

INTERSTATE COMMERCE COMMISSION
WASHINGTON

INVESTIGATION NO. 9091
THE MONONGAHELA CONNECTING RAILROAD COMPANY
REPORT IN RE ACCIDENT
NEAR ELBA TOWER, PITTSBURGH, PA., ON
MAY 6, 1946

SUMMARY

Railroad: Monongahela Connecting
Date: May 6, 1946
Location: Elba Tower, Pittsburgh, Pa.
Kind of accident: Rear-end collision
Movements involved: Engine and cars : Engine and cars
Engine numbers: 175 : 66
Consists: 18 cars : 3 cars, caboose
Estimated speeds: Standing : 5 m. p. h.
Operation: Operating rules
Tracks: Two; tangent; 1 percent
ascending grade eastward
Weather: Raining
Time: 11:55 p. m.
Casualties: 1 killed; 5 injured
Cause: Failure to provide adequate safe-
guards for movements involved
Recommendation: That the Monongahela Connecting
Railroad Company provide adequate
safeguards for the operation of
movements on its line

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 2991

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

THE MONONGAHELA CONNECTING RAILROAD COMPANY

June 14, 1946.

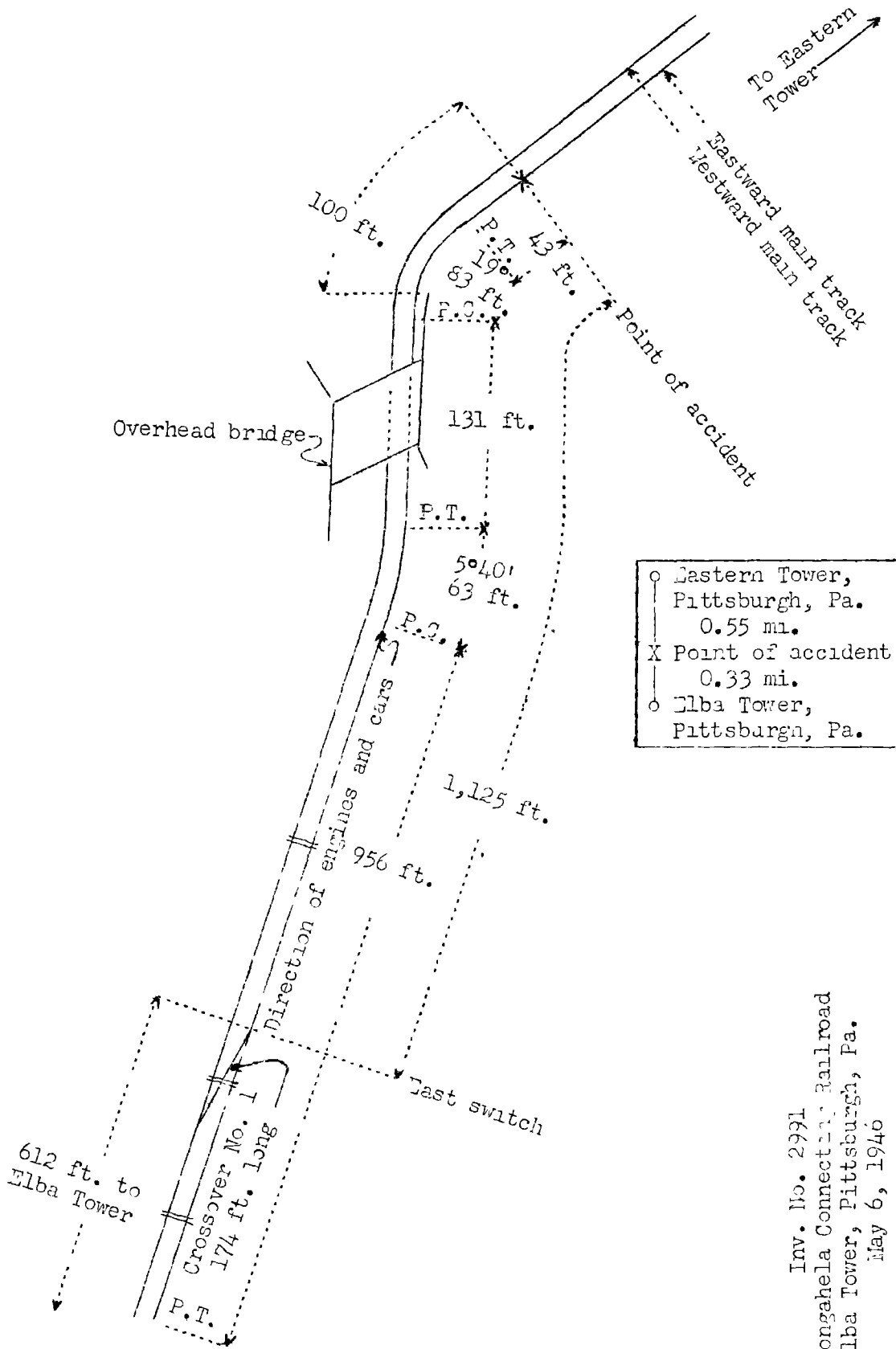
Accident near Elba Tower, Pittsburgh, Pa., on May 6, 1946,
caused by failure to provide adequate safeguards for
movements involved.

REPORT OF THE COMMISSION¹

PATTERSON, Commissioner:

On May 6, 1946, there was a rear-end collision between a yard engine pushing cars and another yard engine pushing wrecking equipment on the Monongahela Connecting Railroad near Elba Tower, Pittsburgh, Pa., which resulted in the death of one train-service employee, and the injury of five employees.

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.



Inv. No. 2991
Monongahela Connecting Railroad
Elba Tower, Pittsburgh, Pa.
May 6, 1946

Location of Accident and Method of Operation

This accident occurred on that part of the railroad which extends between Elba Tower and Eastern Tower, Pittsburgh, Pa., 0.88 mile. Between these points and between industrial yards which lie to the north and to the south, there are two tracks designated as the eastward and the westward main tracks, over which yard movements are authorized by operating rules and oral instructions. There are no time-table schedules in effect, and there is no block system in use. The accident occurred on the eastward main track 0.33 mile east of Elba Tower. From the west there are, in succession, a tangent 956 feet in length, a $5^{\circ}40'$ curve to the left 63 feet, a tangent 131 feet, a 19° curve to the right 83 feet, and a tangent 43 feet to the point of accident and some distance eastward. At the point of accident, the grade for east-bound movements is 1 percent ascending.

Crossover No. 1, a trailing-point crossover, connects the two main tracks and is 174 feet in length. Its east switch is 612 feet east of Elba Tower and 1,125 feet west of the point of accident. The south abutment of an overhead bridge parallels the eastward main track on the south, and is 10 feet horizontally distant. The east end of the abutment is 100 feet west of the point of accident.

Operating rules read in part as follows:

22. Each engine operating after sunset, or when obscured by fog or other causes, must display the headlight in front or the light in rear of engine or tender. All crews will carry a red lantern to be used as a marker following the direction the engine is going to indicate the rear end at night * * *

56. When a train is stopped by an accident or obstruction, the brakeman must immediately go back with danger signals to stop any train moving in the same direction. * * *

67. No train, engine, crane, truck or other equipment will occupy or run over the main tracks without authority from Dispatcher, Yardmaster or Towerman.

The maximum authorized speed is 25 miles per hour.

Description of Accident

Yard engine 175, a Diesel-electric engine, was pushing a cut of 18 cars. This movement passed Elba Tower at 11:39 p. m. and stopped on the eastward main track about 11:45 p. m. with the rear end of the engine 1,737 feet east of Elba Tower. About 10 minutes later the rear end was struck by equipment which was being pushed by yard engine 66..

Yard engine 66, a steam engine headed west, was pushing wrecking equipment. This movement from east to west consisted of a caboose, one box car, one flat car loaded with car trucks, one wrecking crane and engine 66. This movement entered the eastward main track at crossover No. 1 about 11:50 p. m., and was moving at an estimated speed of about 5 miles per hour when it struck yard engine 175.

The west end of the caboose and the east end of the first car of yard engine 66 were telescoped. The front pair of wheels of the first car were derailed. None of the equipment of yard engine 175 was derailed or damaged.

A light rain was falling at the time of the accident, which occurred about 11:55 p. m.

The front brakeman of yard engine 66, who was in the caboose, was killed.

The caboose of yard engine 66 is of wood construction, except for steel reinforcement of the center-sill. It is equipped with a combination back-up valve and alarm whistle, which is attached in a horizontal position by an elbow to a vertical branch pipe, and is located about 4 inches above the end-platform railing. The back-up valve is so arranged that when a push-button is operated air is vented through the whistle for warning purposes, and the whistle itself serves as an angle-cock. When the whistle is turned to either side it vents brake-pipe air to the atmosphere and the train air-brakes become applied.

Discussion

Yard engine 175, which was pushing a cut of 18 cars, stopped on the eastward main track about 11:45 p. m., with the rear of the engine standing 1,737 feet east of Elba Tower, and 43 feet east of a 19° curve to the right. About 10 minutes later the rear of the engine was struck by wrecking equipment.

The wrecking equipment involved was being pushed by engine 66, which was headed west. About 11:50 p. m. this movement entered the eastward main track at crossover No. 1, located 1,125 feet west of the point of accident. As this movement

approached the point where the accident occurred, the speed was about 8 miles per hour. The conductor and one brakeman were maintaining a lookout ahead from the east platform of the caboose, and another brakeman was inside the caboose. The engineer was maintaining a lookout toward the east and the fireman was on the deck tending the fire. The conductor said that the first he was aware of anything being wrong was when he saw the dimmed headlight at the rear of engine 175 about 120 feet distant. He immediately attempted to open the back-up valve to apply the train brakes. However, the pipe connection of the valve was loose and the valve arrangement turned instead of becoming open. Then the conductor jumped off to the north and proceeded about 30 feet to the north because of the track curvature, and gave stop signals to the engineer with a lighted white lantern. Immediately upon seeing these stop signals the engineer of engine 66 moved the brake valve to emergency position. The speed was about 5 miles per hour at the time of the collision. The brakeman, who was on the platform with the conductor, jumped off to the south and gave stop signals to the fireman. These latter signals were not observed as the fireman was tending the fire. Because of sharp curvature and the south abutment of an overhead bridge, the view of the point of accident from the west was restricted to a distance of about 120 feet.

After the accident, examination disclosed that the back-up valve could be operated only with considerable effort, but the assembly moved easily in the threads of the branch-pipe connection. The conductor said that if he had been able to apply the brakes immediately upon observing the preceding movement, the following movement could have been stopped short of the point of accident. Further examination disclosed that the brake on the first car was inoperative because the cut-out cock was closed. The brake of the second car would not apply with a service application, but would apply with an emergency application.

The rules and instructions of this railroad provide that movements over tracks designated as main tracks may be authorized orally by the yardmaster, the dispatcher or the towerman at the point of entry. Where home signals are used at towers, movements may be authorized by signal indication. Home signals do not indicate track occupancy, as the tracks are not provided with circuits. In this instance, yard engine 66 entered the eastward main track at a point where the movement was not controlled by signal indications. There is no definite rule or instruction which prescribes the manner in which a movement may be made on tracks designated as main tracks. Flag protection is not required unless a movement is stopped by an obstruction or as a result of an accident. Employees involved and officials did not have a common understanding of what constituted an obstruction. Some thought that a movement stopped on a main

track constitutes an obstruction, while others thought a main track must be blocked as a result of an accident before flag protection is required. The trainmaster and these employees said that when a main track is occupied it is customary to inform crews of following movements of such condition. The employees said if they are not instructed that a main track is occupied by a preceding movement they assume that the track is clear. However, without receiving information about a movement on the main track, they have occasionally found such movement on the track over which their train had authority to operate. The dispatcher said that he does not in each instance instruct crews of following movements that the track is occupied. In the instant case, no member of the crew of yard engine 66 was instructed by either the dispatcher or the towerman at Elba Tower that the eastward main track was occupied by yard engine 175.

There was no rule that definitely required the crew of the preceding movement to furnish rear-end protection, and there was no rule that definitely required anyone to inform the crew of the following movement about the existence of the first movement. From this it is evident that the movements were not properly safeguarded.

Cause

It is found that this accident was caused by failure to provide adequate safeguards for movements involved.

Recommendation

It is recommended that the Monongahela Connecting Railroad Company provide adequate safeguards for the operation of movements on its line.

Dated at Washington, D. C., this fourteenth day of June, 1946.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,
Secretary.