## INTERSTATE COMMERCE COMMISSION

#### WASHINGTON

## **INVESTIGATION NO. 2741**

# THE BALTIMORE AND OHIO RAILROAD COMPANY AND THE PENNSYLVANIA RAILROAD COMPANY REPORT IN RE ACCIDENT AT EAST COLUMBUS, OHIO, ON NOVEMBER 14, 1943

Inv-2741

#### **SUMMARY**

Railroad: Baltimore and Ohio, and Pennsylvania

Date: November 14, 1943

Location: East Columbus, Ohio

Kind of accident: Collision with automobile and derailment of train

Equipment involved: Passenger train: Automobile

Train number: F. R. R. 133:

Engine number: 1517:

Consist: 11 cars:

Speed: 65 m. p. h.: 20-25 m. p. h.

Operation: Automatic-block and cab-signal system for P. R. R. trains

Track: Three; tangents 0.16 percent ascending grade westward

Highway: Tangent; crosses track at angle of 45 degree 04'; level at crossing

Weather: Clear

Time: 1:31 a.m.

Casualties: 4 killed; 3 injured

Cause: Automobile being driven upon highway grade crossing

immediately in front of approaching train

INTERSTATE COMMERCE COMMISSION

**INVESTIGATION NO. 2741** 

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

THE BALTIMORE AND OHIO RAILROAD COMPANY AND THE PENNSYLVANIA RAILROAD COMPANY

January 1, 1944.

Accident at East Columbus, Ohio, on November 14, 1943, caused by an automobile being driven upon highway grade crossing immediately in front of an approaching train.

## REPORT OF THE COMMISSION 1

## PATTERSON, Chairman:

On November 14, 1943, there was a derailment of a Pennsylvania Railroad passenger train, on a line operated jointly by the Baltimore and Ohio Railroad and the Pennsylvania Railroad, after it had struck an automobile at a highway grade crossing at East Columbus, Ohio. This accident resulted in the death of three occupants of the automobile and one train-service employee, and the injury of one passenger, one railway-mail clerk and one train-service employee. This accident was investigated in conjunction with a representative of the Public Utilities Commission of Ohio.

## Diagram

Inv-2741 Baltimore and Ohio Railroad and Pennsylvania Railroad East Columbus, Ohio November 14, 1943

Location of Accident and Method of Operation

This accident occurred on the Columbus and Newark Division, which was jointly operated by the Baltimore and Ohio Railroad ant the Pennsylvania Railroad, and extended between Newark and Columbus, Ohio, 33 miles. In the immediate vicinity of the point of accident this was a three-track line over which Pennsylvania trains moving with the current of traffic were operated by an automatic-block and cab-signal system, the indications of which superseded time-table superiority. The tracks from north to south were No. 1, westward main, No. 2, eastward main, and No. 4, eastward freight. The collision occurred on track No. 1 where the railroad was crossed at grade by James Road at a point 1,158 feet east of NY Tower, and the derailment occurred at a point 32.6 feet farther west. A single-track line of the New York. Central Railroad crossed the three main tracks at an angle of about 15 degree at a point 1,038 feet west of the highway involved. From the east on the railroad the track was tangent 3.17 miles to the point of accident and 2.88 miles beyond. The grade for west-bound trains was 0.15 percent descending 2 miles, then 0.16 percent ascending 0.11 mile to the point of collision and 1.12 miles beyond.

James Road, which was a four-lane highway, crossed the tracks at an angle of 45 degree 04'. From the south the highway was tangent 600 feet to the crossing and a considerable distance beyond. The grade for north-bound vehicles was 1.06 percent ascending 175 feet to track No. 4, then practically level over the three-track crossing. On them crossing, the highway was 40 feet 6 inches wide and was surfaced with bituminous mixture. Planks were provided inside and outside each rail.

A standard cross-buck railroad-crossing sign was located to the right of the direction of north-bound traffic, in the southeast angle of the crossing, 50 feet south of the centerline of track No. 1 and 6 feet east of the highway. This sign was mounted on a mast 11 feet high and bore the word "RAILROAD CROSSING" in black letters on a white background. In addition, the crossing was protected continuously by a watchman. The watchman's booth was located in the northwest angle of the crossing, 17.7 feet north of track No. 1 and 15.6 feet west of the highway. Approach indicators were not provided in the watchman's booth. A crossing-whistle sign for west-bound trains was located 1,260 feet 'east the crossing.

Operating rules read in part as	s follows:	
14.	Engine Whistle Signals	
Note-The signals prescribed are illustrated by "o" for short sounds; "" for longer sounds. * * $^*$		
	SOUND	INDICATION
* * *		
(1)		0
Approaching public crossings at grade, to be prolonged or repeated until crossing is reached, * * *		
* * *		
Instructions to crossing watchmen read in part as follows:		
* * *		
3 -	* * *	
The signal equipment for each watchman will be, -		
A standard stop sign, A Red f * A white lamp A Whistle	lag Fusees	A red Lamp approved as standard for * *
* * *		
4 - They must be on the lookout at all times for movements in either direction on the tracks across the crossing, and must not depend upon the schedules of trains nor upon warning appliances for warning of approaching trains.  * * *		
	1	4 1 4 111 64
5 - At crossings not protected by gates, they must station themselves in the middle of the highway near the track before each movement is made on a track across the highway and remain there until it is safe for vehicles * * * to cross the track. While so stationed, they must display:		
* * *		
by night and when day signals cannot be plainly seen, a red light towards the highway in both directions, swinging it across the direction of traffic.		
* * *		
Sec. 6307-60 of the Motor Vehicle Laws of Ohio, Revision of Sept. 1, 1941, read in part as follows:		
UNIFORM TRAFFIC ACT		
* * *		
Driving Across Grade Crossings; * * * Flagman		
No person shall drive a vehicle across a railroad grade crossing when:  * * *		
(b) A * * * flagman gives or continues to give a signal of the approach or passage of a train. * *		

Ohio -Driver's Manual provides in part: \* \* \* A driver must keep his automobile under such control that he will be able to bring it to a stop within the assured clear distance ahead. \* \* \*

The maximum authorized speed for passenger trains was 70 miles per hour.

## Description of Accident

No. 133, a west-bound first-class Pennsylvania Railroad passenger train, consisted of engine 1517, one baggage-mail car, one baggage car and nine coaches, in the order named. All cars were of steel construction. After a terminal air-brake test was made this train departed from Pittsburgh, Pa., 190.9 miles east of Columbus, at 9:55 p.m., November 13, passed. Summit, Ohio, 9.4 miles east of N.Y. Tower and the last open office, at 1:23 a.m., November 14, 3 minutes late, and while moving at an estimated speed of 65 miles per hour it struck an automobile and was derailed.

The automobile involved was a 1939 Chevrolet four-door sedan, bearing Ohio license plates G-24-X, and was owned by a woman, who was one of the occupants. The automobile was moving northward on James Road at a-n estimated speed of 20 to 25 miles per hour. It proceeded upon the crossing and was struck by No. 133.

From a north-bound automobile the view of a west-bound train was materially restricted because of buildings and a pole line.

The automobile was demolished, and the greater part of its wreckage stopped 1,370 feet west of the crossing and 27 feet north of track No. 1. Part of the wreckage lodged under the engine-truck wheels of the engine. The first marks of derailment were engine-truck flange marks about 7 inches outside the north rail and 11 inches inside the south rail at a point 12.3 feet west of the crossing. The engine truck continued in line with the track throughout a distance of 1,106 feet to the N. Y. C. crossing, where the general derailment occurred. The engine stopped on its left side 1,494 feet west of the crossing, headed east, and parallel to track No. 1. The left side of the cab was crushed, and the engine truck and the trailer truck were detached. The tender was torn loose from the engine and stopped on its right side on tracks Nos. 1 and 2 at a point 1,251 feet west of the engine. The first car stopped diagonally across tracks Nos. 1, 2 and 4 at a point 297 feet west of the engine. This car was badly damaged. The second to the seventh cars, inclusive, were derailed and stopped upright and practically in line with the tracks. The front truck of the eighth car was derailed.

It was clear at the time of the accident, which occurred at 1:31 a.m.

The engineer was killed and the fireman was injured.

During the 30-day period preceding the day of the accident, the average daily movement of trains over the crossing was 161.7. During the 24-hour period beginning at 2 p.m., November 19, 1943, 6,670 motor vehicles and 152 trains passed over the crossing.

#### Discussion

No. 133 was approaching the crossing involved at a speed of approximately 65 miles per hour on tangent track in territory where the maximum authorized speed was 70 miles per hour. The headlight was lighted brightly, the bell was ringing, the throttle was closed, and both enginemen were maintaining a lookout ahead. The engine whistle was sounded for the crossing in

compliance with the rules. The cab signals and the wayside signals displayed proceed. The weather was clear, but the wind was from the north and blew smoke along the left side of the boiler and partially obscured the fireman's view ahead Just as the engine entered upon the crossing the fireman observed an automobile moving northward over the crossing. He immediately warned the engineer, who moved the brake valve to emergency position, but the engine collided with the automobile at that instant. Wreckage of the automobile became lodged under the engine truck wheels, and the engine truck was derailed a few feet west of the crossing. These wheels continued in line with the track about 1,100 feet to a railroad crossing at grade, then the general derailment occurred. It is not known if the occupants of the automobile became aware of the approaching train, nor if the engineer saw the automobile, as the occupants of the automobile and-the engineer were killed in the accident. The brakes of this train had been tested and had functioned properly en route. The driver of the automobile had purchased it October 5, 1943 and had been granted a driver's license October 23, 1943.

The laws of the State of Ohio require that vehicles must not proceed upon a railroad track when a flagman gives a warning signal of the approach of a train. The crossing was protected by a crossbuck sign and a watchman. The watchman said that he observed No. 133 approaching about 2 miles distant and stationed himself to the south of track No. 4, and gave warning signals to vehicular traffic by swinging a lighted red lantern and blowing a whistle. Apparently he was somewhat confused concerning the accident, as he said the automobile approached the railroad from the north, reduced speed, then proceeded upon track No. 1 immediately in front of No. 133. The fireman observed the automobile proceeding in front of the engine from the south. A number of occupants of other automobiles following the one involved said that it was proceeding northward, and that at the time of the accident the watchman was not in view. Because of buildings and a line of telegraph poles the view to the east was materially restricted; however, a driver of a north-bound vehicle bad an unobstructed view to the east throughout a distance of 70 feet immediately south of track No. 1. The driver manual issued by the State of Ohio specifies that a driver must operate an automobile under control so that it can be stopped within the assured clear distance ahead. If the automobile involved had been operated in this manner, it could have been stopped short of track No. 1, and the accident would have been prevented.

An overhead bridge to eliminate the highway grade crossing involved was under construction at the time of this accident, and it was opened for use on December 1.

## 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 first day of January, 1944.

By the Commission, Chairman Patterson.

W. P. BARTEL,

(SEAL) Secretary.

Foot Note:

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