INTERSTATE COMMERCE COMMISSION WASHINGTON

REPORT NO. 3563

THE PENNSYLVANIA RAILROAD COMPANY

IN RE ACCIDENT

AT GLENMONT, OHIO, ON

MARCH 26, 1954

SUMMARY

Date:

March 26, 1954

Railroad:

Pennsylvania

Location:

Glenmont, Ohio

Kind of accident:

Rear-end collision

Trains involved:

Freight

: Locomotive

Train numbers.

Extra 9730 South

: Extra 9664

South

Engine numbers:

Diesel-electric

: Diesel-electric units 9664A and 9665A

units 9730A, 9730B, 9732B, and 9727A

144 cars, 2 cabooses:

Estimated speeds:

Standing

: 30 m. p. h.

Operation:

Consist:

Timetable, train orders, and

manual-block system

Track:

Single; tangent; 0.25 percent

ascending grade southward

Weather:

Clear

Time:

1:37 a.m.

Casualties:

4 injured

Cause:

Failure to operate following train in accordance with a permissive-

block signal indication and a

flagman's signals

INTERSTATE COMMERCE COMMISSION

REPORT NO. 3563

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

THE PENNSYLVANIA RAILROAD COMPANY

May 4, 1954

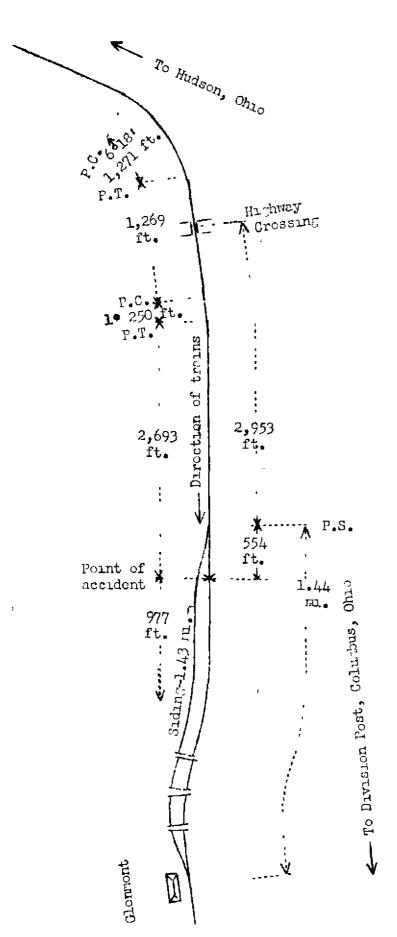
Accident at Glenmont, Ohio, on March 26, 1954, caused by failure to operate the following train in accordance with a permissive-block signal indication and a flagman's signals.

REPORT OF THE COMMISSION

CLARKE, Commissioner.

On March 26, 1954, there was a rear-end collision between a freight train and a locomotive on the Pennsylvania Railroad at Glenmont, Ohio, which resulted in the injury of three train-service employees and one employee not on duty. This accident was investigated in conjunction with representatives of the Public Utilities Commission of Ohio.

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



- Hudson, Ohlo 37.2 m.
- o Orrville 18.5 mi.
- KM
 - 11.0 ra.
- Killbuck 6.1 ri.
- X Glenront (Point of accident) 12.5 12.
- Donyalle
 - 14.7 a.
- Mt. Vernon
- 41.0 rg.
 Division Post,
 Columbus, Ohio

Pennsylvanie Railrord On10 1954 Report No. 3563 Glenmont, ..erch 26, **-** 5 **-** 3563

Location of Accident and Method of Operation

This accident occurred on that part of the Lake Division extending between Hudson and Division Post, near Columbus, Ohio, 141.0 miles. In the vicinity of the point of accident this is a single-track line, over which trains are operated by timetable, train orders, and a manual-block system. At Glenmont, 72.8 miles south of Hudson, a siding 1.43 miles in length parallels the main track on the west. The north switch of this siding is 1.44 miles north of the station. The accident occurred on the main track at a point 554 feet south of the north siding-switch. From the north there are, in succession, a 6°18' curve to the right 1.271 feet in length, a tangent 1.269 feet, a 1° curve to the right 250 feet, and a tangent 2,693 feet to the point of accident and 977 feet southward. At the point of accident the grade is 0.25 percent ascending southward.

The block in which the accident occurred extends between KN block-limit station, 17.1 miles north of Glenmont, and Glenmont. The adjacent northward block extends between Orrville, 35.6 miles north of Glenmont, and KN. The offices at Orrville and Glenmont are open continuously. KN block-limit station is unattended and is controlled by the operator at Glenmont.

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

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.

* * *

289. Permissive-block signal indication -- Block occupied; * * * proceed prepared to stop short of a train or obstruction, but not exceeding 15 miles per hour.

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305. Block signals govern the use of blocks, but unless otherwise provided, do not supersede the superiority of trains, nor dispense with the use and the observance of other signals whenever and wherever they may be required.

At a block-limit station trains will be governed in their use of the block by instructions of the signalman in charge of the block-limit station as indicated on the time-table.

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

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* * * 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. The signalman in charge of a block-limit station may give a train at that block-limit station verbal permission to enter one block. The signalman, when authorized by the superintendent, will issue Clearance Card (Form K) to a train not governed by Clear-block signal to pass one or more block-limit stations as though Permissive-block signal were displayed.

Firemen 400N-7. * * *

They are responsible * * * for assisting the engineman in all things requisite for the safe and prompt movement of their train.

In the vicinity of the point of accident the maximum authorized speed for freight trains is 45 miles per hour.

Description of Accident

Extra 9730 South, a south-bound freight train, consisted of Diesel-electric units 9730A, 9730B, 9732B, and 9727A, coupled in multiple-unit control, 144 cars, and 2 cabooses. This train departed from Orrville, the last open office, at 12:14 a. m. and stopped on the main track at Glenmont about 1:23 a. m. with the rear end at a point 554 feet south of the north siding-switch. About 14 minutes later the rear end was struck by Extra 9664 South.

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Extra 9664 South, a south-round locomotive assigned to helper service, consisted of Diesel-electric units 9664A and 9665A, coupled in multiple-unit control. This locomotive had assisted a north-bound freight train from Danville, 12.5 miles south of Glenmont, to Orrville. En route members of the crew had received train-order authority for their locomotive to run extra Crrville to Glenmont on the return movement. At Orrville the crew received authority to leave Orrville and to pass KN as though permissive-bloosignals were displayed. This locomotive depart() from Orrville at 12:22 a.m., passed the north siding-switch at Glenmont, and while moving on the main track at an estimated speed of 30 miles per hour it struck the roar end of Extra 9730 South.

The caboose at the rear of the train and the rear truck of the second caboose from the rear of Extra 9730 South were derailed. The rear caboose was destroyed, and the other caboose was somewhat damaged. The underframe of the rear caboose overrode the buffer at the front end of the first Diesel-electric unit of Extra 9664 South and telescoped the control compartment. The control compartment was demolished, and the unit was otherwise damaged. This unit stopped with the front end across the rails of the siding and against the underside of the rear caboose of Extra 9730 South. The rear end of the unit was between the rain track and the siding. It leaned toward the west at an angle of about 30 degrees. All wheels of this unit were derailed. No other equipment of either train was derailed.

The conductor of Extra 9730 South and the engineer and the flagman of Extra 9664 South were injured.

The weather was clear at the time of the accident, which occurred about 1.37 a. m.

The Diesel-electric units of Extra 9664 South were equipped with 24RL brake equipment. A safety-control feature actuated by a foot-pedal was provided. An energency brake valve was located on the fireman's side of each control compartment. The control compartment of the first unit was provided with trainphone equipment for communication with similarly equipped locamotives, cabooses, and stations.

Discussion

Under the rules of this carrier, 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, displaying lighted fusees. A train other than a passenger train may be admitted to a block occupied by a preceding freight train only under authority of a permissive-block signal indication. - A train which enters a block under authority of a permissive-block signal indication is required to proceed within that 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, A train authorized by clearance card Form K to pass a blocklimit station as though a permissive-block signal were displayed is similarly restricted in the block in advance of the block-limit station.

Extra 9730 South departed from Orrville at 12:14 a. m. Members of the crew had received clear-block authority between This train had stopped on the main Orrville and Glenmont. track at Glenmont to await the arrival of Extra 9664 South, the helper locomotive which was to assist the train southward. The conductor and the flagman were in the rear caboose. train-service employee who was not on duty was in the second caboose from the rear. The locomotive was in the vicinity of the station, and the rear end of the train was at a point 554 feet south of the north siding-switch. Immediately after the train stopped the flagman alighted from the caboose with flagman's signals and proceeded northward to provide protection. The marker lights were lighted and displayed red to the rear. The flagman said that when he observed the reflection of the headlight of an approaching locomotive he lighted a red fusee and continued to walk northward. He later dropped this fusee and immediately lighted another and proceeded northward, giving stop signals. His signals were not acknowledged, and he did not hear the grade-crossing whistle signal sounded for a highway crossing located 2,953 feet north of the north siding-switch. He said that he did not place torpedoes. helper locomotive was to be coupled to his train at Glenmont, and he did not consider their use necessary. He said that he reached a point north of the north siding-switch and continued to give stop signals as the locomotive was closely approaching,

Immediately before the locomotive bassed he threw the lighted fusee across the track in front of the control compartment in an effort to attract the attention of the enginemen. He estimated that the speed of the locomotive was about 30 miles per hour. He said that the sound of the exhaust of the Diesel engines of the locomotive indicated that power was being used.

Extra 9864 South was on the siding at Orrville when Extra 9730 South departed. The flagman communicated by telephone with the operator immediately after Extra 9730 South departed and obtained block authority for the movement from Orrville to Glemmont. Extra 9664 South departed from Orrville at 12:22 a. π. As this train was approaching the point where the accident occurred the enginemen were in their respective positions in the control compartment at the front of the locomotive. The flagman was in the control compartment at the rear. The neadlight was lighted brightly. brakes of the locomotive had functioned properly when used Both the trainphone apparatus and the speed en route. indicator in the front control compartment were inoperative. The windows of the control compartment were closed. engineer said that he recalled last using the brakes to control the soced when the locorotive was in the vicinity of Killbuck, but he did not recall taking any action after that time. He did not observe the rear end of the preceding train before the collision occurred. The firenen said that the engineer appeared normal and that the speed of the locomotive had been properly controlled by the use of the brakes at various points en route. He said that im ediately before the locomotive entered the tangent on which the accident occurred he raised his plasses to his fo eccod and wiped his eyes with a handgerslief. He did not recall whether the grade-crossing whistle signal was sounded for the highway crossing immediately north of the point of accident. said that when he had corpleted wiping his eyes he replaced his glasses and then observed the marker lights of the preceding train. He called a warning, but the collision occurred before he could take action to stop the train, estimated that the locomotive had been moving at a speed of about 15 miles per nour immediately before the accident occurred. The flagman said the speed indicator in the rear control compartment indicated a speed of 30 to 35 miles per hour as the locomotive was moving on the curve immediately north of the point of accident. He became concerned, but then decided that other members of the crew had communicated

by trainphone with the crew of the preceding train and had ascertained the location of that train. He said that he was unaware of anything being wrong until the locemotive passed a lighted fusee immediately before the collision occurred.

The engineer of Extra 9664 South said that he did not remember feeling ill before reporting for duty, but he became ill on the north-bound trip between Danville and Orrville. He assumed that he was suffering from an attack of indigestion, and before departing from Orrville he took some bicarbonate of soda. This treatment failed to relieve the condition, and after departing from Orrville he became violently ill. After the accident occurred he was unable to recall at what point he took charge of his locomotive and could recall only scattered details of the north-bound trip. He was able to recall events relating to the south-bound trip insofar as movement from Orrville to Killbuck was concerned, but apparently he had lapsed into a come in the vicinity of Killbuck and could recall no incidents which occurred after the train passed that station.

In tests made between 11:05 p. m. and 11:45 p. m., March 29, 1954, it was found that with a south-bound train standing with the rear end at the point where the accident occurred the marker lights on the caboose were visible from the control compartment of a following locomotive throughout a distance of 4,252 feet immediately north of the point of accident. A lighted fusee placed on the track 450 feet north of the point of accident was visible from the control compartment of a south-bound locomotive throughout a distance of 5,032 feet north of the point of accident.

The engineer of Extra 9664 South entered the service of the carrier as locomotive fireman April 8, 1913, and was promoted to engineer October 16, 1917. He last passed a periodical physical examination by a physician of the medical department of the carrier June 5, 1953. While he was hospitalized for treatment of injuries received in the accident he was found to have an abnormal kidney condition. Laboratory tests disclosed that non-protein nitrogen of the blood was 63.0, the normal limits being 25-35. The physician in charge of his treatment at the hospital stated that such condition could result in the affected individual being dulled mentally or lapsing into a coma. He further stated that the engineer apparently had been suffering from this condition for some period prior to the time of the accident.

<u>Cause</u>

This accident was caused by failure to operate the following train in accordance with a permissive-block signal indication and a flagman's signals.

Dated at Washington, D. C., this fourth day of May, 1954.

By the Commission, Commissioner Clarke.

(SEAL)

GEORGE W. LAIRD,

Secretary.