

3. Case Studies of Collision Accidents between Vessels Resulted in Fatalities or Missing Persons

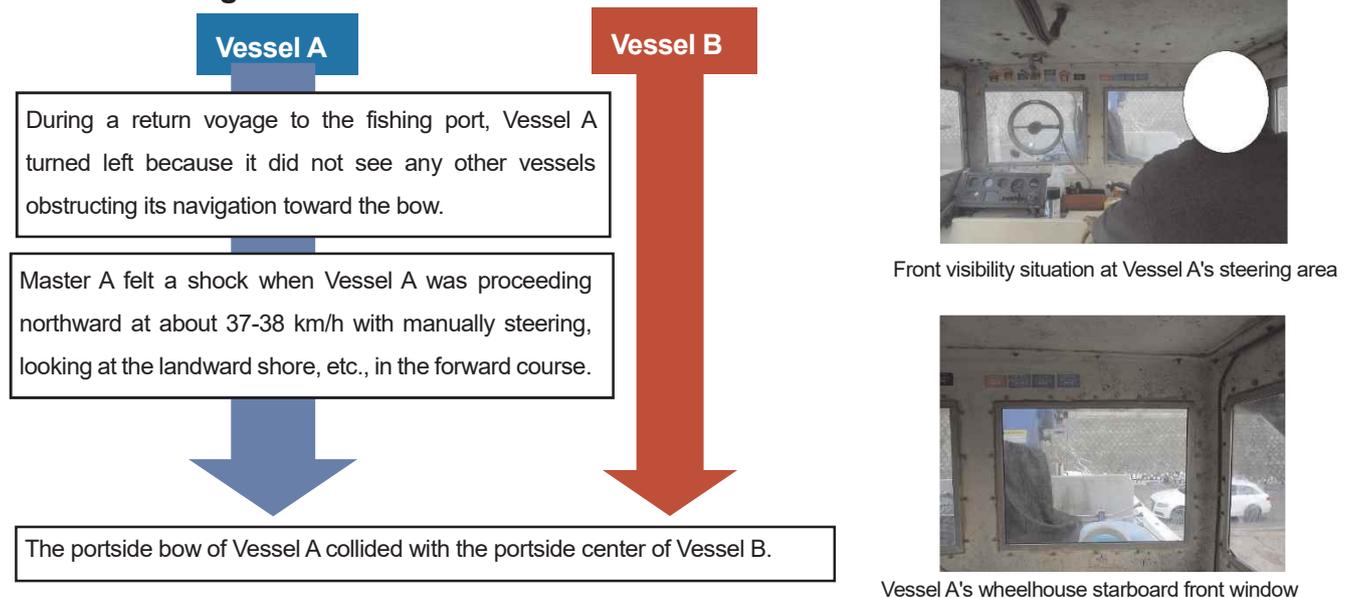
This chapter presents cases of collision accidents with fatalities or missing persons. Please take a look at the circumstances surrounding the accident, the cause of the Probable Causes, and safety Actions.

1 A fishing vessel on a return voyage was navigating with a blind spot toward the bow, and collided with another fishing vessel underway.

Summary of the Accident: Vessel A (fishing vessel, 9.55 tons, one-man crew) was proceeding north and Vessel B (fishing vessel, 2.17 tons, one-man crew) was proceeding west (estimated). The two vessels collided at around 07:30.

Master B died of thoracic aortic dissection.

Events Leading to the Accident



- When Master A stood in front of the helm wheel on the starboard side of Vessel A's wheelhouse, which is the usually maneuvering location, and looked at the forward course, **a wide area in front of the portside was blinded by the crane prop portside.**
- Master A did not accurately understand the blind spot created by the crane prop, and recognized after the accident that **even if he stood at the maneuvering area and kept watch on the forward course as usual, a blind spot would be created in the range of approximately 20 to 30 degrees toward the portside bow.**

Probable Causes : It is probable in this accident that, while Vessel A was proceeding north, Master A **thought that there were no vessels in the forward course that would interfere with navigation**, and continued to **navigate with a blind spot** toward the portside bow, and was unaware that the Vessel was approaching Vessel B, which caused the collision between the portside bow of Vessel A and the portside center of Vessel B.

In order to Prevent Recurrence

- After this accident, Master A decided to **assign two persons to watch over Vessel A in order to eliminate a blind spot** caused by the crane in the forward way watch.
- The operator should be on watch **with an accurate understanding of the blind spots** created by the structures on deck.
- When a blind spot caused toward the bow of the vessel, the operator should **keep a lookout to compensate for the blind spot** caused by constantly swinging the bow to the left or right, or by moving from the maneuvering location whenever possible, rather than keeping a lookout from a single location.

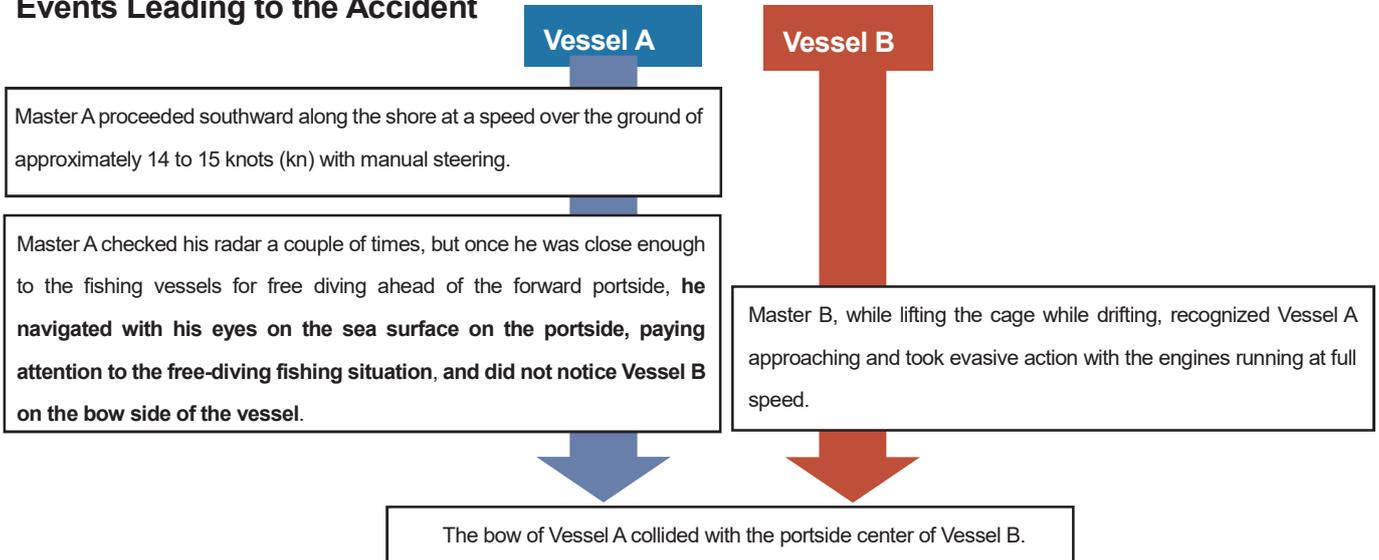
The investigation report of this case is published on the Board's website (issued on November 26, 2020)

https://www.mlit.go.jp/jtsb/ship/rep-acc/2020/MA2020-10-24_2019hs0139.pdf

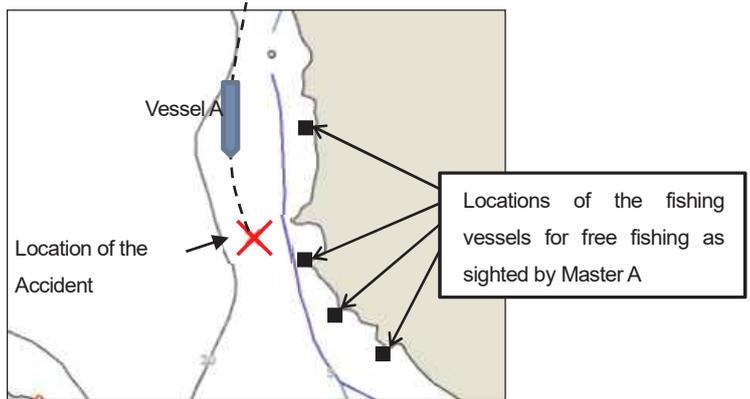
2 A fishing vessel continues to navigate with attention to fishing conditions and collides with a drifting fishing vessel

Summary of the Accident : Vessel A (fishing vessel, 9.7 tons, two crewmembers) was proceeding south and Vessel B (fishing vessel, 2.0 tons, one-man crew) was drifting. The two vessels collided at about 15:30. Master B sustained a left renal artery injury, resulting in died from exsanguination.

Events Leading to the Accident



Maneuvering situation of Master A (reproduced)



Schematic diagram of the vicinity of the accident

Probable Causes : It is probable that, Vessel A was collided with Vessel B because while the vessel A proceeding south, Master A **continued to navigate** visually **observing the situation of free-diving fishing** near the portside, and **did not notice Vessel B on the side of bow**, It is probable that while Vessel B was lifting its baskets while drifting, Master B saw Vessel A approaching and took evasive action with full ahead, but Vessel B collided with Vessel A despite this action.

In Order to Prevent Recurrence

• Keep a proper watch on the surroundings at all times, because **paying too much attention to a particular object may cause you to miss other vessels or objects in the surroundings.**

The investigation report of this case is published on the Board's website (issued on June 25, 2020)
https://www.mlit.go.jp/jtsb/ship/rep-acci/2020/MA2020-5-44_2019ns0092.pdf

3 Both vessels collided while navigating with keeping course and speed without noticing the other vessel

Summary of the Accident : Vessel A (car carrier, 58,250 tons, 22 crewmembers) was moving east-northeast, while Vessel B (fishing vessel, 19 tons, nine crewmembers) was moving southeast. At about 09:44, the two vessels collided.

Events Leading to the Accident

Vessel A

Third Navigation Officer A (Third Officer A, sole lookout duty) encountered a shower and the visibility deteriorated to the extent that the bow mast was only slightly visible.

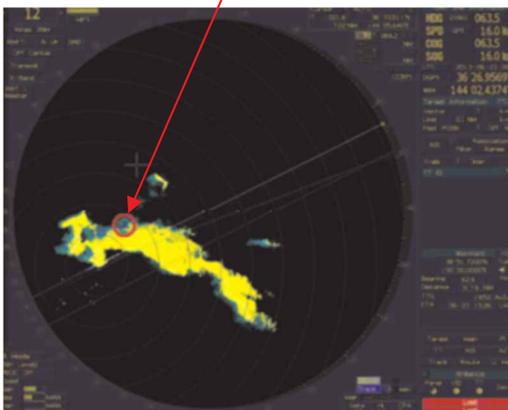
Third Officer A **thought that there were no other vessels in the surroundings** as he didn't recognize any images of other vessels on the radar screen affected by the rainfall, there was no information display of other vessels by AIS, and the vessel was on an ocean voyage.

Vessel B

Ordinary Seaman B (sole lookout duty) did not recognize any images of other vessels ahead of the beam on the radar screen in the wheelhouse.

Ordinary Seaman B went up to the lookout room and sat on the floorboard with his back against the rear wall, keeping watch from about 45° of the forward starboard **with the rear wall creating a blind spot.**

Vessel B's Position (Estimate)



Radar image of Vessel A

(Images of other vessels are not recognized)

The bow of Vessel A collided with the starboard center of Vessel B.

- Third Officer A did not notice Vessel B due to **the lack of images of Vessel B on the radar screen affected by the rainfall.**
- Ordinary Seaman B was on visual watch in the lookout room with a blind spot caused by the wall, and did not notice Vessel A because **Vessel A was approaching from approximately 83° on the starboard bow, which was a blind spot caused by the wall.**
- Ordinary Seaman B could see the radar screen, but had no authority to adjust the radar.
- Both vessels **were not conducting acoustic signaling** in the restricted visibility conditions.

Probable Causes: It is probable that the bow of Vessel A collided with the starboard center of Vessel B when Vessel A was proceeding east-northeast and Vessel B was proceeding south east, because either Third Officer A or Ordinary Seaman B **did not notice the other vessel**, because the visibility was restricted due to a shower and they navigated with keeping their course and speed.

In Order to Prevent Recurrence

- When a restricted visibility condition occurs, the management company of vessel A should **increase the number of bridge duty personnel** and familiarize the crew of the operating vessels with **the acoustic signals to be made** during the restricted visibility condition.
- In the event of a restricted visibility condition, the owner of Vessel B should **report to the master and reinforce the personnel on bridge duty**, as well as **establish a system for acoustic signaling** in the restricted visibility conditions on the operating vessel. It is also desirable to **equip** the operating vessel **with an AIS.**

The investigation report of this case is published on the Board's website (issued on February 26, 2015)

https://www.mlit.go.jp/jtsb/eng-mar_report/2015/2013tk0018e.pdf