

Executive Summary

At 23:57, July 14, 2020, a taxi owned by Longmacheng Automobile Co., Ltd. with the plate number 268-7F was carrying four seafarers working at All Ports Transportation Co., Ltd. from a karaoke place in Wuqi District, Taichung City back to Taichung Port. At 00:09 the next day, the taxi, fell from the work boat basin into the sea. One of the passengers escaped and went to Taichung Branch of TIPC Marine Corporation, Ltd. for help, asking staff there to call the police. The other three passengers and the driver, received fatalities in the occurrence. The investigation report was reviewed and approved at the 30th TTSB Board Meeting on September 3, 2021.

Findings Related to Probable Causes:

1. When the occurrence vehicle entered the port, the rain grew heavier. It was dark outside, and the windshield had relatively low light transmittance. All of the aforementioned reasons negatively affected the driver's vision. The driver, being given directions by the passengers and possibly affected by how the Jersey barriers were oriented beside the road, turned left to leave the road of the work boat basin. When the vehicle slowly steered away from the road, the driver attempted to brake, but it was too late to stop the vehicle from falling into the sea.

Findings related to the risk:

1. Regulations for Road Traffic Signs, Markings, and Signals do not apply to roads in the Taichung Port control area. Therefore, Taiwan International Ports Corporation, Ltd. has not followed these regulations in the road arrangement in Taichung Port or provided clear regulations on road constructions and installations for vehicles driving in the port area. This might have increased the risks for traffic occurrences in this port area.
2. Except for a No Entry For Regular Vehicles warning sign at the entrance of the work basin pier, Taiwan International Ports Corporation, Ltd. did not place appropriate warning signs or markings along the work basin road and install appropriate vehicle stoppers near the pier of the work basin. These may have increased the risk for vehicles falling into the sea.
3. Although the occurrence was not caused solely by poor visibility, with the external condition of being at night and under heavy rain, the low light transmittance of the heat insulation film could be one of the factors that compromised the driver's vision while occurrence happened.
4. Taiwan International Ports Corporation, Ltd. did not provide any safety

instructions (for people or vehicles entering the port) when issuing (them an) entry pass. It also did not arrange any road safety lectures or training courses. Therefore, people did not know the restrictions and control measures the port had in place, and accidents could happen to vehicles driving along or near the pier.

Other investigation findings:

1. The existing heat insulation film inspection method of Directorate General of Highways, Ministry of Transportation and Communications, may generate inconsistent results due to the illuminance of ambient lights and the subjective judgement by the inspector. Compared with other countries, where clear laws in place prescribing the use of a transmission meter for inspection, Taiwan's inspection for taxi has relatively imprecise standards and less scientifically based results.
2. The Ministry of Transportation and Communications and the special municipal governments all have not established a comprehensive safety appraisal mechanism for the Taxicab Transportation Business.
3. The Taxicab Transportation Business is governed by the Ministry of Transportation and Communications as well as the particular special municipal government, with no nationwide appraisal system. Having each competent authority set their own safety appraisal mechanisms individually may lead to inconsistent safety requirements for the Taxicab Transportation Business.
4. The occurrence driver had a valid driver's license issued by Directorate General of Highways, Ministry of Transportation and Communications, and a taxi driver's professional practice registration certificate issued by Taichung City Police Department.
5. The occurrence vehicle had a valid license plate issued by motor vehicles authorities. According to clips recorded by a dashcam on the vehicle, after the vehicle entered the North 5th Road Control Station in the Taichung Port area, it continued driving along the North 5th Road and turned onto the work basin, and the driver did not have any abnormal driving behavior. No evidence showed any abnormalities in the car steering operations or the brake system.
6. According to clips recorded by the dashcam, the rain was heavy when the occurrence happened.
7. No evidence showed that the driver's driving performance in this occurrence might have been compromised by fatigue, medications, or alcohol.

Safety Recommendations

To Taiwan International Ports Corporation, Ltd.:

1. Enhance the current access control mechanism for the port area. People and vehicles shall be informed of all restrictions and control measures for access to this area upon issuance of entry pass. For example, safety instructions documents may be provided, and road safety information may be disseminated to strengthen the safety awareness of all people entering the port area.
2. Install warning signs or reflective vehicle stoppers around the port area in places where vehicles can possibly fall off into the sea.

To Ministry of Transportation and Communications:

1. Traffic signs, markings, and signals shall be installed on all roads in Taichung Port as per the Regulations for Road Traffic Signs, Markings, and Signals to clearly identify roads from working areas in the port and to provide clear instructions for vehicles driving in the port area.
2. Improve the light transmittance inspection method for taxi windshields covered by a heat insulation film. Have clear transmittance inspection standards and employ a transmission meter for the regular taxi inspection to avoid disputes and ensure road safety.

To Ministry of Transportation and Communications and all special municipal governments:

1. Deliberate on the safety appraisal mechanism for the Taxicab Transportation Business and establish a nationwide appraisal mechanism that compliance with regulatory requirements.