U.S. Department of Transportation

National Highway Traffic Safety Administration

ODI RESUME

OFFICE OF DEFECTS INVESTIGATION
NHTSA
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

Investigation: RQ22001
Prompted By: Recall 22E-016
Date Opened: 04/10/2022 **Date Closed:** 10/30/2023
Investigator: Joseph Oxenham **Reviewer:** Sharon Yukevich
Approver: Tanya Topka
Subject: Recall 22E-016

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: Pony.ai
Products: PONY.AI Automated Driving System
Population: 3

Problem Description: Pony.ai initiated Recall 22E-016 on March 3, 2022. NHTSA opened this recall query to evaluate the scope of the affected population and the remedy described by Pony.ai in its defect report.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	EWR D&I	Other	Total	EWR Field Reports
All Incidents:	0	1	0	0	1	0
Crashes/Fires:	0	1	0	0	1	0
Injury Incidents:	0	0	0	0	0	0
Number of Injuries:	0	0	0	0	0	0
Fatality Incidents:	0	0	0	0	0	0
Number of Fatalities:	0	0	0	0	0	0

Description of Other:

ACTION/SUMMARY INFORMATION

Action: This (RQ) Recall Query is closed without additional manufacturer action.

Summary:

The Office of Defects Investigation (ODI) opened Recall Query RQ22-001 to evaluate the scope and remedy of Recall 22E-016. Recall 22E-016 addressed a defect causing the Automated Driving System (ADS) to shut down on a vehicle that was being operated by Pony.ai in a driverless mode. This condition resulted in a single vehicle crash on October 28, 2021. In the submitted recall report, Pony.ai identified the defect as a coding error. They also identified three (3) ADS units effected by the defect. Additionally, they stated that the relevant ADS code was revised to correct the error on the evening of the crash. Pony.ai uploaded the software to the affected units the following day.

ODI sought more detailed information surrounding the failure and the failures of redundant ADS safety systems leading to the crash, and steps that Pony.ai has taken to prevent similar failures in the future. In their response, Pony.ai provided additional details regarding the origin and nature of the software error in the primary ADS unit which led to the incident and how Pony.ai became aware of the error. Pony.ai also provided details regarding errors which occurred in the installation of the redundant system installed in the incident vehicle, which led to the failure of that system.

After thoroughly assessing the material submitted by Pony.ai, ODI believes that the company has properly identified both the error and the affected vehicles. The software upload completed immediately following the incident described above appears to have resolved the issue. Additionally, Pony.ai identified several process and procedural changes which they have either already undertaken, or plan to undertake, to prevent the recurrence of similar errors in the future. ODI is closing this Recall Query. NHTSA reserves the right to take additional action if warranted by new circumstances.