NATIONAL TRANSPORTATION SAFETY BOARD

Office of Railroad, Pipeline and Hazardous Materials Investigations
Washington, DC

OPERATIONS GROUP CHAIRMAN FACTUAL REPORT

DCA-16-FR-009

National Railroad Passenger Corporation Highway / Rail Grade Crossing Accident

West Palm Beach, Florida

July 6, 2016

Accident

NTSB Accident Number:	DCA16FR009
Date of Accident:	July 6, 2016
Time of Accident:	9:59 a.m. (EDT)
Train:	Amtrak No. P09806
Railroad Owner:	South Florida Rail Transit Authority (SFRTA)
Crew Members:	1 – Locomotive Engineer, 1 – Asst. Locomotive Engineer, 1 – Conductor, 2 - Asst. Conductors
Location of Accident:	West Palm Beach, Florida

OPS Group

David Bucher – OPS Group Chairman
NTSB

Allen Yoder
Director of Safety & Security
RTA

Michael Sherlock
Vice President-Rail
Transdev

Scott Kenner
Superintendent Operations
Amtrak

Danielle Simkunas
Asst. Superintendent Commuter Operations
Amtrak

Richard Rusnak
Chief Inspector
Federal Railroad Administration

Synopsis:

On Wednesday July 6, 2016, at approximately 9:59 a.m., Amtrak train Number P09806 traveling northbound on main track No. 2, struck an automobile at a highway-rail grade crossing in West Palm Beach, Florida located at 25th St. and the corner of Windsor Avenue. As a result of the accident, the driver and sole occupant of the automobile sustained severe injuries and was transported to a local hospital. No one on the train was injured.

25th Street at the accident location is a four lane street with two east and west bound traffic lanes. The highway grade crossing is equipped with four quadrant gates, lights, bell as well as two cantilever structures for over lane lighting, and is a designated Quiet Zone. The automobile involved in the accident was traveling westbound in the outer traffic lane

when it entered the crossing. Following the accident, the train crew reported that the crossing warning system was not functioning. In addition, an eye witness testified that a Signal Inspector was observed inside the signal instrument shelter (adjacent to the crossing) at the time of the accident.

The track and crossing warning systems in the accident area are maintained by the VTMI Company for the South Florida Rail Transit Authority (SFRTA) Tri-Rail system.

Weather at the time of the accident was 78 degrees and clear.

Circumstances Prior to the Accident:

Amtrak Train – No. P09806

Amtrak (ATK) Train No. P09806 originated at Amtrak's Miami passenger station located in Miami, FL (Hialeah yard). The train's final destination was Penn Station, New York City, NY

The train crew operating the train received the train's equipment at Miami and performed all required pre-departure equipment tests prior to departure. The P09806 train consisted of 2 locomotives and 11 passenger cars.

The locomotive crew consisted of a locomotive engineer, and an assistant locomotive engineer. Both were located in the control compartment of the lead locomotive. A conductor, and one assistant conductor were located throughout the train. The train departed Miami Station on schedule, at 8:10 a.m. (local time). The crew had an uneventful trip departing Miami.

Train P09806's last scheduled station stop prior to the accident was West Palm Beach, FL. The train proceeded at the required track speed departing from West Palm Beach, through to the accident location. The P09806 train had passed 5 previous open passenger stations before stopping at West Palm Beach station at about 9:45 a.m., on schedule.

The Accident

Train P09806 was operating on No. 2 main track northbound. It approached the 25th Street highway-rail crossing, operating at a speed of 50 miles per hour. The track speed limit on No. 2 track at this location is 55 miles per hour. According to the locomotive engineer, he noticed several highway vehicles passing over the crossing even though he

knew the crossing protection should have been activated. The locomotive engineer immediately applied the brakes on the train.

As the train brakes applied and the train began to slow, the locomotive engineer observed an automobile that was in the right lane of two westbound traffic lanes occupying the 25th Street crossing, pull forward and partially foul No. 2 track. He immediately placed the train into a full emergency air brake application and sounded the horn on the lead locomotive upon approaching the crossing.

The lead locomotive of train P09806 struck the automobile on the driver's side at about 9:59 a.m., at a speed of approximately 50 miles per hour. The train then pushed the vehicle north on No. 2 track approximately 100 feet and clear of No. 2 track before the train came to a stop at approximately 710 feet beyond the crossing. The locomotive engineer transmitted an emergency radio transmission to trains in the area, and gave immediate notification of the crash to the SFRTA (ATK) train dispatcher.1

Method of Operation and Location

The crash occurred at the 25th Street Highway-Rail Crossing located in West Palm Beach, FL, milepost SX 968.3 on the No. 2 Main Track of SFRTA. The railroad at this location is double main track. Tracks are designated as numbers 1 and 2 tracks. The railroad at this location is controlled by Centralized Traffic Control from an RTA dispatching center located in Pompano Beach, FL. Trains are primarily operated southbound on No. 1 track and northbound on No. 2, but can operate in both directions on both tracks as necessary. Track speed for both tracks is 55 miles per hour at the crossing.

Operating Rules

Operating Rules governing employees at the time of the accident were the SFRTA Operating Rules, effective March 29, 2015. Also in effect was SFRTA Timetable No. 2, effective June 1, 2016.

At the time of the accident the train crew operating the Amtrak train P09806 involved in the crash, was governed by wayside signal indications and railroad operating and Amtrak safety rules.

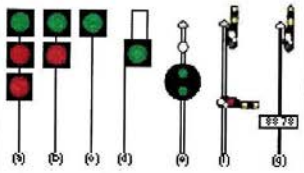
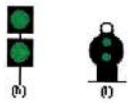
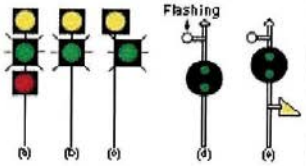
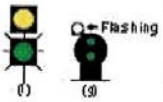
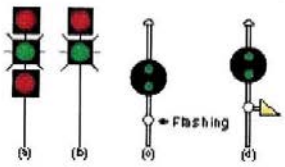
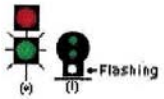
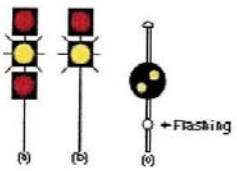
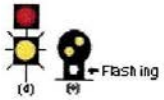
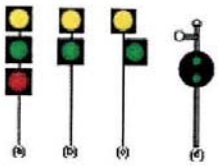
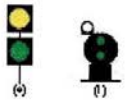
Signal Indications received by – Train No. P09806

1 Amtrak provides train dispatching services for the SFRTA and CSX on this line out of the RTA Pompano Beach dispatching office.

Train P09806, with lead locomotive 146, received a “Clear” signal (the visible trackside signal outside the cab) at the last control point prior to the crash.

This signal indication was a normal indication at this location, and allowed the engineer to operate at maximum authorized speed.

1281 through 1282

RULE	HIGH SIGNAL ASPECTS	DWARF SIGNAL ASPECTS	NAME	INDICATION
1281			CLEAR	Proceed.
1281B			APPROACH LIMITED	Proceed, approaching next signal not exceeding Limited Speed.
1281C			LIMITED CLEAR	Limited Speed through turnouts, crossovers, sidings, and over power-operated switches then proceed.
1281D			LIMITED APPROACH	Limited Speed through turnouts, crossovers, sidings, and over power-operated switches then proceed, prepared to stop at next signal.
1282			APPROACH MEDIUM	Proceed, approaching next signal not exceeding Medium Speed.

Locomotive Crew

ATK Train No. P09806

Engineer:

Hire: 7/23/97
Engineer initial certification (Amtrak): 12/23/97
Current Certification: 2/19/2016

Asst. Engineer:

Hire: 5/7/91
Engineer initial certification (Amtrak): 11/29/91
Current Certification: 3/23/16

The train crew went on-duty at Miami, FL. For all train crew members (conductors and engineers) this was their first train assignment of the day. All crew members had received the required off-duty rest period prior to working the day of the accident.

Train Consist

Amtrak Train P09806 consisted of 2 locomotives and 11 passenger cars. On the head of the train was ATK locomotive 146. The lead locomotive was equipped with a control compartment on the lead (north) end of the locomotive. The lead locomotive was followed by locomotive ATK No. 151. All 11 trailing cars were in revenue service. The train equipment lined-up, as follows:

ATK 146 Locomotive (North End)(Head End)
ATK 151 Locomotive
ATK 61044 Baggage Car
ATK 62040 Sleeper Car
ATK 62017 Sleeper Car
ATK 62036 Sleeper Car
ATK 8505 Lounge Car

ATK 28003 Lounge Car
ATK 25081 Coach Car
ATK 25014 Coach Car
ATK 25023 Coach Car
ATK 25057 Coach Car
ATK 25096 Coach Car (South End)(Rear Car)

No. P09806 **Train Crew – Duty times**

Day of the Accident

Engineer went on duty in Miami, FL, at 7:10 a.m., on July 6, 2016.

Asst. Engineer went on duty in Miami, FL, at 7:10 a.m., on July 6, 2016.

Federal Oversight

Federal oversight of the SFRTA and Amtrak is provided by the Federal Railroad Administration (FRA), which is part of the US Department of Transportation (DOT). The FRA employs multiple field inspectors which conduct field inspections on SFRTA and Amtrak property on a scheduled as well as random basis. FRA operational field inspectors monitor the railroad's compliance with DOT regulations per 49 CFR Parts 200 through 299. FRA also conducts periodic records reviews on SFRTA and Amtrak for various federal record keeping requirements.

Employee Training and Qualifications

Federal regulations 49 CFR Part 240 and 242 require that both locomotive engineers and conductors be trained and certified under a federally approved program. For both of these training programs, employees must pass required testing to confirm that they are qualified to perform their assigned duties. Records provided to NTSB, as part of the crash investigation, indicate that Amtrak had approved training plans in place and that the train crews involved in this crash had received the required training by the railroad. All train crew members involved in the crash held current certifications for their assigned positions.

Employee Interviews

A summary of the 4 interviews conducted by the OPS Group during the investigation appear below:

Interview Highlights

Below are bullets from the NTSB Operations Group interviews:

Name: Russell Griffin Jr.

Title: Locomotive Engineer Train P09806

Date/Time of Interview: 7/8/2016, 3:35 p.m.

- Stated he went on-duty at 7:10 a.m.
- Stated the train departed Miami, FL at 8:10 a.m.
- Proceeded on signal indication departing Miami station
- Approached 25th Street, saw gates were not operating
- Said white car pulled out at the last minute
- Said he had no mechanical issues with the train handling or braking
- Said he could only remember another gate failure about 10 years ago on this line when it was CSX property

Name: James Knox
Title: Asst. Locomotive Engineer Train P09806

Date/Time of Interview: 7/8/2016, 3:50 p.m.

- Stated he went on-duty at 7:10 a.m.
- Said the crew did a detailed job briefing at the Miami crew room before getting on their train
- Stated that he got a "Clear" signal at West Palm Beach Station
- Stated that he got a "Clear" signal at Coral (Control Point)
- Stated that he saw a black SUV slow for the crossing
- Observed white car come into the crossing.
- Thought that the white car stopped then pull forward onto the crossing
- Said he announced "Emergency" 3 times on the radio
- Said all required air brake tests were conducted upon departing Miami Station

- Took no exceptions to how the train handled
- Took no exceptions to the how the lead locomotive operated
- Stated that he had never experienced failed gates before

Name: Matt Kirk
Title: Train Dispatcher Amtrak, D-1 Position

Date/Time of Interview: 7/7/2016, 3:25 p.m.

- Stated he went on-duty at 6:20 a.m.
- Said he was operating 5 or 6 other passenger trains at the time of the accident
- Said he also thought he was operating 2 CSX freight trains at the time of the accident
- Stated that the office had no prior contact with signal inspector Perez prior to the initial contact about his working at 25th Street

Name: Rodney Fernandez
Title: Train Dispatcher Amtrak, D-2 Position

Date/Time of Interview: 7/7/2016, 3:40 p.m.

- Said he reported on-duty at 6:25 a.m.
- Said he was working the D-2 position
- Stated that VTMI inspector called and said he was working on 25th Street crossing and that he was not going to affect train traffic

Radio Communications

The lead controlling locomotive of ATK Train P09806 was equipped with a permanent working railroad radio the day of the accident. The radios were tested by the train crew on the day of the accident prior to departing Miami Station. No problems were noted either before or after the accident.

Locomotive Sight-Distance Observations

On July 9, 2016, sight distance testing was conducted at the accident site with representatives from the FRA and ATK with a similar locomotive representing the lead locomotive involved in the accident.

Test equipment numbers were:

ATK 134 Lead Locomotive (North)
ATK 516 (South)

The sight distance train made three runs through the accident location at restricted and track speed, for purposes of time and visual measurements. The runs were conducted at approximately 11:30 a.m. and completed at 12:32 pm. Weather conditions were similar to weather conditions the day of the accident.

End of Report

David S. Bucher
NTSB Rail Accident Investigator