official UK MAIB report 23/2013

➔ The captain of a wind farm service vessel was navigating within the wind farm as the weather worsened, with winds gusting to 40 knots, driving rain and heavy seas and swell. The captain, as was the practice once 'inside' the wind farm, had put the radar into standby mode. Trials have demonstrated that, at close range, a wind farm may



produce multiple reflected and side lobe echoes that can mask real targets. Employing radar within a wind farm is not reliable; therefore, the decision by the captain not to employ the radar while transiting the wind farm was understandable.

Although the chart plotter, with all the turbine towers clearly indicated, was operating on an appropriate scale, the captain chose not to use the system to monitor the vessel's position. Given that the safety lights of the turbines were functioning, and his familiarity with navigating in the wind farm at night, he was confident in his ability to maintain situational awareness by eye alone. However, as he attempted to navigate through the wind farm by visual means, the vessel struck a turbine tower at approximately 12 knots. The collision resulted in minor injuries to some of the crew and considerable damage to the vessel.

The investigation revealed that passage plans had not been completed for any part of the journey. Additionally, the captain was navigating visually and relied on the safety lights located on the wind turbine towers for his situational awareness. However, in this instance, the tower which the service vessel struck was not illuminated.

Lessons learned

- The captain was relying solely on the turbine safety lights and didn't make good use of the lookout and navigation equipment on board.
- There was no formal assessment of new Masters, allowing the possibility of ingrained poor working practices being passed on and perpetuated.
- Poor seamanship was evident by failing to keep a proper lookout using all available means appropriate in the prevailing circumstances. Many investigations commonly highlight an OOW having relied too heavily on navigation equipment and not 'looking out of the window'. In this case, the opposite was true as insufficient use was made of the navigation equipment available.

LOOKING BACK

MARS 201467

The Pilot's Advice (MARS redux – Report No. 93009)

On approaching the buoyed deep water channel which led to the breakwater at the entrance to the port, in daylight and good visibility, I was in radio contact with the pilot launch who reported that he was taking a pilot to a vessel anchored further out before bringing us our pilot. On receipt of this information I slowed to a speed to give bare steerage way. Eventually, however, we arrived at the buoyed channel before the pilot launch had returned to us, therefore, I altered course to proceed up the buoyed channel with still minimum power to counteract the cross-tide effect.

Once the pilot boarded he ordered 'Full Ahead' and moved into the centre of the channel. By this time the other vessel entering the port was close astern of us and rapidly overtaking our vessel. There then developed an intense discussion in the local language between my pilot and the pilot of the overtaking vessel as to who should pass through the breakwater first. Following this discussion my pilot advised me that as we were proceeding further up the harbour we should enter first and so we should maintain full speed. By this time the other vessel's bow was level with our stern and still overtaking us rapidly. The situation was allowed by both pilots to develop until the bows were level.

I was conning my vessel from the bridge front auxiliary tiller and could feel the intense interaction between the two vessels, I insisted to my pilot that we should reduce speed and allow the other vessel to proceed ahead of us. At this time the pilot of the other vessel stated clearly that my vessel should enter the breakwater first and that he had put his vessel on slow speed, we were then no more than three cables from the breakwater. The other vessel dropped rapidly astern and a dangerous situation was averted.

I think this was a case of the 'Senior' pilot on the other vessel bullying the pilot on our vessel and so causing a hazardous and highly unnecessary situation.

■ **Editor's note:** This MARS report from 1993 remains as pertinent today as it was over 20 years ago when first reported. Pilots are human beings and may be subject to personal rivalries, fatigue, misjudgments or any number of human errors. In the above case, the reporter's view that this was a case of 'bullying' may or may not be on the mark. Notwithstanding, it was a dangerous act.

Good BRM is intended to increase safety by making the bridge team a functioning unit where all members contribute and communicate. In this case the OOW was conning and could feel the vessel interaction. This in turn heightened his awareness of the dangerous situation and he kept the pilot informed of his concerns.

MARS needs you!

Reports from mariners' experiences of incidents and near-misses are one of the most valuable tools the shipping industry has to help prevent such incidents in future. But The Nautical Institute can only share these incidents if they are reported to us in the first place. www.mars.nautinst.org

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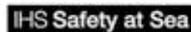
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