

INTERSTATE COMMERCE COMMISSION
WASHINGTON

INVESTIGATION NO. 2661
THE PENNSYLVANIA RAILROAD COMPANY
REPORT IN RE ACCIDENT
NEAR COLUMBIA CITY, IND., ON
DECEMBER 12, 1942

SUMMARY

Railroad:	Pennsylvania
Date:	December 12, 1942
Location:	Columbia City, Ind.
Kind of accident:	Rear-end collision
Trains involved:	Freight : Passenger
Train numbers:	Extra 8393 West : 23
Engine numbers:	2303 : 5471-5357
Consist:	82 cars, caboose : 15 cars
Estimated speed:	2-5 m. p. h. : 25-50 m. p. h.
Operation:	Automatic block-signal system
Track:	Double; tangent; 0.38 percent ascending grade westward
Weather:	Hazy
Time:	About 11:05 a. m.
Casualties:	1 killed; 2 injured
Cause:	Accident caused by failure to provide adequate flag protection for preceding train, and by failure to operate following train in accordance with signal indications

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 2661

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

THE PENNSYLVANIA RAILROAD COMPANY

February 4, 1943.

Accident near Columbia City, Ind., on December 12, 1942,
caused by failure to provide adequate flag protection
for preceding train, and by failure to operate fol-
lowing train in accordance with signal indications.

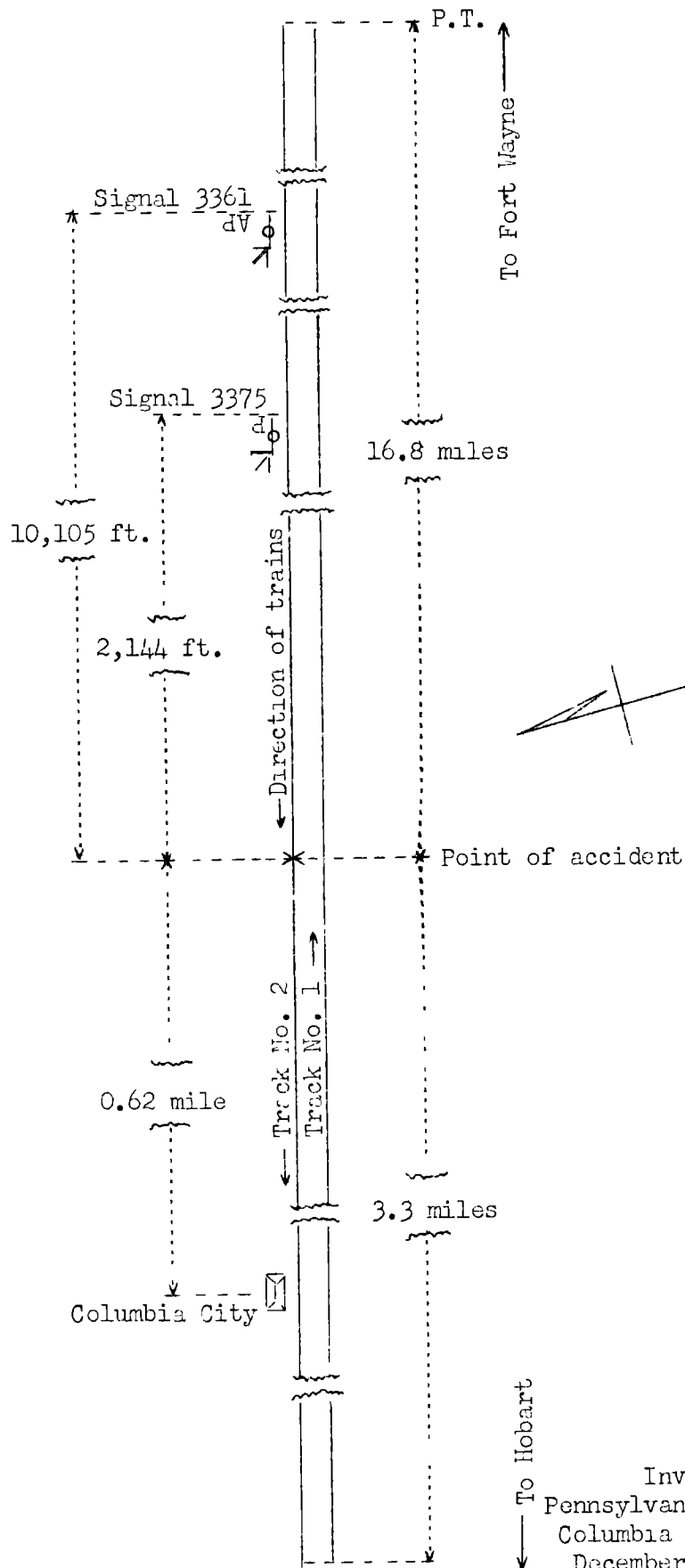
¹
REPORT OF THE COMMISSION

PATTERSON, Commissioner:

On December 12, 1942, there was a rear-end collision between a freight train and a passenger train on the Pennsylvania Railroad near Columbia City, Ind., which resulted in the death of one employee and the injury of two employees. This accident was investigated in conjunction with a representative of the Indiana Public Service Commission.

¹Under 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.

○	Fort Wayne, Ind.
	1.40 mi.
○	Junction
	16.88 mi.
X	Point of accident
	0.62 mi.
○	Columbia City
	95.80 mi.
○	Hobart, Ind.



Inv-2661
 Pennsylvania Railroad
 Columbia City, Ind.
 December 12, 1942

Location of Accident and Method of Operation

This accident occurred on that part of the Fort Wayne Division extending between Fort Wayne and Hobart, Ind., a distance of 114.7 miles. In the vicinity of the point of accident this is a double-track line over which trains moving with the current of traffic are operated by an automatic block-signal system, the indications of which supersede timetable superiority. 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 point 0.62 mile east of the station at Columbia City. Approaching from the east the track is 16.8 miles to the point of accident and 3.3 miles beyond. The grade for west-bound trains is 0.38 percent ascending.

Automatic signals 3361 and 3375, which govern west-bound movements on the westward main track, are located, respectively, 10,105 and 2,144 feet east of the point of accident. These signals are of the one-unit, three-indication, position-light type. Signal 3361 is approach lighted and signal 3375 is continuously lighted. The involved aspects and corresponding indications and names of these signals are as follows:

<u>Aspect</u>	<u>Indication</u>	<u>Name</u>
45 Degrees	Proceed prepared to stop at next signal. Train exceeding medium speed must at once reduce to that speed.	Approach.
Horizontal over marker	Stop; then proceed at restricted speed.	Stop-and-proceed.

Operating rules read in part as follows:

DEFINITIONS

SPEEDS

Medium Speed--Not exceeding one-half the speed authorized for passenger trains but not exceeding 30 miles per hour.

* * *

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.

35. The following signals will be used by flagmen:

Day signals--A red flag, 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.

When recalled and safety to the train will permit, he may return.

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. * * *

* * *

The maximum authorized speed for freight trains is 50 miles per hour, and for passenger trains, 80 miles per hour.

Description of Accident

Extra 8393 West, symbol PF-1, a west-bound freight train, consisted of engine 8393, 40 loaded and 42 empty cars and a caboose. After a terminal air-brake test was made, this train departed from Fort Wayne, 18.9 miles east of Columbia City, at 8:44 a. m., according to the dispatcher's record of movement of trains, passed Junction, 17.5 miles east of Columbia City and the last open office, at 9:12 a. m., and stopped at 10:57 a. m. with the caboose standing 1,914 feet west of signal 3375. About 11:03 a. m. the flagman was recalled, and about 2 minutes later he gave a signal to proceed. The train had moved about 230 feet westward when the rear end was struck by No. 23.

No. 23, a west-bound first-class passenger train, consisted of engines 5471 and 5357, coupled, 4 express cars, 1 baggage car, 1 mail car, 1 coach, 1 passenger-baggage car, 2 coaches, 1 dining car and 4 Pullman sleeping cars, in the order named. The second, fourth and fifth cars were of steel-underframe construction and the remainder were of all-steel construction. After a terminal air-brake test was made this train departed from Fort Wayne at 10:47 a. m., according to the dispatcher's record of

movement of trains, 1 hour 18 minutes late, passed Junction at 10:50 a. m., 1 hour 18 minutes late, passed signal 3361, which displayed approach, passed signal 3375, which displayed stop-and-proceed, and while moving at a speed variously estimated as 25 to 50 miles per hour it collided with the rear end of Extra 8393 West.

The caboose of Extra 8393 was demolished. The rear nine cars were derailed and stopped in various positions across both main tracks. Of these cars, 2 were demolished and the remainder were badly damaged. The rear truck of the tenth car ahead of the caboose was derailed. Engine 5471 was derailed and stopped on its right side, in reverse direction and at a point about 435 feet west of the point of accident. It was considerably damaged and the cab was demolished. The tender of engine 5471 was derailed and stopped across the track about 75 feet west of its engine. Engine 5357 was derailed and stopped, badly damaged, upright, in line with the track and about 494 feet west of the point of accident. The tender of engine 5357 was derailed, remained coupled to its engine and stopped across the tracks. The first five cars of No. 23 were derailed and stopped, badly damaged, in various positions across both main tracks.

It was nazy at the time of the accident, which occurred about 11:05 a. m.

The employee killed was the engineer of the first engine of No. 23. The employees injured were the fireman of the first engine and the front brakeman of No. 23.

Discussion

The rules governing operation on the line involved provide that 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. When recalled, he may return if it is safe to do so. He must place torpedoes and leave a lighted fusee if conditions require. 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. Under the rules governing operation in automatic block-signal territory, an approach indication requires that the speed of a train must be reduced immediately to medium speed, and the train must be prepared to stop at the next signal. 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 hour but must be prepared to stop short of train or obstruction.

Extra 8393 West stopped at 10:57 a. m. with the caboose standing 1,914 feet west of signal 3375. About 8 minutes later, after this train had moved forward about 230 feet, the rear end was struck by No. 23.

When Extra 8393 stopped at Columbia City, the conductor and the flagman were in the caboose. Soon afterward the flagman

went back to provide flag protection. He said he reached a point about 500 feet east of the caboose and remained there until he was recalled. As no train was seen approaching from the east he did not place torpedoes on the rail or leave a lighted fusee. He returned to the caboose and gave proceed signals, and the train started about 11:04 a. m. About 1 minute later the conductor saw No. 23 approaching at a distance of about 1/4 mile and he gave stop signals with a lighted fusee. The conductor said the speed of No. 23 was about 50 miles per hour at the time of the collision. These employees gave no reason why adequate flag protection for their train was not provided. If adequate flag protection had been provided for Extra 8393 this accident would have been averted.

As No. 23 was approaching Columbia City the speed was about 80 miles per hour. The train air-brake system was in the charge of the engineer of the first engine. A running test of the brakes was made soon after departure from Fort Wayne, and they functioned properly. At a point some distance east of Columbia City the front brakemen sounded the train air-signal for the train to stop at Columbia City, and an acknowledgment was sounded on the engine whistle of the first engine. The engineers of the second engine said that because of smoke trailing downward over their engine cab they were unable to see the indication displayed by any of the signals between Fort Wayne and the point of accident. The engineer of the second engine said that about 20 seconds before the collision occurred, a 20-pound brake-pipe reduction was made from the first engine and then almost immediately an emergency application was made. He estimated the speed of No. 23 as between 25 and 35 miles per hour when the collision occurred. In tests after the accident the involved signals functioned properly. Why No. 23 was not operated in accordance with the indications displayed by signals 3331 and 3375 could not be determined, as the engineer of the first engine was killed in the accident and the fireman was so seriously injured he could not be interrogated. Had No. 23 been operated in accordance with the indications displayed by these signals, this accident would not have occurred.

Cause

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

Dated at Washington, D. C., this fourth day of February, 1943.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,
Secretary.