# INTERSTATE COMMERCE COMMISSION WASHINGTON

INVESTIGATION NO. 2512

THE NEW YORK, NEW HAVEN AND HARTFORD RAILROAD COMPANY

REPORT IN RE ACCIDENT 'NEAR SAUNDERSVILLE, MASS., ON
JULY 22, 1941

#### SUMMARY

Railroad.

New York, New Haven and Hartford

Date

July 22, 1941

Location:

Saundersville, Mass.

Kind of accident.

Rear-end collision

Trains involved.

Motor hand-car :

Freight

Train numbers:

: Extra 3343

Engine numbers.

224

3343

Consist.

Trailer

21 cars and caboose

Speed.

Standing

25-30 m. p. h.

Operation:

Timetable, train orders and automatic block-signal system for trains;

motor hand-car messages and manualblock system for motor hand-cars

Track.

Double; tangent; 0.4 percent

descending grade southward

Weather:

Clear

Time .

6:30 a. m.

Casualules

4 injured

Cause:

Accident caused by authorizing a motor hand-car to occupy main track

without providing proper protection

for its movement

#### INTERSTATE COMMERCE COMMISSION

#### INVESTIGATION NO. 2512

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

# September 12, 1941.

Accident near Saundersville, Mass., on July 22, 1941, caused by authorizing a motor hand-car to occupy a main track without providing proper protection for its movement.

# REPORT OF THE COMMISSION1

# PATTERSON, Commissioner

On July 22, 1941, there was a rear-end collision between a motor hand-car and a freight train on the New York, New Haven and Hartford Railroad near Saundersville, Mass., which resulted in the injury of four section laborers.

<sup>1</sup> 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.

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# Location of Accident and Method of Operation

This accident occurred on that part of the Providence Division which extends between South Worcester, Mass., and Boston Switch, R. I., a distance of 37.47 miles. In the vicinity of the point of accident this is a double-track line over which trains are operated by timetable, train orders and an automatic block-signal system. Motor hand-cars are operated by motor hand-car messages and a manual-block system. The accident occurred on the southward main track, designated as track No. 1, at a point 4,602 feet south of the station at Saundersville. As the point of accident is approached from the north there are, in succession, a tangent 860 feet in length, a 2058'08" curve to the right 1,601 feet, and a tangent 70 feet to the point of accident and 717 feet beyond. At the point of accident the grade for south-bound trains is 0.4 percent descending. The west abutment of an overhead bridge is 7 feet 5 inches horizontally distant from the center-line of the southward track at the point of accident. The bridge is 21 feet 10 inches above the level of the tracks.

Operating rules governing movements of motor hand-cars read in part as follows:

1603. For movements of motor hand cars on a main track, \* \* \* prescribed form will be issued by authority and over the signature of the superintendent. After this form has been transmitted, the employe receiving it must repeat it at once from the manifold copy to the train dispatcher. When the form has been repeated correctly, the response "O. K." and the time will be given by the train dispatcher. The employe receiving this response will then write "O. K." and the time on the form. \* \* \*

1605. When authorized to occupy the main track as prescribed by Rule 1603, operators must, unless otherwise directed, accord manual block protection \* \* \* for motor hand car movements until the time limit on the prescribed form has expired. When movements are authorized from an intermediate point between block or communicating offices, the train dispatcher must arrange for prescribed block protection and notify the motor hand car operator accordingly. \* \* \*

1606. \* \* \* An extra train must not be permitted to follow a motor nand car unless it is clear or the time limit on the prescribed form has expired, unless authorized by train order. \* \* \*

Time-table general instructions read in part as follows:

122. Gasoline motor cars, and cars of similar type or construction, which may not operate Automatic Signals and shunt track circuits, must not be operated in Automatic Block Signal territory unless provision is made for Manual Block protection, \* \* \*

The maximum authorized speed for the train involved is 45 miles per hour.

### Description of Accident

At 6.03 a.m. the section foreman at Saundersville called the dispatcher on the telephone for authority to operate motor hand-car No. 224 from Saundersville southward to Farnumsville, a distance of 1.44 miles. The dispatcher instructed the section foreman to copy a motor rand-car message, Form 1433-B, which is the prescribed form for movements of motor hand-cars on a main track. The message read as follows:

<u>No</u>. 202

July 22 <u>19</u>41 Car No. 224

To F. Pilvines Motor Hand Car No. 224

# (For two or more tracks)

NO EXTRA TRAINS WILL RUN ON NO. 1 TRACK BETWEEN
Saundersville and Farnumsville

<u>Until</u> 7.30 A <u>M</u>.

B. F. B. Superintendent C. E. S. Train dispatcher

OK 6.05 A M

Note: The underscored words were printed and the other words were written.

This message was made complete at 6.05 a.m. and about 6:12 a.m., according to the section foreman's statement, motor hand-car No. 224, hauling a trailer, departed southward from Saundersville on track No. 1. A stop was made en route to load the trailer with gravel. The motor hand-car with the loaded trailer proceeded to a point 4,602 feet south of Saundersville and, immediately after it had stopped at that point to unload the gravel, it was struck by Extra 3343 South.

The crew of engine 3343 received a train order authorizing that engine to run as an extra train from Lonsdale northward to South Worcester, a distance of 36.51 miles, and to return to Lonsdale. Extra 3343 North arrived at South Worcester, 8.33 miles north of Saundersville, at 1:05 a.m. Extra 3343, a south-bound freight train, consisting of engine 3343, 8 loaded and 13 empty cars and a caboose, departed from the yard at South Worcester at 6 a.m., according to the train sheet, and entered track No. 1 at 6:10 a.m. The crew did not receive copies of the motor hand-car message nor a train order pertaining to the movement of the motor hand-car. There was no open station between South Worcester and Farnimsville prior to 7 a.m. While this train was moving at a speed estimated as 25 or 30 miles per hour it struck motor hand-car No. 224. The brakes of the train had been tested at South Worcester and they had functioned properly.

In the vicinity of the point of accident the track is laid in a cut, the west slope of which rises 20 feet in height at the bridge. Because of the cut and the track curvature, the view from the right side of the cab of a south-bound engine of the point where the accident occurred is restricted to about 290 feet.

Motor hand-car No. 224 and the trailer were demolished. Engine 3343 stopped at a point 660 feet south of the point of collision. The pilot of engine 3343 was damaged.

The weather was clear at the time of the accident, which occurred at 6:30 a.m.

The employees injured were four section laborers.

#### Discussion

The investigation discloses that when a motor hand-car is operated in automatic block-signal territory on double track, the movement is authorized by the issuance of a motor hand-car message stating that no extra trains will move before a specified time on the track to be used by the motor hand-car between designated stations. In addition, the movement is given manual-

block protection by operators and the train dispatcher further protects the movement by issuing to an operator a holding train order for following extra trains. When the movement of a motor hand-car originates at a point between open stations, the dispatcher is required to arrange for manual-block protection and to inform the motor hand-car operator that block protection has been provided. If conditions are such that the movement of a motor hand-car cannot be given train-order and manual-block protection, the movement must be made under flag protection.

The movement of the motor hand-car involved originated at a closed station. The dispatcher had assumed duty about 3 minutes before the section foreman requested authority to operate his motor hand-car from Saundersville to Farnumsville. At this time Extra 3343 South was at South Worcester, according to information on the train sheet, and the crew of this train held a train order authorizing the train to leave South Worcester at any time after Extra 3343 North arrived at that station. dispatcher inquired of the operator at South Worcester about Extra 3343 South and was informed that it was still at that station. Instead of issuing a train order to restrict the movement of this train between Saundersville and Farnumsville, the dispatcher immediately issued the motor hand-car message. cording to information received by the dispatcher some time later, Extra 3343 South had departed from South Worcester 3 or 4 minutes before the dispatcher inquired of the operator about The dispatcher said that immediately after he had this train. given the response "complete" to the section foreman, he instructed the section foreman to provide flag protection for the movement to Farnumsville, but the section foreman said that he did not hear this instruction and that a few seconds after he received the response "complete" he replaced the telephone receiver. If the section force had protected the movement by flag, it does not appear that the motor hand-car message would have been of any benefit in the movement of the motor hand-car. The section foreman understood that under the terms of the motor hand-car message his motor hand-car was authorized to occupy the southward main track between Saundersville and Farnumsville from 6.05 a.m. to 7.30 a.m. and that he was not required to furnish flag protection.

If the dispatcher had arranged for manual-block protection before he issued the motor hand-car message, it is probable this accident would have been averted. Since the rules require the dispatcher to inform the operator of a motor hand-car originating at an intermediate point that block protection has been provided for the intended movement, the fact that block protection had not been provided in this instance would have been called to the dispatcher's attention if the section foreman had inquired concerning block protection when the dispatcher failed

to mention the matter, and the accident probably would have been averted.

Since the form in use for the movement of motor hand-cars contains authority similar to the authority conferred by a train order and is issued only to the motor hand-car, and since a train order is used to restrict the movement of trains in the territory involved and is issued only to the train or trains involved, this results in the dispatcher being required to issue two different forms for each movement of a motor hand-car. This is equivalent to the single-order system of operation, which is a dangerous practice because of the chances for errors. If the double-order system had been in use on this line, which would have required the dispatcher to issue the substance of the motor hand-car message in the same words and on similar forms to both the motor hand-car and the train or trains involved, undoubtedly the dispatcher would not have issued authority for the movement of the motor hand-car when he found he was unable to deliver a copy of the authority for the movement to Extra 3343 South, and as a result the accident would have been averted.

### Cause

It is found that this accident was caused by authorizing a motor hand-car to occupy a main track without providing proper protection for its movement.

Dated at Washington, D. C., this twelfth day of September, 1941.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL.

Secretary.

# INTERSTATE COMMERCE COMMISSION WASHINGTON

INVESTIGATION NO. 2513

THE ST. LOUIS SOUTHWESTERN RAILWAY COMPANY
REPORT IN RE ACCIDENT
AT NORTH CAMDEN, ARK., ON
JULY 31, 1941

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#### SUMMARY

Railroad:

St. Louis Southwestern

Date:

July 31, 1941

Location:

North Camden, Ark.

Kind of accident:

Rear-end collision

Trains involved:

Freight

:Freight

Train numbers:

Extra 589-556 South: First 19

Engine numbers:

589-556

:809

Consist:

41 cars, caboose

:50 cars, caboose

Speed:

Standing

:7-20 m.p.h.

Operation:

Timetable and train orders; yard limits

Track:

Single; 4° left curve; 0.70 percent ascending grade southward

Weather:

Clear

Time:

About 8:40 a.m.

Casualties:

l injured

Cause:

Accident caused by failure properly to control speed of following train

moving within yard limits.