

INTERSTATE COMMERCE COMMISSION
WASHINGTON

REPORT NO. 3687

THE NEW YORK CENTRAL RAILROAD COMPANY

IN RE ACCIDENT

AT QUINCY, OHIO, ON

APRIL 13, 1956

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SUMMARY

Date: April 13, 1956

Railroad: New York Central

Location: Quincy, Ohio

Kind of accident: Rear-end collision

Equipment involved: Helper locomotive : Freight train

Train number: : Extra 5741 East

Locomotive numbers: Diesel-electric : Diesel-electric
unit 1873 unit 5741

Consist: : 58 cars, caboose

Speeds: Standing : 38 m. p. h.

Operation: Signal indications

Tracks: Double; tangent; 0.27 percent
descending grade eastward

Weather: Clear

Time: 7:03 a. m.

Casualties: 3 injured

Cause: Failure to operate freight train
in accordance with signal
indications

INTERSTATE COMMERCE COMMISSION

REPORT NO. 3687

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

THE NEW YORK CENTRAL RAILROAD COMPANY

June 25, 1956

Accident at Quincy, Ohio, on April 13, 1956, caused by
failure to operate the freight train in accordance
with signal indications.

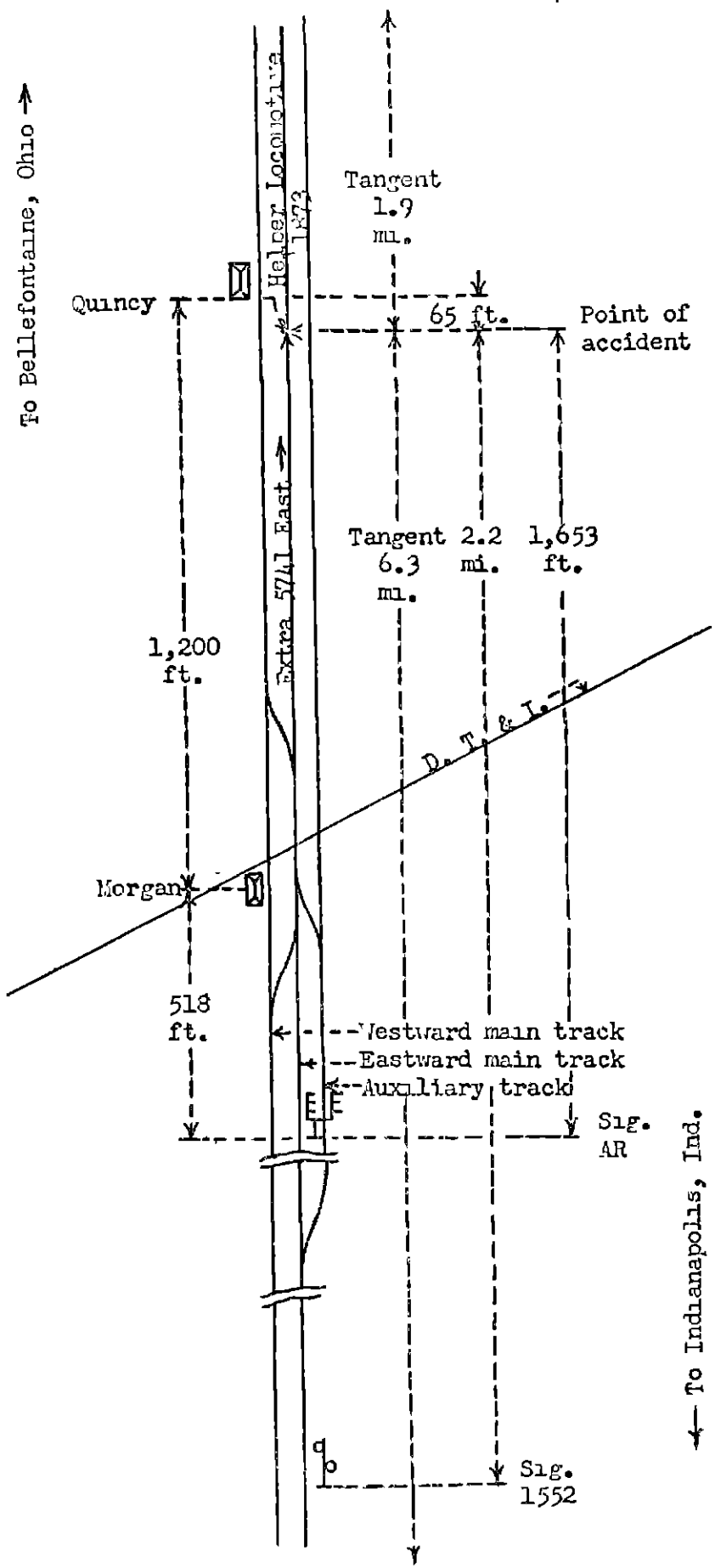
REPORT OF THE COMMISSION¹

CLARKE, Commissioner.

On April 13, 1956, there was a rear-end collision between a helper locomotive and a freight train on the New York Central Railroad at Quincy, Ohio, which resulted in the injury of three employees. This accident was investigated in conjunction with a representative of the Public Utilities Commission of Ohio.

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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 Clarke for consideration and disposition.



- Bellefontaine, Ohio 9.6 mi.
- DeGraff 2.9 mi.
- Quincy (Point of accident) 0.2 mi.
- Morgan 3.3 mi.
- Pemberton 2.5 mi.
- Mix 22.2 mi.
- Versailles 8.2 mi.
- Winchester 18.2 mi.
- Ansonia, Ohio 21.7 mi.
- Muncie, Ind. 3.1 mi.
- Hart 16.0 mi.
- South Anderson 29.1 mi.
- Eastwood 0.8 mi.
- Brightwood Yard 5.2 mi.
- Indianapolis, Ind.

← To Indianapolis, Ind.

Report No. 3687
 New York Central Railroad
 Quincy, Ohio
 April 13, 1956

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Location of Accident and Method of Operation

This accident occurred on that part of the Ohio Division extending between Indianapolis, Ind., and Bellefontaine, Ohio, 143.0 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. Morgan and Quincy, Ohio, are located, respectively, 130.3 miles and 130.5 miles east of Indianapolis. Within interlocking limits at Morgan the two main tracks and an auxiliary track south of the main tracks are connected by crossovers and are crossed at grade by a single-track line of the Detroit, Toledo and Ironton Railroad. The interlocking station is located adjacent to the tracks in the northwest angle of the intersection. The station at Quincy is located approximately 1,200 feet east of the interlocking station at Morgan. The accident occurred on the eastward main track at a point 65 feet west of the station at Quincy. The main tracks are tangent throughout a distance of 6.3 miles immediately west of the point of accident and 1.9 miles eastward. The grade is 0.27 percent descending eastward at the point of accident.

Automatic signal 1552 and semi-automatic signal AR, governing east-bound movements on the eastward main track, are located, respectively, 2.2 miles and 1,653 feet west of the point of accident. Signal 1552 is of the two-unit color-light type. Signal AR is of the three-arm upper-quadrant semaphore type. It is mounted on a bracket mast 518 feet west of Morgan Interlocking Station. Both signals are approach lighted. The aspects applicable to this investigation and the corresponding indications are as follows:

<u>Signal</u>	<u>Aspect</u>	<u>Indication</u>
1552	Yellow-over-red, staggered	PROCEED PREPARING TO STOP AT NEXT SIGNAL. TRAIN EXCEEDING MEDIUM SPEED MUST AT ONCE REDUCE TO THAT SPEED. REDUCTION TO MEDIUM SPEED MUST COMMENCE BEFORE PASSING SIGNAL AND BE COMPLETED BEFORE ACCEPTING A MORE FAVORABLE INDICATION.
AR	Horizontal-over-horizontal-over-horizontal	STOP.

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The controlling circuits are so arranged that when the block of signal 1552 is unoccupied and signal AR indicates Stop, signal 1552 indicates Proceed-preparing-to-stop-at-next-signal.

This carrier's operating rules read in part as follows

SIGNAL DEFINITIONS

Medium Speed.--A speed not exceeding thirty miles per hour.

Slow Speed.--A speed not exceeding fifteen miles per hour.

Restricted Speed.--A speed not exceeding that which will enable a train to stop short of train ahead, * * * and not exceeding slow speed.

35. The following signals will be used by flagmen.

Day Signals--A red flag, * * *
Torpedoes,
Fusees.

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 fusees. * * *

* * *

Note.--When trains are operating under Automatic Block System Rules, the requirements of Rule 99, in so far as protecting against following trains is concerned, will have been complied with when full protection is afforded against trains moving at Restricted Speed.

The maximum authorized speed for freight trains is 50 miles per hour.

Description of Accident

Diesel-electric locomotive 1873, a lead type freight unit assigned to helper service, departed west-bound from Bellefontaine at 6.10 a. m. It arrived at Morgan at 6:25 a. m. and crossed to the eastward main track. It then proceeded eastward and stopped about 6:40 a. m. with the rear end of the locomotive 65 feet west of the station at Quincy to await the arrival of Extra 5741 East, which it was to assist. About 23 minutes later this locomotive was struck by Extra 5741 East.

Extra 5741 East, an east-bound freight train, consisted of Diesel-electric unit 5741, a road-switcher type, 58 cars, and a caboose. This train departed from Brightwood Yard at Indianapolis and passed Eastwood, 124.5 miles west of Quincy, at 12:10 a. m. At Ansonia, 36.4 miles west of Quincy, members of the crew received copies of a message containing the information that a helper locomotive would be provided at Morgan or De Graff, 3.1 miles east of Morgan. This train departed from Ansonia at 5 58 a. m., passed signal 1552, which indicated Proceed-preparing-to-stop-at-next-signal, passed signal AR, which indicated Stop, and while moving at a speed of 38 miles per hour it struck the rear end of helper locomotive 1873.

Helper locomotive 1873 was derailed and moved eastward approximately 1,040 feet by the force of the impact. It stopped upright and in line with the track. It was badly damaged. The locomotive, the first 13 cars, and the front truck of the fourteenth car of Extra 5741 East were derailed. The locomotive stopped upright and approximately in line with the track, with the front end against the rear end of the helper locomotive. The derailed cars stopped approximately in line with the track. The locomotive and the second, third, and fourth cars were badly damaged. The first and eighth cars were somewhat damaged, and the sixth, seventh, and ninth to eleventh cars, inclusive, were slightly damaged.

The fireman of helper locomotive 1873, and the fireman and the front brakeman of Extra 5741 East were injured.

The weather was clear at the time of the accident, which occurred at 7:03 a. m.

Diesel-electric unit 5741 is equipped with a steam generator for train heating, which is mounted in a compartment to the rear of the control compartment.

Discussion

The crew of helper locomotive 1873 consisted of an engineer, a fireman, and a conductor. When this locomotive arrived at Morgan the conductor entered the interlocking station to await the arrival of Extra 5741 East. The conductor had been informed that Extra 5741 East would set off several cars at Morgan, and he expected that the train would be stopped west of signal AR and that the cars would be set off before the helper locomotive was coupled to the road locomotive, as was the usual practice. He did not consider it necessary to place torpedoes on the track. As Extra 5741 East approached signal AR, which indicated Stop, the conductor of the helper locomotive saw that it would not stop short of the signal. He left the interlocking station and gave stop signals and called a warning from a position between the main tracks. His signals were not acknowledged. He estimated that the speed of Extra 5741 East was 40 miles per hour when the locomotive passed him, and he did not think the speed was reduced before the collision occurred. The operator at Morgan said that as Extra 5741 East was approaching signal AR the lever controlling the signal was in position to cause the signal to indicate Stop. When the train did not stop short of the signal the operator attempted to attract the attention of members of the crew on the locomotive from a window of the interlocking station. He saw a person on the left side of the control compartment, but his signals were not acknowledged. As Extra 5741 East was approaching Morgan the engineer of helper locomotive 1873 was located approximately 150 feet west of the rear end of his locomotive. The fireman was on the locomotive. The engineer saw the conductor giving stop signals and heard him call a warning. He then ran westward and gave stop signals. He saw the engineer of Extra 5741 East sitting upright in his seat, but his stop signals were not acknowledged.

As Extra 5741 East was approaching the point where the accident occurred the engineer and the front brakeman were in the control compartment of the locomotive. The conductor and the flagman were in the caboose. The headlight was lighted. The brakes of this train had been tested and had functioned properly when used en route. The windows of the control compartment were closed, and the steam generator was in standby operation. This train had departed from Brightwood Yard about 12:10 a. m. and had performed service en route at South Anderson, Hart, Muncie, and Ansonia, located, respectively, 95.4 miles, 79.4 miles, 76.3 miles, and 36.4 miles west of Quincy. Cars were picked up or set off at each of these points, and all members of the crew

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were aware that several cars in their train were to be set off at Morgan. The fireman had operated the locomotive from a point immediately east of Brightwood Yard to Winchester, 54.3 miles west of the point of accident. The conductor said that he rode in the control compartment between Hart and Luncie and that the members of the crew on the locomotive appeared to be in normal condition. The locomotive was being operated with the hood end forward and the heating boiler compartment to the rear. The engineer said that there were fumes in the control compartment which he thought came from the steam generator. He said that he felt dizzy and then became drowsy soon after the train departed from Ansonia. He recalled passing a west-bound train in the vicinity of Pemberton, 3.5 miles west of Quincy. He said that in this vicinity he roused momentarily and sounded a grade-crossing whistle signal, but he could recall no further details of the trip. The fireman and the front brakeman had exchanged seats when the fireman became drowsy in the vicinity of Versailles, 28.2 miles west of the point of accident. Both the front brakeman and the fireman said that they fell asleep and that they could recall no details of the trip after their train passed Mix, 6.0 miles west of Quincy. None of the members of the crew on the locomotive saw the aspects displayed by signals 1552 and AR. The speed of the train was not reduced as it approached the interlocking, passed over the D.T. & I. crossing, and proceeded eastward to the point of collision. The engineer said that he moved the brake valve to emergency position when the impact occurred. The conductor and the flagman said that they took no action to stop the train when the speed was not reduced approaching the interlocking because they thought instructions relative to leaving cars at Morgan had been changed. They said that the sun was shining brightly from the direction in which the train was moving, and they did not see the signals at the interlocking before the locomotive passed them.

The signal apparatus at Morgan was tested after the accident occurred and it functioned as intended. The signal maintainer at Morgan arrived at that point about 17 minutes after the accident occurred. He said that he immediately checked the positions of the levers and the indications of the signals and found no defective condition in the signal apparatus.

Examination of the control compartment of the locomotive of Extra 5741 East after the accident occurred disclosed that the automatic brake valve was in emergency position

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and the throttle was in idle position. All windows in the control compartment were closed. The cab heater switches were on full on the fireman's side and on low on the engineer's side. Examination of the tape of the speed-recording device disclosed that the speed was 38 miles per hour at the point of collision. There was no indication of deceleration immediately before the accident occurred.

Inspection of locomotive 5741 at Bellefontaine Shop on April 17, 1956, disclosed that portions of the gaskets at the bottom of the rear tube on the No. 1 exhaust manifold and at the bottom of the front tube of the No. 2 exhaust manifold were missing. The missing portions of the gaskets were approximately 8 inches in length and slightly more than 1/8 inch thick and had covered approximately 20 percent of the joint between the engine crankcase and the exhaust manifold at these points. The steam generator functioned as intended when it was tested. Tests failed to disclose entry into the cab of any appreciable quantity of fumes from either the engine or boiler compartments.

Cause

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

Dated at Washington, D. C., this twenty-fifth day of June, 1956.

By the Commission, Commissioner Clarke.

(SEAL)

HAROLD D. McCOY,

Secretary.