INTERSTATE COMMERCE COMMISSION

WASHINGTON

REPORT NO. 3691

THE PENNSYLVANIA RAILROAD COMPANY

IN RE ACCIDENT

AT ATWATER, OHIO, ON

MAY 28, 1956

SUMMARY

Date:	May 28, 1956	
Railroad:	Pennsylvania	
Location:	Atwater, Ohio	
Kind of accident:	Collision	
Equipment involved:	Passenger train	: Motor-truck
Train number:	361	:
Locomotive number:	Diesel-electric unit 5845A	:
Consist:	5 cars	:
Estimated speeds:	70 m. p. h.	· 30 m. p. h.
Operation:	Signal indications	
Tracks:	Double; tangent, 0.75 percent ascending grade westward	
Highway:	Tangent, crosses tracks at angle of 67°37', level	
Weather:	Clear	
Time:	9:05 a. m.	
Casualties:	3 killed; 38 injured	
Cause:	Failure to stop motor-truck short of train moving over rail-highway grade crossing	

INTERSTATE COMMERCE COMMISSION

REPORT NO. 3691

IN THE MATTER OF MAKING ACCIDENT INVESTIGATION REPORTS UNDER THE ACCIDENT REPORTS ACT OF MAY 6, 1910.

THE PENNSYLVANIA RAILROAD COMPANY

July 2, 1956

Accident at Atwater, Ohio, on May 28, 1956, caused by failure to stop a motor-truck short of a train moving over a rail-highway grade crossing.

REPORT OF THE COMMISSION[1]

CLARKE, Commissioner:

On May 28, 1956, there was a collision between a passenger train on the Pennsylvania Railroad and a motor-truck at a rail-highway grade crossing at Atwater, Ohio, which resulted in the death of the driver of the motor-truck, one train-service employee, and an occupant of a grain mill which was struck by derailed equipment, and the injury of 31 passengers, 3 occupants of the grain mill, 2 Pullman Company employees, and 2 train-service employees.

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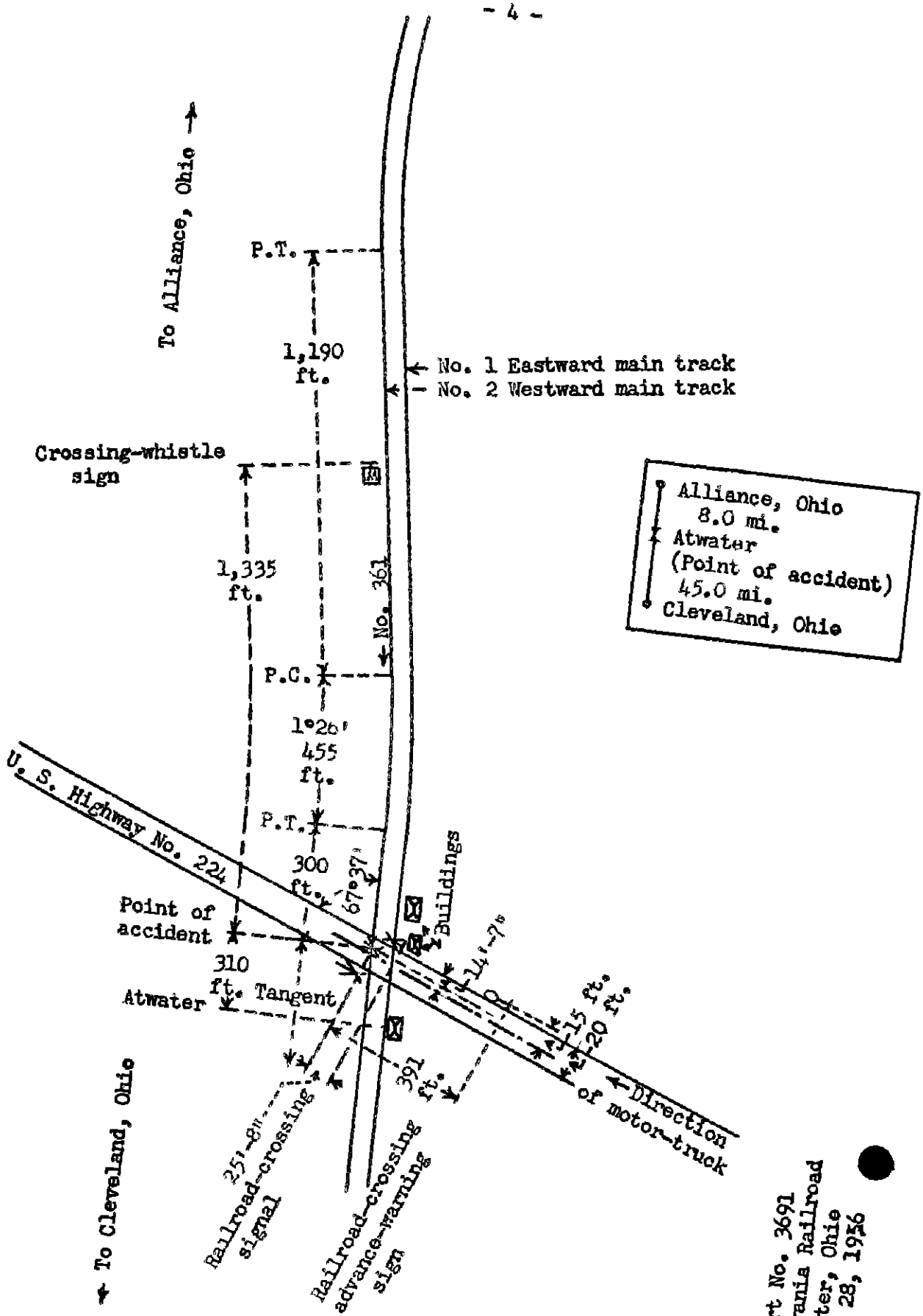
[1] Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Clarke for consideration and disposition.



Report No. 3691
Pennsylvania Railroad
Atwater, Ohio
May 28, 1956

Location of Accident and Method of Operation

This accident occurred on that part of the Lake Region extending between Alliance and Cleveland, Ohio, 53.0 miles, a double-track line, over which trains moving with the current of traffic are operated by signal indications. In the vicinity of the point of accident the railroad extends from southeast to northwest and the highway extends from east to west. Timetable directions on the railroad are east and west, and these directions are used in this report. The main tracks from south to north are designated as No. 1, eastward, and No. 2, westward. The accident occurred on track No. 2 at a point 8 miles west of Alliance and 310 feet east of the station at Atwater, where the railroad is crossed at grade by U. S. Highway No. 224. From the east on the railroad there are, in succession, a tangent 1,190 feet in length, a 1°26' curve to the right 455 feet, and a tangent 300 feet to the point of accident and a considerable distance westward. The grade is 0.75 percent ascending westward at the point of accident.

U. S. Highway No. 224 is surfaced with bituminous material to a width of 20 feet. The northeast angle of the intersection of the highway and the tracks is 67°37'. The crossing is 27 feet in width. A timber is laid on each side of each rail throughout the width of the crossing, and the remaining area of the crossing is surfaced with bituminous material to the level of the tops of the rails. The highway is tangent throughout a distance of several thousand feet on each side of the crossing. The grade for north-bound vehicles is practically level throughout a distance of 300 feet immediately south of the crossing.

A circular railroad-crossing advance-warning sign is located 15 feet east of the center-line of the highway and 391 feet south of track No. 2. This sign is mounted on a post 5 feet above the level of the highway and bears two diagonal lines intersecting at right angles and the letters "RR". A railroad-crossing signal of the flashing-light type is located 14 feet 7 inches east of the center-line of the highway and 25 feet 8 inches south of the center-line of track No. 2. A standard cross buck is mounted on the mast 12 feet 6 inches above the level of the highway. It bears the words "RAILROAD CROSSING" in black on a white background. Two hooded red lamps are mounted back-to-back on a horizontal bar which is attached to the mast below the cross buck. A reflectorized sign which bears the figure "2" and the word "TRACKS" is mounted on the mast above the lamps, and a reflectorized sign which bears the words

"STOP ON RED SIGNAL" is mounted below the lamps. A similar signal is located in the northwest angle of the intersection. The warning aspect is displayed by the alternate illumination of the lamps when a west-bound train occupies any portion of track No. 2 throughout a distance of 4,776 feet immediately east of the crossing. A crossing-whistle sign for west-bound trains is located 1,335 feet east of the crossing.

This carrier's operating rules read in part as follows:

14. Engine Whistle Signals

* * *

Note--The signals prescribed are illustrated by "o" for short sounds; "--" for longer sounds. * * *

SOUND	INDICATION
* * *	
(1) -- -- o --	Approaching public crossings at grade, to be prolonged or repeated until crossing is reached. * * *

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17. The headlight will be displayed to the front of every train by day and by night.

* * *

30. The engine bell must be rung * * * while approaching and passing public crossings at grade * * *

Motor vehicle laws of the State of Ohio read in part as follows:

Sec. 4511.62 No person shall drive a vehicle across a railroad grade crossing in the following instances:

(A) When a clearly visible electric or mechanical signal device gives warning of the immediate approach of a train;

* * *

The maximum authorized speed for passenger trains in the vicinity of the point of accident is 70 miles per hour.

Description of Accident

No. 361, a west-bound first-class passenger train, consisted of Diesel-electric unit 5845A, one express-refrigerator car, three coaches, and one parlor-buffet car, in the order named. The first car was of steel underframe construction, and the other cars were of all-steel construction. All cars except the first were equipped with tightlock couplers. This train departed from Alliance at 8:58 a. m., 2 minutes late, and while moving at a speed of approximately 70 miles per hour the rear end of the locomotive and the front end of the first car were struck by a motor-truck at the intersection of the railroad and U. S. Highway No. 224 at Atwater.

The vehicle involved was a tractor and semi-trailer owned by Roadway Express, Inc., Akron, Ohio. The driver, who was the sole occupant, held New York chauffeur's license No. 2392257. The tractor was a 1955 model Mack. It bore Delaware license C-2962. It was equipped with a conventional cab and was powered by a Diesel engine. The semi-trailer was a 1950 model Freuhauf with a van-type body 32 feet in length and with tandem axles at the rear. It bore Delaware license T-1351. Both the tractor and the semi-trailer were equipped with air brakes. At the time of the accident the semi-trailer was loaded with merchandise. The total length of the vehicle was 42 feet 6 inches, and the gross weight was 47,000 pounds. This vehicle was moving northward on U. S. Highway No. 224 at an estimated speed of 30 miles per hour when it entered the crossing and struck the side of No. 361.

With the exception of the locomotive, the entire train of No. 361 was derailed. The locomotive stopped with the front end 1,390 feet west of the crossing. Separations occurred at each end of the first car and between the fourth and the fifth cars. The first car was derailed to the north and struck and demolished the corner of a small grain mill located approximately 365 feet west of the crossing and 22 feet north of track No. 2. The other cars stopped upright and approximately in line with the tracks. The front end of the second car was 660 feet west of the crossing. The first car was demolished, the other derailed cars were considerably damaged, amd the locomotive was slightly damaged. The tractor and the semi-trailer were demolished.

Track No. 2 was torn up throughout a distance of approximately 300 feet. The end of a 210-foot section of rail which was dislodged from the track penetrated the floor of the third car near the center of the car and passed upward through the roof near the rear end of the car, and approximately 190 feet of this section of rail passed completely through the car.

The front brakeman of No. 361 was killed, and the conductor and the flagman were injured.

The weather was clear at the time of the accident, which occurred about 9:05 a. m.

During the 30-day period preceding the day of the accident the average daily movement in the vicinity of the point of accident was 13.5 trains. During the 24-hour period beginning at 1 p. m., May 31, 1956, 2,913 automobiles, 2,029 motor-trucks, 17 buses, and 23 other vehicles passed over the crossing.

Discussion

As No. 361 was approaching the point where the accident occurred the enginemen were maintaining a lookout ahead from the control compartment at the front of the locomotive. The members of the train crew were in the cars of the train. The headlight was lighted. The engineer said that he began to sound the grade-crossing whistle signal when the locomotive was about 1/2 mile east of the crossing and that he prolonged the signal until the locomotive reached the crossing. The locomotive bell was ringing during this time. None of the members of the crew saw the motor-truck before the accident occurred. According to the tape of the speed-recording device, the speed of the train was approximately 73 miles per hour when the accident occurred. The engineer said that he had tested the speed indicator before the accident occurred, and that it indicated a speed 2 or 3 miles per hour higher than the actual speed.

The motor-truck involved departed from a terminal of the motor carrier in Akron about 35 minutes before the accident occurred. Akron is approximately 20 miles west of Atwater. All safety features of the truck were tested before departure from the terminal. A witness to the accident was following the truck at a distance of about 300 feet when the accident occurred. He said that he had been following the truck since it left the terminal and that the truck had

been operated in a normal manner. He said that apparently the driver of the truck did not apply the brakes before the accident occurred. Another witness was standing about 200 feet south of the crossing when the accident occurred. He said that the driver of the truck was sitting erect in the seat. He estimated that the speed of the truck was about 30 miles per hour, and he said that the speed was not reduced and apparently the brakes were not applied before the accident occurred. This witness heard the sound of the pneumatic horn of the locomotive as No. 361 approached the crossing, and both witnesses said that the warning signals at the crossing were in operation.

The warning signals at the crossing had been last inspected on May 15, 1956. They were again inspected after the accident occurred and were found to function properly.

As a vehicle approaches the crossing from the south the driver's view of an approaching west-bound train is obstructed by buildings and vegetation. As the vehicle moves between points 160 feet and 125 feet south of the crossing the driver can obtain a view of a train between points 375 feet and 430 feet east of the crossing. The driver's view of an approaching train is then obstructed until the vehicle passes a building in the southeast angle of the intersection. The northwest corner of the building is 27 feet east of the center-line of the highway and 48 feet south of track No. 2.

Cause

This accident was caused by failure to stop a motor-truck short of a train moving over a rail-highway grade crossing.

Dated at Washington, D. C., this second day of July, 1956.

By the Commission, Commissioner Clarke.

(SEAL)

HAROLD D. McCOY,

Secretary.