Federal Railroad Administration
Office of Safety
Headquarters Assigned
Accident Investigation Report
HQ-2005-62

Amtrak (ATK)/Union Pacific (UP)
Somis, California
August 5, 2005

Note that 49 U.S.C. §20903 provides that no part of an accident or incident report made by the Secretary of Transportation/Federal Railroad Administration under 49 U.S.C. §20902 may be used in a civil action for damages resulting from a matter mentioned in the report.

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

FRA FACTUAL RAILROAD ACCIDENT REPORT

FRA File # HQ-2005-62

1.Name of Railroad Operating Train #1: Amtrak [ATK]	1a. Alphabetic Code: ATK	1b. Railroad Accident/Incident No.: 097694
2.Name of Railroad Operating Train #2: N/A	2a. Alphabetic Code: N/A	2b. Railroad Accident/Incident: N/A
3.Name of Railroad Responsible for Track Maintenance: Amtrak [ATK]	3a. Alphabetic Code: ATK	3b. Railroad Accident/Incident No.: 097694
4. U.S. DOT_AAR Grade Crossing Identification Number: 745884T	5. Date of Accident/Incident: Month 08 / Day 05 / Year 2005	6. Time of Accident/Incident: 08:35: ☐ AM ☑ PM

7. Type of Accident/Indicent (single entry in code box): 1. Derailment; 2. Head on collision; 3. Rear end collision; 4. Side collision; 5. Raking collision; 6. Broken Train collision; 7. Hwy-rail crossing; 8. RR grade crossing; 9. Obstruction; 10. Explosion-detonation; 11. Fire/violent rupture; 12. Other impacts; 13. Other (describe in narrative): 07

8. Cars Carrying HAZMAT	9. HAZMAT Cars Damaged/Derailed	10. Cars Releasing HAZMAT	11. People Evacuated	12. Division
0	0	0	0	Los Angeles

13. Nearest City/Town	14. Milepost (to nearest tenth)	15. State Abbr	15. State Code	16. County
Camarillo	416.6	N/A	CA	VENTURA

17. Temperature (F) (specify if minus)	18. Visibility (single entry) 1. Dawn 2. Day 3.Dusk 4.Dark	Code	19. Weather (single entry) 1. Clear 2. Cloudy 3. Rain 4. Fog 5.Sleet 6.Snow	Code	20. Type of Track 1. Main 2. Yard 3. Siding 4. Industry	Code
63 F		4		1		1

21. Track Name/Number	22. FRA Track Class (1-9, X)	Code	23. Annual Track Density (gross tons in millions)	24. Time Table Direction 1. North 3. East	Code
Main		4	10		2

OPERATING TRAIN #1

25. Type of Equipment Consist (single entry): 1. Freight train; 2. Passenger train; 3. Commuter train; 4. Work train; 5. Single car; 6. Cut of cars; 7. Yard/switching; 8. Light loco(s).; 9. Maint./inspect.car; A. Spec. MoW Equip. Code: 2

26. Was Equipment Attended? 1. Yes 2. No: 1

27. Train Number/Symbol: 796(5)

28. Speed (recorded speed, if available) R - Recorded E - Estimated: 64 MPH; Code: R

29. Trailing Tons (gross tonnage, excluding power units): N/A

30. Method(s) of Operation (enter code(s) that apply): a. ATCS; b. Auto train control; c. Auto train stop; d. Cab; e. Traffic; f. Interlocking; g. Automatic block; h. Current of traffic; i. Time table/train orders; j.Track warrant control; k. Direct traffic control; l.Yard limits; m.Special instructions; n. Other than main track; o. Positive train control; p. Other (Specify in narrative) Code(s): e, g, N/A, N/A, N/A

30a. Remotely Controlled Locomotive? 0 = Not a remotely controlled; 1 = Remote control portable; 2 = Remote control tower; 3 = Remote control transmitter - more than one remote control transmitter: 0

31. Principal Car/Unit	a. Initial and Number	b. Position in Train	c. Loaded (yes/no)
(1) First involved (derailed, struck, etc)	N/A	1	yes
(2) Causing (if mechanical cause reported)	N/A	N/A	N/A

32. If railroad employee(s) tested for drug/alcohol use, enter the number that were positive in the appropriate box.

Alcohol	Drugs
N/A	N/A

33. Was this consist transporting passengers? (Y/N): Y

34. Locomotive Units	a. Head End	Mid Train b. Manual	Mid Train c. Remote	Rear End d. Manual	Rear End c. Remote
(1) Total in Train	0	0	0	0	1
(2) Total Derailed	0	0	0	0	0

35. Cars	Loade a. Freight	Loade b. Pass.	Empty c. Freight	Empty d. Pass.	e. Caboose
(1) Total in Equipment Consist	0	5	0	0	0
(2) Total Derailed	0	1	0	0	0

36. Equipment Damage This Consist: 520000

37. Track, Signal, Way, & Structure Damage: 0

38. Primary Cause Code: M302

39. Contributing Cause Code: N/A

Number of Crew Members

40. Engineer/ Operators	41. Firemen	42. Conductors	43. Brakemen
N/A	0	1	1

Length of Time on Duty

44. Engineer/Operator: Hrs 8 Mi 50

45. Conductor: Hrs 9 Mi 05

Casualties to:	46. Railroad Employees	47. Train Passengers	48. Other
Fatal	0	0	0
Nonfatal	N/A	0	2

49. EOT Device? 1. Yes 2. No: 2

50. Was EOT Device Properly Armed? 1. Yes 2. No: N/A

51. Caboose Occupied by Crew? 1. Yes 2. No: N/A

OPERATING TRAIN #2

52. Type of Equipment Consist (single entry): 1. Freight train; 2. Passenger train; 3. Commuter train; 4. Work train; 5. Single car; 6. Cut of cars; 7. Yard/switching; 8. Light loco(s).; 9. Maint./inspect.car; A. Spec. MoW Equip. Code: N/A

53. Was Equipment Attended? 1. Yes 2. No: N/A

54. Train Number/Symbol: N/A

55. Speed (recorded speed, if available) R - Recorded E - Estimated: 0 MPH; Code: N/A

57. Method(s) of Operation (enter code(s) that apply): a. ATCS; b. Auto train control; g. Automatic block; h. Current of traffic; m.Special instructions; n. Other than main track

57a. Remotely Controlled Locomotive? 0 = Not a remotely controlled; 1 = Remote control portable

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56. Trailing Tons (gross tonnage, excluding power units)	c. Auto train stop d. Cab e. Traffic f. Interlocking	i. Time table/train orders j.Track warrant control k. Direct traffic control l.Yard limits	o. Positive train control p. Other (Specify in narrative) Code(s)	2 = Remote control tower 3 = Remote control transmitter - more than one remote control transmitter
N/A			N/A N/A N/A N/A N/A	N/A

58. Principal Car/Unit	a. Initial and Number	b. Position in Train	c. Loaded (yes/no)	59. If railroad employee(s) tested for drug/alcohol use, enter the number that were positive in the appropriate box.	Alcohol	Drugs
(1) First involved (derailed, struck, etc)	0	N/A	N/A		N/A	N/A
(2) Causing (if mechanical cause reported)	0	N/A	N/A	60. Was this consist transporting passengers? (Y/N)	N/A	

61. Locomotive Units	a. Head End	Mid Train b. Manual	Mid Train c. Remote	Rear End d. Manual	Rear End c. Remote	62. Cars	Loade a. Freight	Loade b. Pass.	Empty c. Freight	Empty d. Pass.	e. Caboose
(1) Total in Train	0	0	0	0	0	(1) Total in Equipment Consist	0	0	0	0	0
(2) Total Derailed	0	0	0	0	0	(2) Total Derailed	0	0	0	0	0

63. Equipment Damage This Consist	64. Track, Signal, Way, & Structure Damage	65. Primary Cause Code	66. Contributing Cause Code
0	0	N/A	N/A

Number of Crew Members				Length of Time on Duty	
67. Engineer/ Operators	68. Firemen	69. Conductors	70. Brakemen	71. Engineer/Operator	72. Conductor
N/A	N/A	N/A	N/A	Hrs 0 Mi 0	Hrs 0 Mi 0

Casualties to:	73. Railroad Employees	74. Train Passengers	75. Other
Fatal	0	0	0
Nonfatal	0	0	0

76. EOT Device? (1. Yes 2. No)	77. Was EOT Device Properly Armed? (1. Yes 2. No)	78. Caboose Occupied by Crew? (1. Yes 2. No)
N/A	N/A	N/A

Highway User Involved

79. Type	Code
A. Auto B. Truck C. Truck-Trailer. D. Pick-Up Truck E. Van F. Bus G. School Bus H. Motorcycle J. Other Motor Vehicle K. Pedestrian M. Other (spec. in narrative)	B

80. Vehicle Speed (est. MPH at impact)	81. Direction geographical) 1.North 2.South 3.East 4.West	Code
5		3

82. Position	Code
1.Stalled on Crossing 2.Stopped on Crossing 3.Moving Over Crossing 4. Trapped	3

86a. Was the highway user and/or rail equipment involved in the impact transporting hazardous materials? (1. Highway User 2. Rail Equipment 3. Both 4. Neither)	Code
	4

Rail Equipment Involved

83. Equipment	Code
1.Train(units pulling) 2.Train(units pushing) 3.Train (standing) 4.Car(s) (moving) 5.Car(s) (standing) 6.Light Loco(s) (moving) 7.Light(s) (standing) 8.Other (specify in narrative)	2

84. Position of Car Unit in Train
1

85. Circumstance	Code
1. Rail Equipment Struck Highway User 2. Rail Equipment Struck by Highway User	1

86b. Was there a hazardous materials release by (1. Highway User 2. Rail Equipment 3. Both 4. Neither)	Code
	4

86c. State here the name and quantity of the hazardous materials released, if any.
N/A

87. Type of Crossing Warning	1.Gates	2.Cantilever FLS	3.Standard FLS	4.Wig Wags	5.Hwy. traffic signals	6.Audible	7.Crossbucks	8.Stop signs	9.Watchman	10.Flagged by crew	11.Other (spec. in narr.)	12.None
Code(s)	08	N/A	N/A	N/A	N/A	N/A	N/A					

88. Signaled Crossing Warning (See instructions for codes)	Code

89. Whistle Ban (1. Yes 2. No 3. Unknown)	Code
	2

90. Location of Warning (1. Both Sides 2. Side of Vehicle Approach 3. Opposite Side of Vehicle Approach)	Code
	1

91. Crossing Warning Interconnected with Highway Signals (1. Yes 2. No 3. Unknown)	Code
	2

92. Crossing Illuminated by Street Lights or Special Lights (1. Yes 2. No 3. Unknown)	Code
	2

93. Driver's Age	94. Driver's Gender (1. Male 2. Female)	Code
34		1

95. Driver Drove Behind or in Front of Train and Struck or was Struck by Second Train (1. Yes 2. No 3. Unknown)	Code
	2

96. Driver (1. Drove around or thru the Gate 2. Stopped and then Proceeded 3. Did not Stop 4. Stopped on Crossing 5. Other (specify in narrative))	Code
	3

97. Driver Passed Standing Highway Vehicle (1. Yes 2. No 3. Unknown)	Code
	2

98. View of Track Obscured by (primary obstruction) (1. Permanent Structure 2. Standing Railroad Equipment 3. Passing Train 4. Topography 5. Vegetation 6. Highway Vehicle 7. Other (specify in narrative) 8. Not obstructed)	Code
	8

101. Casulties to Highway-Rail Crossing Users	Killed	Injured
	0	2

99. Driver Was (1. Killed 2.Injured 3. Uninjured)	Code
	2

102. Highway Vehicle Property Damage (est. dollar damage)
0

100. Was Driver in the Vehicle? (1. Yes 2. No)	Code
	1

103. Total Number of Highway-Rail Crossing Users (include driver)
2

104. Locomotive Auxiliary Lights? (1. Yes 2. No)	Code
	1

105. Locomotive Auxiliary Lights Operational? (1. Yes 2. No)	Code
	1

106. Locomotive Headlight Illuminated? (1. Yes 2. No)	Code
	1

107. Locomotive Audible Warning Sounded? (1. Yes 2. No)	Code
	1

108. DRAW A SKETCH OF ACCIDENT AREA INCLUDING ALL TRACKS, SIGNALS, SWITCHES, STRUCTURES, OBJECTS, ETC., INVOLVED.

109. SYNOPSIS OF THE ACCIDENT

At 8:35 p.m. PDT, August 5, 2005, southbound Amtrak (ATK) passenger train 796 in a cab car forward operation struck a dump truck at a private highway-rail grade crossing. The accident occurred in Somis, California, milepost 416.6 on the Union Pacific Railroad (UP) Los Angeles Area, Santa Barbara Subdivision.

The method of operation is Traffic Control System. The maximum timetable speed is 70 mph for passenger trains and 60 mph for freight trains.

There were a total of five injuries: two occupants of the truck and three train crew members. There were no hazardous materials involved. Estimated equipment damage is $520,000 to the cab car and it derailed. The dump truck was destroyed.

At the time of the accident, it was dark and clear with a temperature of 63 degrees Fahrenheit.

The accident was caused by the failure of the dump truck driver to yield to the oncoming train. According to the California Highway Patrol, the driver failed to stop his vehicle at a posted stop sign at the railroad crossing.

110. NARRATIVE

The following information was obtained from an investigation that was conducted by the Federal Railroad Administration.

Circumstances Prior to the Accident

The crew of Amtrak 796 South included a locomotive engineer, a conductor, and an assistant conductor. The conductor was called to report for duty at 11:30 a.m. PDT, on August 5, 2005 at his home duty station in Los Angeles, CA. The engineer and assistant conductor were called to report at 11:45 a.m. PDT, on August 5, 2005 at their home duty station in Los Angeles, CA. All had received the statutory off duty period prior to reporting for duty.

Their assigned passenger train consisted of five cars including the lead control cab car and one rear locomotive. The train ran on a scheduled route beginning at Paso Robles to San Diego, CA. The trip was uneventful and a normal run before approaching the accident area. The route included several stops including a stop at the Camarillo station prior to the accident.

As the train approached the accident area, the locomotive engineer was seated at the controls at the right side of the control cab car, number C6952. The conductor was in the café car talking to the on-board services employee. The assistant conductor was in the upper portion of the café car standing behind the last seat and in front of the sliding door when he heard the train go into emergency.

In this area of the railroad there are, in succession, a one percent ascending grade leveling to a zero percent grade from milepost 416.4 to the impact area at milepost 416.6. The accident occurred on tangent track.

The railroad timetable direction of travel is north to south but is geographically opposite. The geographic direction of travel of the vehicle is west to east. Timetable directions are used throughout this report in reference to the train movement and in crew statements. However, it is important to note that the dump truck crossed in front of the locomotive in a geographically eastward direction, that is, from left to right relative to the locomotive engineer's line of sight. Correlating the direction of travel with the railroad's reports, crew statements and police report appear to conflict but, in reality, are in agreement.

The maximum authorized speed for this train was 70 mph, as designated in the current UP Timetable.

The Accident

Amtrak 796 South

As the train approached Hagle Tree Farm Road, a private grade crossing, the engineer said the train was traveling 64 MPH when he observed a dump truck attempting to cross the tracks in an westward (timetable) direction; police reports indicate a geographic eastward direction. As the train approached the crossing, he sounded both the whistle and bell in an attempt to alert the driver. When he determined that a crash was imminent, he immediately placed the train in emergency braking. He left the controls and started moving to the back end of the lead car toward the passenger compartment and threw himself to the floor. Seconds later, the train struck the loaded dump truck which was still crossing the tracks.

Dump Truck

The truck was traveling geographically eastward and was following a row of trucks en route to a designated dumping area. The driver stated he was moving at about 5 MPH but was unsure if he had stopped at the stop sign. He claimed he didn't see or hear the train prior to the collision.

The train struck the right rear side of the dump truck. After impact, the truck spun around and landed approximately 100 feet from the point of impact. The cab car's first set of wheels derailed and the unit continued for approximately one-half mile before coming to a stop near milepost 417.

Post-Accident Actions and Injuries

After the train stopped, the engineer noticed he had sustained some scrapes on his arms and knees. The conductor called the engineer, who did not respond. He then called the assistant conductor and directed him to go into the cab car to check on the engineer's condition. The conductor attempted to contact the train dispatcher via radio but was unable to do so. He then called the dispatcher on the company cell phone and made notification. The engineer and conductor began to check on passengers, advised them to keep calm and to start evacuating the train. A bystander called 911 and emergency crews arrived within minutes to treat the injured passengers.

The engineer was treated and released at the site. The conductor and assistant conductor were also injured. The conductor sustained injuries after hitting a cabinet door and was taken to Simi Valley Hospital (SVH) for treatment and was released. The assistant conductor sustained injuries after hitting a sliding door and was taken to Ventura County Medical Center (VCMC) for treatment and was released. The truck driver and his passenger sustained injuries requiring hospital care. Sixteen train passengers were taken to local hospitals around the region where they were treated and released. Since there was no treatment beyond first aid, these were not FRA-reportable.

The dispatcher notified Amtrak's Road Foreman of Engines and Union Pacific's Superintendent of Operations of the accident. After their arrival, Amtrak dispatched another passenger train to milepost 417 to transfer the passengers and continue on to Los Angeles and San Diego.

Analysis and Conclusions

Analysis

The driver of the truck was a 34-year old male. The passenger was a 29-year old female.

The grade crossing is a private road crossing with posted private stop signs. There is no active warning system.

The railroad has a whistle post in place about 1350 feet timetable north of the crossing. The lead cab car is equipped with front headlights, auxiliary lights and the audible warning devices required by Federal regulations. The front headlights were broken from the impact.

Conclusions

The Amtrak train was in full compliance with its own operating rules and all applicable Federal standards. The train engineer was the only witness to the accident.

Probable Cause

The accident was caused by the failure of the dump truck driver to yield to the oncoming train. According to the California Highway Patrol, the driver failed to stop his vehicle at a posted stop sign at the railroad crossing.