NATIONAL TRANSPORTATION SAFETY BOARD

Office of Railroad, Pipeline and Hazardous Materials Investigations

Human Performance and Survival Factors Division

January 9, 2009

HUMAN PERFORMANCE GROUP FACTUAL FINDINGS

A. ACCIDENT

The head on collision of Metrolink train 111 with Union Pacific (UP) freight train LOS 65-12 at Chatsworth, CA at approximately 4:22 P.M.¹ on September 12, 2008.

NTSB accident number: DCA-08-MR-009

A. HUMAN PERFORMANCE GROUP

Lawson F. Narvell, Jr.

Human Performance Investigator

NTSB

490 L'Enfant Plaza East, S.W.

Washington, D.C. 20594

Tel: (202) 314-6422

fax: (202) 314-6497

cell: (202) 320-6317

email: narvelr@ntsb.gov

L. Scott Lewis

Chief Inspector

U.S. Department of Transportation

Federal Railroad Administration (FRA)

3401 Centrelake Drive

Ontario, CA 91761

Office: (909) 937-7242 cell: (916) 798-8974

Email: Scott.Lewis@dot.gov

Matthew E. Cardiff

Associate Train Operations Supervisor

State of California

Public Utilities Commission

Consumer Protection and Safety Division

Rail Operations and Safety Branch

320 West 4th St., Suite 500

Los Angeles, CA 90013

Cell: (213) 308-4083

¹ Unless otherwise indicated, all times are denoted in Pacific Daylight Time.

Email: mat@cpuc.ca.gov

Ben Blissett

Coordinator, Safety Task Force

Brotherhood of Locomotive Engineers and Trainmen (BLET)

565 Montgomery St.

Christiansburg, VA 24073

Cell: (540) 588-4860

Email: benblissett@gmail.com

Stephen T. Dawson

Safety Coordinator

United Transportation Union (UTU)

5020 N. Sepulveda Ave.

San Bernardino, CA 92404-1131

Tel: (951) 314-4764

Email: stdawson@charter.net

Gregg Konstanzer

Assistant General Manager

Connex Railroad

Metrolink Commuter Operation

2558 Supply St., Bldg. A

Pomona, CA 91767

Tel: (323) 227-7163

Fax: (909) 392-8970

Email: gregg.Konstanzer@veoliatransportation.com

Fred Jackson

Manager of System Safety & Training

Metrolink

Southern California Regional Rail Authority (SCRRA)

700 S. Flower St., Suite 2600

Los Angeles, CA 90017

Tel: (213) 452-0311 cell: (213) 494-8217

Fax: (213) 452-0460

Email: jacksonf@scrra.com

James S. Cramer

Manager, Operating Practices

Transportation - Western Region

UP

2442 Carson St.

Long Beach, CA 90801

Tel: (562) 490-7027 cell: (562) 237-2464

Email: jscramer@up.com

A. SUMMARY OF THE ACCIDENT

On Friday, September 12, 2008 at approximately 4:22 P.M. PDT, westbound Metrolink passenger train No. 111 and UP freight train LOF 6512 collided head-on while operating in a 6-degree curve on Metrolink's Ventura Subdivision between control point Topanga and tunnel No. 28 near Chatsworth, CA. The Metrolink train derailed its locomotive and lead passenger car; the UP train derailed two locomotives and 10 cars. As a result of the collision, the Metrolink locomotive was shoved approximately 50 feet into the lead passenger car. Emergency response agencies reported that 102 injured persons were transported to local hospitals. There were 25 fatalities.

Damage was estimated at \$10.6 million. Environmental conditions were daylight, clear skies, haze, calm winds, with a temperature of 73 degrees F. with visibility at 4 miles.

A. DETAILS OF THE ACCIDENT

1. Behavioral Factors

a. 96-hour work/rest history.

(1). The Connex engineer². Time sheets provided by Connex disclosed the following information for the engineer from Monday, September 8 until Thursday, September 11:

He went on duty at 5:54 A.M. at Montalvo, departed on train 106 at 6:44 A.M, and arrived at Los Angeles Union Station (LAX) at 8:28 A.M. He was off duty from 9:26 A.M. until 2:00 P.M. when he returned to duty. He departed LAX on train 111 at 3:35 P.M., and arrived at Moorpark at 4:45 P.M. He departed Moorpark at 4:57 P.M. on train 118 and arrived at LAX at 6:20 P.M. At 6:40 P.M. he departed LAX on train 119 and arrived at Montalvo at 8:35 P.M. He went off duty at 9:05 P.M.

Similar to the previous four days, on the day of the accident the engineer went on duty at 5:54 A.M. He operated a train from 6:44 A.M. until going off duty at 9:26 A.M. He returned to duty at 2:00 P.M. At 3:35 P.M. he departed on train 111.

At the time of the accident the engineer had most recently been on duty for the second portion of his workday for about two hours and twenty-two minutes.

(2) The Connex conductor. The conductor recalled that he awoke at 3:00 A.M. on Monday, September 8, and departed his residence at 4:00 A.M. He departed on a train at 6:44 A.M. and worked until 9:26 A.M. He was off duty from that time until 2:00 P.M. He worked the second part of his day from 2:00 P.M. until 9:05 P.M. at which point he went off duty. He arrived home at about 9:23 P.M. The conductor said he was off duty the following two days, Tuesday September 9 and Wednesday, September 10. Similar to

² Investigation revealed that Connex Railroad provides engineers, conductors and related support staff to the SCRRA.

the previous Monday, he arose at 3:00 A.M. on Thursday, September 11 and Friday, September 12, departed his residence at 4:00 A.M. and went on duty at 6:44 A.M. He worked until 9:26 A.M., and resumed his duties at 2:00 P.M.

At the time of the accident he had most recently been on duty for the second portion of his workday for about two hours and twenty-two minutes, and awake for about thirteen hours and twenty-two minutes.

(3) <u>The UP engineer</u>. The engineer stated that he arose every day between 6:00 A.M. and 6:30 A.M., departed his residence for work at 10:30 A.M., and went on duty at 11:30 A.M. He said he usually went off duty between 6:30 P.M. and 7:00 P.M. He added he retired each evening no later than 11:30 P.M.

At the time of the accident he had been awake for approximately ten hours and on duty for about just under five hours.

(4) The UP conductor. The conductor said that he awoke at approximately 9:30 A.M. on Monday, September 8. He went on duty at 11:30 A.M. on UP train LOF 6512, worked until about 6:30 P.M., and returned home. He retired for the evening at between 11:00 P.M. and 11:30 P.M. He did not work the following day, Tuesday, September 9 and awoke at about 10:00 A.M. He retired for the evening at approximately 11:45 P.M. Likewise, he did not work the following day, Wednesday, September 10 and arose at about 8:45 A.M. He retired for the evening at about 1:00 A.M. the following day, Thursday, September 11. He arose later that day at about noon, again did not work, and retired for the evening at approximately 11:00 P.M. He awoke the following morning, Friday, September 12 at 9:30 A.M. when he was called for duty. He reported for duty at 11:30 A.M. to work train LOF 6512.

At the time of the accident he had been awake for about six hours and forty-two minutes and on duty for almost five hours.

(5) The UP brakeman. The brakeman recalled that on Tuesday, September 9 and Wednesday, September 10 he arose about 7:00 A.M., reported for work by 11:30 A.M. and went off duty at about 7:00 P.M. On both evenings he retired by 9:30 P.M. He awoke at 6:00 A.M. on Thursday, September 11, worked to repair a flat tire, reported for duty at 11:30 A.M. and went off duty at approximately 7:00 P.M. He retired for the evening between 9:30 P.M. and 10:00 P.M. He awoke the following morning, Friday, September 12 at 6:00 A.M., had a dentist appointment at 9:00 A.M. and reported for duty at 11:30 A.M.

At the time of the accident the brakeman had been awake for almost ten and one half hours and on duty for just under five hours.

2. Medical Factors

a. Health. The Safety Board's Medical Officer received and examined the Connex and UP medical records of the crewmembers involved in the accident. His final

³ With the exception of Tuesday, September 9 when he went off duty at 6:55 P.M., UP records confirmed that the engineer went on duty at 11:30 A.M., including the day of the accident, and went off duty at 6:30 P.M. each day beginning Monday, September 8.

factual report pertaining to these records, as appropriate, will be submitted to the docket as a separate report.

b. *Toxicology*. Pursuant to 49 Code of Federal Regulations (CFR) 219, Subpart C, Post-Accident Toxicological Testing, toxicological specimens were obtained from the engineer and conductor of the Metrolink train and the engineer, conductor and brakeman of the UP train. Testing was conducted by Quest Diagnostics, 3175 Presidential Drive, Atlanta, GA 30340. Substances screened for included cannabinoids, cocaine, opiates, amphetamines, methamphetamines, phencyclidine, barbiturates, benzodiazepines, and ethyl alcohol. The results were negative for the presence of alcohol and the aforementioned drugs in the Connex engineer and conductor, and the UP engineer and brakeman. The UP conductor tested positive for cannabinoids (marijuana) in both his blood and urine specimens⁴. Copies of the final toxicological testing results obtained from the FRA will be placed in the For Official Use Only docket maintained by the Safety Board.

Summaries of those toxicological test results are shown below.

<u>Position</u>	Specimens obtained	Time/date collected	Results
Connex engineer	blood	btwn 9:30-11:30 A.M./9-15-08	negative
	urine	btwn 9:30-11:30 A.M./ 9-15-08	negative
Connex conductor	blood	11:23 P.M ./ 9-12-08	negative
	urine	1:40 A.M. / 9-13-08	negative
UP engineer	blood	1:36 A.M. / 9-13-08	negative
	urine	1:30 A.M. / 9-13-08	negative
UP conductor	blood	1:30 A.M./ 9-13-08	positive
	urine	1:30 A.M. ⁵ / 9-13-08	positive
UP brakeman	blood	1:05 P.M. / 9-13-08	negative
	urine	1:30 P.M. / 9-13-08	negative ⁶

⁴ Results indicated the blood specimen contained 13.7 nanograms per milliliter (ng/ml) of carboxy-THC, which is the metabolite of the active ingredient of marijuana, tetrahydrocannabinol (THC) and 1.1 ng/ml of THC, and the urine specimen contained 117 ng/ml of carboxy-THC.

⁵ The precise time was not indicated on FRA specimen collection form FRA F 6180.74 (Rev. 10-94), however a time of collection of 1:30 A.M. was indicated as the time the specimen was collected in a letter from the Medical Review Officer (MRO) to the FRA.

⁶ The UP provided the following explanation to the FRA as to the reason for the delay in testing the brakeman. Investigation revealed that the brakeman was unable to be located after incident. This incident was catastrophic and massive in scope with an estimated loss of 25 lives. The rescue effort was extensive and many of the victims went unidentified for many hours. Finding where the injured were taken for medical attention was extremely difficult. Getting information from the rescuers as to victim identification was almost impossible because rescue continued into the morning and injured were being treated in several

In addition, arraignments were made to have remaining portions of specimens obtained from the Connex engineer and conductor sent to the (CAMI) for independent toxicological analyses. Copies of the final toxicological testing results obtained from the FRA will be placed in the For Official Use Only docket maintained by the Safety Board.

A summary of those toxicological test results appears below.

Connex engineer	blood urine	benazepril ⁷ and pioglitazone ⁸ benazepril and pioglitazone
Connex conductor	blood urine	fluoxetine ⁹ and norfluoxetine ¹⁰ fluoxetine, morphine ¹¹ and norfluoxetine

The Safety Board's Medical Officer will review and address, as appropriate, all toxicological test results.

3. Operational Factors

a. Training.

(1) <u>The Connex engineer.</u> Connex records disclosed the following training information for the engineer in the year before the accident.

<u>Date</u>	<u>Training item</u>
5-14-2008	General Code of Operating Rules ¹²
5-14-2008	49 CFR 217 & 218 ¹³
5-14-2008	MTLK TTSI ¹⁴

locations. The injured were taken to several hospitals. The brakeman stated that he had a difficult time getting medical attention, and that when he was taken to the hospital he was in much pain and confused. He said he lost his cell phone in the incident and had no way to communicate with anyone outside the hospital. When he was released he just wanted to go home. He did not call a UP official until the following morning. Upon receiving his call, UP immediately arranged to have post accident test administered.

⁷ Benazepril is used alone or in combination with other medications to treat high blood pressure. Benazepril is in a class of medications called angiotensin-converting enzyme (ACE) inhibitors. It works by decreasing certain chemicals that tighten the blood vessels, so blood flows more smoothly.

⁸ Pioglitazone is used with a diet and exercise program and sometimes with other medications, to treat type 2 diabetes (condition in which the body does not use insulin normally and therefore cannot control the amount of sugar in the blood). Pioglitazone is in a class of medications called thiazolidinediones.

⁹ Fluoxetine (Prozac) is used to treat depression, obsessive-compulsive disorder (bothersome thoughts that won't go away and the need to perform certain actions over and over), some eating disorders, and panic attacks (sudden, unexpected attacks of extreme fear and worry about these attacks).

¹⁰ A metabolite of Fluoxetine

11 Morphine is used to relieve moderate to severe pain

The General Code of Operating Rules is a four-hour class that encompasses the rule requirements for operations that cover all territories. 40-50 question test

13 This one hour class discusses changes in the current year (2008) to 49 Code of Federal Regulations Part 217 and 218 that address railroad operating rules and railroad operating practices, respectively.

5-14-2008	Connex notices scenario ¹⁵
5-13-2008	Safety hazmat fatigue ¹⁶
5-13-2008	BNSF TTSI ¹⁷
5-13-2008	UPRR TTSI ¹⁸
5-13-2008	Airbrake ATS ¹⁹
5-13-2008	CRM/job briefing ²⁰
6-5-2008	New locomotive (MP36 PH3) equipment ²¹
11-2-2007	Supplemental equipment ²²

(2) The Connex conductor. Connex records disclosed the following training information for the conductor in the year before the accident.

<u>Date</u>	Course name
4-23-2008 4-23-2008 4-23-2008 4-23-2008 5-13-2008 5-13-2008	GCOR 5.13 ²³ 49 CFR 217 & 218 MTLK TTSI Connex notices scenario Safety hazmat fatigue BNSF TTSI UPRR TTSI

¹⁴ Refers to Metrolink special timetable instructions.

¹⁶ A 1-½ class that incorporates Connex safety instructions, Connex hazardous materials (HAZMAT)

policies, and fatigue related discussions.

Training that addresses timetable special instructions for Connex personnel who operate over the Burlington Northern Santa Fe (BNSF) railroad.

18 Training that addresses timetable special instructions for Connex personnel who operate over the Union

Pacific railroad (UPRR).

19 A two-hour class that emphasizes Connex air brake and train handling instructions for compliance with federal guidelines regarding proper air brake tests and inspections for Metrolink commuter trains and freight/work trains.

²⁰ Crew Resource Management (CRM) is training that is used in every aspect of training and implementation of operating trains. Elements of CRM include four basic elements that are addressed throughout the entire instructional process.: technical proficiency, situational awareness, communication and teamwork.

Job briefings. Prior to beginning work, all train and engine crewmembers must participate in a job briefing to ensure that they have a clear and common understanding of all safety critical tasks to be performed, and their individual responsibilities in performing those tasks. When operating conditions change, an additional job briefing must be conducted with all affected crewmembers to ensure uniform and complete understanding.

Each element is discussed and becomes an integral part of the training and continuing education process. ²¹ A four-hour class offered by the manufacturer of a new type of locomotive that was introduced into service in 2008.

²² A four-hour class based on the SCRRA Supplemental Instructions concerning the policies and

procedures for the operation of Metrolink trains.

23 Blue signal protection of workmen. The rule outlines the requirements for protection of railroad workers. engaged in inspecting, testing, repairing and servicing rolling equipment.

¹⁵ A 1-1/2 hour class that reviews all of Connex's current policies involving subjects such as train operations, administrative procedures, equipment troubleshooting, changes in Air Brake and Train Handling Rules, changes in Southern California Regional Rail Authority (SCRRA) Supplemental Instructions.

5-13-2008	Airbrake ATS
5-13-2008	CRM/job briefing
11-1-2007	Supplemental equipment
11-1-2007	Fare enforcement ²⁴
9-18 - 2007	Sensitivity and ADA ²⁵

(3) The UP engineer. UP records disclosed the following training information for the engineer in the year before the accident.

<u>Date</u>	Course name
8-19-2008	CFR 49 232.203 hands on testing ²⁶
8-19-2009	CFR 49 232.203 hands on testing
8-19 - 2010	CFR 49 232.203, hands on testing
8-11-2008	CFR 49 232.203 hands on testing
7-1-2008	CFR 49 232.203 hands on testing
6-12-2008	Red Zone contact ²⁷
6-10-2008	Red Zone contact
6-10-2008	CFR 49 232.203 hands on testing
5-30-2008	CFR 49 232.203 hands on testing
4-28-2008	CFR 49 232.203 hands on testing
4-2-2008	CFR 49 232.203 hands on testing
3-5-2008	Eyes on path ²⁸
12-14-2007	CFR 49 232.203 hands on testing
12-6-2007	CFR 49 232.203 hands on testing
9-10-2007	CFR 49 232.203 hands on testing

(4) The UP conductor. UP records disclosed the following training information for the conductor in the year before the accident.

<u>Date</u>	Course name
8-24-2008	CFR 49 232.203 hands on testing
6-26-2008	Red zone contact
4-24-2008	Eyes on path
1-20-2007	The science of fatigue and alertness ²⁹

(5) The UP brakeman. UP records disclosed the following training

²⁴ A class taught by an experienced conductor to educate conductors on the policies and procedures for the fare enforcement of Metrolink trains.

Training that addresses the Americans with Disabilities Act.

A field training exercise that relates to efficiency testing

²⁷ A course designed to emphasize the dangers to employees who work within Red Zone areas, i.e., on, around, over and under rail cars

Training designed to prevent skips, trips and falls.

29 A course designed to inform employees how to be well rested and stay alert so they can work and live safely and productively

information for the brakeman in the year before the accident.

<u>Date</u>	Course name
8-19-2008	CFR 49 232.203 hands on testing
8-11-2008	CFR 49 232.203 hands on testing
7-1-2008	CFR 49 232.203 hands on testing
6-12-2008	Red zone contact
6-10-2008	Red zone contact
6-10-2008	CFR 49 232.203 hands on testing
4-28-2008	CFR 49 232.203 hands on testing
4-2-2008	CFR 49 232.203 hands on testing
3-5-2008	Eyes on path
12-14-2007	CFR 49 232.203 hands on testing
12-6-2007	CFR 49 232.203 hands on testing
9-10-2007	CFR 49 232.203 hands on testing

b. Experience.

(1) <u>The Connex engineer.</u> Records revealed that Connex hired the engineer in that capacity on June 25, 2005. He had previously been hired as an engineer by Amtrak in November 1998.

Disciplinary action. Connex files disclosed no record of any disciplinary action pertaining to the engineer.

Locomotive engineer recertification. The engineer's most recent recertification occurred on July 24, 2007 and was valid until September 10, 2010.

(2) <u>The Connex conductor.</u> Records revealed that the conductor was hired on June 25, 2005. He had previously been hired by Amtrak as a conductor in March 1997.

Disciplinary action. Connex files disclosed no record of any disciplinary action pertaining to the conductor.

(3) <u>The UP engineer</u>. Records revealed that the engineer was hired April 3, 1969.

Disciplinary action. UP files disclosed no record of any disciplinary action pertaining to the engineer in the two years previous to the accident.

Locomotive engineer recertification. The engineer's most recent recertification occurred on September 3, 2008. It is valid until January 31, 2010.

(4) <u>The UP conductor</u>. Records revealed that the conductor was hired on June 22, 1998.

Disciplinary action. UP files disclosed no record of any disciplinary action pertaining to the conductor in the two years previous to the accident.

(5) <u>The UP brakeman.</u> Records revealed that the brakeman was hired on January 2, 1965.

Disciplinary action. UP files disclosed no record of any disciplinary action pertaining to the engineer in the two years previous to the accident.

6. Interviews

A. On scene interview of the UP conductor and brakeman. In concert with the Operations group and selected party representatives, the Human Performance group conducted interviews of the UP conductor and brakeman in Woodland Hills, CA on September 17, 2008.. Information pertaining to their work/rest information in the days before the accident, medical histories including use of medications, as applicable, and responses specific to the circumstances surrounding the accident in the context of the Human Performance areas of consideration, were obtained. Complete transcripts of these interviews are attached herewith, and are also located in the public docket.

B. <u>Interviews of the UP engineer and Metrolink conductor</u>. On September 23, 2008 the Operations group conducted an interview of the UP engineer and two days later on September 25, conducted a follow up interview with the Connex conductor. At the request of the Human Performance group chairman, the Operations group posed relevant Human Performance questions to and recorded responses from both crewmembers. Complete transcripts of these interviews are attached herewith, and are also located in the public docket.

C. Family members of the engineer of Metrolink train 111. On October 27, 2008 family members of the engineer were interviewed. They recalled he became fascinated with trains at the age of 9 after he boarded a train while his parents were traveling in Nevada. Once he became an adult, he was employed by Sperry where he learned about railroad tracks. He subsequently became a freight engineer in Arkansas, moved to Amtrak as an engineer, and then subsequently was employed by Connex as an engineer. They said that he was an engineer for a total of about twelve years.

The engineer's brother said that he last spoke with him in August of 2008, at which time he told him a person had committed suicide by jumping in front of his train. He added this was the second such instance, as someone had committed suicide in the same fashion two or three years earlier.

The engineer's brother said his brother did not drink alcohol or use illegal drugs. He stated his brother was a diabetic, but that otherwise his health was fine. With regard to his diabetes, he recalled the engineer did not require insulin, but took oral medications (no further information). He was not aware if the engineer had a personal physician.

³⁰ A preliminary interview was conducted of the conductor by the Operations group on September 16, 2008 while he recuperated in a hospital

Present at the interview were the engineer's mother and brother.
 A reference to Sperry Rail Services, a rail flaw detection company.

When questioned about his vision and hearing, he said his brother wore prescription glasses, and had no problems to his knowledge with his hearing.

The engineer's brother said the engineer loved his job, and added he was not aware of anything that might have preoccupied or distracted him from safely performing his duties. He recalled that his brother always tried to do the right thing at his job, and that he got along with co-workers. He said his brother at some point raised the issue of Metrolink engineers not being properly represented, and that on the morning of the accident Metrolink had rejected a proposal to divide their union.

When questioned as to whether he had knowledge of the engineer's work/rest history, the engineer's brother said that he awoke at about 4:00 A.M., arrived at work by 5:00 A.M. and began work at 6:00 A.M. He then worked until about noon, and was off until 4:00 P.M. He then worked the second part of his day from 4:00 P.M. until about 10:00 P.M. The engineer's brother said the engineer worked a standard five-day week with weekends off. He added that on occasion his brother would indicate that he was tired, but nonetheless went to work.

D. Reinterview of the UP conductor. On November 5, 2008 the conductor was reinterviewed to provide information about his postaccident toxicology test results, which indicated the presence of THC in his system. He stated that he smoked marijuana three times at most in July and August 2008, adding those occasions were his first use ever. He denied ingesting marijuana on the day of or several days before the accident. He said that a doctor contacted him at least three weeks after the accident and informed him of the results. He likewise relayed the same information to him, i.e., he smoked marijuana a total of three times in July and August 2008. The conductor said that he is currently enrolled in a drug treatment program, which included counseling, and was unable to provide a date of completion for that program. Although not specifically asked about drug use on the day of the accident during his initial interview on September, the conductor responded he would have responded in the negative to such use at that time as well, citing use in July and August.

E. Interview of a youth associated with the investigation. On November 6, 2008 a youth who had previously been determined to be relevant to the investigation was interviewed at the train station in Chatsworth, CA.³⁴ The youth recalled he first met the Connex engineer in late May 2008 through a friend.³⁵ He recalled they would have communicated by text messages and cell phone once to twice a week. He added he would have seen him in person on many occasions at various train stations while "rail fanning", although he was unable to provide an exact number. The youth said they would talk about train operations, including the engineer's career, and that the conversations would be brief when they spoke in person "...because he would usually be driving the train. And he'd come in, you know, say hi, and leave." The youth recalled that the engineer had previously operated buses for the Greyhound Bus Company, that he had worked for the BNSF railroad, and had been an engineer with Metrolink since 1996.

³³ The conductor subsequently contacted this investigator and reported that a Dr. Hayes contacted him on October 3, 2008 to discuss the positive findings.

This individual was interviewed with the approval and in the presence of his father.
 Per the youth's father, the youth met the engineer as a result of a group of his friends who were rail fans.

The youth said that occasionally he would not receive a text message response from the engineer while he was operating his train. He added that the engineer was "...focusing on his work, what he was doing, you know." And "....when he got a chance, he would always reply back." He further stated the engineer had a break during his workday from 9:00 A.M. until 3:35 P.M. and when they communicated, "I would...assume that he was not driving the train." He also said about the engineer's schedule, which was a regular five-day work week with weekends off," I knew between the hours of about 9:30 to 2:00 in the afternoon was completely free. And he usually would take a nap, you know, but he would always be free to talk, then." When questioned about the engineer's activities during his midday break, the youth responded that he would go to his home, feed his dogs, get the mail, check emails and go to the store and take a nap. The youth recalled they spoke via cell phone on the day of the accident at about 12:30 P.M., and that the engineer informed him he was going to the supermarket. He said that he sounded "...happy and cheerful like I always remembered him to be. There was nothing wrong." He was not aware of anything that may have distracted or preoccupied the engineer, and added the engineer stated that he was looking forward to the weekend. He also remembered they exchanged a "few" text messages that morning. and again stated just a few "...because that was a very busy shift for him..."

The youth said that after 3:35 P.M. on the afternoon of the accident, he received a text message form the engineer every fifteen minutes. He added he had sent the engineer a text message shortly after 4:00 P.M., and received the last text message response from him at 4:22 P.M. He recalled the message pertained to an Amtrak train that was running behind schedule.

The youth said that he was at home after receiving the text message at 4:22 P.M. on the day of the accident, and that he had turned on the news sometime after that time. When he learned the accident was at Chatsworth, he said he immediately knew it was the engineer's train, as it was the only Metrolink train there at that time.

When questioned as to whether he knew the UP crew, the youth responded that he knew of them, and that there were three [crewmembers] on that train.

The youth was asked whether the engineer had ever mentioned having any problems with his equipment or any co-workers or supervisors. He replied there were always minor problems with equipment with all engineers, and that there were no problems with other employees.

The youth said that as a rail fan, he rode a lot of trains. When questioned as to whether he had the opportunity to be in the cab of a locomotive, the youth responded, "Over the years yes but never while it was operating or moving." He specifically stated that on one occasion within a week of the accident he was in the locomotive cab with the engineer "... when it was not operating." The visit occurred at the Moorpark train station and lasted about five to ten minutes. He added the train was out of service and had no passengers onboard, and that the engineer did not allow him to approach the controls. He said he was not aware that the engineer had ever permitted another person, with the exception of trainees he had helped train years earlier, to be in the locomotive cab while he was operating. He recalled they had a discussion about he, the youth, being in the locomotive cab when he was older and "...when I had gotten a career with the railroad and I wasn't an engineer yet, maybe letting me go up there just to get the experience."

When questioned as to whether he was aware if the engineer had any medical

conditions, the youth responded he had diabetes and had taken medication for it. He added that condition would not have interfered with his work. He also said the engineer did not consume alcohol or abuse drugs.

Compiled by: Farres

Date: January 9, 2009

Lawson F. Narvell, Jr.

Human Performance Investigator

Approved by:

Date: January 9, 2009

Gerald D. Weeks, Ph.D.

Chief, Human Performance and Survival Factors Division