



NATIONAL TRANSPORTATION SAFETY BOARD

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

Group Chairman's Factual Report

HUMAN PERFORMANCE FACTORS

HWY22MH006

A. CRASH INFORMATION & CRASH SUMMARY

Refer to the *Crash Information and Crash Summary Report* in the docket for this investigation.

B. HUMAN PERFORMANCE FACTORS GROUP

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C. DETAILS OF THE HUMAN PERFORMANCE FACTORS INVESTIGATION

The human performance factors on-scene investigation focused on the behavioral, medical, operational, and environmental factors associated with the drivers of the 2007 Dodge Ram 2500 pickup truck (hereafter the pickup driver) and the 2017 Ford Transit Van (hereafter the van driver). Factors which potentially contributed to their performance in the crash are examined in the sections below.

The pickup truck was used by the driver for personal and business use. The pickup truck contained work tools and an external fuel tank. According to his wife, it was being used for business purposes when the crash occurred. Because the gross vehicle weight rating (GVWR) of the pickup truck was below 10,000 pounds, it was not within the scope of the Federal Motor Carrier Safety Regulations (FMCSRs).¹

The Ford Transit Van was being used commercially by a university to transport athletes to a golf tournament. Because the van was towing a trailer when the crash occurred, its combined gross vehicle weight rating (CGVWR) was sufficient to fall within the scope of the FMCSRs.

1. 2007 Dodge Ram 2500 Pickup Truck Driver

The driver of the 2007 Ram pickup truck was a 38-year-old male that lived in Seminole, TX with his wife and 5 children. According to his wife he worked as a mechanic and owned a trucking company.

1.1. Licensing

At the time of the crash, the pickup truck driver had a valid Texas Class C driver's license; there were no restrictions or endorsements.² His driving history dates to September 11, 2005, before he was licensed. His driver's license was most recently reinstated on August 17, 2019, because of legislative changes in Texas traffic laws (see section **1.3 Texas Driver Responsibility Program**). Details of the pickup truck driver's license history are described below.

1.1.1. Violation History

The pickup truck driver's first traffic violation occurred on September 11, 2005, when he was 21 years old; he was charged and convicted of driving without a license. On December 9, 2006, while unlicensed, he was charged with and subsequently convicted of driving while intoxicated (DWI). In all, the pickup truck driver's license and court history shows 29 traffic violations (25 convictions), including 13 violations related to driving without a license, 11 violations related to excessive speed, and one DWI conviction. See **Table 1** below for a list of traffic law violations.

¹ For more information, see the Motor Carrier Group Chairman's Investigation Narrative

² Human Performance Factors Attachment – Pickup Truck Driver's License History

Table 1: Pickup Driver Traffic Law Violations

Date	Location	Traffic Violation
11-13-21	Reeves County, TX	Speed Equal to or Greater than 10% Above Posted Limit
11-14-21	Seminole, TX	Excessive Speed* (48 mph/20 mph)
2-23-21	Seminole, TX	Failure to Drive in Single Lane* (warning)
2-11-18	Seminole, TX	Driving While License Invalid*
2-11-18	Seminole, TX	Excessive Acceleration*
4-29-17	Gaines County, TX	Driving Without License
4-14-17	Gaines County, TX	Driving Without License
4-14-17	Gaines County, TX	Excessive Acceleration
9-19-16	Seagraves, TX	Speed Equal to or Greater than 10% Above Posted Limit
6-18-16	Gaines County, TX	Excessive Speed (105 mph/75 mph)
6-18-16	Gaines County, TX	Driving Without License
11-8-14	Terry County, TX	Speed Equal to or Greater than 10% Above Posted Limit
11-8-14	Terry County, TX	No Driver License
10-25-13	Gaines County, TX	Driving While Invalid License
7-27-13	New Braunfels, TX	Driving Without License
3-23-13	Gaines County, TX	No Seat Belt (driver)
3-23-13	Gaines County, TX	Driving While Invalid License
2-14-13	Gaines County, TX	Driving Without License
2-14-13	Gaines County, TX	Failure to Control Speed
10-16-12	Gaines County, TX	No Driver License
10-16-12	Gaines County, TX	Fail to Control Speed
10-2-12	Gaines County, TX	Driving While License Invalid
5-10-12	Seminole, TX	Parking on Roadway
6-4-11	Menard County, TX	Speeding 15 mph or more over posted limit
6-4-11	Menard County, TX	No Driver License
1-22-10	Terry County, TX	Speeding 15 mph or more over posted limit
1-22-10	Terry County, TX	No Driver License
12-9-06	Gaines County, TX	Driving While Intoxicated
9-11-05	Gaines County, TX	No Driver License

*Does not appear on driving record

1.1.2. Driver License Status History

During much of his driving history, the pickup truck driver was unlicensed, or his driving privilege was suspended. His first traffic violation occurred on September 11, 2005, while he was unlicensed. The conviction for this violation resulted in his first driving privilege suspension. The pickup truck driver first obtained a driver’s license on July 18, 2011. In all, the pickup truck driver had 8, suspensions against his license or driving privilege. **Table 2** below lists driver’s license and driving privilege suspension periods and the traffic violation for which he was stopped. The pickup truck driver’s most recent driver driver’s license suspension began on March 3, 2018 and ended on March 2, 2019. When the crash occurred, his license was valid.

Table 2: Pickup Truck Driver License Suspension History

Begin Date	End Date	Related Violation	Violation Date
03-03-2018	03-02-2019	Speeding 10% Above Speed Limit	9-19-2016
02-01-2015	01-31-2016	Speeding 10% Above Speed Limit	11-08-2014
01-14-2014	03-26-2014	Driving While License Invalid	10-25-2013
10-04-2013	10-03-2014	Driving While License Invalid	03-23-2013
06-08-2013	06-07-2014	Fail to Control Speed	10-16-2012
02-04-2013	02-03-2015	Driving While License Invalid	10-02-2012
05-15-2010	05-14-2011	No Driver License	01-22-2010
01-18-2007	04-17-2007	Driving While Intoxicated	12-09-2006

1.2. Texas Traffic Law

Texas law requires that unless exempted, a person may not operate a motor vehicle on a highway unless the person holds a driver’s license.³ Persons exempt from driver license requirements include:

- a person serving in the armed forces while operating an official vehicle in the scope of that service,
- a person operating a road machine, farm tractor, or implement of husbandry unless the vehicle meets the Texas definition of a commercial motor vehicle, and
- a nonresident of Texas on active duty in the armed forces (including a spouse or dependent) who holds a license issued by their state or Canadian province of residence.

A person convicted of driving without a license may be subject to a fine of up to two hundred dollars for a first offense; twenty-five to two hundred dollars for a second offense within a year; and a fine of twenty-five to two hundred dollars and/or seventy-two hours to six months of jail confinement for a third violation within twelve months.

1.2.1. Texas Driver License Suspensions

For certain traffic law violations, the Texas Department of Public Safety (DPS) may suspend, cancel, or revoke an individual’s driving privileges. Most suspensions are applied following a court action such as a conviction of DWI, driving without a license, driving with a suspended or revoked license, reckless driving, or driving without insurance coverage. Additionally, court related driver license suspensions may be applied for failure to appear in court to face traffic violation charges or failure pay traffic citation fines. Under the Texas Administrative License Revocation (ALR) Program, a person may have their driving privileges suspended from 90 days to 2 years for failing or refusing a breath alcohol test when an officer has probable cause to believe that a DWI offense has occurred.

³ Texas Transportation Code § 521.021.

1.3. Texas Driver Responsibility Program

On September 1, 2003, Texas enacted the Driver Responsibility Program (DRP). The program was developed to encourage safe driving habits by establishing a system that authorized the DPS to assess surcharges to an individual based on certain traffic offenses. The surcharges are separate from other license actions (suspensions, revocations, or cancellations). Surcharges were assessed based on points applied for convictions of moving violations or convictions or serious violations such as DWI or driving without a license.

On September 1, 2019, the Texas Legislature repealed the DRP. As a result, all suspension surcharges were eliminated, and previously assessed points were removed from driving records. However, previous suspensions and violations were not removed from driving records. After the repeal of the DRP, the pickup truck driver was able to obtain a valid driver's license.

1.4. Crash History

According to police data, the pickup truck driver was involved in a previous crash on July 5, 2012, in Seminole, Texas.⁴ The crash occurred when the operator of another vehicle turned in front of the pickup truck driver from an improper lane position. The reporting officer found that the pickup truck driver was not at fault; he was not issued a citation. The pickup truck driver had a valid driver's license when this crash occurred.

1.5. Activities Prior to the Crash

In an interview with the pickup truck driver's wife, she was asked about his activities leading up to the crash.⁵ According to his wife, the pickup driver typically began working around 5 o'clock in the morning and finished around 6 o'clock in the evening. On the day of the crash, he woke up sometime in the afternoon because he worked late the previous day; she was unsure what time he got home or went to bed. On the day of the crash, she last spoke to the pickup truck driver when he left home, about 20 minutes prior to the crash. The pickup truck driver's cell phone records were obtained. The records show that he did not use his phone frequently throughout the day. Because the pickup truck driver was self-employed, no records showing his work hours were available. Information showing the pickup truck driver's activities leading up to the crash is listed below in **Table 2**.

Table 2: Pickup Truck Driver's Activities

Sunday, March 13, 2022		
<u>Time</u>	<u>Event</u>	<u>Source</u>
8:08 a.m.	Driver made first cell phone call of the day	Cell Phone Records
8:49 p.m.	Driver ended last cell phone call of the day	Cell Phone Records
Monday, March 14, 2022		
<u>Time</u>	<u>Event</u>	<u>Source</u>
11:36 a.m.	Driver made first cell phone call of the day	Cell Phone Records
11:12 p.m.	Driver ended last cell phone call of the day	Cell Phone Records

⁴ Human Performance Factors Attachment – Pickup Truck Driver's 7-5-12 Crash Report

⁵ Human Performance Factors Attachment – Pickup Truck Driver's Wife Interview

Tuesday, March 15, 2022

<u>Time</u>	<u>Event</u>	<u>Source</u>
5:55 p.m.	Driver received only cell phone call of the day	Cell Phone Records
7:50 p.m.	Driver left home/beginning of crash trip	Witness Interview
8:17 p.m.	Crash occurred Andrews, TX	Police Records

1.6. Crash Route

According to the pickup truck driver's wife, he departed their home about 8:00 p.m. headed to Midland, TX, about 65 miles away. The crash occurred about 25 miles into the trip near Andrews, TX. The pickup truck driver was familiar with the highway as he traveled it frequently.

1.7. Health Factors

According to the pickup truck driver's wife, he did not have any known medical conditions or diagnosis. He did not have medical insurance and did not regularly see a physician. She did not know the last time that he saw a doctor. Because the pickup truck driver did not operate a commercial motor vehicle (CMV), he did not have a commercial driver medical exam. His wife stated that on occasions in which he received prescription medications, he obtained them from Walgreens Pharmacy. However, upon receipt of a subpoena, Walgreens Pharmacy indicated that there were no prescription records for the pickup truck driver.

1.8. Post-Crash Toxicology

Following the crash, the South Plains Pathology Laboratory collected a blood sample from the pickup truck driver for toxicological analysis. An additional sample was sent to the Federal Aviation Administration (FAA) Forensic Sciences Laboratory for toxicological analysis. The results of toxicology testing can be found in the *Medical Factual Report* for this investigation.

1.9. Pickup Truck Driver Distraction

According to the pickup truck driver's cell phone records, he was not using his phone to talk or text near the time of the crash.

2. 2007 Ford Transit Van Driver

The driver of the 2007 Ford Van was a 26-year-old single male that lived alone in Hobbs, NM. He was a native of Texas that moved to NM to become the head coach of the golf team for the University of the Southwest in Hobbs, NM.

2.1. Licensing

At the time of the crash, the van driver held a Texas Class C license⁶; the required license for the van involved in this crash. His driving record lists a single conviction for a traffic violation which occurred on February 9, 2020, in Kosse, TX; the violation was not listed. In response to

⁶ Human Performance Factors Attachment – Van Driver's License History

receiving a traffic violation, he completed the Texas Driving Safety Course on March 12, 2020. There are no other entries on his driving record.

2.2. Crash History

There was no record of any previous crashes listed on the van driver’s driving record or in an insurance industry crash database.

2.3. Activities Prior to the Crash

Information as to the van driver’s activities in the days leading up to the crash was obtained from a surviving passenger aboard the van when the crash occurred. According to the passenger, the day prior to the crash, the golf team traveled from Hobbs, NM to Midland, TX to practice at the tournament location and returned at the end of the day. The day of the crash, the team left Hobbs, NM at about 5:30 a.m. After finishing the tournament, the team departed the golf course and stopped for a meal at a local fast-food restaurant. After stopping for about 30 minutes, the team departed for Hobbs, NM at about 7:30 p.m. The passenger stated that the van driver worked during the entire tournament; he provided meals and water to players on the course while monitoring the team. Because the van driver worked as a salaried employee, there were no records indicating his work times. The van driver’s cell phone records were obtained.⁷ There was no information available as to his activity when he was not working. Information indicating work and cell phone activity are shown below in **Table 3**; all times are in Central Daylight Time.

Table 3: Van Driver’s Activities

Sunday, March 13, 2022		
<u>Time</u>	<u>Event</u>	<u>Source</u>
2:23 p.m.	Driver received cell phone call	Cell Phone Records
8:49 p.m.	Driver ended last cell phone call of the day	Cell Phone Records
Monday, March 14, 2022		
<u>Time</u>	<u>Event</u>	<u>Source</u>
5:35 a.m.	Driver departed Hobbs, NM	Witness Interview
5:43 a.m.	Driver made first cell phone call of the day	Cell Phone Records
8:00 a.m.	Driver began working golf tournament	Witness Interview
7:29 p.m.	Driver ended last cell phone call of the day	Cell Phone Records
Tuesday, March 15, 2022		
<u>Time</u>	<u>Event</u>	<u>Source</u>
5:35 a.m.	Driver departed Hobbs, NM	Witness Interview
5:45 a.m.	Driver made first cell phone call of the day	Cell Phone Records
7:15 p.m.	Driver made last phone call before the crash occurred	Cell Phone Records
7:30 p.m.	Driver departed Midland TX	Witness Interview
8:17 p.m.	Crash occurred Andrews, TX	Police Records

⁷ Human Performance Factors Attachment – Van Driver’s Cell Phone Records

2.4. Crash Route

According to an administrator from the University of the Southwest, the crash trip was a return trip to the university following a golf tournament in Midland Texas. The distance of the trip was about 100 miles. Under normal traffic conditions, the trip takes about one hour and forty-five minutes. The crash occurred about 27 miles into the trip. The van driver made the trip the previous day for a practice session at the golf course. According to the university administrator, the van driver had made the trip previously, but not on a regular basis. The university did not provide guidance on which route was to be taken.

2.5. Health Factors

Because the van driver was operating a commercial motor vehicle, he was required to be medically certified. However, the university was not in compliance with Federal Motor Carrier Safety Regulations and the driver was not medically certified. For more information, see *Motor Carrier Factual Report* for this investigation. There was no medical information pertaining to the van driver obtained in this investigation.

2.6. Post-Crash Toxicology

Following the crash, the South Plains Pathology Laboratory collected a blood sample from the van driver for toxicological analysis. An additional sample was sent to the Federal Aviation Administration (FAA) Forensic Sciences Laboratory for toxicological analysis. The results of toxicology testing can be found in the *Medical Factual Report* for this investigation.

2.7. Van Driver Distraction

According to the pickup truck driver's cell phone records, he was not using his phone to talk or text near the time of the crash.

3. Witness Statement Summary

NTSB investigators interviewed a driver of a vehicle traveling immediately behind the transit van. The driver stated that he traveled behind the van for approximately 10 miles. During this time, he and the van travelled about 70-75 mph. The witness did not observe anything unusual about the operation of the van. The witness noted that the rear lights were not working on the trailer being towed by the van. When the crash occurred, the witness did not observe the van brake or steer away from the approaching pickup truck. His first indication that a crash had occurred was a large "fireball". After the collision, fire quickly consumed both vehicles.

4. Environmental Factors

Global Positioning System (GPS) coordinates of the crash scene were used to determine environmental conditions near the time of the crash:

Latitude: 32.4114
Longitude: -102.4303

4.1. Weather Data

Historical weather data from the Midland/Odessa National Weather Service (KMDD), located approximately 19 miles from the crash site were used to document meteorological conditions. Observations for March 15, 2022, near the time of the crash are shown below in **Table 4**.⁸

Table 4. March 15, 2022, KMDD Weather Observations

Time (EST)	7:53 p.m.	8:53 p.m.
Temperature	68° F	63° F
Dew Point	14.0° F	14.0° F
Humidity	12%	15%
Pressure	27.13 in	27.13 in
Visibility	10 mi	10 mi
Wind Dir.	SSW	S
Wind Speed	7 mph	6 mph
Wind Gust Speed	0	0
Precipitation	0.0	0.0
Conditions	Clear	Clear

4.2. Astronomical Data for March 15, 2022

Using the GPS Coordinates listed above, astronomical data for the crash site and date was obtained from the United States Naval Observatory (USNO).⁹ The astronomical data is summarized in **Table 5** below.

Table 5. March 15, 2022
Sun and Moon Data for Andrews, TX

Event	Time
CRASH	8:17 p.m.
Begin civil twilight ¹⁰	7:36 a.m.
Sunrise	8:00 a.m.
Sun Transit	1:59 p.m.
Sunset	7:58 p.m.
End civil twilight	8:23 p.m.
Moon Set	6:59 a.m.
Moon Rise	5:33 p.m.

⁸ Data obtained from: <http://www.wunderground.com>.

⁹ Data obtained from: https://aa.usno.navy.mil/calculated/rstt/oneday?date=2022-03-15&lat=32.32&lon=-102.55&label=Andrews%2C+TX&tz=6&tz_sign=-1&tz_label=true&dst=true&submit=Get+Data

¹⁰ Morning civil twilight begins when the geometric center of the sun is 6 degrees below the horizon and ends at sunrise.

D. DOCKET MATERIAL

The following human performance attachments are included in the docket for this investigation:

Human Performance Factors Attachment – Pickup Truck Driver’s License History

Human Performance Factors Attachment – Pickup Truck Driver’s 7-5-12 Crash Report

Human Performance Factors Attachment – Pickup Truck Driver’s Wife Interview

Human Performance Factors Attachment – Pickup Truck Driver’s Cell Phone Records

Human Performance Factors Attachment – Van Driver’s License History

Human Performance Factors Attachment – Van Driver’s Cell Phone Records

End of Report

Kenneth Bragg

Senior Human Performance Investigator