# INTERSTATE COMMERCE COMMISSION WASHINGTON

INVESTIGATION NO. 2459

THE PENYSYLVANIA RAILROAD COMPANY
REFORT IN RE ACCIDENT
NEAR NORTH SEBRING, ONIO, ON

OCTOBER 31, 1940

## SUMMARY

Railro d: Fennsylvania

Date: October 51, 1940

Location: . North Sebring, Ohio

Kind of accident: Derailment following collision

at highway grade crossing

Equipment involved: Freight train : Automobile

Train number: Extra 9709

Engine number: 5709

Consist: 41 cars, caboose

Speed: 25-30 m. p. h. : 25 m. p. h.

Timetable, train orders and manual block system Operation:

Track: Single; tangent; 0.07 percent

ascending grade westward

Highway:

Tangent; crosses track at angle of 41 degrees; 1.53 percent ascending grade northward

Weather: Clear

4:15 p. m. Time:

Casualties: 2 killed; 2 injured

Cause: Accident caused by automobile being

driven upon highway grade crossing immediately in front of approaching

train

## INTERSTATE CONMERCE COMMISSION

## INVESTIGATION NO. 2459

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

## THE PENNSYLVANIA RAILROAD COMPANY

## January 7, 1941

Accident near North Sebring, Chio, on October 31, 1940, caused by automobile being driven upon highway grade crossing immediately in front of approaching train.

## REPORT OF THE COLLISSION

## PATTERSCN, Commissioner:

On October 31, 1940, there was a derailment of a freight train on the Pennsylvania Railroad after it struck an automobile at a highway grade crossing near North Sebring, Chio, which resulted in the Ceath of two railroad employees and the injury of the driver and one occupant of the automobile.

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.

o Boanna, Ohio 6.6 m. North Jackson 15.54 mi. A Point of accident 2,964 ft. o North Sebring 2.8 ml. ပ် Alliance, Ohio

Last sidin -switch

Inv. To. 2459 Pennsylvania Railroad North Sebring, Chio

## Location and Method of Operation

This accident occurred on that part of the Erie & Ashtabula Division designated as the Alliance Branch which extends between Boanna and Alliance, Ohio, a distance of 25.5 miles. In the vicirity of the point of accident this is a single-track line over which trains are operated by timetable, train orders and a manual block system. As the point of accident is approached on the railroad from the east there is a 0030' curve to the left 650 feet long, which is followed by a tangent 3,828 feet to the point of accident and 3,224 feet beyond. The grade for west-bound trains is 0.42 percent descending 1,600 feet, then 0.07 percent ascending 2,275 feet to the point of accident. cident occurred at a point 2,964 feet east of the station where the railroad is crossed at grade by a highway known as Johnson Road. A siding 4,475 feet in length parallels the main track on the south and its east switch is 359 feet west of Johnson Road. As the point of accident is approached from the south on Johnson Road there is a tangent 2,100 feet to the point of accident and some distance beyond. The grade for north-bound vehicles is 1.53 percent ascending a distance of 200 feet to the railroad track. Johnson Road crosses the railroad at an angle of 41 degrees. It is paved with a top surface of asphaltum, is 16 feet wide, and has gravel shoulders; at the crossing it is 22 feet wide and surfaced with asphaltum its entire width. Guard rails 24 feet in length provide a clearance of 3 inches inside and outside the running rails at the crossing. The space between the inside guard rails is surfaced with asphaltum.

The crossing is protected by standard cross-buck signs on each side of the track and to the right of the direction of traffic. The crossing sign for north-bound traffic is located 13 feet south of the track and 6 feet east of the highway, and bears the words, "RAILRCAD CROSSING"; a norizontal bar beneath the cross-buck bears the word, 'DANGER." The signs are lettered black on a thite background. At a point 433 feet south of the track on the east side of the highway there is an advance highway warring sign consisting of a 30-inch disc bearing the letters "RR" on each side of a large "X"; the disc has black lettering on a yellow background.

Then a vehicle is moving northward on the highway between points 2,100 and 500 feet south of the crossing involved, the view of an approaching west-bound train is restricted to 350 feet because of trees and brush; when the vehicle is 100, 50, 40, and 30 feet south of the crossing the view to the east is unobstructed throughout distances of 700, 1,300, 2,300, and 4,000 feet, respectively.

From a point 300 feet east of the crossing a clear view of the highway south of the track can be had from the left side of a west-bound engine.

Rules of the operating department read in part as follows:

14. Engine Whistle Signals.

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

14(1) o o Approaching public crossings at grade. \* \* \*

Special time-table instructions read in part as follows:

S7
D701 o o Approaching public crossings at grade to be prolonged or repeated until crossing is reached, \* \* \*

A whistle sign for west-bound trains is located 1,352 feet east of the crossing.

Section 12603 of the Motor Vehicle Laws of Chio, revision of November 1, 1939, reads in part as follows:

Sec. 12603. Speed regulations for Motor Vehicles. No person shall operate a motor vehicle in and upon the public roads and highways at a speed greater or less than is reasonable or proper, having due regard to the traffic, surface and width of the road or highway and of any other conditions then existing, and no person shall drive any motor vehicle in and upon any public road or highway at a greater speed than will permit him to bring it to a stop within the assured clear distance anead.

It shall be prima facie lawful for the operator of a motor vehicle to drive the same at a speed not exceeding the following:

Forty-five miles per hour on highways outside of municipal corporations.

The maximum authorized speed for freight trains is 40 miles per hour

The weather was clear at the time of the accident, which occurred about 4:15 p. m.

## Description

Extra 9709, a west-bound freight train, with Conductor Powell and Engineman Midland in charge, consisted of engine 9709, of the 2-10-2 type, 41 loaded cars and a caboose. This train departed from North Jackson, 16.2 miles east of North Sebring, at 3:42 p. m., according to the train sheet, and when approaching North Sebring, while moving at a speed estimated at 25 to 30 miles per hour, struck an automobile at a highway grade crossing and was derailed.

The automobile was a 1933 Chevrolet coach driven by George E. Atkinson, owner, who was accompanied by his son. The automobile bore Ohio license No. K-556-D, and the owner held operator's license L-707863. The automobile was driven northward on Johnson Road at a speed estimated at 25 miles per hour, and when it had nearly reached the railroad track it swerved toward the left and was struck by Extra 9709.

The automobile was demolished and parts of it fouled the track and derailed the engine truck; the right engine-truck wheel dropped off the gage side of the north rail at a point 80 feet west of the highway, then after moving on the ties about 290 feet the wasel flange encountered the right foot forging of the head rod of the east siding-suitch and the wheel climbed the end of the right-hand switch point and became rerailed, but the switch remained lined for the main track. The right enginetruck wheel followed the north turnout rail a distance of about 34 feet, at which point this rail became torr out, and about 12 feet farther west the general derailment occurred The left engine-truck wheel was suspended by wreckage of the automobile urtil the general derailment occurred. Engine 9709 and its tender were derailed to the south and stopped on their right sides. headed east, practically parallel to the siding with the rear end of the tender 720 feet west of the crossing; they were badly damaged. The engine-truck frame was broken, both radius-bar braces were bent, and the left radius-bar brace was torn from under the left journal box, which was broken. A rail pierced the roof and the crown sheets of the firebox Both tender trucks were detached. The first 24 cars were derailed and stopped, badly damaged, in various positions across the main track and the siding. One wheel of the front truck of the twenty-fifth car was derailed. All wreckage was confined within a distance of 343 feet.

The employees killed were the engineman and the fireman.

## Summary of Evidence

Front Brakeman Poberts stated that at Haselton, 37.4 miles east of North Sebring, a terminal air-brake test was made and the brates functioned properly en route. As the train approached the point where the accident occurred he was in the brateman's booth on the tender. The train mas drifting at a speed of about 30 miles per hour. He heard the road-crossing whistle-signal sounded clearly and istinctly several times for Johnson Road and the engine bell was ringing; the last signal was started when the engine was 500 feet east of the crossing. The first intimation he had of anything being wrong was when the tender became derailed a short distance west of the crossing and the brakes became applied in emergency. Soon afterward the conductor arrived at the front end and informed him that the train had struck an automobile. He said the weather was clear at the time of the accident, which occurred at 4:15 p. m.

Conductor Powell stated that at Haselton a terminal air-brake test was made and the brakes functioned properly en route. As the train approached the point where the accident occurred the speed was about 25 or 30 miles per hour. He and the flagman were in the caboose cupola. The conductor heard the regulation road-crossing whistle-signal sounded. His first knowledge of anything being wrong was when the air brakes became applied in emergency and the train stopped abruptly. He went forward immediately and found wreckage of an automobile at the east siding-switch. The conductor said that the engineran was in a dazed condition and did not know what caused the accident. It was daylight and the weather was clear at the time of the accident.

The statement of Flagman Fazensteb added nothing of importance.

Supervisor of Track Hofmeister stated that he arrived at the scene of the accident about 6:05 p.m. He inspected the east siding-switch and found it lined for the main track and locked. The first mark of derailment was a flange mark inside the north rail at a point 80 feet west of Johnson Road. These flange marks continued on the ties 297 feet to the east siding-switch. The right-hand switch point indicated that it had been struck by a wheel tread. The east head-block tie on the south side of the track was splintered and the rear axle and housing of the automobile were wedged against the switch-stand and tie. The main track and the siding were badly damaged a distance of 300 feet west of the switch. A rail penetrated the roof sheet and the crown sheet of engine 9709.

Master Mechanic Wray stated that subsequent to the accident he inspected engine 9709 and found nothing about its condition

which might have contributed to the derailment. The engine truck and engine-truck wheels, the driving wheels, and the foundation brake gear were in good condition, except for damage sustained in the accident.

George E. Athinson, the driver of the automobile involved, stated that, accompanied by his son, he was driving north on Johnson Road to his home, which is located on the east side of Johnson Road and 1,774 feet north of the crossing involved. The speed of his automobile as it approached the crossing involved was 25 miles per hour, the left front side-window was closed but the right front side-window was open. When the automobile passed over a culvert located 133 feet south of the railroad track, he looked eastward, and then westward. but at that time he neither say nor heard a train approaching. He continued to drive his automobile at a speed of 25 miles per hour and maintained a constant lcokout; he did not stop for the crossing. . At a point about 10 feet distant from the track his son called a warning to him. At that time the driver saw the train, applied the brakes, and attempted to turn the automobile toward the left out it was too late to avert the accident. The engine struck the right side of the automobile near the front wheel. Driver Atkinsor said that he had been driving automobiles for 23 years and this was the first accident in which he had been involved. The automobile was a 1933 model Chevrolet and was in good mechanical condition. He has resided at his present address for 5 years and is familiar with this crossing, having used it almost every day. At the time of the accident it was daylight and the weather was clear, and there was no vehicle between his automobile and the crossing. He said that he heard neither the engine whistle sounded for the crossing nor the engine bell ringing. Previously he had never seen a train pass this location at that time of day

Robert E. Atkinson, aged 18, stated that he was in the automobile with his father at the time the accident occurred. As the automobile approached the railroad crossing on Johnson Road the speed was about 25 miles per hour. He said that about 130 feet south of the crossing he looked toward the left and the right and neither saw nor heard a train approaching. When the automobile was about 10 feet from the track he looked toward the right and saw a train nearly at the crossing. He called a warning immediately and his father sverved the car toward the left but too late to prevent the accident. The son said that just as the automobile reached the track he thought he heard the sound of the engine which he was thoroughly familiar with conditions at the crossing as he passed over it almost every day.

Ray Baker, whose residence is located 493 feet north of the crossing, stated that, as Extra 9709 approached, the whistle signal was sounded for the crossing involved Mildred Needham, of the same residence, corroborated the statement of Ray Baker.

Christy Schmied stated that he was standing at the side of Johnson Road about 1/4 mile south of the crossing involved. When Extra 9709 was near the whistle post he heard the road-crossing whistle-signal sounded for the crossing, then the whistle was again sounded and prolonged, and was still being sounded when the engine reached the crossing. He could not see the train but he saw the smoke from the engine. He did not see the train strike the automobile, but he heard the noise caused by the collision and saw the cars being derailed. He estimated the speed of the train at 25 to 30 miles per hour.

According to data furnished by the carrier, the average daily movement of trains over the crossing involved was 9.6.

Observations of the Commission's Inspectors

The Commission's inspectors examined the track and found it in good condition; east of the crossing involved there was no indication of defective or dragging equipment.

A check of traffic for a 24-hour period was made and during that time 633 vehicles and 10 trains used the crossing involved. All trains sounded the regulation road-crossing whistle-signal for the crossing.

## Discussion

According to the evidence, the crossing whistle-signal was sounded in compliance with the rules and the engine bell was ringing as the train approached the crossing where the accident occurred. The evidence indicates that the maximum authorized speed of 40 miles per hour was not being exceeded. The front brakeman was in the booth on the tender and did not see the automobile involved. The engineman and the fireman died as a result of the accident and it could not be determined if either saw the automobile prior to the accident. After the automobile was struck, part of the wreckage fouled the engine-truck wheels in such manner that the right wheel was derailed 80 feet west of the crossing. When this wheel encountered the facing-point siding-switch 370 feet west of the crossing the general derailment of the train occurred.

The driver of the automobile involved was familiar with the crossing. According to his statement, when his automobile was about 135 feet distant from the railroad, he looked eastward and westward but neither saw nor heard the train approaching. The automobile was moving at a speed of about 25 miles per hour and that speed was maintained to the crossing. His son, the only

other occupant of the automobile, did not see or hear the train until the automobile was about 10 feet from the track. At that time he saw the train, which was closely approaching the road crossing, and heard the engine whistle sounded. He warned his fither, who attempted to turn the car but too late to avert the accident

The crossing was protected by a highway sign and by a standard cross-buck sign located, respectively, 433 and 13 feet south of the track. The weather was clear and there was no vehicle between the automobile involved and the crossing. At distances of 50, 40, and 30 feet south of the crossing a driver has a clear view of an approaching west-bound train for distances of 1,200, 2,300, and 4,000 feet, respectively. The state law requires that a driver of a vehicle shall operate such vehicle at a rate of speed with regard to any existing condition, and at a speed which will permit stopping within the assured clear distance ahead; however, the law does not require that a stop be made at a highway crossing at grade. Had the driver involved operated his car prepared to stop, if necessary, at the railroad track, he would have been able to see the train in time to avert the accident.

## Cause

It is found that this accident was caused by an automobile being driven upon a highway grade crossing immediately in front of an approaching train.

Dated at Washington, D. C., this seventh day of January, 1941.

By the Commission, Commissioner Patterson.

SEAL

V. P. BARTEL,

Secretary.