

National Transportation Safety Board
Office of Railroad, Pipeline and Hazardous Materials Investigations
Washington, D.C. 20594

Collision of Union Pacific Trains AMNML 07 and ALDAS 06

Texarkana, TX

September 8, 2015

Mechanical Group Factual Report

Accident

Accident # DCA15FR014

Keys #: 91935

Accident Type: Side collision between two UP trains at an interlocking

Vehicle #1: (Striking train) AMNML-07 westbound train

Vehicle #2: (Struck train) ALDAS-06 northbound train

Location: Texarkana, TX

Date of Accident: September 8, 2015

Date of Report: September 12, 2015

Mechanical Group Members

National Transportation Safety Board-Group Chairman

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ACCIDENT SYNOPSIS:

On September 8, 2015 at 12:34 a.m. central daylight time, Union Pacific Railroad (UP) train AMNML-07 (train #1) traveling west on the Pine Bluff Subdivision, main track, collided into the side of UP train ALDAS-06 (train #2) traveling north on Little Rock Subdivision, main track one, at Texarkana, Texas. The collision occurred at a railroad crossing at grade located at the intersection of the Pine Bluff Subdivision, Control Point (CP) CB418, Mile Post (MP) 419.1 and the Little Rock Subdivision, CP R001, MP .5. As a result of the collision, two locomotives of the westbound train UP AMNML-7 along with the thirteenth through the nineteenth cars of the north bound train UP ALDAS-06 derailed. Both engineer and conductor of the westbound train sustained minor injuries. The lead locomotive of the westbound train AMNML-07 UP 2542 derailed on its side resulting in a release of approximately 4,000 gallons of diesel fuel. The fuel spill was contained, afterwards the soil and debris was removed for proper disposal. The Event recorder data indicated train #1 traveling at 19 mph before the train was placed into emergency brake application by the engineer and an impact speed of 6 MPH. The estimated damage is estimated at \$4,664,073.00. The parties to the investigation include Union Pacific Railroad, the Federal Railroad Administration (FRA), the Brotherhood of Locomotive Engineers and Trainmen (BLET), the Sheet Metal, Air, Rail and Transportation (SMART) and the Brotherhood of Railroad Signalmen (BRS).



Figure 1 Photo at accident site of damaged locomotives and auto carriers.

Train Consist

The westbound auto train AMNML 07 consisted of 3 locomotives and 67 auto carriers. The train was 6,520 feet in length and weighed 5167 tons. The locomotive consist had a total of 8,900 horse power and an equivalent tons per equivalent powered axle of 24.2 (EPA).

The northbound mixed manifest train ALDAS 06 consisted of 2 locomotives and 70 Freight cars. The train was 6,302 feet in length and weighed 5609 tons. The locomotive consist had a total of 8,000 horse power and an equivalent tons per equivalent powered axle of 20.8 (EPA).

Railroad Equipment Involved in the Collision

The westbound AMNML 07 was configured as a distributed power consist with 2 locomotive in the front of the train and one on the rear. The first and second locomotives were derailed. The lead locomotive UP2542 sustained heavy damages. The locomotive consist consisted of the following:

1. UP2542 West GE C45AH
2. NS9242 East GE D9-44CW (idle not in power)
3. UP7118 East GE C44AC (DPU)

The freight cars of the westbound AMNML 07 were not derailed. Eight cars from the northbound ALDAS 06 were derailed due to the collision. The 8 derailed cars consisted of the following:

Car position 13	TTGX 970765
Car position 14	TTGX 715661
Car position 15	TTGX 987836
Car position 16	TTGX 978125
Car position 17	TTGX 941861
Car position 18	TTGX 961745
Car position 19	TTGX 992694

The northbound ALDAS 06 was conventionally configured with two locomotives in the lead position and were not derailed. The locomotive consist consisted of the following:

1. UP4971 East EMD SD70M
2. UP4482 East EMD SD70M

Equipment damage was estimated by Union Pacific to be approximately \$2,356,109.

Accident Sequence

Preliminary review of event recorder data and physical data from the accident scene indicate the westbound train was approaching the POD at control point 419.1 traveling at approximately 19 mph before the train was placed into emergency brake application by the engineer. The recorder data also showed an impact speed of 6 mph.

Pre-Departure Inspections

On September 7, 2015, at 12:08 pm CDT, a Class I Air Brake Test and Pre-departure inspection was conducted on the AMNML 07 at the Marion, AR Yard, by Progress Rail Qualified Mechanical Inspectors. The Progress Rail Mechanical Inspectors found no defective conditions and made no repairs during the inspection process.

Equipment Post Accident Inspections

On September 9, 2015, the mechanical group conducted an FRA Class I Air Brake Test and Pre-departure inspection on the AMNML 07. The train was reassembled in its original configuration from the time of the incident. Five minor air brake defects were noted.

On September 10, 2015, the mechanical group conducted an FRA Class I Air Brake Test and Pre-departure inspection on the ALDAS 06. The train was reassembled in its original configuration without the 7 derailed cars from the time of the incident. Two minor air brake defects were noted.

Documentation Received

- Train list
- Weight list
- Any diagrams and photos of the accident scene
- Aerial photos of the accident scene
- Event recorder data
- Forward facing camera download
- Car/Locomotive repair history

- Blue cards for the locomotives
- Locomotive daily inspection records
- Air brake test record
- DPU data logger downloads
- Training records for carman
- AEI reader consist
- Locomotive engineer reports
- Trip optimizer data logger downloads

The mechanical group reviewed and took no exceptions to the documentation received nor to the maintenance history of the equipment.

Group Member to the Investigation - Acknowledgment Signatures

The undersigned designated *Group Member to the Investigation* representatives attest that the information contained in this report is a factually accurate representation of the information collected during the on scene phase of this investigation, to the extent of their best knowledge and contribution in this investigation.

_____ Date _____
Joey Rhine, NTSB

_____ Date _____
Ross Mackey, FRA

_____ Date _____
Mark Smith, Union Pacific

_____ Date _____
Ed McCaddon, Union Pacific