

MAIB

MARINE ACCIDENT INVESTIGATION BRANCH

FLYER TO THE SHIPPING INDUSTRY

Grounding of a vessel steered by her master with a pilot on board



Sea Mithril

The UK registered cargo vessel *Sea Mithril* weighed anchor at the entrance to the River Humber just before midnight on 17 February 2008. She was laden with a cargo of coal bound for Grove Wharf on the River Trent. The wind was light and there was good visibility. A pilot boarded and, following a brief exchange of information during which the pilot advised that he was not familiar with the control of the vessel's azimuth pod propulsion system, the master went below to rest leaving the chief officer with the pilot on the bridge for the start of the vessel's river passage. The pilot carried locally produced charts of the area, which were of a larger scale and showed more detail than the corresponding British Admiralty charts held on board, but he did not make them available to the master or the chief officer.

At 0215, the visibility reduced to about 20 metres and the chief officer called the master and chief engineer in accordance with the vessel's standing orders. When the master arrived on the bridge, he changed from automatic to manual steering and sat at the steering position. Apart from the master, none of the ship's crew was able to manually control the vessel's azimuth propulsion units. The pilot monitored the vessel's position using the single radar display fitted on the bridge with the chief officer assuming the role of lookout. An AB with a hand held radio was sent to the focsle head to also act as lookout.

The passage continued in very poor visibility. Shortly after 0400, as the vessel approached Flixborough Wharf on the River Trent, the pilot advised the master to reduce engine speed. Soon afterwards, the forward lookout saw the loom from the deck lights of a vessel moored on the wharf appear out of the fog. He called the bridge via his radio and informed the master in Russian that there was a ship close off the port bow. There was then a series of loud exchanges in Russian between the master, the master and the AB, during which the master further reduced the engine speed and altered course to starboard away from the lights.

By 0410, *Sea Mithril* was clear of the moored vessel but, almost immediately, the forward lookout reported the lights of a second vessel on the port bow. Again the situation was discussed by the master, the chief officer and the AB in Russian and the master manoeuvred the vessel to increase the passing distance. The pilot heard the exchanges between the master and crew, but he was not aware of their concerns over the proximity of the moored vessels, or the master's changes to the vessel's course and speed.

By the time *Sea Mithril* had cleared Flixborough Wharf, her speed had reduced to about 2.5 knots over the ground and she was being swept bodily towards the left-hand bank of the river by the flood tide. The pilot initially advised the master to steer to starboard to negotiate the next bend in the river but when he noticed the vessel's speed indicated on the radar display, he advised the master to 'speed up' and to 'come more to starboard'. Reed beds were then seen to port, and a few moments later the vessel momentarily touched the river bottom with her stern near the left hand river-bank.

The master quickly put the azimuth controls to full ahead and to starboard. The vessel turned sharply and began to head across the river towards shallows in the middle of the river, and although the master put the engine controls to port, the vessel ran gently aground at 0425. The pilot advised that the vessel would re-float without difficulty on the rising tide but this advice was ignored by the master who applied full astern power. After several minutes, the master was informed by the chief engineer in Russian that water was spraying from the port azimuth oil vent in the engine room. The pilot was not made aware of this problem.

The vessel re-floated at 0447 and, with her engines operating at full astern, she slewed back across the river and again momentarily grounded stern first before control was regained and she was berthed alongside.

Safety Lessons

1. Pilotage is one of the oldest professions in the world, and is also one of the most important in ensuring maritime and environmental safety. However, no pilot, no matter how knowledgeable or experienced, is infallible or invincible yet many masters frequently expect pilots to navigate their vessels with little or no assistance from them or their crew. Equally, many pilots do not demand adequate support is provided. While such reliance on pilots usually results in a safe passage, this will not always be the case, particularly in restricted visibility where communications and teamwork are vital. On this occasion, the lack of support and teamwork was highlighted by a number of factors:
 - The pilot was the only person monitoring the vessel's position.
 - The master was the helmsman and was therefore unable to maintain a command oversight of the situation or liaise effectively with the pilot.
 - Communication between the pilot and the master was poor; the master was not aware of the proximity of the moored vessels and the pilot was not aware of the manoeuvring undertaken by the master or the problem with the port azimuth unit.
 - The initial exchange of information between the master and the pilot failed to highlight the potential problems during the passage or the limitations of the bridge organisation in restricted visibility.
 - The ship's crew had not adequately planned the passage from the anchorage to the vessel's intended berth.
 - The more detailed, larger scale chart of the area was not made available to the bridge team.
2. When manoeuvring during mooring or other operations in close proximity to other vessels or dangers, it is not unusual for masters to steer vessels themselves in hand steering. This is necessary to ensure sufficient control is maintained. However, other situations which require hand steering to be used, such as restricted visibility, also tend to require a master's undivided attention and skills of command, which is not possible if he is the helmsman. It is therefore essential that all vessels have sufficient crew, other than the master, who are competent in the use of the steering and propulsion systems fitted, regardless of their complexity.

Further details on the accident and the subsequent investigation can be found in the MAIB's investigation report, which is posted on its website:

www.maib.gov.uk

Alternatively, a copy of the report will be sent on request, free of charge.

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