

# NATIONAL TRANSPORTATION SAFETY BOARD OFFICE OF HIGHWAY SAFETY WASHINGTON, D.C.

# HUMAN PERFORMANCE FACTORS GROUP CHAIRMAN'S FACTUAL REPORT

#### 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

Kenneth J. Bragg, Senior Human Performance Factors Investigator, Group Chairman NTSB Office of Highway Safety 490 L'Enfant Plaza East, S.W. Washington, DC 20594

#### C. DETAILS OF THE HUMAN PERFORMANCE FACTORS INVESTIGATION

The primary focus of this investigation are the drivers of two combination commercial motor vehicles (CMV's) that collided with the rear of a traffic queue that formed following a series of minor collisions in the northbound lanes of Interstate 65 (I-65) near milepost 138 in Greenville, Alabama. The Human Performance factual investigation focused on the behavioral, medical, operational, and environmental factors associated with the CMV drivers.

### 1. 2020 Volvo Driver's Behavioral Factors

The driver of the 2020 Volvo combination vehicle was a 57-year-old male. At the time of the crash, he worked as a commercial driver for an auto transport company based regionally in Birmingham, AL.

# 1.1. Licensing

At the time of the crash the Volvo driver held a valid Alabama Class A Commercial Driver's License (CDL). He held double/triple trailers and tank endorsements. The Volvo driver first obtained his CDL in 2001 through a training program provided by a former carrier. His current license was issued in February 2021 with an expiration date in February 2025.

<sup>&</sup>lt;sup>1</sup> A Class A license allows the holder to operate any combination of motor vehicles with a gross combined weight rating (GCWR) of 26,001 pounds or more, in combination with a trailer in excess of 10,000 pounds in commerce.

<sup>&</sup>lt;sup>2</sup> A doubles/triple trailer endorsement allows the holder to operate a combination vehicle towing two or three trailers simultaneously; a tank endorsement allows the holder to operate a vehicle designed to carry any liquid or gaseous material within a tank(s) that is permanently or temporarily attached to the vehicle.

# 1.1.1. License History

The truck driver's Alabama driving record and the Commercial Driver's License Information System (CDLIS) listed one license suspension.<sup>3</sup> His license was suspended for failure to appear in court after being issued a traffic citation. The suspension was issued on February 19, 2003 and withdrawn on March 21, 2005. The original citation was for an unspecified violation which occurred in Georgia on July 26, 2002. A comprehensive public records database indicates that the Volvo driver was cited for two CMV weight violations, gross weight exceeded 80,000 lbs. on July 19, 2005 and September 26, 2007; both in Missouri. The weight violations do not appear elsewhere in his driving history.

Pre-employment records from a previous carrier indicate that the truck driver had a traffic conviction for an improper U-turn on October 19, 2009 and speeding 15-25 mph over the speed limit on February 19, 2011. These violations did not appear in his current driving record due to record retention limits.<sup>4</sup>

A query of the Problem Driver Pointer System (PDPS) maintained by the National Driver Registry (NDR) found no entry that the truck driver's license had been suspended.<sup>5</sup> The suspension does not appear in NDR because the suspension was the result of an administrative action and not due to a traffic violation conviction.

# 1.2. Crash History

Queries of an insurance industry claims database, a comprehensive database of public records, and the Volvo driver's license history found no involvement in previous crashes.

#### 1.3. Training and Experience

The Volvo driver self-reported that he first obtained heavy vehicle operator training while enlisted in the United States Army in 1982; he continued military service until 2006. According to the truck driver's employment application with the accident carrier, dated May 17, 2012, he has operated car haulers since 1992 and has had uninterrupted employment as a commercial driver since May 2000.<sup>6</sup> In 2012, when the Volvo driver began employment with the accident carrier, he underwent new employee driver training program.<sup>7</sup>

<sup>&</sup>lt;sup>3</sup> Human Performance Factors Attachment – Volvo Driver's License History.

<sup>&</sup>lt;sup>4</sup> Illinois traffic violations remain on a driver's record from four to five years. Found at: <a href="https://www.cyberdriveillinois.com/departments/drivers/faq.html#:~:text=Moving%20violations%20such%20as%2">https://www.cyberdriveillinois.com/departments/drivers/faq.html#:~:text=Moving%20violations%20such%20as%2</a> <a href="mailto:ospeeding,from%20the%20date%20of%20conviction">ospeeding,from%20the%20date%20of%20conviction</a>.

<sup>&</sup>lt;sup>5</sup> National Driver Registry is a division in the National Center for Statistics and Analysis within the National Highway Traffic Safety Administration which maintains the Problem Driver Pointer System database. The database contains records of driver's whose privilege to drive has been suspended, cancelled, revoked or denied or who have been convicted or serious traffic-related offenses.

<sup>&</sup>lt;sup>6</sup> Human Performance Factors Attachment – Volvo Driver's Employment Application.

<sup>&</sup>lt;sup>7</sup> See the *Motor Carrier Factual Report* for more information on the Volvo driver's employment training.

# 1.4. Crash Trip

The crash trip began as a return to the carrier's base from a car dealership in Mobile, Alabama to the carrier base in Birmingham, Alabama. The distance of the intended route was about 265 miles and, according to the driver, would have taken about four and a half hours to complete. When the crash occurred, the truck was empty and the driver had not yet purchased fuel. The driver made the trip frequently throughout his work week and was familiar with the roadway.

### 1.5. Activities Prior to Crash

Information about the Volvo driver's activities in the days leading up to the crash were obtained from his cell phone records<sup>8</sup>, data from the truck driver's electronic logging device (ELD)<sup>9</sup>, and an interview with the driver<sup>10</sup>. The Volvo driver's activities are listed below in **Table** 1.

**Table 1**: Volvo driver's activities leading up to the crash.

Tuesday, June 15, 2021				
Time	Event	Source		
5:26 a.m.	Driver goes on duty, Tarrant, AL <sup>11</sup>	Electronic Logging Device		
1:04 p.m.	First cell phone call of the day	Cell phone records		
8:49 p.m.	Driver Goes off duty, Tarrant, AL	Electronic Logging Device		
8:49 p.m.	Last cell phone call of the day	Cell phone records		
12:00 a.m.	Driver goes to bed	Driver interview		
	Wednesday, June 16, 2021			
<u>Time</u>	<u>Event</u>	Source		
4:00 a.m.	Driver wakes up	Driver interview		
7:31 a.m.	Driver goes on duty, Tarrant, AL	Electronic Logging Device		
12:00 p.m.	Driver goes off duty, Tarrant, AL	Electronic Logging Device		
1:16 p.m.	First cell phone call of the day	Cell phone records		
7:09 p.m.	Driver goes off duty, Tarrant AL	Electronic Logging Device		
11:40 p.m.	Last cell phone call of the day	Cell phone records		
12:00 a.m.	Driver goes to bed	Driver interview		
Thursday, June 17, 2021				
<u>Time</u>	Event	Source		
6:00 a.m.	Driver wakes up	Driver interview		
5:48 a.m.	Driver goes on duty, Tarrant, AL Electronic Loggin			
10:17 a.m.	First cell phone call of the day  Cell phone records			
7:09 p.m.	Driver goes off duty, Tarrant, AL Electronic Logging Devi			
9:57 p.m.	Last cell phone call of the day	Cell phone records		
12:00 a.m.	Driver goes to bed Driver interview			

<sup>&</sup>lt;sup>8</sup> Human Performance Factors Attachment – Volvo Driver's Cell Phone Records.

Human Performance Factors Attachment – Volvo Driver's ELD Records.
 Human Performance Factors Attachment – Witness Interviews.

<sup>&</sup>lt;sup>11</sup> Tarrant, AL is a municipal city in Jefferson County Alabama which borders Birmingham, Alabama.

Friday, June 18, 2021			
<u>Time</u>	Event	Source	
6:00 a.m.	Driver wakes up Electronic Logging		
7:28 a.m.	Driver goes on duty, Tarrant, AL	Electronic Logging Device	
8:50 a.m.	First cell phone call of the day  Cell phone records		
5:53 p.m.	Driver goes off duty, Tarrant, AL	Electronic Logging Device	
9:57 p.m.	Last cell phone call of the day	Cell phone records	
10:00 p.m.	Driver goes to bed	Driver interview	
	Saturday June 19, 2021		
<u>Time</u>	Event	Source	
3:45 a.m.	Driver wakes up	Driver interview	
4:41 a.m.	Driver goes on duty, Tarrant, AL	Electronic Logging Device	
9:41 a.m.	First cell phone call of the day	Cell phone records	
12:14 p.m.	Last cell phone call before the crash occurred	Cell phone records	
2 :22 p.m.	Crash occurred in Greenville, AL	Police Records	

# 1.6. Sleep Factors

In an interview with the Volvo driver, he stated that he generally sleeps well. He typically works during the day and goes to sleep at night. His job does not typically involve overnight trips; he sleeps at home nightly. Following a suggestion by his wife, the Volvo driver stated that he underwent a sleep study about 5 years ago and was not diagnosed with any sleep disorders. <sup>12</sup>

# 1.6.1. Sleep Opportunity

Information from an interview with the Volvo driver, ELD records, and cell phone records were used to identify periods in which he could have obtained sleep. In the days leading up to the crash, the Volve driver's typical workday began in the early morning hours (4:30 - 7:30 a.m.) and ended in the late evening (5-7:00 p.m.) In the days leading up to the crash, the driver had about 4-6 hours per night available for sleep each night. The amount of sleep the driver obtained each night was due to sleep habits, and not work demands. **Table 2** lists the hours available for sleep each night.

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<sup>&</sup>lt;sup>12</sup> See the *Medical Factors Report* for additional information related to the Volvo driver's sleep health.

**Table 2**: Volvo drivers sleep opportunity.

Fron	n	То		
<u>Date</u>	<u>Time</u>	<u>Date</u>	<u>Time</u>	Elapsed Time
June 15, 2021	12:00 a.m.	June 15, 2021	5:00 a.m.	5 hours
June 16, 2021	12:00 a.m.	June 16, 2021	3:30 a.m.	3.5 hours
June 17, 2021	12:00 A.M.	June 17, 2021	6:00 a.m.	6 hours
June 18, 2021	12:00 a.m.	June 18, 2021	6:00 a.m.	6 hours
June 18, 2021	10:00 p.m.	June 19, 2021	3:45 a.m.	5.75 hours

#### 1.7. Distraction

Factors which had the potential to distract the Volvo driver leading up to the crash sequence are discussed in the sections below.

#### 1.7.1. Cell Phone Use

Cell phone records were examined to determine if the driver was using a cell phone when the crash occurred. The records show that the Volvo driver was not using his cell phone to text or talk near the time of the crash. Additionally, there were no active internet connections immediately prior to or during the crash sequence.

#### 1.7.2. Internal/External Distraction

There were no sources of distraction found, inside or outside of the vehicle, which may have diverted the Volvo driver's attention from the driving task. In an interview with the driver, he stated that he was looking ahead when the events which lead to the crash began.

#### 1.8. Medial Factors

Information on the Volvo driver's general health, driver fitness exam, sleep, health, and post-crash toxicology is documented in the Medical Factual Report for this investigation.

# 1.9. Medical Examination Report for Commercial Motor Vehicle Driver Fitness Determination (CDL Medical Exam)

Commercial drivers in the United States are required by *Federal Motor Carrier Safety Regulations* (FMCSRs) to be medically certified as being physically qualified to drive a commercial vehicle.<sup>13</sup> These examinations may result in one of four outcomes with respect to medical qualification:

• The driver is found to meet the standards in 49 *Code of Federal Regulations* (CFR) §391.41 and is given a 2-year certificate; <sup>14</sup>

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<sup>&</sup>lt;sup>13</sup> 49 Code of Federal Regulations §391.41.

 $<sup>^{14}</sup>$  For more information on who must be examined and the examination process, please see 49 CFR §391.43 and 49 CFR §391.45.

- The driver is found to meet the standards, but requires periodic evaluation for one or more conditions and is qualified for 3 months, 6 months, or 1 year;
- The driver is temporarily disqualified due to a condition or medication; or;
- The driver is found not to meet the standards.

The Volvo driver's most recent Medical Examination for Commercial Driver Fitness Determination was on March 10, 2020. The exam was conducted by a physician at an occupational health practice in Birmingham, AL. In the self-reporting health history section on the report, the Volvo driver reported having high blood pressure and diabetes. He reported that he did not use insulin. The Volvo driver's vital signs, uncorrected vision, and unassisted hearing were found to be within normal limits. Following the examination, the Volvo driver was given a one-year medical certificate and required to undergo periodic monitoring for hypertension and diabetes.

For more information regarding the truck driver's general health, toxicology testing, medications, Commercial Driver Fitness Determination, and sleep health, see the *Medical Factors Factual Report* for this investigation.

# 1.10. Response to Hazard

Information on the Volvo driver's response to the crash ahead was developed from an interview with the Volvo Driver and a forward-facing video aboard the Volvo truck 15.

According to the Volvo driver, just prior to reaching the area of the crash, it began raining. There was moderate traffic, which was flowing normally; cars passed him as he drove in the right lane. As he approached the bridge where the crash occurred, he saw brake lights and a car "slam on brakes." In response, the driver said that he sharply applied his brakes and attempted to steer to the left to avoid colliding with the vehicle in front of him. The driver said that when the brake lights of the car in front of him came on, he was three car lengths away. When he applied the brakes, he felt the truck respond before impacting the vehicle ahead.

A forward-facing video with an overlay of data from the truck's electronic engine control module (ECM) shows the driver's acceleration and braking input as well as the crash impact. At the beginning of the video segment, the truck was traveling about 70 mph and the driver maintained 100% acceleration. At this point in the video, there are vehicles ahead of the crash truck. About 1 second later, as the traffic ahead becomes visible, the driver stops providing accelerator input and applies the brakes. The data does not provide a percentage of braking input; only that the brake switch has been activated. The driver maintained the brake application until the crash occurred (about 3 seconds). According to ECM data the truck was traveling about 70 mph at the beginning of the video and began slowing when the brakes were applied. About .5 seconds before the crash occurred, the truck was traveling about 56 mph.

<sup>&</sup>lt;sup>15</sup> For more information, see the *Video Factual Report* for this investigation.

# 2. 2005 Freightliner Driver

The driver of the 2005 Freightliner combination vehicle was a 41-year-old male. At the time of the crash, he worked as a commercial driver as an owner/operator for a freight transportation company based in Atlanta, GA.

# 2.1. Licensing

The Freightliner driver held a valid Georgia Class A CDL. <sup>16</sup> The driver had no restrictions or endorsements. His current license was issued in June of 2019 with an expiration date in September of 2022.

# 2.1.1. License History

The Freightliner driver first obtained a CDL in December of 2016. His current driver license record shows no violations.<sup>17</sup> Georgia Court records show that the Freightliner driver was charged with Following too closely and driving too fast for conditions related to a crash on August 3, 2017. (see crash history below). This violation does not appear elsewhere. The CDLIS report shows that the driver was charged for following too closely on November 20, 2014. This offense occurred in a non-commercial vehicle and prior to him obtaining a CDL.

# 2.2. Crash History

Information regarding the Freightliner driver's involvement in past crashes was obtained from an insurance industry claims and public records database.

# 2.2.1. 7-7-17 Crash

This crash occurred at the intersection of an interstate exit ramp and a surface street in Marietta, GA. The crash occurred when a 3-axle straight truck, operated by the Freightliner driver in the right lane, had a minor collision with car traveling in the left while they both were making a left turn. The driver of the passenger car was found to be at fault and cited for a moving violation. The crash resulted in disabling vehicle damage.

#### 2.2.2. 10-10-17 Crash

This crash occurred at the intersection of two four lane surface streets in DeKalb County, GA.<sup>19</sup> The crash occurred when a passenger car, operated by the Freightliner driver in the left lane and a passenger car traveling in the right lane collided while they were making a left turn. The Freightliner driver was found to be at fault for the crash and cited for "failure to maintain lane". This violation does not appear elsewhere in his driving history. The crash resulted in minor damage.

<sup>&</sup>lt;sup>16</sup> A Class A license allows the holder to operate any combination of motor vehicles with a gross combined weight rating (GCWR) of 26,001 pounds or more, in combination with a trailer in excess of 10,000 pounds in commerce.

<sup>&</sup>lt;sup>17</sup> Human Performance Attachment – Freightliner Driver's License History

<sup>&</sup>lt;sup>18</sup> Human Performance Attachment – Freightliner Driver 7-7-17 Crash Report.

<sup>&</sup>lt;sup>19</sup> Human Performance Attachment – Freightliner Driver 10-10-17 Crash Report

#### 2.2.3. 8-6-21 Crash

This crash occurred at the intersection of a 3-lane and 2-lane surface street in Fulton County, GA after the crash which is the subject of this investigation. <sup>20</sup> The crash occurred when a passenger car, operated by the Freightliner driver attempted a left turn from a center lane and collided with a vehicle that intended to keep straight in the far-left lane. The Freightliner driver was cited for making an improper turn. The crash resulted in minor vehicle damage.

# 2.3. Experience

According to the Freightliner driver, he first began driving truck tractors in 2016 after attending a commercial driving school in Atlanta, GA. In his employment application with the motor carrier in this crash, he lists one prior commercial driving job. He drove for another carrier from January 2019 through March 2021.

# 2.4. Crash Trip

The crash trip began on Friday, June 18, 2021, in Laredo, Texas. The Freightliner driver picked up a load of hardware supplies and departed for Jonesboro, GA at about 1:30 p.m. The driver reached Hammond, LA on June 19 at about 1:00 a.m. where he went off duty, in his sleeper berth until 11:00 a.m. He resumed driving at about 11:15 a.m. until the crash occurred in Greenville, Alabama at 3:22 p.m. The approximate distance of the segment of the trip from Hammond, LA to Greenville, AL is about 281 miles. The approximate distance of the intended trip, from Laredo, TX to Jonesboro, GA is about 1,100 miles.

### 2.5. Activities Prior to the Crash

Information about the Freightliner driver's activities in the days leading up to the crash were obtained from his cell phone records<sup>21</sup>, telematic data aboard the accident truck<sup>22</sup>, the driver's ELD<sup>23</sup>, and an interview with the driver<sup>24</sup>. The Freightliner driver's activities are listed below in **Table 3**.

**Table 3**: Freightliner driver's activities leading up to the crash

	- 4.16-4 C - 1-1-B			
Tuesday, June 15, 2021				
<u>Time</u>	Event	Source		
7:51 a.m.	First cell phone call of the day	Cell Phone Records		
8:30 a.m.	Driver goes on duty, Stonecrest, GA	Electronic Logging Device		
10:08 p.m.	Last phone call of the day ends	Cell Phone Records		
10:51 p.m.	Driver goes off duty, Dalton, FA	Electronic Logging Device		

<sup>&</sup>lt;sup>20</sup> Human Performance Attachment – Freightliner Driver 8-6-21 Crash Report

<sup>&</sup>lt;sup>21</sup> Human Performance Attachment – Freightliner Driver Cell Phone Records

<sup>&</sup>lt;sup>22</sup> Human Performance Attachment – Freightliner Telematics Data

<sup>&</sup>lt;sup>23</sup> Human Performance Attachment – Freightliner Driver ELD Records

<sup>&</sup>lt;sup>24</sup> Human Performance Attachment – Witness Interviews

Wednesday, June 16, 2021			
<u>Time</u>	<u>Event</u>	Source	
7:54 a.m.	First cell phone call of the day	Cell Phone Records	
8:33 a.m.	Driver goes on duty, Denham Springs, LA	Electronic Logging Device	
2:14 p.m.	Driver goes off duty, Aldine, TX  Electronic Logg		
3:34 p.m.	Driver makes cell phone call  Cell Phone Records		
10:19 p.m.	Driver ends last cell phone call of the day Cell Phone Records		
	Thursday, June 17, 2021		
<u>Time</u>	<u>Event</u>	Source	
7:54 a.m.	First cell phone call of the day	Cell Phone Records	
10:16 a.m.	Driver goes on duty, Aldine, TX	Electronic Logging Device	
7:41 p.m.	Driver ends last cell phone call of the day	Cell Phone Records	
9:00 p.m.	Driver goes off duty, Los Corralitos, TX	Electronic Logging Device	
	Friday, June 18, 2021		
Time	Event	Source	
7:23 a.m.	First cell phone call of the day	Cell Phone Records	
8:17 – 8 30 a.m.	Driver makes cell phone call	Cell Phone Records	
11:11 a.m.	Driver makes cell phone call	Cell Phone Records	
11:45 a.m. – 12:03	Driver makes cell phone call	Cell Phone Records	
p.m	D' C C C		
1:20 p.m.	Driver goes on duty, Los Corralitos, TX	Electronic Logging Device	
Tr.	Saturday June 19, 2021	G	
<u>Time</u>	Event	Source	
1:00 a.m.	Driver goes off duty, Hammond, LA	Electronic Logging Device	
10:10 a.m.	First cell phone call of the day  Cell Phone Records		
11:00 a.m.	Driver goes on duty, Hammond, LA	Electronic Logging Device	
3:01 p.m.	The last cell phone use before the crash	Cell Phone Records	
3:22 p.m.	Crash occurred in Greenville, AL	Police Records	

# 2.6. Sleep Factors

The Freightliner driver stated in an interview with NTSB investigators that he typically drives over-the-road and sleeps in his truck when working. His truck is equipped with a sleeper berth and he does not have difficulty sleeping. He reported on his most recent Commercial Driver Medical Examination Report that he did not have any sleep disorders, pauses in breathing while asleep, daytime sleepiness, or loud snoring.<sup>25</sup>

# **2.6.1.** Sleep Opportunity

Information from an interview with the Freightliner driver, ELD records, and cell phone records were used to identify periods in which he could have obtained sleep. In the days leading up to the crash, the Freightliner driver typically began working mid-morning and worked until 9-10 p.m. However, the day prior to the crash the driver began working at about 1:20 p.m. and worked until 1:00 a.m. Following this shift, the driver had a 9- hour opportunity for rest before

<sup>&</sup>lt;sup>25</sup> See the Medical Factors Report for additional information related to the Freightliner driver's sleep health.

he began the crash trip. In the days leading up to the crash, the driver had about 9-10 hours per night available for sleep night. **Table 4** lists the hours available for sleep each night.

**Table 4**: Freightliner drivers sleep opportunity.

Fron	1	То		
<u>Date</u>	<u>Time</u>	<u>Date</u>	<u>Time</u>	Elapsed Time
June 15, 2021	10:51 p.m.	June 16, 2021	7:54 a.m.	9.1 hours
June 16, 2021	10:20 p.m.	June 17, 2021	7:54 a.m.	9.6 hours
June 17, 2021	9:00 p.m.	June 18, 2021	7:23 a.m.	10.4 hours
June 19, 2021	1:00 a.m.	June 19, 2021	10:10 a.m.	9.1 hours

#### 2.7. Distraction

Factors which had the potential to distract the Freightliner driver leading up to the crash sequence are discussed in the sections below.

#### 2.7.1. Cell Phone Use

Cell phone records and a forensic examination of the Freightliner driver's cell phone device were used to determine if the driver was using a cell phone when the crash occurred. The information shows that he was not using his cell phone to text or talk when the crash occurred. Immediately following the crash (3:24 p.m.) the driver made a 5-minute call to a close friend. According to the friend, the driver was emotionally distraught, and he consoled him.

#### 2.7.2. Internal/External Distraction

There were no sources of distraction found, inside or outside of the vehicle, which may have diverted the Freightliner driver's attention from the driving task. In an interview with the driver, he stated that he was looking ahead when the events which lead to the crash began.

#### 2.8. Medial Factors

Information on the Freightliner driver's general health, driver fitness exam, sleep, health, and post-crash toxicology is documented in the Medical Factual Report for this investigation.

# 2.9. Medical Examination Report for Commercial Motor Vehicle Driver Fitness Determination (CDL Medical Exam)

Commercial drivers in the United States are required by *Federal Motor Carrier Safety Regulations* (FMCSRs) to be medically certified as being physically qualified to drive a commercial vehicle.<sup>26</sup> These examinations may result in one of four outcomes with respect to medical qualification:

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<sup>&</sup>lt;sup>26</sup> 49 Code of Federal Regulations §391.41.

- The driver is found to meet the standards in 49 *Code of Federal Regulations* (CFR) §391.41 and is given a 2-year certificate;<sup>27</sup>
- The driver is found to meet the standards, but requires periodic evaluation for one or more conditions and is qualified for 3 months, 6 months, or 1 year;
- The driver is temporarily disqualified due to a condition or medication; or;
- The driver is found not to meet the standards.

The Freightliner driver's most recent Medical Examination for Commercial Driver Fitness Determination was in January 2021. The exam was conducted by a physician at a family health practice in Stone Mountain, GA. In the self-reporting health history section on the report, the Freightliner driver did not report having any of the queried medical conditions. The driver's vital signs, vision, and hearing were found to be within normal limits. Following the examination, the Freightliner driver was given a two-year medical certificate with no conditions

For more information regarding the truck driver's general health, toxicology testing, medications, Commercial Driver Fitness Determination, and sleep health, see the *Medical Factors Factual Report* for this investigation.

### 2.10. Response to Hazard

Information on the Freightliner driver's response to the crash ahead was developed from an interview with the driver. The driver stated that leading up to the crash it had been raining sporadically. When the driver reached the vicinity of the crash, the driver stated that he was traveling about 60 mph in the right lane; it was raining.<sup>28</sup> The driver stated that he saw traffic in the right lane slowing and he moved to the left lane. As he moved to the left lane, he suddenly saw vehicles ahead of him stop. In response, he applied his brakes to avoid the stopped vehicles ahead. While stopping his truck collided with the left side of the bridge and straddled the railing. Because his truck was elevated on the bridge railing, he was unable to see the traffic around him. His truck came to rest in the grass-covered center median. After his truck came to rest, he exited the truck and observed that his truck and several other vehicles were on fire.

#### 3. Environmental Factors

# 3.1. Global Positioning System (GPS) Location

The NTSB utilized GPS coordinates for this crash as determined by the Wisconsin State Patrol. Relevant environmental conditions for this location are described in the sections below.

Latitude: N 43.317017016

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 $<sup>^{27}</sup>$  For more information on who must be examined and the examination process, please see 49 CFR  $\S 391.43$  and 49 CFR  $\S 391.45$ .

<sup>&</sup>lt;sup>28</sup> GPS data from the Freightliner truck indicates the vehicle was traveling at 73 mph about two minutes before the crash occurred. For more information on vehicle speed, see the *Reconstruction Group Factual Report* for this investigation.

Longitude: W -89.441856806

3.2. Weather Information

Historical data for weather for Greenville, AL near the time of the crash is documented in

the Meteorology Specialist's Factual Report for this investigation.

D. DOCKET MATERIAL

The following attachments and photographs are included in the docket for this

investigation:

LIST OF ATTACHMENTS

Human Performance Factors Attachment – Volvo Driver's License History

Human Performance Factors Attachment – Volvo Driver's Employment Application

Human Performance Factors Attachment - Volvo Driver's Cell Phone Records

Human Performance Factors Attachment – Volvo Driver's ELD Records

Human Performance Factors Attachment – Volvo Driver Interview Transcript

Human Performance Factors Attachment – Freightliner Driver's License History

Human Performance Factors Attachment – Freightliner Driver 7-17-17 Crash Report

Human Performance Factors Attachment – Freightliner Driver 10-10-17 Crash Report

Human Performance Factors Attachment – Freightliner Driver 8-6-21 Crash Report

Human Performance Factors Attachment – Freightliner Driver's Cell Phone Records

Human Performance Factors Attachment – Freightliner Driver's ELD Records

Human Performance Factors Attachment – Freightliner Driver Interview Transcript

END OF REPORT

Kenneth Bragg

Human Performance Investigator