

INTERSTATE COMMERCE COMMISSION  
WASHINGTON

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INVESTIGATION NO. 2890  
THE NEW YORK, CHICAGO AND ST. LOUIS  
RAILROAD COMPANY  
REPORT IN RE ACCIDENT  
AT CAYUGA, IND., ON  
MAY 22, 1945

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SUMMARY

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Railroad: New York, Chicago and St. Louis  
Date: May 22, 1945  
Location: Cayuga, Ind.  
Kind of accident: Head-end collision  
Trains involved: Work : Freight  
Train numbers: Work Extra 916 : Second 49  
Engine numbers: 916 : 646  
Consist: Spreader-ditcher, : 51 cars, caboose  
caboose  
Estimated speed: 5 m. p. h. : 15 m. p. h.  
Operation: Timetable, train orders and  
manual-block system  
Track: Single; tangent; practically level  
Weather: Clear  
Time: 2:15 p. m.  
Casualties: 1 killed; 4 injured  
Cause: Failure of the New York, Chicago  
and St. Louis Railroad Company  
properly to enforce its operating  
rules applicable to the movement  
of the trains involved

INTERSTATE COMMERCE COMMISSION

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INVESTIGATION NO. 2890

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

THE NEW YORK, CHICAGO AND ST. LOUIS RAILROAD COMPANY

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June 22, 1945.

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Accident at Cayuga, Ind., on May 22, 1945, caused by failure of the New York, Chicago and St. Louis Railroad Company properly to enforce its operating rules applicable to the movement of the trains involved.

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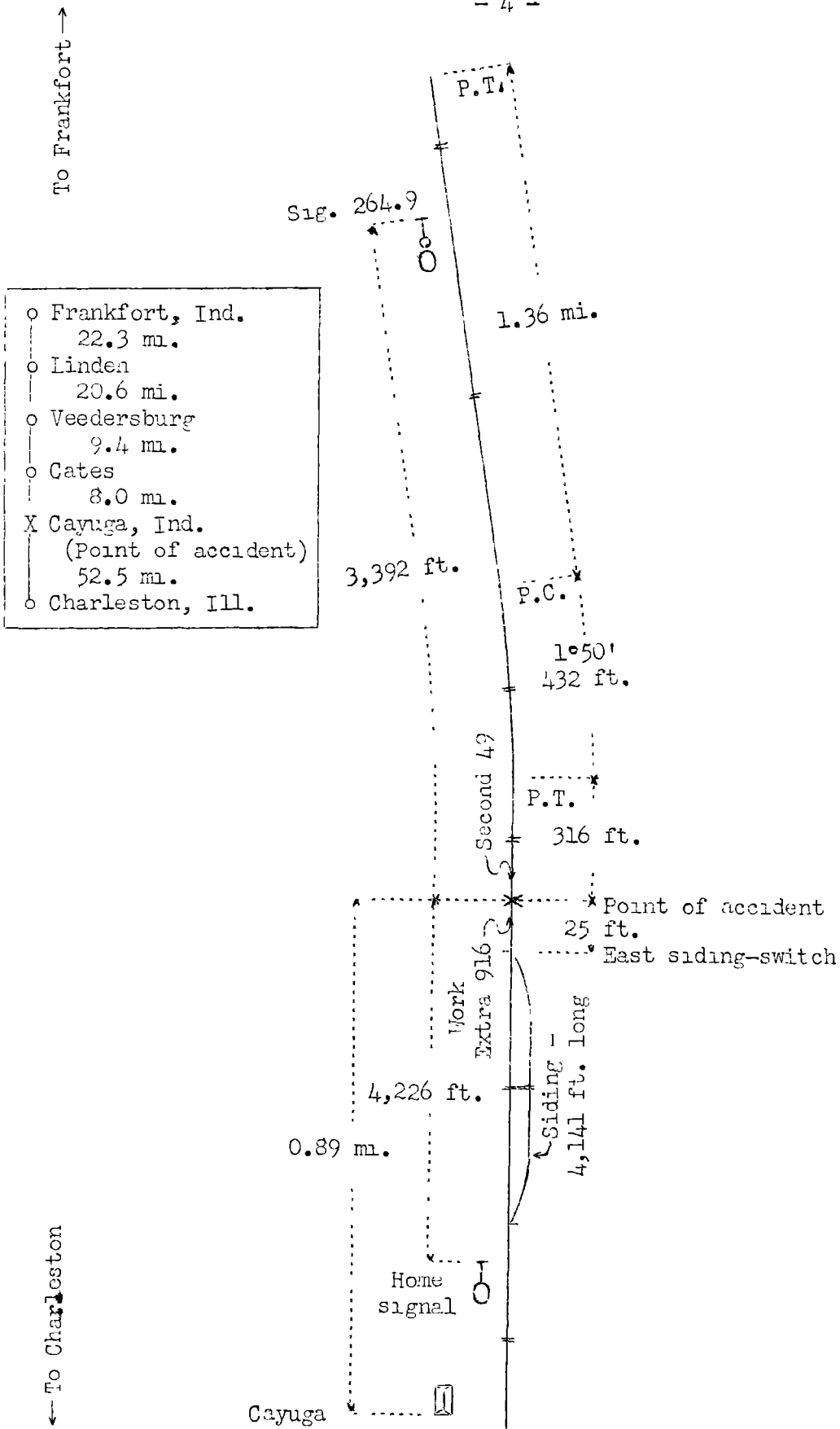
REPORT OF THE COMMISSION<sup>1</sup>

PATTERSON, Commissioner:

On May 22, 1945, there was a head-end collision between a work train and a freight train on the New York, Chicago and St. Louis Railroad at Cayuga, Ind., which resulted in the death of one employee, and the injury of four employees. This accident was investigated in conjunction with a representative of the Indiana Public Service Commission.

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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.



Inv. No. 2890  
 New York, Chicago and St. Louis R. R.  
 Cayuga, Ind.  
 May 22, 1945

Location of Accident and Method of Operation

This accident occurred on that part of the Clover Leaf District designated as the Third Subdivision and extending westward from Frankfort, Ind., to Charleston, Ill., 112.8 miles, a single-track line in the vicinity of the point of accident over which trains are operated by timetable, train orders and a manual-block system. At Cayuga, 60.3 miles west of Frankfort, a siding 4,141 feet long parallels the main track on the south. The east switch of this siding is 0.89 mile east of the station. The accident occurred on the main track 25 feet east of the east siding-switch. From the east there are, in succession, a tangent 1.36 miles in length, a 1°50' curve to the right 432 feet and a tangent 316 feet to the point of accident and a considerable distance westward. The grade is practically level.

The manual block involved extended between Cayuga and Cates, 8 miles east of Cayuga. At Cayuga, westward approach signal 264.9 and a westward interlocking home signal, governing west-bound movements over a crossing of a line of the C.& E.I.R.R., are located, respectively, 3,392 feet east and 4,226 feet west of the point of accident. The approach signal is of the three-indication, color-light type, continuously lighted, and a yellow disc is displayed on the mast. The involved aspects and corresponding indications and names of the approach signal are as follows:

<u>Aspect</u>	<u>Indication</u>	<u>Name</u>
*Green	Proceed.	Clear.
Red, with yellow disc	Stop; then proceed at restricted speed.	Stop and proceed.

\*Note.--Used only in territory not protected by Automatic Block Signals, as approach signal to an Interlocking Home Signal, \* \* \*

The controlling track circuits are so arranged that when a train occupies the track between the approach signal and the home signal, or when a main-track switch between these signals is placed in reverse position, signal 264.9 displays stop-and-proceed.

Operating rules read in part as follows:

DEFINITIONS

\* \* \*

Restricted Speed.--Proceed prepared to stop short of train, obstruction, or switch not properly lined and to look out for broken rail.

\* \* \*

EXTRA TRAIN.--A train not authorized by a timetable schedule. It may be designated as

\* \* \*

Work extra--for work train extra.

\* \* \*

73. Extra trains are inferior to regular trains.

S-87. An inferior train must keep out of the way of OPPOSING superior trains and failing to clear the main track by the time required by rule must be protected as prescribed by Rule 99.

Extra trains must clear the time of opposing regular trains not less than five minutes unless otherwise provided \* \* \*

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, \* \* \*

\* \* \*

The front of the train must be protected in the same way when necessary, by the head brakeman or fireman.

FORMS OF TRAIN ORDERS.

\* \* \*

S-H.

Work Extra.

- (1) Eng. 292 two nine two work extra 6:45  
six four five a. m. until 5:45 five  
four five p. m. between D and E.

\* \* \*

To enable a work extra to work upon the time of a regular train, the following form will be used:

- (5) Work Extra Eng. 292 two nine two protects  
against No. 55 five five Eng. 707, or .....  
..... class trains, between D and E.

The work extra may work upon the time of the train or trains mentioned in the order, and must protect itself against such train or trains. The regular train or trains receiving the order will run expecting to find the work extra protecting itself.

\* \* \*

317. On single track, to admit a train to a block the signalman must examine the block record and if the block is clear of opposing trains and preceding passenger trains, give "1 for .....", " to the next block station in advance. If it is proper for the train to be admitted, the signalman in advance will reply "2 for ....." or "5 of ....." ". The signalman at the entrance of the block must then display the proper signal indication.

A train must not be admitted to a block which is occupied by an opposing train or by a passenger train \* \* \*. A train may be permitted to follow a train other than a passenger train into a block under permissive indication or Clearance Form A.

326. \* \* \*

The signalmen must obtain control of the block before permitting a train or engine to re-enter the block.

509. \* \* \*

\* \* \*

When an automatic signal equipped with yellow disc indicates "Stop and Proceed", freight trains, having 50% or more of their rated tonnage, may proceed at restricted speed without stopping.

\* \* \*

513. Before a train or engine enters on or fouls a main track, or crosses from one main track to another, trainmen will operate the switch and wait at the switch a sufficient time for an approaching train to appear or stop before making engine or train movement, and the crossover movement must be completed before switches are restored to normal position. This will not relieve employes from the duty of promptly and properly protecting the movement.

\* \* \*

Clearance Form A reads in part as follows:

CLEARANCE FORM A

.....M.....19.....

To Conductor and Engineman.....at.....

\* \* \*

Block.....

.....  
Operator

\* \* \*

Time-table special instructions read in part as follows:

22. \* \* \*

Definitions.

A Grade Signal is an automatic signal equipped with a yellow disc.

\* \* \*

23. \* \* \*

\* \* \*

An automatic approach signal is also an automatic signal between the approach and home signals \* \* \*

\* \* \*

The maximum authorized speed for the freight train involved was 45 miles per hour.

Description of Accident

At Cayuga, the crew of Work Extra 916 received copies of train order No. 223 reading in part as follows:

Eng 916 Nine One Six Work Extra 601 Six  
Naught one am Until 830 Eight three  
Naught PM Between Cayuga and Veedersburg  
Protecting Against Second Class trains \* \* \*

Veedersburg is 17.4 miles east of Cayuga. Work Extra 916, consisting of a combination ballast-spreader and ditcher, engine



916 headed east, and a caboose, in the order named, entered the main track at Cayuga at the east siding-switch and stopped with the front of the train about 70 feet east of the switch. Immediately afterward, while an attempt was being made to back the train into clear, the spreader-ditcher was struck by Second 49.

At Linden, 38 miles east of Cayuga, the crew of Second 49, a west-bound second-class freight train, received copies of train order No. 223, and at Cates they received copies of Clearance Form A authorizing their train to proceed from Cates to Cayuga on its time-table authority and under a clear block indication after the arrival of an east-bound freight train. Second 49, consisting of engine 646, 51 cars and a caboose, departed from Cates at 2:02 p. m., 8 hours 39 minutes late; passed signal 264.9, which changed from proceed to proceed-at-restricted-speed immediately in front of that train, and while moving at an estimated speed of 15 miles per hour it collided with Work Extra 916 at a point 3,392 feet west of signal 264.9.

The engine and first four cars of Second 49, and the spreader-ditcher of Work Extra 916 were derailed. The engines of both trains, the first three cars of Second 49, and the spreader-ditcher of Work Extra 916 were damaged.

The weather was clear at the time of the accident, which occurred about 2:15 p. m.

The flagman of Work Extra 916 was killed. The front brakeman of Work Extra 916, and the engineer, the fireman and the front brakeman of Second 49 were injured.

#### Discussion

The crew of each train held copies of train order No. 223, which authorized Work Extra 916 to work on the time of second-class trains between Cayuga and Veedersburg. Under the rules, Work Extra 916, while occupying the main track within the working limits, was required to provide flag protection against second-class trains.

The investigation disclosed that Work Extra 916 arrived into clear on the siding at Cayuga at 1:15 p. m., and members of the crew went to lunch. About 1:57 p. m. the conductor informed the operator at Cayuga that his train was ready to proceed eastward to perform work at a point about 3 miles east of Cates. The operator informed the train dispatcher accordingly. At that time the dispatcher was unable to authorize the movement. Then Work Extra 916 proceeded to the east end of the siding, and the conductor communicated by telephone with the operator at Cates and requested the operator to hold all west-bound trains at Cates until Work Extra 916 arrived at that point. The operator agreed to this arrangement, and Work Extra 916 entered the

main track at the east siding-switch at Cayuga about 2:14 p. m., and had proceeded eastward about 70 feet when the engineer observed Second 49 approaching at a distance of about 450 feet. He immediately 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. Work Extra 916 had moved westward about 45 feet and had attained a speed of about 5 miles per hour when the collision occurred.

At 1:42 p. m., the crew of Second 49 received manual-block authority at Cates which authorized their train to proceed from Cates to Cayuga under a clear block after the arrival of an east-bound freight train. Second 49 departed from Cates at 2:02 p. m. No train order restricting the authority of this train with respect to Work Extra 916 had been issued. As Second 49 was approaching Cayuga the speed was about 45 miles per hour. The brakes of this train had been tested and had functioned properly en route. The enginemen and the front brakeman were maintaining a lookout ahead. When the engine was about 100 feet east of signal 264.9 the indication of this signal changed from proceed to proceed-at-restricted speed, and the engineer immediately made a 10-pound brake-pipe reduction, and, when the engine was about 900 feet west of the signal, he made a further reduction of 8 pounds. The brakes were not released. The speed was reduced to about 25 miles per hour at a point about 500 feet east of the east siding-switch. Then the engineer observed that the main track was occupied, and he immediately moved the brake valve to emergency position. The speed of Second 49 was about 15 miles per hour when the collision occurred. From the right side of a west-bound engine the view of the point where the accident occurred was restricted to a distance of about 500 feet because of structures adjacent to the track on the curve.

Under the carrier's rules governing movements in manual-block territory, opposing trains are not permitted to occupy the same block simultaneously. In arranging block authority for a train to enter a block, the operators at each end of the block must confer with each other, and both operators must have the same information and make appropriate entries on their block records. However, in this case the conductor of the work extra called the operator at Cates and requested him to hold all west-bound trains until his train arrived at that station, although Second 49 was overdue at Cayuga. Second 49 had departed from Cates about 8 minutes before the conductor called the operator at that station. The operator at Cates did not confer with the operator at Cayuga concerning the proposed movement of the work extra, but he told the conductor he would hold all west-bound trains although he had not ascertained from the operator at Cayuga whether Second 49 was clear of the block. The conductor considered the statement of the operator

at Cates to be equivalent to block authority. The operator said that although he did not inform the conductor of the work extra that Second 49 was occupying the block he expected the work extra to remain in the clear until Second 49 had passed Cayuga. As a result, the operator at Cayuga knew nothing about the arrangements for the movement of the work extra from Cayuga to Cates. The telephone circuit used by the conductor and the operator at Cates was not connected to the circuit used by the train dispatcher. The dispatcher had no knowledge of the arrangement made for Work Extra 916 to occupy the block.

The investigation disclosed that the crew of Work Extra 916 had been in work-train service for 46 days prior to the date of the accident, and in a number of instances the work extra had moved against overdue superior trains on the same informal block authority as was relied upon by the crew for protecting the movement of their train from Cayuga to Cates. If the rules applicable to the movement of the trains involved had been obeyed, the work extra would have remained in the clear at Cayuga until after Second 49 was clear of the block and proper block authority was arranged by the operators at Cates and Cayuga. The failure of employees to obey operating rules over a considerable length of time, as in this case, is a result of improper enforcement of those rules on the part of operating officials.

Cause

It is found that this accident was caused by failure of the New York, Chicago and St. Louis Railroad Company properly to enforce its operating rules applicable to the movement of the trains involved.

Dated at Washington, D. C., this twenty-second day of June, 1945.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,  
Secretary.