INTERSTATE COMMERCE COMMISSION

WASHINGTON

INVESTIGATION NO. 2909

THE NEW YORK, NEW HAVEN AND HARTFORD
RAILROAD COMPANY

REPORT IN RE ACCIDENT

AT STANDISH, MASS., ON

JULY 1, 1945

SUMMARY

Railroad:	New York, New Haven and Hartford
Date:	July 1, 1945
Location:	Standish, Mass.
Kind of accident:	Derailment
Train involved:	Passenger
Train number:	821
Engine number:	1323
Consist:	8 cars
Estimated speed:	60 m. p. h.
Operation:	Timetable, train orders and manual-block system
Track:	Single; tangent; 0.045 percent descending grade southward
Weather:	Clear
Time:	7:12 p. m.
Casualties:	2 killed; 69 injured
Cause:	Train entering open switch at high rate of speed

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 2909

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

August 24, 1945.

Accident at Standish, Mass., on July 1, 1945, caused by a train entering an open switch at a high rate of speed.

REPORT OF THE COMMISSION[1]

PATTERSON, Commissioner:

On July 1, 1945, there was a derailment of a passenger train on the New York, New Haven and Hartford Railroad at Standish, Mass., which resulted in the death of 2 train-service employees, and the injury of 64 passengers and 5 train-service employees. This accident was investigated in conjunction with representatives of the Massachusetts Department of Public Utilities.

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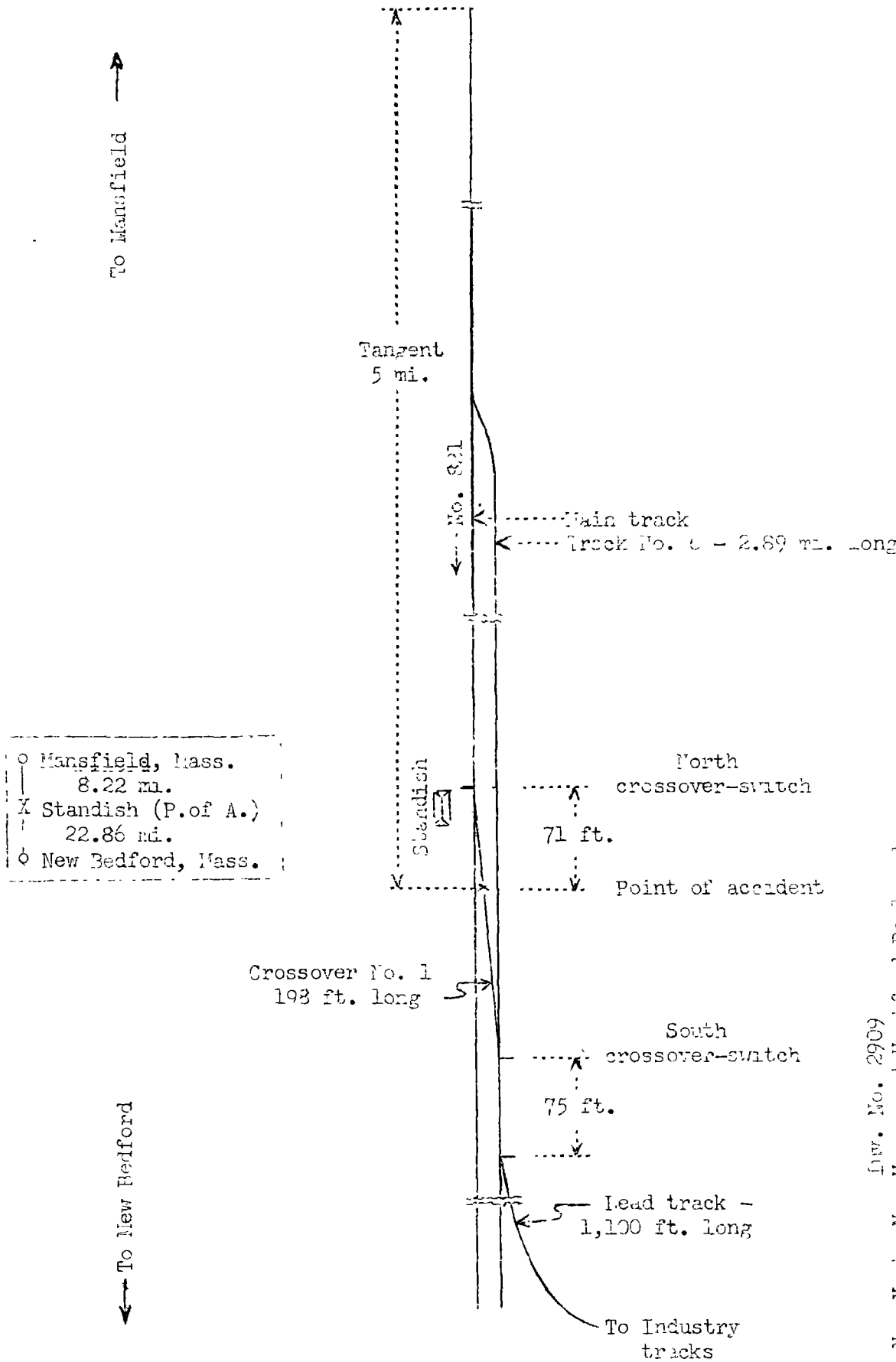
[1]Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Patterson for consideration and disposition.



Inv. No. 2904
New York, New Haven and Hartford Railroad
Standish, Mass.
July 1, 1945

Location of Accident and Method of Operation

This accident occurred on that part of the Boston Division extending southward from Mansfield to New Bedford, Mass., 31.08 miles, a single-track line in the vicinity of the point of accident over which trains are operated by timetable, train orders and a manual-block system. In the vicinity of Standish, 8.22 miles south of Mansfield, an auxiliary track, 2.89 miles long and designated as track No. 6, parallels the main track on the east. At Standish the north switch of a No. 10 crossover 198 feet long, hereinafter referred to as crossover No. 1, which connects the main track and track No. 6, is opposite the station. Crossover No. 1 is facing-point for south-bound movements from the main track to track No. 6. A lead track about 1,100 feet long extends southeastward from track No. 6 to several industry tracks, and its north switch is 75 feet south of the south switch of crossover No. 1. The accident occurred on crossover No. 1 at a point 71 feet south of the north switch. The main track is tangent throughout a distance of about 5 miles north of Standish and a considerable distance southward. At the point of accident the grade for south-bound trains is 0.045 percent descending.

The switches of crossover No. 1 are hand operated. The switch-stand of the north switch of crossover No. 1 is of the hand-throw, intermediate-stand type, and is provided with an oil lamp and two targets. The centers of the lenses and the targets are, respectively, 6 feet 7 inches and 5 feet above the ties, and about 7 feet west of the gage side of the west rail of the main track. When the switch is lined normally a green circular target, 15 inches in diameter, and a green light are displayed. When the switch is lined for movement through the crossover a red arrow-shape target, 14-1/2 inches by 15 inches, and a red light are displayed.

Operating rules read in part as follows:

104. * * *

* * *

Where trains are required to be reported clear of main track, at hand operated switches, such report must not be made until switch has been secured in its normal position.

104a. The normal position for all switches * * * is that which leaves the main track clear for the safe passage of trains or engines.

* * *

The maximum authorized speed for passenger trains is 60 miles per hour.

Description of Accident

No. 821, a south-bound passenger train, consisted of engine 1323, of the 4-6-2 type, one baggage car and seven coaches, in the order named. All cars were of steel-underframe construction. This train departed from Mansfield, 8.22 miles north of Standish and the last open office, at 7:03 p. m., 11 minutes late, and while moving at an estimated speed of 60 miles per hour it entered crossover No. 1 at Standish and was derailed.

The engine and the first seven cars were derailed. The engine and tender stopped on their left sides across the lead track, with the front end of the engine 406 feet south of the point of derailment. The tender cistern was torn loose from its frame and stopped 49 feet south of the engine. The first seven cars stopped practically upright and in various positions. The engine and the derailed cars were considerably damaged.

The weather was clear at the time of the accident, which occurred about 7:12 p. m.

The engineer and the fireman were killed. The conductor, the baggageman, two ticket collectors and the flagman were injured.

During the 30-day period preceding the day of the accident, the average daily movement in the vicinity of the point of accident was 28.3 trains.

Discussion

No. 821 was moving on tangent track at an estimated speed of 60 miles per hour, in territory where the maximum authorized speed was 60 miles per hour, when it entered crossover No. 1 at the north switch at Standish. The engine and the first seven cars were derailed. As the train was approaching Standish the conductor was in the first car and the other members of the train crew were in other cars of the train. The first these employees knew of anything being wrong was when the brakes were applied in emergency just prior to the derailment. Examination immediately after the accident disclosed that the north switch of crossover No. 1 was lined for entry to the crossover. It could not be determined when the enginemen first became aware that the switch was improperly lined, as they were killed in the accident. However, the brakes were applied in emergency immediately before the engine entered the crossover. Because of buildings, foliage of trees and street

crossing signals adjacent to the track in the vicinity of the north crossover-switch, the switch target was visible from a distance of only a few hundred feet.

The investigation disclosed that the last authorized operation of the switch involved was made by a switchtender about 3 hours prior to the occurrence of the accident, to permit the movement of a north-bound train from track No. 6 through the crossover to the main track. The switchtender said that immediately after this train departed he restored both switches of crossover No. 1 to normal position and locked the switch locks. Then he reported by telephone to the train dispatcher and the block operator the departing time of the north-bound train. The switchtender was instructed that there were no further duties for him to perform, and he went off duty at 4:15 p. m. He was positive that the switch involved was securely locked in normal position at that time. Examination of the switch lock immediately after the accident indicated that it had not been tampered with. According to the evidence, there was no employee of the railroad in this vicinity between the time the switchtender went off duty and the time the accident occurred.

The Commission investigated the derailment of another passenger train at the same location, which occurred on August 5, 1944, as a result of the north switch of the crossover involved being improperly lined, and which resulted in the death of 2 persons and the injury of 45 persons. In the Commission's report covering the investigation of that accident, in view of the fact that the manual block system does not provide protection against open switches, the attention of operating officials of this railroad was directed to the need for measures which will provide greater protection against accidents resulting from open switches. At the time of the accident here under investigation the carrier had procured necessary materials for the installation of an automatic semaphore signal to provide, among other things, open-switch protection for the switch involved. The materials were brought to Standish the day before the present accident occurred. The installation was completed and the signal placed in service on July 10. The signal is located 6,700 feet north of the north crossover-switch, and is so arranged that when the switch is in normal position and the track between it and the switch is not occupied it will display the arm in diagonal position and a green light. This indication permits a train to move at maximum authorized speed between the signal and the switch. When the switch is open or the track between the signal and the switch is occupied, the signal will display the arm in horizontal position and a yellow light. This indication requires trains to proceed at a speed not exceeding 15 miles per hour and to be prepared to stop short of a train, an obstruction or a switch improperly lined. If this

signal had been in operation on the day of the present accident, the engine crew would have received warning of the abnormal condition in time to take necessary action to avert the accident.

Cause

It is found that this accident was caused by a train entering an open switch at a high rate of speed.

Dated at Washington, D. C., this twenty-fourth day of August, 1945.

By the Commission, Commissioner Patterson.

W. P. BARTEL,
Secretary.

(SEAL)