

INTERSTATE COMMERCE COMMISSION
WASHINGTON

INVESTIGATION NO. 2892
WABASH RAILROAD COMPANY
REPORT IN RE ACCIDENT
AT WABASH, IND., ON
MAY 31, 1945

SUMMARY

Railroad: Wabash

Date: May 31, 1945

Location: Wabash, Ind.

Kind of accident: Side collision

Trains involved: Freight : Freight

Train numbers: 73 : Extra 2820-2923 West

Engine numbers: 2406 : 2820-2923

Consist: 8 cars, caboose : 96 cars, caboose

Estimated speed: 5 m. p. h. : 15 m. p. h.

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

Track: Single; tangent; 0.624 percent
descending grade westward

Weather: Clear

Time: 2:05 p. m.

Casualties: 2 injured

Cause: Train fouling main track immedi-
ately in front of a following train

Recommendation: That the Wabash Railroad Company
install derails coordinated with
electric switch-locking at clear-
ance points on its sidings in
automatic block-signal territory
on the 1st District of the
Montpelier Division

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 2892

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

WABASH RAILROAD COMPANY

July 3, 1945.

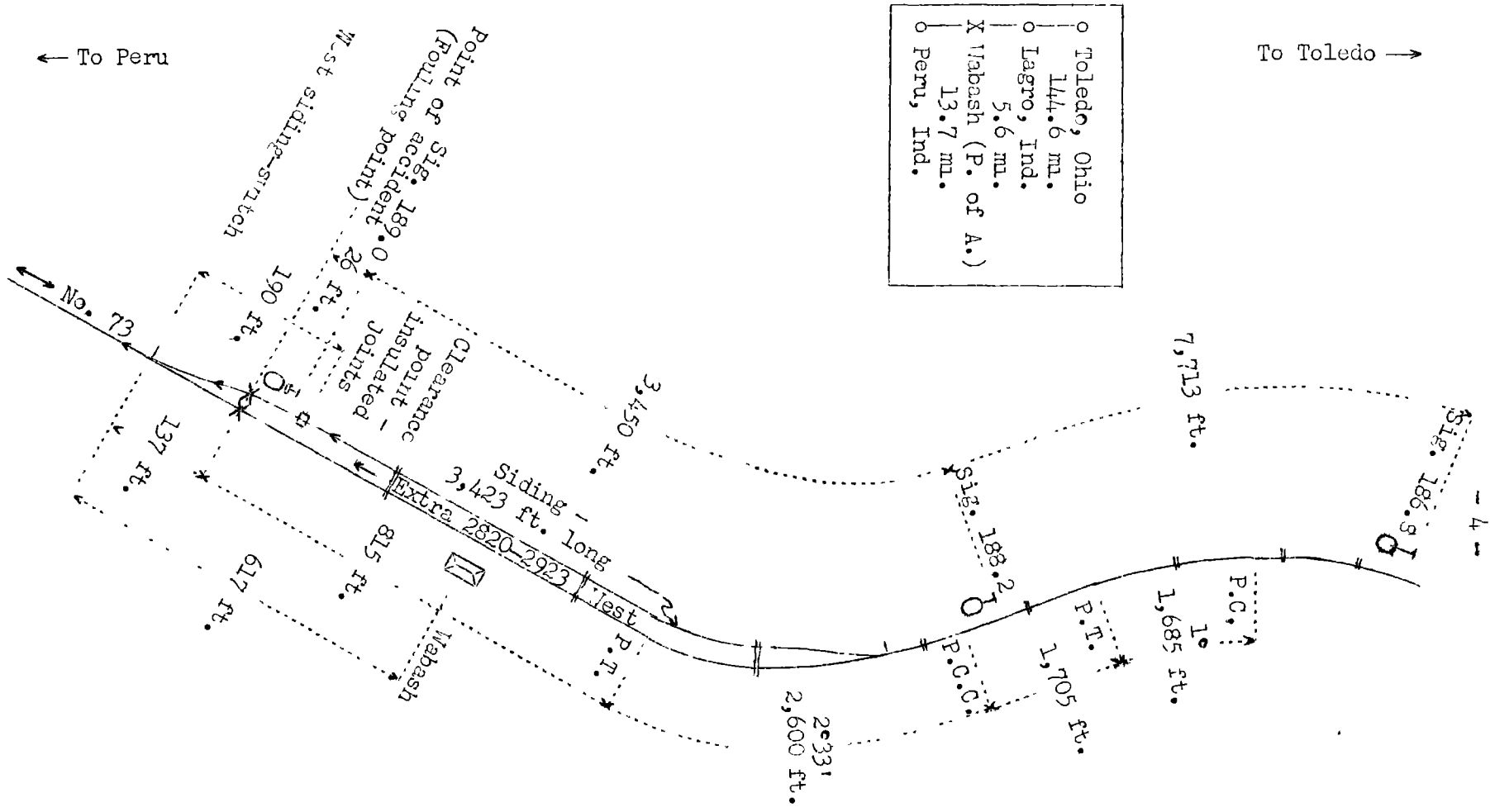
Accident at Wabash, Ind., on May 31, 1945, caused by a
train fouling the main track immediately in front
of a following train.

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REPORT OF THE COMMISSION

PATTERSON, Commissioner:

On May 31, 1945, there was a side collision between
two freight trains on the Wabash Railroad at Wabash, Ind.,
which resulted in the injury of two employees. This acci-
dent was investigated in conjunction with a representative
of the Indiana Public Service Commission.

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. 2892
 Wabash Railroad
 Wabash, Ind.
 May 31, 1945

Location of Accident and Method of Operation

This accident occurred on that part of the Montpelier Division designated as the 1st District and extending westward from Toledo, Ohio, to Peru, Ind., 163.9 miles, a single-track line in the vicinity of the point of accident over which trains are operated by timetable, train orders and an automatic block-signal system. At Wabash, 150.2 miles west of Toledo, a siding 3,423 feet long parallels the main track on the north. The west switch of this siding is 617 feet west of the station. The clearance point at the west end of the siding is 190 feet east of the switch. The accident occurred at the fouling point of the main track and the turnout, at a point 137 feet east of the west siding-switch. From the east on the main track there are, in succession, a 1° curve to the left 1,635 feet long, a tangent 1,705 feet, a compound curve to the right 2,600 feet, the maximum curvature of which is 2°33', and a tangent 815 feet to the point of accident and a considerable distance westward. The grade is 0.624 percent descending westward.

Automatic signals 186.8, 188.2 and 189.0 governing west-bound movements, are located, respectively, 11,189, 3,476 and 26 feet east of the point of accident. These signals are of the three-indication, color-light type. Signal 189.0 is continuously lighted when displaying a stop indication and approach lighted when displaying other indications. Signals 186.8 and 188.2 are approach lighted. 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>
186.8	Green	PROCEED.	CLEAR SIGNAL.
188.2	Green	PROCEED.	CLEAR SIGNAL.
189.0	Red, with number plate	STOP; THEN PROCEED AT CAUTION.	STOP AND PROCEED SIGNAL.

The track circuits of the fouling section of the turnout of the west siding-switch extend 190 feet east of the switch. The controlling circuits are so arranged that when the track between signal 189.0 and the next signal westward is occupied, or when main track switches between these signals are reversed, or when a train occupies the fouling section of the turnout of the west siding-switch, signals 189.0 and 188.2 display stop and signal 186.8 displays approach. Signal 189.0 is located north of the siding and about 20 feet north of the north rail of the main track.

Operating rules read in part as follows:

DEFINITIONS.

* * *

Extra Train.--A train not authorized by a timetable schedule. * * *

* * *

Caution.--The movement of a train, or engine, under such control that the engineman can stop within his range of vision.

85. * * *

* * * extra trains may pass and run ahead of third class trains and extra trains.

* * *

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 fuseses.

* * *

When a train is moving under circumstances in which it may be overtaken by another train, the flagman must take such action as may be necessary to insure full protection. By night, or by day when the view is obscured, lighted fuseses must be thrown off at proper intervals.

* * *

513. Before a train or engine enters on or fouls a main track, or crosses from one main track to another, at hand operated switches, the trainman will operate the switch and wait two minutes at the switch before making engine or train movement, except when opposing train has been met and can be seen receding from switch. This will not relieve employes from the duty of promptly and properly protecting the movement.

* * *

The maximum authorized speed in the city limits of Wabash is 25 miles per hour.

Description of Accident

No. 73, a west-bound third-class freight train, consisted of engine 2406, one rider car, seven cars and a caboose. This train entered the siding at Wabash about 1:45 p. m., 2 hours late, and performed switching service on the freight-house track, which connects with the siding at a point 330 feet east of the point of accident. Later, No. 73 proceeded westward on the siding en route to the next station, and entered the main track at the west siding-switch about 2:04 p. m., when the fireman saw a west-bound train approaching closely. Then the train stopped, and an attempt was made to back it into clear, and while it was moving backward at a speed of about 5 miles per hour the tender and the rider car were struck by Extra 2820-2923 West.

Extra 2820-2923 West, a west-bound freight train, consisting of engines 2820 and 2923, 96 cars and a caboose, passed Lagro, 5.6 miles east of Wabash and the last open office, at 1:58 p. m., passed signals 186.8 and 188.2, which displayed proceed, and while moving at an estimated speed of 15 miles per hour it passed signal 189.0, which displayed stop-and-proceed, and collided with No. 73 at the fouling point of the turnout 26 feet west of signal 189.0.

The engine of No. 73 was derailed and pushed westward about 300 feet, and stopped practically upright at a 45-degree angle to the track. The tender was torn loose and overturned at the west siding-switch. The rider car was demolished. Both engines of Extra 2820-2923 were derailed. Engine 2820 was badly damaged.

The weather was clear at the time of the accident, which occurred about 2:05 p. m.

The fireman of engine 2923 and the front brakeman of Extra 2820-2923 West were injured.

In tests after the accident the automatic block-signal system functioned properly.

Discussion

No. 73 stopped in clear on the siding at Wabash about 1:45 p. m. About 15 minutes later this train started westward on the siding en route to the next station westward. Without stopping, the engine entered the main track at the west siding-switch, which had been lined for the movement to the main track after the engine had entered the turnout. The engine entered the main track about 2:04 p. m., at which time the fireman observed a west-bound train approaching on the main track a short distance east of the switch. He warned the engineer, who immediately applied the brakes and stopped the

train, placed the reverse gear in position for backward movement and opened the throttle in an attempt to back his train into clear on the siding. No. 73 had attained a speed of about 5 miles per hour, but the engine, tender and the first car were still on the turnout when the collision occurred. No train order restricting the authority of either train to proceed at this point had been issued. No. 73 was a third-class train, and therefore superior to Extra 2820-2923 West. However, under the rules of the carrier it is permissible for extra trains to pass and run ahead of third-class trains.

As Extra 2820-2923 was approaching Wabash the speed was about 25 miles per hour and the throttle of each engine was in drifting position. The brakes of this train had been tested and functioned properly en route. The train-brake system was in the charge of the engineer of the first engine. The enginemen of both engines and the front brakeman were maintaining a lookout ahead. Signals 186.8 and 188.2 displayed proceed. When the first engine was about 1,600 feet east of the point of accident the engineer made a brake-pipe reduction to reduce speed over street crossings. When the engine was about 800 feet east of the west siding-switch the enginemen of Extra 2820-2923 observed that the engine of No. 73 was fouling the main track. The engineer of the first engine immediately moved the brake valve to emergency position in an attempt to avert the accident. The speed was about 15 miles per hour at the time of the collision. No flagging signals were given, no fusee was burning on the track, and no torpedoes were exploded.

About 1 minute before the accident occurred the engine of No. 73 entered the track circuit of the turnout. Since the average speed of Extra 2820-2923 was 25 miles per hour, an interval of about 1 minute 30 seconds elapsed after this train passed signal 188.2, located 3,423 feet east of the insulated joints at the clearance point of the west siding-switch. Therefore, it is apparent that Extra 2820-2923 had passed signal 188.2 before No. 73 fouled the track circuit of the turnout.

The operating rules of this carrier provide that after a trainman operates a hand-operated switch in automatic block-signal territory an interval of two minutes must elapse before a train or engine may foul the main track. In addition, the movement must be safeguarded by providing flag protection until the entire train has entered the main track and normal speed has been attained. In this case the flagman was standing about 200 feet west of the rear of his train and no other member of the crew provided flag protection, and the engine-whistle signal was not sounded for flag protection. If an interval of two minutes had elapsed after the switch was lined for entry to the main track, this accident could have been averted.

In addition to the present accident, the Commission has investigated during the past two years nine accidents in which trains, without providing adequate protection, fouled the main track immediately in front of an approaching train, such as occurred in this case. These accidents resulted in the death of 48 and the injury of 209 persons. Of these, eight occurred in territory where the operation was by timetable, train orders and automatic block-signal system, and one occurred in territory where the operation was by timetable and train orders only. During the 30-day period preceding the day of the accident, the average daily movement on this district was 27.8 trains. The maximum authorized speeds on this line are 80 miles per hour for passenger trains and 50 miles per hour for freight trains. In view of the high authorized speed and volume of traffic on this line, all available facilities for adequate protection should be provided. Derails located at the clearance points and arranged to operate in conjunction with electrically locked switches would prevent trains from fouling the main track immediately in front of an approaching train, such as occurred in this case.

Cause

It is found that this accident was caused by a train fouling the main track immediately in front of a following train.

Recommendation

It is recommended that the Wabash Railroad Company install derails coordinated with electric switch-locking at clearance points on its sidings in automatic block-signal territory on the 1st District of the Montpelier Division.

Dated at Washington, D. C., this third day of July, 1945.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,
Secretary.