

INTERSTATE COMMERCE COMMISSION
WASHINGTON

INVESTIGATION NO. 2836
THE NEW YORK CENTRAL RAILROAD COMPANY
REPORT IN RE ACCIDENT
NEAR TIADAGHTON, PA., ON
OCTOBER 19, 1944

SUMMARY

Railroad: New York Central

Date: October 19, 1944

Location: Tiedaghton, Pa.

Kind of accident: Side collision

Trains involved: Freight : Freight

Train numbers: Extra 2640 South : Second 6

Engine numbers: 2640 : 3191

Consist: 90 cars, caboose : 29 cars, caboose

Speed: 5 m. p. n. : 25 m. p. h.

Operation: Timetable, train orders and
manual-block system

Track: Double and single; tangent;
0.3412 percent descending
grade southward

Weather: Clear

Time: 5:10 p. m.

Casualties: 1 killed; 6 injured

Cause: Failure properly to control speed
of Extra 2640 South approaching
end of double track and in accord-
ance with signal indication

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 2836

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

THE NEW YORK CENTRAL RAILROAD COMPANY

December 29, 1944.

Accident near Tiadaghton, Pa., on October 19, 1944, caused
by failure properly to control the speed of Extra
2640 South approaching the end of double track and in
accordance with signal indication.

REPORT OF THE COMMISSION¹

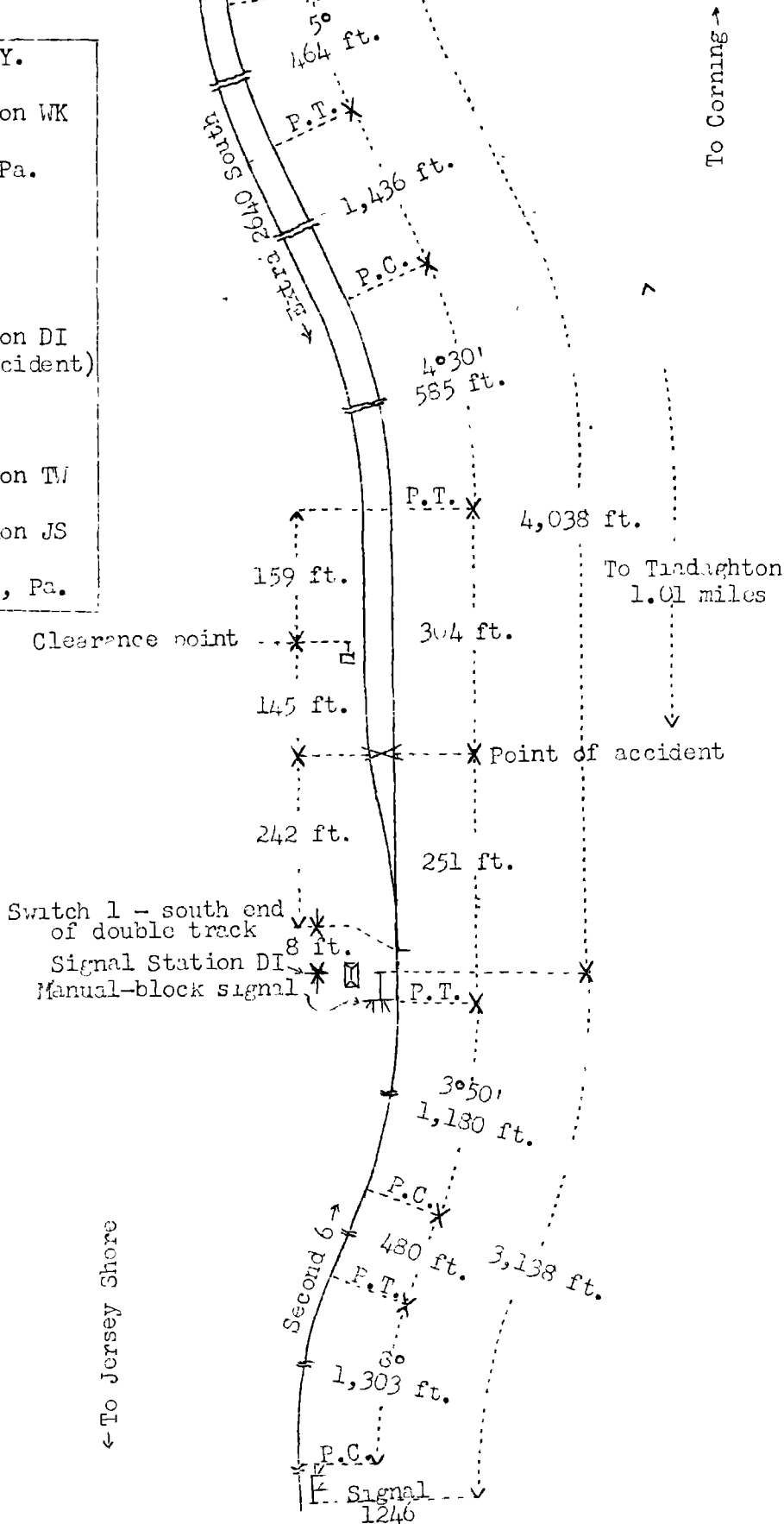
PATTERSON, Chairman:

On October 19, 1944, there was a side collision between
two freight trains on the New York Central Railroad near
Tiadaghton, Pa., which resulted in the death of one employee
and the injury of six employees.

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

Signal 1221
 End-of-automatic-block sign 5,958 ft
 Northward main track
 Southward main track
 P.T.
 349 ft.
 P.C.
 5°
 1,464 ft.
 P.T.
 1,436 ft.
 P.C.
 4°30'
 585 ft.

- o Corning, N. Y.
 0.34 mi.
- o Signal Station WK
 30.31 mi.
- o Middlebury, Pa.
 11.84 mi.
- o Ansonia
 9.03 mi.
- o Tiadaghton
 1.01 mi.
- x Signal Station DI
 (Point of accident)
 7.09 mi.
- o Blackwell
 33.21 mi.
- o Signal Station TW
 2.35 mi.
- o Signal Station JS
 1.65 mi.
- o Jersey Shore, Pa.



Inv-2836
 New York Central Railroad
 Tiadaghton, Pa.
 October 19, 1944

Location of Accident and Method of Operation

This accident occurred on that part of the Pennsylvania Division extending southward from Signal Station WK, near Corning N. Y., to Signal Station JS, near Jersey Shore, Pa., 94.84 miles. Between Middlebury, Pa., 30.31 miles south of Signal Station WK, and Signal Station DI, near Tiadaghton, 21.88 miles, this was a double-track line, and between Signal Station DI and Signal Station TW, 40.30 miles, a single-track line, over which trains were operated by timetable, train orders and a manual-block system. The switch at the south end of the double track at Signal Station DI, hereinafter referred to as switch 1, was 8 feet north of the tower. The clearance point at the south end of the double track was 387 feet north of switch 1, and there was a sign, indicating the end of double track, at this point on the west side of the southward main track. The accident occurred 1.01 miles south of the station at Tiadaghton, 145 feet south of the clearance point and 242 feet north of switch 1. From the north there were, in succession, a tangent 349 feet, a 5° curve to the left 464 feet, a tangent 1,436 feet, a 4°30' curve to the right 585 feet, a tangent 159 feet to the clearance point of switch 1 and a No. 18 turnout to the left 145 feet to the point of accident. From the south there were, in succession, an 9° curve to the right 1,303 feet, a tangent 480 feet, a 3°50' curve to the left 1,180 feet and a tangent 251 feet to the point of accident. The grade for south-bound trains was descending, successively, 0.3174 percent 1.4 miles, 0.1406 percent 3,168 feet and 0.3412 percent 1,584 feet to the point of accident. The grade for north-bound trains was ascending 0.4826 percent 1 mile to the point of accident.

The block north of the point of accident extended between Ansonia, about 10 miles north of Signal Station DI, and the clearance point at the south end of the double track near Signal Station DI, and the block in which the accident occurred extended between the clearance point and Blackwell, about 7 miles south of Signal Station DI. The manual-block signals at Ansonia and Signal Station DI were of the three-indication, upper-quadrant, semaphore type, and were electrically lighted. These signals were used also as train-order signals. The signal at Signal Station DI was mounted on a mast located on the west side of the main track, in front of the tower and 8 feet south of switch 1. The involved day aspects and corresponding indications of these signals were as follows:

<u>Signal</u>	<u>Aspect</u>	<u>Indication</u>
Ansonia	Vertical	Proceed
Signal Station DI		
for south-bound trains	Horizontal	Stop
for north-bound trains	Vertical	Proceed

Automatic signal 1246, located 3,138 feet south of Signal Station DI, governed movements to the end-of-automatic-block sign, 4,038 feet north of Signal Station DI. This signal had no approach signal, and it governed north-bound movements with

regard to track occupancy, position of the manual-block signal at Signal Station DI, and the position of the switch at the end of double track. Automatic signal 1221, located 9,996 feet north of Signal Station DI, governed south-bound movements on the southward main track to the end-of-automatic-block sign, 4,038 feet north of Signal Station DI. This signal had no approach signal and it governed movements only to a point 3,643 feet north of the clearance point at the end of the double track.

Switch 1 was hand-operated, and was in the charge of the operator at Signal Station DI. The switch-stand was on the east side of the track, and was of the intermediate type. The switch-stand was provided with a rectangular target 10 inches by 3 feet 4 inches. The center of the target was 7 feet 6 inches above the level of the tops of the rails. The normal position of switch 1 was for movement from the single track to the northward main track. When switch 1 was lined normally the target was at right angles to the track, and displayed green to the south and red to the north.

Operating rules read in part as follows:

10. Color Signals.

Color.	Indication.
(a) Red.	Stop.
* * *	
(c) Green.	Proceed, * * *
* * *	

73. Extra trains are inferior to regular trains.

83. Unless otherwise provided, a train must not * * * pass from one of two or more tracks to single track, until it has been ascertained whether all trains due, which are superior or of the same class, have arrived or left.

* * *

98. Trains must approach the end of two or more tracks, * * * prepared to stop, unless the switches are properly lined, signals indicate proceed, and track is clear. * * *

317-B. * * *

A train must not be admitted to a block which is occupied by an opposing train * * * except as provided in Rules * * * or by train order.

* * *

The maximum authorized speed for freight trains was 35 miles per hour.

Description of Accident

Extra 2640 South, a south-bound freight train, consisting of engine 2640, 90 cars and a caboose, passed the manual-block signal at Ansonia, which displayed proceed, at 4:53 p. m., passed the clearance point at the south end of double track near Signal Station DI, where it was required to wait until the crew had received train-order and manual-block authority to proceed, and while it was moving at an estimated speed of 5 miles per hour the engine entered the turnout of switch 1 and was struck by Second 6.

Second 6, a north-bound second-class freight train, consisting of engine 3191, 29 cars and a caboose, passed the manual-block signal at Signal Station DI, which displayed proceed, at 5:10 p. m., 3 hours 18 minutes late, and while moving at an estimated speed of 25 miles per hour it passed switch 1, which was lined for movement from the single track to the northward main track, and struck Extra 2640 South at a point 242 feet north of switch 1.

The engine of each train, three cars of Extra 2640 South and seven cars of Second 6 were derailed and damaged.

Engine 2640 was provided with type LT brake equipment. This engine was not equipped with a speed recorder or indicator. Of the cars of Extra 2640, 38 were provided with AE-type and the remainder with K-type brake equipment. In tests after the accident there was no condition found that would prevent the proper application of the train brakes.

It was clear at the time of the accident, which occurred about 5:10 p. m.

The front brakeman of Second 6 was killed. The conductor, the fireman and the flagman of Second 6, and the engineer, the fireman and the front brakeman of Extra 2640 South were injured.

Discussion

The rules governing operation on this line provide that trains must approach the end of double track prepared to stop, unless the switches are properly lined, signals indicate proceed, and track is clear. A train must not proceed from one of two or more tracks to single track until it has received information by train order concerning overdue superior trains. In manual-block territory no train may be permitted to enter a block occupied by an opposing train, except by train-order authority or in case of emergency.

The manual-block signal at Signal Station DI governing southward movements entering the block in which the accident occurred was located 395 feet south of the north end of that block. At the time of the accident the manual-block signal displayed proceed for Second 6 to enter the block which was immediately north of the block in which the accident occurred, and displayed stop for

southward movements. The latter indication did not permit Extra 2640 South to pass the clearance point at the south end of the double track. Switch 1 was lined for movement from the single track to the northward main track. No train order had been issued restricting the authority of Second 6 to proceed, or to authorize the movement of Extra 2640 South beyond the clearance point of switch 1. Under the rules, Extra 2640 South was required to approach the end of double track at Signal Station DI prepared to stop at the clearance point and not to proceed beyond the clearance point without train-order and manual-block authority. The surviving employees concerned so understood.

As Second 6 was approaching Signal Station DI the speed was about 25 miles per hour. The enginemen and the front brakeman were maintaining a lookout ahead. Signal 1246 displayed proceed. When the engine was in the vicinity of switch 1 the fireman observed the engine of Extra 2640 South pass the clearance point, and he called a warning. The engineer immediately increased the speed of his train in an unsuccessful attempt to clear the fouling point before Extra 2640 South reached it.

As Extra 2640 South was approaching Signal Station DI the speed was about 30 miles per hour. The brakes had functioned properly at all points where used en route. The enginemen and the front brakeman were maintaining a lookout ahead. The engineer said that when the engine reached a point about 4,500 feet north of the clearance point of switch 1 he made a 7-pound brake-pipe reduction. The brakes were not released. When the engine was about 2,400 feet north of the clearance point the speed was about 25 miles per hour. He said he thought he had the train under proper control and that the engine would stop short of the clearance point as a result of the 7-pound reduction, but when the engine was about 1,200 feet north of the clearance point he realized that the speed was excessive, and he moved the brake valve to emergency position in an attempt to stop short of the fouling point of switch 1. However, the train was not stopped and the speed was about 5 miles per hour when the engine was struck by Second 6 about 145 feet south of the clearance point.

Cause

It is found that this accident was caused by failure properly to control the speed of Extra 2640 South approaching the end of double track and in accordance with signal indication.

Dated at Washington, D. C., this twenty-ninth day of December, 1944.

By the Commission, Chairman Patterson.

(SEAL)

W. P. BARTEL,
Secretary.