Collision in restricted visibility

Vessel A, a container vessel, was approaching the pilot station at full speed which was 17 knots and on a course of 280°. It was in the afternoon there was restricted visibility due to fog.

On the bridge was the 2nd Officer who was the OOW and the Master. Two ARPA radars were being used alternatively between 6M, 3M and 1.5M and both officers were monitoring the vessel's progress on the radar.

The Master could see a target on the radar and started to plot it as vessel B. The vessel was on the port bow, 4M away with a CPA of 0.2M and a speed of 6 knots and also maintaining a course of 280°. The master was monitoring the vessel on the radar and started the fog signal as well.

The master on A decided to open up the course a bit and altered to starboard to 290° to increase the CPA. At this time vessel B was about 0.3M away and suddenly altered course to starboard. The Master on A noticed this and ordered hard to starboard and stopped the engine.

It was too late to avoid the collision and A hit B on its starboard side about midships. ■

Discussion

Go to the “File“ menu and select “Save as...“ to save the pdf-file on your computer.

You can place the marker below each question to write the answer directly into the file.

When discussing this case please consider that the actions taken at the time made sense for all involved. Do not only judge, but also ask why you think these actions were taken and could this happen on your vessel?

1. What were the immediate causes of this accident?

2. Is there a risk that this kind of accident could happen on our vessel?

3. How could this accident have been prevented?

4. What action would you as the OOW or Master have taken after you had plotted vessel B?

5. Is 17 knots a safe speed for a container vessel in restricted visibility?

6. What do you think is an acceptable CPA in this situation?

7. Would you have stopped the engine at the same time as altering hard to starboard?

8. What sections of our SMS would have been breached if any?

9. Does our SMS address these risks?

10. How could we improve our SMS to address these issues?

11. What do you think was the root cause of this accident?

12. Is there any kind of training that we should do that addresses these issues?

Issues to consider

Discuss the following COLREGS rules and also what other COLREGS rules would apply.

Rule 5 Look-out

Every vessel shall at all times maintain a proper look-out by sight and hearing, as well as by all available means appropriate in the prevailing circumstances and conditions so as to make a full appraisal of the situation and of the risk of collision.

Rule 6 Safe Speed

Every vessel shall at all times proceed at a safe speed so that she can take proper and effective action to avoid collision and be stopped within a distance appropriate to the prevailing circumstances and conditions.

Rule 19 Conduct of vessels in restricted visibility

(b) Every vessel shall proceed at a safe speed adapted to the prevailing circumstances and conditions of restricted visibility. A power-driven vessel shall have her engines ready for immediate manoeuvre.

(d) A vessel which detects by radar alone the presence of another vessel shall determine if a close-quarters situation is developing and/or risk of collision exists. If so, she shall take avoiding action in ample time.