INTERSTATE COMMERCE COMMISSION

WASHINGTON

INVESTIGATION NO. 2844

THE PENNSYLVANIA RAILROAD COMPANY

REPORT IN RE ACCIDENT

NEAR NEWPORT, PA., ON

NOVEMBER 14, 1944

SUMMARY

Railroad:	Pennsylvania		
Date:	November 14, 1944		
Location:	Newport, Pa.		
Kind of accident:	Head-end collision and wreckage struck by train moving on adjacent track		
Trains involved:	Freight	: Freight	: Passenger
Train numbers:	Extra 6977 East	: Extra 6826 West	: Passenger Extra 122 West
Engine numbers:	6977	: 6826-6937	: 122
Consist:	102 cars, caboose	: 81 cars, caboose	: 10 cars
Estimated speed:	Standing	: 20 m. p. h.	: 30 m. p. h.
Operation:	Movements with current of traffic by automatic block and cab-signal systems; movements against current of traffic by train orders and manual block system		
Tracks:	Four; 1° curve; 0.14 percent ascending grade westward		
Weather:	Clear		
Time:	About 9:36 p. m.		
Casualties:	19 injured		
Cause:	Failure of the Pennsylvania Railroad Company to provide adequate safeguards for movement of trains against current of traffic		
Recommendation:	The Pennsylvania Railroad Company should revise its operating practices so as to provide adequate protection for movement of trains against current of traffic		

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 2844

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

THE PENNSYLVANIA RAILROAD COMPANY

January 10, 1944.

Accident near Newport, Pa., on November 14, 1944, caused by failure of the Pennsylvania Railroad Company to provide adequate safeguards for the movement of trains against the current of traffic.

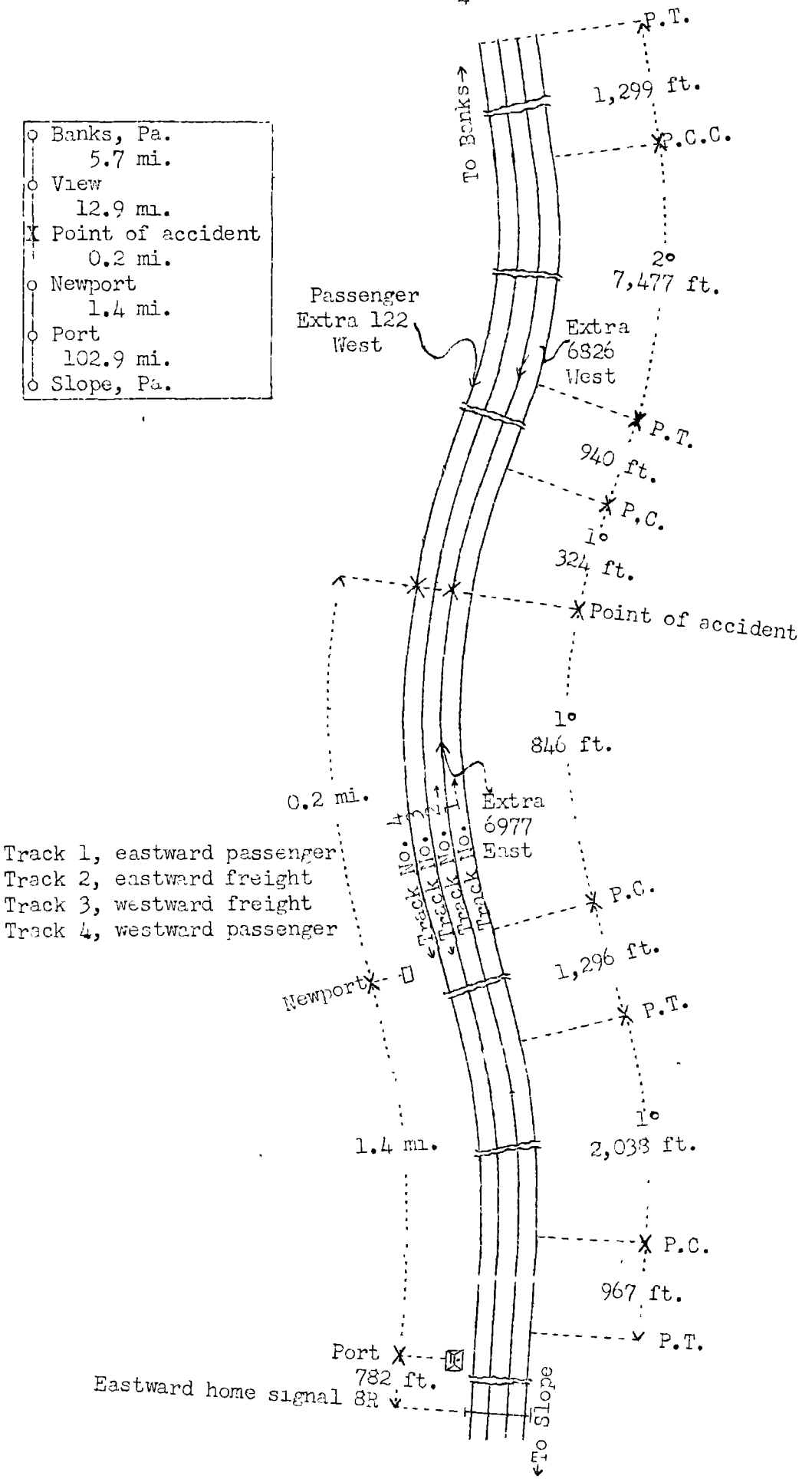
REPORT OF THE COMMISSION[1]

PATTERSON, Commissioner:

On November 14, 1944, there was a head-end collision between two freight trains, and the wreckage was struck by a passenger train on the Pennsylvania Railroad near Newport, Pa., which resulted in the injury of 12 passengers, 2 Pullman employees and 5 train-service employees. This accident was investigated in conjunction with a representative of the Pennsylvania Public Utility Commission.

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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. 2344
Pennsylvania Railroad
Newport, Pa.
November 14, 1944

Location of Accident and Method of Operation

This accident occurred on that part of the Middle Division extending eastward from Slope, near Altoona, to Banks, near Harrisburg, Pa., 123.1 miles. In the vicinity of the point of accident this was a 4-track line over which trains moving with the current of traffic were operated by automatic block and cab-signal systems, and trains moving against the current of traffic were operated by train orders and a manual-block system. The main tracks from south to north were designated as No. 1, eastward passenger, No. 2, eastward freight, No. 3, westward freight, and No. 4, westward passenger. The accident occurred 104.5 miles east of Slope, at a point 0.2 mile east of the station at Newport. The freight trains were moving in opposing directions on track No. 2, and the passenger train was moving westward on track No. 4. From the west there were, in succession, a tangent 967 feet in length, a 1° curve to the left 2,038 feet, a tangent 1,296 feet, and a 1° curve to the right 846 feet to the point of accident. From the east there were in succession, a tangent 1,299 feet in length, a compound curve to the right 7,477 feet, the maximum curvature of which was 2°, a tangent 940 feet and a 1° curve to the left 324 feet to the point of accident. At this point the grade was 0.14 percent ascending westward.

Interlockings were located at Port and at View, respectively, 1.4 miles west and 13.1 miles east of Newport. Eastward home signal 8R at Port, which governed east-bound movements entering the interlocking on track No. 2, was mounted on a signal bridge 782 feet west of the tower. This signal was of the position-light type and was continuously lighted. The involved aspect and corresponding indication and name of this signal was as follows:

Aspect	Indication	Name
Three lights in vertical position	Proceed.	Clear.

Operating rules read in part as follows:

> 102. When a train is disabled or stopped suddenly by an emergency application of the air brakes or other causes, adjacent tracks as well as tracks of other railroads that are liable to be obstructed must be protected at once in both directions until it is ascertained they are safe and clear for the movement of trains.

221b. * * *

Before a train order is issued to hold trains the fixed signal at the point at which the trains are held must be displayed at "stop" for the track and in the direction of the approaching train and the operating lever blocked by the standard blocking device.

Forms of Train Orders

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J

Holding Order

* * *

(5) Hold all ____ward trains clear of ____track between A and B.

When a train has been so held it must not proceed until the order to hold is annulled or an order given to the operator in the form No 2 Eng 592 may go.

These orders will be addressed to the operator and acknowledged in the usual manner except that the response "complete" must not be given by the dispatcher until the operator has placed the fixed signal at "stop" for the track and in the direction of the approaching train at the point at which the train is to be held.

* * *

D-R

Providing for a Movement Against the Current of Traffic

(1) No 1 Eng 461 has right over opposing trains on No 2 track C to F.

* * *

A train must not be moved against the current of traffic until holding orders have been issued and the track on which it is run has been cleared of opposing trains.

Under these orders the designated train must use the track specified between the stations named.

Fixed Signals

* * *

Name	Indication	Aspect	Rule No.
Train-order.	Orders.	Yellow.	294.

Manual Block System

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D-308. When a train is turned out against the current of traffic, manual block system rules must be observed; Rule 316 or 317 to apply as may be designated by special instructions.

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

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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. * * *

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Time-table special instruction No. 2903 provided that Rule 317 was applicable for all movements against the current of traffic in the territory and on the track involved.

The block involved extended between Port and View, 14.5 miles.

The maximum authorized speed for the passenger train was 70 miles per hour, for the freight train moving with the current of traffic, 50 miles per hour, and for the freight train moving against the current of traffic, 40 miles per hour.

Description of Accident

Train order No. 103, Form 19, addressed to the operator at Port and made complete at 8:55 p. m., read as follows:

> Hold all Eastward trains clear of
> No 2 track between Port and View.

Train order No. 104, Form 19, addressed to Extra 6826 West at View and made complete at 8:57 p. m., read as follows:

> Extra 6826 West has right over
> opposing trains on No. 2 track
> View to Port.

Extra 6977 East, an east-bound freight train, consisting of engine 6977, 102 cars, and a caboose, entered the interlocking on track No. 2 at Port, the last open office, under a proceed indication displayed by signal 8R. This signal should have displayed stop. This train proceeded through the interlocking, then soon after the engine had passed the tower the operator gave stop signals with a white light. When the conductor saw these signals he applied the brakes, and the train stopped about 9:25 p. m. with the front end standing about 1.75 miles east of home signal 8R. About 8 minutes later the front end was struck by Extra 6826 West. The tender of the engine and the first two cars of Extra 6977 were derailed, and stopped across track No. 1.

Extra 6826 West, a west-bound freight train, consisted of engines 6826 and 6937, 81 cars and a caboose. At View, the last open office, the crew of this train received copies of train order No. 104 and manual-block authority to proceed on track No. 2 from View to Port. Extra 6826 West passed View at 9:18 p. m. and, about 9:33 p. m., while moving on track No. 2 at an estimated speed of 20 miles per hour it collided with Extra 6977 East. The first six cars of Extra 6826 were derailed, and obstructed all main tracks.

Passenger Extra 122 West, a west-bound passenger train, consisted of engine 122, four tourist sleeping cars, one kitchen car and five tourist sleeping cars, in the order named. All cars were of steel construction. This train passed View at 9:26 p. m., and, about 9:36 p. m., while moving on track No. 4 at an estimated speed of 30 miles per hour, it struck the derailed cars of Extra 6826 West. Passenger Extra 122 was not

derailed, but the left side of each car was considerably damaged and the train was separated at six locations.

It was clear at the time of the accident, which occurred about 9:36 p. m.

The fireman of Extra 6977 East and the engineer of the first engine, the fireman of each engine and the front brakeman of Extra 6826 West were injured.

The standard blocking device provided at Port interlocking for blocking signal levers was a wooden wedge to which a metal clamp and a set screw were attached. This device was applied and removed manually.

Discussion

The rules governing operation on this line provide that movements against the current of traffic may be authorized after a holding order has been issued and the track on which the movement to be made has been cleared of opposing movements. The fixed signal, where provided at the point at which trains are to be held, must be displayed at stop for the track involved and in the direction of the approaching train, and the operating lever blocked by the standard blocking device. In addition, manual block-system rules must be observed. All the employees concerned understood these requirements. During the 30-day period preceding the day of the accident three movements against the current of traffic were made between View and Port. On the day of the accident Extra 6826 West was operated against the current of traffic on track No. 2 because of congestion on tracks Nos. 3 and 4.

Order No. 103, which was addressed to the operator at Port and sent to Port at 8:55 p. m., required the operator at that point to hold east-bound trains clear of track No. 2. Order No. 104, which was sent to the operator at View at 8:57 p. m., authorized Extra 6826 West to proceed against the current of traffic on track No. 2 from View to Port. At 9:02 p. m. the operator at View received block authority from the operator at Port to admit Extra 6826 West to the block. Several minutes later the crew of Extra 6826 West received copies of train order No. 104 and manual-block authority to proceed. This train passed the block station at View on track No. 2 at 9:18 p. m. About 9:23 p. m. Extra 6977 East, moving on track No. 2, passed eastward home signal 8R at Port under a proceed indication. Soon after the engine of this train had passed the tower the operator discovered that he had erroneously permitted the signal to display proceed for Extra 6977, and he gave stop signals with a white light. When the caboose was passing the

tower the conductor saw the stop signals, and he made a service brake-pipe reduction. The train stopped about 9:25 p. m., with the front end standing about 1.6 miles east of the tower. About 9:33 p. m. Extra 6826 West struck Extra 6977 East, and about 3 minutes later the wreckage was struck by Passenger Extra 122 West, which passed View at 9:26 p. m.

The operator at Port said that about 5 minutes before he copied order No. 103, which required him to hold eastward trains clear of track No. 2, he had placed the lever controlling signal 8R in position to display proceed for the movement of Extra 6977 East on track No. 2. The operator said he probably had erroneously applied the blocking device to a lever other than the lever controlling signal 8R, and just prior to the time he copied order No. 103, he informed the dispatcher that the lever was in position for signal 8R to display stop, and that he had applied the blocking device to the lever. After Extra 6977 East had been stopped, the train dispatcher and the operators at Port and View made unsuccessful attempts to communicate by telephone with other employees to instruct them to flag the west-bound trains.

The enginemen and the front brakeman of Extra 6977 East said that when their train stopped there was no indication of any defective condition of the train, and they were not aware of anything being wrong until several minutes later when the enginemen observed that the cab signal was displaying a restrictive indication, then flag protection was immediately provided on all tracks. A west-bound train moving on track No. 3 stopped in response to flagging signals, but the enginemen of Extra 6826 West and Passenger Extra 122 West did not see the flagging signals until too late to avert the collision.

The issuance of the holding order addressed only to the operator at Port, together with the issuance of the order addressed to Extra 6826 West at View authorizing that train to operate against the current of traffic from View to Port, was in accordance with the rules of the carrier. The operator was not required to display the train-order signal for the holding order addressed only to the operator at Port, but he was required to display the home signal, located 782 feet west of the tower, at stop, and to apply the blocking device to the lever controlling that signal. This method of issuing train orders is the single-order system. If the double-order system had been in use on this line, the order received by Extra 6826 West would have been addressed to east-bound trains at Port, and the operator at Port would have been required to display the train-order signal against east-bound trains on track No. 2 before he repeated the order to the dispatcher. Under such a system the safety of the movement of Extra 6826 West would not have depended entirely upon the memory of the operator at Port to apply

and to keep a blocking device on a lever controlling a certain interlocking signal. At Port there was only one train-order signal for eastward movements, and it governed east-bound trains on both track No. 1 and track No. 2.

The manual-block rules of this carrier require the operator to display a stop signal, where provided, when he grants block authority for a train to enter the block at the opposite end. There was no fixed signal at Port for manually blocking of trains other than the interlocking home signals, and it was permissible for the operator to remove the blocking device from a controlling signal lever to display a signal at other than stop position to permit movements to tracks other than the track to which the holding order applied. In this case it was intended that Extra 6977 East would proceed from track No. 2 to track No. 1 at Port after an east-bound passenger train had passed Port on track No. 1, and to arrange for this movement, the operator would have been required to remove the blocking device to clear the home signal.

The freight trains involved in this accident were being operated on a track on which the automatic block and cab signal systems were not designed to provide protection for opposing movements, and the protection intended to be provided by the manual-block system which was in use for such movement not only was not equivalent to the protection provided for movements in the normal direction of traffic but in this case it was nullified in the circumstances here under consideration. If the track involved had been signalled for movements in both directions, or if a train-order signal had been displayed at stop at Port for east-bound trains on track No. 2, or if train order No. 103 or No. 104 had been delivered to Extra 6977 East at Port, this accident would not have occurred.

The situation in this accident was substantially the same as the one involved in the accident which occurred on the line of this carrier at Seward, Pa., on February 17, 1942. Although the blocking device in the present case was not like the one in the former case, there was the same possibility of error when the use of either was required. In all other respects the facilities and practices were the same in the present case as in the former. In the Commission's report covering the investigation of the former accident it was recommended that the Pennsylvania Railroad Company provide an adequate train-order and manual-block system or other suitable protection for the operation of trains against the current of traffic. The carrier has had about 2-1/2 years since the Commission released the report covering the Seward accident in which to make necessary changes to conform with the recommendation in that report. If such changes had been made, the present accident would not have occurred.

Cause

It is found that this accident was caused by failure of the Pennsylvania Railroad Company to provide adequate safeguards for the movement of trains against the current of traffic.

Recommendation

The Pennsylvania Railroad Company should revise its operating practices so as to provide adequate protection for the movement of trains against the current of traffic. A rule to show cause why it should not do so will be served on said carrier.

Dated at Washington, D. C., this tenth day of January, 1945.

By the Commission, Commissioner Patterson.

W. P. BARTEL,
Secretary.

(SEAL)