

INTERSTATE COMMERCE COMMISSION
WASHINGTON

INVESTIGATION NO 2763
THE NEW YORK, NEW HAVEN AND HARTFORD
RAILROAD COMPANY
REPORT IN RE ACCIDENT
AT DARIEN, CONN., ON
JANUARY 14, 1944

SUMMARY

Railroad: New York, New Haven and Hartford
Date: January 14, 1944
Location: Darien, Conn.
Kind of accident: Rear-end collision
Trains involved: Passenger : Passenger
equipment
Train numbers: 382 : Extra 0357 East
Engine numbers: Electric motor 0359 : Electric motor
0357
Consist: 9 cars : 7 cars
Estimated speed: 2 m. p. h. : 35 m. p. h.
Operation: Automatic block-signal system
Track: Four; tangent; 0.51 percent
descending grade eastward
Weather: Clear
Time: 11:02 p. m.
Casualties: 1 killed; 16 injured
Cause: Failure properly to control
speed of following train in
accordance with signal indications

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 2763

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

THE NEW YORK, NEW HAVEN AND HARTFORD
RAILROAD COMPANY

February 14, 1944.

Accident at Darien, Conn., on January 14, 1944, caused by
failure properly to control the speed of the following
train in accordance with signal indications.

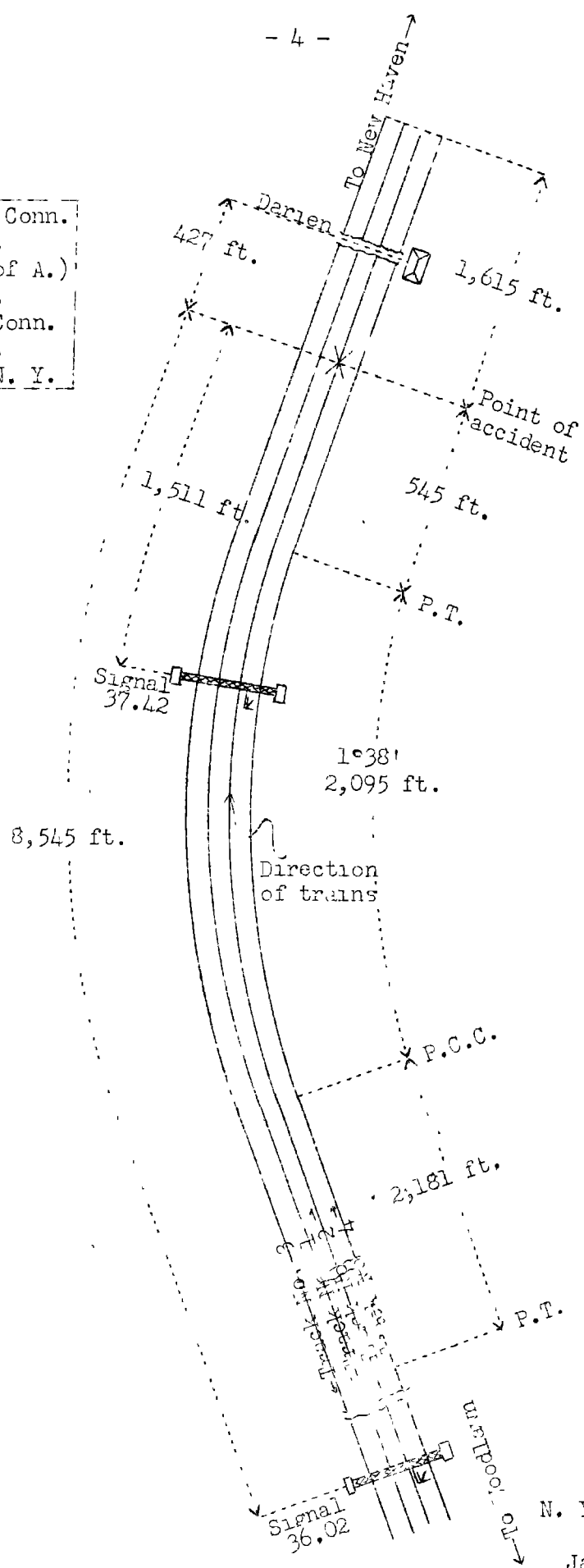
REPORT OF THE COMMISSION¹

PATTERSON, Chairman:

On January 14, 1944, there was a rear-end collision between a passenger train and a passenger-equipment train on the New York, New Haven and Hartford Railroad at Darien, Conn., which resulted in the death of 1 employee, and the injury of 11 passengers, 2 employees off duty and 3 employees on duty. This accident was investigated in conjunction with a representative of the Connecticut Public Utilities Commission.

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 New Haven, Conn.
34.54 mi.
- X Darien (P. of A.)
4.69 mi.
- o Stamford, Conn.
21.29 mi.
- o Woodlawn, N. Y.



Inv. No. 2763
 N. Y., N. H. & H. R.R.
 Darien, Conn.
 January 14, 1944

Location of Accident and Method of Operation

This accident occurred on that part of the New Haven Division extending between Woodlawn, N. Y., and New Haven, Conn., 60.52 miles. This was a four-track line, equipped with an overhead catenary system for the electric propulsion of trains, over which trains moving with the current of traffic were operated by an automatic block-signal system, the indications of which superseded time-table superiority. The main tracks from north to south were, respectively, No. 3, No. 1, No. 2 and No. 4. The current of traffic on tracks No. 2 and No. 4 was eastward, and on tracks No. 3 and No. 1, westward. The accident occurred on track No. 2, at a point 427 feet west of the station at Darien. From the west there were, in succession, a tangent 2,181 feet in length, a compound curve to the right 2,095 feet, having a maximum curvature of 1°38', a tangent 545 feet to the point of accident and 1,615 feet beyond. The grade for east-bound trains was 0.51 percent descending.

Automatic signals 36.02 and 37.42, governing east-bound movements on track No. 2, were mounted on signal bridges located, respectively, 8,545 feet and 1,511 feet west of the point of accident. These signals were of the one-arm, three-indication, upper-quadrant, semaphore type, and were continuously lighted. The involved night aspects and corresponding indications and names of these signals were as follows:

<u>Signal</u>	<u>Aspect</u>	<u>Indication</u>	<u>Name</u>
36.02	Yellow	Proceed preparing to stop at next signal. Train exceeding medium speed must at once reduce to that speed.	Approach signal.
37.42	Red	Stop; then proceed in accordance with * * * Rule 509a.	Stop and proceed signal.

DEFINITIONS.

* * *

REDUCED SPEED.--Proceed prepared to stop short of train or obstruction.

* * *

MEDIUM SPEED.--A speed not exceeding 30 miles per hour.

* * *

RESTRICTED SPEED.--A speed not exceeding 15 miles per hour prepared to stop short of train, engine, obstruction, or switch not properly lined and to look out for broken rail.

Operating rules read in part as follows:

11. A lighted fusee on or near the track of an approaching train or engine is a stop signal and must be extinguished by a member of the crew. The train or engine may then proceed at reduced speed.

34. Immediately upon seeing a signal affecting the movement of their train or engine, the engine-man and fireman must, and when practicable the trainmen will, call its indication to each other.

99. * * *

Should the speed of a train be reduced under circumstances in which it may be overtaken, either day or night, a lighted fusee must be dropped off at intervals to warn following trains.

509a. On two or more tracks when a train or engine is stopped by a stop and proceed signal, unless a more favorable indication is immediately displayed, it may proceed at once at restricted speed.

FIREMEN.

851. While engine is moving they must keep a constant lookout when not necessarily engaged in other duties, and give immediate notice to engine-man of any signals or other conditions affecting the safety of the train.

The maximum authorized speed for the trains involved was 70 miles per hour.

Description of Accident

No. 382, an east-bound passenger train, consisted of electric motor 0359, eight coaches and one baggage car, in the order named. The ninth car was of steel-underframe construction and the remainder were of all-steel construction. This train passed Stamford, 4.69 miles west of Darien and the last open office, at 10:55 p. m., 2 minutes late, and stopped at Darien at 11:01 p. m. About 1 minute later, after this train had moved about 50 feet eastward, it was struck by Extra 0357 East.

Extra 0357 East, an east-bound passenger-equipment train, consisted of electric motor 0357, six coaches and one dining car, in the order named. The cars were of steel construction. This train departed from Stamford at 10:57 p. m., passed signal 36.02, which displayed approach, passed signal 37.42, which displayed stop-and-proceed, and while moving at an estimated speed of 35 miles per hour it struck No. 382 at a point 1,511 feet east of signal 37.42.

The rear car of No. 382 was demolished. The eighth car was considerably damaged, and the first seven cars were slightly damaged. Motor 0357 was derailed and stopped, badly damaged, upright and in line with the track.

From the control compartment of an east-bound motor the view of the point where the accident occurred was restricted to about 1,500 feet, because of embankments and vegetation adjacent to the track and track curvature.

It was clear at the time of the accident, which occurred at 11:02 p. m.

The engineer of Extra 0357 was killed. The engineer, the fireman and a ticket collector of No. 382 were injured.

Tests conducted after the accident disclosed that signals 36.02 and 37.42 functioned properly.

Discussion

Under the rules of this carrier governing operation in automatic block-signal territory, an approach indication requires that the speed of a train must be reduced immediately to a speed not exceeding 30 miles per hour, and the train must be prepared to stop at the next signal. A stop-and-proceed indication requires a train to stop at the signal, then it may proceed at a speed not exceeding 15 miles per hour, but it must be prepared to stop short of a train or an obstruction.

No. 382 stopped at the station at Darien at 11:01 p. m. About 1 minute later, after this train had started and moved eastward about 50 feet, the rear end was struck by Extra 0357 East about 1,500 feet east of signal 37.42.

As No. 382 was approaching Darien the flagman dropped a lighted 5-minute fusee on track No. 2 about 700 feet west of signal 37.42. As No. 382 was departing from Darien the flagman saw the reflection of the headlight of the following train about 1,500 feet distant. He gave stop signals with a lighted white lantern from the side door of the rear car, then jumped off just before the collision occurred. After the accident occurred, the remains of a burned fusee were found where the flagman said he dropped the lighted fusee.

Extra 0357 East was held several minutes on track No. 2 at the home signal at Stamford, and during this time an east-bound passenger train, moving on track No. 4, passed Extra 0357 and entered track No. 2. The engineer and the fireman were not able to identify the passing train. About 1 minute later, the home signal for track No. 2 displayed approach, and Extra 0357 proceeded. The fireman said the next three signals displayed approach, but speed was not reduced in compliance with these indications; however, all signal indications west of Stamford had been obeyed. As the train was approaching signal 36.02, located 7,034 feet west of signal 37.42, the speed was about 45 miles per hour. The enginemen were maintaining a lookout ahead from the control compartment. There was no condition of the motor that obscured the view ahead or distracted their attention. The brakes functioned properly at all points where used en route. The fireman said he called the approach indication displayed by signal 36.02 to the engineer, and warned him that the speed should be controlled in accordance with the indication. Under an approach indication, the speed should not have been in excess of 30 miles per hour. The engineer replied that the two signals immediately west of signal 36.02 had displayed approach indications also, and that signal 37.42 would probably display a proceed indication for their train. The engineer did not take action to control the speed of the train and, before the indication displayed by signal 37.42 became visible, the fireman left the control compartment to perform other duties. At this time the engineer appeared to be normal. The fireman did not return to the control compartment to observe the indication displayed by signal 37.42. The brakes were applied in emergency just prior to the collision. It could not be determined why the engineer failed to take action to control the speed of the following train, as he was killed in the accident.

Cause

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

Dated at Washington, D. C., this fourteenth day of February, 1944.

By the Commission, Chairman Patterson.

(SEAL)

W. P. BARTEL,
Secretary.