# INTERSTATE COMMERCE COMMISSION WASHINGTON

INVESTIGATION NO. 2657

THE PENNSYLVANIA RAILROAD COMPANY

REPORT IN RE ACCIDENT

MEAR GREENCASTLE, IND., ON

DECEMBER 8, 1942

#### SUMMARY

Railroad:

Pennsylvania

Date:

December 8, 1942

Location:

Greencastle, Ind.

Kind of accident:

Rear-end collision

Trains involved:

Freigit

: Light engines

Train numbers:

Extra 7233 West : Extra 4618 West

Engine numbers:

7283

: 4618-8672, coupled

Consist:

89 cars, caboose:

Speed:

5-8 m. p. n. : 15-25 m. p. n.

Operation:

Centralized-traffic-control system

Track:

Double; tangent; 0.32 percent

ascending grade westward

Weather:

Hazy

Tirme:

About 2:10 a. m.

Casualties:

l killed

Cause:

Accident caused by failure to provide flay protection for preceding train, and a failure to operate following train in accordance with

signal indication

#### INTERSTATE COMMERCE COMMISSION

#### INVESTIGATION NO. 2657

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

THE PENNSYLVANIA RAILROAD COMPANY

January 25, 1943.

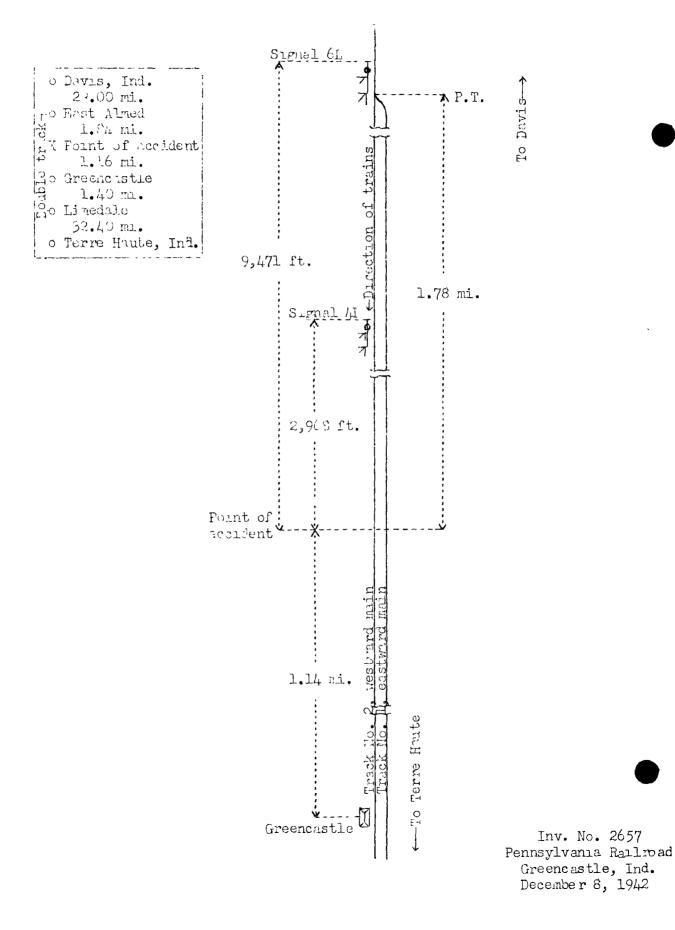
Accident near Greencastle, Ind., on December 8, 1942, caused by failure to provide flag protection for preceding train, and by failure to operate following train in accordance with signal indication.

REPORT OF THE COUNISSION

## PATTERSON, Commissioner:

On December 8, 1942, there was a regreed collision between a freight train and two light engines, coupled, on the Pennsylvania Railroad near Greencastle, Ind., which resulted in the death of one employee. This accident was investigated in conjunction with a representative of the Indiana Public Service Commission.

<sup>&</sup>lt;sup>1</sup>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.



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## Location of 'Accident and Method of Operation

This accident occurred on that part of the St. Lovis Division extending between Davis and Terre Haute, Ind., a distance of 65.8 miles. Between East Almeda and Limedale, Ind., a distance of 4.4 miles, this is a double-track line over which trains are operated by a centralized-traffic-control system, and movements in either direction on both tracks are made by signal indications only. The main tracks from south to north are No. 1, eastward main, and No. 2, westward main. The accident occurred on track No. 2 at a boint 1.84 miles west of East Almeda and 1.14 miles east of the station at Greencastle. Approaching from the east on track No. 2 there is a tangent 1.78 miles to the point of accident and a considerable distance beyond. At the point of accident the grade for west-bound trains is 0.82 percent ascending.

Semi-automatic signals GL and 4L, governing west-bound movements on track No. 2, are of the position-light type and are located, respectively, 9,471 and 2,963 feet east of the point of accident. The aspect and corresponding indication displayed by these signals for the trains involved are as follows:

Agpect

## Indication

Name

Three lights in horizontal position above marker light Stop: then proceed Stop-and-process at restricted speed

Operating rules read in part as follows:

DEFINITIONS

\* \* \*

Speeds

\* \* \*

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

19b. \* \* \*

When an engine is running backward without cars \* \* \*, a white light must be displayed by night on the rear of the tender if not equipped with a headlight.

35. The following signals will be used by flagmen:

\* \* \*

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

99. When a train stors 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.

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When conditions require, he will leave the torpedoes and a lighted fusee.

\* \* \*

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.

\* \* \*

The maximum authorized speed for freight trains is 50 miles fer nour, and for the light engines involved moving in backward motion, 25 miles per hour.

# Description of Accident

Extra 7283 West, symbol VL-9, a west-bound freight train, consisted of engine 7283, 15 loaded and 74 empty cars and a caboose. This train departed from Davis, 32 miles east of Greencastle, at 10:43 p.m., December 7, according to the dispatcher's record of movement of trains, passed East Almeda, 3 miles east of Greencastle, at 1:54 a.m., December 8, stopped at signal 4L, which displayed stop-and-proceed, then proceeded, and while moving at an estimated speed of 5 to 8 miles per hour its rear end was struck by Extra 4818 West at a point 2,938 feet west of signal 4L.

Extra 4618 West consisted of engines 4618 and 8672, coupled, and was en route from East Almeda to Greencastle to supply the engines with water. This train, with the engines moving in backward motion, stopped at signal 6L, which disrlayed stopand-proceed, and departed from East Almeda on track No. 2 at 2:02 a.m., stopped at signal 4L, which displayed stop-and-proceed, and while moving at a speed variously estimated as 15 to 25 miles per nour it collided with the rear end of Extra 7283 West.

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The cabcose of Extra 7283 West was derailed and stopped across track No. 1. Both ends of the caboose were damaged and the west end was crushed inward a distance of 12 feet. The first four cars ahead of the caboose were derailed and considerably damaged. The tender of engine 4618 was badly damaged.

It was hazy at the time of the accident, which occurred about 2:10 a.m.

The employee killed was a student brakeman who was in the capoose of Extra 7283 West.

#### Discussion

The rules governing operation on the line involved provide that 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. At night, lighted fusees must be thrown off at proper intervals. Under the rules governing operation in automatic block-signal territory, a stop-and-proceed indication requires a train to stop at the signal, then it may proceed at a speed not exceeding 15 miles per near but must be prepared to stop short of a preceding train or obstruction.

Extra 7283 West stopped at signal 4L, which displayed stop-and-proceed, then proceeded, and while moving at a speed of 5 to 8 miles per hour the rear end was struck by Extra 4618 West at a point 0.56 mile west of signal 4L. Extra 4618 West stopped at signal 4L, which displayed stop-and-proceed, then proceeded, and while moving at a speed variously estimated as 15 to 25 miles per hour it struck the rear end of Extra 7283. Under the rules, flag protection was required for Extra 7283 and Extra 4618 was required to proceed prepared to stop short of train ahead.

Extra 7280 was approaching the point where the accident occurred at a low speed. The conductor and the flagman were in the caboose, and no flag protection was provided. They jumped off just before the collision occurred. These employees gave no reason why flag protection for their train was not provided; however, the flagman thought the flagging rule did not require him to drop off limited fusees at hight when his train was moving slowly on tangent track. If the flagman had been properly instructed in regard to the duties of a flagman of a train moving under circumstances in which it might be overtaken by another train, and had he dropped off lighted fusees at proper intervals, this accident would have been averted.

Extra 4518 West consisted of engines 4618 and 8672, in the order named, moving in backward motion. The air-brake system was in the charge of the engineer of engine 4618. The

enginemen of both engines were maintaining a lookout ahead. The front brakeman was in the brakeman's booth on top of the tender of engine 4618, and the conductor was on the deck of enfine 4618. The front brakeman said amber marker lights were displayed at the rear of the tender of engine 4618, but the back-up light, with which the tender of this engine was equipped was not lighted. The engineer of engine 4618 said he had placed the switches in control of the marker lights and the back-up light in proper position for illumination of these lights. However, he made no inspection to see that the back-up light was lighted, and the front brakeman did not inform him that the back-up light was not lighted. The front brakeman said he first saw lighted red marker lights of the preceding train at a distance of about 180 feet, but he was unable to call a warning to the engineer of engine 4618. The front brakeman estimated the speed of his train as 20 to 25 miles per hour when the collision occurred. The enginemen estimated the speed as 15 miles per hour. They did not see the preceding train until just before the collision occurred. The engineer of engine 4618 said that when he saw the caboose of Extra 7283 he attempted to move the automatic brake valve to emergency position in an effort to stop his crain, but he inadvertently moved the independent brake valve instead. The members of the crew of Extra 4618 understood that a stop-and-proceed indication requires a train to be operated so that it can be stopped short of a preceding train, but it was not being so operated when the collision occurred. If this train had been operated in accordance with the stop-and-proceed indication displayed by signal 4L, 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 twenty-fiftn day of January, 1943.

By the Commission, Commissioner Patterson.

W. P. BARTEL,

(SEAL)

Secretary.