NATIONAL TRANSPORTATION SAFETY BOARD

Meeting of November 19, 2024

(Information subject to editing)

Box Truck Centerline Crossover Collision with Bus, Louisville, New York, January 28, 2023

HWY23FH005

This is a synopsis from the NTSB's report and does not include the Board's rationale for the findings, probable cause, and safety recommendations. NTSB staff is currently making final revisions to the report from which the attached findings and safety recommendations have been extracted. The final report and pertinent safety recommendation letters will be distributed to recommendation recipients as soon as possible. The attached information is subject to further review and editing to reflect changes adopted during the Board meeting.

Executive Summary

What Happened

On Saturday, January 28, 2023, about 6:00 a.m., a bus was traveling west on New York State Route 37 (SR-37) at a speed of 53–54 mph in Louisville, New York. The bus was operated by LBFNY and transporting 14 workers to a solar farm construction site. At the same time, a box truck, operated by Aero Global Logistics, was traveling east on SR-37 about 59 mph. SR-37 is a two-lane roadway with one lane in each direction and a posted speed limit of 55 mph. The roadway was wet and there was light snow in the area.

As the two vehicles approached each other, the truck crossed over the highway centerline and collided with the driver's side of the bus. As a result, six bus passengers died in the crash, two were seriously injured, five had minor injuries, and one was uninjured. The bus driver sustained minor injuries, and the truck driver was seriously injured.

What We Found

We found that although the bus driver did not meet qualifications for operating a commercial motor vehicle in the United States, and therefore should not have been operating the bus, based on the circumstances of the crash, there was no action he could have taken to avoid it. Although the passengers seated on the right side of the bus were outside of the impact and intrusion zone, many of them were thrown out of their seats during the collision sequence and sustained injuries due to the lack of accessible seat belts and insufficient safety oversight by LBFNY. LBNFY's

lack of seat belt use and accessibility policies and pretrip safety briefings hindered the safety of the bus occupants.

We found that the truck driver was likely fatigued at the time of the crash due to a combination of insufficient sleep and circadian disruption associated with his shift-work schedule. There was no evidence that Aero Global Logistics (AGL), the motor carrier overseeing trucking operations, educated its drivers and employees about the risks of fatigue. AGL possibly could have prevented the crash if it had had a structured fatigue management program in place. Further, the truck was not equipped with a driver monitoring system and AGL did not have policies or procedures for using these systems, which prevented AGL from monitoring driver performance, providing coaching on safe driving behaviors, and improving safety at the company. The truck also was not equipped with active lane departure prevention technology, which could have intervened and prevented or mitigated the crash when the truck driver began to cross the centerline.

We found that the Federal Motor Carrier Safety Administration (FMCSA) failed to consider AGL's commonalities (shared president, safety manager, and several drivers and vehicles) with a previous motor carrier that had a poor safety record, which resulted in an inaccurate assessment of AGL's safety controls, such as the policies and procedures it used to ensure compliance with FMCSA regulations. More stringent performance requirements for new entrant motor carriers would ensure that carriers such as AGL cannot graduate from the FMCSA's New Entrant Safety Assurance Program if their on-road performance data show a pattern of unsafe operation. Moreover, we found that the FMCSA was aware of numerous safety deficiencies in AGL's operations for several years, but the agency's interventions and oversight did not prevent AGL from continuing to operate unsafely. The overall safety posture of motor carriers would be better represented, and the safety of our roadways would be improved, if Safety Measurement System on-road performance data were included in the FMCSA's determination of a motor carrier's safety rating.

We also found that when states lack administrative safeguards, such as reviewing a company's status in the FMCSA's database, to identify motor carriers that are subject to out-of-service orders, these carriers may exploit those states' lack of safeguards to continue operating throughout the country in an unsafe manner. Finally, we found that enforcement limitations on en-route bus inspections contributed to the lack of interventions that enabled LBFNY to continue its unsafe operations in violation of a federal out-of-service order for over 7 months.

We determined that the probable cause of the Louisville, New York, crash was the truck driver's fatigue due to insufficient sleep and circadian disruption, which lowered his level of alertness to the driving task and resulted in the truck crossing the centerline of the roadway into the opposing lane of travel and colliding with the oncoming bus.

Contributing to the crash were the failure of the truck motor carrier, AGL, to effectively manage driver fatigue and monitor unsafe driving, and the failure of the

bus motor carrier, LBFNY, to operate in compliance with Federal Motor Carrier Safety Regulations and a federal out-of-service order. Also contributing was the FMCSA's ineffective oversight of AGL during the New Entrant Safety Assurance Program and subsequent compliance reviews to ensure that the carrier had appropriate safety management controls in place to mitigate its high crash rate and driver fatigue.

Contributing to the severity of the injuries was the failure of the bus motor carrier, LBFNY, to ensure that seat belts were readily accessible and worn, which resulted in multiple bus occupants being displaced from their seats and injured during the collision sequence.

What We Recommended

As a result of this investigation, we recommended that LBFNY establish policies and procedures to ensure that the seat belts on all of its buses are regularly inspected to maintain their functionality and accessibility, and to require that all bus occupants wear seat belts on every trip and that bus drivers provide pretrip safety briefings informing all bus occupants about the benefits of wearing seat belts.

We recommended that AGL develop and implement a fatigue management program based on the North American Fatigue Management Program as well as install driver monitoring system technologies across its entire fleet of trucks and incorporate policies and procedures to enhance driver safety, training, and coaching. We recommended that the American Trucking Associations and National Private Truck Council inform their members about this crash and urge them to develop fatigue management programs based on the North American Fatigue Management Program. We also recommended that the Amalgamated Transit Union, International Brotherhood of Teamsters, Owner-Operator Independent Drivers Association, and Transport Workers Union of America inform their members about the crash and urge them to familiarize themselves with this program to learn about fatigue, its causes, and its countermeasures. Further, we reiterated a recommendation to the state of New York to enact legislation that provides for primary enforcement of a mandatory seat belt use law for all vehicle seating positions equipped with a passenger restraint, and we reiterated a recommendation to the National Highway Traffic Safety Administration to require all newly manufactured commercial motor vehicles with gross vehicle weight ratings above 10,000 pounds to be equipped with lane departure prevention systems.

To address deficiencies in the oversight of AGL, we recommended that the FMCSA require motor carriers in the New Entrant Safety Assurance Program to submit a corrective action plan, to be reviewed and approved by the FMCSA, before being granted full operating authority if their Safety Measurement System data show a pattern of unsafe operation or a high crash-involvement rate. We reiterated a recommendation to the FMCSA to establish an additional layer of oversight for recent graduates of the new entrant program that has a lower threshold for unsafe operations. Further, we recommended that the FMCSA incorporate Safety

Measurement System on-road performance data into its methodology for determining a carrier's fitness to operate, and we recommended that the FMCSA include provisions in its safety fitness determination rulemaking that prioritize passenger-carrying motor carrier safety performance and ensure increased compliance monitoring for these carriers, including more frequent compliance reviews.

Finally, because LBFNY was able to register its fleet of buses out of state in Montana despite being subject to a federal out-of-service order, we recommended that the state of Montana implement procedures—such as requiring and reviewing US Department of Transportation numbers—to identify motor carriers that are subject to a federal out-of-service order and prevent them from registering their commercial motor vehicles in the state. We also recommended that the American Association of Motor Vehicle Administrators work with the FMCSA to develop guidelines for all state motor vehicle administrations to identify and prevent similar improper registrations in their states.

Findings

1. None of the following were factors in the crash: (1) mechanical condition of either vehicle; (2) highway condition; (3) familiarity with their vehicles or the roadway by either driver; (4) cell phone use, use of alcohol or other drugs, or medical conditions of either driver; or (5) bus driver fatigue.

2. The emergency response efforts were timely and adequate.

3. Although the bus driver did not meet qualifications for operating a commercial motor vehicle in the United States, and therefore should not have been operating the bus, based on the circumstances of the crash, there was no action he could have taken to avoid it.

4. Although the passengers on the right side of the bus were outside of the impact and intrusion zone, many of them were thrown out of their seats during the collision sequence and sustained injuries because the bus's seat belts were inaccessible and not used.

5. LBFNY's lack of seat belt use and accessibility policies and pretrip safety briefings hindered the safety of the bus occupants.

6. The truck driver's centerline crossover and incursion into the bus's travel lane was likely due to fatigue caused by limited and fragmented sleep as well as circadian disruption associated with his shift-work schedule.

7. If Aero Global Logistics had had a structured fatigue management program in place before the Louisville crash, it could have educated its drivers and other employees about the risks of fatigue and possibly prevented the crash.

8. Although Aero Global Logistics (AGL) had recently acquired driver monitoring systems (DMS) to be installed on some of its trucks, it did not have policies or procedures for how to use these systems and did not have a DMS installed on the crash-involved truck. The lack of DMS installation kept the truck driver from receiving unsafe driving warnings and prevented AGL from monitoring driver performance, providing coaching on safe driving behaviors, and improving safety at the company.

9. Had the truck been equipped with an active lane departure prevention system or similar technology, it could have alerted the driver to the lane departure and subsequently intervened and prevented or mitigated the crash.

10. The Federal Motor Carrier Safety Administration (FMCSA) failed to consider Aero Global Logistics' (AGL) commonalities (shared president, safety manager, and several drivers and vehicles) with a previous motor carrier that had a poor safety record, which resulted in an inaccurate assessment of AGL's safety controls, such as the policies and procedures it used to ensure compliance with FMCSA regulations.

11. More stringent safety performance requirements for new entrant motor carriers would ensure that motor carriers such as Aero Global Logistics cannot graduate from the New Entrant Safety Assurance Program if their on-road performance data show a pattern of unsafe operation or a high crash-involvement rate.

12. The Federal Motor Carrier Safety Administration was aware of numerous safety deficiencies in Aero Global Logistics' operations for several years, but the agency's interventions and oversight did not prevent the carrier from continuing to operate unsafely.

13. The overall safety posture of motor carriers would be better represented, and the safety of our roadways would be improved, if Safety Measurement System on-road performance data were included in the Federal Motor Carrier Safety Administration's determination of a motor carrier's safety rating.

14. When states do not have administrative safeguards in place, such as reviewing a company's status in the Federal Motor Carrier Safety Administration's database, to identify motor carriers that are subject to out-of-service orders and prevent them from registering their vehicles, as was the case with Montana, these carriers may exploit those states' lack of safeguards to continue to operate throughout the country in an unsafe manner.

15. Because of a lack of intervention associated with enforcement limitations on en-route bus inspections, LBFNY was able to operate its fleet of buses in violation of a federal out-of-service order, as well as with an improperly licensed driver and no safety management controls in place to protect bus occupants, for over 7 months.

Probable Cause

The National Transportation Safety Board determines that the probable cause of the Louisville, New York, crash was the truck driver's fatigue due to insufficient sleep and circadian disruption, which lowered his level of alertness to the driving task and resulted in the truck crossing the centerline of the roadway into the opposing lane of travel and colliding with the oncoming bus.

Contributing to the crash were the failure of the truck motor carrier, AGL, to effectively manage driver fatigue and monitor unsafe driving, and the failure of the bus motor carrier, LBFNY, to operate in compliance with Federal Motor Carrier Safety Regulations and a federal out-of-service order. Also contributing was the FMCSA's ineffective oversight of AGL during the New Entrant Safety Assurance Program and subsequent compliance reviews to ensure that the carrier had appropriate safety management controls in place to mitigate its high crash rate and driver fatigue.

Contributing to the severity of the injuries was the failure of the bus motor carrier, LBFNY, to ensure that seat belts were readily accessible and worn, which resulted in multiple bus occupants being displaced from their seats and injured during the collision sequence.

Recommendations

New Recommendations

To the Federal Motor Carrier Safety Administration:

1. Require new entrant motor carriers to submit a corrective action plan, to be reviewed and approved by the Federal Motor Carrier Safety Administration, before they are granted full operating authority if their Safety Measurement System on-road performance data show a pattern of unsafe operation or a high crash-involvement rate.
2. Incorporate Safety Measurement System on-road performance data into your methodology for determining a motor carrier's fitness to operate. [Note: this recommendation supersedes Safety Recommendation H-12-17 and is classified Open–Unacceptable Response.]
3. Support the American Association of Motor Vehicle Administrators in developing guidelines—such as requiring and reviewing US Department of Transportation numbers as part of the registration process—for state motor vehicle administrations to identify motor carriers that are subject to a federal out-of-service order and prevent them from registering their commercial motor vehicles in the state.

4. Include provisions in your safety fitness determination rulemaking that prioritize passenger-carrying motor carrier safety performance and ensure increased compliance monitoring and other interventions for these carriers, including more frequent compliance reviews.

To the State of Montana:

5. Implement procedures—such as requiring and reviewing US Department of Transportation numbers as part of the registration process—to identify motor carriers that are subject to a federal out-of-service order and prevent them from registering their commercial motor vehicles in the state.

To the American Trucking Associations and the National Private Truck Council:

6. Inform your members about the Louisville, New York, crash and urge them to develop fatigue management programs based on the North American Fatigue Management Program to educate drivers and other employees about fatigue, its causes, and its countermeasures.

To the Amalgamated Transit Union, the International Brotherhood of Teamsters, the Owner-Operator Independent Drivers Association, and the Transport Workers Union of America:

7. Inform your members about the Louisville, New York, crash and urge them to familiarize themselves with the North American Fatigue Management Program to learn about fatigue, its causes, and its countermeasures.

To the American Association of Motor Vehicle Administrators:

8. In cooperation with the Federal Motor Carrier Safety Administration, develop guidelines—such as requiring and reviewing US Department of Transportation numbers as part of the registration process—for state motor vehicle administrations to identify motor carriers that are subject to a federal out-of-service order and prevent them from registering their commercial motor vehicles in the state.

To LBFNY:

9. Establish procedures to ensure that the seat belts on all of your buses are regularly inspected to maintain their functionality and accessibility.
10. Establish policies to require that all bus occupants wear seat belts on every trip and that bus drivers provide pretrip safety briefings informing all bus occupants about the benefits of wearing seat belts.

To Aero Global Logistics:

11. Develop and implement a fatigue management program based on the North American Fatigue Management Program to educate your drivers and other employees about fatigue, its causes, and its countermeasures.
12. Install driver monitoring system technologies across your entire fleet of trucks and incorporate policies and procedures for proactively using these technologies to enhance safe driving behaviors and driver training and coaching.

Previously Issued Recommendations Reiterated in This Report

To the National Highway Traffic Safety Administration:

Require all newly manufactured commercial motor vehicles with gross vehicle weight ratings above 10,000 pounds to be equipped with lane departure prevention systems. (H-21-1)

Safety Recommendation H-21-1 is reiterated in section 2.3.3.2 of this report.

To the State of New York:

Enact legislation that provides for primary enforcement of a mandatory seat belt use law for all vehicle seating positions equipped with a passenger restraint. (H-15-42)

Safety Recommendation H-15-42 is reiterated in section 2.2.2 of this report.

Previously Issued Recommendation Reiterated and Classified in This Report

To the Federal Motor Carrier Safety Administration:

Establish an additional layer of oversight of recent graduates of your new entrant safety assurance program that has a lower tolerance for unsafe operations. (H-20-34)

Safety Recommendation H-20-34 is reiterated and classified Open–Unacceptable Response in section 2.4.1.2 of this report.

Previously Issued Recommendation Classified in This Report

To the Federal Motor Carrier Safety Administration:

Include safety measurement scores in the methodology used to determine a carrier's fitness to operate in the safety fitness rating

rulemaking for the new Compliance, Safety, Accountability initiative. (H-12-17)

Safety Recommendation H-12-17 is classified Closed–Unacceptable Action/Superseded in section 2.4.1.3 of this report.