



4.5

Collision due to miscommunication when approaching port

Vessel A, a capesize bulk carrier, was approaching port while fully loaded with iron ore. It had an overall length of 325 metres, a breadth of 52.5 metres and drafts of 17.8 metres. The water depth in the fairway of the port was more than 18 metres. However, the water depth to the north and south of the fairway was less than 17 metres. Vessel A was constrained by her draught and had the correct lights displayed. The fairway was about 420 metres in breadth.

Pilot briefing carried out

The pilot had embarked, and three tugs were lining up to connect to the vessel. The Master and pilot on vessel A had carried out a pilot briefing and the pilot had received a copy of the pilot card. It was evening with clear skies and light winds. Vessel A had a speed of 7 knots and a course of 310 degrees and both steering pumps were switched on. All navigation equipment was working. The vessel was in manual steering mode. Both X-band and S-band ARPA radars were set to north up and true motion. The range was switched between 3 NM and 6 NM.

On the bridge of vessel A were the Master, the Third Officer who was OOW, the pilot and the helmsman. According to the wheelhouse poster the minimum manoeuvring speed for vessel A was 5 knots. In ballast condition, it would take it about 12 minutes to stop if the engines were put from full ahead to full astern. If vessel A was sailing at 15 knots in deep water, it would take about 153 seconds to alter course by 90 degrees at hard-over angle.

C -30 minutes: Vessel B outbound from the port was acquired on the ARPA. It was a panamax bulk carrier with a length overall of 225 metres, breadth of 32.3 metres and was about 10 degrees on the starboard bow, 6 NM away. The ship was on a course of 125 degrees making about 10 knots, giving it a course almost reciprocal to the course of vessel A. Vessel B had a CPA of 0.5 NM and was shaping up to pass down the starboard side of vessel A. Those in vessel A observed the starboard green sidelight and masthead lights on vessel B. The vessel had a pilot on board.

C -14 minutes: Vessel B was about 3 NM distant. Behind vessel B there was a third outbound vessel. Vessel B was still slightly on the starboard bow of vessel A. Vessel B was outbound and navigating in the waters outside and to the north of the fairway.

C -12 minutes: The pilot on vessel A talked to the pilot of vessel B in the local language, and was advised that vessel B's pilot had just disembarked, before which he had told the Master of vessel B that he should pass vessel A green to green. Vessel A's pilot ordered the tugs to standby as they were approaching the buoyed fairway.

C -11 minutes: The pilot on vessel A called vessel B on the VHF and asked to pass green to green, which an officer on vessel B agreed upon. Vessel A was now on a course of 300 degrees and making about 8 knots. At about the same time, the VTS called vessel B and informed it that vessel A was inbound. Vessel B's officer acknowledged that they were aware of vessel A and that they would pass green to green.

C -9 minutes: The pilot ordered the first tug to make fast on the stern, the second on the starboard side and the third to follow the vessel on the port side. Vessel B was at a distance of 2.3 NM.

C -2 minutes: When vessel B was about 0.5 NM off the starboard bow it started to alter to starboard and towards vessel A and the red side light on B could be seen. The pilot on vessel A was alarmed by vessel B and called on the VHF and yelled 'green to green vessel B' and at the same time ordered hard to port and stop engine. An officer on vessel B replied, 'too close have to pass port to port' and continued to alter to starboard.

Collision: The pilot on vessel A ordered hard to starboard and full astern but it was too late, and the vessels collided. Vessel B's port side shell plating was torn open from cargo hold 2 to cargo hold 6.

COLREGs

Rule 3 - General definitions:

(h) The term 'vessel constrained by her draught' means a power-driven vessel which, because of her draught in relation to the available depth and width of navigable water, is severely restricted in her ability to deviate from the course she is following.

Vessel B should have stayed clear of vessel A as she was constrained by her draught.

Rule 8 - Action to avoid collision:

(a) Any action to avoid collision shall be taken in accordance with the Rules of this Part and shall, if the circumstances of the case admit, be positive, made in ample time and with due regard to the observance of good seamanship.

(b) Any alteration of course and/or speed to avoid collision shall, if the circumstances of the case admit, be large enough to be readily apparent to another vessel observing visually or by radar, a succession of small alterations of course and/or speed should be avoided.

(c) If there is sufficient sea-room, alteration of course alone may be the most effective action to avoid a close-quarters situation provided that it is made in good time, is substantial and does not result in another close-quarters situation.

Reviewing the radar screenshots recorded by the VDR on vessel A shows that the vessels were positioned to make a safe 'starboard to starboard' passing had they kept their courses. At this point there was no risk of collision. However, just before the vessels began to pass each other, vessel B called 'port to port' on the VHF and altered starboard to cross ahead of vessel A. The distance between the two vessels was about 0.5 NM when vessel B called port to port. The sudden starboard alteration by vessel B changed a safe starboard-to-starboard passing into a risk of collision. Vessel B caused a risk of collision to arise.

Rule 9 - Narrow channels:

(a) A vessel proceeding along the course of a narrow channel or fairway shall keep as near to the outer limit of the channel or fairway which lies on her starboard side as is safe and practicable.

(d) A vessel shall not cross a narrow channel or fairway if such crossing impedes the passage of a vessel which can safely navigate only within such channel or fairway. The latter vessel may use the sound signal prescribed in Rule 34(d) if in doubt as to the intention of the crossing vessel.

Vessel A was sailing on the starboard side in the fairway/narrow channel with constrained draught.

Vessel B was outside of the fairway and then suddenly altered to starboard at a distance of 0.5 NM and tried to cross ahead of vessel A, which is in violation with (d).

Rule 18 - Responsibilities between vessels:

(a) A power-driven vessel underway shall keep out of the way of:

(ii) a vessel restricted in her ability to manoeuvre;

(d)

(i) Any vessel other than a vessel not under command or a vessel restricted in her ability to manoeuvre shall, if the circumstances of the case admit, avoid impeding the safe passage of a vessel constrained by her draught, exhibiting the signals in Rule 28.

Vessel B should stay clear of vessel A.

What can we learn?

- Vessel A was a huge vessel, constrained by her draught and was assisted by tugboats which made it difficult for her to manoeuvre. To enter the fairway, vessel A needed to be lined up at an early stage. The agreement between the two vessels was to pass 'starboard to starboard'. This meant that vessel B would keep sailing outside and to the north of the fairway (B was already sailing outside the fairway) whilst A would proceed in the fairway. If vessel B had not altered to starboard there would not have been a collision.
- The pilots on vessels A and B made a verbal agreement to pass 'starboard to starboard'. This was also confirmed later between the pilot on vessel A and an officer on vessel B. The VTS was also in contact with vessel B and informed them that vessel A was an incoming vessel. They also did not raise any concerns about the 'starboard to starboard' passing.
- Collisions between vessels in a narrow channel are one of the few scenarios in collisions between two vessels underway where one vessel can be held solely at fault for not maintaining position on its starboard side of the fairway. These are issues that Masters need to be aware of.