INTERSTATE COMMERCE COMMISSION

WASHINGTON

INVESTIGATION NO. 3167

THE PENNSYLVANIA RAILROAD COMPANY

REPORT IN RE ACCIDENT

NEAR TEMPLETON, PA., ON

FEBRUARY 19, 1948

SUMMARY

Railroad:	Pennsylvania	
Date:	February 19, 1948	
Location:	Templeton, Pa.	
Kind of accident:	Rear-end collision	
Trains involved:	Freight	: Freight
Train numbers:	Extra 3572 North	: Extra 4580 North
Engine numbers:	3572	: 4580
Consists:	19 cars, caboose	: 32 cars, caboose
Estimated speeds:	Standing	: 30 m. p. h.
Operation:	Signal indications	
Tracks:	Double; 2°30' curve; 0.032 percent ascending grade northward	
Weather:	Clear	
Time:	2:30 a. m.	
Casualties:	1 killed; 1 injured	
Cause:	Admitting a following freight train to an occupied manual block under a clear-block indication	

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 3167

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

THE PENNSYLVANIA RAILROAD COMPANY

April 7, 1948

Accident near Templeton, Pa., on February 19, 1948, caused by admitting a following freight train to an occupied manual block under a clear-block indication.

REPORT OF THE COMMISSION[1]

PATTERSON, Commissioner:

On February 19, 1948, there was a rear-end collision between two freight trains on the Pennsylvania Railroad near Templeton, Pa., which resulted in the death of one employee, and the injury of one employee.

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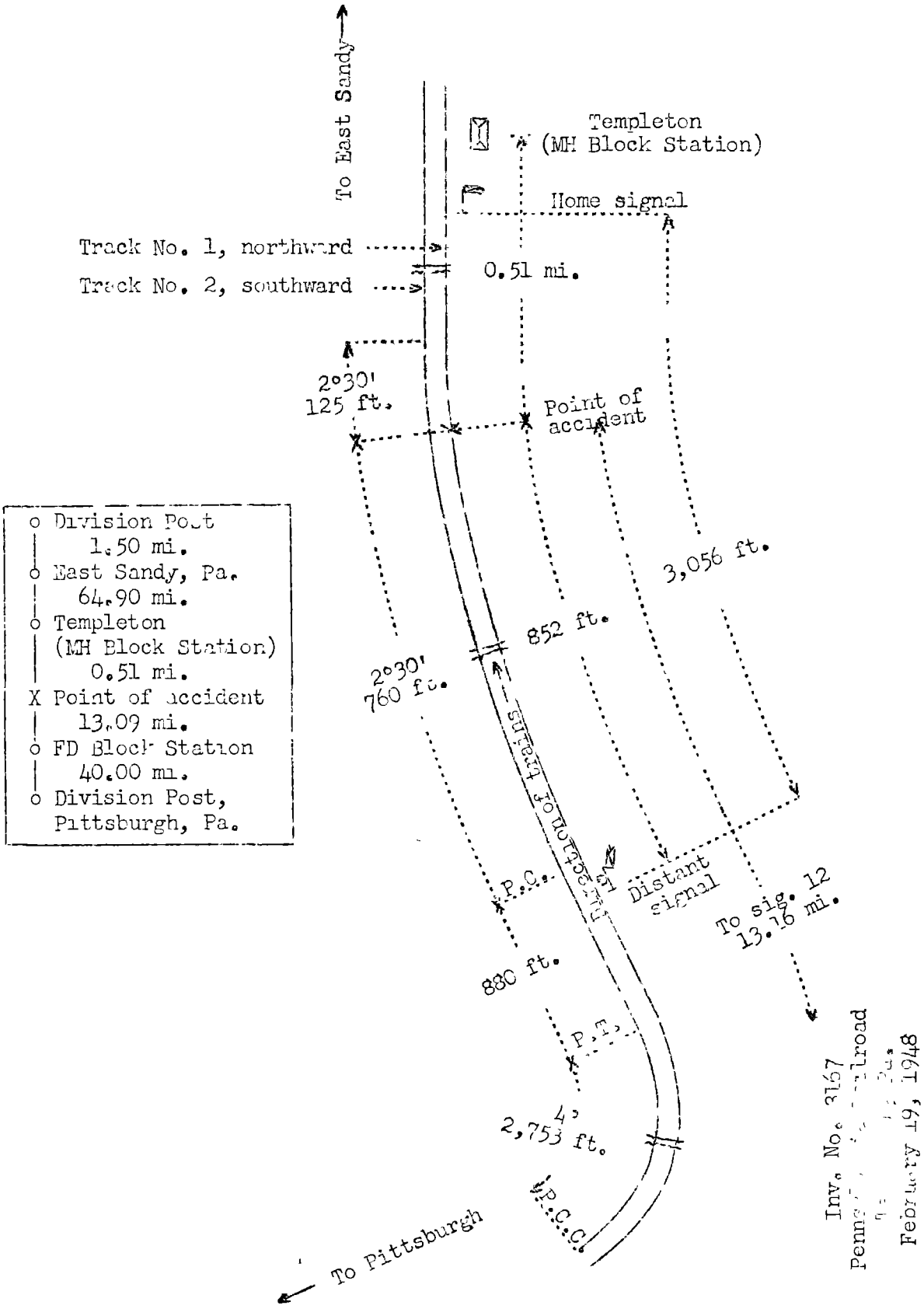
[1] Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Patterson for consideration and disposition.



Inv. No. 3157
Penn[illegible] Railroad
[illegible]
February 19, 1948

Location of Accident and Method of Operation

This accident occurred on that part of the Conemaugh Division extending between Division Post, near Pittsburgh, and Division Post, near East Sandy, Pa., 120 miles, a double-track line in the vicinity of the point of accident, over which trains moving with the current of traffic are operated by manual block-signal indications. The main tracks from east to west are designated as No. 1, northward, and No. 2, southward. The accident occurred on track No. 1, at a point 53.09 miles north of Pittsburgh and 0.51 mile south of MH Block Station at Templeton. From the south on track No. 1, there are, in succession, a compound curve to the left, the maximum curvature of which is 4°, 2,753 feet in length, a tangent 880 feet and a 2°30' curve to the right 760 feet to the point of accident and 125 feet beyond. The grade is 0.032 percent ascending northward.

Manual-block signal 12, located 714 feet south of FD Block Station and 13.16 miles south of the point of accident, governs entry of north-bound movements to the block on track No. 1. This block extends to MH Block Station, 13.6 miles north of FD Block Station. Signal 12 is of the position-light type, and the involved aspects and corresponding indications and names are as follows:

Signal	Aspect	Indication	Name
12	Three white lights in horizontal position	Stop.	Stop-signal.
12	Three white lights in diagonal position to the left	Block occupied; * * * for trains other than passenger trains, proceed prepared to stop short of a train or obstruction, but not exceeding 15 miles per hour.	Permissive-block.
12	Three white lights in vertical position over white marker	Proceed; manual block clear.	Clear-block.

A distant signal for the northward home manual-block signal at MH Block Station is 3,056 feet south of the home signal and 852 feet south of the point of accident. This signal is

of the one-arm, two-indication, upper-quadrant, semaphore type, and the involved night aspect and corresponding indication and name are as follows:

Aspect	Indication	Name
Yellow light over yellow marker-light	Train exceeding Medium speed must at once reduce to that speed. * * * Approach next signal prepared to stop.	Caution.

The controlling circuits of the home and distant signals at MH Block Station are so arranged that when the home signal displays stop, or if track No. 1 is occupied between these signals, the distant signal displays approach.

This carrier's operating rules read in part as follows:

DEFINITIONS

* * *

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

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

* * *

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.

15. TORPEDOES

The explosion of two torpedoes is a signal to proceed at Reduced speed. The explosion of one torpedo will indicate the same as two but the use of two is required.

* * *

35. The following signals will be used by flagmen:

* * *

Night signals--A red 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.

* * *

317. (For absolute block for opposing movements and permissive block for following movements on the same track.)

Before admitting a train to a block under Clear-block signal, the signalman in charge of the block station or block-limit station at the entrance of the block must know that the block is clear of all trains and that no other train has been given permission or a signal to enter the block. Signals governing opposing movements, where provided, must display Stop-signal. The signalman will then display a Clear-block signal for the train to be admitted to the block. * * *

Before admitting a train other than a passenger train to a block, the signalman in charge of the block station or block-limit station at the entrance of the block must know that the block is clear of opposing trains and passenger trains, and that no opposing train or no passenger train has been given permission or a signal to enter the block. Signals governing opposing movements, where provided, must display Stop-signal, and Stop-signals to passenger trains must be displayed. If the block is clear of opposing trains and passenger trains, the signalman in charge of the block station may permit a train other than a passenger train to follow a train other than a passenger train into the block by displaying a Permissive-block signal for the train to be admitted to the block. * * *

* * *

327. To permit a train to enter a block * * *, the signalman must first obtain control of the block to be used. * * *

* * *

The maximum authorized speed for freight trains is 50 miles per hour.

Description of Accident

Extra 3572 North, a north-bound freight train, consisting of engine 3572, headed southward, 19 cars and a caboose,

stopped at 2:15 a. m. on track No. 1, with the rear end standing 13.16 miles north of manual block signal 12 at FD Block Station and 0.51 mile south of MH Block Station at Templeton. About 15 minutes later the rear end of this train was struck by Extra 4580 North.

Extra 4580 North, a north-bound freight train, consisting of engine 4580, 32 cars and a caboose, entered the block at FD Block Station at 2:04 a. m., under a proceed-manual-block-clear indication displayed by signal 12, and passed the distant signal located 3,056 feet south of MH Block Station. This signal displayed approach-next-signal-prepared-to-stop. While this train was moving at an estimated speed of 30 miles per hour it collided with Extra 3572 North.

The caboose and the rear two cars of Extra 3572 North, and the engine and the first two cars of Extra 4580 North were derailed. The caboose of Extra 3572 North was demolished. The remainder of the derailed equipment was considerably damaged.

The engineer of Extra 4580 North was killed, and the fireman of this train was injured.

The weather was clear at the time of the accident, which occurred at 2:30 a. m.

Discussion

The rules governing operation in manual block-signal territory on this line provide that a following freight train may be admitted to a block occupied by a preceding freight train only under authority of a permissive block-signal indication. A train that enters a block under authority of a permissive-block indication is required to proceed within the block at a speed not exceeding 15 miles per hour, and must be operated in such manner that it can be stopped short of a preceding train or an obstruction. The manual block involved extended between FD Block Station and MH Block Station, a distance of 13.6 miles.

The investigation disclosed that about 1 hour 28 minutes after Extra 3572 North was admitted to the block involved the operator at FD Block Station erroneously admitted Extra 4580 North into the block under a clear-block indication. About 2:30 a. m. Extra 4580 North struck the rear end of Extra 3572 North, which was standing on track No. 1 at a point 13.16 miles north of FD Block Station and 0.51 mile south of MH Block Station. The marker lamps on the caboose of Extra 3572 North were lighted and displayed red to the rear.

At the time the accident occurred the engine and the first three cars of Extra 3572 North were on an auxiliary track. The members of the crew of this train, except the flagman, were in the vicinity of the engine, and they were not aware of anything being wrong until the collision occurred. The flagman said that when his train stopped he proceeded southward to provide flag protection, placed two torpedoes on the east rail of track No. 1 about 645 feet south of the rear end of the train, and remained in this vicinity until the collision occurred. Soon after he saw the reflection of the headlight of the approaching train about 3/4 mile distant, he lighted a red fusee and gave stop signals. He said the engineer acknowledged his signal by sounding two short blasts on the engine whistle. He estimated the speed of Extra 4580 North as about 25 miles per hour when the engine passed him. After the accident, the remains of exploded torpedoes were found at points 615 feet and 645 feet south of the point of accident, and the remains of a recently burned fusee were found at a point 435 feet south of the point of accident.

As Extra 4580 North was approaching the point where the accident occurred the speed was about 40 miles per hour. The headlight was lighted brightly, and the enginemen were maintaining a lookout ahead from their respective positions in the cab. All the members of the train crew were in the caboose. The engineer was killed in the accident, and it could not be determined when he first became aware that the preceding train was occupying the block. The fireman said that when the aspect displayed by the distant signal for the home signal at MH Block Station became visible to him he called to the engineer the approach indication displayed by this signal. Then the engineer made a light brake-pipe reduction and moved the throttle lever to closed position. The fireman said that no flagging signal was seen or heard by him, and the first he knew of anything being wrong was when the collision occurred. The members of the train crew thought the brakes were applied in emergency immediately prior to the collision. The brakes of this train had been tested and had functioned properly en route.

The operator at FD Block Station said that as Extra 4580 North was approaching the home signal at his station this signal was displaying a permissive-block indication, because Extra 3572 North had not cleared the block. He understood that, under this condition, before the following train was permitted to enter the block, he was required to obtain proper authority from the operator at MH Block Station and then to admit the train to the block only under authority of a permissive-block indication. In this case, the operator at FD Block Station did not communicate with the operator at MH Block Station to obtain block authority for Extra 4580 North to enter the block. When the engine of that train was

closely approaching the home signal he operated the lever in control of this signal to position for a stop indication to be displayed, because he had just received a train order involving track conditions for delivery to Extra 4580 North. As soon as this train had acknowledged this signal, he intended to operate the lever to position for the signal to display a permissive-block indication, but he erroneously placed the lever in position for the signal to display a clear-block indication. He was not aware of his error until about 10 minutes after Extra 4580 North had entered the block. He then communicated with the operator at MH Block Station and informed him of the situation. The operator at MH Block Station was proceeding toward the location of the engine of Extra 3572 North to inform the crew that Extra 4580 North had entered the block under clear-block authority when the collision occurred.

Cause

It is found that this accident was caused by admitting a following freight train to an occupied manual block under a clear-block indication.

Dated at Washington, D. C., this seventh day of April, 1948.

By the Commission, Commissioner Patterson.

W. P. BARTEL,

(SEAL) Secretary.