# INTERSTATE COMMERCE COMMISSION WASHINGTON

INVESTIGATION NO. 2796

THE PENNSYLVANIA RAILROAD COMPANY

REPORT IN RE ACCIDENT

AT CLEVELAND, OHIO, ON

HAY 3, 1944

#### SUMMARY

Railroad: Pennsylvania

Date: May 3, 1944

Location: Cleveland, Onio

Kind of accident: Rear-end collision

Trains involved: N. Y. C. & St. L. : P. R. R. freight

freight

Train numbers: Extra 491 Vest : Extra 6626 West

Engine numbers: 491 : 6626

Consist: 40 cars, caboose : 48 cars

Estimated speed: Standing : 3 m. p. h.

Operation: Automatic block-signal system

Track: Double; tangent; 0.5975 percent

descending grade westward

Weather: Clear

Time: 2 a. m.

Casualties: 2 injured

Cause: Failure properly to control speed

of following train in accordance with automatic block-system rules

and flagging signals

#### INTERSTATE COMMERCE COMMISSION

### INVESTIGATION NO. 2796

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

#### THE PENNSYLVANIA RAILROAD COMPANY

June 20, 1944.

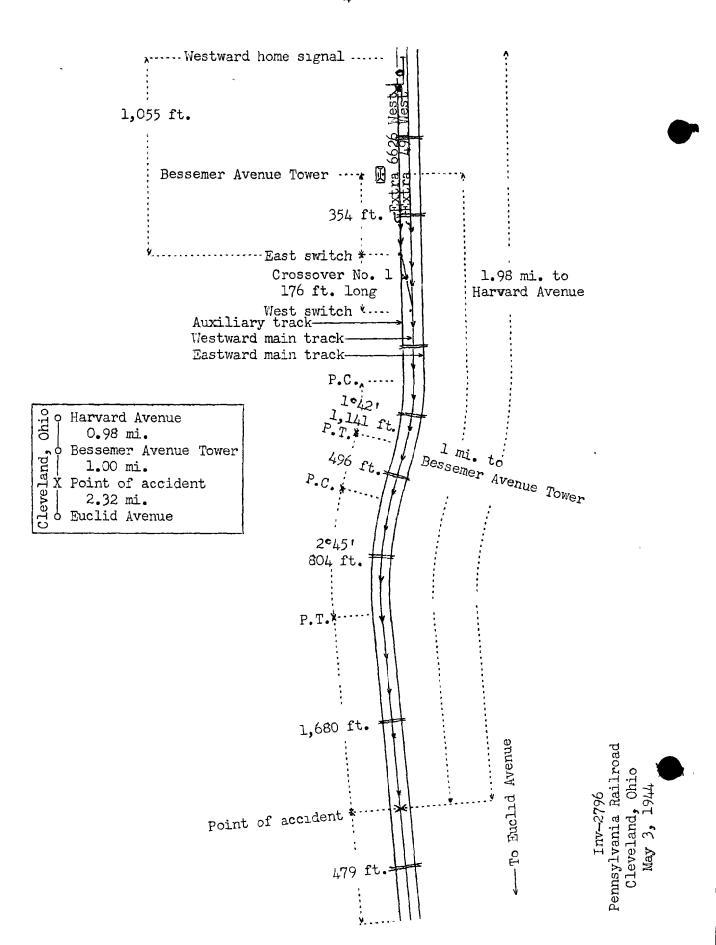
Accident at Cleveland, Onio, on May 3, 1944, caused by failure properly to control the speed of the following train in accordance with automatic blocksystem rules and flagging signals.

# REPORT OF THE COMMISSION

# PATTERSON, Chairman:

On May 3, 1944, there was a rear-end collision between a New York, Chicago & St. Louis Railroad freight train and a Pennsylvania Railroad freight train on the line of the Pennsylvania Railroad at Cleveland, Onio, which resulted in the injury of two employees.

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.



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**-** 5 **-** 2796

# Location of Accident and Method of Operation

This accident occurred on that part of the Cleveland Division extending westward from Harvard Avenue to Euclid Avenue, Cleveland, 4.3 miles. This was a double-track line over which trains moving with the current of traffic were operated by an automatic block-signal system, the indications of which superseded time-table superiority. The New York, Chicago & St. Louis Railroad train involved was being operated over a portion of this line. The accident occurred on the westward main track 1.98 miles west of Harvard Avenue, at a point 1 mile west of the tower at Bessemer Avenue. From the east there were, in succession, a 1042' curve to the right 1,141 feet long, a tangent 496 feet, a 2045' curve to the left 804 feet and a tangent 1,680 feet to the point of accident and 479 feet beyond. The grade for west-bound trains varied between 0.233 percent and 1.275 percent descending 4,467 feet to the point of accident, and was 0.5975 percent descending at tnis point.

In this vicinity an auxiliary track paralleled the westward main track on the north. The east switch of a crossover 176 feet long, hereinafter referred to as crossover No. 1, which connected the auxiliary track and the westward main track, was 354 feet west of the tower at Bessemer Avenue, and was facing-point for movements from the auxiliary track to the westward main track. The switches of crossover No. 1 were hand operated, and were in the charge of a switch tender.

#### DEFINITIONS

\* \* \*

Speeds

\* \* \*

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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.

Operating rules read in part as follows:

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 except in manual block system territory when clear of main track, marker lamps lighted showing yellow 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 \* \* \*
- 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.

\* \* \*

502. A train or engine must not enter a block at a hand operated switch or crossover \* \* \* without permission of the signalman, \* \* \*

The train or engine receiving such permission will proceed at restricted speed.

Time-table special instructions read in part as follows:

2408. Switch tenders are stationed at and have charge of main track switches as indicated:

Location

Switches

\* \* \*

Bessemer Ave. ---- Main track and crossover switches.

\* \* \*

\* \* \*

At Bessemer Avenue, trains on main tracks will be governed by hand signal from the switch tender with a yellow flag or yellow light, and for other movements with green flag or green light.

\* \* \*

**-7-** 2796

## Description of Accident

Extra 491 West, a west-bound New York, Chicago & St. Louis Railroad freight train, consisting of a caboose, 40 cars and engine 491, headed westward, in the order named, stopped on the westward main track about 1:55 a.m., with the rear end standing 4,743 feet west of the west switch of crossover No. 1. About 5 minutes later the rear end was struck by Extra 6626 West.

Extra 6626 West, a west-bound Pennsylvania Railroad freight train, consisting of engine 6626, headed eastward, and 48 cars, in the order named, moved from the auxiliary track through crossover No. 1 to the westward main track. It entered the westward main track 1,055 feet west of the westward home signal at Bessemer Avenue, the last signal east of the point of accident governing west-bound movements on the westward main track, and while moving at an estimated speed of 3 miles per hour it struck the rear end of Extra 491 West.

The tender of each engine and the cab of engine 6626 were damaged. The driving wheel assembly of engine 6626 and the front truck of the first car of Extra 6626 were derailed.

It was clear at the time of the accident, which occurred about 2 a.m.

The conductor and the engineer of Extra 6626 West were injured.

# Discussion

The rules of this carrier governing operation in automatic block-signal territory provide that when a train or an engine is authorized to enter a block at a hand-operated switch or crossover, it must proceed prepared to stop short of a train or an obstruction until the first automatic signal is reached, and then proceed in accordance with signal indications. Flag protection must be provided for a train stopped under circumstances in which it may be overtaken by another train. All the employees concerned so understood.

About 5 minutes after Extra 491 West stopped, its rear end was struck by Extra 6626 West. A lighted red light and a lighted white light were displayed on the rear end of engine 491, which was headed westward at the rear of its train. The flagman had reached a point about 600 feet east of the rear of Extra 491 when he saw the reflection of the headlight of the approaching train, about 1,400 feet distant. He immediately

**- 8 -** 2796

gave stop signals with a lighted white lantern and a lighted red lantern, and the signals were answered by the sounding of the engine whistle. The flagman continued to give stop signals until the engine of Extra 3626 passed him.

The engine of Extra 6626 West was headed eastward and was pulling 48 cars. The enginemen, the conductor and the front brakeman were on the engine. The enginemen were maintaining a lookout ahead. This train was authorized by the switch tender to enter the westward main track at crossover No. 1, and it had proceeded westward a distance of about 3,000 feet at a speed of about 15 miles per hour when the fireman saw stop signals being given with a lighted red lantern about 1,100 feet distant. called a warning to the engineer, who immediately made a 10 or 12-pound brake-pipe reduction. Íner, about 10 seconds later, the engineer moved the brake valve to emergency position. speed of Extra 6626 was about 3 miles per nour when the collision occurred. The brakes had been tested and functioned properly. From the point where Extra 6626 entered the main track to the point of accident, it did not pass an automatic signal. If Extra 6626 had been operated prepared to stop short of a train or an obstruction, in accordance with the rules, this accident would have been averted.

# Cause

It is found that this accident was caused by failure properly to control the speed of the following train in accordance with automatic block-system rules and flagging signals.

Dated at Washington, D. C., this twentieth day of June, 1944.

By the Commission, Chairman Patterson.

(SEAL)

W. P. BARTEL, Secretary.