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

<table>
<thead>
<tr>
<th>Vessel A (chemical tanker)</th>
<th>Vessel B (cargo ship)</th>
<th>Vessel C (cargo ship)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross tonnage: 9,149tons</td>
<td>Gross tonnage: 8,651tons</td>
<td>Gross tonnage: 499tons</td>
</tr>
<tr>
<td>L×B×D: 133.00m×22.72m×12.10m</td>
<td>L×B×D: 137.30m×21.00m×10.70m</td>
<td>L×B×D: 75.50m×12.30m×6.87m</td>
</tr>
<tr>
<td>Flag state: Republic of Malta</td>
<td>Flag state: Republic of Korea</td>
<td>Flag state: Japan</td>
</tr>
<tr>
<td>Engine: Diesel engine</td>
<td>Engine: Diesel engine</td>
<td>Engine: Diesel engine</td>
</tr>
<tr>
<td>Output: 4,891kW</td>
<td>Output: 5,148kW</td>
<td>Output: 735kW</td>
</tr>
</tbody>
</table>

Around 10:00, December 30
- Vessel A departed the Ulsan Port, Republic of Korea, heading for the Kobe Section of Hanshin Port.

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.

Around 17:30, December 30
- Vessel B departed the Kobe Section of Hanshin Port, heading for Gwangyang Port, Republic of Korea.

December 31
- 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.

Around 23:35, December 30
- Vessel C departed Sakaide Port, Sakaide City, Kagawa Pref., heading for Kannon Port.
After passing the No.2 light buoy, Officer A began to turn to starboard.

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.

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

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.

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

Vessel A and Vessel B collide

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

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.

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

About 30 seconds before a collision
Officer A turned to starboard to a course of approximately 041°, and then sailed on a course of 038° - 042°.

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.

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

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

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.

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.

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


*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°.
Vessel A and Vessel C collide

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 northeasterward on the left side of the center line of the Aki Nada south passage and Vessel B was proceeding southwesterward 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 southwesterward.

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