

Case 3

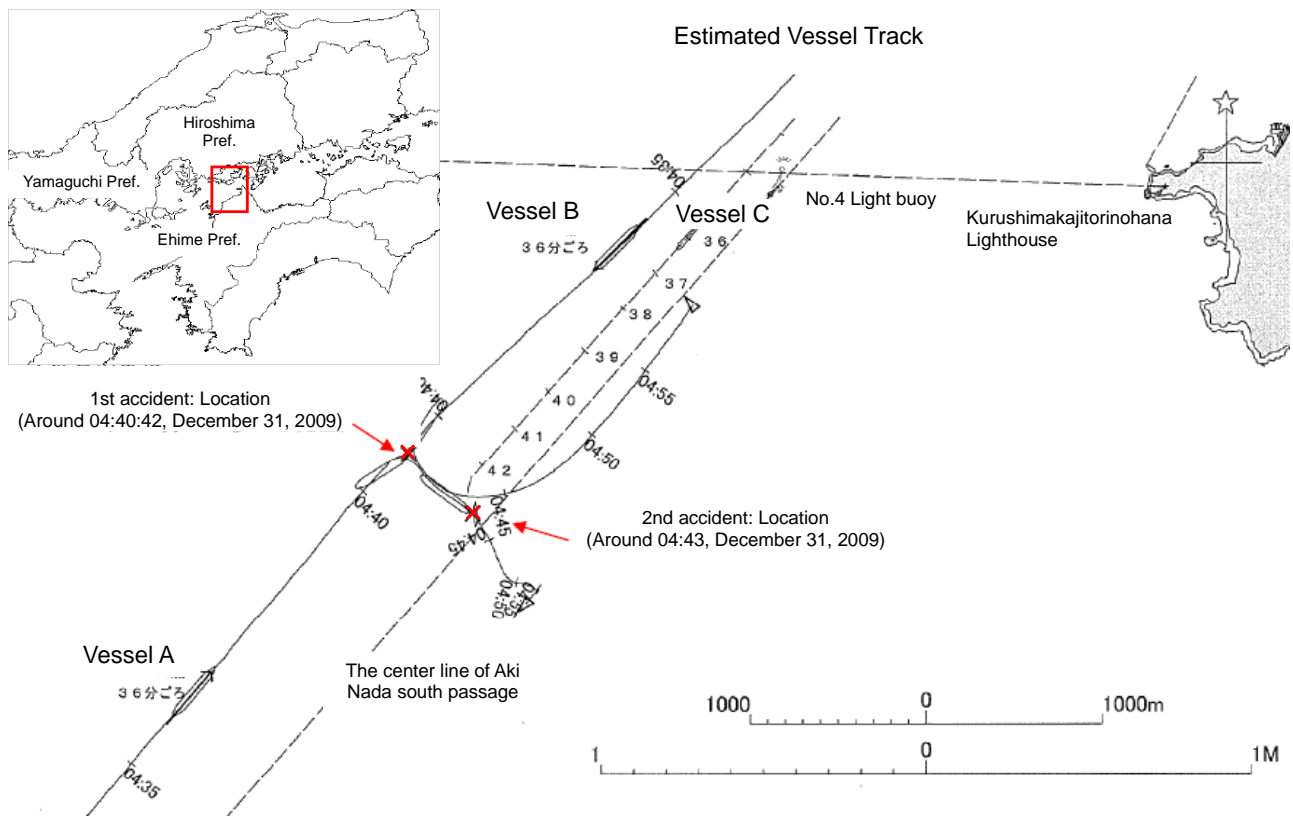
After a collision between Vessel A and Vessel B caused by a failure to keep a lookout, Vessel A collided again with Vessel C while Vessel A was turning to starboard due to her residual momentum

Summary (1st accident): The Vessel A, manned with the Master A and 19 crew members, was proceeding northeastward off the southwest of Kajitorino Hana and the Vessel B, manned with the Master B and 18 crew members, was proceeding southeastward in the same area. The two vessels collided with each other at around 04:40:42, December 31, 2009.

The port bow of the Vessel A was breached and port stern was dented. The bow of the Vessel B was cracked and dented and the starboard stern was dented. But no fatality or injury was caused on both vessels.

Summary (2nd accident): The Vessel A was proceeding southeastward after colliding with the Vessel B around the location of the 1st accident and the Vessel C, manned with the Master C and 3 crew members, was proceeding southwestward behind the port side of the Vessel B. The two vessels collided with each other at around 04:43.

The Vessel A sustained damage in the bow, and the Vessel C sustained the dent damage in her starboard mid-section. But no fatality or injury was caused on both vessels.



Events Leading to the Accident

Vessel A (chemical tanker)	Vessel B (cargo ship)	Vessel C (cargo ship)
Gross tonnage: 9,149tons L×B×D:133.00m×22.72m×12.10m Flag state: Republic of Malta Engine: Diesel engine Output: 4,891kW	Gross tonnage: 8,651tons L×B×D: 137.30m×21.00m×10.70m Flag state: Republic of Korea Engine: Diesel engine Output: 5,148kW	Gross tonnage: 499tons L×B×D: 75.50m×12.30m×6.87m Flag state: Japan Engine: Diesel engine Output: 735kW
Around 10:00, December 30	Around 17:30, December 30	Around 23:35, December 30
Vessel A departed the Ulsan Port, Republic of Korea, heading for the Kobe Section of Hanshin Port.	Vessel B departed the Kobe Section of Hanshin Port, heading for Gwangyang Port, Republic of Korea.	Vessel C departed Sakaide Port, Sakaide City, Kagawa Pref., heading for Kanmon Port.
December 31	December 31	
Vessel A sailed on a course of approximately 030° under automatic steering, on the right side of the line (center line) connecting the lighted buoys set up on the recommended route in the southern part of Aki Nada.	After setting out from the western entrance to the Kurushima Kaikyo Traffic Route, Vessel B sailed on a course of approximately 225° on the right side of the center line.	

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Around 04:03, December 31

Officer A passed to the southeast of the Aki Nada south passage No.2 light buoy and reached the waypoint to change course (*7), but he did not do so and remained on the same course.

After passing the No.2 light buoy, Officer A began to turn to starboard.

Around 04:11

Deck Officer A crossed the center line and sailed on the left side of the center line on a course of approximately 034°.

Around 04:25

When Officer A checked the radar, he mistakenly assumed that Vessel B was located on the port bow and proceeding southwestward along the center line, and that Vessel A could pass Vessel B on her port side. After this, Officer A did not keep a lookout for Vessel B, and sailed while maintaining the same course and speed.

Vessel B was actually located on the starboard bow of Vessel A.

Around 04:32

Officer A turned to starboard to a course of approximately 041°, and then sailed on a course of 038 - 042°.

Due to the course change, Vessel B was approaching Vessel A crossing ahead of Vessel A to her port side so as to involve the risk of collision with Vessel A. However, Officer A did not notice this situation.

About 30 seconds before a collision

Officer A saw the mast lights and both sidelights of Vessel B, which was at approximately 400m on the bow, and then steered to hard starboard.

Around 04:40:42

Vessel A and Vessel B collide

After the collision, Vessel A stopped her engine but continued to turn to starboard due to her forward residual momentum.

Around 04:31, December 31

Officer B detected Vessel A on the starboard bow using the radar and saw her port sidelight. He believed that Vessel B was in a crossing situation with Vessel A and changed her course approximately 2° to starboard.

At this time, it is probable that Vessel A was actually located on the port bow of Vessel B and was displaying her starboard sidelight to Vessel B. However, Officer B did not make a full appraisal of the situation between Vessel B and Vessel A, mistakenly assuming that Vessel B was the give-way vessel in a crossing situation, and then turned to starboard.

Since Officer B turned Vessel B to starboard, he assumed that Vessel A would be sailing to cross ahead of Vessel B to her port side. Then, Officer B sailed maintaining the same course and speed without keeping a lookout for Vessel A.

Since Vessel B was going to overtake Vessel C, which was sailing ahead of Vessel B's port side, on her starboard side, after this, Officer B was only paying attention to Vessel C's movement.

Around 04:36

Officer B overtook Vessel C. However, he did not notice that Vessel A was crossing ahead of Vessel B to her starboard side, and that she was approaching so as to involve a risk of collision.

About 30 seconds before a collision

Officer B steered to port, and engaged the engine to full astern.

Weather and sea conditions

Weather: Fair Wind direction: WNW
Wind force: 4 Visibility: Fair
Tide: Nearly low tide
Current of the Kurushima Kaikyo: during turning of tide from northward to southward

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*7 The direction of the standard course from the Aki Nada south passage No.1 light buoy to the No.2 light buoy is 029°, and the direction from the No.2 light buoy to the No.4 light buoy is 041°.

Officer C sailed along the right side of the center line, on a course of approximately 221°, under automatic steering.

Around 04:34

Officer C passed the Aki Nada south passage No.4 light buoy leaving a gap of approximately 0.1m to her port side.

Vessel C was about to pass Vessel A, which was on the starboard bow, on her starboard side.

Around 04:35

Although Officer C saw Vessel B overtaking Vessel C on her starboard side, he did not predict that there would be any risk of her approaching Vessel A.

Around 04:42

Officer C saw the 2 port sidelights and multiple white lights of Vessel A and Vessel B ahead to starboard, and wondered that those lights were approaching Vessel C while moving to port side.

Officer C did not notice that Vessel A and Vessel B had collided.

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Vessel A proceeded southeastward parallel to Vessel B, which was turning to port, and sailed toward the path ahead of Vessel C, which was sailing to the port aft of Vessel B.

Since the 2 port sidelights and multiple white lights were drawing near ahead to starboard, officer C steered to port approximately 20° in order to widen the distance to them, and then steered further to hard port. At this moment, officer C noticed that Vessel A and Vessel B had collided.

Although he was able to avoid a collision with Vessel B, he finally turned approximately 70° to port from his original course.

Around 04:43

Vessel A and Vessel C collide

Condition of lookout and vessel operation

1st accident

Vessel A > Due to a lack of sleep and accumulation of fatigue, Officer A's concentration was diminished and he was not paying attention to keeping a lookout ahead.

> When Officer A checked the radar, Vessel B was actually on the starboard bow of Vessel A, but Officer A mistakenly assumed that Vessel B was on the port bow proceeding southwestward, and that Vessel A could pass Vessel B on her port side. After this, Officer A was not keeping a lookout for Vessel B.

Vessel B > It is probable that Officer B detected Vessel A on the starboard bow by using radar, and turned to starboard believing that Vessel B was in a crossing situation with Vessel A, but in fact, Vessel A was located on the port bow of Vessel B at that time.

> Since Officer B turned Vessel B to starboard, he assumed that Vessel A would be sailing to cross ahead of Vessel B to her port side. Then, he was not keeping a lookout for Vessel A.

> Since Officer B was going to overtake Vessel C, which was sailing ahead of Vessel B's port side, on Vessel C's starboard side, Officer B was only paying attention to Vessel C's movement.

2nd accident

Vessel A > After colliding with Vessel B, Vessel A stopped her engine but continued to turn to starboard due to her residual momentum.

Vessel C > Officer C saw the 2 port sidelights and multiple white lights of both Vessel A and Vessel B and assumed that Vessel A and Vessel B had sailed in Vessel C's starboard bow direction; therefore, he wondered that those lights were approaching Vessel C while moving to port direction. Officer C did not notice Vessel A and Vessel B had collided with each other. Then, since those lights were drawing near ahead to starboard, he steered to port approximately 20° to widen the distance to them, and then steered further to hard port.

Probable Causes (1st): It is probable that the 1st accident occurred involving a collision of two vessels, Vessel A and vessel B, because both Vessel A and Vessel B were not keeping a lookout while Vessel A was proceeding northeastward on the left side of the center line of the Aki Nada south passage and Vessel B was proceeding southwestward on the right side of the center line of the Aki Nada south passage at night-time off the southwestern coast of Kajitorinohana.

It is somewhat likely that the reason why Vessel A was not keeping a lookout was that Officer A had mistakenly assumed that Vessel A could pass by Vessel B on her port side.

It is somewhat likely that the diminished concentration of Officer A and his lack of attention paid to keeping a lookout ahead, caused by a lack of sleep and accumulation of fatigue, may have contributed to the occurrence of this accident.

It is probable that the reason why Vessel B was not keeping a lookout was that when Officer B first saw Vessel A, he did not make a full appraisal of the situation of Vessel B with Vessel A and changed Vessel B's course 2° to starboard, assuming that Vessel A would be sailing to cross ahead of Vessel B to her port side.

Probable Causes (2nd): It is probable that the 2nd accident occurred involving collision of Vessel A and vessel C, because Vessel A sailed toward the path ahead of Vessel C while Vessel A was proceeding southeastward turning to starboard due to her residual momentum after the collision with Vessel B and Vessel C was proceeding southwestward,.

In order to Prevent Recurrence

- > Vessels sailing along the recommended route should sail on the right side of the center line of the route.
- > Keep a proper lookout by sight and using radar and other available means.

The investigation report of this case is published on the Board's website (issued on January 27, 2012).

http://www.mlit.go.jp/jtsb/ship/rep-acc/2012/MA2012-1-3_2011tk0019.pdf

(This report is a translation of the Japanese original investigation report. The text in Japanese shall prevail in the interpretation of the report.)