

INTERSTATE COMMERCE COMMISSION  
WASHINGTON

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INVESTIGATION NO. 3082  
THE PENNSYLVANIA RAILROAD COMPANY  
REPORT IN RE ACCIDENT  
NEAR KISKIMINETAS JCT., PA., ON  
MARCH 2, 1947

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SUMMARY

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Railroad: Pennsylvania  
Date: March 2, 1947  
Location: Kiskiminetas Jct., Pa.  
Kind of accident: Rear-end collision  
Trains involved: Freight : Freight  
Train numbers: Extra 4268 East : Extra 4372 East  
Engine numbers: 4268 : 4372  
Consists: 57 cars, caboose : 48 cars, caboose  
Estimated speeds: Standing : 15 m. p. h.  
Operation: Signal indications  
Track: Double; 3° curve; 0.5 percent  
descending grade eastward  
Weather: Clear  
Time: 6:27 p. m.  
Casualties: 1 killed; 1 injured  
Cause: Failure to operate following train  
in accordance with signal indications

INTERSTATE COMMERCE COMMISSION

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INVESTIGATION NO. 3082

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

THE PENNSYLVANIA RAILROAD COMPANY

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April 9, 1947.

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Accident near Kiskiminetas Jct., Pa., on March 2, 1947,  
caused by failure to operate the following train  
in accordance with signal indications.

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REPORT OF THE COMMISSION<sup>1</sup>

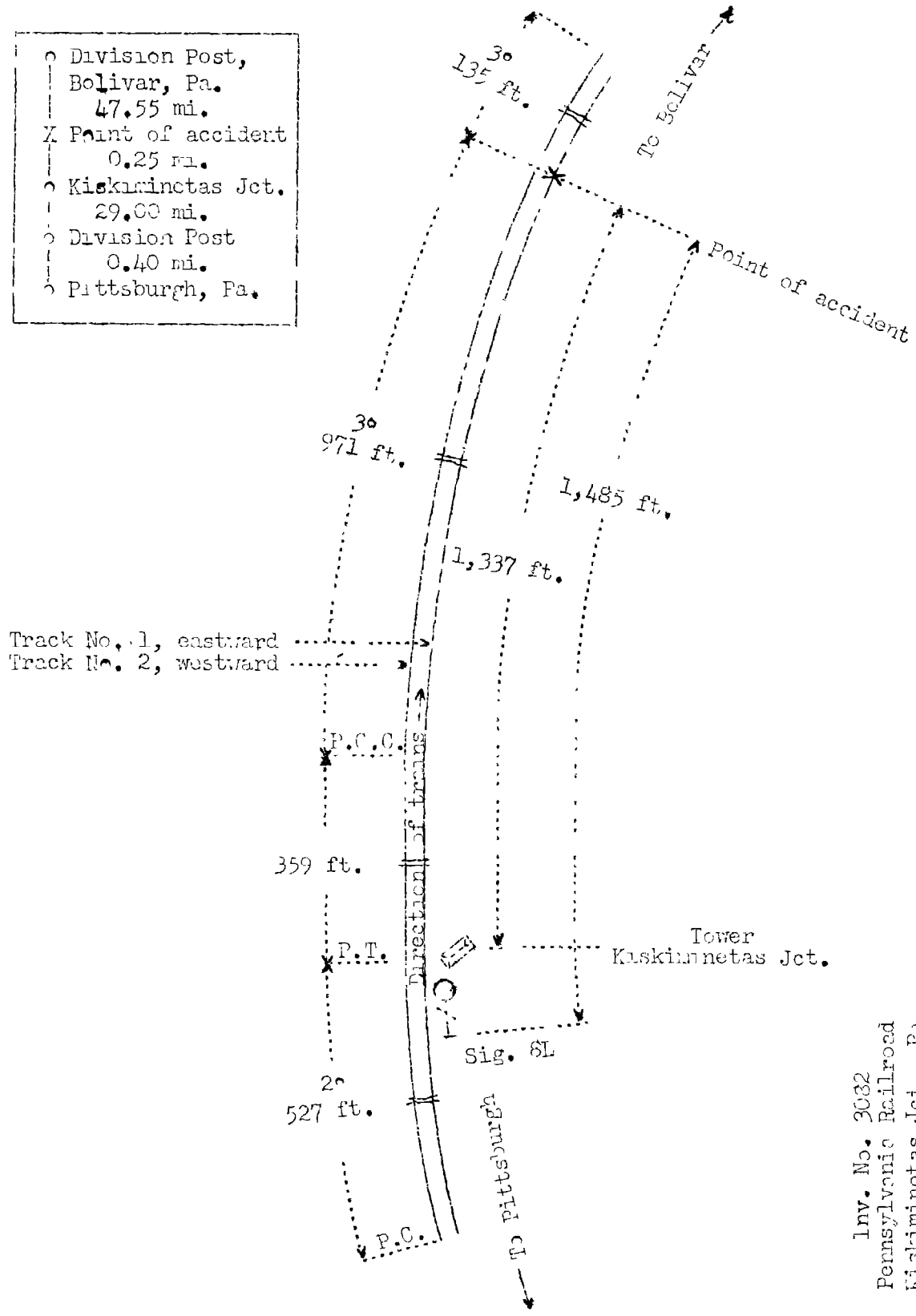
PATTERSON, Commissioner:

On March 2, 1947, there was a rear-end collision between two freight trains on the Pennsylvania Railroad near Kiskiminetas Jct., Pa., which resulted in the death of one employee, and the injury of one employee.

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<sup>1</sup> 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.

- o Division Post, Bolivar, Pa. 47.55 mi.
- X Point of accident 0.25 mi.
- o Kiskiminetas Jct. 29.00 mi.
- o Division Post 0.40 mi.
- o Pittsburgh, Pa.



Inv. No. 3032  
 Pennsylvania Railroad  
 Kiskiminetas Jct., Pa.  
 March 2, 1947

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 Bolivar, Pa., 76.8 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 cab-signal indications. The main tracks from south to north are designated as No. 1, eastward, and No. 2, westward. The accident occurred on track No. 1, at a point 29.65 miles east of Pittsburgh and 1,337 feet east of the tower at Kiskiminetas Jct. From the west on track No. 1 there are, in succession, a 2° curve to the right 527 feet in length, a tangent 359 feet and a compound curve to right, the maximum curvature of which is 3°, 971 feet to the point of accident and 135 feet eastward. At the point of accident the curvature is 1°. The grade is 0.5 percent descending eastward.

Home signal 8L, governing east-bound movements within interlocking limits on the eastward main track at Kiskiminetas Jct., is 1,485 feet west of the point of accident. This signal is of the two unit, four-indication, position-light type, and is controlled from the tower at Kiskiminetas Jct. The cab signals are of the four-indication, position-light type. The involved aspects and corresponding indications and names of these signals are as follows:

<u>Signal</u>	<u>Aspect</u>	<u>Indication</u>	<u>Name</u>
8L	Three white lights in horizontal position over three white lights in diagonal position to the left	Proceed at Restricted speed.	Restricting.
Cab signal	Two white lights in diagonal position to the left	Proceed at Restricted speed.	Restricting.

The controlling circuits are so arranged that, when an east-bound train is occupying track No. 1 in the block immediately east of signal 8L and the route is aligned for movement on track No. 1, signal 8L and the cab signals of a following train will display proceed-at-restricted-speed. The cab signal equipment includes an audible warning signal and an acknowledging lever located on the right side of the engine cab. When an engine enters restricted territory and the visual signal changes to a more restricting indication, the audible signal sounds until the acknowledging lever is placed in acknowledging position.

Operating rules read in part as follows:

DEFINITIONS

\* \* \*

Cab Signal--A signal located in engineman's compartment or cab indicating a condition affecting the movement of a train or engine.

\* \* \*

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

\* \* \*

Restricted Speed--Not exceeding 15 miles per hour prepared to stop short of train, obstruction or switch not properly lined and to look out for broken rail.

9. Day signals must be displayed from sunrise to sunset but when day signals cannot be plainly seen, night signals must be used in addition.

Nightsignals must be displayed from sunset to sunrise.

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:

Day signals--A red flag, torpedoes and fusees.

Night signals--A red light, a white 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.

\* \* \*

Note--When trains are operating under Automatic Block System Rules, the requirements of Rule 99, in so far as protecting against following trains is concerned, will have been complied with when full protection is afforded against trains moving at Restricted speed.

296. Cab signal indications do not supersede fixed signal indications except when cab signal changes to a more restrictive or a more favorable indication after passing a fixed signal.

501a. Interlocking home signals governing the use of routes leading to a block will in addition govern the use of the block in direction for which traffic has been established for a train to the next block signal.

The maximum speed for all trains moving on track No. 1 in the vicinity of the point of accident is 45 miles per hour.

#### Description of Accident

Extra 4268 East, an east-bound freight train, consisting of engine 4268, 57 cars and a caboos, passed the tower at Kiskiminetas Jct., the last open office, at 6:10 p. m. and stopped about 6:12 p. m. on track No. 1, with the rear end standing 1,485 feet east of signal 8L. About 15 minutes later the rear end was struck by Extra 4372 East.

Extra 4372 East, an east-bound freight train, consisting of engine 4372, 48 cars and a caboos, passed signal 8L, which displayed proceed-at-restricted-speed, and while moving on track No. 1 at an estimated speed of 15 miles per hour it struck Extra 4268 East.

The caboos and the fifty-sixth and fifty-seventh cars of Extra 4268 East, and the engine and the first and second cars of Extra 4372 East were derailed. The caboos of Extra 4268 East and the cab of the engine of Extra 4372 East were demolished. The remainder of the derailed equipment was damaged.

The engineer of Extra 4372 East was killed, and the fireman was injured.

The weather was clear and it was dusk at the time of the accident, which occurred about 6:27 p. m.

### Discussion

Extra 4268 East stopped about 6:12 p. m. on track No. 1 about 0.25 mile east of the tower at Kiskiminetas Jct. to take water and to set out cars. The rear end was standing 1,485 feet east of home signal 8L. About 15 minutes later the rear end of this train was struck by Extra 4372 East.

When Extra 4268 East stopped, the flagman proceeded westward to provide flag protection. He placed two torpedoes on the south rail of track No. 1 about 725 feet west of the rear of his train. He was in the vicinity of the location of the torpedoes when he saw Extra 4372 East approaching, and immediately gave stop signals with a lighted red lantern. The signals were acknowledged by two short blasts on the engine whistle of the approaching train. When the engine was closely approaching his location the flagman again gave stop signals, and these signals were acknowledged. He estimated the speed of Extra 4372 East as about 15 miles per hour when the engine passed him, and there was no indication that the brakes of the train had been applied.

The fireman of Extra 4372 East said that when the engine was in the vicinity of the tower at Kiskiminetas Jct. the speed was about 25 miles per hour. Soon afterward the audible signal in the cab was sounded, and the cab-signals displayed proceed-at-restricted-speed indications. The engineer moved the acknowledging lever to acknowledging position and placed the throttle lever in closed position. When the engine was moving on the curve to the right immediately prior to the time the collision occurred the engineer sounded two short blasts on the engine whistle and made a service brake-pipe reduction. Immediately afterward the engineer moved the brake valve to emergency position. Because of the curve, the fireman did not see the flagman of the preceding train until just before the collision occurred. The engineer was killed. The front brakeman was in the brakeman's booth on the tender of the engine and he was not aware of anything being wrong until the collision occurred. After the accident there was no condition found that would prevent the proper application of the train brakes.

Under the flagging rules of this railroad, "full protection" in automatic block-signal territory consists of providing flag protection a distance sufficient only for stopping a following train which is being operated



under a proceed-at-restricted-speed indication. A train operating under this indication must not exceed a speed of 15 miles per hour, and the train must be so operated that it can be stopped short of a preceding train or an obstruction.

Cause

It is found that this accident was caused by failure to operate the following train in accordance with signal indications.

Dated at Washington, D. C., this ninth day of April, 1947.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,  
Secretary.