

INTERSTATE COMMERCE COMMISSION
WASHINGTON

REPORT NO. 3736
THE PENNSYLVANIA RAILROAD COMPANY
IN RE ACCIDENT
AT WARSAW, IND., ON
JANUARY 25, 1957

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SUMMARY

Date: January 25, 1957

Railroad: Pennsylvania

Location: Warsaw, Ind.

Kind of accident: Head-end collision

Trains involved: Freight : Freight

Train numbers: Extra 7093 West : Extra 9724 East

Locomotive numbers: Diesel-electric units 7093, 7095, and 7069 : Diesel-electric units 9724A, 9712B, 2020B, and 9584A

Consists: 115 cars, cabooses : 119 cars, cabooses

Estimated speeds: Standing : 20 m. p. h.

Operation: Movements with the current of traffic by signal indications; movements against the current of traffic by train orders and a manual block-signal system

Track: Double; 0°41' curve; level

Weather: Light snow

Time: 6:41 a. m.

Casualties: 5 injured

Cause: Failure to operate east-bound train in accordance with signal indications

INTERSTATE COMMERCE COMMISSION

REPORT NO. 3736

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

THE PENNSYLVANIA RAILROAD COMPANY

March 21, 1957

Accident at Warsaw, Ind., on January 25, 1957, caused by
failure to operate the east-bound train in accordance
with signal indications.

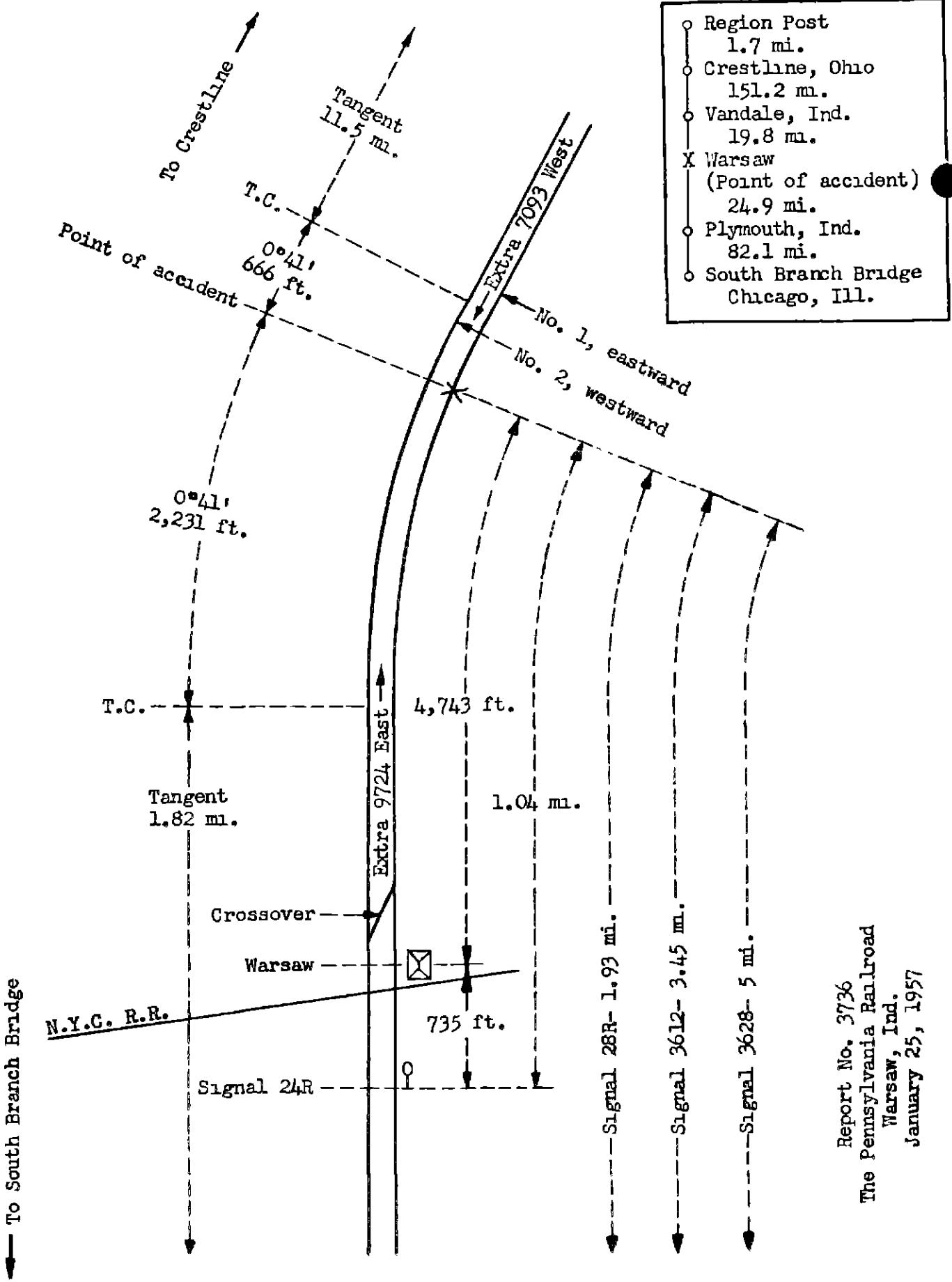
REPORT OF THE COMMISSION¹

MURPHY, Commissioner:

On January 25, 1957, there was a head-end collision between two freight trains on the Pennsylvania Railroad at Warsaw, Ind., which resulted in the injury of five train-service employees. This accident was investigated in conjunction with a representative of the Indiana Public Service Commission.

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



Report No. 3736
 The Pennsylvania Railroad
 Warsaw, Ind.
 January 25, 1957

Location of Accident and Method of Operation

This accident occurred on that part of the Northwestern Region extending between Region Post, near Crestline, Ohio, and South Branch Bridge, Chicago, Ill., 279.7 miles. In the vicinity of the point of accident this is a double-track line, over which trains moving with the current of traffic are operated by signal indications. Trains moving against the current of traffic are operated by train orders and a manual block-signal system. From north to south the main tracks are designated as No. 2, westward, and No. 1, eastward. At Warsaw, Ind., 171.0 miles west of Crestline, the main tracks are crossed at grade by a single-track line of the New York Central Railroad. A short distance east of the crossing the two main tracks are connected by a trailing-point crossover. The crossing and the crossover are within interlocking limits. The interlocking station is located in the southeast angle of the intersection. The accident occurred on track No. 1 at a point 4,743 feet east of the interlocking station. From the east there is a tangent 11.5 miles in length and a 0°41' curve to the left 666 feet to the point of accident and 2,231 feet westward. From the west there is a tangent 1.82 miles in length and the curve on which the accident occurred. The grade is practically level.

Automatic signals 3628 and 3612 and semi-automatic signals 28R and 24R, governing east-bound movements on track No. 1, are located, respectively, 5 miles, 3.45 miles, 1.93 miles, and 1.04 miles west of the point of accident. These signals are of the position-light type. Signal 3628 is approach lighted, and signals 3612, 28R, and 24R are continuously lighted. Signals 28R and 24R are controlled from the interlocking station at Warsaw. Aspects applicable to this investigation and the corresponding indications and names are as follows:

<u>Signal</u>	<u>Aspect</u>	<u>Indication</u>	<u>Name</u>
3628	Three amber lights in vertical position	Proceed.	Clear
3612	Three amber lights in diagonal position to the right	Proceed prepared to stop at next signal. Train exceeding Medium speed must at once reduce to that speed.	Approach
28R 24R	Two red lights in horizontal position	Stop.	Stop

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

DEFINITIONS

Medium Speed--Not exceeding one-half the speed authorized for passenger trains but not exceeding 30 miles per hour.

In the vicinity of the point of accident the maximum authorized speed for freight trains moving with the current of traffic is 50 miles per hour.

Description of Accident

Extra 7093 West, a west-bound freight train, consisted of Diesel-electric units 7093, 7095, and 7069, coupled in multiple-unit control, 115 cars, and a caboose. At Vandale, Ind., 19.8 miles east of Warsaw, the members of the crew received copies of train order No. 314 reading as follows:

Extra 7093 West has right over opposing trains on No. 1 track Vandale to Warsaw

They also received block authority to move from Vandale to Warsaw on track No. 1. The train crossed from track No. 2 to track No. 1 and passed Vandale at 5:55 a. m. It stopped about 6:37 a. m. with the locomotive 4,743 feet east of the interlocking station at Warsaw. About 5 minutes later it was struck by Extra 9724 East.

Extra 9724 East, an east-bound freight train, consisted of Diesel-electric units 9724A, 9712B, 2020B, and 9584A, coupled in multiple-unit control, 119 cars, and a caboose. This train departed from Plymouth, Ind., 24.9 miles west of Warsaw and the last open office, at 5:54 a. m. It passed signal 3628, which indicated Proceed, passed signal 3612, which indicated Proceed-prepared-to-stop-at-next-signal, passed signal 28R, which indicated Stop, passed signal 24R, which indicated Stop, passed a train-order signal which was displayed at the interlocking station at Warsaw, and while moving at a speed estimated to be about 20 miles per hour it struck Extra 7093 West.

The locomotive of Extra 7093 West was moved eastward a distance of 14 feet by the force of the impact. No equipment of this train was derailed. The locomotive, the first seven cars, and the thirty-fifth to the forty-third cars, inclusive, of Extra 9724 East were derailed. The Diesel-electric units remained upright. The first two units stopped approximately in line with the track, and the other units stopped at angles to the track. The derailed cars stopped in various positions on or near the tracks. The

first Diesel-electric unit of Extra 7093 West and the four Diesel-electric units of Extra 9724 East were badly damaged. The second and third Diesel-electric units of Extra 7093 West were slightly damaged. Four cars were destroyed, two cars were badly damaged, and ten cars were slightly damaged.

The swing brakeman of Extra 7093 West and the engineer, the fireman, the front brakeman, and the flagman of Extra 9724 East were injured.

A light snow was falling and day was breaking at the time of the accident, which occurred at 6:47 a. m.

The locomotive of Extra 9724 East was equipped with a safety-control feature actuated by a pedal.

Discussion

On the day of the accident Extra 7093 West was operated on track No. 1 from Vendale to Warsaw to permit following first-class trains to pass on track No. 2.

About 5:25 a. m. the train dispatcher instructed the third-trick operator at Warsaw to hold east-bound trains on track No. 1. The operator placed the levers controlling signals 28R and 24R in position to cause the signals to indicate Stop and applied a standard blocking device to the lever controlling signal 24R. He said that when east-bound trains were to be held at Warsaw it was a general practice to hold them at signal 28R in order to avoid blocking rail-highway grade crossings between signals 28R and 24R. At 5:27 a. m. the dispatcher issued train order No. 313. This order, which was addressed to the operator at Warsaw, read as follows:

Hold all eastward trains clear of No. 1 track
between Warsaw and Vandele

After this order was made complete the dispatcher issued train order No. 314. This order was addressed to the operator and C. & E. All Eastward Trains at Warsaw and to C. & E. Extra 7093 West at Vaniale. The third-trick operator at Warsaw transferred these orders to the first-trick operator and left the interlocking station about 6 a. m.

After the third-trick operator left the interlocking station he passed signal 24R, and he said he observed that the signal indicated Stop. On his way home he stopped at a rail-highway grade crossing west of signal 3612 to permit Extra 9724 East to pass. He said that the signal indicated

Proceed-prepared-to-stop-at-next-signal at that time. A trackman who was working between signals 28R and 24R said that signal 24R indicated Stop as Extra 9724 East approached and passed it.

The first-trick operator at Warsaw said that the levers controlling signals 28R and 24R were in position to cause the signals to indicate Stop when he went on duty and that he left them in that position. He was not aware that Extra 9724 East had passed signal 28R until he saw that the locomotive was passing signal 24R, 735 feet west of the interlocking station. When he saw that the locomotive was passing the signal he leaned out the window and gave stop signals with a white lantern. There was no response to his signals as the front of the locomotive passed, and he then descended to the ground with a lighted red lantern and attempted to attract the attention of any member of the crew who might be in the rear control compartment. He said that there was no brake application as the front of the train passed him. He estimated that the speed of the train was about 35 miles per hour.

When Extra 7093 West stopped at Warsaw the enginemen, the front brakeman, and the swing brakeman were on the locomotive. The conductor and the flagman were at the rear of the train. The headlight was lighted dimly. The train was stopped a considerable distance east of the interlocking station to avoid blocking rail-highway grade crossings between that point and the interlocking. The front brakeman called the operator on the telephone and was informed that his train could proceed after No. 59, a west-bound passenger train, passed. The fireman and the front brakeman saw Extra 9724 East approaching at a distance which they thought was from 1,000 to 1,600 feet, and these employees and the engineer left the locomotive before the collision occurred. The engineer and the fireman thought that Extra 9724 East was moving at a speed of from 20 to 25 miles per hour. The front brakeman was unable to estimate the speed. The swing brakeman, who was in the control compartment of the third Diesel-electric unit, did not see Extra 9724 East before the collision occurred.

As Extra 9724 East was moving between Plymouth and Warsaw the engineer was in the control compartment at the front of the locomotive, the front brakeman and the swing brakeman were in the control compartment at the rear of the locomotive, and the conductor and the flagman were in the caboose. The fireman left the front control compartment on two occasions to patrol the units. The engineer said

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that he was experiencing considerable trouble with the locomotive, and he opened the window several times to see whether he could detect any sliding wheels. Both the engineer and the fireman said that signal 3628 indicated Proceed. The fireman said that as the train was approaching this signal the alarm bell rang indicating mechanical trouble on the Diesel-electric units, and he left the control compartment. The engineer said that he did not see the aspects of signals 3612, 28R, or 24R, and that he could remember no details of the movement from the point at which he saw signal 3628 to the railroad crossing at Warsaw. He thought that he had fallen asleep and that he roused when the front of the locomotive passed over the crossing. When he became aware of his location he realized that he had not seen the aspects of the signals. He immediately opened the window to see whether hand signals were being given by the operator, but he saw no one in the interlocking station. As the locomotive was moving on the curve on which the accident occurred he saw Extra 7093 West ahead, and when he realized that the train was on track No. 1 he made an emergency application of the brakes. He thought that the speed was about 30 miles per hour when he applied the brakes and about 20 miles per hour when the collision occurred. Neither of the brakemen on the locomotive saw the aspects of signals 3612, 28R, or 24R, and neither of them saw the operator at Warsaw. At the time the accident occurred the enginemen of Extra 9724 East had been on duty 10 hours 41 minutes after having been off duty during a period of 16 hours 15 minutes. The engineer said that at the time the train was approaching Warsaw he was a little tired but he was not aware of being sleepy.

Cause

This accident was caused by failure to operate the east-bound train in accordance with signal indications.

Dated at Washington, D. C., this twenty-first day of March, 1957.

By the Commission, Commissioner Murphy.

(SEAL)

HAROLD D. McCOY,

Secretary.