



**HUMAN PERFORMANCE ATTACHMENT 3
INTERVIEWS
HWY-09-MH-015
Miami, OK**

(16 Pages)

Interview with Erin Ashley Alf

This interview took place at Ms. Alf's house on July 9, 2009, at 3:05 p.m. Present during interview were Rafael Marshall, Robert Accetta, and Nancy Ann Martin, Ms. Alf's mother.

72-hour history

June 23:

- Went to bed around 11pm

June 24

- Got up around 8am and ate breakfast
- Out with friends
- Baby sat until 10 pm
- Went to bed around 11 pm

June 25

- Got up between 8 and 9am and ate breakfast
- Out with friends/shopping
- Went to bed around 10pm. Denies having trouble sleeping

June 26

- 5am: Woke up and began packing from trip to Chicago. She described being fully awake and not drowsy.
- 7am: Fiancé begins driving. They go to McDonald's in Wichita Falls for breakfast around this time.
- 10:30 am: Begins driving because the fiancé is tired. She has been up throughout the drive up to this point.
- 11:30 am: They stop for lunch at McDonalds on Will Roger's Turnpike, Mile Marker 288.4, before Vinita, OK.
- 12 pm: finished lunch and began driving
- 1:13 pm involved in accident at Miami, OK, (accident occurred at 322.0, 33.6 miles from McDonalds). Note, at 75 mph departure time from McDonalds would have been about 12:46 pm, and at 70 mph departure time would be about 12:44 pm.

The driver does not have a set schedule. She did not remember much about what she did in the days prior to the accident. She stated that she spent most of her time shopping or with friends.

This driver has been licensed for 3 years. She denies ever being in a crash before June 26, 2009. The accident occurred in her fiancé's vehicle, which was a 2001 Ford Focus. She stated that she was familiar with the vehicle, having driven it previously about 3 times around town. She stated that the vehicle was in good shape, and that the alignment was good. She noted that the vehicle would travel straight but would begin drifting slowly to the right if the driver did not correct it. (This may be slope-of-roadway induced drifting).

She described the traffic on eastbound I-44 as sparse. After lunch, she began driving again while her fiancé slept in the passenger seat. She stated that she was in the left lane before falling asleep and drifting to the right lane. She stated that at the time of her accident, the cruise control was disengaged. She awoke when her vehicle sideswiped the left rear tires of the semi-trailer of a truck-tractor semitrailer that was parked at the side of the road. She awoke and overcorrected toward the left. Her vehicle began fishtailing into the left lane and hit the median barrier head-on. When the vehicle stopped, it was facing westward on the left eastbound traffic lane of I-44.

A man in a car pulled over to help. He, the truck driver, and a male passenger of the truck helped push her car to the right shoulder. The driver called her father on her cell phone while her fiancé exchanged information with the truck driver. The truck driver, his passenger, and the man left. The driver and fiancé walked to a nearby underpass and waited for police and ambulance. She stated that she did not hear or see the other crash occur. It took 3.5 hours before she was taken to the hospital, where she was diagnosed with a bruised sternum.

The driver stated that she and her fiancé were wearing their seatbelts. Both the driver and passenger side airbags deployed during the crash sequence.

According to the driver she doesn't smoke or drink alcoholic beverages. The driver also stated that she was on her menstrual cycle, and that she tended to tire easily during those times. The driver has a history of asthma and takes medication for this condition and takes Ibuprofen for headaches. The driver does not wear corrective lenses. The interview was concluded at 4:10 pm.

Telephone interview with Christina Schlaikjer

Christina Schlaikjer was interviewed over the phone at 1:43pm, July 4, 2009 by Rafael Marshall. Ms. Schlaikjer is a registered nurse. She and her husband were traveling in their 2001 Toyota Forerunner, with her husband driving and she in the front passenger seat.

According to Ms. Schlaikjer, they were traveling slowly on eastbound I-44 in the right lane, due to an accident ahead of them. They moved to the left lane, and she noticed a Chevrolet Tahoe¹ beginning to pass them on the right hand side. Almost immediately, her husband shouted something. She looked back and saw a truck coming at 'full force.' She screamed as the accident truck impacted the Tahoe to the right of them. Glass from the Tahoe shattered and impacted their Toyota. After the accident truck hit the Tahoe, it continued to hit other cars.

When the accident sequence was over, she called 911 on her cellular phone to report the accident. Her husband exited the vehicle to attend to a lady who was pinned in her vehicle under the truck. The lady was screaming. Ms. Schlaikjer followed her husband to the lady and assessed that there was nothing they could do to help her. Ms. Schlaikjer stated that she smelled gasoline and became concerned that an explosion might occur. She went back to her car and backed up her vehicle. She then went back to the accident scene to see if there was anyone she could help. She went to the Tahoe and stayed a while with the little girl in the vehicle. Ms. Schlaikjer stated that the little girl was sitting on top of her dad, who appeared deceased. Another lady, who was also a nurse, was already there with the little girl, so Ms. Schlaikjer looked for another person who needed assistance. She looked up and saw a man who was bleeding from the right side of his head. She had him sit down and found out that he was the driver of the accident truck. He seemed to be in shock. He repeatedly asked why cars ran underneath truck. He stated to her that he was stopped and pulled over when the cars ran underneath his truck. The driver also repeatedly asked her for his cell phone so that he could call his son and [AWG] dispatch. He tried to get up to look for his phone, but Ms. Schlaikjer asked him to continue sitting down so that she could continue to apply pressure to his head wound. The driver asked whether kids were involved and if anyone died...she did not answer him. At one point, the driver stated, "I might have been on phone, and that's why I didn't see them hit me." Ms. Schlaikjer described the driver's demeanor as calm. He asked her who she was and where she was from. Mr. Schlaikjer stated that she did not know how long she was with the driver, but she was with him until he was taken away by ambulance.

¹ She referred to this vehicle as a Tahoe. However, from her description of the scene, people, and events, it is likely that this vehicle was actually the Land Rover.

Interview – Steve Hummel, a driver at AWG

Mr. Hummel was interviewed at his place of business, Associated Wholesale Grocers, at 3:30 p.m. on July 2, 2009. Present----- Rafael Marshall and Ron Jones of AWG. Mr. Hummel interacted with Mr. ~~(R)~~ on the morning on June 26, prior to Mr. ~~(R)~~ departure on the accident tr---

--- the morning before the accident trip, Mr. Hummel mentioned seeing Mr. ~~(R)~~ socializing with coworkers and drinking a-----coffee. He described Mr. ~~(R)~~ demeanor as normal. He stated that Mr. ~~(R)~~ was generally happy-go-l-----d this was his demeanor on the day of the accident.

According to Mr. Hummel, he has known Mr. ~~(R)~~ for approximately 4 years. When Mr. ~~(R)~~ and Mr. Hummel spoke, it was primarily about the 1946 Ford pickup Mr. ~~(R)~~ was restoring. Mr. Hummel related helping Mr. ~~(R)~~ find parts for the vehicle. Mr. Hummel twice mentioned during the interview that Mr. ~~(R)~~ knew the general area and often helped him and other with directions.

Mr. Hummel state-----e has not been to Mr. ~~(R)~~ house and does not know what activities Mr. ~~(R)~~ engaged in outside of work. He could not recall any conversations with-----~~(R)~~ about Mr. ~~(R)~~ physical health or about major life events in Mr. ~~(R)~~ life.

Interview - Mike Corsono, co-worker

Mr. Corsono was interviewed at his place of business, Associated Wholesale Grocers, at approximately 1 p.m. on July 2, 2009, by Gary Van Etten. He stated that he only knew the Mr.-(R)-- on a casual basis from work. He stated that he last saw Mr.-(R)-- 2 days before the accident. He did not notice any indication of illness or emotional problems. He believed that Mr. (R)--- was a good driver and was in good shape. He thought the accident might have occurred because Mr. -(R)---either blanked out or was using the cruise control and was just not paying attention--

Interview – William Herndon, co-worker

Mr. Herndon was interviewed at his place of business, Associated Wholesale Grocers, at approximately 2 p.m. on July 2, 2009, by Gary Van----- His stated that he only knew Mr.--(R)--- casually from work. He noted that Mr. (R)---did not smoke or drink. Furtherm----- stated that Mr.--(R)-- owned a ranch wit---- -----p-s-----did not know to what extent he worked on the ranch. Mr. Herndon last saw Mr.--(R)--- around 2:30 a.m., just before they both went on the road on the day of the accident. They had a casual conversation about a store Mr. Herndon had to go to for which Mr. (R)--- suggeste----- ions. Mr. Herndon did not notice any physical or emotional problems with Mr.--(R)--

Interview with Dr. Charles Mauldin

Dr. Mauldin was interviewed at his place of business, 1308 North Glenstone, Springfield MO 65802, on July 2, 2009 at 11 a.m. Present was Gary Van Etten, with Rafael Marshall on speakerphone. Dr. Mauldin was the fitness examiner who performed an examination on the driver on January 2008. When asked whether he remembered the driver, he said that he did not. As a result, his answers were based on the information from the January 2008 long form. According to the physician, he noticed that the driver had an irregular heartbeat and a heart murmur. He recommended that the driver get an EKG and a stress test. He provided the driver with a fitness card that was good for 1 year. The driver undertook the EKG and stress tests on August 28, 2008. The tests results were normal. The physician stated that at the time of the physical, the driver was on Lipitor and a blood pressure medicine (see long form for name). The long form states that the driver denies having obstructive sleep apnea. His vision appears to be good. His field of view was 80-degrees, which was better than the minimum of 70 degrees per eye. The physician said that the driver was in good health considering his age.

Dr. Mauldin stated that he has been performing driver fitness examinations for nearly 20 years, and has performed them at this facility since 2001. When asked how he learned to perform fitness examinations, he stated that he learned from reading the regulations and reports.

Oklahoma State Patrol Interview with Carey Bass

On Wednesday, August 12, 2009 Trooper JAMES LOF----- EY BASS telephonically regarding a telephone call she had with-(R)-----the driver of a truck involved in a multi-fatality crash on the Will Rogers Turnpike. BASS' date of birth is March 17, 1979 and her address is 718 South Newton Avenue, Springfield, Missouri 65806.

LOFTIS informed BASS that while reviewing-(R)-----telephone records, it was found that she had a twenty-two minute phone con-----with -(R)---- that ended approximately eight minutes before he was involved in the crash. BASS said she did speak with-(R)----- and was expecting to be called by investigators.

BASS said -(R)---- is a close family friend, and called to check on her kids, and to see if BASS ha----- a promotion she was hoping to get at work. BASS said during the conversation, -(R)---- seemed like nothing was unusual, and coherent. BASS said -(R)----- did not say anything about being tired or sleepy, and was having a "normal day".

BASS said-(R)---- remarked about seeing a Trooper on the side of the road, and talked about a red ----- was driving slow in front of him. -(R)----- made the statement that the car was going to crash. BASS said since-(R)----- was in traffic, they concluded the conversation.

BASS said she has spoken with -(R)---- several times since the day of the crash, and he does not know what happened. BASS said in her opinion, she thinks-(R)----- might have had a stroke. BASS said in the weeks before the crash, her mot----- -(R)----- to the hospital, and he was having unknown heart problems.

BASS said -(R)---- is now having to wear a heart monitor, and that his blood pressure unexpectedly goes up.

Interview with William Richard Hall

Mr. Hall was interviewed telephonically on January 20, 2010, at 11 a.m., by David Rayburn.

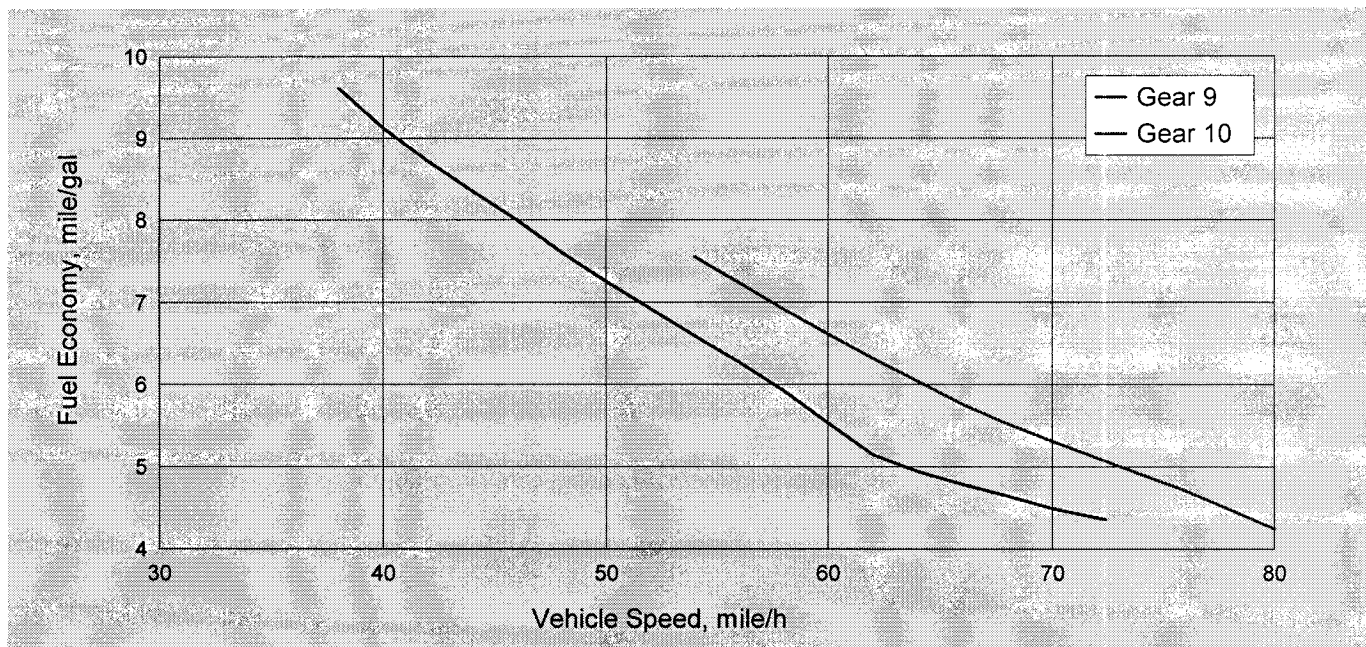
Mr. Hall was driving a 2008 Century Freightliner, pulling a loaded 53-ft long refrigerated van semitrailer eastbound on I-44 when the accident occurred. He said he first noticed the accident truck in his left side mirror changing from the right-hand lane to the left-hand lane. He said this occurred simultaneously with him beginning to slow for all the congestion and brake lights ahead in both lanes when he crested the hill top. He said he had put on his 4-way hazard flashers as soon as he saw the stopped traffic ahead. He stated that the traffic queue extended about 1/3 of a mile, from the top of the next hill until the point where the accident occurred. He indicated the accident truck passed him, changed back to the right hand lane, never slowed or braked and crashed into the stopped traffic ahead.

He stated that when he saw the traffic queue, he began down shifting his truck from 10th gear to 9th. The accident truck passed him as he downshifted from 9th to 8th gear. He estimated that it took the accident truck about 6-7 seconds to complete the passing maneuver. Mr. Hall did not notice whether the windows on the accident truck were up or down. Mr. Hall continued to downshift to 7th, and 6th gear, and then braked hard and stopped at the point where the grocery truck had struck the first stopped car. He said he thought he was traveling 66 mph and had slowed to 35-40 mph by the time the impact happened. He added that he thought the grocery truck was 300-400 feet ahead of him when the first impact occurred.

Mr. Hall added that another truck had passed him after the accident truck, and that this truck was able to stop in time.

He finished the interview by stating that his present truck has a Vorad collision warning system on it and all trucks should have it. The truck he was driving on the day of the accident was not equipped with one.

The following pages provides the specifications for the vehicle Mr. Hall was driving the Miami, Oklahoma accident. The saw tooth curve shows that he had slowed down to about 52 mph in eighth gear when the accident driver passed him and he had probably slowed down to 27.9 mph in 6th gear by the time the impact occurred. These specifications help explain that the accident truck driver passed quickly and got back into the right lane with time remaining to observe and react to the visual cues regarding the slowing and stopped traffic ahead.



VEHICLE CONFIGURATION

Application	Line Haul Tractor
Vehicle Type	Conv. Truck/Trailer
Description	Van
Vehicle Speed Limit	80.0 mile/h
Vehicle Cruise Speed	80.0 mile/h
Aerodynamics	Full package
Height	13.5 ft
Width	102.0 in
Number of Trailers	1
Side	Smooth
Top	Closed
Gap	30.0 in
Weight (GVW)	80000 lb
Total Number of Axles	5

DRIVE TRAIN

Engine Series	SERIES 60
Rated Power	515 hp @ 1800 r/min
Peak Torque	1650 lb-ft @ 1100 r/min
Droop	75 r/min
T800 Torque	940.0 lb-ft
Fan Type	On/Off (Clutch)
Air Conditioning	Yes
Transmission Manufacturer	Fuller
Transmission	FRO-16210C
Shift Schedule	Standard
Drive Axle Manufacturer	Meritor
Drive Axle (Ratio)	Tandem (3.42)
Tire Type	Low Profile Radial
Tire Model	295/75 R22.5
Tire Size	509 revs/mile

ENVIRONMENT

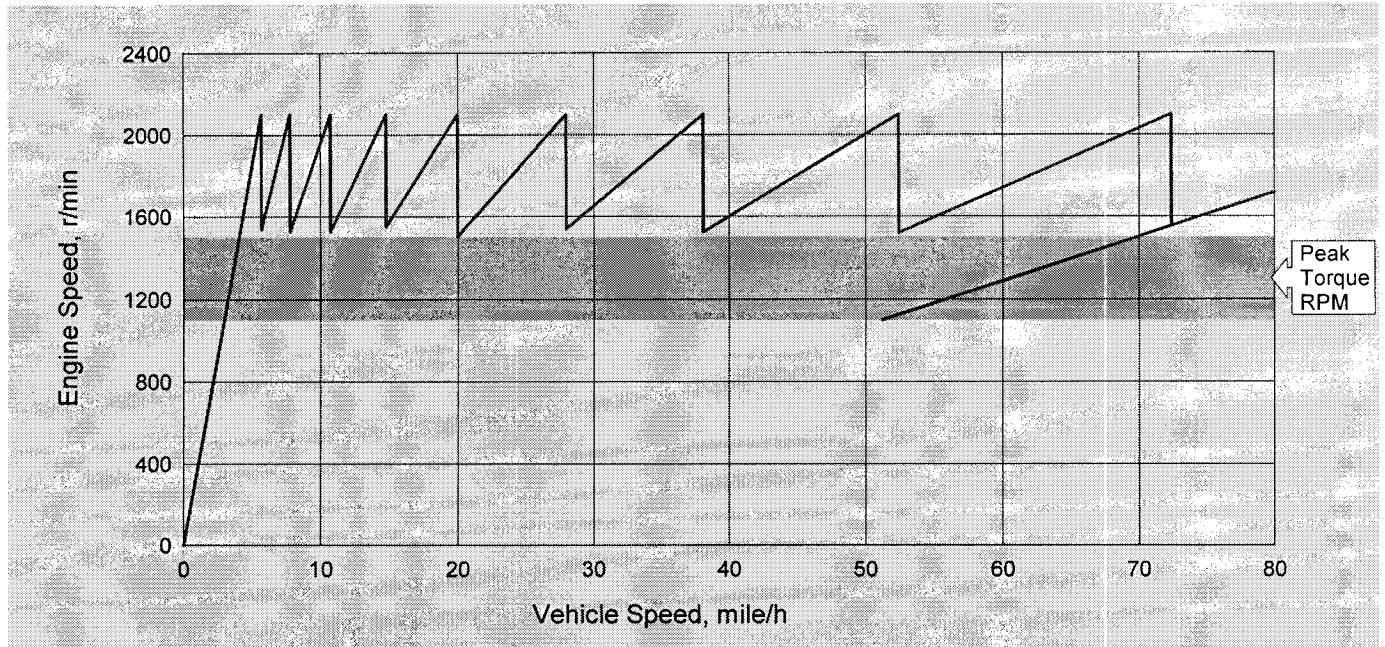
Surface Type	Smooth Concrete (1.0)
Terrain	Nearly Flat (0% - 1.5%)

CONSTANT SPEED FUEL ECONOMY

Gear	Speed mile/h	Engine RPM r/min	Fuel Economy, mile/gal
9	38.0	1102	9.61
9	40.0	1161	9.12
9	42.0	1219	8.72
9	44.0	1277	8.35
9	46.0	1335	7.99
9	48.0	1393	7.61
9	50.0	1451	7.25
9	52.0	1509	6.92
9	54.0	1567	6.59
9	56.0	1625	6.27
9	58.0	1683	5.93
9	60.0	1741	5.54
9	62.0	1799	5.15
9	64.0	1857	4.94
9	66.0	1915	4.79
9	68.0	1973	4.64
9	70.0	2031	4.50
9	72.0	2089	4.38
9	72.4	2100	4.36
10	52.0	1116	7.88
10	54.0	1159	7.55
10	56.0	1202	7.24
10	58.0	1245	6.92
10	60.0	1288	6.61
10	62.0	1331	6.32
10	64.0	1374	6.04
10	66.0	1417	5.76
10	68.0	1460	5.52
10	70.0	1503	5.31
10	72.0	1546	5.10
10	74.0	1589	4.91
10	76.0	1632	4.71
10	78.0	1675	4.48

Additional Notes:

Fuel Economy at Vehicle Speed Limit (80.0 mile/h, 1718 r/min) in top gear: 4.25 mile/gal
 Fuel Economy at Cruise Speed (80.0 mile/h, 1718 r/min) in top gear: 4.25 mile/gal
 Fuel Economy at Maximum Speed (89.0 mile/h, 1911 r/min) in top gear: 3.55 mile/gal



VEHICLE CONFIGURATION

Application	Line Haul Tractor
Vehicle Type	Conv. Truck/Trailer
Description	Van
Vehicle Speed Limit	80.0 mile/h
Vehicle Cruise Speed	80.0 mile/h
Aerodynamics	Full package
Height	13.5 ft
Width	102.0 in
Number of Trailers	1
Side	Smooth
Top	Closed
Gap	30.0 in
Weight (GVW)	80000 lb
Total Number of Axles	5

SHIFT SCHEDULE

Gear	Trans. Ratio	Total Reduction	Step %	Veh. Down Shift RPM	Down Shift Speed mile/h	Veh. Up Shift RPM	Up Shift Speed mile/h
1	12.69	43.40	36.60	1537	5.7	2100	5.7
2	9.29	31.77	37.63	1526	7.8	2100	7.8
3	6.75	23.09	37.76	1524	10.7	2100	10.7
4	4.90	16.76	35.36	1551	14.8	2100	14.8
5	3.62	12.38	39.77	1502	20.0	2100	20.0
6	2.59	8.86	36.32	1541	27.9	2100	27.9
7	1.90	6.50	37.68	1525	38.1	2100	38.1
8	1.38	4.72	38.00	1522	52.5	2100	52.5
9	1.00	3.42	35.14	1554	72.4	2100	72.4
10	0.74	2.53	N/A	1554	72.4	1718	80.0

DRIVE TRAIN

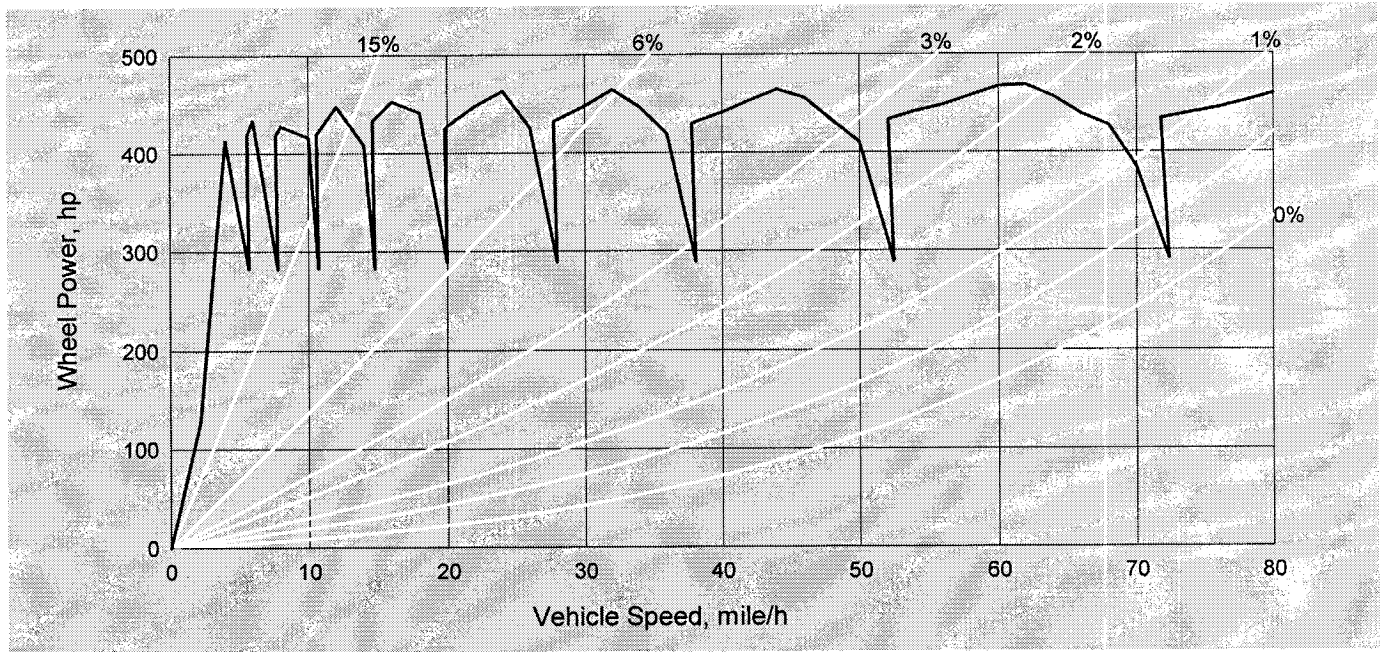
Engine Series	SERIES 60
Rated Power	515 hp @ 1800 r/min
Peak Torque	1650 lb-ft @ 1100 r/min
Drop	75 r/min
T800 Torque	940.0 lb-ft
Fan Type	On/Off (Clutch)
Air Conditioning	Yes
Transmission Manufacturer	Fuller
Transmission	FRO-16210C
Shift Schedule	Standard
Drive Axle Manufacturer	Meritor
Drive Axle (Ratio)	Tandem (3.42)
Tire Type	Low Profile Radial
Tire Model	295/75 R22.5
Tire Size	509 revs/mile

ENVIRONMENT

Surface Type	Smooth Concrete (1.0)
Terrain	Nearly Flat (0% - 1.5%)

Additional Notes:

Vehicle Speed Limit (80.0 mile/h) RPM in top gear is 1718 r/min
 Cruise Speed (80.0 mile/h) RPM in top gear is 1718 r/min
 1st reverse ratio (13.75) clutch engagement (800 r/min) velocity: 2.01 mile/h
 1st forward ratio (12.69) clutch engagement (800 r/min) velocity: 2.17 mile/h



VEHICLE CONFIGURATION

VEHICLE POWER CAPABILITIES

Application	Speed mile/h	Engine RPM r/min	Gross Engine hp	Net Engine hp	Driveln Loss hp	Wheel Power hp	Resistance Air hp	Roll hp	Grade- ability %	
Vehicle Type	Forward 1, Ratio 12.690; Start									
Description	80.0 mile/h									
Vehicle Speed Limit	2.2	800	143.2	140.2	12.7	127.5	0.0	1.7	27.1	
Vehicle Cruise Speed	4.0	1473	464.2	453.6	41.2	412.4	0.0	3.2	48.0	
Aerodynamics	Full Package	2100	333.0	311.2	28.3	282.9	0.1	4.6	22.9	
Height	13.5 ft									
Width	102.0 in									
Number of Trailers	1									
Side	5.6	1502	471.5	460.4	41.8	418.6	0.1	4.5	34.8	
Top	6.0	1617	489.5	476.7	43.3	433.3	0.1	4.9	33.5	
Gap	Smooth	2100	333.0	311.2	28.3	282.9	0.2	6.5	16.6	
Weight (GVW)	Closed									
Total Number of Axles	Forward 3, Ratio 6.750; Manual Shift									
	30.0 in									
	8.0	1500	470.9	459.8	41.8	418.1	0.2	6.3	25.2	
	8.0	1567	482.5	470.4	42.8	427.7	0.2	6.6	24.7	
	10.0	1958	476.8	457.8	41.6	416.2	0.4	8.5	19.1	
	10.7	2100	333.0	311.2	28.3	282.9	0.5	9.2	11.9	
	DRIVE TRAIN									
	Forward 4, Ratio 4.900; Manual Shift									
Engine Series	SE 406	60	1504	471.9	460.8	41.9	418.9	0.5	9.1	18.1
Rated Power	12.0	1706	506.6	492.3	44.7	447.5	0.7	10.5	17.0	
Peak Torque	51.9 ft @ 1800	1990	468.7	449.1	40.8	408.3	1.1	12.5	13.2	
Droop	14.0	1990	333.0	311.2	28.3	282.9	1.3	13.3	8.5	
T800 Torque	75 r/min	Forward 5, Ratio 3.620; Manual Shift								
Fan Type	On Off (Clutch)	1535	477.7	466.1	33.5	432.6	1.3	13.2	13.4	
Air Conditioning	Yes	16.0	1680	501.2	487.3	35.1	452.2	1.7	14.7	12.8
Transmission Manufacturer	Yes	18.0	1890	492.9	475.2	34.2	441.0	2.4	16.9	11.0
Transmission	Full	20.0	2100	333.0	311.2	22.4	288.8	3.2	19.2	6.2
Shift Schedule	FRO-16210C									
Drive Axle Manufacturer	Standard									
Drive Axle (Ratio)	Meritor									
Tire Type	Tandem (3.42)									
Tire Model	Low Profile Radial									
Tire Size	295/75 R22.5									
	509 revs/mile									



VEHICLE CONFIGURATION

Application	Line Haul Tractor
Vehicle Type	Conv. Truck/Trailer
Description	Van
Vehicle Speed Limit	80.0 mile/h
Vehicle Cruise Speed	80.0 mile/h
Aerodynamics	Full package
Height	13.5 ft
Width	102.0 in
Number of Trailers	1
Side	Smooth
Top	Closed
Gap	30.0 in
Weight (GVW)	80000 lb
Total Number of Axles	5

DRIVE TRAIN

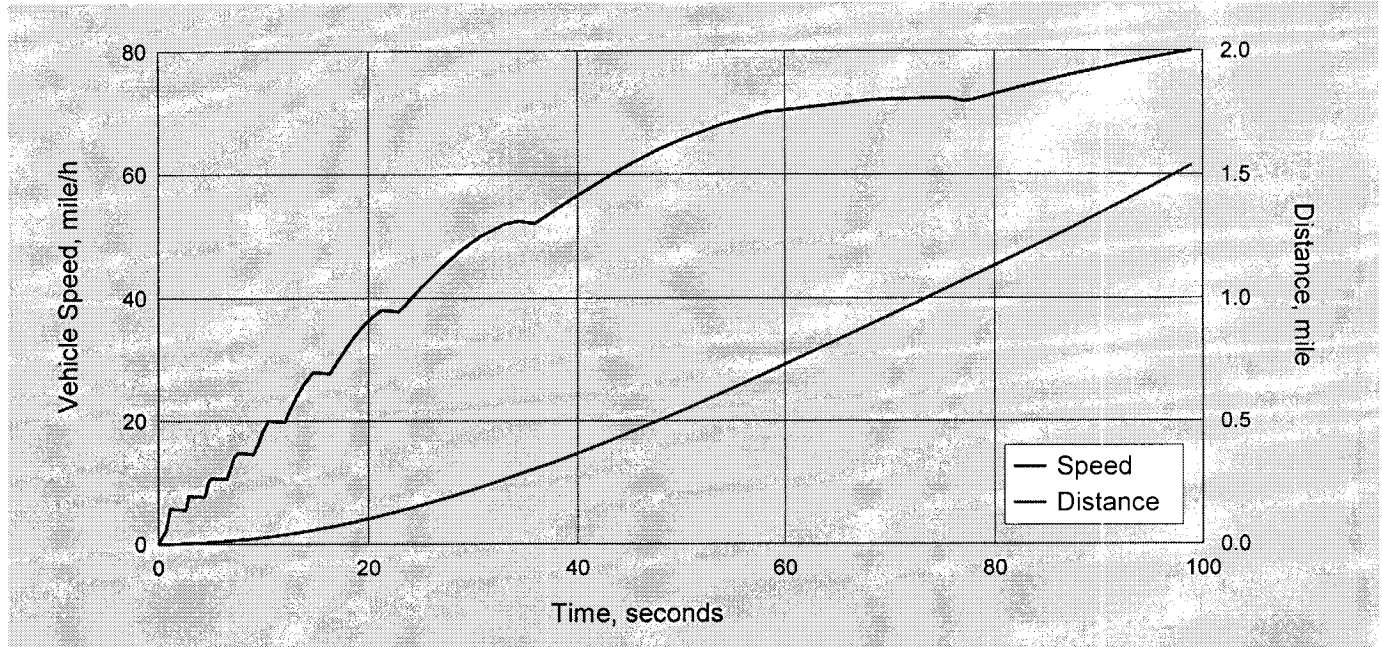
Engine Series	SERIES 60
Rated Power	515 hp @ 1800 r/min
Peak Torque	1650 lb-ft @ 1100 r/min
Droop	75 r/min
T800 Torque	940.0 lb-ft
Fan Type	On/Off (Clutch)
Air Conditioning	Yes
Transmission Manufacturer	Fuller
Transmission	FRO-16210C
Shift Schedule	Standard
Drive Axle Manufacturer	Meritor
Drive Axle (Ratio)	Tandem (3.42)
Tire Type	Low Profile Radial
Tire Model	295/75 R22.5
Tire Size	509 revs/mile

ENVIRONMENT

Surface Type	Smooth Concrete (1.0)
Terrain	Nearly Flat (0% - 1.5%)

VEHICLE POWER CAPABILITIES

Speed mile/h	Engine RPM r/min	Gross Engine hp	Net Engine hp	Driveln Loss hp	Wheel Power hp	Resistance Air hp	Roll hp	Grade- ability %
Forward 6, Ratio 2.590; Manual Shift								
19.8	1489	468.5	457.6	32.9	424.7	3.1	18.9	9.5
20.0	1503	471.6	460.5	33.1	427.4	3.2	19.2	9.5
22.0	1653	495.6	482.1	34.7	447.4	4.3	21.5	9.0
24.0	1803	514.6	498.6	35.9	462.7	5.6	24.0	8.5
26.0	1954	477.4	458.6	33.0	425.6	7.1	26.6	7.1
27.9	2100	333.0	311.2	22.4	288.8	8.8	29.1	4.2
Forward 7, Ratio 1.900; Manual Shift								
27.7	1529	476.7	465.2	33.5	431.7	8.6	28.8	6.7
28.0	1543	479.1	467.3	33.6	433.7	8.9	29.2	6.6
30.0	1654	495.7	482.2	34.7	447.5	10.9	31.9	6.3
32.0	1764	515.3	499.9	36.0	463.9	13.2	34.7	6.1
34.0	1874	497.9	480.5	34.6	446.0	15.9	37.6	5.4
36.0	1984	471.1	451.6	32.5	419.1	18.9	40.6	4.7
38.0	2095	340.0	318.2	22.9	295.4	22.2	43.6	2.8
38.1	2100	333.0	311.2	22.4	288.8	22.3	43.8	2.7
Forward 8, Ratio 1.380; Manual Shift								
37.8	1514	474.0	462.7	33.3	429.4	21.9	43.3	4.5
38.0	1521	475.3	463.9	33.4	430.6	22.2	43.6	4.5
40.0	1602	487.3	474.6	34.1	440.5	25.9	46.8	4.3
42.0	1682	501.5	487.5	35.1	452.5	29.9	50.0	4.2
44.0	1762	515.1	499.8	36.0	463.8	34.4	53.3	4.0
46.0	1842	507.3	490.5	35.3	455.2	39.3	56.7	3.7
48.0	1922	483.9	465.7	33.5	432.2	44.7	60.2	3.2
50.0	2002	461.6	441.8	31.8	410.0	50.5	63.7	2.8
52.0	2082	357.2	335.8	24.2	311.6	56.8	67.4	1.7
52.5	2100	333.0	311.2	22.4	288.8	58.3	68.2	1.5
Forward 9, Ratio 1.000; Manual Shift								
52.1	1511	473.3	462.1	28.9	433.2	57.1	67.5	2.8
54.0	1567	482.5	470.4	29.4	441.0	63.6	71.1	2.7
56.0	1625	490.7	477.7	29.8	447.8	71.0	74.9	2.5
58.0	1683	501.7	487.8	30.5	457.3	78.9	78.8	2.4
60.0	1741	512.8	497.8	31.1	466.7	87.3	82.8	2.3
62.0	1799	515.1	499.1	31.2	467.9	96.3	86.9	2.2
64.0	1857	503.1	486.1	30.4	455.7	106.0	91.0	1.9
66.0	1915	485.8	467.6	29.2	438.4	116.2	95.3	1.6
68.0	1973	474.4	455.1	28.4	426.7	127.1	99.6	1.4
70.0	2031	430.9	410.5	25.6	384.9	138.6	104.0	1.0
72.0	2089	347.7	326.1	20.4	305.7	150.9	108.5	0.3
72.4	2100	333.0	311.2	19.4	291.7	153.3	109.4	0.2
Forward 10, Ratio 0.740; Manual Shift								
71.8	1542	478.8	467.1	33.6	433.5	149.7	108.1	1.1
72.0	1546	479.4	467.7	33.6	434.0	150.9	108.5	1.1
74.0	1589	485.5	473.1	34.0	439.1	163.8	113.1	1.0
76.0	1632	491.8	478.7	34.4	444.2	177.4	117.7	0.9
78.0	1675	500.0	486.2	35.0	451.2	191.8	122.5	0.8
80.0	1718	508.9	494.4	35.6	458.8	207.0	127.3	0.7



VEHICLE CONFIGURATION

Application	Line Haul Tractor
Vehicle Type	Conv. Truck/Trailer
Description	Van
Vehicle Speed Limit	80.0 mile/h
Vehicle Cruise Speed	80.0 mile/h
Aerodynamics	Full package
Height	13.5 ft
Width	102.0 in
Number of Trailers	1
Side	Smooth
Top	Closed
Gap	30.0 in
Weight (GVW)	80000 lb
Total Number of Axles	5

DRIVE TRAIN

Engine Series	SERIES 60
Rated Power	515 hp @ 1800 r/min
Peak Torque	1650 lb-ft @ 1100 r/min
Droop	75 r/min
T800 Torque	940.0 lb-ft
Fan Type	On/Off (Clutch)
Air Conditioning	Yes
Transmission Manufacturer	Fuller
Transmission	FRO-16210C
Shift Schedule	Standard
Drive Axle Manufacturer	Meritor
Drive Axle (Ratio)	Tandem (3.42)
Tire Type	Low Profile Radial
Tire Model	295/75 R22.5
Tire Size	509 revs/mile

ENVIRONMENT

Surface Type	Smooth Concrete (1.0)
Terrain	Nearly Flat (0% - 1.5%)

ACCELERATION

Speed mile/h	Engine RPM r/min	Time s	Distance, ft	Distance, mile	Acceleration mile/h/s
Forward 1, Ratio 12.690; Start					
2.2	800	0.7	1.2	0.000	2.96
4.0	1473	0.9	2.2	0.000	5.21
5.7	2100	1.1	3.6	0.001	3.91
Forward 2, Ratio 9.290; Manual Shift					
5.6	1502	2.6	16.0	0.003	-0.09
6.0	1617	2.7	16.7	0.003	4.83
7.8	2100	2.9	19.1	0.004	3.59
Forward 3, Ratio 6.750; Manual Shift					
7.7	1500	4.4	36.1	0.007	-0.09
8.0	1567	4.5	37.0	0.007	4.21
10.0	1958	4.8	40.9	0.008	3.60
10.7	2100	5.0	44.8	0.008	2.79
Forward 4, Ratio 4.900; Manual Shift					
10.6	1504	6.5	68.3	0.013	-0.09
12.0	1706	6.8	73.5	0.014	3.26
14.0	1990	7.2	80.8	0.015	2.68
14.8	2100	7.6	88.6	0.017	2.09
Forward 5, Ratio 3.620; Manual Shift					
14.6	1535	9.1	120.9	0.023	-0.10
16.0	1680	9.5	129.7	0.025	2.58
18.0	1890	9.9	140.7	0.027	2.34
20.0	2100	10.5	158.3	0.030	1.62

Additional Notes:

- Acceleration time for 0 - 10 = 0:00:05
- Acceleration time for 0 - 20 = 0:00:12
- Acceleration time for 0 - 30 = 0:00:17
- Acceleration time for 0 - 40 = 0:00:24



VEHICLE CONFIGURATION

Application	Line Haul Tractor
Vehicle Type	Conv. Truck/Trailer
Description	Van
Vehicle Speed Limit	80.0 mile/h
Vehicle Cruise Speed	80.0 mile/h
Aerodynamics	Full package
Height	13.5 ft
Width	102.0 in
Number of Trailers	1
Side	Smooth
Top	Closed
Gap	30.0 in
Weight (GVW)	80000 lb
Total Number of Axles	5

DRIVE TRAIN

Engine Series	SERIES 60
Rated Power	515 hp @ 1800 r/min
Peak Torque	1650 lb-ft @ 1100 r/min
Droop	75 r/min
T800 Torque	940.0 lb-ft
Fan Type	On/Off (Clutch)
Air Conditioning	Yes
Transmission Manufacturer	Fuller
Transmission	FRO-16210C
Shift Schedule	Standard
Drive Axle Manufacturer	Meritor
Drive Axle (Ratio)	Tandem (3.42)
Tire Type	Low Profile Radial
Tire Model	295/75 R22.5
Tire Size	509 revs/mile

ENVIRONMENT

Surface Type	Smooth Concrete (1.0)
Terrain	Nearly Flat (0% - 1.5%)

ACCELERATION

Speed mile/h	Engine RPM r/min	Time s	Distance, ft	mile	Acceleration mile/h/s
Forward 6, Ratio 2.590; Manual Shift					
19.8	1489	12.0	202.1	0.038	-0.12
20.0	1503	12.1	204.8	0.039	1.97
22.0	1653	12.6	221.5	0.042	1.88
24.0	1803	13.2	240.7	0.046	1.80
26.0	1954	13.8	265.2	0.050	1.53
27.9	2100	14.7	301.3	0.057	1.06
Forward 7, Ratio 1.900; Manual Shift					
27.7	1529	16.2	362.5	0.069	-0.14
28.0	1543	16.4	370.3	0.070	1.40
30.0	1654	17.2	402.4	0.076	1.35
32.0	1764	17.9	437.9	0.083	1.30
34.0	1874	18.8	479.4	0.091	1.19
36.0	1984	19.8	530.3	0.100	1.02
38.0	2095	21.2	608.2	0.115	0.71
38.1	2100	21.3	617.3	0.117	0.59
Forward 8, Ratio 1.380; Manual Shift					
37.8	1514	22.8	700.8	0.133	-0.18
38.0	1521	23.0	711.0	0.135	0.96
40.0	1602	24.1	773.4	0.146	0.93
42.0	1682	25.2	841.6	0.159	0.89
44.0	1762	26.4	915.5	0.173	0.86
46.0	1842	27.6	998.6	0.189	0.80
48.0	1922	29.0	1097.5	0.208	0.70
50.0	2002	30.7	1214.2	0.230	0.62
52.0	2082	33.0	1393.4	0.264	0.42
52.5	2100	34.4	1496.6	0.283	0.33
Forward 9, Ratio 1.000; Manual Shift					
52.1	1511	35.9	1611.6	0.305	-0.25
54.0	1567	37.6	1747.7	0.331	0.58
56.0	1625	39.4	1896.2	0.359	0.55
58.0	1683	41.3	2057.2	0.390	0.52
60.0	1741	43.3	2230.8	0.423	0.50
62.0	1799	45.5	2422.0	0.459	0.47
64.0	1857	47.8	2643.2	0.501	0.42
66.0	1915	50.6	2910.2	0.551	0.36
68.0	1973	53.9	3232.6	0.612	0.31
70.0	2031	58.1	3665.9	0.694	0.24
72.0	2089	63.3	4734.3	0.897	0.10
72.4	2100	75.6	5504.2	1.042	0.05
Forward 10, Ratio 0.740; Manual Shift					
71.8	1542	77.1	5662.8	1.073	-0.38
72.0	1546	77.8	5743.3	1.088	0.25
74.0	1589	82.2	6218.9	1.178	0.23
76.0	1632	87.2	6764.1	1.281	0.20
78.0	1675	92.7	7389.8	1.400	0.18
80.0	1718	98.9	8110.2	1.536	0.16

Additional Notes:

- Acceleration time for 0 - 10 = 0:00:05
- Acceleration time for 0 - 20 = 0:00:12
- Acceleration time for 0 - 30 = 0:00:17
- Acceleration time for 0 - 40 = 0:00:24