

INTERSTATE COMMERCE COMMISSION
WASHINGTON

INVESTIGATION NO. 2747
THE CLEVELAND, CINCINNATI, CHICAGO & ST. LOUIS
RAILWAY COMPANY
REPORT IN RE ACCIDENT
AT LUDLOW FALLS, OHIO, ON
NOVEMBER 28, 1943

SUMMARY

Railroad: Cleveland, Cincinnati, Chicago
& St. Louis

Date: November 28, 1943

Location: Ludlow Falls, Ohio

Kind of accident: Head-end collision

Trains involved: Freight : Freight

Train numbers: 97 : 94

Engine numbers: 1994 : 1965

Consist: 51 cars, caboose : 54 cars, caboose

Speed: 25 m. p. h. : 8 m. p. n.

Operation: Timetable and train orders

Track: Single; 4° curve; 0.6 percent
ascending grade westward

Weather: Clear

Time: About 7:05 a. m.

Casualties: 1 killed; 2 injured

Cause: Lap of authority of two opposing
trains

Recommendation: That the Cleveland, Cincinnati,
Chicago & St. Louis Railway
Company establish an adequate
block system on the line on
which this accident occurred

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 2747

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

THE CLEVELAND, CINCINNATI, CHICAGO & ST. LOUIS
RAILWAY COMPANY

January 6, 1944.

Accident at Ludlow Falls, Ohio, on November 28, 1943, caused
by lap of authority of two opposing trains.

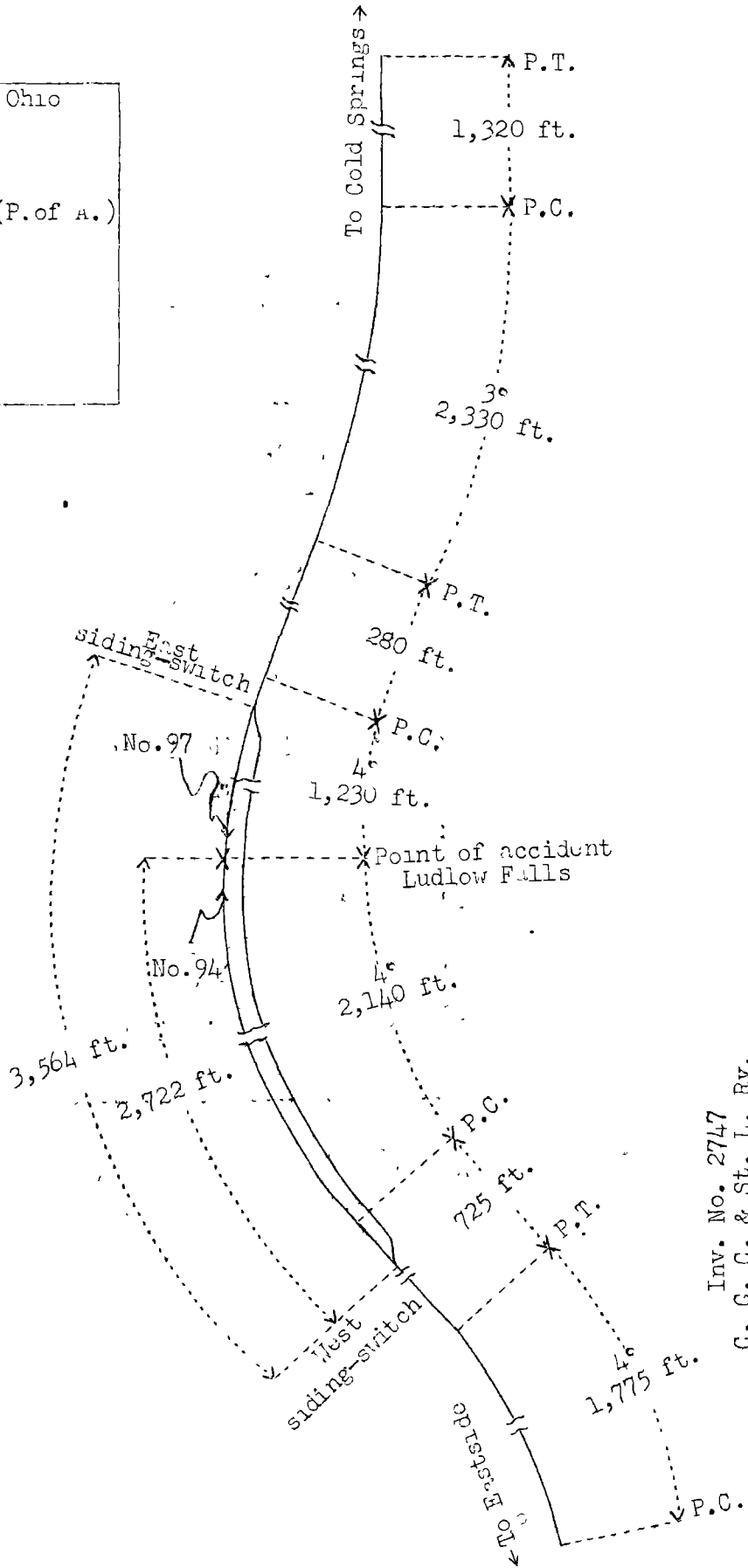
REPORT OF THE COMMISSION¹

PATTERSON, Chairman:

On November 28, 1943, there was a head-end collision between two freight trains on the Cleveland, Cincinnati, Chicago & St. Louis Railway at Ludlow Falls, Ohio, which resulted in the death of one employee and the injury of two employees. This accident was investigated in conjunction with a representative of the Public Utilities Commission of Ohio.

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

- o Cold Springs, Ohio
19.5 mi.
- o Troy
9.4 mi.
- X Ludlow Falls (P. of A.)
19.3 mi.
- o Hewitt, Ohio
15.8 mi.
- o Lynn, Ind.
60.2 mi.
- o Eastside, Ind.



Inv. No. 2747
C. C. C. & St. L. Ry.
Ludlow Falls, Ohio
November 28, 1943

Location of Accident and Method of Operation

This accident occurred on that part of the Indiana Division extending between Cold Springs, Ohio, and Eastside, Ind., 130.2 miles. In the vicinity of the point of accident this was a single-track line over which trains were operated by timetable and train orders. There was no block system in use. At Ludlow Falls a siding 3,564 feet in length paralleled the main track on the south. The accident occurred on the main track between the switches of this siding. From the east there were, in succession, a tangent 1,320 feet, a 3° curve to the right 2,330 feet, a tangent 280 feet and a 4° curve to the left 1,230 feet to the point of accident and 2,140 feet beyond. From the west there were, in succession, a 4° curve to the left 1,775 feet, a tangent 725 feet and the curve on which the accident occurred. At this point the grade for west-bound trains was 0.6 percent ascending.

Operating rules read in part as follows:

72. * * *

Trains in the direction specified by the timetable are superior to trains of the same class in the opposite direction.

202. Each train order must be given in the same words to all employees or trains addressed.

205. Each train order must be written in full in a book provided for the purpose in the office of the train dispatcher; and with it recorded the names of those who have signed for the order; the time and the signals which show when and from what offices and by whom the order was repeated, and the responses transmitted; and the train dispatcher's initials. These records must be made at once and never from memory or memoranda.

206. * * *

When train orders are transmitted by telegraph, the train dispatcher must underscore each word and figure in the body of the order at the time it is repeated. When transmitted by telephone, he must write the order as he transmits it and underscore as prescribed above.

209. Operators receiving train orders must write or typewrite them in manifold during transmission. If the requisite number of copies cannot be made at one writing, they must make others from the original copy and repeat to the train dispatcher from the new copies each time additional copies are made. They must retain a copy of each train order. The time, complete, and the signature of the operator must be in his handwriting.

211. When a "19" train order has been transmitted, operators must, unless otherwise directed, repeat it at once from the manifold copy, in the succession in which the several offices have been addressed. Each operator receiving the order should observe whether the others repeat correctly. When the order has been repeated correctly by an operator, the response "complete", and the time, with the initials of the Superintendent, will be given by the train dispatcher. * * *

* * *

FORMS OF TRAIN ORDERS

S-A.

Fixing Meeting Points for Opposing Trains.

(1) No 1 meet No 2 at B.

* * *

Trains receiving these orders will run with respect to each other to the designated points and there meet in the manner prescribed by the rules.

Time-table special instructions read in part as follows:

72. SUPERIORITY OF TRAINS.

Eastward * * * trains are superior to trains of the same class in the opposite direction.

The maximum authorized speed for freight trains was 30 miles per hour.

Description of Accident

At Cold Springs, 28.9 miles east of Ludlow Falls, the crew of No. 97, a west-bound second-class freight train, received copies of train order No. 224 reading as follows:

No 97 Engine 1994 meet No 94 Engine 1965
at Ludlow Falls and has right over No 92
Cold Springs to Eastside No 94 take
siding Other Superior trains overdue
Cold Springs 5 05 a m have arrived & left

No. 97, consisting of engine 1994, 51 cars and a caboose, departed from Troy, 9.4 miles east of Ludlow Falls and the last open office, at 6:38 a. m., 8 hours 18 minutes late, and while moving at an estimated speed of 25 miles per hour it collided with No. 94 on the main track, 2,722 feet east of the west siding-switch at Ludlow Falls.

At Lynn, 35.1 miles west of Ludlow Falls, the crew of No. 94, an east-bound second-class freight train, received copies of train order No. 224 reading as follows:

No 97 Eng 1994 meet No 94 Eng 1965
at Ludlow Falls and has right over
No 92 Cold Springs to East Side

No. 94, consisting of engine 1965, 54 cars and a caboose, passed Hewitt, 19.3 miles west of Ludlow Falls and the last open office, at 6:26 a. m., 3 hours 53 minutes late, and, because the words, "No 94 take siding," had been omitted from train order No. 224, passed the west siding-switch at Ludlow Falls, where it would have been required to enter the siding if the order had read correctly, and while moving at an estimated speed of 8 miles per hour it collided with No. 97.

From an engine moving in either direction in the vicinity of the siding, the view of an engine approaching from the opposite direction was restricted to a distance of about 800 feet, because of vegetation adjacent to the track and track curvature.

The engine of each train, the first 9 cars of No. 97 and the first 3 cars of No. 94 were derailed and badly damaged.

The weather was clear at the time of the accident, which occurred about 7:05 a. m.

The engineer of No. 97 was killed, and the fireman of each train was injured.

During the 31-day period preceding the day of the accident, the average daily movement in the vicinity of the point of accident was 9.6 trains.

Discussion

The rules governing operation on this line require that train orders must be sent in the same words to all employees or trains to whom the orders are addressed. When the telephone is used for dispatching trains, at the time of transmittal the train dispatcher is required to write train orders in full in a book provided for the purpose. Operators receiving an order must write it during transmission on the prescribed form, and must then repeat it to the dispatcher. The dispatcher must underscore in his train-order book each word and figure as the order is being repeated. Each operator receiving the order must check to observe whether the other operators repeat correctly. The dispatcher and the operators concerned in this investigation understood these requirements.

Train order No. 224 established Ludlow Falls as the meeting point between No. 94, an east-bound second-class train, and No. 97, a west-bound second-class train. No. 94 was superior by direction. The crew of No. 94 received the order at Lynn, 35.1 miles west of Ludlow Falls, and the crew of No. 97 received it at Cold Springs, 28.9 miles east of Ludlow Falls. The copies of the order held by the crew of No. 97 required No. 94 to take siding at the meeting point, but the copies of the order held by the crew of No. 94 did not include the provision for No. 94 to take siding. The discrepancy in the copies of the order held by the crews of these trains resulted in each train being authorized to occupy the main track between the siding switches at the meeting point. No. 94 and No. 97 collided on the main track between the siding switches at Ludlow Falls. Because of vegetation adjacent to the track and track curvature in this vicinity, the members of the crew on the engine of each train were unable to see the other train more than a few hundred feet. Action to stop their respective trains was taken by the engineers, but the distance was not sufficient to avert the collision.

In addition to establishing Ludlow Falls as the meeting point between No. 94 and No. 97, train order No. 224 gave No. 97 right over No. 92, an east-bound second-class train, between Cold Springs and Eastside, and the order included information concerning other overdue superior trains. The train dispatcher said that the order was sent simultaneously to the operator at Lynn for delivery to No. 94, to the operator at Eastside for delivery to No. 92, and to the operator at Cold Springs for

delivery to No. 97. The instructions for No. 94 to take siding at Ludlow Falls were sent only to the operator at Lynn and the operator at Cold Springs, and the information concerning overdue trains was sent only to the operator at Cold Springs. The train dispatcher said that the operator at Lynn and the operator at Cold Springs repeated the order the same as he had transmitted it to them, but the operator at Eastside said that after the first part of the order, which did not include the instruction for No. 94 to take siding, was sent, the train dispatcher informed him that it was not necessary for him to copy the remainder of the order. He said that when the operator at Lynn repeated the order he checked the part of the order he had copied, but he could not recall whether the instruction for No. 94 to take siding was sent by the dispatcher or repeated by the operator at Lynn. He did not listen to the repetition made by the operator at Cold Springs. The operator at Cold Springs said that he checked the part of the order that was repeated by the operator at Eastside, but he was not listening when the order was repeated by the operator at Lynn. The operator at Lynn said that after the part of the order which established the meeting point and gave No. 97 right over No. 92 was sent, he understood the train dispatcher to say, "That is all, Lynn," and he was away from the telephone to perform other duties about 30 or 45 seconds, then he repeated that part of the order he had copied. He did not hear the train dispatcher send the instruction for No. 94 to take siding. Because of two other interruptions to attend to other train movements, he heard only part of the order when it was repeated by the operator at Eastside, and only the last four words repeated by the operator at Cold Springs. He said he did not recopy the order.

If the order had been sent in the same words to each operator, and if each operator had checked the repetition of the other operators, as required by the rules, the employees concerned would have discovered that the instruction for No. 94 to take siding was omitted from the copies of the order addressed to No. 94, and this accident would have been averted.

The book of operating rules of this carrier contains manual-block rules which provide for blocking of opposing movements, but these rules were not in effect in the territory involved. If an adequate block system had been in use in this territory, these opposing trains would not have been permitted to occupy the same block simultaneously, and the accident would not have occurred.

Cause

It is found that this accident was caused by lap of authority of two opposing trains.

Recommendation

It is recommended that the Cleveland, Cincinnati, Chicago & St. Louis Railway Company establish an adequate block system on the line on which this accident occurred.

Dated at Washington, D. C., this sixth day of January, 1944.

By the Commission, Chairman Patterson.

(SEAL)

W. P. BARTEL,
Secretary.