

The Capsizing of Workboat Chung Cheng No. 7 During the Towing Operation of Fishing Vessel Micronesia No. 102

Executive Summary

At approximately 1109 local time on May 23, 2025, the Micronesia-flagged fishing vessel Micronesia No. 102 (hereinafter referred to as "the fishing vessel M") was unberthing for departure from its outer berth at the Fair Wind Shipyard in the Port of Kaohsiung. As required under Taiwan's compulsory pilotage regulations, a harbor pilot (hereinafter referred to as "Pilot A") was assigned to pilot the vessel, and two domestic workboats, Chung Cheng No. 7 (hereinafter referred to as "the workboat A") and Chung Cheng No. 3 (hereinafter referred to as "the workboat B"), were engaged to assist in the unberthing operation. During the operation, the workboat A capsized and sank in the port waters, resulting in the drowning of its captain. No pollution resulted from the occurrence.

Following Taiwan's Transportation Occurrence Investigation Act and the Casualty Investigation Code of the International Maritime Organization (IMO), the TTSB is an independent transportation occurrence investigation agency responsible for conducting this investigation. The Investigation Task Force included members from the Maritime and Port Bureau; Ministry of Transportation and Communications; Fisheries Agency, Ministry of Agriculture; Taiwan International Ports Corporation, Ltd., Kaohsiung Harbor Pilot Office, Kasar Fishing Corporation, and Chung Cheng Enterprise Co., Ltd.

Based on a comprehensive analysis of the factual information, the investigation identified 19 findings and issued 7 safety recommendations. The

final report was reviewed and approved at the 87th TTSB Board Meeting held on June 12, 2026.

The finding related to probable causes:

1. While the fishing vessel M was preparing to unberth within the compulsory pilotage area of the Port of Kaohsiung, where pilotage is mandatory, the Pilot A did not board the vessel. Pilot A cited safety concerns regarding the vessel's starboard recessed steel ladder, as well as climbing difficulties caused by an excessive freeboard height difference with the adjacent fishing vessel. Furthermore, Pilot A failed to establish effective communication and command coordination with the captain of the fishing vessel M and the operators of the two workboats.
2. After the mooring lines of the fishing vessel M were cast off, the crew set off firecrackers at the bow and stern in accordance with traditional customs, causing them to leave their assigned stations temporarily and leaving no one to maintain a proper lookout. Upon learning that Pilot A would not board, the captain failed to contact the Pilot A or the workboat operators to understand the unberthing plan. Without confirming the conditions on the starboard water, the captain unilaterally engaged the engines to commence unberthing. This action caused the bow workboat to be instantly subjected to an excessive towing load, resulting in girting. During the towing operation, the operator of the workboat A repeatedly called by radio requesting that the fishing vessel to stop its engines, but received no response, ultimately causing the workboat A to list heavily to port and capsize.
3. When the workboat A capsized, the operator was not wearing a life jacket, which reduce the chances of survival after falling overboard and ultimately led to his death by drowning.

The findings related to risk:

1. When workboat A was girted by fishing vessel M, the towline came under tension and became taut, leaving the operator of workboat A with insufficient time to release or cut the towline.
2. Pilot A did not board the vessel to conduct pilotage, nor did he establish radio communication with the captain of the fishing vessel M. Instead, he notified the Vessel Traffic Services (VTS) operator at 1105 local time that the fishing vessel M was unberthing. During the towing operation, Pilot A failed to establish effective command and coordination between the captain of the fishing vessel M and the operator of the workboat A, thereby increasing the risk of the unberthing and towing operations.
3. An executive of the company operating the fishing vessel M visually observed the assistant of the harbor service boat -Tong 6 making a crossed-arms signal and concluded that Pilot A would not board the vessel for pilotage. The executive subsequently informed the captain, through the chief officer of the fishing vessel M, that the vessel could cast off and depart.
4. The captain of the fishing vessel M was unaware of Pilot A's plan for the operation and did not know that two workboats were assisting with the unberthing operation. In the absence of a pilot on board, the captain proceeded to cast off and engage the engines based solely on the instructions of the company executive, thereby increasing the risk of the unberthing and towing operations.
5. The captain of the fishing vessel M failed to maintain a radio watch as required, resulting in his failure to receive calls and emergency stop requests from the operator of the workboat A. Furthermore, the fishing vessel M was

equipped only with a one-way ship-wide public address system and lacked an established communication and command system for crew members to report to the captain or the bridge, thereby increasing the risk of the unberthing and towing operations.

6. The noise and smoke generated by the crew of the fishing vessel M setting off firecrackers impaired the crew's lookout and interfered with communications, reducing their alertness and response capabilities regarding abnormal situations.
7. The captain of the fishing vessel M failed to establish comprehensive operating procedures for fishing vessels entering and leaving port, resulting in the captain's failure to fully grasp the overall situation of the unberthing operation and to properly fulfill safe navigation responsibilities.
8. The on-site supervision, risk identification, and safety protection measures implemented by Chung Cheng Enterprise during the towing operation were ineffective, thereby failing to effectively mitigate the risk of the towing operation.
9. Prior to the occurrence, a total of five personnel assisting with the unberthing operation of the fishing vessel M, including Pilot A, two workboat operators, one workboat assistant, and one assistant on Tong 6, were not wearing life jackets, thereby increasing the risk of injury in the event of a man-overboard occurrence.
10. On the day of the occurrence, Coast Guard inspection officers and family members of the crew all successfully boarded the fishing vessel M from the shore via accommodation ladders, indicating that conditions for shore-based boarding were met. However, Pilot A failed to thoroughly evaluate available boarding options and did not establish effective communication and coordination with the ship, thereby demonstrating a breakdown in ship-to-

shore communication.

The other findings:

1. During the occurrence, the wind direction was northwesterly with a Beaufort wind force of scale 2 and gusts of scale 3, and visibility was good. There is no evidence indicating that weather or sea conditions were related to this occurrence.
2. The main engines, auxiliary engines, and steering gears of the fishing vessel M, Tong 6, and workboats A and B were found to be functioning normally, and no abnormalities were identified in the relevant statutory certificates and inspection records.
3. The captain, crew, and fishery observer of the fishing vessel M all held valid certificates of competency issued by the flag state's maritime administration.
4. The Pilot A held a valid pilot license issued by the Ministry of Transportation and Communications (MOTC).
5. The operators and assistants of workboats A and B all held valid Power Motorboat Operator Licenses issued by the maritime administration of Taiwan.
6. The work and rest times of Pilot A, the captain of the fishing vessel M, and the captain of the workboat A during the 72 hours prior to the occurrence were normal. There is no evidence indicating that fatigue was a factor in this occurrence.

Safety Recommendations

To Kasar Fishing Corporation

1. Establish standard operating procedures governing the use of radio communications and vessel movements within compulsory pilotage areas in

Taiwan. Ensure effective two-way communication between the bridge and deck personnel during port operations, and require that the bridge be manned by sufficient qualified watchkeeping personnel with clearly assigned responsibilities during critical operations, including casting off, towing, and engine maneuvering.

2. Strengthen crew training in port operations and establish clear reporting, verification, and cross-check procedures for critical operations, including casting off, towing, and engine maneuvering, to enhance risk awareness and ensure the safe execution of coordinated operations.

To Chung Cheng Enterprise Co., Ltd.

1. Ensure compliance with standard operating procedures for workboat operations, including effective port communications and safe towline deployment and securing practices. Develop and implement quick-release arrangements for towlines under tension, and strengthen emergency response procedures for girting to reduce the operational risks associated with towing operations.
2. Strengthen safety education and training for crew members, and require all crew members to wear appropriate personal protective equipment (PPE) during all onboard operations to reduce the risk of man-overboard incidents.

To Kaohsiung Harbor Pilot Office

1. Reinforce compliance with the Pilotage Law by requiring pilots to board vessels to conduct pilotage and complete a comprehensive Master–Pilot Exchange (MPX) before pilotage, including the planned maneuver, workboat deployment, propulsion limitations, and other operational information necessary for the safe conduct of pilotage operations.

To Taiwan International Ports Corporation, Ltd.

1. Assist in ensuring compliance with compulsory pilotage requirements by facilitating the boarding of pilots to conduct pilotage, thereby enhancing the safety of coordinated port operations.

To Maritime and Port Bureau, Ministry of Transportation and Communications

1. Strengthen oversight of compulsory pilotage operations in the Port of Kaohsiung by ensuring compliance with the Pilotage Law and requiring pilots to board vessels before commencing pilotage, except where otherwise permitted by law, thereby enhancing the safety of pilotage operations.

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.