INTERSTATE COMMERCE COMMISSION

WASHINGTON

INVESTIGATION NO. 2910

THE PENNSYLVANIA RAILROAD COMPANY

REPORT IN RE ACCIDENT

AT COLUMBUS, OHIO, ON

JULY 2, 1945

SUMMARY

Railroad:	Pennsylvania	
Date:	July 2, 1945	
Location:	Columbus, Ohio	
Kind of accident:	Rear-end collision	
Trains involved:	Freight	: Freight
Train numbers:	Extra 8255 East	: Extra 373 East
Engine numbers:	8255, 4358	: 373, 375 and 376
Consist:	68 cars, caboose	: 102 cars, caboose
Estimated speed:	Standing	: 3 m. p. h.
Operation:	Signal indications	
Track:	Two; tangent; 0.91 percent ascending grade eastward	
Weather:	Raining	
Time:	4:55 a. m.	
Casualties:	1 killed; 1 injured	
Cause:	Failure to provide "full protection" for preceding train and failure properly to control speed of following train in accordance with signal indication	

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO: 2910

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

THE PENNSYLVANIA RAILROAD COMPANY

August 31, 1945.

Accident at Columbus, Ohio, on July 2, 1945, caused by failure to provide "full protection" for the preceding train and by failure properly to control the speed of the following train in accordance with signal indication.

REPORT OF THE COMMISSION[1]

PATTERSON, Commissioner:

On July 2, 1945, there was a rear-end collision between two freight trains on the Pennsylvania Railroad at Columbus, Ohio, which resulted in the death of one employee, and the injury of one employee. This accident was investigated in conjunction with a representative of the Public Utilities Commission of Ohio.

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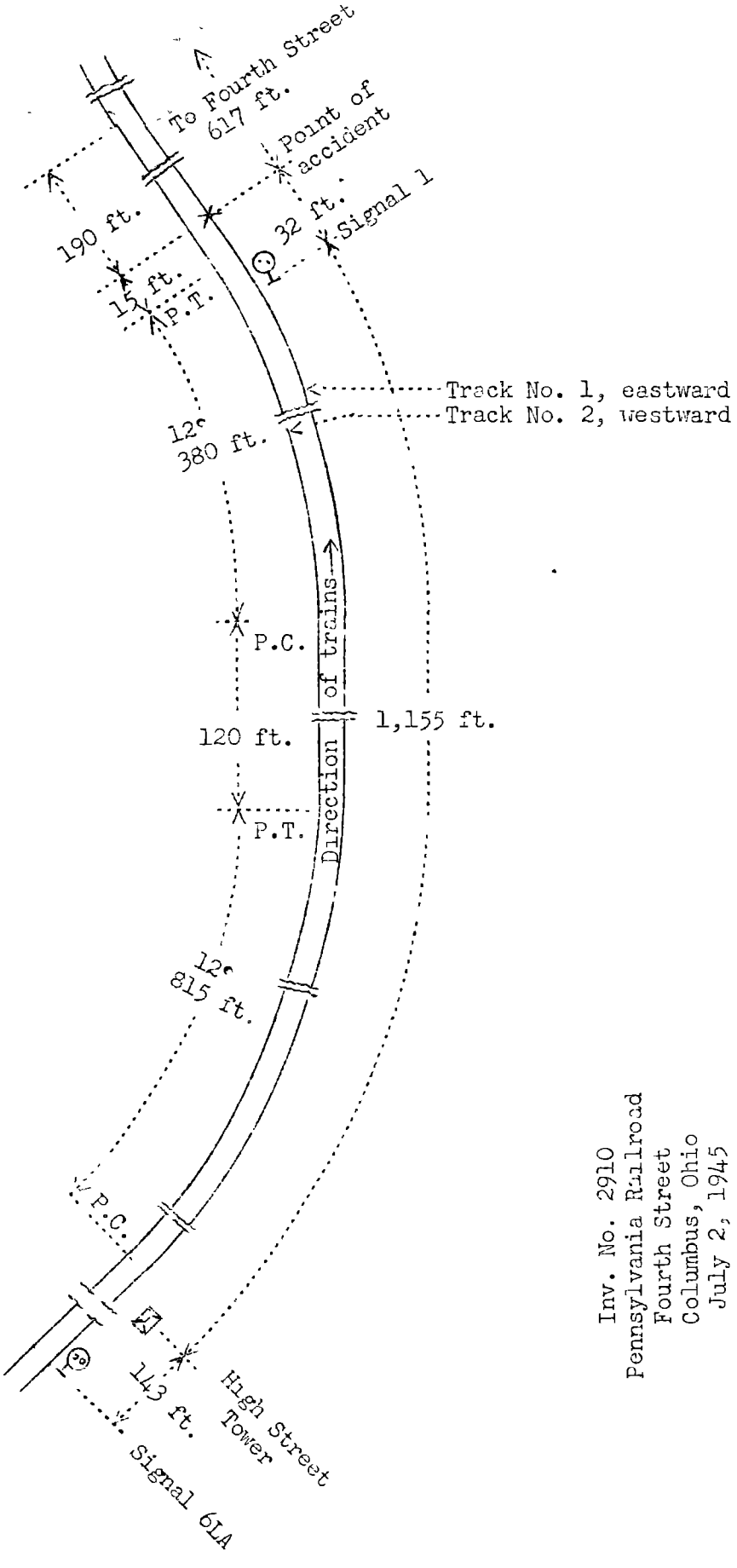
[1]Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Patterson for consideration and disposition.



Inv. No. 2910
Pennsylvania Railroad
Fourth Street
Columbus, Ohio
July 2, 1945

Location of Accident and Method of Operation

This accident occurred on that part of the Columbus Division extending eastward from High Street to Fourth Street, Columbus, Ohio, 0.4 mile, a two-track line. These tracks from south to north are designated as secondary track No. 1, eastward, and secondary track No. 2, westward. Trains moving with the current of traffic on track No. 1 are operated by signal indications. There are no time-table schedules in effect. The accident occurred on track No. 1 at a point 1,187 feet east of the tower at High Street. From the west there are, in succession, a 12° curve to the left 815 feet in length, a tangent 120 feet, a 12° curve to the left 380 feet, and a tangent 15 feet to the point of accident and 190 feet eastward. The grade for east-bound trains is, successively, 0.65 percent descending 465 feet, 0.85 percent ascending 1,000 feet, and 0.91 percent ascending 150 feet to the point of accident and a considerable distance eastward.

Signals 6 LA and 1, governing east-bound movements on track No. 1, are, respectively, 1,330 feet and 32 feet west of the point of accident. These signals are dwarf signals of the position-light type, and are continuously lighted. The involved aspects and corresponding indications and names of these signals are as follows:

Signal	Aspect	Indication	Name
6 LA	Two white lights in diagonal position to the right	Proceed prepared to stop at next signal. * * *	Slow-approach.
1	Two white lights in diagonal position to the left	Proceed at restricted speed.	Restricting.

Signal 6 LA is controlled by the leverman at High Street tower. Signal 1 is fixed to display proceed-at-restricted-speed.

Operating rules read in part as follows:

DEFINITIONS

* * *

Reduced Speed--Prepared to stop short of train or obstruction.

* * *

Restricted Speed--Not exceeding 15 miles per hour prepared to stop short of train, obstruction or switch not properly lined and to look out for broken rail.

* * *

19. The following signals will be displayed, one on each side of the rear of every train, as markers, to indicate the rear of the train:

* * *

By night, on engines and cars, marker lamps lighted showing red to the rear * * *

19a. A train not equipped to display the markers prescribed by Rule 19, will display on rear of train * * * by night, a red light * * *

35. The following signals will be used by flagmen:

* * *

Night signals--a red light, a white light, torpedoes and fusees.

99. When a train stops under circumstances in which it may be overtaken by another train, the flagman must go back immediately with flagman's signals a sufficient distance to insure full protection, placing two torpedoes, and when necessary, in addition, displaying lighted fusees.

* * *

105a. Unless otherwise provided, trains and engines using a secondary track must proceed at reduced speed unless the track upon which the movement is to be made is seen or known to be clear and switches properly lined.

* * *

105b. Unless otherwise provided, trains and engines using a secondary track or a siding will not protect against following movements on such tracks.

Time-table special instructions provide that flag protection in accordance with Rule 99 is required for all trains in the territory involved.

The maximum authorized speed for all trains is 15 miles per hour.

Description of Accident

Extra 8255 East, an east-bound freight train, consisting of engine 8255, 65 cars, a caboose, engine 4358 and 3 cars, in the order named, stopped about 4:47 a. m. with the rear end standing on track No. 1 at a point 32 feet east of signal 1. About 8 minutes later the rear car was struck by Extra 373 East.

Extra 373 East, an east-bound freight train, consisting of engine 373, a caboose, 102 cars loaded with coal, and engines 375 and 376, in the order named, passed signal 6 LA, which

displayed proceed-prepared-to-stop-at-next-signal, passed the tower at High Street at 4:55 a. m., then the engine passed signal 1, which displayed proceed-at-restricted-speed, and the train was moving on track No. 1 at an estimated speed of 3 miles per hour when it struck Extra 8255 East.

The rear car of Extra 8255, the front end of engine 373 and the first car to the rear of the caboose of Extra 373 were slightly damaged. The caboose of Extra 373 was demolished.

It was raining at the time of the accident, which occurred about 4:55 a. m.

The flagman of Extra 373 was killed, and the front brakeman was injured.

The underframe of the caboose of Extra 373 was of steel and the superstructure was of wood. The caboose was crushed between the tender and the car immediately behind the caboose. The casualties occurred in this caboose.

Discussion

The rules governing operation in this territory provide that east-bound movements on track No. 1 may be made at a speed not exceeding 15 miles per hour when authorized by proper signal indication. Adequate rear-end protection against following movements is required. Trains or engines moving under authority of a proceed-at-restricted-speed indication must be prepared to stop short of a train or an obstruction.

About 8 minutes after Extra 8255 East stopped, with the rear end standing on track No. 1, it was struck by Extra 373 East at a point 32 feet east of signal 1, which displayed proceed-at-restricted-speed.

Because the rear car of Extra 8255 East was not equipped to display markers a lighted red lantern was displayed on the rear end of the rear car. When Extra 8255 stopped, the flagman removed the lantern to use it for flagging purposes and proceeded westward about 200 feet. He saw the reflection of the headlight of the approaching train about 500 feet distant. He immediately gave stop signals with the lighted red lantern and a lighted white lantern, and was giving stop signals when the front end of Extra 373 East passed him. After the flagman took the red lantern from the rear car, no marker was displayed on the rear end of the preceding train.

Extra 373 East entered track No. 1 under authority of a proceed-prepared-to-stop-at-next-signal indication displayed by signal 6 LA, located 1,298 feet west of signal 1. As Extra 373 East was approaching the point where the accident occurred the speed was about 6 miles per hour. The train air-brake system was in the charge of the engineer of the first engine. The brakes had been tested and had functioned properly. The headlight of the first engine was lighted, and the enginemen were

maintaining a lookout ahead. The throttle of the first engine was in drifting position, and the throttles of the two engines at the rear of the train were in open position. Because of the sharp curve to the left and the type of engine, the engineer had no view of the track ahead. The point where the accident occurred could be seen from the left side of an east-bound engine a distance of about 450 feet. When the first engine was about 250 feet west of signal 1 the fireman saw, simultaneously, the proceed-at-restricted-speed indication displayed by this signal and the rear end of the preceding train. He called a warning to the engineer, who made a service brake-pipe reduction. Soon afterward, the fireman saw stop signals being given with a red lantern and a white lantern. He again warned the engineer, who then moved the brake valve to emergency position. The speed of Extra 373 was about 3 miles per hour when the collision occurred.

The indication displayed by signal 1 required the speed of Extra 373 East to be so controlled that the train could be stopped short of a preceding train or an obstruction. However, in this case the train was heavy and because of the ascending grade of almost 1 percent the train probably would have stalled if the speed had been lower than 6 miles per hour. Flag protection was required in this territory, and the preceding train had stopped about 8 minutes prior to the accident. The flagman had gone back to a point on the curve not more than 200 feet from the rear end of his train. The engineer of the first engine of the following train could not see the flagman because of the sharp curvature to the left, and when the fireman saw the flagman's signals the distance was too short in which to stop. Had the flagman gone back an additional distance of 300 feet, which he had ample time to do, he would then have been on tangent track, in position where his signals could have been seen from the approaching engine in time to avert the accident.

Cause

It is found that this accident was caused by failure to provide "full protection" for the preceding train and by failure properly to control the speed of the following train in accordance with signal indication.

Dated at Washington, D. C., this thirty-first day of August, 1945.

By the Commission, Commissioner Patterson.

W. P. BARTEL,
Secretary.

(SEAL)