INTERSTATE COMMERCE COMMISSION

WASHINGTON

REPORT NO. 3369

THE NEW YORK CENTRAL RAILROAD COMPANY
AND
THE BALTIMORE AND OHIO RAILROAD COMPANY

IN RE ACCIDENT

AT GALATEA, OHIO, ON

OCTOBER 8, 1950

SUMMARY

Date:	October 8, 1950	
Railroads:	New York Central	: Baltimore and Ohio
Location:	Galatea, Ohio	
Kind of accident:	Side collision	
Trains involved:	Freight	: Freight
Train numbers:	Extra 1674 South	: Extra 5587 West
Engine numbers:	Diesel-electric units 1674A, 2432B and 1642A	: 5587
Consists:	Caboose	: 47 cars, caboose
Estimated speeds:	Standing	: 45 m. p. h.
Operation:	Interlocking	
Tracks:	Single; tangent; 0.3 percent ascending grade southward	: Double; tangent; 0.05 percent descending grade westward
Weather:	Misty	
Time:	6:40 p. m., dark	
Casualties:	4 injured	
Cause:	Failure to operate New York Central train in accordance with signal indications	

INTERSTATE COMMERCE COMMISSION

REPORT NO. 3369

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

THE NEW YORK CENTRAL RAILROAD COMPANY
AND
THE BALTIMORE AND OHIO RAILROAD COMPANY

November 29, 1950

Accident at Galatea, Ohio, on October 8, 1950, caused by failure to operate the New York Central train in accordance with signal indications.

REPORT OF THE COMMISSION[1]

PATTERSON, Commissioner:

On October 8, 1950, there was a side collision between a freight train on the New York Central Railroad and a freight train on the Baltimore and Ohio Railroad at Galatea, Ohio, which resulted in the injury of four employees. This accident was investigated in conjunction with a representative of the Public Utilities Commission of Ohio.

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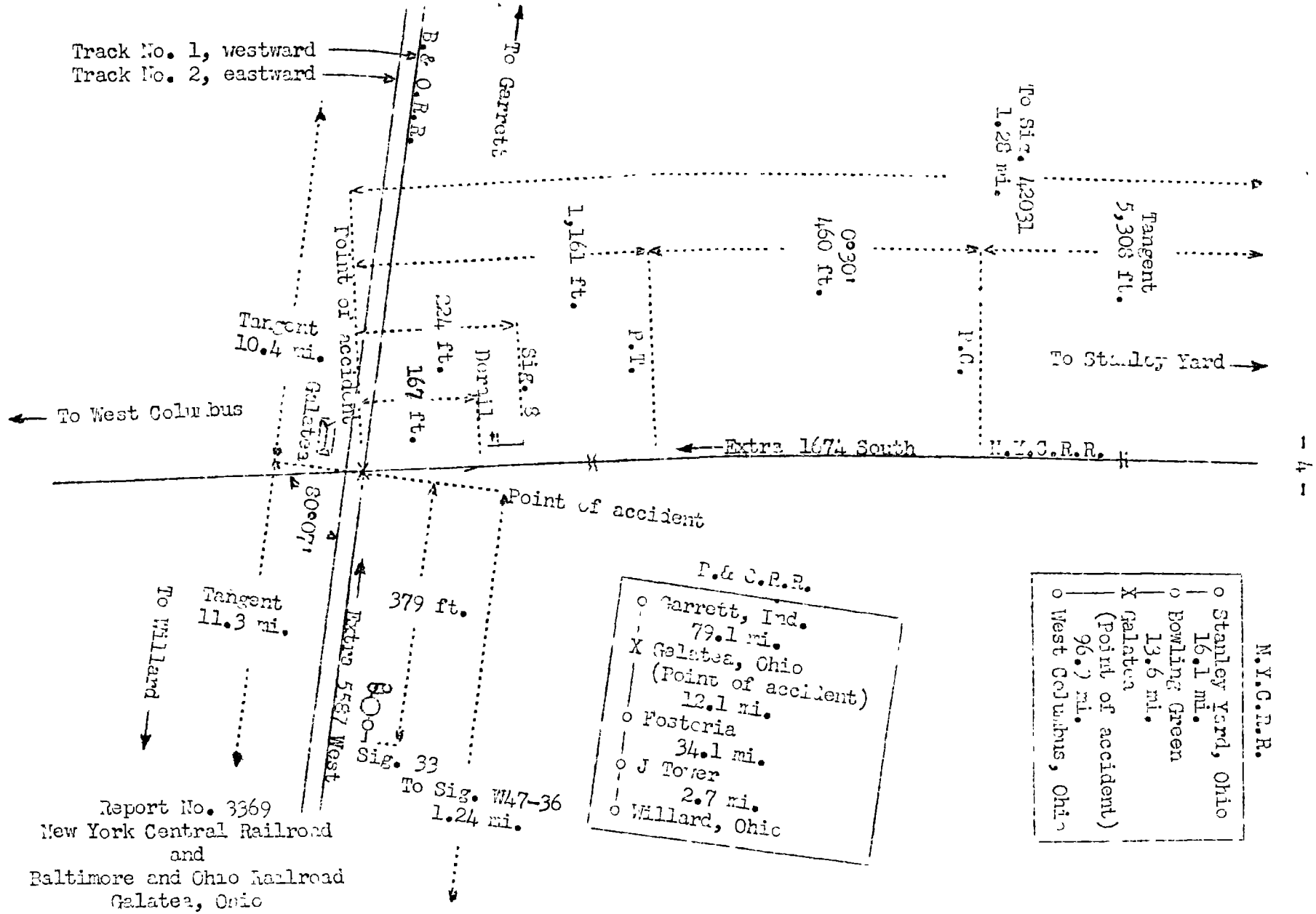
[1] Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Patterson for consideration and disposition.



Report No. 3369
New York Central Railroad
and
Baltimore and Ohio Railroad
Galatea, Ohio
October 8, 1950

Location of Accident and Method of Operation

This accident occurred at the intersection of the New York Central Railroad and the Baltimore and Ohio Railroad at Galatea, Ohio. The crossing is located on that part of the Ohio Central Division of the N.Y.C. extending between Stanley Yard and West Columbus, Ohio, 126.6 miles, and on that part of the Chicago Division of the B.& O. extending between Willard, Ohio, and Garrett, Ind., 128 miles. The crossing is 29.7 miles south of Stanley Yard and 48.9 miles west of Willard. In the vicinity of the point of accident the N.Y.C. is a single-track line, over which trains are operated by timetable, train orders and a manual-block system. The B.& O. is a double-track line, over which trains moving with the current of traffic are operated by signal indications. The main tracks of the B.& O. from north to south are designated as track No. 1, westward, and track No. 2, eastward. Movements over the crossing are governed by interlocking signals. The N.Y.C. extends north and south and the B.& O. extends east and west. The two lines intersect at an angle of 80°07'. The interlocking station is located in the southwest angle of the crossing, about 12 feet west of the center-line of the N.Y.C. track and 20 feet south of the center-line of B.& O. track No. 2. From the north on the N.Y.C. there are, in succession, a tangent 5,308 feet in length, a 0°30' curve to the left 460 feet and a tangent 1,161 feet to the point of accident and a considerable distance southward. Throughout a distance of approximately 1.6 miles immediately north of the point of accident the grade for south-bound trains varies from level to 0.3 percent ascending southward. At the crossing the grade is practically level. From the east the B.& O. tracks are tangent throughout a distance of 11.3 miles to the crossing and 10.4 miles westward. The grade for west-bound trains is 0.05 percent descending westward.

On the N.Y.C. approach signal 42031 and home signal 8, governing south-bound movements, are located, respectively, 1.28 miles and 224 feet north of the crossing. Signal 42031 is of the color-light type, and signal 8 is a two-arm, upper-quadrant semaphore type signal. These signals are approach-lighted and each displays three aspects. On the B.& O., approach signal W47-36 and home signal 33, governing west-bound movements on track No. 1, are located, respectively, 1.24 miles and 379 feet east of the point of accident. These signals are of the color-position-light type and are approach-lighted. The aspects applicable to this investigation and their corresponding indications and names are as follows:

Signal	Aspect	Indication	Name
42031	Yellow over red marker light, 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.	———
8	Red-over-red	Stop.	———
W47-36	Green-over-green under lunar white marker light	Proceed.	Clear.
33	Green-over-green under lunar white marker light	Proceed.	Clear.
	Two horizontal red lights	Stop.	Stop.

The circuits and the mechanical locking are so arranged that, when the route is lined for the B.& O., signal 42031 indicates Approach and signal 8 indicates Stop. Approach and route locking are provided. Indicators are provided in the interlocking station to indicate when a south-bound train enters the N.Y.C. approach circuit at a point 2.26 miles north of the crossing and when a west-bound train enters the B.& O. approach circuit at a point 2.57 miles east of the tower. A switch-point derail is located on the N.Y.C. 167 feet north of the center-line of B.& O. track No. 1.

Operating rules of the N.Y.C. read in part as follows:

DEFINITIONS.

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

34. The engineman and fireman must, and when practicable the trainmen will, communicate to each other the indication of all signals affecting the movement of their train.

98. Trains must approach * * * railroad crossings at grade * * * prepared to stop, unless * * * signals indicate proceed, and track is clear. * * *

The maximum authorized speed for freight trains was 40 miles per hour on the N.Y.C. and 55 miles per hour on the B.& O.

Description of Accident

Extra 1674 South, a south-bound N.Y.C. freight train, consisted of Diesel-electric units 1674A, 2432B and 1642A, coupled in multiple-unit control, and a caboose. This train departed from Bowling Green, the last open office, 13.6 miles north of Galatea, at 5:54 p. m., passed signal 42031, which indicated Approach, passed signal 8, which indicated Stop, and was derailed at the switch-point derail north of the crossing. The train stopped with the second Diesel-electric unit across B.& O. tracks Nos. 1 and 2. Immediately afterward the second Diesel-electric unit was struck by B.& O. Extra 5587 West.

Extra 5587 West, a west-bound B.& O. freight train, consisted of engine 5587, 47 cars and a caboose. This train departed from J Tower, 2.7 miles west of Willard, at 5:42 p. m., passed Fostoria, the last open office, 12.1 miles east of the point of accident, at 6:24 p. m., passed signal W47-36, which indicated Proceed, passed signal 33, which indicated Stop, and while moving at an estimated speed of 45 miles per hour it struck the second Diesel-electric unit of Extra 1674 South.

The first Diesel-electric unit of Extra 1674 South was derailed to the east and stopped about 60 feet south of B.& O. track No. 2, with the center of the pilot about 6 feet east of the center-line of the N.Y.C. track. The rear of the unit stopped about 10 feet south of B.& O. track No. 2. This unit leaned toward the east at an angle of about 30 degrees. The second Diesel-electric unit stopped about 10 feet north of B.& O. track No. 1 and diagonally across the northwest angle of the intersection. The rear end of this unit stopped on the west edge of the N.Y.C. roadbed and 33 feet north of the crossing. The front truck of this unit stopped in the vicinity of B.& O. track No. 2 and about 200 feet west of the crossing.

The third Diesel-electric unit and the caboose were derailed to the east and stopped in line with the track. The first and the third Diesel-electric units were somewhat damaged. The second Diesel-electric unit was badly damaged and the caboose was slightly damaged. B.& O. engine 5587 was derailed to the north and stopped with the front end 198 feet west of the crossing. The tender remained coupled to the engine and stopped with the rear end between tracks Nos. 1 and 2. The engine leaned toward the south at an angle of about 15 degrees. The first six cars were derailed and stopped in various positions along the tracks. The engine and the tender were considerably damaged. The first car was badly damaged and the second and third cars were somewhat damaged. The fourth to the sixth cars, inclusive, were slightly damaged.

The engineer and the fireman of Extra 1674 South, and the engineer and the front brakeman of Extra 5587 West were injured.

The weather was misty and it was dark at the time of the accident, which occurred about 6:40 p. m.

Discussion

When the route at Galatea interlocking is lined for a west-bound movement on the B.& O., signal 42031 and signal 8, which govern south-bound movements on the N.Y.C., indicate, respectively, Approach and Stop. If the approach circuit on B.& O. track No. 1 is occupied and signal 33 displays an aspect to proceed the route cannot be changed until after the expiration of a time interval of 3 minutes 12 seconds. About 2 minutes before the accident occurred the operator at Galatea interlocking lined the route for the movement of B.& O. Extra 5587 West through the interlocking. N.Y.C. Extra 1674 South had entered the approach circuit on the N.Y.C. a few seconds before the route was lined for the B.& O.

As the N.Y.C. train approached the point where the accident occurred the speed was about 40 miles per hour. The headlight was lighted brightly. The brakes of this train had been tested and had functioned properly when used en route. The enginemen were maintaining a lookout ahead from their respective positions in the control compartment of the first Diesel-electric unit. The conductor, the flagman and the front

brakeman were in the caboose. Signal 42031 indicated Approach and the enginemen called the indication. The engineer said that after the engine passed the signal he became concerned about an opposing second-class train and consulted the timetable to ascertain its schedule. He did not initiate a brake application to comply with the approach signal indication. He sounded the grade-crossing whistle-signal on the pneumatic horn for a rail-highway grade crossing south of signal 42031. He said that he first became aware that signal 8 indicated Stop when the engine was about 70 feet north of the signal. He immediately initiated an emergency application of the brakes. The fireman said that he repeated the indication of signal 42031 after the engineer called it. When he first observed signal 8 it indicated Stop. He called the indication and the engineer responded. He said the speed of the train was being regulated by manipulating the throttle and he thought the speed was being properly controlled. When the train was about 1,200 feet from the crossing he again called the indication of signal 8. Before he could take any action to stop the train the engineer initiated the emergency application of the brakes. None of the employees in the caboose observed the aspect of signal 42031. The flagman said that he saw the Stop aspect of signal 8 when the train was a short distance north of the signal. The brakes were applied in emergency before he could take any action to stop the train. The members of the train crew alighted from the caboose a few seconds before the collision occurred. According to the tape of the speed recording device of Diesel-electric unit 1674A, the speed of the train was about 40 miles per hour when the brakes were applied in emergency.

As B.& O. Extra 5687 West was approaching the crossing the speed was about 50 miles per hour. The headlight was lighted brightly. The brakes of this train had been tested and had functioned properly when used en route. The enginemen and the front brakeman were in their respective positions in the cab of the engine. The conductor and the flagman were in the caboose. The engineer said that both signal W47-36 and signal 33 indicated Proceed. The indications were called by the enginemen and the front brakeman. However, when the engine was about 750 feet east of signal 33 Extra 1674 South occupied the track circuit south of signal 8. This track occupancy caused the indication of signal 33 to change from Proceed to Stop. The engineer called the Stop indication and immediately initiated an emergency application of the brakes, closed the throttle and opened the sanders. When he saw the N.Y.C. train enter the crossing he warned the fireman and the front brakeman and placed the reverse lever in position for backward movement. The collision occurred before the speed of the train had been materially reduced.

Cause

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

Dated at Washington, D. C., this twenty-ninth day of November, 1950.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,

Secretary.