

INTERSTATE COMMERCE COMMISSION
WASHINGTON

REPORT NO. 3534

GRAND TRUNK WESTERN RAILROAD COMPANY
AND
THE NEW YORK CENTRAL RAILROAD COMPANY

IN RE ACCIDENT

NEAR JACKSON, MICH., ON

SEPTEMBER 14, 1953

SUMMARY

Date: September 14, 1953

Railroads: Grand Trunk Western : New York Central

Location: Jackson, Mich.

Kind of accident: Side collision

Equipment involved: Track motor-car : Passenger train

Train number: : 625

Consist: : 1 Diesel-powered car

Estimated speeds: Standing : 50 m. p. h.

Operation: Interlocking

Tracks: Single; tangent; : Double; tangent;
0.58 percent : practically
descending grade level
westward

Weather: Cloudy

Time: 8:40 a. m.

Casualties: 1 killed

Cause: Failure properly to control speed
of track motor-car approaching
railroad crossing at grade

INTERSTATE COMMERCE COMMISSION

REPORT NO. 3534

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

GRAND TRUNK WESTERN RAILROAD COMPANY
AND
THE NEW YORK CENTRAL RAILROAD COMPANY

October 16, 1953

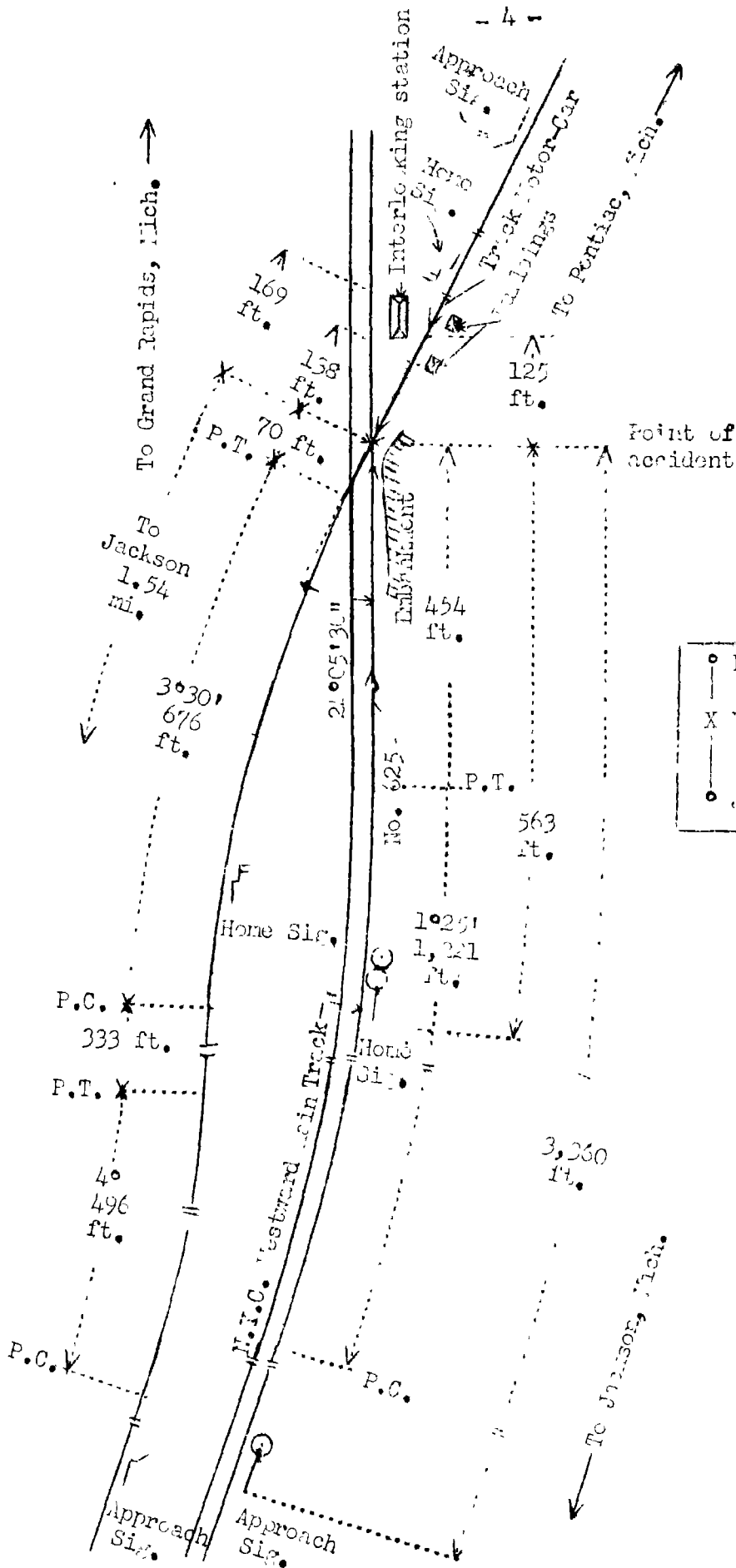
Accident near Jackson, Mich., on September 14, 1953,
caused by failure properly to control the speed
of a track motor-car approaching a railroad
crossing at grade.

1.
REPORT OF THE COMMISSION

CLANKE, Commissioner:

On September 14, 1953, there was a side collision between a track motor-car on the Grand Trunk Western Railroad and a passenger train on the New York Central Railroad near Jackson, Mich., which resulted in the death of one maintenance-of-way employee. This accident was investigated in conjunction with representatives of the Michigan 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 Clarke for consideration and disposition.



N.Y.C.

- Grand Rapids, Mich.
- | 93.00 mi.
- X (Point of accident)
- | 1.47 mi.
- Jackson, Mich.

G.T.W.

- Pontiac, Mich.
- | 69.92 mi.
- X N.Y.C. Crossing (Point of accident)
- | 1.54 mi.
- Jackson, Mich.

Report No. 3534
 Grand Trunk Western Railroad
 near Jackson, Mich.
 Sept. 14, 1953.

Location of Accident and Method of Operation

This accident occurred at the intersection of the Grand Trunk Western Railroad, hereinafter referred to as the G.T.W., and the New York Central Railroad, hereinafter referred to as the N.Y.C., near Jackson, Mich. An interlocking station at the intersection is designated by the G.T.W. as M.C.R.R. Crossing. This designation is used in this report. The crossing is located on that part of the Detroit Division of the G.T.W. extending between Jackson and Pontiac, Mich., 71.46 miles, and on that part of the Michigan Division of the N.Y.C. extending between Jackson and Grand Rapids, Mich., 94.47 miles. In the vicinity of the point of accident the G.T.W. extends from southwest to northeast. The N.Y.C. extends from southeast to northwest and crosses the G.T.W. at an angle of $24^{\circ}05'30''$. Timetable directions on both lines are east and west, and these directions are used in this report. M.C.R.R. Crossing is 1.54 miles east of Jackson on the G.T.W. and 1.47 miles west of that station on the N.Y.C. In this vicinity the G.T.W. is a single-track line, over which trains are operated by timetable and train orders. There is no block system in use. From the west there are, in succession, a 4° curve to the left 496 feet in length, a tangent 333 feet, a $3^{\circ}30'$ curve to the right 676 feet, and a tangent 70 feet to the point of accident and a considerable distance eastward. At the point of accident the grade is 0.58 percent descending westward. In the vicinity of the point of accident, the N.Y.C. is a double-track line, over which trains moving with the current of traffic are operated by signal indications. From the east there are, in succession, a $1^{\circ}25'$ curve to the left 1,221 feet in length and a tangent 454 feet to the point of accident and 38 feet westward. The grade is practically level. An embankment which rises to a height of approximately 6 feet above the level of the tops of the rails parallels the westward main track on the north immediately east of the crossing.

Movements over the crossing are governed by interlocking signals. The approach and home interlocking signals governing west-bound movements on the westward main track of the N.Y.C. line are located, respectively, 3,360 feet and 563 feet east of the crossing. The interlocking station is located in the northeast angle of the intersection. The interlocking normally is lined for movements on the N.Y.C. The interlocking station is unattended except when a G.T.W. employee is assigned to operate the interlocking for the movement of a G.T.W. train over the crossing.

Operating rules of the N.Y.C. 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.
* * *	
(m) _____	Approaching stations, junctions, and railroad crossings at grade * * *
* * *	

Regulations governing the use and operation of track motor-cars of the G.T.W. read in part as follows:

* * *

When approaching railroad * * * crossings, * * * cars must be operated with caution at reduced speed and prepared to stop immediately. * * *

The maximum authorized speeds were 60 miles per hour for the passenger train and 30 miles per hour for the track motor-car.

Description of Accident

A G.T.W. track motor-car, occupied by a section foreman and three sectionmen, departed eastward from the section tool house at Jackson soon after 7:30 a. m., and proceeded to a rail-highway grade crossing located approximately 1/2 mile east of M.C.R.R. Crossing. About 15 minutes later, when it was found that additional equipment was required, the track motor-car, occupied by the section foreman and one sectionman, departed west-bound in backward motion en route to the section tool house at Jackson. It stopped on the intersection of the G.T.W. track and the N.Y.C. westward main track at M.C.R.R. Crossing, and immediately afterward it was struck by No. 625.

No. 625, a west-bound first-class N.Y.C. passenger train, consisted of one Diesel-powered passenger-mail car. This train departed from Jackson at 8:35 a. m., on time, passed the approach and home interlocking signals at M.C.R.R. Crossing; each of which indicated Proceed, and while it was moving on the westward main track at an estimated speed of 50 miles per hour it struck the track motor-car at the crossing.

The track motor-car was demolished. The wreckage stopped on the north side of the N.Y.C. tracks at a point 180 feet west of the crossing. No. 625 stopped approximately 600 feet west of the crossing. The front end of the equipment of No. 625 was somewhat damaged.

The section foreman, who was operating the track motor-car, was killed.

The weather was cloudy at the time of the accident, which occurred about 8:40 a. m.

The track motor-car was of the belt-drive type and was equipped with 4-wheel brakes. It was powered by a 1-cylinder 8-13-horsepower motor and weighed 935 pounds. It had seating capacity for eight persons. The wheels were insulated to prevent the shunting of track circuits. A windshield and safety railings were provided.

During the 30-day period preceding the day of the accident the average daily movement over the crossing was 1.47 G.T.W. trains and 14.3 N.Y.C. trains.

Discussion

On the day of the accident a G.T.W. section force, consisting of a foreman and three sectionmen, went on duty at the section tool house at Jackson at 7:30 a. m. Soon afterward this force boarded a track motor-car and departed east-bound to perform service at a rail-highway grade crossing located approximately 1/2 mile east of M.C.R.R. Crossing. The surviving members of the force said that there had been a heavy dew during the night and that a considerable amount of moisture remained on the rails after they departed from Jackson. The section foreman stopped the track motor-car clear of the N.Y.C. tracks at M.C.R.R. Crossing, alighted and made an inspection of the crossing. The section force then proceeded eastward to the point at which work was to be performed. About 15 minutes later it was found that additional tools and equipment were required to complete the work. The section foreman and one sectionman boarded

the track motor-car and departed west-bound en route to the section tool house to obtain the additional supplies. The motor-car was being operated in backward motion.

As the track motor-car was approaching the point where the accident occurred the speed was about 15 miles per hour, as estimated by the sectionman. The sectionman was seated on the south side of the car, and the foreman was operating the controls from a seat on the opposite side. The sectionman said that it was the usual practice to stop before passing over the N.Y.C. tracks at M.C.R.R. Crossing, and that as the car approached the crossing the speed was being reduced. When the car reached a point about 60 feet east of the crossing he observed a train closely approaching on the N.Y.C. He immediately called a warning. He said that the foreman applied the brakes, but because of moisture on the rails the wheels of the track motor-car slid and the car did not stop short of the crossing. The foreman and the sectionman alighted before the car reached the crossing. The car stopped on the crossing and immediately afterward it was struck by No. 625. The foreman was struck by flying wreckage. The sectionman said he thought that the track motor-car would have stopped short of the crossing if the rails had been dry.

As No. 625 was approaching the point where the accident occurred the speed was about 50 miles per hour, as estimated by the engineer. The engineer was maintaining a lookout ahead from the control compartment at the front of the car. The members of the train crew were in the car to the rear of the control compartment. The headlight was lighted. The approach and the home interlocking signals each indicated Proceed. When the train was in the vicinity of the home signal the engineer sounded the whistle signal for the interlocking. The engineer said that after the train passed the home signal he turned momentarily and glanced at the indicator lights on the rear panel of the operating compartment to ascertain if the motors were functioning properly. He said that when he again looked forward the train was about 100 feet distant from the crossing and he observed the track motor-car moving toward the crossing on the G.T.W. He estimated that the track motor-car was 25 or 30 feet from the crossing when he first saw it. He immediately shut off the power and moved to apply the brakes, but the collision occurred before the speed of the train could be reduced.

The investigation disclosed that an embankment, buildings and vegetation adjacent to the tracks in the southeast angle of the intersection materially restrict the view which the operator of a west-bound G.T.W. track motor-car approaching M.C.R.R. Crossing has of the N.Y.C. tracks south of the crossing. From points on the G.T.W. track 150 feet, 100 feet, and 75 feet immediately east of the crossing, the N.Y.C. tracks south of the crossing are visible for distances of 100 feet, 250 feet, and 1,100 feet, respectively.

The rules of the G.T.W. require that the speed of a track motor-car approaching a railroad crossing at grade must be reduced and controlled in such manner that a track motor-car be stopped immediately. In the instant case the section foreman apparently misjudged the distance in which the track motor-car could be stopped under the conditions existing in the vicinity of the crossing.

Cause

It is found that this accident was caused by failure properly to control the speed of a track motor-car approaching a railroad crossing at grade.

Dated at Washington, D. C., this sixteenth day of October, 1953.

By the Commission, Commissioner Clarke.

(SEAL)

GEORGE W. LAIRD,
Acting Secretary.