Recreational Fishing Boat JINN AN HAE BAW Major Marine Occurrence

Executive Summary

On November 25, 2023, at approximately 18:36 local time, a collision occurred between the Vietnamese-flagged tugboat “BINH AN”, which had a total of 17 crew members on board, including the master, while towing a transport barge named TIPM 514001, and the national recreational fishing vessel “JINN AN HAE BAW” (hereinafter referred to as “JIN”), which had 2 crew members (the captain and a crew member) along with 14 passengers. The collision occurred approximately 6.4 nautical miles west of Anping Port, Tainan City. The occurrence resulted in damage to the bow of “JIN”, causing it to become dented, while the surrounding area of the bow deck and railings were deformed. One passenger from “JIN” fell overboard and was reported missing; they were later confirmed deceased. The captain and crew of “JIN” sustained serious injuries, and 5 passengers suffered minor injuries. Fortunately, there was no environmental pollution as a result of the collision.

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 Tainan City Government, Taiwan Shipbuilding Corporation's Marine Wind Power Engineering Company, Jia Shi Shipping Co., Ltd., Vietnam's PTSC Marine Company, and the owner of JIN.

After comprehensive investigation and analysis of the factual data, a total of 19 findings and 6 safety recommendations were obtained.

The findings related to probable causes are as follows:

1. The captain of “JIN” had poor vision, and the illumination from the aft deck lights of “BINH AN” may have created a halo effect, preventing him from noticing “BINH AN” towing a transport barge and wind power base. He also failed to recognize that “BINH AN” was a vessel restricted in its ability to maneuver, and did not conduct an appropriate lookout or take avoidance measures as required by international collision regulations (COLREGs). Three minutes before the collision, “JIN” reduced its speed by 3 knots and turned portside by 10 degrees. Fifty-three seconds prior to the collision, “JIN” increased its speed to 16.6 knots and maintained its course, neglecting safety speed measures, which ultimately led to the collision.

2. Prior to the collision, one passenger on the port side of “JIN”'s bridge was not wearing a life jacket. The port side wall was approximately 58 cm high and lacked railing protection. After the collision, the passenger fell overboard and drowned.

The findings related to risk are as follows:

1. Ten minutes before the collision, the chief mate of “BINH AN” turned off the automatic alarm function of the Automatic Radar Plotting Aid (ARPA) and switched to manual target acquisition. During “JIN”'s rapid approach, he used a laser pointer and spotlight to signal nearby fishing boats; however, these measures did not provide sufficient warning.

2. The chief mate of “BINH AN” detected a fishing vessel rapidly approaching from the right rear using Automatic Radar Plotting Aid (ARPA). If he had sounded a series of at least five short blasts on the horn to express concern,

and accompanied this with at least five short and urgent flash signals, it could have heightened the captain of JIN's awareness of the collision risk.

3. During inspections while moored, the transport barge could utilize a generator or emergency battery to power the navigation lights. However, since no one is permitted to remain on board during towing at sea, which prevented the use of a generator for navigation lights; consequently, the transport barge operator used solar-powered navigation lights.

4. Taiwan’s maritime regulatory authority has not established regulations for navigation lights on unmanned transport barges. The navigation lights used on such vessels, which are not approved by the maritime authority, may not meet relevant regulatory requirements, leaving transport barge operators without guidance.

5. After modifying the railing on “JIN”, the owner did not report the changes to the maritime authority or reapply for inspection. As a result, some side walls are less than 1 meter high and lack guardrails, thereby increasing the risk of falls for both crew members and passengers.

6. In the three months leading up to the incident, the owner of “JIN”, the maritime authority, and the fisheries authority failed to detect abnormalities in the Automatic Identification System (AIS) signals from “JIN”, affecting the vessel's identification and response to emergencies. During this voyage, “JIN”'s AIS did not transmit its position, name, or call sign.

7. After departing the port, all 14 passengers on “JIN” were not wearing life jackets, and five passengers were tying fishing gear in the side aisles during the voyage.

8. The Emergency Position Indicating Radio Beacon (EPIRB) on “JIN” was located inside the living quarters, inconsistent with the inspection record

from the National Communications Commission.

The other findings are as follows:

1. “BINH AN” held a ship inspection certificate issued by the Vietnamese maritime authority, and there were no abnormal entries in the inspection record book.
2. “BINH AN” possessed a valid Safety Management Certificate (SMC) and Document of Compliance (DOC) issued by the Vietnamese maritime authority.
3. The transport barge held a valid Safety Management Certificate (SMC) issued by Taiwan's maritime authority.
4. “JIN” held a vessel inspection certificate from the Republic of China, and the inspection record book did not show any abnormal entries.
5. The captain, chief mate, and crew of “BINH AN” all held valid competency certificates issued by the Vietnamese maritime authority.
6. The captain and crew of “JIN” held valid officer and crew certificates issued by Taiwan's regulatory authority.
7. The “BINH AN” captain confirmed that the navigation, towing, warning, and deck lights were turned on at departure. The transport barge displayed a diamond-shaped signal, with solar-powered navigation lights and warning lights at the top of the wind power base automatically turning on at dusk.
8. “JIN”'s navigation and surrounding lights were operational during the voyage.
9. The captain of the Dragon Fishing Vessel visually spotted “BINH AN” before using radar to identify two tracks. He exited the bridge to visually confirm “BINH AN”, the transport barge, and the wind power base. When the two

vessels were about 0.25 nautical miles apart, the captain of the Dragon fishing vessel turned portside by 10 degrees to avoid a collision, passing behind the transport barge.

Safety Recommendations

To Vietnam's PTSC Marine Company

1. Strengthen fleet safety management to ensure compliance with the International Regulations for Preventing Collisions at Sea (COLREGs) during navigation. On-duty officers should effectively utilize visual and auditory aids, navigational instruments, and appropriate methods to maintain a proper lookout and avoid collision risks.

To Maritime and Port Bureau of the Ministry of Transportation and Communications

1. Assess the issue of unmanned transport barges using solar-powered navigation lights under the Taiwan flag. Strengthen inspection procedures to ensure that navigation lights comply with COLREGs. Navigation lights installed on such vessels should be inspected and approved by the maritime authority or a recognized inspection agency before being used during navigation.

To National Communications Commission

1. Re-examine the inspection regulations for Emergency Position Indicating Radio Beacons (EPIRB). Strengthen operational procedures and maintain detailed records of related documents (including photos).

To Fisheries Agency of the Ministry of Agriculture

1. Enhance navigation training and safety promotion for recreational fishing vessels. Crew members on duty should effectively use visual and auditory aids, navigational instruments, and appropriate methods to maintain a proper

lookout and avoid collision risks, particularly regarding the recognition of towing lights and avoidance measures by Fishing Vessel captains.

2. Implement the installation of Automatic Identification Systems (AIS) or Vessel Monitoring Systems (VMS) as designated by central competent authorities on recreational fishing vessels. Before departure, ship owners or captains should check and confirm that the ship's position signals have been reported to the Fisheries Monitoring Center.

To Tainan City Government

1. Strengthen the management and promotion of safety for recreational fishing boats, ensuring that captains require passengers to wear life jackets for their safety.

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.