

INTERSTATE COMMERCE COMMISSION  
WASHINGTON

---

INVESTIGATION NO. 3007  
THE NEW YORK, CHICAGO AND ST. LOUIS  
RAILROAD COMPANY  
REPORT IN RE ACCIDENT  
AT RIPLEY, N. Y., ON  
JULY 24, 1946

---

SUMMARY

---

Railroad: New York, Chicago and St. Louis  
Date: July 24, 1946  
Location: Ripley, N. Y.  
Kind of accident: Rear-end collision  
Trains involved: Freight : Freight  
Train numbers: Extra 757 West : 37  
Engine numbers: 757 : 741  
Consists: Caboose, 46 cars : 84 cars, 2 cabooses  
and caboose  
Estimated speeds: 3 m. p. h. : 20 m. p. h.  
Operation: Signal indications  
Track: Single; tangent; 0.08 percent  
descending grade westward  
Weather: Clear  
Time: 10:35 p. m.  
Casualties: 1 killed; 4 injured  
Cause: Failure to operate following  
train in accordance with  
signal indications

INTERSTATE COMMERCE COMMISSION

---

INVESTIGATION NO. 3007.

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

---

September 10, 1946.

---

Accident at Ripley, N. Y., on July 24, 1946, caused by  
failure to operate the following train in accordance  
with signal indications.

---

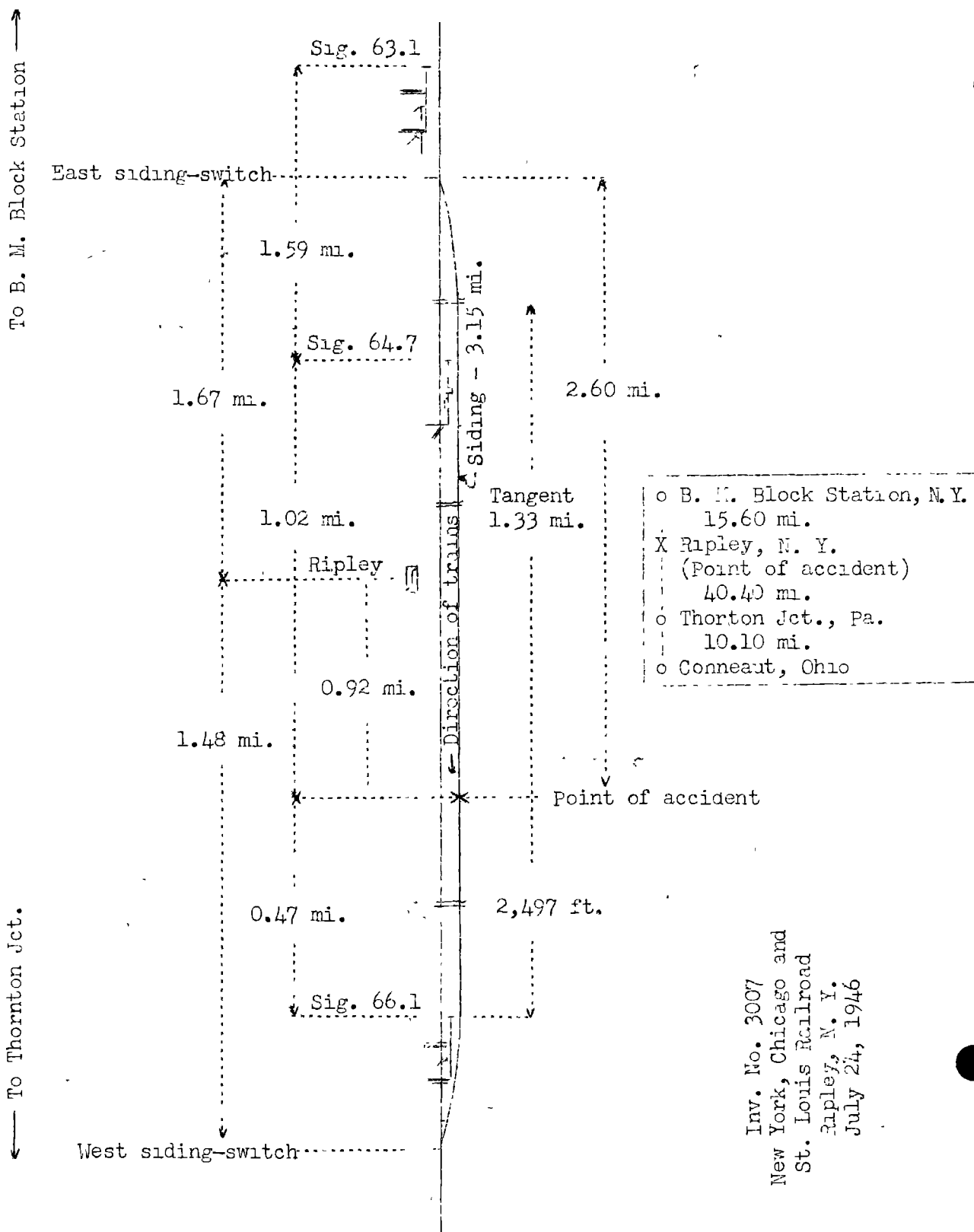
REPORT OF THE COMMISSION<sup>1</sup>

PATTERSON, Commissioner:

On July 24, 1946, there was a rear-end collision between two freight trains on the New York, Chicago and St. Louis Railroad at Ripley, N. Y., which resulted in the death of one employee, and the injury of four employees.

---

<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.



Location of Accident and Method of Operation

This accident occurred on that part of the Buffalo Division extending between E. M. Block Station, N. Y., and Thornton Jct., Pa., 56 miles, a single-track line, over which trains are operated by signal indications. At Ripley, 15.6 miles west of E. M. Block Station, a siding 3.15 miles long parallels the main track on the south. This siding is designated as a controlled siding, and trains moving in either direction on this track are operated by signal indications. The east and west switches of the siding are, respectively, 1.67 miles east and 1.48 miles west of the station. The accident occurred on the siding at a point 2.60 miles west of the east switch. The main track and the siding are tangent throughout a distance of 1.33 miles immediately east of the point of accident and 2,497 feet westward. At the point of accident, the grade is 0.08 percent descending westward.

Semi-automatic signal 63.1, governing west-bound movements on the main track and from the main track to the siding at the east switch, automatic signal 64.7, governing west-bound movements on the siding, and semi-automatic signal 66.1, governing west-bound movements from the siding to the main track at the west switch, are, respectively, 2.61 and 1.02 miles east, and 0.47 mile west of the point of accident. These signals are of the color-light type. Signals 63.1 and 66.1 are continuously lighted, and signal 64.7 is 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>
63.1	Red-over-yellow-over-red	Proceed at medium speed preparing to stop at next signal.	Medium-approach.
64.7	Red, with number plate	Stop; then proceed at restricted speed.	Stop and proceed.
66.1	Red-over-green-over-red	Proceed; medium speed * * *	Medium-clear.

Signals 63.1 and 66.1 and the siding switches are controlled by a centralized-traffic control machine at Conneaut, Ohio, 50.5 miles west of Ripley.

Operating rules read in part as follows:

DEFINITIONS.

\* \* \*

MEDIUM SPEED.--A speed not exceeding 35 miles per hour.

\* \* \*

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

\* \* \*

CONTROLLED SIDING.--A siding protected by controlled signals.

\* \* \*

19. The following signals will be displayed to the rear of every train, as markers, to indicate the rear of the train:

\* \* \*

Rear of freight train by night when on siding \* \* \*.

Lights \* \* \* as markers showing \* \* \* yellow to the side and rear. Deck light \* \* \* showing \* \* \* yellow to the rear.

34. All members of engine and train crews, must when practicable, communicate to each other by its name the indication of each signal affecting the movement of their train or engine.

The maximum authorized speed for freight trains moving on the siding at Ripley is 35 miles per hour.

#### Description of Accident

Extra 757 West, a west-bound freight train, consisting of engine 757, one caboose, 46 cars and a caboose, in the order named, stopped on the siding at Ripley about 10 p. m., with the rear end standing about 4,000 feet west of signal 64.7. About 35 minutes later, after a proceed-at-medium-speed indication was displayed by signal 66.1, Extra 757 West proceeded westward about 500 feet and had attained a speed of about 3 miles per hour when the rear end was struck by No. 37.

No. 37, a west-bound third-class freight train, consisting of engine 741, 84 cars and 2 cabooses, in the order named, passed signal 63.1, which displayed proceed-at-medium-speed-preparing-to-stop-at-next-signal, entered the siding at Ripley at the east switch, about 10:30 p. m., passed signal 64.7, which displayed stop-then-proceed-at-restricted-speed, and while moving at an estimated speed of 20 miles per hour it struck Extra 757 West at a point 1.02 miles west of signal 64.7.

The rear caboose of Extra 757 was demolished, and the wreckage was destroyed by fire. The rear five cars were derailed, and were considerably damaged. The engine of No. 37 was derailed and stopped on its left side 230 feet west of the point of accident. The first five cars of No. 37 were derailed. The front end of the engine and the first four cars were badly damaged. The fifth car was slightly damaged.

The weather was clear at the time of the accident, which occurred about 10:35 p. m.

The conductor of Extra 757 West was killed. The flagman of Extra 757 West, and the conductor, the flagman and the middle brakeman of No. 37 were injured.

### Discussion

The east siding-switch at Ripley was lined for two west-bound freight trains to enter the siding to meet an east-bound train, and the controlling signals were displaying proper indications for these movements. The first west-bound train, Extra 757 West, entered the siding at the east switch about 9:56 p. m., then proceeded to the west end of the siding and stopped about 10 p. m., with the rear end standing about 4,900 feet west of signal 64.7. The east-bound train, which was moving on the main track, cleared the west siding-switch at 10:32 p. m. Then the route was lined for Extra 757 West to enter the main track at the west siding-switch. Signal 63.1 displayed proceed-at-medium-speed for Extra 757 West. This train proceeded and had moved about 500 feet westward and had attained a speed of about 3 miles per hour when the rear end was struck by No. 37.

Immediately before the collision occurred the conductor and the flagman of Extra 757 West were in the rear caboose. The conductor was killed. The flagman first observed the following train when the engine was a few hundred feet distant, and he jumped from the caboose just before the collision occurred. Flag protection against following trains moving on the siding is not required by the carrier. The marker lamps and the deck lamp at the rear of the rear caboose of Extra 757 West were lighted and displayed yellow aspects to the rear.

No. 37 approached signal 64.7 at a speed of about 15 miles per hour, in compliance with the proceed-at-medium-speed indication displayed by signal 63.1 for this train. The headlight was lighted brightly, and the engineer was maintaining a lookout ahead. The fireman was on the deck of the engine tending the fire. The engineer said that he was operating his train in such manner that it could be stopped short of signal 64.7. However, when the engine was about 450 feet east of signal 64.7, he thought this signal was displaying a yellow aspect, which would permit his train to proceed prepared to stop at signal

66.1, located immediately east of the west siding-switch. He called this indication to the fireman. The fireman answered the engineer, but did not look at the signal. Soon afterward, the engineer observed that signal 66.1 was displaying proceed-at-medium-speed, and he called this indication to the fireman. Then he opened the throttle lever. At this time the fireman was in the coal space of the tender. When his engine was about 200 feet east of the rear end of the preceding train the engineer of No. 37 saw the outline of the caboose, and he immediately moved the brake valve to emergency position. The speed of No. 37 was about 20 miles per hour when the collision occurred. The fireman did not know that the preceding train was occupying the siding until after the brakes of his train were applied in emergency. The members of the train crew of No. 37 were in the rear caboose of their train. They did not know of anything being wrong until the collision occurred.

In tests after the accident the signals involved functioned properly. The controlling circuits are so arranged that when the siding is occupied between signals 64.7 and 66.1, signal 64.7 displays a red aspect, which requires a train to stop short of the signal, then it may proceed but must be prepared to stop short of a preceding train or an obstruction. The engineer of No. 37 thought that his vision may have been momentarily impaired by the rays of the headlight of the engine of the east-bound train, which passed his engine just east of signal 64.7, and for this reason he read the red aspect displayed by signal 64.7 as yellow, and did not see the marker lamps of the preceding train.

#### Cause

It is found that this accident was caused by failure to operate the following train in accordance with signal indications.

Dated at Washington, D. C., this tenth  
day of September, 1946.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,  
Secretary.