

INTERSTATE COMMERCE COMMISSION
WASHINGTON

INVESTIGATION NO. 2556
THE LEHIGH VALLEY RAILROAD COMPANY
REPORT IN RE ACCIDENT
AT RANSOM, PA., ON
JANUARY 4, 1942

-2-

SUMMARY

Railroad: Lehigh Valley
Date: January 4, 1942
Location: Ransom, Pa.
Kind of accident: Derailment
Equipment involved: Passenger train :Automobile
Train number: 4
Engine number: 2033
Consist: 14 cars
Speed: 45-50 m.p.h. :Standing
Operation: Timetable, train orders and an
automatic block-signal system
Track: Double; 0°30' left curve; 0.09
percent descending grade eastward
Highway: Tangent; crosses tracks at right
angles; slightly ascending grade
southward
Weather: Snowing
Time: 2:55 a.m.
Casualties: 1 killed; 19 injured
Cause: Accident caused by a passenger train
striking an automobile which had
stalled on a highway grade crossing

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 2556

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

THE LEHIGH VALLEY RAILROAD COMPANY

February 10, 1942

Accident at Ransom, Pa., on January 4, 1942, caused by a passenger train striking an automobile which had stalled on a highway grade crossing.

REPORT OF THE COMMISSION¹

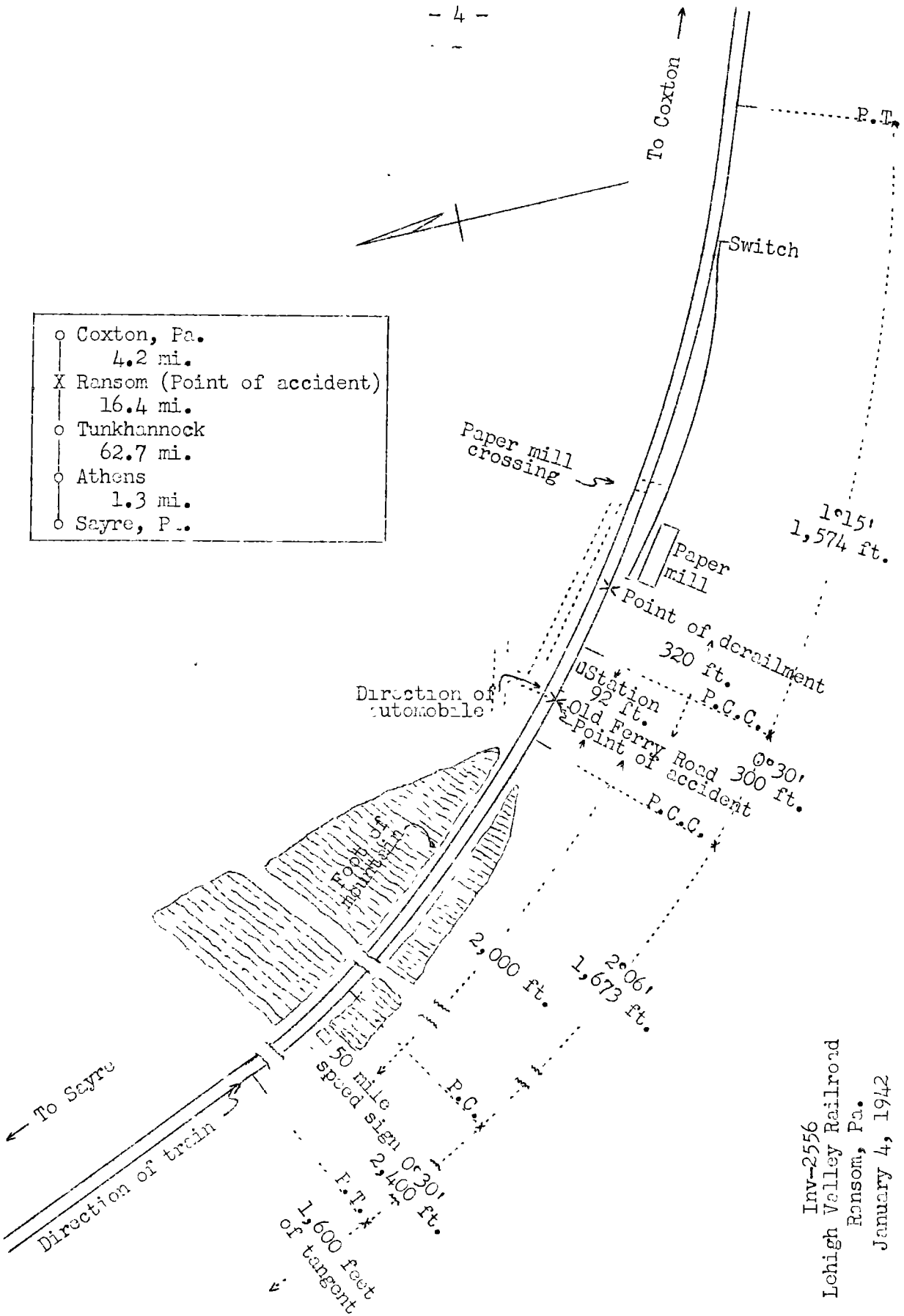
PATTERSON, Commissioner:

On January 4, 1942, there was a derailment of a passenger train on the Lehigh Valley Railroad after it struck an automobile at a highway grade crossing at Ransom, Pa. The accident resulted in the death of 1 passenger and the injury of 12 passengers, 1 express messenger, 3 employees off duty and 3 train-service employees. This accident was investigated in conjunction with a representative of the Pennsylvania Public Utility Commission.

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

- Coxton, Pa. 4.2 mi.
- X Ransom (Point of accident) 16.4 mi.
- Tunkhannock 62.7 mi.
- Athens 1.3 mi.
- Sayre, Pa.



Inv-2556
 Lehigh Valley Railroad
 Ransom, Pa.
 January 4, 1942

Location of Accident and Method of Operation

This accident occurred on that part of the Wyoming Division which extends between Sayre and Coxtan, Pa., a distance of 84.6 miles. In the vicinity of the point of accident this is a double-track line over which trains are operated by timetable, train orders and an automatic block-signal system. The main tracks from north to south are No. 1, westward main, and No. 2, eastward main. The accident occurred on the eastward main track at a point 92 feet west of Ransom station, at which point the railroad is crossed at grade by Old Ferry Road. As the point of accident is approached from the west on the railroad there are, in succession, a tangent 1,660 feet in length and a compound curve to the left 5,947 feet in length, the curvature of which varies from $0^{\circ}30'$ to $2^{\circ}06'$. The accident occurred on this curve at a point 4,217 feet east of its western end where the curvature is $0^{\circ}30'$. The grade for east-bound trains is, successively, 0.034 percent descending 4,782 feet, level 3,766 feet and 0.09 percent descending 42 feet to the point of accident and a considerable distance beyond. The highway crosses the tracks at right angles and terminates just south of the tracks. As the point of accident is approached from the north on Old Ferry Road there are, in succession, a slight curve to the left 150 feet in length and a tangent 125 feet to the crossing. The grade for south-bound vehicles on Old Ferry Road is level throughout a distance of 40 feet to the north rail of the westward main track and slightly ascending across the tracks. The highway is surfaced with macadam and is 14 feet in width at the crossing. At a point 1,360 feet east of the crossing a trailing-point turnout to the south leads off the eastward main track to a spur track serving a paper mill located south of the tracks and 386 feet east of the crossing.

A highway crossing sign is located in the northwest angle of the crossing. This sign is rectangular, bears the words "RAILROAD CROSSING STOP, LOOK & LISTEN" in black letters on a white background, and is mounted on a post 9 feet 6 inches above the ground line. Crossing whistle signs for east-bound trains are located 1,371 and 761 feet west of the crossing. The first sign is provided for the crossing involved, and the second is for a crossing located just east of the paper mill.

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. * * *

* * *

(1) _____ o _____ Approaching public crossings at grade. To be prolonged or repeated until crossing is reached.

The Vehicle Code of the Commonwealth of Pennsylvania reads in part as follows:

Section 1002. Restrictions as to Speed.--

* * *

3. Twenty (20) miles an hour speed limit:

All vehicles, * * * when approaching within two hundred (200) feet of a railway grade crossing where official signs erected by the proper authorities are displayed.

* * *

In the vicinity of the point of accident the maximum authorized speed for passenger trains is 70 miles per hour and on the curve involved, 50 miles per hour.

Description of Accident

No. 4, an east-bound first-class passenger train, consisted of engine 2033, of the 4-6-2 type, three baggage cars, one express car, one baggage-mail car, one passenger-baggage car, three coaches, one club car and four Pullman sleeping cars, in the order named. The first and third cars were of steel-underframe construction, and the remainder were of steel construction. At Sayre, 80.4 miles west of Ransom, a terminal air-brake test was made, a running test was made on departure and the brakes functioned properly en route. This train passed Athens, 79.1 miles west of Ransom, at 1:10 a.m., according to the dispatcher's record of movement of trains, 28 minutes late, passed Tunkhannock, 16.4 miles west of Ransom and the last open office, at 2:39 a.m., 35 minutes late, and while moving at an estimated speed of 45 to 50 miles per hour it struck an automobile on a highway grade crossing, and was derailed.

The automobile involved was a 1935 Ford coupe, which bore Pennsylvania license plates 54CF6, and was owned and being driven by a man, sole occupant, who held operator's license No. 2231880. The automobile moved southward on Old Ferry Road, entered upon the crossing, passed over the westward main track and was passing over the eastward main track when the right rear wheel slipped off the west edge of the macadam surface,

caught against the gage side of the south rail, and the automobile stalled. Between 25 and 35 minutes later the automobile was struck by No. 4.

Because of track curvature and the cut at the foot of the mountain, a view of the crossing, under the most favorable weather conditions, can be had from the left side of an east-bound engine a distance of only 800 feet, and from the right side only 321 feet. Falling snow at the time of the accident restricted visibility.

The automobile was demolished and most of its wreckage was thrown to a point 285 feet east of the crossing and just south of the tracks. The right half of the rear axle and its housing were found at a point 986 feet east of the crossing and on the south side of the tracks. These portions of the automobile bore abrasions indicating that they had slid on the rails after they became lodged beneath the front pair of engine-truck wheels.

The front wheels of the engine truck were derailed to the right at a point 320 feet east of the crossing. From this point eastward throughout a distance of 1,040 feet to the trailing-point switch of the paper mill spur-track, light flange marks appeared on the ties inside the gage side of the north rail and outside the south rail. At this switch the south rail was forced out of position, and the general derailment occurred. Eastward from a point 52 feet east of the switch the eastward main track was destroyed throughout a distance of 615 feet. Engine 2033 was derailed, stopped at a point 2,020 feet east of the crossing and leaned to the south at an angle of about 45 degrees, with the right driving wheels near the center of the eastward main track and the left side of the engine fouling the westward main track. The engine truck was badly damaged and the engine pilot was broken. The drawbar between the engine and tender was broken. The tender was derailed to the south and stopped, badly damaged, on its right side at the rear of the engine and on the roadbed. The first 10 cars were derailed toward the south. The first car, considerably damaged, stopped 40 feet west of the tender, and leaned to the right at an angle of 75 degrees. The second car, considerably damaged, stopped on its right side, with its front end against the first car. The third car, badly damaged, leaned to the right at an angle of 75 degrees, with its front end against the second car. The fourth car, considerably damaged, leaned to the right at an angle of 15 degrees, with its front end against the third car. The fifth car, badly damaged, leaned to the right at an angle of 15 degrees, with its front end at the edge of the ties and its rear end about 35 feet south of the track. The sixth car, badly damaged and

reversed in direction, stopped against the north side of the fifth car and leaned at an angle of 15 degrees. The seventh car was practically destroyed and it stopped across both main tracks. The eighth car, badly damaged, stopped across both tracks and leaned to the right at an angle of 15 degrees. The ninth car, considerably damaged, stopped almost upright, with its front end just south of the eastward main track and its rear end on the track. The tenth car, slightly damaged, stopped upright on the roadbed. The front wheels of the front truck of the eleventh car were derailed.

It was snowing at the time of the accident, which occurred about 2:55 a.m.

The train-service employees injured were the conductor and two trainmen.

Data

During the 30-day period preceding the day of the accident, there was a daily average of 35.36 trains over the crossing involved. During the 24-hour period beginning at 7 a.m., January 7, 1942, 4 trucks, 4 automobiles, 36 trains and 2 track motor cars passed over this crossing.

Discussion

The automobile involved had been obstructing the eastward main track at the grade crossing involved from 25 to 35 minutes prior to the approach of No. 4, an east-bound train. During this period the driver of the automobile first tried to lift the right rear wheel over the south rail but was unable to do so and then went to a paper mill about 400 feet east of the crossing and tried to obtain help to remove the automobile from the crossing. He was unable to get anyone there to help him, but one of the employees of the mill made arrangements by telephone for a man to drive a towing car to the crossing to pull the stalled car clear of the track and the driver was told to return to his automobile and wait for the arrival of the towing car. The driver was waiting for the towing car to arrive when he saw the headlight of No. 4 a few hundred feet distant. Immediately after the employee telephoned for the service of the towing car, another employee of the mill telephoned the telephone operator at Coxtan, 4.2 miles east of Ransom, and informed her that an automobile was stalled on the crossing involved. The telephone operator informed the towerman at Pittston Jct., 5.3 miles east of Ransom, who informed the dispatcher at Wilkes-Barre. Since the dispatcher at Wilkes-Barre did not have charge of the territory involved, he gave the information about 2:40 a.m. to the dispatcher at

Sayre, who immediately called the operator at Tunkhannock, 16.4 miles west of Ransom and the last open office, to stop No. 4 but the train had passed that station at 2:39 a.m. The dispatcher at Sayre immediately called the section foreman at Falls, 5.2 miles west of Ransom, to flag No. 4. The section foreman proceeded toward the track as soon as possible but No. 4 passed at 2:53 a.m., just before he reached the track. At 2:47 a.m. a yard engine was dispatched westward from Falling Springs, 4 miles east of Ransom, to flag No. 4 west of Ransom, but the accident occurred before this engine reached Ransom. At 2:52 a.m., the dispatcher at Wilkes-Barre appealed to employees at the paper mill to flag No. 4 before it would reach the crossing. An employee of the mill was sent out to flag the train but the accident occurred before he reached the crossing. The crew of No. 4 had no warning of the obstruction on the track. The headlight was burning brightly but because of the track curvature being to the left the engineer could not see an object on the crossing a greater distance than 350 feet and because of falling snow visibility was further reduced. The first the engineer knew of the obstruction was when he saw an object flying from the front of the engine. He immediately applied the brakes in emergency. The fireman did not see the automobile, as he was just returning from the tender to his position on the left side of the cab when the automobile was struck.

The driver of the automobile was not familiar with the crossing involved. He had been visiting near Ransom and was returning to his home in Scranton. On account of several inches of newly fallen snow, no skid chains being used, and one tire being smooth, his automobile was unable to climb a hill on the highway leading to Scranton. He started on another route, became lost and stalled his automobile on the crossing involved. The automobile had been inspected recently, the driver had about 8 years' experience in driving automobiles and he had an operator's license in his possession. The driver said that it did not occur to him to flag No. 4.

Cause

It is found that this accident was caused by a passenger train striking an automobile which had stalled on a highway grade crossing.

Dated at Washington, D. C., this tenth day of February, 1942.

By the Commission, Commissioner Patterson,

(SEAL)

W. P. BARTEL,
Secretary.