INTERSTATE COMMERCE COMMISSION

WASHINGTON

INVESTIGATION NO. 2866

THE PENNSYLVANIA RAILROAD COMPANY

REPORT IN RE ACCIDENT

NEAR DELPHOS, OHIO, ON

FEBRUARY 4, 1945

SUMMARY

Railroad:	Pennsylvania	
Date:	February 4, 1945	
Location:	Delphos, Ohio	
Kind of accident:	Rear-end collision	
Trains involved:	Passenger	: Passenger
Train numbers:	Passenger Extra 6110 West	: 43
Engine numbers:	6110	: 5399
Consist:	12 cars	: 7 cars
Estimated speed:	5 m. p. h.	: 10 m. p. h.
Operation:	Signal indications	
Track:	Double; tangent; 0.07 percent ascending grade westward	
Weather:	Misting	
Time:	About 7:20 p. m.	
Casualties:	20 injured	
Cause:	Failure to provide flag protection for preceding train and failure to operate following train in accordance with signal indication	

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 2866

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

THE PENNSYLVANIA RAILROAD COMPANY

March 20, 1945.

Accident near Delphos, Ohio, on February 4, 1945, caused by failure to provide flag protection for the preceding train and by failure to operate the following train in accordance with signal indication.

REPORT OF THE COMMISSION[1]

PATTERSON, Commissioner:

On February 4, 1945, there was a rear-end collision between two passenger trains on the Pennsylvania Railroad near Delphos, Ohio, which resulted in the injury of 6 passengers, 13 dining-car employees and 1 train-service employee. This accident was investigated in conjunction with a representative of the Public Utilities Commission of Ohio.

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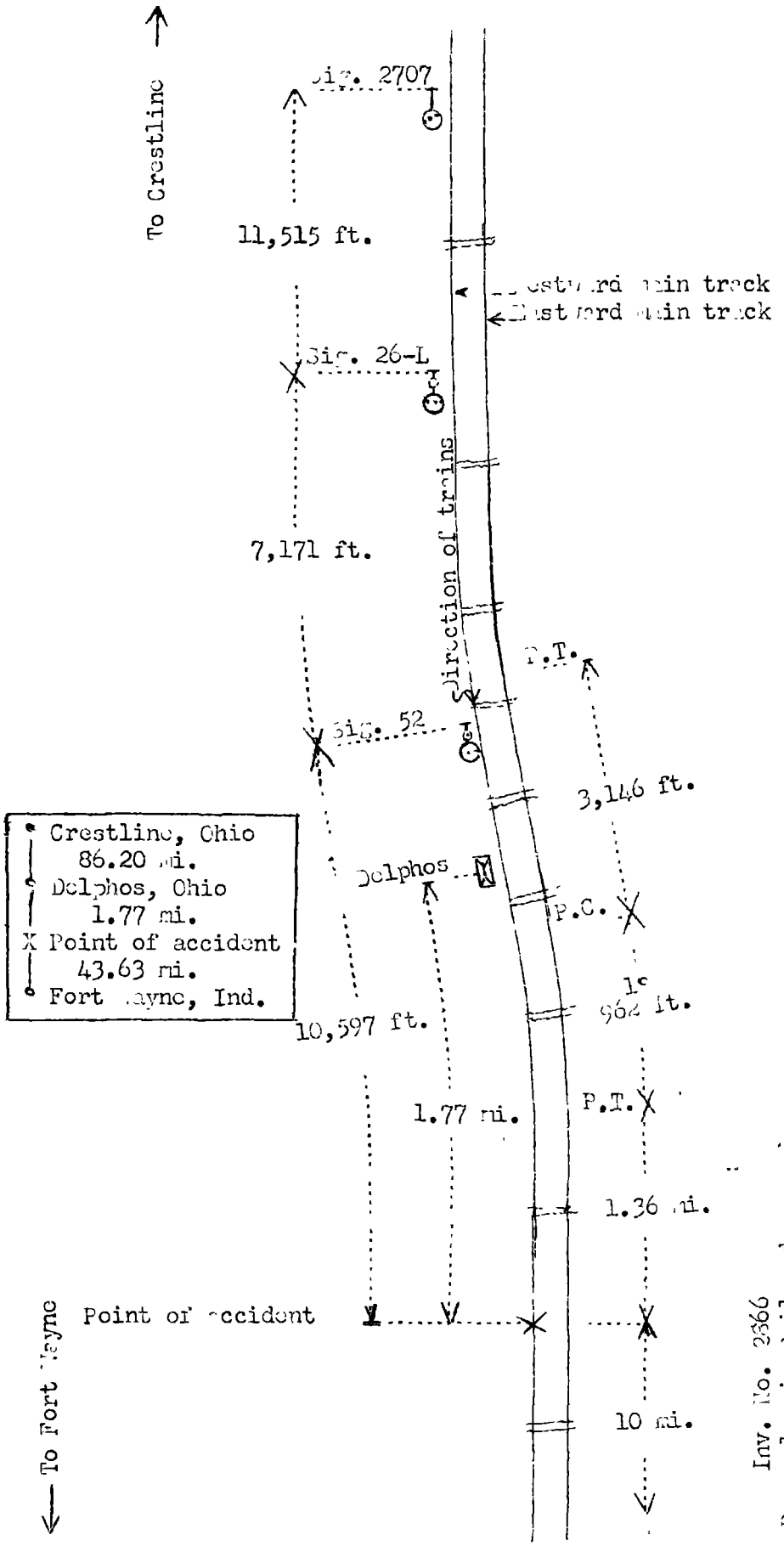
[1] Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Patterson for consideration and disposition.



Inv. No. 2366
Pennsylvania Railroad
Delphos, Ohio
February 4, 1945

Location of Accident and Method of Operation

This accident occurred on that part of the Fort Wayne Division extending westward from Crestline, Ohio, to Fort Wayne, Ind., 131.6 miles. This was a double-track line over which trains moving with the current of traffic were operated by signal indications. The accident occurred on the westward main track 87.97 miles west of Crestline, at a point 1.77 miles west of the station at Delphos. From the east there were, in succession, a tangent 3,146 feet in length, a 1° curve to the right 962 feet and a tangent 1.36 miles to the point of accident and about 10 miles westward. The grade was 0.07 percent ascending westward.

Automatic signal 2707 and semi-automatic signals 26-L and 52, which governed west-bound movements on the westward main track, were, respectively, 29,283, 17,768 and 10,597 feet east of the point of accident. These signals were of the position-light type. The involved aspects and corresponding indications and names of these signals were as follows:

Signals	Aspect	Indication	Name
2707	Three white lights in diagonal position to the right.	Proceed prepared to stop at next signal. Train exceeding medium speed must at once reduce to that speed.	Approach.
26-L and 52	Three white lights in horizontal position above one white light.	Stop; then proceed at restricted speed.	Stop-and-proceed.

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.

11. A train finding a fusee burning red on or near its track must stop and extinguish the fusee and then proceed at reduced speed.

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, * * * marker lamps lighted showing red to the rear * * *.

35. The following signals will be used by flagmen:

* * *

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

99. * * *

* * *

When a train is moving under circumstances in which it may be overtaken by another train, the flagman must take such action as may be necessary to insure full protection. By night, or by day when the view is obscured, lighted fusees must be thrown off at proper intervals.

When day signals cannot be plainly seen, owing to weather or other conditions, night signals must also be used.

* * *

The maximum authorized speed for the trains involved was 80 miles per hour.

Description of Accident

Passenger Extra 6110 West, a west-bound passenger train, consisted of engine 6110, one baggage car, eight coaches, one dining car and two Pullman sleeping cars, in the order named. All cars were of steel construction. This train passed Delphos, the last open office, at 7:12 p. m., and while moving at an estimated speed of 5 miles per hour it was struck by No. 43.

No. 43, a west-bound passenger train, consisted of engine 5399, one express car, one baggage-mail car, one mail car, one passenger-baggage car, two coaches and one dining car, in the order named. All cars were of steel construction. This train passed signal 2707, which displayed approach, stopped at signals 26-L and 52, which displayed stop-and-proceed, stopped at Delphos, and de-

parted at 7:16 p. m., 2 hours 55 minutes late. About 4 minutes later, while this train was moving at an estimated speed of 10 miles per hour it struck Passenger Extra 6110 West at a point 10,597 feet west of signal 52.

The front truck of the first car of each train was derailed. The tender of the engine and the cars of Passenger Extra 6110, and the first, fourth, fifth and sixth cars of No. 43 were more or less damaged. The front end of the engine of No. 43 was somewhat damaged.

It was misting at the time of the accident, which occurred about 7:20 p. m.

The train-service employee injured was the conductor of No. 43.

Discussion

Passenger Extra 6110 West was preparing to stop in response to signals given by the flagman of a preceding freight train when the rear end of Passenger Extra 6110 was struck by No. 43.

As No. 43 was approaching the point where the accident occurred the headlight was lighted, and the throttle was in drifting position. The brakes had been tested and had functioned properly en route. The enginemen were maintaining a lookout ahead. These employees understood that, after their train stopped in accordance with the stop-and-proceed indications displayed by signals 26-L and 52, the train was required to proceed prepared to stop short of a signal, a train or an obstruction. They said that between signal 26-L and Delphos, and after their train departed from Delphos, the speed was not in excess of 12 miles per hour at any point. Just before the accident occurred an east-bound passenger train moving on the eastward main track passed No. 43. Throughout a distance of about 1 mile immediately east of the point of accident trailing smoke and steam from that train materially restricted the view had by the enginemen of No. 43 of the track ahead, and the engineer made a light service brake-pipe reduction. The investigation disclosed that the valve of the train steam-heat line on the rear car of Passenger Extra 6110 was sufficiently open to permit an unusual volume of steam to be released, and, because of the prevailing weather conditions, this steam together with the trailing smoke and steam from the east-bound train obscured the marker lamps and the rear end of Passenger Extra 6110 from the view of the enginemen of No. 43. These employees expected that a preceding train moving at less than normal speed would be protected by lighted fusees. However, no lighted fusee or any other flagging signal was seen or heard at any point between signal 2707 and the point where the accident occurred, a distance of approximately 5.5 miles. The first

the enginemen of No. 43 knew of anything being wrong was when the engineer saw the rear end of the preceding train immediately prior to the collision.

Passenger Extra 6110 West had followed the preceding freight train throughout a distance of approximately 16 miles immediately east of the point where the accident occurred. Throughout this distance Passenger Extra 6110 stopped at four signals, which displayed stop-and-proceed, and three additional stops were made in compliance with lighted fusees which had been dropped by the flagman of the preceding train. During this time the flagman of Passenger Extra 6110 was engaged in duties assigned him by the conductor, which required the flagman to be in the front portion of the train. The conductor, who was in the rear car, said he understood that he was required to drop lighted fusees at frequent intervals during the time his train was moving at less than normal speed. However, no fusees were dropped at any point in this territory. An ample supply of 5-minute red fusees were available in the rear car. If lighted fusees had been dropped, the following passenger train would have been required to stop and to extinguish any lighted fusee, then to proceed prepared to stop short of a train or an obstruction, and this accident would have been averted.

Cause

It is found that this accident was caused by failure to provide flag protection for the preceding train and by failure to operate the following train in accordance with signal indication.

Dated at Washington, D. C., this twentieth day of March, 1945.

By the Commission, Commissioner Patterson.

W. P. BARTEL,
Secretary.

(SEAL)