

INTERSTATE COMMERCE COMMISSION
WASHINGTON

REPORT NO. 3289
ST. JOHNSBURY & LAMOILLE COUNTY RAILROAD
IN RE ACCIDENT
NEAR CAMBRIDGE JCT., VT., ON
OCTOBER 10, 1949

SUMMARY

Date: October 10, 1949

Railroad: St. Johnsbury & Lamoille County

Location: Cambridge Jct., Vt.

Kind of accident: Head-end collision

Equipment involved: Track motor-car : Freight train

Train number: : Extra 48 West

Engine number: : Diesel-electric
unit 48

Consist: : 3 cars, caboose

Estimated speeds: Unknown : 30 m. p. h.

Operation: Timetable and train orders

Track: Single; 6°15' curve; 0.7 percent
ascending grade eastward

Weather: Clear

Time: 12:57 p. m.

Casualties: 3 killed

Cause: Failure to provide adequate protection
for movement of track motor-car

Recommendation: That the St. Johnsbury & Lamoille
County Railroad provide adequate
protection for movement of track
motor-cars on its line

INTERSTATE COMMERCE COMMISSION

REPORT NO. 3289

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

ST. JOHNSBURY & LAMOILLE COUNTY RAILROAD

December 19, 1949

Accident near Cambridge Jct., Vt., on October 10, 1949,
caused by failure to provide adequate protection
for the movement of a track motor-car.

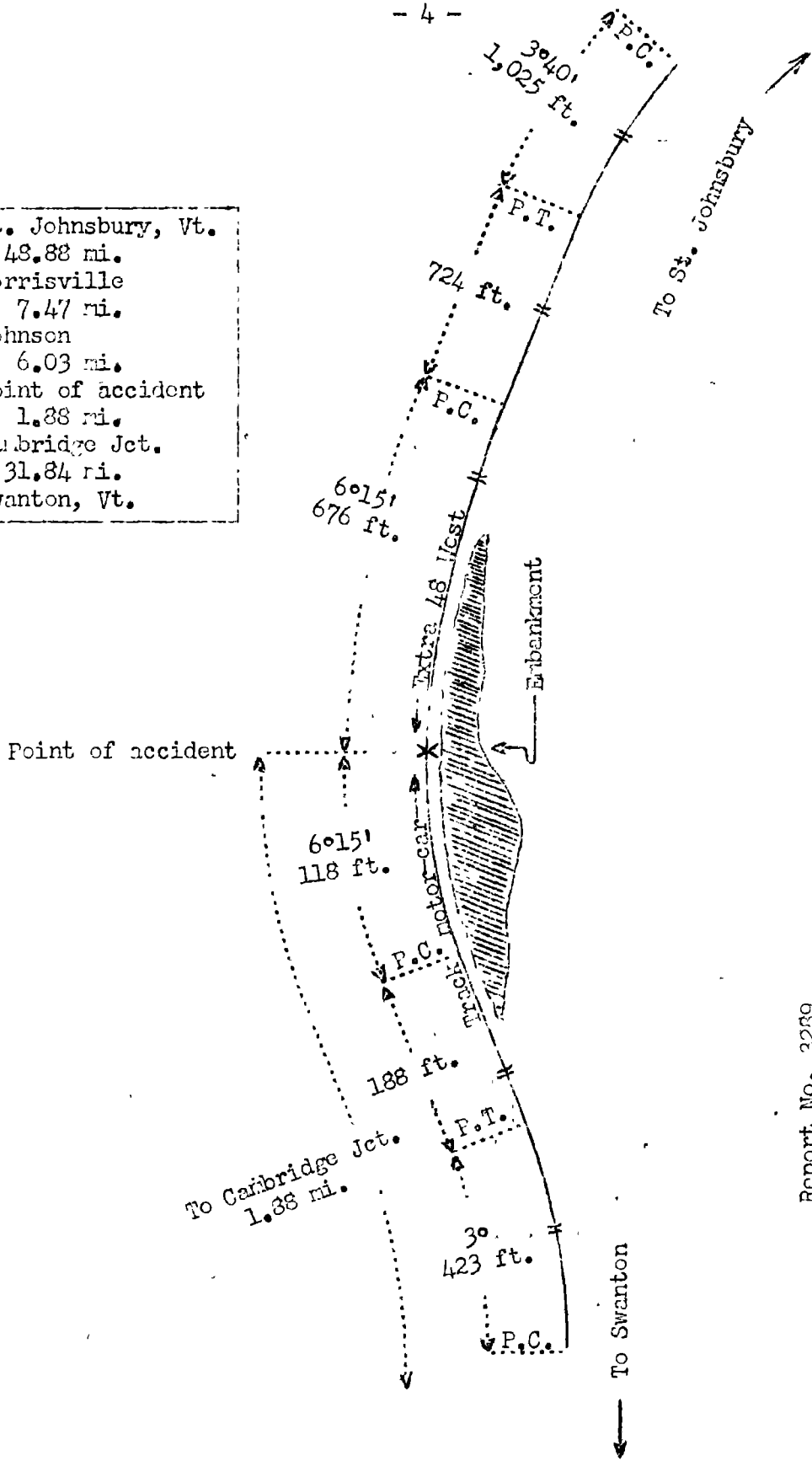
REPORT OF THE COMMISSION¹

PATTERSON, Commissioner:

On October 10, 1949, there was a head-end collision between a track motor-car and a freight train on the St. Johnsbury & Lamoille County Railroad near Cambridge Jct., Vt., which resulted in the death of three maintenance-of-way employees. This accident was investigated in conjunction with representatives of the Vermont Public Service Commission.

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.

- o St. Johnsbury, Vt.
- | 48.88 mi.
- o Morrisville
- | 7.47 mi.
- o Johnson
- | 6.03 mi.
- X Point of accident
- | 1.88 mi.
- o Cambridge Jct.
- | 31.84 mi.
- o Swanton, Vt.



Report No. 2289
 St. Johnsbury & Lamoille County Railroad
 Cambridge Jct., Vt.
 October 10, 1949

Location of Accident and Method of Operation

This accident occurred on that part of the railroad extending between St. Johnsbury, and Swanton, Vt., 96.1 miles, a single-track line, over which trains are operated by timetable and train orders. There is no block system in use. The accident occurred on the main track 62.38 miles west of St. Johnsbury and 1.88 miles east of the station at Cambridge Jct. From the east there are, in succession, a 3°40' curve to the left 1,025 feet in length, a tangent 724 feet, and a 6°15' curve to the left 676 feet to the point of accident and 118 feet westward. From the west there are, in succession, a 3° curve to the left 423 feet in length, a tangent 188 feet and the curve on which the accident occurred. The grade is 0.7 percent ascending eastward. In the vicinity of the point of accident there is an embankment on the south side of the track, the wall of which rises to a height of about 23 feet.

This carrier's operating rules read in part as follows:

14. Engine Whistle Signals.

NOTE:--The signals prescribed are illustrated by "o" for short sounds; "—" for longer sounds. * * *

Sound.	Indication.
--------	-------------

* * *

(p) Succession of short sounds	Alarm for persons or live stock on the track.
--------------------------------	---

97a. Extra trains may be run at any time, without notice except to those whom it is necessary to advise in order to insure proper movement of such trains.

This carrier's maintenance-of-way rules and instructions governing the operation of track motor-cars read in part as follows:

RULES FOR THE OPERATION OF
MOTOR, HAND, TRAILER AND
PUSH CARS

992. Employes operating cars on main tracks shall, when practicable, obtain information regarding trains, but such information will not relieve them from the responsibility of protecting their cars. * * *

SECTION FOREMEN

1021. Before going on duty they will ascertain, if possible, whether all trains due have passed, and what extra trains are running or expected. (See Rule 97a.)

Special Instructions

Dispatchers: All Agents: All Operators: All Section Foremen

* * *

At exactly 7:00 A.M. daily, except Sunday, the Train Dispatcher will give lineup for both M&W RR and St. J. & L.C. RR without calling any office. He will simply say, "No Extras in sight either Road." or "No Extras on M&W, Extra for Swanton and return on St. J. & L.C. RR leaving St. J. 8:15 A.M." or whatever the known lineup may be at the time.

Agents or operators reporting for duty at 7:00 A.M. will get this lineup and acknowledge receiving same.

At points where Agent reports for duty later than 7:00 A.M. he will, immediately upon opening his office, ask the Train Dispatcher for the lineup.

In case an Extra is run after a lineup is given Train Dispatcher will notify all interested Agents or Operators, who will make every effort to notify the Section Foremen.

All Agents:
All Section Foremen:

Type of Instructions Issued Under Conditions when extras are run or an out of the ordinary move is made.

* * *

Cannot reach section men for line up on your extra. Run carefully and sound horn often.

* * *

Look out for section men. No way of notifying them of your run.

The maximum authorized speed for the train was 35 miles per hour but was restricted to 30 miles per hour over curves. The maximum authorized speed for the track motor-car was 20 miles per hour.

Description of Accident

About 12:53 p. m., a track motor-car, bearing no identification number and occupied by three sectionmen, departed eastward from the vicinity of Cambridge Jct. About 12:57 p. m., this track motor-car, while moving at an unknown speed, collided with Extra 48 West.

Extra 48 West, consisting of Diesel-electric unit 48, three cars and a caboose, departed from Johnson, the last open office, 7.91 miles east of Cambridge Jct., at 12:28 p. m. Switching service was performed at Talc Mill Siding, which is within yard limits at Johnson and approximately 7.58 miles east of Cambridge Jct. Extra 48 West departed from Talc Mill Siding at 12:44 p. m., and while moving at an estimated speed of 30 miles per hour it collided with the track motor-car.

The track motor-car was moved westward 487 feet, stopped about 6 feet south of the track and was demolished. Extra 48 West stopped 552 feet west of the point of accident. Diesel-electric unit 48 was slightly damaged. None of the units of the train was derailed.

The employees killed were maintenance-of-way employees, who were on the track motor-car.

The weather was clear at the time of the accident, which occurred about 12:57 p. m.

According to data furnished by the railroad the track motor-car was of the 4-wheel type, and was equipped with 4-wheel brakes. It weighed 1,095 pounds, and was powered by a gasoline engine rated at 8-13 horsepower. The motor-car was provided with a safety rail across the front and one across the rear. They extended 16 inches above the seat deck. A wooden windshield extended about 22 inches above the level of the seat and was mounted on the front of the car. A glass windshield, enclosed in a steel frame about 10 inches high and extending the width of the car, was mounted above the wooden windshield.

During the 30-day period preceding the day of the accident the average daily movement in the vicinity of the point of accident was 4.8 trains.

Discussion

The rules and instructions governing the operation of track motor-cars on this line provide that a line-up of train movements will be issued at 7 a. m. All operators on duty at that time are required to receive the line-up for delivery to employees requesting it. At stations which are opened after 7 a. m. the operator is required to obtain a line-up of train movements from the dispatcher only when such line-up is requested. A line-up of train movements is given to the operator of a track motor-car only when requested and such line-ups are always given orally. If a train is created after the operator of a track motor-car has obtained a line-up and cannot be given a superseding line-up, the engineer of such train is instructed that the track motor-car operator has not been advised of such movement.

On March 10, 1949, a bulletin addressed to all agents and section foremen on this line stated that the schedules of certain fourth class freight trains operating between St. Johnsbury and Cambridge Jct. would be abolished beginning March 13, 1949. This bulletin also contained the instruction that an extra freight train would leave St. Johnsbury for Cambridge Jct. about 7:45 a. m., on Monday, Wednesday, and Friday, and also that an extra freight train would leave Cambridge Jct. for St. Johnsbury, about 9:30 a. m., on Tuesday, Thursday and Saturday. On the day of the accident Extra 48 West was being operated from St. Johnsbury to Cambridge Jct., in accordance with this bulletin.

The investigation disclosed that about 12:20 p. m. on the day of the accident a member of the maintenance-of-way force requested information from the operator at Cambridge Jct. concerning the location of Extra 48 West. The operator then called the train dispatcher several times by telegraph to obtain the information. At that time the dispatcher was absent from his office, because it was his usual meal period. The operator then called Morrisville, 15.38 miles east of Cambridge Jct., by telegraph, and before the call was answered he asked for the location of Extra 48 West. He said he then heard the station-call letters

for the office at Morrisville sounded. This signal indicated to him that Extra 48 West was at Morrisville, and he so informed the sectionman. However, the operator at Morrisville was absent from the office. The agent at Morrisville was in the telegraph office and heard the operator call the dispatcher and also the operator at Morrisville, but he did not answer the call because he was engaged in other duties. He said he did not hear the call letters for the office at Morrisville sounded in response to the call by the operator at Cambridge Jct. The track motor-car was to move to a point approximately 2.25 miles east of the station at Cambridge Jct. The track motor-car remained on the siding at the east siding-switch at Cambridge Jct. until No. 74, a second-class east-bound freight train, departed from Cambridge Jct. at 12:30 p. m. The track motor-car departed eastward from Cambridge Jct. about 12:53 p. m., 33 minutes after the line-up was obtained from the operator, and while it was moving at an unknown speed it collided with Extra 48 West at a point 1.88 miles east of the station at Cambridge Jct.

Extra 48 West departed from Johnson at 12:28 p. m., then switching service was performed about 1 mile west of the station. The schedule time of No. 74 was cleared within yard limits at Johnson, and Extra 48 West departed about 12:45 p. m. As Extra 48 West was approaching the point where the accident occurred the speed was about 30 miles per hour. No train order restricting its movement with respect to a track motor-car had been issued, and the crew of this train had not been informed that a track motor-car was occupying the main track. The enginemen were maintaining a lookout ahead from their respective positions in the control compartment at the front of the Diesel-electric unit, and the other members of the crew were in the caboose. The brakes of this train had been tested and had functioned properly when used en route. The fireman observed the approaching track motor-car at a distance of about 150 feet. He immediately called a warning to the engineer, who initiated an emergency brake application, but the collision occurred before the brakes of the train had become effective.

Because of track curvature and an embankment on the inside of the curve, the view of the point of accident from either direction was considerably restricted.

Operators of track motor-cars on this railroad are given oral line-ups of train movements when they request them. A line-up neither confers authority over trains or other track motor-cars, nor relieves the track motor-car operator of responsibility for collision if the movement of a train is omitted from the line-up or if the line-up is otherwise erroneous. Train crews and other track motor-car operators are not informed when a track motor-car is occupying the main track. Trains may be created at any time after a line-up has been issued without the issuance of a superseding line-up by the dispatcher. A line-up does not confer authority for any track motor-car to occupy the main track. Track motor-car operators are required to provide the same degree of protection when they have a line-up as when they do not have it.

In the instant case, the maintenance-of-way employee accepted oral information from the operator at Cambridge Jct. that Extra 48 West was at Morrisville, 15.38 miles east of Cambridge Jct. On the basis of this information, he apparently calculated that the track motor-car could go to the point where it was to be removed from the track before Extra 48 West would arrive at that point. However, Extra 48 West was at Johnson instead of Morrisville, and the track motor-car did not depart from Cambridge Jct. until 12:53 p. m. The accident occurred 4 minutes later at a point 1.88 miles east of Cambridge Jct.

During the past six years the Commission has investigated twenty-six collisions, including the instant case, in which track motor-cars were involved. These accidents resulted in the death of 51 persons and the injury of 86 persons, and were caused by failure to provide adequate protection for the movement of track motor-cars. In the instant case, if an adequate block system had been provided to protect the movement of the track motor-car, the train and the track motor-car would not have been permitted to occupy the same block simultaneously. If adequate train-order protection had been provided for the movement of the track motor-car, the members of the crew of Extra 48 West and the employees on the track motor-car would have had a common understanding with respect to both movements.

Cause

It is found that this accident was caused by failure to provide adequate protection for the movement of a track motor-car.

Recommendation

It is recommended that the St. Johnsbury & Lamoille County Railroad provide adequate protection for the movement of track motor-cars on its line.

Dated at Washington, D. C., this nineteenth day of December, 1949.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,
Secretary.