INTERSTATE COMMERCE COMMISSION WASHINGTON

REPORT NO. 3591

THE PENNSYLVANIA RAILROAD COMPANY

IN RE ACCIDENT

AT EBENSBURG JCT., PA., ON

AUGUST 6, 1954

SUMMARY

Date:

August 6, 1954

Railroad:

Pennsylvania

Location:

Ebensburg Jct., Pa.

Kind of accident:

Side collision

Equipment involved:

Track motor-car

· Freight train

Train number

: Extra 8810 East

Engine number:

: Diesel-electric units 8810 and

8812

Consist:

· 20 cars, caboose

Estimated speeds:

Standing

: 10 m. p. h.

Operation.

Operating rules

Track.

Single; siding, tangent; converging line, 10° curve, 0.70 percent descending grade northward

Weather:

Clear

Time

11:55 a. m.

Casual ties:

l killed

Cause:

Unauthorized use by track motor-car of the track involved, and failure properly to control speed of train in accordance with rules for movement

on secondary track

INTERSTATE COMMERCE COMMISSION

REPORT NO. 3591

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

THE PENNSYLVANIA RAILROAD COMPANY

October 27, 1954

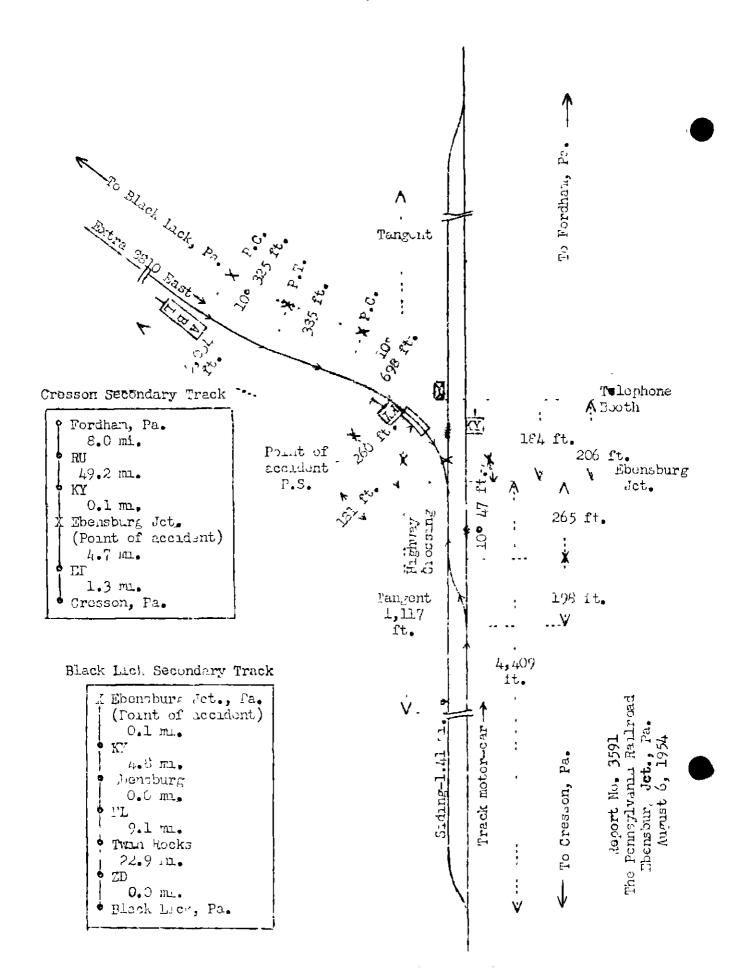
Accident at Ebensburg Jet., Pa., on August 6, 1954, caused by unauthorized use by the track motor-car of the track involved, and by failure properly to control the speed of a train in accordance with rules for movement on a secondary track.

REPORT OF THE COMMISSION

CLARKE, Commissioner;

On August 6, 1954, there was a side collision between a trick motor-car and a freight train on the Pennsylvania Railroad at Ebensburg Jot., Pa., which resulted in the death of one maintenance-of-way employee. This accident was invastigated in conjunction with a representative of the Pennsylvania Public Utility Commission.

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.



Location of Accident and Method of Operation

This accident occurred on that part of the Pittsburgh Division designated as the Cresson secondary track, which extends between Cresson and Fordham, Pa., 63.3 miles. In the vicinity of the point of accident this is a single-track line, over which trains are operated by operating rules and a manual-block system. At Econsburg Jct., 6.0 miles north of Cresson, a siding 1.41 miles in length parallels the main track on the west. A spring switch, normally lined for movements on the Cresson line, is located at the south end of the siding. At a junction switch located in the siding, 4,409 feet north of the south siding-switch, a line converges from the west. This line is designated as the Black Lick secondary track and extends between Black Lick, Pa , and Ebensburg Jct., 36.9 miles. It is a single-track line, over which trains are operated by operating rules and a manual-Timetable directions on the Cresson line are block system north and south, and on the Black Lick line are east and west. A crossover 198 feet in length, which is facing-point for north-bound movements on the Cresson line, connects the Cresson secondary track and the siding at Ebensburg Jct. The north switch of this crossover is located in the siding at a point 265 feet south of the switch at the junction with the Black Lick line. The junction switch is facing-point for north-bound movements on the siding. In normal position it is lined for movements to or from the Black Lick line. The accident occurred 47 feet north of the point-of-switch at the junction. The track of the Cresson line and the siding are tangent throughout a distance of 1,117 feet immediately south of the point of accident and a considerable distance northward. From the west on the Black Lick line there are, in succession, a 10° curve to the left 325 feet, a tangent 385 feet, and a 10° curve to the right 698 feet to the point of accident and 47 feet eastward. The grade is approximately 0.70 percent descending northward at the point of accident.

The switch stand at the junction of the siding and the Black Lick line is of the low-stand ground-throw type. It is located on the west side of the track and is equipped with both white and yellow targets of the flanged-collar type which are fitted around the corresponding lenses of the oil burning switch lamp. When the switch is lined for movement to or from the Black Lick line the white target and a lunar white light are displayed in the direction of approaching trains, and when the switch is lined for movement on the siding the yellow target and yellow light are similarly displayed.

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In the immediate vicinity of the point of accident, a secondary highway parallels the siding on the west. This highway crosses the Black Lick line at grade at a point 181 feet west of the junction switch.

A block-limit station, designated KY, is located on the east side of the Cresson secondary track at a point 184 feet north of the junction switch at Ebensburg Jct. Another block-limit station, also designated KY, is located on the south side of the Black Lick secondary track at a point 260 feet west of the junction switch. An approach block-limit signal is located on the Black Lick secondary track 5,034 feet west of KY block-limit station. All block-limit stations on the Cresson and Black Lick secondary tracks are controlled by the operator at EP, 1.3 miles north of Cresson. The office at EP is open continuously.

A telephone for communication with the block operator is located on the west side of the siding at Ebensburg Jct. and 206 feet north of the junction switch.

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

DEFINITIONS

Speeds

#

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

* * *

Tracks

*

Secondary Track--A designated track upon which trains and engines may be operated without time-table authority, train orders or block signals.

* * *

80. Track cars will run as track car extras, in charge of drivers, governed by rules and special instructions applying to track cars and by the same rules and special instructions as apply to trains other than passenger trains, except as otherwise herein provided. Track car extras will be designated by the last four numerals of track car numbers. * * *

* * *

On tracks governed by Block Signal System Rules, track car extras will run without train orders by verbal permission of the signalmen in charge of the portions of the track to be used. Signalmen must not permit track car extras to enter and proceed on track of no assigned direction * * unless so authorized by the superintendent, and then only when the portion of the track to be used is clear of opposing trains and track car extras, and signals governing opposing rovements display Stop and their levers are blocked by standard blocking devices.

* * *

105. Unless otherwise provided, trains using a siding must proceed at Reduced speed.

* * *

Unless otherwise provided, trains and engines using a secondary track must proceed at Reduced speed unless the track upon which the movement is to be made is seen or known to be clear and switches properly lined.

A secondary track upon which trains and engines are operated ir both directions must not be used without permission of the employe in charge of such track. * * *

* * *

Timetable special instructions read in part as follows:

1156-A9, Ebensburg Jct. Siding will be used by Southward trains from Black Lick Secondary track.

Timetable special instructions provide that between EP and RU, 54.0 miles north of EP on the Cresson secondary track, and between KY and ZD, 36.5 miles west of KY on the Black flick secondary track, rules for movement by train orders do not apply. All other rules as they apply to main tracks and sidings are in effect. Extra trains, except passenger extras, run on verbal permission of the operator as EP when authorized by the superintendent, authority for movement of passenger extras must be in writing. Timetable special instructions also provide that manual block signal system rules are in effect in these districts.

The maximum authorized speed for Freight trains in the vicinity of the point of accident is 20 miles per nour. The maximum authorized speed for track motor-cars is 20 miles per hour.

Description of accident

Track Car Extra 4816 North, a north-bound track motor-cal, coupled by a track foreman and two trackmen, departed from EP block station, the last open office, at 11 38 a. m. The block signal at EP indicated Proceed for this movement. The track motor-car proceeded to Ebensburg Jot., entered the siding at the crossover immediately south of the junction with the Black Lick line, then moved northward on the siding and stopped 47 feet north of the point of the junction switch A few seconds later it was struck by Extra 8810 East.

Extra 8810 East, an east-bound freight train, consisted of Diesel-electric units 8810 and 8812, coupled in multiple-unit control, 20 cars, and a caboose. This train departed from Twin Rocks, on the Black Lick line, 14 miles west of the point of accident, at 1 16 a m, according to the block record maintained at EP, proceeded eastward with clear-block authority through intervening blocks to KY block-limit station, passed the block-limit station at KY, and while moving at an estimated speed of 10 miles per hour it struck Track Car Extra 4816 North.

The track motor-car was moved southward on the siding a distance of approximately 200 feet to the point at which the front end of Extra 8810 East stopped. It was destroyed. The front end of the locomotive of Extra 8810 East was slightly damaged.

The track foreman, who was operating the track motor-car, was killed.

The weather was clear at the time of the accident, which occurred about 11.55 a.m.

Track motor-car 4816 was of the friction wheel, chain-drive type. It was powered by an 8 to 10-horsepower engine. It was provided with a metal top, and with windshields at front and rear ends. It had seating capacity for 10 persons and weighed approximately 1,500 pounds.

The locomotive of Extra 8810 East was equipped with trainphone apparatus for communication with similarly equipped locomotives, cabooses, and stations. Trainphone apparatus was provided in the block station at EP.

Diesel-electric units 8810 and 8812 are of the road-switcher type.

Discussion

The rules of this carrier provide that track motor-cars will run as track car extras and, unless otherwise provided, are governed by the rules and special instructions which apply to trains other than passenger trains. On designated portions of both the Cresson secondary track and the Black Lick secondary track extra trains, except passenger extras, are operated without train orders, and movements are authorized verbally by the train dispatcher through the operator at EP. block signal system rules are in effect in these districts. KY block-limit station on the Cresson secondary track and KY block-limit station on the Black Lick secondary track are considered as two separate stations. The block immediately south of KY extends between KY block-limit station on the Cresson secondary track and EP, and the block immediately west of KY extends between KY block-limit station on the Black Lick secondary track and FL, 4.8 miles west of KY. The portion of track between KY block-limit station on the Block Lick secondary track and the siding at Ebensburg Jot. is not within block signal system limits and may be used only after permission has been received from the operator at EP, as prescribed by rule No. 105. Employees are instructed that a siding must not be used without the permission of the operator, and the rules prescribe that, unless otherwise provided, movements on a secondary track or a siding must be made at reduced speed.

On the day of the accident a track foreman and two members of the track force at Ebensburg were assigned to operate track motor-car 4816 from Cresson to Ebensburg. Ebensburg is on the Black Lick line, 4.9 miles west of the point of accident. Track Car Extra 4816 North departed from Cresson at 11:28 a. m. and proceeded to EP. The track foreman in charge of the movement proceeded to the block station. The operator at EP communicated by telephone with the train dispatcher and reported the arrival of the track motor-car. The dispatcher instructed the operator to ascertain the location of Extra 8810 East, which was moving on the Black Lick line, and soon afterward the operator reported that he was unable to communicate by trainphone with the train. dispatcher then directed him to issue instructions to the track foreman that Track Car Extra 4816 North was to proceed and to hold the rain track at KY block-limit station, and that the foreman was to report by telephone immediately after arrival The operator gave the foreman these instructions at that point and informed him that the train on the Black Lick line had clear-block authority to KY block-limit station and would be routed through the south end of the siding at Ebensburg Jct. He said that the foreman correctly repeated the instructions and conversed briefly with him before leaving. The operator cleared the block signal, and the track motor-car departed northward at 11.38 a. m.

As the track motor-car was approaching the point where the accident occurred it was being operated by the track foreman from his position on the left side of the car. trackmen who accompanied him were seated on the opposite side of the car. They said they had observed that the block signal at EP indicated Proceed before their departure. foreman did not inform them of the instructions he had received at the block station. The track motor-car was stopped clear of the crossover at Ebensburg Jct., and the trackman at the front end alighted and lined the crossover switches for movement to the siding. He said that it was the usual practice for track motor-cars to enter the siding and clear trains on the north end of the siding at this point and he lined the switches without waiting for orders from the The track motor-car then entered the crossover. it moved northward the trackman at the rear alighted, restored the south crossover-switch to normal position, and again boarded the track motor-car. The trackman who was in the vicinity of the north crossover-switch restored the switch to normal position after the track motor-car passed. He said that when he heard the sound of the approaching train he called a warning to the other employees. The foreman reduced the speed of the track motor-car as it approached the junction switch and instructed the trackman on the car to run anead and

line the switch for movement on the siding. The trackman alighted and ran to the switch. He said that after he had reversed the switch he heard the grade-orossing whistle signal sounded and realized that a train was closely approaching. He immediately warned the track foreman. The track motor-car was moving over the switch points when he observed the locomotive of the approaching train approximately 180 feet distant. He said that the track foreman placed the track motor-car in reverse gear and he thought the car was stopped before the collision occurred.

As Extra 8810 East was approaching the point where the accident occurred the enginemen were maintaining a lookout ahead from their respective positions in the control compartment of the first Diesel-electric unit. The conductor was in the control compartment of the second Diesel-electric unit, and the other members of the train crew were in the caboose. The brakes of this train had been tested and had functioned properly when used en route. The engineer said that when the locomotive was in the vicinity of the approach block-limit signal, approximately 1 mile west of Ebensburg Jct., he communicated by trainphone with the operator at EP and informed him that the train was approaching KY blocklimit station. The operator informed him that because an opposing movement was en route to Ebensburg Jct., block authority could not be given for the train to proceed beyond that point. The operator said that the engineer then requested and received permission for the train to proceed to the south end of the siding. The engineer said that the operator did not identify the opposing movement and he did not expect to find the siding occupied by a track motor-car. He estimated that the speed of the train was about 10 miles per hour as it moved on the curve immediately west of the point of accident. Because of track curvature and vegetation adjacent to the track, the enginemen's view of the track ahead from the control compartment of a locomotive approaching the point of accident from the west is materially restricted. The bell was ringing, and the grade-crossing whistle signal was sounded throughout a distance of approximately 1,000 feet before the locomotive occupied the rail-highway grade crossing immediately west of the point of accident. The engineer said that after the locomotive entered the crossing he observed the track motor-car moving northward on the siding and he immediately made an emergency application of the brakes. He then observed that the junction switch was lined for movement on the siding. He said that the track motor-car continued to move northward until it was struck by the locomotive. The speed of the train was reduced somewhat before the collision occurred, but the

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locomotive and the forward portion of the train trailed through the junction switch and stopped on the siding with the front end about 150 feet south of the switch.

During the investigation of this accident it developed that there was considerable confusion and difference of opinion as to the operating practices and requirements at the location involved. The train dispatcher and the operator said they understood that the instructions issued to the track foreman authorized the movement of the track motor-car from EP to KY block-limit station on the Cresson secondary track only and that further authority was required before the track motor-car was permitted to occupy any track except this track at Ebensburg Jct. They said that permission for the train to pass KY block-limit station on the Black Lick secondary track and proceed to the south end of the siding was intended to convey the information that the track between these points The track foreman was killed in the accident, and his understanding of the requirements pertaining to the movements at Ebensburg Jct. is not known. The conductor of Extra 8810 East said he understood that permission to use the siding was required but that such permission did not indicate that the track was clear. The engineer said he understood that when he received permission to proceed to the south end of the siding the track between KY block-limit station and the end of the siding would be clear. He also understood the requirement that, unless otherwise provided, a train using a secondary track or a siding must be operated at reduced speed. He said that he thought the train was being so operated immediately before the accident and that after the train brakes were applied the track motor-car continued to move northward until the collision occurred. However, the fact that the engineer applied the brakes immediately after he saw the track motor-car and the train then moved approximately 200 feet after the collision occurred indicates that it was not being operated in such manner that it could be stopped short of an obstruction.

Because of the conditions disclosed by this investigation, the carrier should promptly take necessary steps to clarify the rules and instructions governing operation in this territory.

Cause

This accident was caused by unauthorized use by the track motor-car of the track involved, and by failure properly to control the speed of the train in accordance with rules for movement on a secondary track.

Dated at Washington, D. C., this twenty-seventh day of October, 1954.

By the Commission, Commissioner Clarke.

(SEAL)

GEORGE W. LAIRD,

Secretary.