

Fishery Patrol Ship Hsun Hu No.9 and Semi-Container Ship Ta Yang Major Marine Occurrence

Executive Summary

At approximately 0418 hours on December 13, 2023, the Taiwanese-registered fishery patrol ship Hsun Hu No.9 (gross tonnage 1859) collided with the Taiwanese-registered semi-container ship Ta Yang (gross tonnage 2496) approximately 4 nautical miles south of Qimei Island, Penghu County, Taiwan. There were no casualties or environmental pollution resulting from this occurrence.

In accordance with the Taiwan's Transportation Occurrence Investigation Act and the Casualty Investigation Code of the International Maritime Organization, the TTSB is an independent transportation occurrence investigation agency responsible for conducting this investigation. The investigation team also included members from the Maritime and Port Bureau of the Ministry of Transportation and Communications, the Coast Guard Administration (CGA) under the Ocean Affairs Council, and the Ta Yang Shipping Co., Ltd. (the ship management company).

After comprehensive investigation and analysis of the factual data, a total of 6 findings and 5 safety recommendations were obtained.

The findings related to probable causes are as follows:

1. During its mission, Hsun Hu No.9 was patrolling in a north-south direction in the waters south of Qimei Island, Penghu County. While maneuvering to change direction, the on-duty personnel in the bridge failed to observe the movements of nearby vessels, maintain proper lookouts, or effectively use

navigational equipment. Consequently, they did not detect that Ta Yang had entered the turning area of Hsun Hu No.9, leading to a collision where the bow of Hsun Hu No.9 collided with the starboard side of Ta Yang.

2. The on-duty personnel in the bridge on Ta Yang noticed Hsun Hu No.9 ahead and took evasive actions despite being the stand-on vessel. Although Hsun Hu No.9 passed ahead of Ta Yang, it remained in the vicinity, yet Ta Yang did not maintain continuous monitoring. When Hsun Hu No.9 was 0.9 nautical miles off Ta Yang's starboard side, it initiated a port turn to reverse course, reducing the distance between the two vessels. In the four minutes leading up to the collision, the on-duty personnel in the bridge on Ta Yang were unable to detect the course change of Hsun Hu No.9 and did not take any collision avoidance measures, resulting in its starboard side being struck by Hsun Hu No.9.

The findings related to risk are as follows:

1. Although the Coast Guard Administration has established training systems and subject matter for personnel at various stages of vessel operations, the on-duty personnel in the bridge of Hsun Hu No.9 were still unfamiliar with the use of navigational equipment such as radar and the Electronic Chart Display and Information System (ECDIS). As a result, they were unable to effectively utilize these devices to assist with navigation, lookout, and collision avoidance, and did not demonstrate the full effectiveness of their training.
2. Although Hsun Hu No.9 did not activate its Automatic Identification System (AIS) broadcast function due to the nature of its official duties, from the perspective of maritime safety, vessels in the vicinity had difficulty detecting its navigation status and intentions. This situation may increase the risk of a collision with other vessels.

The other findings are as follows:

1. Hsun Hu No.9 had not undergone Voyage Data Recorder (VDR) inspections or performance tests for over eight years since its manufacture, resulting in the failure to record and store very high frequency (VHF) radio communications, Automatic Radar Plotting Aid (ARPA) data, or screenshots from the Electronic Chart Display and Information System (ECDIS).
2. The crew of Hsun Hu No.9 was unfamiliar with and did not promptly save the Voyage Data Recorder (VDR) data. Additionally, relevant CGA personnel did not remind the crew to preserve the VDR data in a timely manner. As a result, the original data was overwritten during the incident, which impacted the investigation and analysis of the accident.

Safety Recommendations

To Coast Guard Administration, Ocean Affairs Council

1. Strengthen training and awareness programs for the on-duty personnel in the bridge of the fleet to ensure compliance with the International Regulations for Preventing Collisions at Sea (COLREG), with particular emphasis on maintaining proper lookout during vessel operations. Additionally, ensure that on-duty personnel are familiar with navigational equipment to assist with their duties.
2. Evaluate the timing and content of the Automatic Identification System (AIS) signals sent by the fleet's vessels, balancing the need for confidentiality in law enforcement operations of public service vessels while ensuring that vessels in the vicinity can promptly obtain relevant information and take collision avoidance measures promptly to prevent
3. Develop and establish procedures for the inspection and performance testing of Voyage Data Recorders (VDR) for the fleet's vessels to ensure the integrity

and accuracy of recorded data, including vessel position, bridge audio, and navigational equipment images.

4. Develop and establish procedures for the onboard storage of Voyage Data Recorder (VDR) data for the fleet's vessels, and ensure these procedures are well communicated so that necessary assistance can be provided during near-miss incidents or maritime investigations.

To the Ta Yang Shipping Co., Ltd.

1. Strengthen training and awareness programs for the on-duty personnel in the bridge of the fleet to ensure compliance with the International Regulations for Preventing Collisions at Sea (COLREG), with particular emphasis on the importance of maintaining a proper lookout. Even in situations where two vessels appear to be passing without collision risk, the on-duty personnel should remain alert and continuously monitor surrounding vessel movements to prevent accidents.

Note: The final report of this occurrence investigation is published in Chinese. To facilitate understanding for non-Chinese readers, the Executive Summary has been translated into English. While every effort has been made to ensure accuracy, discrepancies may occur. In the event of any inconsistency, the Chinese version shall prevail.