



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Highway Safety
490 L'Enfant Plaza SW, Washington, DC 20594

October 18, 2022

Group Chairman's Factual Report

HUMAN PERFORMANCE

HWY22FH001

A. ACCIDENT

Location: Big Spring, Texas

Date: November 19, 2021

Time: 4:01 p.m. CST

Vehicle 1: 2016 Ford F-350 Pick Up Truck. Private Owner

Vehicle 2: 2005 MCI Motorcoach. Andrews Independent School District

Vehicle 3: 2018 Freightliner Bus. Andrews Independent School District

B. HUMAN PERFORMANCE GROUP

Group Chairman Rafael Marshall
National Transportation Safety Board (NTSB)
490 L'Enfant Plaza SW, Washington, DC 20594

Group Member Trooper Dustin Henderson
Texas Department of Public Safety (TXDPS)
San Angelo, Texas

C. SUMMARY

The Human Performance factual narrative focused on the driver of the 2016 Ford F-350 pick-up truck (truck driver) and the behavioral, medical, operational, and environmental factors that may have contributed to the crash. cursory information is provided about the drivers of the 2005 MCI motorcoach (motorcoach driver) and the 2018 Freightliner bus (bus driver).

D. DETAILS OF THE HUMAN PERFORMANCE INVESTIGATION

1.0 Truck Driver

1.1 Background and License History

The truck driver was a 59-year-old male with a Class C noncommercial driver's license. The license was issued in January 2019 and expired January 2025. It had no restrictions. He was familiar with the accident vehicle, having owned it since 2016. His driver records did not show any violations or suspensions in the past three years.

The truck driver owned a machine shop that he operated at his home address since May 1997.¹ According to the business card found in his wallet, the machine shop "specialized in pumping unit repair, welding, field work, straighten beam, grease and inspection." The machine shop had a United States Department of Transportation (USDOT) number of 3418603 (see *Motor Carrier Chairman's Factual Report*). In addition, according to his spouse, the truck driver had been the pastor of Valley View Baptist Church for 1.5 years. According to his spouse, the

¹ <https://www.corporationwiki.com/Texas/Midland/nathan-haile-machine-shop-inc/34544158.aspx>; https://texas.repair-misc.org/228172-nathan_hailes_machine_shop.htm; Accessed February 15, 2022.

truck driver was familiar with Big Spring.² On the day of the crash, the driver had not been working for the machine shop and had planned to spend the day evangelizing.

1.2 Pre-Crash Activities

Investigators from the Texas Department of Public Safety (TXDPS) and the NTSB interviewed the truck driver's spouse 4 days after the crash. The interview was brief, and his spouse stated that she had retained an attorney. According to his spouse, the truck driver went to bed around 10 p.m. and woke up around 5:30 a.m. On the day of the crash, the truck driver left the house between 10 a.m. and 10:30 a.m. and planned to spend the day proselytizing.

The TXDPS obtained video surveillance footage of the truck driver as he traveled the north frontage road adjacent to westbound I-20 in Big Spring.³ Surveillance video from Don's Tire Service showed the truck driver traveling east on the frontage road and making a left into Don's. The truck driver stops there, exits his vehicle, and separately approaches and speaks with the drivers of three other vehicles. Afterwards, he returns to his vehicle and drives away. Surveillance video from Eagles Den Suites, east of Don's Tire Service and on the same frontage road, shows the truck driver stopping and separately speaking with two individuals. Surveillance video from Hull's Meat Company at the intersection of the same I-20 frontage road and Birdwell Lane showed the truck driver parking, speaking with someone in the parking lot of the meat market, then heading to the Big Spring Livestock Auction adjacent to the meat market before heading back to his vehicle. Finally, the truck driver appears to speak briefly with another driver while they are both in their vehicles.

The surveillance videos from Don's Tire Service, Eagles Den Suites, and Hulls Meat Company showed that the truck driver generally walked using a quick pace, approached strangers confidently, and gesticulated while speaking. TXDPS interviewed several individuals who spoke with the truck driver prior to the crash, and they all indicated that the truck driver spoke quickly and was very animated during the conversation. He was also in a hurry to leave so that he could continue speaking with others.

Surveillance video from the DK showed the truck driver after he left Hulls Meat Company.⁴ The truck driver made a left from Birdwell Lane to East 3rd Street and headed east. However, from Birdwell, only right turns are allowed because East 3rd Street is a one-way eastbound road. Surveillance video from the Quality Inn on East 3rd Street showed the truck driver going the wrong way and entering the off-ramp of I-20 east. Finally, surveillance video from the Crossroads Collision Center showed the truck driver proceeding west on eastbound I-20 and being passed by an eastbound vehicle.

1.3 Health History

(See Medical Factual Report)

² Human Performance Attachment – Interview with next-of-kin of truck driver.

³ Human Performance Attachment – List of Surveillance Video Clips.

⁴ DK is the name of the general store next to the ALON gas station.

1.4 Autopsy and Toxicology

(See Medical Factual Report)

1.5 Phone Records

Investigators obtained the truck driver's cellular phone records to estimate sleep/wake times and determine if he had been using his phone for texting or calling at the time of the crash.⁵ On November 16, the truck driver initiated two early morning phone calls. Based on the numbers called, these were likely related to his machine shop business, which catered to the oil extraction industry in West Texas. Other than this, his phone activity was scant and offered little clue to his sleep/wake schedule. Based on this information, it appeared that the truck driver had not been on a call or had not been texting (using the phone's native texting application) at the time of the crash.

The phone records do indicate data usage until the time of the crash; however, because the truck driver's phone was not recovered in the crash, the NTSB could not perform a forensic evaluation of the device to determine if the activity was initiated by the truck driver or by the phone.

Table 1. Truck driver cellular phone activity.

Date	Start Time	End Time	Activity
11/16/2021	2:07 AM	3:51 AM	Call out
11/16/2021	4:08 AM	6:23 AM	Call out
11/16/2021	9:14 AM	9:15 AM	Call in
11/17/2021	10:19 AM	10:21 AM	Call in
11/17/2021	10:27 AM	10:42 AM	Call in
11/17/2021	11:47 AM	11:47 AM	Call in
11/17/2021	11:53 AM	11:54 AM	Call in
11/17/2021	12:27 PM	12:27 PM	Outgoing text
11/17/2021	3:26 PM	3:26 PM	Call in
11/17/2021	3:43 PM	3:44 PM	Call in
11/17/2021	3:53 PM	3:54 PM	Call in
11/17/2021	5:25 PM	5:26 PM	Call in
11/18/2021	6:17 PM	6:18 PM	Call out
11/19/2021	11:03 AM	11:03 AM	Call out

2.0 Motorcoach Driver

2.1 Background and License History

The motorcoach driver was a 69-year-old male. He held a Class B driver's license with a passenger endorsement. The license was issued in November 2021 and expired November 2029. The motorcoach driver was required to use corrective lenses when operating a vehicle. His

⁵ Human Performance Attachment – Truck driver phone records.

medical certificate was issued in July 2020 and expired in July 2022.⁶ The medical certificate was signed by a medical examiner certified by the Federal Motor Carrier Safety Administration (FMCSA).

The motorcoach driver started his employment with Andrews Independent School District (Andrews ISD) in 2009. Records from the Drug and Alcohol Clearinghouse indicated that he had no past inspections and was clear to operate commercial vehicles. Documents from Andrews ISD indicated that the motorcoach driver had submitted to three federally regulated controlled substance tests. The controlled substance tests were classified as random tests and were conducted on December 11, 2015, May 20, 2016, and March 27, 2017. All tests returned negative results.

Table 2. Traffic event history of motorcoach driver.

Date	Violation/Incident	Vehicle
10/22/2009	Speeding	Non-CMV
4/6/2018	Non-injury crash Failed to drive in single lane	Non-CMV
7/18/2019	Speeding	Non-CMV

2.2 Pre-Crash Activities

Investigators spoke with the motorcoach driver's spouse 4 days after the crash.⁷ Investigators learned that on November 18th (Thursday) the motorcoach driver awoke around 5 a.m., took a walk around the church building, returned by 6 a.m., read the paper, ate breakfast, then volunteered at the church. He came back home for lunch, then worked on the yard. He then departed for the Lions Club, then spent 1 – 1.5 hours visiting his dad, returned home, had supper, watched a movie on his computer, then went to bed between 10:30 and 11 p.m. On Friday, the day of the crash, the motorcoach driver again awoke around 5 a.m. then took his walk around the church. He had felt a little rushed that day due to an issue related to insurance. He left to get the motorcoach around 1p.m.

His spouse stated that the motorcoach driver slept well and did not snore. There were no family issues that would cause him stress. She further stated that the motorcoach driver was familiar operating buses, having done so since 1974. He was familiar driving the motorcoach.

The motorcoach driver's phone records were obtained to determine if he was using his phone at the time of the crash. His phone records indicated that he had not been on a call or texting using the phone's native applications.⁸

⁶ Although the motorcoach driver had a 2-year DOT Medical certificate, he was examined every year as required by Texas statute.

⁷ Human Performance Attachment – Interview with next-of-kin of motorcoach driver.

⁸ Human Performance Attachment – Motorcoach driver phone records.

2.3 Toxicology

An autopsy was performed on the motorcoach driver on November 22, three days after the crash. A urine drug screen performed during the autopsy was negative for alcohol and common drugs of abuse.

3.0 Bus Driver

3.1 Background and License History

The bus driver was a 60-year-old male. He held a Class B driver's license with a passenger and a school passenger endorsement. The license was issued in September 2020 and expired November 2028. The bus driver was required to use corrective lenses when operating a vehicle. His medical certificate was issued in August 2020 and expired in August 2022. The medical certificate was signed by a medical examiner certified by the FMCSA. Records from the Drug and Alcohol Clearinghouse indicate had no past inspections and was clear to operate commercial vehicles. According to information from the Commercial Driver's License Information System (CDLIS), the bus driver had no convictions, accidents, or withdrawals.

3.2 Pre-Crash Activities

Investigators spoke with the bus driver 4 days after the crash.⁹ According to the bus driver, on November 18th, he woke up late then taught a tennis class from 2:30 p.m. until 4 p.m. He stated he didn't do much after that and went to bed around 11 p.m. The bus driver stated that he awoke around 5 a.m. but went back to bed. On November 19, the day of the crash, the bus driver awoke between 8 and 9 a.m. and relaxed at home. He went to the school around 12 p.m. and taught a junior varsity tennis class from 12:20 p.m. until 1 p.m. He then taught a varsity tennis class from 1 p.m. until 1:30 p.m. He then received a call from "Donny" to because one of their bus drivers canceled and needed him to substitute. The bus driver arrived at the bus bay around 2 p.m. and left Andrews for a football game in Sweetwater around 2:45 p.m.

The bus driver stated that he got on I-20 at Exit 177.¹⁰ He made no stops prior to the crash. He usually used a citizen's band radio to stay in touch with the other drivers but only did so once on this trip. He usually sets the cruise control for 73 mph but does not remember doing so prior to the crash because he was trying to catch up to the motorcoach. He stated that the bus was not as fast as the motorcoach.

As the bus followed the motorcoach, he noticed the motorcoach make an evasive maneuver to the left, then to the right. These maneuvers caused the motorcoach to fishtail. At this point, the bus driver took his foot off the accelerator. He stated that the motorcoach was in the middle of the road when the crash occurred. The bus driver steered to the right to avoid the crash and went through the smoke of the initial crash. He stated that he couldn't see anything at this point. He pulled to the side of the road, parked the bus, and exited the bus. He noticed the

⁹ Human Performance Attachment – Interview with bus driver.

¹⁰ The three buses in the convoy likely took Andrews Highway (state route 176) to I-20. Exit 177 was the next major exchange.

damage along the driver's side of the bus. He then started walking back to the final rest position of the motorcoach.

According to the bus driver, he had no medical issues that could affect his operation of a vehicle.

E. GENERAL FACTORS

1.0 Weather

The closest official National Weather Service weather station to the crash site was located approximately 48 miles southwest, at Midland International Airport (weather station KMAF). Observations closest to the time of the crash are shown in Table 3.

Table 3. Weather data from weather station KMAF.

Time (EST)	3:53 p.m.
Temperature	67° F
Dew Point	32° F
Humidity	27%
Pressure	27.15 in
Wind Dir.	S
Wind Speed	13 mph
Wind Gust Speed	0
Precipitation	0
Events	None
Conditions	Fair

2.0 Astronomical Factors

According to the Earth System Research Laboratory/Global Monitoring Division of the National Oceanic and Atmospheric Administration, apparent sunrise in the immediate area of this crash occurred at 7:19 a.m., and apparent sunset occurred at 5:43 p.m. This crash occurred at 4:01 p.m., during the daylight hours. The sun was to the southwest, at an azimuth of 231 degrees and an elevation of 17 degrees (see figure 1). The sun would have been to the left of the truck driver at the time of the crash.

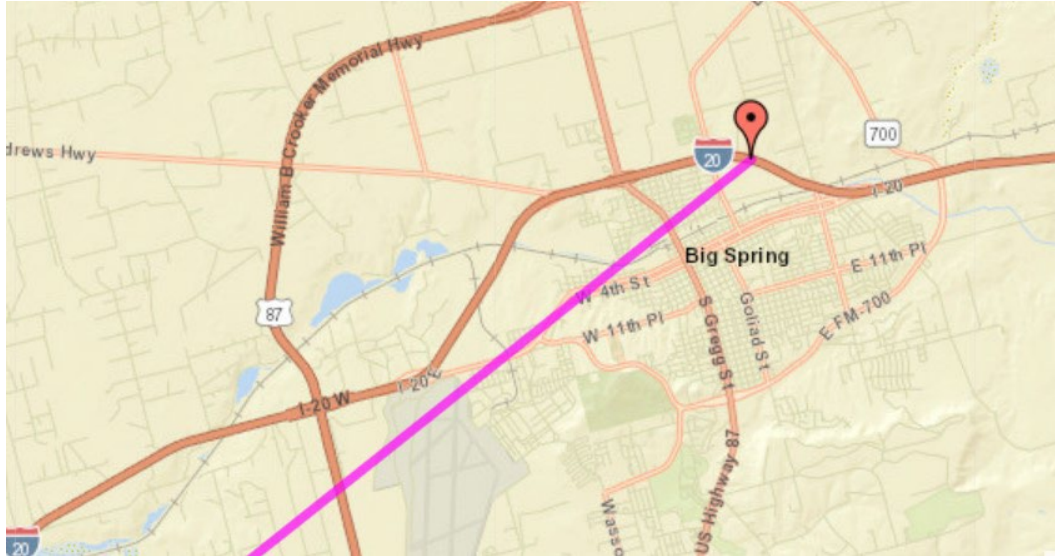


Figure 1. Direction of the sun at the time of the crash.

F. ATTACHMENTS

- Human Performance Attachment – Interview with next-of-kin of truck driver
- Human Performance Attachment – List of Surveillance Video Clips
- Human Performance Attachment – Truck driver phone records
- Human Performance Attachment – Interview with next-of-kin of motorcoach driver
- Human Performance Attachment – Motorcoach driver phone records
- Human Performance Attachment – Interview with bus driver

Submitted by:

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