

Bulk Carrier FU SHUN Major Marine Occurrence

Executive Summary

On July 25, 2024, at approximately 0549 hours local time, the Tanzania-flagged bulk carrier “FU SHUN” (hereinafter referred to as “the ship”) departed Kaohsiung bound for Hong Kong, carrying nine Myanmar nationals and eight refrigerated containers. While navigating approximately 15.4 nautical miles off the outer fairway of Kaohsiung Port, the ship began listing to port and started flooding. The master subsequently ordered the abandonment of the vessel. The occurrence resulted in the total loss of FU SHUN; three crew members lost their lives, two were reported missing, and four were rescued after drifting ashore near Kaohsiung.

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 Taiwan International Ports Corporation, Ltd., and Elite Marine Transportation Co.,S.A..

After comprehensive investigation and analysis of the factual data, a total of 13 findings and 5 safety recommendations were obtained.

The findings related to probable causes are as follows:

1. During the occurrence, the peripheral circulation of Typhoon KAIMI generated gale-force winds and heavy seas (Beaufort scale 8 to 9, gusts up to 10, wave heights between 5.5 and 7 meters) over the southwestern waters of

Taiwan. The Master failed to take timely avoidance measures to keep the ship clear of the affected area, continuing navigation under adverse weather conditions and thereby exposing the ship to severe meteorological and sea hazards.

2. The Master's insufficient awareness of the deteriorating weather and improper navigational decisions led FU SHUN to operate in heavy seas without effective countermeasures. The combination of adverse weather, compromised watertight integrity of the cargo holds, and improper handling resulted in seawater flooding the cargo holds and engine compartments, ultimately causing the ship to sink.
3. The ship's lifesaving and safety equipment failed to function as intended during the emergency. All nine crew members dropped into the water; the Master, Chief Engineer, and Third Engineer drowned, while four others, the Chief Mate, Engineer, Able Seaman A, and Cook, survived by clinging to fenders and drifting ashore. Two crew members remain missing.

The findings related to risk are as follows:

1. The ship was 39 years old and classified as high-risk. Its hatch covers were susceptible to displacement during heavy rolling, allowing seawater to enter the cargo hold when waves struck the deck. The ship was not equipped with a cargo hold flooding alarm or a bilge pumping system, which prevented the crew from detecting or removing the water ingress in time.
2. Significant discrepancies existed between Taiwan's New Inspection Regime (NIR) Port State Control database and the Tokyo MOU database, which classified the ship as a low-risk vessel. Additionally, the Maritime and Port Bureau lacked effective mechanisms to integrate and track critical data, such as flag-state blacklists, classification society performance, and ship management company records. This limitation hindered its ability to identify

and deter substandard ships.

3. Port State Control (PSC) inspectors in Taiwan faced excessive workloads and concurrent administrative duties. Assigning inspectors to joint inspection tasks further increased operational burdens and enforcement pressures.

The other findings are as follows:

1. The ship held valid statutory certificates issued by the Tanzanian Maritime Administration, a valid Interim Safety Management Certificate and Interim Cargo Ship Safety Equipment Certificate issued by Eagle Classification of Shipping, and a valid Document of Compliance issued by the Horizon Bureau of Shipping.
2. The Master and all crew members held valid Certificates of Competency issued by the Myanmar Maritime Administration.
3. The sinking destroyed relevant onboard evidence, and the bridge watchkeeping and crew rest records could not be verified.
4. As the Master perished and key evidence was lost, the investigation was unable to confirm whether a typhoon-avoidance plan had been developed or what communications had been made with the company prior to the sinking.
5. During Typhoon KAIMI, a total of nine ships ran aground or sank around Taiwan; seven of these were classified as high-risk vessels in the Tokyo MOU database.
6. During typhoon periods, the Maritime and Port Bureau implements several control measures for ships anchoring outside commercial ports, including monitoring and alerting through the Maritime Safety Information System, directing foreign ships to remain at least 10 nautical miles offshore, and designating violators as Port State Control (PSC) priority inspection targets.

Safety Recommendations

To Elite Marine Transportation Co.,S.A.

1. Strengthen the mechanisms for collecting and disseminating weather information to ensure that Masters receive timely updates and can develop appropriate avoidance plans.
2. Review the fleet's lifesaving equipment and abandon-ship training, and enhance the crew's ability to respond to heavy-weather emergencies to improve survivability under severe conditions.

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

1. Refer to the annual Tokyo MOU blacklists of flag states and poorly performing vessels, and increase the frequency and scope of Port State Control (PSC) inspections to accelerate the removal of substandard ships.
2. Reassess manpower and training programs for PSC inspectors, and strengthen the legal and procedural framework governing inter-agency joint inspection operations.
3. When broadcasting warnings to foreign vessels during typhoon periods, ensure that Coast Radio Station messages include directives for vessels to navigate to safe waters and provide information on the extent of gale-force wind zones (Beaufort scale 7 or higher).

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.