

INTERSTATE COMMERCE COMMISSION
WASHINGTON

INVESTIGATION NO. 2953
THE PEORIA AND EASTERN RAILWAY COMPANY
AND
THE WABASH RAILROAD COMPANY
REPORT IN RE ACCIDENT
AT DANVILLE JCT., ILL., ON
DECEMBER 6, 1945

SUMMARY

Railroads: Peoria and Eastern : Wabash

Date: December 6, 1945

Location: Danville Jct., Ill.

Kind of accident: Side collision

Trains involved: Passenger : Freight

Train numbers: 13 : Second 82

Engine numbers: 60 : 2910

Consist: 4 cars : 48 cars, caboose

Estimated speed: 10 m. p. h. : 5 m. p. h.

Operation: Signal indications : Timetable, train orders and automatic block-signal system

Track: Single; tangent; : Double; tangent;
0.82 percent : 0.798 percent
descending grade ascending grade
westward eastward

Weather: Clear

Time: 1:23 p. m.

Casualties: 3 injured

Cause: Failure to provide adequate protection for movements over crossing involved

Recommendation: That at the crossing involved the Peoria and Eastern Railway Company, the Wabash Railroad Company and the Chicago & Eastern Illinois Railroad Company install an interlocking conforming to the requirements prescribed by the Commission's order of April 13, 1939

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 2953

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

THE PEORIA AND EASTERN RAILWAY COMPANY
AND
THE WABASH RAILROAD COMPANY

January 23, 1946.

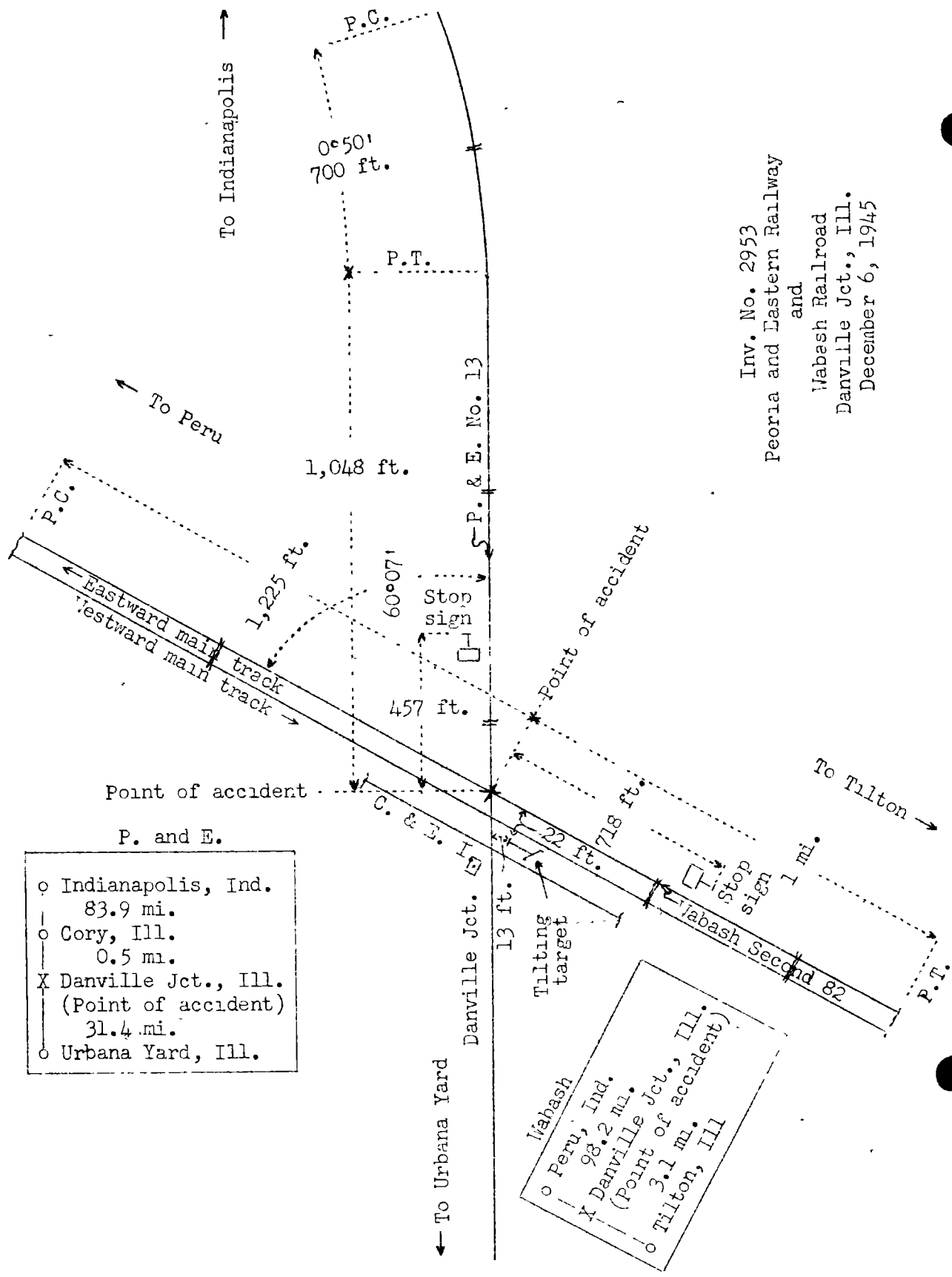
Accident at Danville Jct., Ill., on December 6, 1945, caused
by failure to provide adequate protection for movements
over the crossing involved.

REPORT OF THE COMMISSION¹

PATTERSON, Commissioner:

On December 6, 1945, there was a side collision between
a passenger train of the Peoria and Eastern Railway and a
freight train of the Wabash Railroad at Danville Jct., Ill.,
which resulted in the injury of three train-service employees.

¹Under authority of section 17 (2) of the Interstate Com-
merce Act the above-entitled proceeding was referred by the
Commission to Commissioner Patterson for consideration and
disposition.



Inv. No. 2953
 Peoria and Eastern Railway
 and
 Mabash Railroad
 Danville Jct., Ill.
 December 6, 1945

- P. and E.
- o Indianapolis, Ind.
83.9 mi.
 - o Cory, Ill.
0.5 mi.
 - X Danville Jct., Ill.
(Point of accident)
31.4 mi.
 - o Urbana Yard, Ill.

- Mabash
- o Peru, Ind.
98.2 mi.
 - X Danville Jct., Ill.
(Point of accident)
3.1 mi.
 - o Tilton, Ill.

Location of Accident and Method of Operation

This accident occurred at an intersection of the Peoria and Eastern Railway and a line of the Wabash Railroad, hereinafter referred to, respectively, as the P. & E. and the Wabash. The crossing is located on that part of the P. & E. extending between Indianapolis, Ind., and Urbana Yard, Ill., 115.8 miles, and on that part of the Wabash extending between Tilton, Ill., and Peru, Ind., 101.3 miles. According to the timetables, the crossing is 84.4 miles west of Indianapolis and 3.1 miles east of Tilton. In the vicinity of the point of accident the P. & E. is a single-track line over which trains are operated by a manual-block system, the indications of which supersede time-table superiority, and the Wabash is a double-track line over which trains are operated by timetable, train orders and an automatic block-signal system. At the crossing the main track of the P. & E. intersects the main tracks of the Wabash and the main track of a line of the Chicago & Eastern Illinois Railroad at an angle of $60^{\circ}07'$. The P. & E. track extends east and west, and the Wabash and the C. & E. I. tracks extend northeast and southwest. The accident occurred at the intersection of the main track of the P. & E. and the eastward main track of the Wabash. From the east on the P. & E. there is a $0^{\circ}50'$ curve to the right 700 feet in length, which is followed by a tangent 1,048 feet to the crossing and a considerable distance westward. The grade is 0.82 percent descending westward. The Wabash main tracks are tangent throughout a distance of about 1 mile immediately west of the crossing and 1,225 feet eastward. The grade is 0.798 percent ascending eastward.

Movements over the crossing are governed by a tilting-target signal mounted on a mast located 13 feet south of the center-line of the P. & E. main track and 22 feet west of the center-line of the Wabash eastward main track. The blade of the target is 13.5 feet long and 13 inches wide, and is 30.5 feet above the tops of the rails. The middle portion is painted yellow, and each end is painted red. The target is equipped with a red electric-light bulb at each end for night signals. The signal is in the charge of a leverman, and is controlled from a building located in the northwest angle of the intersection. The aspects and corresponding indications of the signal are as follows:

	<u>Aspects</u>		<u>Indications</u>
	<u>Day</u>	<u>Night</u>	
Horizontal	Two red lights in horizontal position		Proceed signal for P.& E. trains
Diagonal	Two red lights in diagonal position		Proceed signal for Wabash trains
Vertical	Two red lights in vertical position		Proceed signal for C.& E.I. trains

Stop signs governing west-bound movements on the P.& E. and east-bound movements on the Wabash are, respectively, 457 feet east and 718.2 feet west of the crossing.

Operating rules of the P.& E. and the Wabash read in part as follows:

DEFINITIONS

* * *

Fixed Signal.--A signal of fixed location indicating a condition affecting the movement of a train * * *.

Note to Definition of Fixed Signal.-- The definition of a "Fixed Signal" covers such signals as * * * stop boards, * * * or other means for displaying indications that govern the movement of a train * * *

* * *

98. Trains must approach * * * railroad crossings at grade, * * * prepared to stop, unless * * * signals indicate proceed, and track is clear. * * *

A bulletin issued September 3, 1943, reads in part as follows:

INSTRUCTIONS FOR OPERATING CROSSING TARGET

* * *

* * *

Targetman must make sure before changing signal to proceed for an opposing route that no train is closely approaching on the route for which the signal is then set.

He must not take signal away from a train which has received a signal to proceed over the crossing until the rear of passing train has cleared crossing. * * *

When necessary to set signal against a train which has received a proceed signal, targetman must have an understanding with engineer of the train receiving proceed indication that the signal will be taken away from him and given to another train. * * *

* * *

In the vicinity of the point of accident the trains involved were required to proceed prepared to stop short of a train or an obstruction.

Description of Accident

No. 13, a west-bound first-class P. & E. passenger train, consisted of engine 60, one baggage car, one mail car, one coach and one passenger-baggage car, in the order named. All cars were of steel construction. This train passed Cory, the last open reporting office, 0.5 mile east of Danville Jct., at 1:20 p. m., 15 minutes late, stopped with the front of the engine at the stop sign, located 457 feet east of the crossing, and then proceeded. The crossing signal displayed proceed for movement on the P. & E., and No. 13 was moving over the crossing at an estimated speed of 10 miles per hour when it was struck by Wabash Second 82.

Second 82, an east-bound second-class Wabash freight train, consisting of engine 2910, 48 cars and a caboose, departed from Tilton, the last open reporting office, at 1:10 p. m., 4 hours late, stopped with the front of the engine about 900 feet west of the crossing, then proceeded, passed the crossing signal, which displayed stop for movement on the Wabash, and while moving at an estimated speed of 5 miles per hour it struck P. & E. No. 13.

The engine and the front truck of the first car of No. 13 and the engine and the first two cars of Second 82 were derailed. The derailed equipment was considerably damaged.

The weather was clear at the time of the accident, which occurred about 1:23 p. m.

The engineer, the fireman and the brakeman of No. 13 were injured.

During the 30-day period preceding the day of the accident, the average daily movement over the crossing involved was 16.6 trains on the P. & E., 18.2 trains on the Wabash, and 18.5 trains on the C. & E. I.

Discussion

The investigation disclosed that the crossing signal was displaying proceed for movement on the Wabash and stop for movement on the P. & E. until just prior to the time P. & E. No. 13 stopped in the vicinity of the stop sign, located 457 feet east of the crossing. When P. & E. No. 13 was preparing to stop at the stop sign the leverman changed the indication of the crossing signal to display proceed for movement on the P. & E. and stop for movement on the Wabash. No. 13 stopped at the stop sign, then proceeded and was moving over the crossing when it was struck by Wabash Second 82.

The engineer, the conductor and the flagman of No. 13 were not aware of anything being wrong until the collision occurred. The engineer said that he and the fireman were maintaining a lookout ahead but, because of buildings on the south side of the track in the vicinity of the crossing, it was not possible to see a train approaching from the south on the Wabash until the engine of No. 13 was in the immediate vicinity of the crossing. It could not be determined when the fireman of No. 13 first became aware of anything being wrong, as he was so seriously injured in the accident that he could not be questioned during this investigation.

The enginemen of Second 82 and the front brakeman, who was on the engine, said that when their train stopped in the vicinity of the stop sign, located 718 feet south of the crossing, the crossing signal displayed proceed for movement on the Wabash. After the train stopped, the engineer sounded two short blasts on the engine whistle to acknowledge the proceed indication displayed by the crossing signal, then the train proceeded. Soon afterward the fireman and the front brakeman moved from the left side of the engine to the deck of the engine. The signal was so located that the engineer could not see it from his seatbox after the engine passed the stop sign. The employees on the engine did not again observe the indication displayed by the crossing signal, and they were not aware of anything being wrong until their engine was a short distance south of the crossing. Then the engineer saw the engine of No. 13 moving on the crossing, and he immediately moved the brake valve to emergency position, but the collision occurred before his train could be stopped. Soon after Second 82 proceeded from the stop sign, the leverman and a section foreman gave hand signals from a point in the vicinity of the crossing in an attempt to stop the train short of the crossing. The engineer of Second 82 thought the signals given by these employees were to call his attention to a track force that was working in the vicinity of the crossing.

The leverman said that when No. 13 was in the vicinity of the P. & E. stop sign he changed the indication of the crossing signal to display proceed for No. 13 and stop for Second 82.

At that time he thought Second 82 was a considerable distance south of the Wabash stop sign and that the enginemen would see the stop indication before their engine reached the stop sign. The section foreman said that he observed the indication of the crossing signal change from proceed to stop for Second 82 when that train was in the vicinity of the stop sign and after the engineer had sounded the engine whistle.

The investigation disclosed that at any time the leverman can change the route from one line to another regardless of track occupancy or time element. If the target had been so arranged that after an approaching train accepts a proceed indication the leverman can not change the signal to display proceed for another route until the expiration of prescribed time interval or if a signal for each route over the crossing, properly interlocked, had been provided, this accident would have been averted.

Cause

It is found that this accident was caused by failure to provide adequate protection for movements over the crossing involved.

Recommendation

It is recommended that at the crossing involved the Peoria and Eastern Railway Company, the Wabash Railroad Company and the Chicago & Eastern Illinois Railroad Company install an interlocking conforming to the requirements prescribed by the Commission's order of April 13, 1939. A rule to show cause why they should not do so will be served on said carriers.

Dated at Washington, D. C., this twenty-third day of January, 1946.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,
Secretary.