National Transportation Safety Board
Washington, DC 20594

Response to Petition for Reconsideration

August 2, 2022

Mr. James F. Moseley, Jr.
Moseley, Prichard, Parrish, Knight & Jones
501 West Bay Street
Jacksonville, Florida 32202
[redacted]

In accordance with Title 49 *Code of Federal Regulations* (*CFR*) Part 845.32, the National Transportation Safety Board (NTSB) has reviewed the petition for reconsideration and modification of probable cause of the fire aboard roll-on/roll-off vehicle carrier *Höegh Xiamen*, Pier 20, Blount Island, Jacksonville, Florida, June 4, 2020 (NTSB/MAR-21/04). The petitioner has met the requirements for the NTSB's review of their petition; specifically, Höegh Technical Management, a party of interest to the US Coast Guard investigation, has a direct interest in the investigation and has offered claims that our report was erroneous, based on the discovery of new evidence. Based on our review of the petition filed on March 14, 2022, the NTSB grants the petition in its entirety.

On June 4, 2020, about 1530 eastern daylight time, the crew of the 600-foot-long, Norwegian-flagged roll-on/roll-off vehicle carrier *Höegh Xiamen* were preparing to depart the Blount Island Horizon Terminal in Jacksonville, Florida, en route to Baltimore, Maryland, when they saw smoke coming from a ventilation housing for one of the exhaust trunks that ran from deck 12 (the weather deck) to one of the cargo decks.

Crewmembers discovered a fire on deck 8, which had been loaded with used vehicles. The crew attempted to fight the fire but were repelled by heavy smoke. Shoreside fire department teams from the Jacksonville Fire and Rescue Department arrived at 1603 and relieved the crew. The captain, after consulting with and receiving concurrence from the fire department, had carbon dioxide from the vessel's fixed fire-extinguishing system released into decks 7 and 8, and the crew then evacuated from the *Höegh Xiamen*.

The fire continued to spread to the higher cargo decks and the accommodations. Shoreside firefighters entered cargo decks with fire hoses, and nine firefighters were subsequently injured, five of them seriously, in an explosion.

Responders subsequently adopted a defensive strategy, cooling external exposed surfaces. The fire was extinguished over a week later, on June 12.

The *Höegh Xiamen* and its cargo of 2,420 used vehicles were declared a total loss valued at $40 million, and in August 2020, the vessel was towed to Turkey to be recycled.

The probable cause of the casualty was adopted on December 1, 2021, as follows:

> The National Transportation Safety Board determines that the probable cause of the fire aboard the vehicle carrier *Höegh Xiamen* was Grimaldi's and SSA Atlantic's ineffective oversight of longshoremen, which did not identify that Grimaldi's vehicle battery securement procedures were not being followed, resulting in an electrical fault from an improperly disconnected battery in a used vehicle on cargo deck 8. Contributing to the delay in the detection of the fire was the crew not immediately reactivating the vessel's fire detection system after the completion of loading. Contributing to the extent of the fire was the master's decision to delay the release of the carbon dioxide fixed fire-extinguishing system.

The petitioner, Höegh Technical Management, was a party of interest to the Coast Guard investigation. Höegh Technical Management declined to be party to the NTSB investigation.

Petitioner's Claims

The petitioner presented two factual inaccuracies identified in the report following their own investigation. First, the petitioner pointed out a timing error related to when the chief officer first observed smoke from the upper deck ventilation housing. The NTSB report stated this occurred about 1530; however, the petitioner stated that the vessel's voyage data recorder captured the chief officer's report of smoke over the portable radio at 1544, a 14-minute discrepancy. Second, the petitioner stated that the vehicle lashing inspection procedure cited in the NTSB report as part of Höegh Technical Management's safety management system (SMS) is not actually part of Höegh Technical Management's SMS. Rather, the petitioner believes that the document likely was "locally produced" by the stevedores. Documents that are part of Höegh Technical Management's SMS contain an SMS reference in the top right-hand corner of the document for document control purposes; the vehicle lashing inspection procedure did not have an SMS reference in the top right-hand corner.

NTSB Response

The NTSB reviewed the voyage data recorder information for the *Höegh Xiamen* and confirmed that the chief officer's report of smoke over the handheld radio occurred about 1544. Therefore, the NTSB changed the initial time smoke was discovered to 1544 throughout the report. Additionally, the report has been revised to say that the crew attempted to release the CO_2 about 30 minutes after the discovery of the fire based on the revised time. The NTSB deems 30 minutes a more reasonable amount of time for a master to decide to release the CO_2 fixed fire-extinguishing system and understands his decision to wait for the arrival of the Jacksonville Fire and Rescue Department, which he thought would have more experience than the crew. Additionally, the master's decision-making time is comparable to the time it took the crew to release CO_2 within a vehicle deck in the fires aboard the vehicle carriers *Honor* and *Courage*, previous reports where the NTSB noted the timeliness of CO_2 release.

The report contains the finding that, "by the time the master decided to release the CO_2 fixed fire-extinguishing system, the fire had already spread to other zones beyond deck 7/8, and, therefore, the CO_2 was ineffective in suppressing the fire." There was a 44-minute gap between the completion of loading and the discovery of the fire (during which time the fire detection system was deactivated, allowing the fire to spread unnoticed), then about 30 more minutes passed before the crew attempted to release CO_2. Therefore, the master's decision-making time was not the only factor that allowed the fire to spread, and, as stated above, the NTSB considers 30 minutes reasonable. Staff has added additional text before the finding to summarize those additional factors. Thus, the finding in the report remains the same, but the contributing factor in the probable cause stating, "Contributing to the extent of the fire was the master's decision to delay the release of the carbon dioxide fixed fire-extinguishing system," has been removed.

The NTSB also reviewed the SMS information in the petition for reconsideration and agreed that the vehicle lashing inspection procedure document referenced in the report did not contain Höegh Technical Management's SMS reference in the top right-hand corner. The NTSB also reviewed other documents from Höegh Technical Management's SMS system that showed the SMS reference in the top right-hand corner. Therefore, the NTSB deleted the information in the report that stated that the vehicle lashing inspection procedure was part of Höegh Technical Management's SMS. The related Safety Recommendation M-21-19 to Höegh Technical Management, stating, "Revise your 'Vehicle Lashing Inspection Procedure' to include a process to ensure all vehicle batteries are disconnected before departure and provide training to all crew on the revised procedure," was classified as "Closed—Acceptable Alternate Action" on May 26, 2022. This classification is based on Höegh Technical Management revising its vessels' SMS to require strict adherence to the procedure for

battery disconnection and securement and advising its masters and chief officers to communicate with the charterers' port captain, stevedore's foreman, or other shoreside representatives to ensure that the correct battery disconnect procedures are being followed. Because the recommendation is closed, the NTSB left the safety recommendation language unchanged within the report.

Disposition

After review of the evidence, the petition for reconsideration of the facts of NTSB/MAR-21/04 in connection with the fire aboard roll-on/roll-off vehicle carrier *Höegh Xiamen*, Pier 20, Blount Island, Jacksonville, Florida, June 4, 2020, is granted in its entirety. Additional changes in the analysis and probable cause have been made to reflect the factual changes. A revised report is enclosed.

Copy to:
Captain Jason L. Neubauer, USCG
US Coast Guard Headquarters, CG-INV
Email: [redacted]